

Plugs for the world



Made by professionals. For professionals.

In recent years, the world of electrical engineering has undergone rapid development, just like most other industries and processes. Multifunctional plugs and receptacles to bundle together and distribute various forms of energy are just an example of the innovative spirit that has made MENNEKES prominent for more than 60 years.

With over 6,000 catalogue items and just as many tailored combinations, we offer an assortment that meets any requirement and sometimes even exceeds it.

Internationally certified and tested.

Latest technology, the imagination of our staff and the courage to grow have made us a market leader with branches and agencies all over the world.

In order to maintain our position, we give first priority to establishing close customer relationships. Only by a constant interchange with you, the customer, do MENNEKES products stay what they are:

Made by professionals.

For Professionals.

For the whole world.



A dialogue with customers: One of Walter Mennekes' most important undertakings.

For the whole world.





Plugs for the world

MENNEKES

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	Contact Service Marketing	
1	Receptacles Cepex receptacles	
2	Plugs Phase inverters Test plugs	
3	Connectors	
4	Receptacles – fused, switched and interlocked, electrically interlocked	
5	Plugs and receptacles, 7 pole Plugs and receptacles for 600V to 690V power supply Plugs and receptacles with special 1h earth position	
6 NEW!	Industrial Ethernet - Electrical power and data: Cepex data port receptacles and fibre optics technology in Cepex- and CEE-receptacles CEEplus - Electrical power, signals and data	
7 NEW!	AMAXX® Receptacle combinations	0 0 0 0 0 0 0
8	EverGUM Receptacle combinations in solid rubber enclosures	960
9	Receptacles in stainless steel and other metal enclosures	
10	Plugs and receptacles for special applications: - for use in corrosive atmosphere - for use under harsh conditions - made of AMELAN with a high resistance to chemicals	



11	SCHUKO® plugs and receptacles Grounding-type plugs and receptacles according to various national standards	
12	Plugs and receptacles for low voltages, downstream of an isolating transformer, DC	
13	Plugs and receptacles for containers and terminals	
14	Plugs and receptacles for hazardous areas Zone 22	
15	Plugs and receptacles for campsites and mobile consumers	3
16	Plugs and receptacles 200A to 400A	G-
17	Cable connection boxes, hinged windows, enclosures	
18	Plugs and receptacles for military purpose Plugs and receptacles for fire brigades and civil protection organisations Plugs and receptacles made from light weight alloy	
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Creating connections.



MENNEKES products are manufactured using hightech machines, applying the maximum care using both manual labour and automatic processes.





Maintaining connections.

With products manufactured at our headquarter in Kirchhundem and Neudorf/ Erzgebirge we serve the world marked. The plant in Nanjing/China supplies our customers in the chinese domestic market. With representations in Germany, various subsidiaries abroad as well as international representatives we are organised to be active around the globe. A total staff of 650 ensure that MENNEKES products are popular all over the world.



Kirchhundem production facilities



Kirchhundem headquarters



Neudorf works





Always a step ahead with MENNEKES.

Our R&D department focuses on the requirements of national and international customers. MENNEKES develop and design products that not only enhance workplace safety but also facilitate work processes thus saving time and cutting costs.

The results are presentable: well thought-out design and a very wide range of applications.

Many of our concepts and ideas have been patented and still, new ideas coming up every day.

Professional. Thinking ahead. Thinking creatively. Thinking outside the box.



Full of imagination. Practical.





reddot design award winner 2006



StarTOP®.
Plugs and receptacles
with SafeCONTACT.
The innovative contact
technology to save time
and cut costs.



AirKRAFT® and 3KRAFT.

The multifunctional distributors for electrical power, data, compressed air integrate practical handling with excellent, repeated award-winning product design.



EverGUM.
Solid rubber in a signal colour for durability and safety.

Only products labelled MENNEKES deserve the highest accolade.

Firm. Tight.



Our products are exposed to extreme conditions, for the first time in the MENNEKES test lab. Only those products which stand up to this harsh test will be used worldwide and deserve to be labelled with our name.



Constant exposure to cold, heat, dust and water is carried out in our test lab over and over again. After that, products are certified by esteemed organisations according to international standards. On that you can rely, any time, in any circumstances, all over the world.

Durable.























In order to positively achieve our aim of ensuring high quality in all markets, we have introduced and certified a quality management system according to DIN EN ISO 9001:2000. Being an export-oriented organisation, MENNEKES hold product certificates from internationally renowned test institutes for various application areas.

Tested and certified.

Your direct line to products, information and service.





Service and safety all over the world: Here you will find information and a product overview, no matter where or when.



www.MENNEKES.de Around

At www.MENNEKES.de, you will find everything you need: information on our company, our products and our services. Over 10,000 products are documented in our online catalogue with a comfortable search function, so that you swiftly find what you're looking for.

What's more, all our current leaflets and information are available for downloading. Also, you may order sales promotion aids. If you would like to get in touch with us, you will find all contacts, all major postal addresses, subsidiaries and much more.





Detailed information for professionals: To help you with engineering, exact dimensions and specifications of the various products can be viewed on the internet.

Take the online configurator for your planning:
Just 3 steps to your required combination with price,
illustration and a descriptive text:

www.AMAXX.info



the clock. Around the globe.



Training and vocational education at MENNEKES.



Together we're strong.

We constantly offer training for our partners from all crafts, trades and industries to introduce new products, exchange experience and submit proposals. These synergies are reflected in research & development and in practical applications.





More information: info@ MENNEKES.de



Those who have greater knowledge can provide better advice and put forward stronger sales arguments. Therefore, we have established the MENNEKES training centre for our customers. Changing markets, new developments, new regulations, new products. It was never as important as it is today to constantly update one's know-how. Using advanced communication equipment, capable experts clarify and explain complex issues. What's more, the sharing of ideas among colleagues leads to new ways of carrying out day to day tasks.



Youth is our future.

The advancement of young people is one of the most important things in our times. To MENNEKES, it has top priority. Every year, we take on more apprentices than other companies.

We are at your disposal, at more than 40 trade fairs every year.

Making contacts.



Trade fairs are an important communication platform for introducing new products, sharing ideas, cultivating relationships and making new contacts. Every year, we participate in trade fairs in Germany, the rest of Europe and all over the world. Of course, you will also find us at the industry's most important fair, i.e., "Light & Building". Customers and manufacturers alike can benefit from experience gained on such occasions.



Sharing experience.



Technical information, from man to man:
Sharing information is paramount because praise, criticism and ideas are the source of market-oriented concepts.







National partnerships.

























International recognition.

MENNEKES plugs and receptacles conform to relevant national and international standards. After plugs and receptacles are tested by independent organisations such as VDE (Association of German Electrical Engineers), records according to CCA- or CB-II-procedures are established which then serve as basis for approval in other countries, among others

in the countries whose national test marks are listed below. Due to special national regulations not all products can receive general world-wide approval. For plugs and receptacles for the USA and Canada, see separate catalogue.





1

CEE receptacles, 16A to 125A

Receptacles screwless with TwinCONTACT, 16A and 32A, IP 44 and IP 67 Page 22 and 23





Receptacles with screw terminals, 16A to 63A, IP 44 Page 24 and 25

Double boxes screwless with TwinCONTACT, 16A and 32A, IP 44 Page 22 and 23





Receptacles with screw terminals, 16A to 125A, IP 67 Page 26 and 27

Panel mounted receptacles screwless with TwinCONTACT, 16A and 32A, IP 44 and IP 67 Page 28 to 31





Panel mounted receptacles with screw terminals, 16A to 125A, IP 44 and IP 67 Page 32 to 37

RAPIDO panel mounted receptacles with a central locking system, 16A and 32A, IP 44 Page 38 and 39





Panel mounted receptacles for cable ducts and flush mounted installation boxes, 16A and 32A, IP 44 and IP 67 Page 40 to 43

Cepex surface mounted receptacles and double receptacles, 16A and 32A, IP 44 Page 46, 47 and 56, 57





Cepex panel mounted receptacles and flush mounted receptacles 16A and 32A, IP 44
Page 48 to 55 and 58, 59

Receptacles with high heat-resistant contact carriers and nickel plated contacts and with high resistance to chemicals see chapter 10.

Receptacles 16A to 125A

New. The swift connection. MENNEKES TwinCONTACT.

Looking for quick and easy connection? You can't miss the MENNEKES TwinCONTACT - a spring terminal in a newly designed receptacle. Remove the insulation, insert the conductors, and you're done. The contact is safely in place and it is even approved as a connection terminal – undo the conductor, that's all it takes. Press the red button and remove the conductor this is our concept of convenient and time-saving handling.

Colour-coded terminals for unmistakable connections.



Suitable for solid conductors and flexible conductors (with ferrules or ultrasonic welded).

Cond. cross section at 16A: 1.5 - 4.0 mm², at 32A: 2.5 - 10 mm².







Through wiring.
Safe and easy.
With the new MENNEKES
TwinCONTACT, the
connection of CEE and/or
SCHUKO® receptacles is
easily established.



Save time.
Panel mounted receptacles with TwinCONTACT technology. For installation in ducts, distributors, control cubicles, ...

Flanges and fixing. One dimension for all.



Panel mounted receptacles from 16A 3 pole to 32A 5 pole, in IP 44 or IP 67. A uniform flange dimension of 85 x 85 mm as well as a standardised fixing hole spacing of 70 x 70 mm make the swiftest installation possible.

For additional functions such as control, monitoring, signalling, electrical interlocking etc., an optional auxiliary switch may be installed.





There's nothing tighter than that. Twisting-proof flange with integral positioned seal.

RAPIDO. Installed in no time at all.



The name says it all: Quick installation in a jiffy, with no need for fixing holes or screws. Safe gripping by a stable thread with counter nut and protection against torsion. 16A 3 pole to 32A 5 pole, IP 44. Installation diameter of 61 mm for a wall thickness from 2 to 5 mm or 70 mm a wall thickness from 2 to 9 mm.



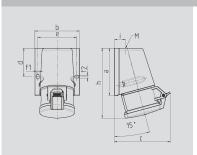
chapter 1.

MENNEKES CEE receptacles, screwless, with TwinCONTACT

to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code.

Enclosure and insert made of AMAPLAST.

Other voltages and frequencies available on request.



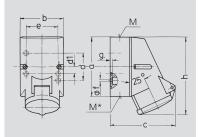
Drawing	Amp.		16		I	32	
1 MB 463	Poles	3	4	5	3	4	5
Dim. in mm	n a	95	93	92,5	102	102	102
	b	73,5	87,5	87,5	94	94	94
	c	93	107,5	110	115,5	115,5	119,5
	d	55,5	55,5	55,5	62	62	62
	e	61	76	76	84	84	84
	f1	5,3	5,3	5,3	5,1	5,1	5,1
	f2	5,3	5,3	5,3	5,1	5,1	5,1
	h	139	139	136,5	160	160	156,5
	i	19,8	21,5	21,5	26,5	26,5	26,5
	M	M20x 1,5	M25x 1,5	M25x 1,5	M25x 1,5	M32x 1,5	M32x 1,5
Terminal for co		1,5	1,5	1,5	2,5	2,5	2,5
section (mm²)		—4	—4	—4	—6	—6	—6

Receptacles with TwinCONTACT

screwless spring terminals, external fixing, cable entry from top

▲ IP 44

Product group 1038, type 31 shown.



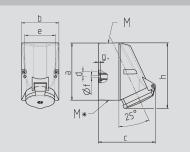
Drawing	Amp.		16	
1 MB 209	Poles	3	4	5
Dim. in mn	n a b c	87 64 99	100 75 110	100 75 113
	d d1 e	40 50	11 59	11 59
	f g. h	4,5 4 115	5 4 125	5 4 128
	to	20 20 (blii be cut	oút	
Max. cable di	am. (mm)	15	15	15
Terminal for o section (mm²)		1,5 —4	1,5 —4	1,5 —4

Receptacles with TwinCONTACT

screwless spring terminals, suitable for through wiring, internal fixing, one cable entry at top and one blind entry (can be cut out) at bottom, enclosure base can be turned 180°

▲ IP 44

Product group 1140, type 3331 shown.



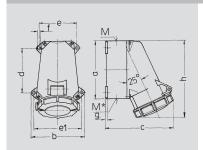
Drawing	Amp.		16		I	32	
1 MB 43	Poles		4	5	3	4	5
Dim. in mm	a b c		28 84 22	128 84 124	128 84 136	128 84 136	128 84 138
	d e f	!	11 68 5,3	11 68 5,3	11 68 5,3	11 68 5,3	11 68 5,3
	g. h M		4 44 25	4 145 25	4 158 32	4 158 32	4 160 32
Max. cable dia	2x M : to b		olind) t out 18	t	M 25 (I o be cu 18/25	it out	
Terminal for co section (mm²) r		-	1,5 –4	1,5 —4	2,5 —10	2,5 —10	2,5 —10

Receptacles with TwinCONTACT

screwless spring terminals, suitable for through wiring, internal fixing, one cable entry at top and two blind entries (can be cut out) at bottom, enclosure base can be turned 180°

▲ IP 44

Product group 1141, type 419 shown.



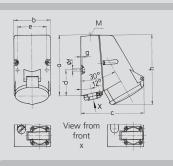
Drawing	Amp.		16			32	
1 MB 219	Poles	3	4	5	3	4	5
Dim. in mm	a b c	95 102 115	95 102 124	95 102 129	120 112 143	120 112 143	120 112 150
	d e e1	64,2 77,5 88	64,2 77,5 88	64,2 77,5 88	90,2 79 98,5	90,2 79 98,5	90,2 79 98,5
	f g. h	5,5 5 128	5,5 5 128	5,5 5 132	5,5 5 160	5,5 5 160	5,5 5 160
	M M*	20 20 (blind) t	25 25 o be cu	25 25 at out	32 t	32 M 32 (o be co	32 blind) ut out
Max. cable dia	am. (mm)	15	18	18	25	25	25
Terminal for co section (mm²)			1,5 —4	1,5 —4	2,5 —10	^{2,5} —10	^{2,5} —10

Receptacles with TwinCONTACT

screwless spring terminals, suitable for through wiring, with 4 external fixing points, one cable entry at top and one blind entry (can be cut out) at bottom

♦ IP 67

Product group 1132, type 200 shown.



Drawing	Amp.	16	32
1 MB 354	Poles	5	5
Dim. in mm	a	141	141
	b	85	85
	c	139	153
	d	61	61
	e	68	68
	f	5,3	5,3
	g.	4	4
	h	145	162
Max. cable dia	M	25	32
	m. (mm)	18	25
Terminal for co		1,5	2,5
schnitt von		—4	—10

Double boxes with TwinCONTACT CEE and SCHUKO® receptacle in one enclosure

screwless spring terminals, also available with shock-proof receptacles to comply with French/Belgian, Danish and Swiss standards

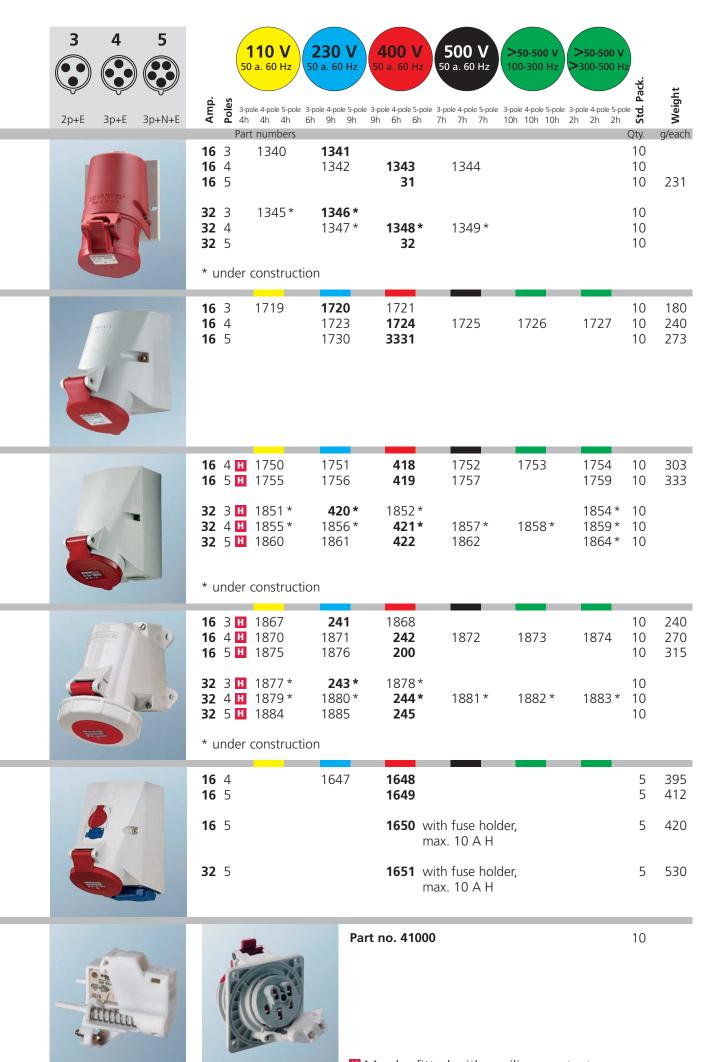
▲ IP 44

Product group 1143, type 1649 shown.

Auxiliary contact

For standard receptacles and panel mounted receptacles 16A and 32A of product groups 1018, 1019, 1041, 1044, 1048, 1049, 1132 and 1141. Function: Change-over contact = NC/NO Connected load: 16A (4A)* / ~ 250V 10A (3A)* / ~ 400V

* for inductive or motor load



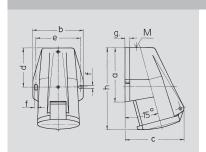
■ May be fitted with auxiliary contact.

MENNEKES CEE receptacles and receptacles for through wiring, with screw terminal

to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code.

Enclosure and insert made of AMAPLAST.

Other voltages and frequencies available on request.



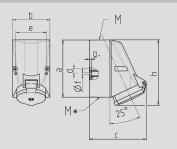
Drawing Amp.	1	16			32	
1 MB 205 Poles	3	4	5	3	4	5
Dim. in mm a b	91	91	91	102	102	102
	73	79	87	89	89	94
	86	93	99	108	108	114
d	55	55	56,4	62	62	62
e	62	68	76	77,5	77,5	84
f	5,3	5,3	5,3	5,3	5,3	5,3
g.	8	8	9	10	10	10
h	132	132	132	153	153	153
M	20	25	25	25	25	32
Max. cable diam. (mm	13	18	18	18	18	25
Terminal for cond. crossection (mm²) minma		1,5 —4	1,5 —4	2,5 —10	2,5 —10	2,5 —10

Receptacles

external fixing, cable entry from top



Product group 1037, type 1 shown.



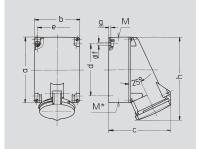
Diawing	Amp.	10			32	
1 MB 43	Poles	4	5	3	4	5
Dim. in mn	n a b c	128 84 122	128 84 124	128 84 136	128 84 136	128 84 138
	d e f	11 68 5,3	11 68 5,3	11 68 5,3	11 68 5,3	11 68 5,3
	g. h M	4 144 25	4 145 25	4 158 32	4 158 32	4 160 32
Max. cable dia	M* am. (mm)	2x M 25 (to be o 18			M 25 (I o be cu 18/25	it out
Terminal for or section (mm²)		1,5 —4	1,5 —4	2,5 —10	2,5 —10	2,5 —10

Receptacles

internal fixing, one cable entry at top and two blind entries (can be cut out) at bottom, enclosure base can be turned 180°

▲ IP 44

Product group 1041, type 1419 shown.



Drawing	Amp.		63	
1 MB 213	Polen	3	4	5
Dim. in mm	a b c	170 118 164	170 118 164	170 118 164
	d e f	134,5 103 6,1	134,5 103 6,1	134,5 103 6,1
	g. h M	216 40	216 40	216 40
Max. cable dia	M* ım. (mm)	(blind) 1 32	2x to be cu 32	M 40 it out 32
Terminal for co section (mm²) r	nd. cross	6 —25	_6 _25	_6 _25

Receptacles with SoftCONTACT

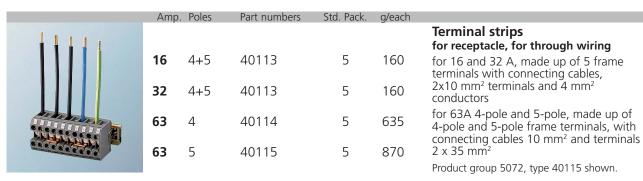
internal fixing, one cable entry at top and two blind entries (can be cut out) at bottom, enclosure base can be turned 180°, with 6 fixing points to accommodate special terminals

▲ IP 44

Product group 1041, type 1145 shown.

Terminal strips

(for receptacles on page 26/27, product group 1052)





■ May be fitted with auxiliary contact.

Special terminals

(for 63A receptacles on page 24 to 27, product groups 1041 and 1049)



Special terminals 2 x 25 mm²
Special terminals 2 x 6 mm² for pilot contacts
Cable lug for special terminal no. 40096 and 2.5 mm² cord
Cable lug for 10 mm² cord

Part no. 40300 Part no. 40096 Part no. 40098 Part no. 40100

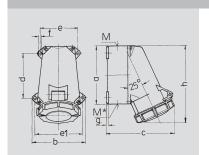
Product groups 5070 and 5071.

MENNEKES CEE receptacles and receptacles for through wiring, with screw terminal

to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code.

Enclosure and insert made of **AMAPLAST**.

Other voltages and frequencies available on request.



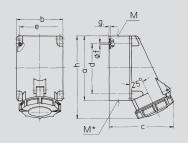
Drawing	Amp.		16		1	32	
1 MB 219	Poles	3	4	5	3	4	5
Dim. in mn	n a b c	95 102 115	95 102 124	95 102 129	120 112 143	120 112 143	120 112 150
	d e e1	64,2 77,5 88	64,2 77,5 88	64,2 77,5 88	90,2 79 98,5	90,2 79 98,5	90,2 79 98,5
	f g. h	5,5 5 128	5,5 5 128	5,5 5 132	5,5 5 160	5,5 5 160	5,5 5 160
	M M*	20 20 (blind) t		25 25 at out		32 M 32 (o be ci	ut out
Max. cable di	am. (mm)	15	18	18	25	25	25
Terminal for or section (mm²)		1,5 —4	1,5 —4	1,5 —4	2,5 —10	$-^{2,5}_{-10}$	2,5 —10

Receptacles

four external fixing, one cable entry at top and one blind entry (can be cut out) at bottom

♦ IP 67

Product group 1049, type 1195 shown.



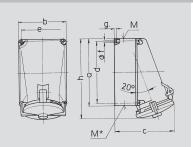
Drawing	Amp.		63	
1 MB 112	Poles	3	4	5
Dim. in mm	n a b c	170 118 171	170 118 171	170 118 171
	d e f	134,5 103 6,1	134,5 103 6,1	134,5 103 6,1
	g. h M	216 40	216 40	6 216 40
Max. cable dia	M* nm. (mm)	(blind) 1 32		M 40 ut out 32
Terminal for co section (mm²) i			6 25	_6 _25

Receptacles with SoftCONTACT

internal fixing, one cable entry at top and two blind entries (can be cut out) at bottom, enclosure base can be turned 180°, with 6 fixing points to accommodate special terminals (see page 25)

♦ IP 67

Product group 1049, type 136 shown.

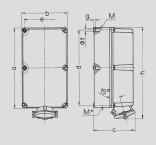


1 MB 162	Amp.	125	
1 MB 163	Poles	4	5
Dim. in mn	n a	264	264
	b	163	163
	c	203	203
	d	240	240
	e	140	140
	f	8,1	8,1
	g.	8	8
	h	313	313
	M	50	50
Max. cable di	M*	50	50
	am. (mm)	38	38
Terminal for co		25	25
section (mm²)		—35	—35

Receptacles

♦ IP 67

Product group 1050, type 143 shown.



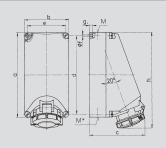
Drawing	Amp.	125	
1 MB 163	Poles	4	5
Dim. in mm	a	460	460
	b	260	260
	c	236	236
	d	434	434
	e	234	234
	f	11	11
	g.	9.	9.
	h	525	525
Max. cable dia	M	63	63
	M*	2x63	2x63
	m. (mm)	44	44
Terminal for co		25	25
section (mm²) n		—70	—70

Receptacles

with large space for accommodating wiring



Product group 1051, type 2162 shown.



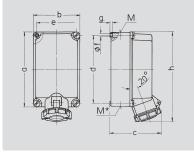
Diawing	Amp.		10			32	
1 MB 206	Poles	3	4	5	3	4	5
Dim. in mm	n a	225	225	225	225	225	225
	b	118	118	118	118	118	118
	c	144	150	152	155	155	159
	d	208	208	208	208	208	208
	e	101	101	101	101	101	101
	f	6,3	6,3	6,3	6,3	6,3	6,3
	g.	8	8	8	8	8	8
	h	249	251	253	255	255	259
Max. cable dia	٠, ,	2x25 25	25 and 2x25 25	2x25 25	2x25 25	25	2x25 25
Terminal for co		1,5	1,5	1,5	2,5	2,5	2,5
section (mm²)		—4	—4	—4	—10	—10	—10

Receptacles

for through wiring, with fixing points for terminal strip Part no. 40113 (see page 24)

♦ IP 67

Product group 1052, type 5516 shown.



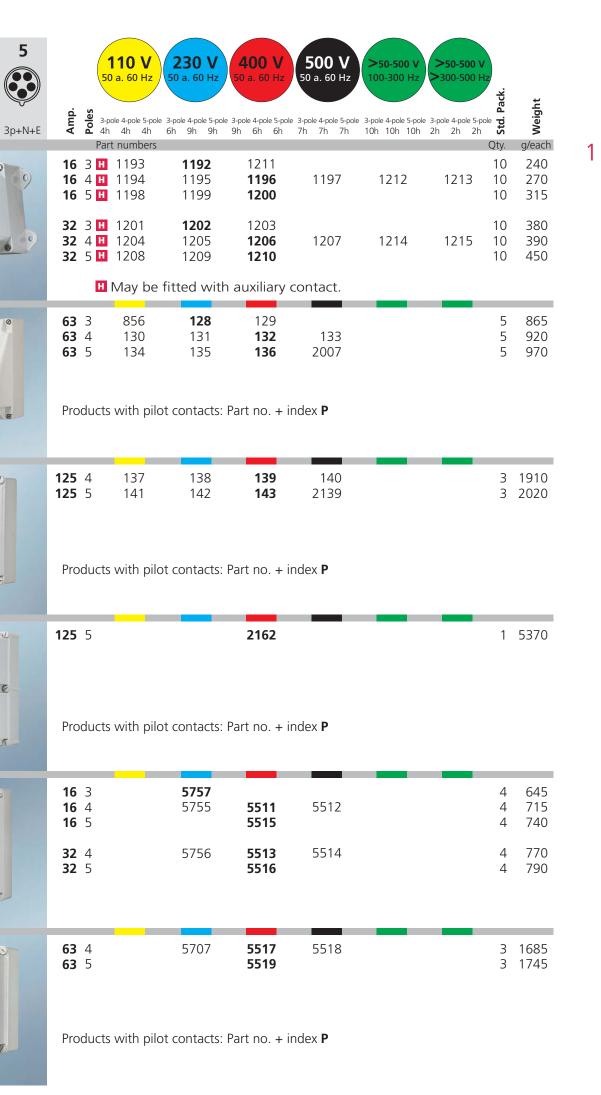
Drawing	Amp.	(53	
1 MB 178	Poles		4	5
Dim. in mn	n a b c		54 53 93	264 163 193
	d e f		10 10 ,1	240 140 8,1
	g. h M	33 2x4		8 334 2x40
Max. cable dia	M* am. (mm)	2x4	10 27	2x40 27
Terminal for co section (mm²)		-2	6 25	_6 _25

Receptacles with SoftCONTACT

for through wiring, with fixing points for terminal strip Part no. 40114 or 40115 (see page 24)

♦ IP 67

Product group 1052, type 5519 shown.

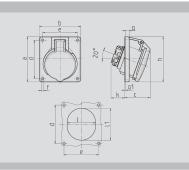


MENNEKES CEE panel mounted receptacles, screwless with TwinCONTACT

to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code.

Enclosure and insert made of AMAPLAST.

Other voltages and frequencies available on request.



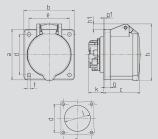
Drawing A	mp.		16		32
1 MB 465 P	oles	3	4	5	5
Dim. in mm	a b c d e	73,5 64 52 60 52	100 92 58 85 77	100 92 58 85 77	100 92 60 85 77
	f g g1	5,5 7 2	5,5 8 2	5,5 8 2	5,5 8 2
Terminal for cond section (mm²) mir	h k l l1 l. cross	79 31 52 60 1,5 —4	100 31 55 63 1,5 —4	100 31 65 72 1,5 —4	105 54 73 85 2,5 —€

Panel mounted receptacles with TwinCONTACT

screwless spring terminals, suitable for through wiring, 20° inclination

▲ IP 44

Product group 1133, type 3473 shown.



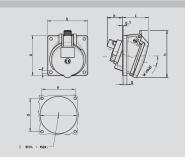
Drawing	Amp.		16		32
1 MB 464	Poles	3	4	5	5
Dim. in mm	a b c d e	75 75 53 60 60	75 75 53 60 60	75 75 54 60 60	75 75 64 60 60
	f g g1	5,5 8 2	5,5 8 2	5,5 8 2	5,5 8 2
Terminal for co section (mm²) n	h h1 k l nd. cross	75 22 43 1,5 —4	80 6 22 52 1,5 —4	85 9 22 57 1,5 —4	95 12 38 65 2,5 —6

Panel mounted receptacles with TwinCONTACT

screwless spring terminals, suitable for through wiring, straight



Product group 1134, type 3385 shown.



Drawing A	Amp.		16		I	32	
1 MB 453 P	Poles	3	4	5	3	4	5
Dim. in mm	a b c d e f	85 85 53 70 70 5,5	85 85 57 70 70 5,5	85 85 57 70 70 5,5	85 85 67 70 70 5,5	85 85 67 70 70 5,5	85 85 67 70 70 5,5
		8 2 89 39 57 76 1,5 —4	8 2 96 34 64 76 1,5 —4	8 2 100 33 70 76 1,5 —4	8 2 110 39 78 78 2,5 —6	8 2 110 39 78 78 2,5 —6	8 2 110 39 78 78 78 2,5 —6

Panel mounted receptacles with TwinCONTACT

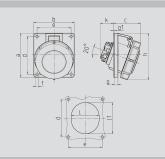
screwless spring terminals,

with standard flange dimensions

flange: 85 x 85 mm fixing hole spacing: 70 x 70 mm 20° inclination

▲ IP 44

Product group 1148, type 3070 shown.



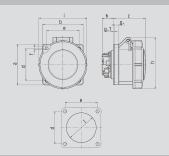
Drawing	Amp.		16		32
1 MB 466	Poles	3	4	5	5
Dim. in mm	a b c d e	73,5 64 52 60 52	100 92 60 85 77	100 92 62 85 77	100 92 66 85 77
	f g g1	5,5 7 2	5,5 8 2	5,5 8 2	5,5 8 2
Terminal for co section (mm²) n	h k I I1 nd. cross	84 31 52 60 1,5 —4	100 31 55 63 1,5 —4	106 31 65 72 1,5 —4	113 54 73 85 2,5 —6

Panel mounted receptacles with TwinCONTACT

screwless spring terminals, suitable for through wiring, 20° inclination

♦ IP 67

Product group 1135, type 3485 shown.



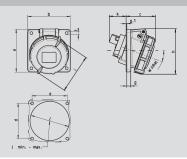
Drawing	Amp.		16		32
1 MB 467	Poles	3	4	5	5
Dim. in mn	n a b c d e	75 75 60 60	75 75 61 60 60	75 75 61 60 60	85 75 72 60 60
	f g g1	5,5 8 2	5,5 8 2	5,5 8 2	5,5 8 2
	h i k I	83 78 21 43	88 85 21 52	95 96 21 54	105 110 38 65
Terminal for o section (mm²)		1,5 —4	1,5 —4	1,5 —4	2,5 —6

Panel mounted receptacles with TwinCONTACT

screwless spring terminals, suitable for through wiring, straight

♦ IP 67

Product group 1136, type 1131 shown.



Drawing Ar	mp.		16			32	
1 MB 452 Po	les	3	4	5	3	4	5
Dim. in mm	a b c d e f	85 85 57 70 70 5,5	85 85 59 70 70 5,5	85 85 60 70 70 5,5	85 85 72 70 70 5,5	85 85 72 70 70 5,5	85 85 72 70 70 5,5
ļ n		8 2 87 75 39 57 76 1,5 —4	8 91 81 34 64 76 1,5	8 2 99 86,5 33 70 76 1,5 —4	8 2 107 102 40 78 78 2,5 —6	8 2 107 102 40 78 78 2,5 —6	8 2 107 102 40 78 78 2,5 —6

Panel mounted receptacles with TwinCONTACT

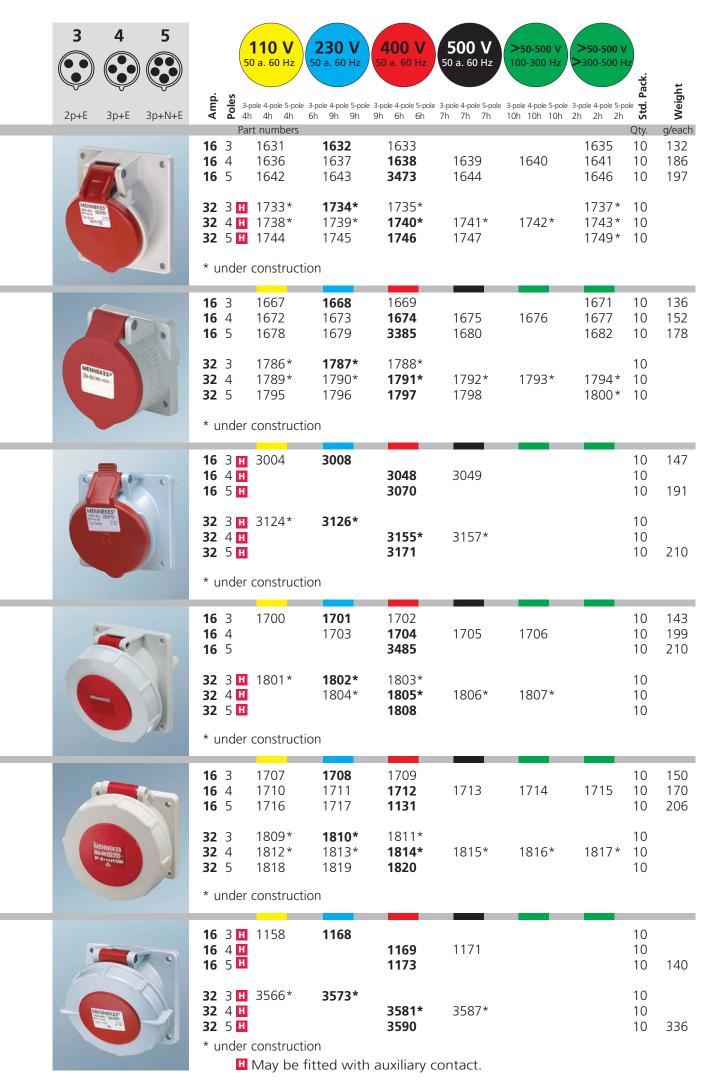
screwless spring terminals,

with standard flange dimensions

flange: 85 x 85 mm fixing hole spacing: 70 x 70 mm 20° inclination

♦ IP 67

Product group 1146, type 1173 shown.

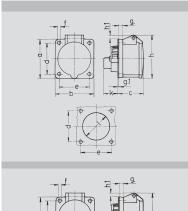


MENNEKES CEE panel mounted receptacles, screwless, with TwinCONTACT

to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code.

Enclosure and insert made of **AMAPLAST**.

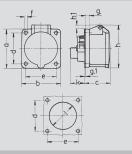
Other voltages and frequencies available on request.



Drawing Amp.	16
1 MB 426 Poles	3
Dim. in mm a b c	55 55 54
d e f	45 45 5,5
g. g.1 h	8 2 70
h1 k l	12 28 47
Terminal for cond. cross section (mm²) minmax	

Panel mounted receptacles with TwinCONACT screwless spring terminals, suitable for through wiring, straight, small flange dimension

▲ IP 44



Drawing	Amp.		16	
1 MB 259	Poles	3	4	5
Dim. in mm	a	62	72	72
	b	62	65	65
	c	54	54	54
	d	47	52	52
	e	47	52	52
	f	5,5	5,5	5,5
	g.	8	8	8
	g.1	2	2	2
	h	68	77	85
	h1	7	7	11
	k	28	28	28
	l	50	52	57
Terminal for co		1,5	1,5	1,5
section (mm²) n		—4	—4	—4

Panel mounted receptacles with TwinCONACT

Product group 1147, type 1619 shown.

screwless spring terminals, suitable for through wiring, straight, small flange dimension

▲ IP 44 Product group 1147, type 1337 shown.

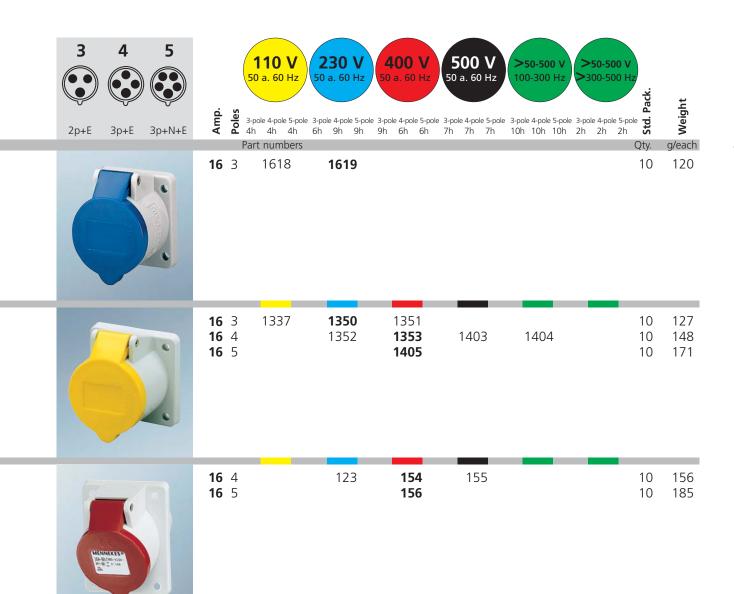
Drawing Amp.	16	- 1
1 MB 147 Poles	4	5
Dim. in mm a b c	87 71 46	87 71 46
d	70	70
d1	7,5	7,5
e	52	52
f	5,1	5,1
g.	6.	6.
g.1	2	2
h	92	92
k	39	39
l	64	64
I1	80	80
Terminal for cond. cross	1,5	1,5
section (mm²) minmax.	—4	—4

Panel mounted receptacles with TwinCONACT

screwless spring terminals, suitable for through wiring, 20° inclination

▲ IP 44

Product group 1145, type 154 shown.

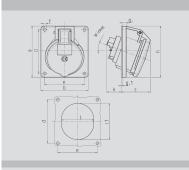


MENNEKES CEE panel mounted receptacles, with screw terminal

to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code.

Enclosure and insert made of AMAPLAST.

Other voltages and frequencies available on request.



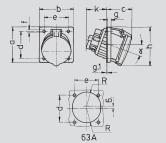
Drawing	Amp.		16		I	32	
1 MB 260	Poles	3	4	5	3	4	5
Dim. in mm	n a b c d e f	73,5 64 52 60 52 5,5	100 92 58 85 77 5,5	100 92 58 85 77 5,5	100 92 62 85 77 5,5	100 92 62 85 77 5,5	100 92 62 85 77 5,5
Terminal for co	g. g.1 h k l l1 α ond. cross	79 43 52 60 20° 1,5	3,5 8 2 100 32 55 63 20° 1,5 —4	8 2 100 32 65 72 20° 1,5 —4	8 2 103 53 67 82 20° 2,5	5,3 103 53 67 82 20° 2,5 —10	8 2 107 45 72 85 20° 2,5 —10

Panel mounted receptacles

20° inclination

▲ IP 44

Product group 1044, type 1463 shown.



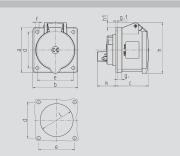
Drawing	Amp.		63	
1 MB 297	Poles	3	4	5
Dim. in mn	n a	110	110	110
	b	106	106	106
	c	85	85	85
	d	85	85	85
	e	77	77	77
	f	6,2	6,2	6,2
	g.	12	12	12
	g.1	2	2	2
	h	122	122	122
	k	69	69	69
	R	46	46	46
	α	20°	20°	20°
Terminal for o		_6	_6	6
section (mm²)		—25	25	—25

Panel mounted receptacles with SoftCONTACT

20° inclination



Product group 1044, type 1155 shown.



Drawing	Amp.		16		I	32	
1 MB 247	Poles	3	4	5	3	4	5
Dim. in mn	n a b c	75 75 53	75 75 53	75 75 55	75 75 64	75 75 64	75 75 65
	d e f	60 60 5,5	60 60 5,5	60 60 5,5	60 60 5,5	60 60 5,5	60 60 5,5
	g. g.1 h	8 2 75	8 2 80	8 2 85	8 2 89	8 2 89	8 2 95
	h1 k l	31 43	6 32 52	9 32 54	11 39 58	11 39 58	12 39 62
Terminal for o section (mm²)		1,5 —4	1,5 —4	1,5 —4	2,5 —10	2,5 —10	2,5 —10

Panel mounted receptacles

straight,

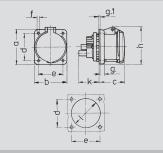
flange: 75 x 75 mm, fixing hole spacing: 60 x 60 mm

▲ ID 1/1

Product group 1056, type 1385 shown.

Blind flange

to close unused openings, see chapter 11 (SCHUKO®)



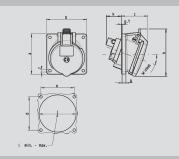
Drawing	Amp.		63	
1 MB 211	Poles	3	4	5
Dim. in mn	n a	107	107	107
	b	100	100	100
	c	80	80	80
	d	85	85	85
	e	77	77	77
	f	6.	6.	6.
	g.	12	12	12
	g.1	2	2	2
	h	113	113	113
	k	55	55	55
	I	88	88	88
Terminal for o section (mm²)		6 25	_6 —25	_6 —25

Panel mounted receptacles SoftCONTACT

straight



Product group 1056, type 1252 shown.



Drawing A	mp.		16		1	32	
1 MB 453 Pc	oles	3	4	5	3	4	5
Dim. in mm	a b c d e f	85 85 53 70 70 5,5	85 85 57 70 70 5,5	85 85 57 70 70 5,5	85 85 67 70 70 5,5	85 85 67 70 70 5,5	85 85 67 70 70 5,5
ļ r		8 2 89 39 57 76 1,5 —4	8 96 34 64 76 1,5	8 2 100 33 70 76 1,5 —4	8 2 110 39 78 78 2,5 —6	8 2 110 39 78 78 2,5 —6	8 2 110 39 78 78 2,5 —6

Panel mounted receptacles with standard flange dimensions

flange: 85 x 85 mm fixing hole spacing: 70 x 70 mm 20° inclination

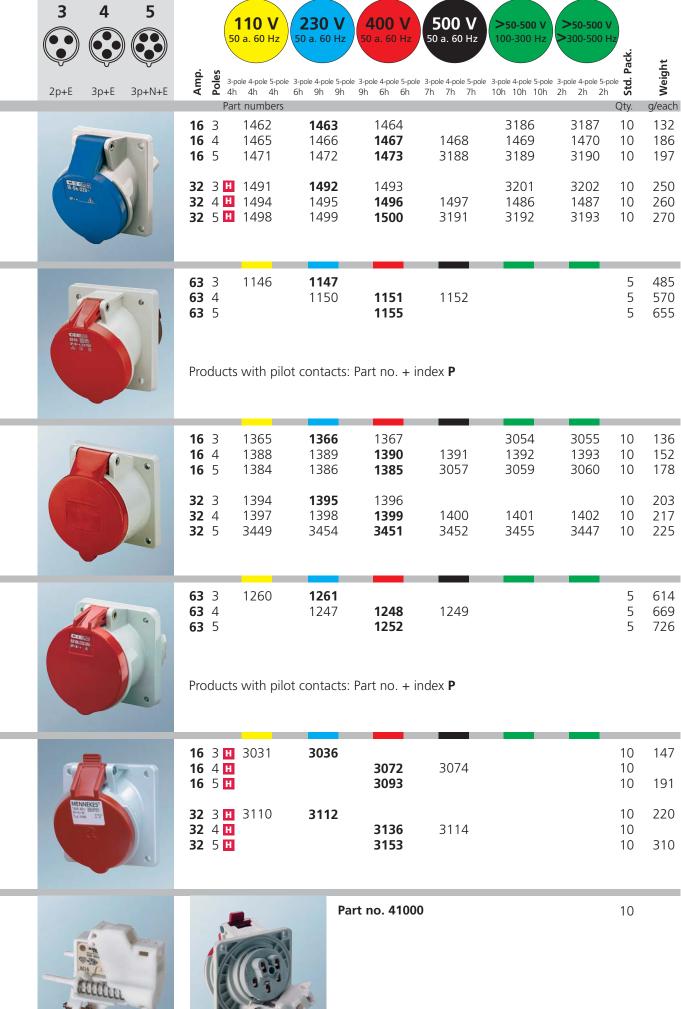
▲ IP 44

Product group 1018, type 3093 shown.

Auxiliary contact

For standard receptacles and panel mounted receptacles 16A and 32A of product groups 1018, 1019, 1041, 1044, 1048, 1049, 1132 and 1141. Function: Change-over contact = NC/NO Connected load: 16A (4A)* / ~ 250V 10A (3A)* / ~ 400V

* for inductive or motor load

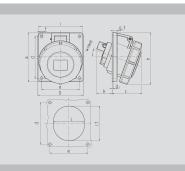


MENNEKES CEE panel mounted receptacles, with screw terminal

to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code.

Enclosure and insert made of AMAPLAST.

Other voltages and frequencies available on request.



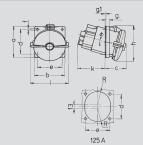
Drawing	Amp.		16		1	32	
1 MB 251	Poles	3	4	5	3	4	5
Dim. in mm	a b c d e f	73,5 64 52 60 52 5,5	100 92 60 85 77 5,5	100 92 62 85 77 5,5	100 92 64 85 77 5,5	100 92 64 85 77 5,5	100 92 66 85 77 5,5
Terminal for co	g.1 h i k l l1 α	8 2 84 78 43 52 60 20°	8 100 85 32 55 63 20° 1,5	8 2 105 96 32 65 72 20° 1,5	8 2 109 103 53 67 82 20° 2,5	8 109 103 53 67 82 20° 2.5	8 2 113 110 45 72 85 20° 2,5
Terminal for co section (mm²) r	nd. cross ninmax.	1,5 —4	1,5 —4	1,5 —4	$\frac{2.5}{-10}$	-2.5	-2.5

Panel mounted receptacles

20° inclination

♦ IP 67

Product group 1048, type 1551 shown.



۱p.		63			125	
les	3	4	5	3	4	5
a	110	110	110	114	114	114
b	106	106	106	110	110	110
c	85	85	85	85	85	85
d	85	85	85	90	90	90
e	77	77	77	90	90	90
f	6,2	6,2	6,2	6,2	6,2	6,2
g.	12	12	12	13	13	13
J.1	2	2	2	2	2	2
h	125	125	125	135	135	135
i	117	117	117	135	135	135
k	69	69	69	103	103	103
R	46	46	46	47	47	47
α	20°	20°	20°	15°	15°	15°
cross	6	6	6	25	25	25
max.	—25	—25	—25	—70	—70	—70
	es abcdef g.1.h ikRαcross	es 3 a 110 b 106 c 85 c 85 e 77 f 6,2 g .11 2 11 h 125 i 117 k 69 R 46 α 20° cross 6	a 110 110 100 to 85 85 85 e 77 77 f 6,2 6,2 6,2 12 12 12 12 14 125 125 i 117 117 k 69 69 68 46 46 46 42 20° 20° 66 6 6 6	S	S S S S S S S S S S	S S S S S S S S S S

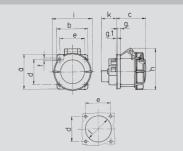
Panel mounted receptacles SoftCONTACT *)

20° inclination for 63A, 15° inclination for 125A

*) 63A: with **SoftCONTACT** 125A: with **TorsionSpringCONTACT**

♦ IP 67

Product group 1048, type 209 shown.



Drawing Amp.	1	16		I	32	
1 MB 141 Poles	3	4	5	3	4	5
Dim. in mm a b c	75	75	75	85	85	85
	75	75	75	75	75	75
	60	61	61	70	70	72
d	60	60	60	60	60	60
e	60	60	60	60	60	60
f	5,5	5,5	5,5	5,5	5,5	5,5
g.	8	8	8	8	8	8
g.1	2	2	2	2	2	2
h	83	88	95	99	99	105
i	78	85	96	103	103	110
k	26	27	27	34	34	34
I	50	54	57	62	62	65
Terminal for cond. cross		1,5	1,5	2,5	2,5	2,5
section (mm²) minmax		—4	—4	—10	—10	—10

Panel mounted receptacles straight

Judigiti

♦ IP 67

Product group 1046, type 228 shown.

Blind flange

to close unused openings, see chapter 11 (SCHUKO®)



1 MB 212	Amp.		63			125	
1 MB 258	Poles	3	4	5	3	4	5
Dim. in mm	a	107	107	107	130	130	130
	b	100	100	100	130	130	130
	c	84	84	84	124	124	124
	d	85	85	85	104	104	104
	e	77	77	77	104	104	104
	f	6,5	6,5	6,5	6,5	6,5	6,5
	g.	12	12	12	18	18	18
	g.1	2	2	2	2	2	2
	h	113	113	113	122	122	122
	i	118	118	118	135	135	135
	k	55	55	55	43	43	43
	I	88	88	88	95	95	95
Terminal for co		6	6	6	25	—25	25
section (mm²) r		25	25	25	—70	—70	—70

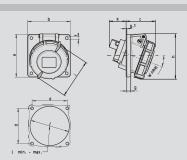
Panel mounted receptacles SoftCONTACT *)

straight

*) 63A: with **SoftCONTACT** 125A: with **TorsionSpringCONTACT**

♦ IP 67

Product group 1046, type 1128 shown.



Drawing	Amp.		16		1	32	
1 MB 452	Poles	3	4	5	3	4	5
Dim. in mm	a b c d e f	85 85 57 70 70 5,5	85 85 59 70 70 5,5	85 85 60 70 70 5,5	85 85 72 70 70 5,5	85 85 72 70 70 5,5	85 85 72 70 70 5,5
Terminal for co	g.1 h i k I min. I max.	8 2 87 75 39 57 76	8 91 81 34 64 76 1,5	8 2 99 86,5 33 70 76 1,5	8 2 107 102 40 78 78 2,5	8 2 107 102 40 78 78 2,5	8 2 107 102 40 78 78 2,5
section (mm²)		 4	 4	 4	2,3	2 ,3	2 ,3

Panel mounted receptacles with standard flange dimensions

flange: 85 x 85 mm fixing hole spacing: 70 x 70 mm 20° inclination

♦ IP 67

Product group 1019, type 1103 shown.



3 4 5	50	110 V a. 60 Hz	230 V 50 a. 60 Hz	400 V 50 a. 60 Hz	500 V 50 a. 60 Hz	>50-500 V 100-300 Hz	>50-500 > 300-500	Hz), t
2p+E 3p+E 3p+N+E			e 3-pole 4-pole 5-pol 6h 9h 9h	le 3-pole 4-pole 5-pole 9h 6h 6h	e 3-pole 4-pole 5-pole 7h 7h 7h	3-pole 4-pole 5-pole 10h 10h 10h	3-pole 4-pole 5- 2h 2h 2h		Weight
300	16 3 16 4 16 5	t numbers 1474	1475 1478	1476 1479 1485	1480	1481		Qty. 10 10 10	g/each 143 199 210
WHEN THE PROPERTY OF THE PROPE	32 3 H 32 4 H 32 5 H	1501	1502 1505	1503 1506 1551	1507	1567		10 10 10	260 280 315
	63 3 63 4 63 5	2179 203 207	2180 204 208	2181 205 209	206 3507		_	5 5 5	520 615 695
	125 3 125 4 125 5 Products	210 214 with pilo	3575 211 215 ot contacts:	212 216 Part no. + i	213 ndex P			5 5 5	840 940 1050
	16 3 16 4 16 5	217 220 226	218 221 227	219 222 228	223	224	225	10 10 10	150 170 206
MENNEXES BA-6512/2017- 2-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	32 3 32 4 32 5	229 232 238	230 233 239	231 234 240	235	236	237	10 10 10	236 245 297
AN	63 3 63 4 63 5	1263 1122 1126	1264 1123 1127	1265 1124 1128	1125		Τ	5 5 5	655 720 775
	125 3 125 4 125 5 Products	1455 1459 with pile	3380 1456 1460 ot contacts:	1457 1461 Part no. + i	1458 3283 ndex P				1070 1190 1310
	16 3 H 16 4 H 16 5 H	903	905	1081 1103	1082			10 10 10	240
MUNESSY 18-by line 18-ren	32 3 H 32 4 H 32 5 H	3197	3200	3254 3524	3256			10 10 10	336

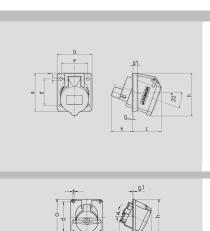
[■] May be fitted with auxiliary contact.

MENNEKES CEE panel mounted receptacles, with screw terminal

to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code.

Enclosure and insert made of AMAPLAST.

Other voltages and frequencies available on request.



Drawing	Amp.		16
1 MB 472	Poles	3	
Dim. in mm	a b c d e f	68 62 52 47 47 5,5	
Terminal for co	g1 g_ h k nd. cross	8 1,5 76 37 1,5 —4	

Panel mounted receptacles

20° inclination, flange: 68 x 62 mm

fixing hole spacing: 47 x 47 mm



Product group 1032, type 857 shown.



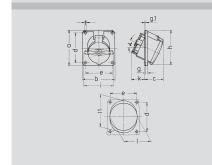
Drawing	Amp.	16	32	63
1 MB 235	Poles	5	5	5
Dim. in mm	b c	110 106 48	110 106 51	110 106 85
	d e f	90 90 5,1 6. 2 110	90 90 5,1	90 90 6,2
	g. g.1 h	6. 2 110	6. 2 110	12 2 122
	i k I	38 78	58 87	69 92
	Ι1 α	15°	15°	98 20°
Terminal for co section (mm²)		1,5 —4	-10^{2}	_25

Panel mounted receptacles with uniform flange dimensions and fixing hole spacing

63A: with **SoftCONTACT** 15° inclination for 16A and 32A 20° inclination for 63A

▲ IP 44

Product group 1044, type 20147 shown.



Drawing	Amp.	16	32	63	125
1 MB 235	Poles	5	5	5	5
Dim. in mm	b c	110 106 48	110 106 51	110 106 85	114 110 85
	d e f	90 90 5,1	90 90 5,1	90 90 6,2	90 90 6,2
	g. g.1 h	6. 2 110	6. 2 110	12 2 122	13 2 135
	i k I	38 78	58 87	69 92	135 103 94
	Ι1 α	15°	15°	98 20°	107 15°
Terminal for co section (mm²) i		1,5 —4	2,5 —10	_6 25	25 —70

Panel mounted receptacles with uniform flange dimensions and fixing hole spacing

15° inclination for 16A, 32A and 125A 20° inclination for 63A

63A: with **SoftCONTACT**

125A: with **TorsionSpringCONTACT**

♦ IP 67

Product group 1053, type 20148 shown.



g/each 132

 GE
 3-pole 4-pole 5-pole 3-pole 4

400 V

50 a. 60 Hz

500 V

50 a. 60 Hz

>50-500 V

100-300 Hz

3p+N+E

16 3 858 857

110 V

50 a. 60 Hz

230 V

50 a. 60 Hz



16 5	20146	10	223
32 5	20147	10	291
63 5	21160	5	695

63A receptacles with pilot contacts: part no. + index P



16 5	3333	10
32 5	3334	10
63 5	20148	5 695
125 5	216	5 1050

63A and 125A receptacles with pilot contacts: part no. + index P

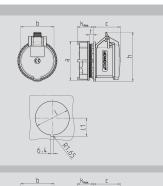
MENNEKES CEE panel mounted receptacles RAPIDO

to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code.

Drawing

Enclosure and insert made of AMAPLAST.

Other voltages and frequencies available on request.



Drawing	Amp.		16
1 MB 468	Poles	3	
Dim. in mm	а	69	
	b	57	
c	max.	55	
	k	30	
	h	87	
	- 1	61	
	l1	33,25	
	t	2-9	
Terminal for cor	nd. cross	1,5	
section (mm²) m	inmax.	-4	

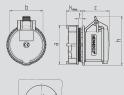
Amp. |

Panel mounted receptacles RAPIDO with TwinCONTACT

screwless spring terminals, suitable for through wiring, for wall apertures 61 mm diameter, central fixing

▲ IP 44

Product group 1154, type 997 shown.

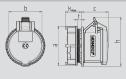


1 MB 468	Poles	4	5	5
Dim. in mm	a	81	81	81
	b	66	69	80
(max.	58	55	64
	k	33	33	39
	h	100	102	108
	- 1	70	70	70
	I1	37,75	37,75	37,75
	t	2-9	2-9	2-9
Terminal for co	nd. cross	1,5	1,5	2,5
section (mm²) n	ninmax.	—4	-4	—10
		l		I

Panel mounted receptacles RAPIDO with TwinCONTACT

screwless spring terminals, suitable for through wiring, for wall apertures 70 mm diameter, central fixing

▲ IP 44 Product group 1154, type 907 shown.





Drawing Amp.		16	
1 MB 468 Poles	3	4	5
Dim. in mm a	69	69	69
b	57	61	69
c max.	55	55	52
k	30	32	32
h	87	93	98
I	61	61	61
I1	33,25	33,25	33,25
t	2-9	2-9	2-9
Terminal for cond. cross	1,5	1,5	1,5
section (mm²) minmax.	—4	-4	—4

Panel mounted receptacles RAPIDO screw terminals,

for wall apertures 61 mm diameter, central fixing



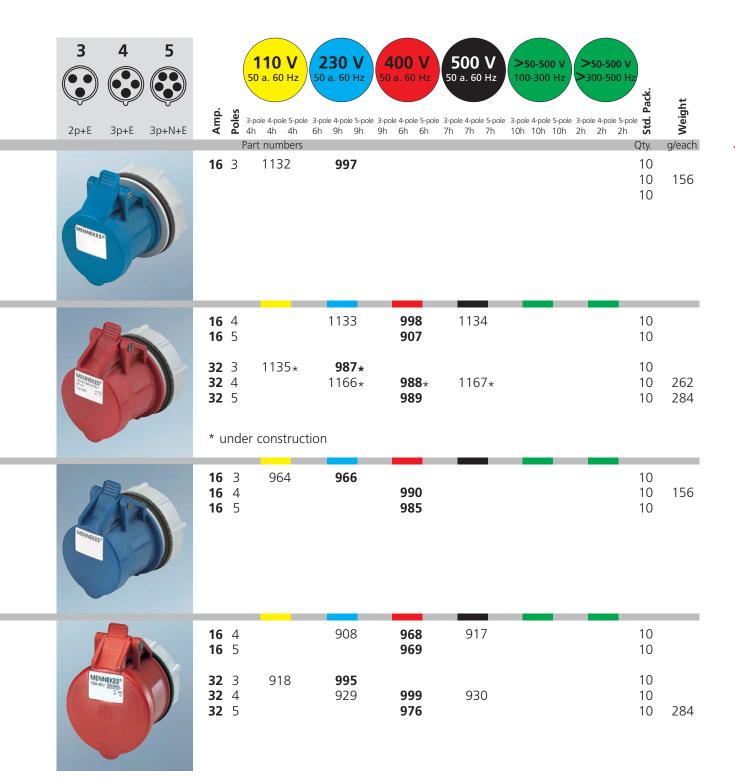


Drawing	Amp.		10			32	
1 MB 468	Poles		4	5	3	4	5
Dim. in mn	n a		81	81	81	81	81
	b		66	69	71	71	80
	c max.		58	55	66	66	64
	k		33	33	39	39	39
	h		100	102	101	101	108
	- 1		70	70	70	70	70
	l1	3	7,75	37,75	37,75	37,75	37,75
	t		2-9	2-9	2-9	2-9	2-9
Terminal for o			1,5 4	1,5 —4	2,5 —10	2,5 —10	2,5 —10
section (min)	min. max.				-10	-10	10

Panel mounted receptacles RAPIDO screw terminals,

for wall apertures 70 mm diameter, central fixing

Product group 1157, type 969 shown.

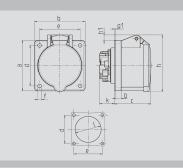


MENNEKES CEE panel mounted receptacles for cable ducts and flush mounted installation boxes, flanges

to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code.

Enclosure and insert made of **AMAPLAST**.

Other voltages and frequencies available on request.

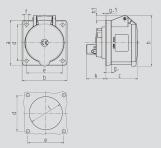


Drawing Amp.	1	16		32
1 MB 464 Poles	3	4	5	5
Dim. in mm a b c d e	75	75	75	75
	75	75	75	75
	53	53	54	64
	60	60	60	60
	60	60	60	60
f	5,5	5,5	5,5	5,5
g	8	8	8	8
g1	2	2	2	2
h		80	85	95
h1		6	9	12
k		22	22	38
		52	57	65
Terminal for cond. cros		1,5	1,5	2,5
section (mm²) minma		—4	—4	—6

Panel mounted receptacles with TwinCONTACT

screwless spring terminals, suitable for through wiring, straight, flange: 75 x 75 mm, fixing hole spacing: 60 x 60 mm

▲ IP 44 Product group 1134, type 3385 shown.

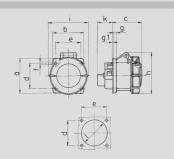


Drawing	Amp.		16		1	32	
1 MB 360	Poles	3	4	5	3	4	5
Dim. in mm	ı a	75	75	75	75	75	75
	b	75	75	75	75	75	75
	c	53	53	55	64	64	64
	d	60	60	60	60	60	60
	e	60	60	60	60	60	60
	f	5,5	5,5	5,5	5,5	5,5	5,5
	g.	8	8	8	8	8	8
	g.1	2	2	2	2	2	2
	h	75	80	85	89	89	95
	h1 k l	31 43	6 32 52	9 32 54	11 39 58	11 39 58	12 17 54
Terminal for co		1,5	1,5	1,5	2,5	2,5	2,5
section (mm²) I		—4	—4	—4	—10	—10	—10

Panel mounted receptacles

with screw terminals, straight, flange: 75 x 75 mm, fixing hole spacing: 60 x 60 mm

▲ IP 44 Product group 1056, type 1276 shown.



Drawing	Amp.		16		1	32	
1 MB 141	Poles	3	4	5	3	4	5
Dim. in mm	n a	75	75	75	85	85	85
	b	75	75	75	75	75	75
	c	60	61	61	70	70	72
	d	60	60	60	60	60	60
	e	60	60	60	60	60	60
	f	5,5	5,5	5,5	5,5	5,5	5,5
	g.	8	8	8	8	8	8
	g.1	2	2	2	2	2	2
	h	83	88	95	99	99	105
	i	78	85	96	103	103	110
	k	26	27	27	34	34	34
	I	50	54	57	62	62	65
Terminal for co		1,5	1,5	1,5	2,5	2,5	2,5
section (mm²)		—4	—4	—4	—10	—10	—10

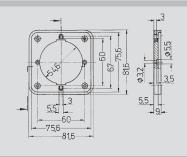
Panel mounted receptacles with TwinCONTACT

screwless spring terminals, suitable for through wiring, straight, flange: 75 x 75 mm

flange: 75 x 75 mm, fixing hole spacing: 60 x 60 mm

♦♦ IP 67

Product group 1136 type 1131 shown.



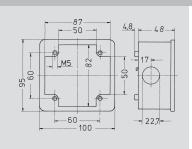




Flange

for panel mounted receptacles 16A, 3-, 4- and 5-pole of product groups 1046, 1056, 1136 and 1134 as well as 32A, 5-pole of product group 1056 to be attached to cable ducts

Part no. 40102



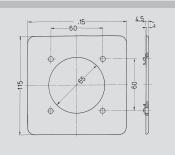
Drawing 1 MB 232 Dim. in mm



Flush mounted installation box

with accessories, suitable together with the appropriate flange for mounting a 16A or 32A panel mounted receptacle of product groups 1046, 1056, 1136 and 1134

Part no. 40369



Drawing 1 MB 233

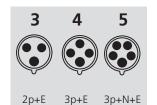
Dim. in mm



Flange

with a gasket for fitting a 16A or 32A panel mounted receptacle of product groups 1046, 1056, 1136 and 1134 on a flush mounted installation box part no. 40369

Part no. 41340





230 V 50 a. 60 Hz









Weight 3-pole 4-pole 5-pole 5-



Amp.	Poles	3-pole 4-pole 5-pole 4h 4h 4h	3-pole 4-pole 5-pole 6h 9h 9h	3-pole 4-pole 5-pole 9h 6h 6h	3-pole 4-pole 5-pole 7h 7h 7h	3-pole 4-pole 5-pole 10h 10h 10h	3-pole 4-pole 5-po 2h 2h 2h	Std. P.	Weigh
		Part numbers						Qty.	g/each
16	3	1667	1668	1669			1671	10	136
16	4	1672	1673	1674	1675	1676	1677	10	152
16	5	1678	1679	3385	1680		1682	10	178



1394	1395	1396				10	200
1397	1398	1399	1400	1401	1402	10	217
1274	1275	1276	3069	3089	3090	10	225
	1397	1397 1398		1397 1398 1399 1400	1397 1398 1399 1400 1401	1397 1398 1399 1400 1401 1402	1394 1395 1396 10 1397 1398 1399 1400 1401 1402 10 1274 1275 1276 3069 3089 3090 10



					_			
16 3	1707	1708	1709				10	150
16 4	1710	1711	1712	1713	1714	1715	10	170
16 5	1716	1717	1131				10	206





Panel mounted receptacles from 16A, 3, 4 and 5 pole to 32A, 5 pole, IP44 as well as 16A, 3, 4 and 5 pole to 16A, 5 pole, IP67 with uniform flange dimensions of 75 x 75 mm and uniform fixing hole spacing of 60 x 60 mm. Using flange 40102 on the left, these are suitable for installation on cable ducts and in cavity wall or concrete installation boxes.

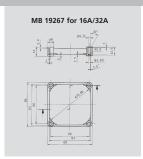
See also page 42/43.





The ideal combination: Cepex receptacles installed in cavity wall or concrete installation boxes (only 16A, 3 to 5 pole and SCHUKO®)

Cavity wall installation box on the left, concrete installation box on the right (made by Kaiser)







Flanges for swift and safe fastening

of panel mounted receptacles 16A and 32A, product groups 1046, 1056, 1136 and 1134

Part no. 19267000

a. panel mounted receptacles 63A, product groups 1046, 1056,

Part no. 19272000

MENNEKES CEE panel mounted receptacles for cable ducts of various duct manufacturers

Detailed product description you will find on pages 40/41 and 48/49.

Cable duct built-in boxes	MENNEKES Cepex panel mounted receptacles colour: pearl white IP 44	MENNEKES panel mounted receptacles TwinCONTACT with screwless spring terminals, Flange 75 x 75 mm, fixing hole spacing 60 x 60 mm, IP 44	MENNEKES panel mounted receptacles with screw terminals Flange 75 x 75 mm, fixing hole spacing 60 x 60 mm, IP 44	MENNEKES panel mounted receptacles TwinCONTACT with screwless spring terminals, Flange 75 x 75 mm, fixing hole spacing 60 x 60 mm, IP 67	
brand Flange	A P 230V 400V	A P 230V 400V	A P 230V 400V	A P 230V 400V	
Hager-Tehalit built-in box no. L 5819 frames of Tehalit (2)	frame with a frame of Tehalit (1) Panel mounted receptacles with care. (2) Cepex receptacles 32A car	s with flange, 32A, 3+4 p, can to the mounted with Tehalit frame	fit, but due to the protruding ea e hole Ø 76 mm, fixing hole spa	arth contact please install acing 70 x 70 mm.	
	Only Cepex receptacles 32 necessary, if you use Cepe	A have to be mounted with on x spacer frames for mounting.	e or two Cepex spacer frames.	Fixing screws 4 x 50 mm are	
Rehau built-in box no. 268591-100 frames of Rehau with fixing hole spacing 60 x 60 (2) / fixing hole spacing 70 x 70 (1)	32 3 ₍₁₎ 4117 32 4 ₍₁₎ 4256 4118 32 5 ₍₁₎ 420 For the installation of CEE received and a formula (i) Cepex receptacles 16A, 3p	16 3 ₍₂₎ 1668 1669 16 4 ₍₂₎ 1673 1674 16 5 ₍₂₎ 1679 3385 32 5 ₍₂₎ 1797 ceptacles Rehau offers one built lange for the mounting of various to 32A, 5p can be installed with swith flange size 75 x 75 mm atting hole spacing.	ous receptaćles. ith flange size 70 x 70 mm only.		
Niedax built-in box no. GDHR 50 (1) MENNEKES 40102 or Niedax masking frame (1) MENNEKES 40102 MENNEKES 40102	(1) GDHR 50: Installation of is recommen (2) KEDB 80: Do not intall stability is not	16 3 1668 1669 16 4 1673 1674 16 5 1679 3385 of panel mounted receptacles with ded with Niedax masking frame panel mounted receptacles with sufficient for 32A receptacles. d KEDB 80 cannot be used for	e with Ā-point-fixing only. h flange, 32A, as the	16 3 1708 1709 16 4 1711 1712 16 5 1717 1131	
Niedax built-in box no. GDI 60/70 (1) (2) built-in box no. CED 80 (1) (2) frames of Niedax frames of Niedax	(2) Panel mounted receptacles with care.	16 3 1668 1669 16 4 1673 1674 16 5 1679 3385 d receptacles with flange, 32A, s with flange, 32A, 3p + 4p, can	n fit, but due to the protruding	·	

MENNEKES CEE panel mounted receptacles for cable ducts of various duct manufacturers

MENNEKES

MENNEKES

MENNEKES

Detailed product description you will find on pages 40/41 and 48/49.

MENNEKES

Cepex panel mounted panel mounted panel mounted panel mounted receptacles receptacles with receptacles receptacles **TwinCONTACT** screw terminals **TwinCONTACT** colour: pearl white Flange 75 x 75 mm, with screwless spring with screwless spring IP 44 fixing hole spacing terminals, Flange terminals, Flange 75 x 75 mm, fixing hole 60 x 60 mm. 75 x 75 mm, fixing hole spacing 60 x 60 mm, IP 44 spacing 60 x 60 mm, IP 44 IP 67 Cable duct built-in boxes 400V 2301/ 400V A P 230V 400\/ 400V brand 230V **OBO-Bettermann** built-in box no. MENNEKES 16 3 16 3 1668 1669 16 3 1366 1367 16 3 1708 1709 40102 (1) 2390 / 8 T (1) (2) 16 4 1673 1674 16 4 1389 1390 16 4 1712 1711 16 5 1679 3385 16 5 1386 1385 16 5 1717 1131 32 3₍₂₎ 1395 1396 **32 4**₍₂₎ 1398 1399 built-in box no. 32 5 1275 1276 GED / 2 CEE (1) 2390 / 8T: All panel mounted receptacles with flange 75 x 75 mm have to be installed with MENNEKES frame with flange (3) 40102 (page 40). (2) 2390 / 8T: Not suitable for panel mounted receptacles with flange, 32A, 3p + 4p. (3) GED / 2 CEE: All panel mounted receptacles 16A and 32A with flange 75 x 75 mm have to be installed with OBO-frame. **GGK-Kunststoffwerke** built-in box no. Flange 16 3 4112 16 3 1668 1669 16 3 1366 1367 16 3 1708 1709 1263 1261 blue **16 4**₍₁₎ 4233 4113 16 4 1673 1674 16 4 1389 1390 16 4 1711 1712 GED 50₍₁₎ 16 5 16 5 1679 3385 1386 1385 16 5 1717 1131 **32 3**₍₃₎ 1395 **32 4**₍₃₎ 1398 **32 5**₍₃₎ 1275 built-in box no. Flange (1) GED 50: Cepex receptacles 4p have to be installed with care to ensure a perfect plug-in of the plug. 1268 black 1263 (2) GDS 50: The built-in box is not suitable for the mounting of Cepex receptacles. GDS 50 (2) (3) Panel mounted receptacles with flange, 32A, 5p, can fit, but there is limited wiring space. Panel mounted receptacles with flange, 32A, 3p + 4p, are not suitable due to the protruding earth contact. (3) GDS 50: For all panel mounted receptacles with flange 75 x 75 mm, the flange 1263 of GGK is necessary. van Geel built-in box no. MENNEKES 16 3 4112 16 3 1668 1669 16 3 1366 1367 16 3 1708 1709 40102 type 121 16 4 1673 1674 16 4 1389 1390 16 4 1711 1712 16 5 1679 3385 16 5 1386 1385 16 5 1717 1131 **32 5**₍₁₎ 1275 1276

(1) The installation of panel mounted receptacles with flange, 32A, 5p, can only be recommended with exceptions. The stability is not suitable for 32A receptacles.

All panel mounted receptacles with flange 75 x 75 mm have to be mounted with MENNEKES frame 40102 (page 40). The wiring space of the built-in receptacle Type 121 is for CEE receptacles limited.



Cepex panel mounted receptacles in silver, alpine white and grey

or with labelling field,
with labelling field and
safety lock, as well as
SCHUKO®-versions see
catalogue pages 48 to 55
and 58/59.



Screwless panel mounted receptacles TwinCONTACT

with spring terminals offer even more wiring space and are suitable for throughwiring.

Cepex receptacles.

Perfect in every detail. One fits another.





Part no. 41404.
A universal concept.
The modular Cepex system is based on the flush mounted installation box 41404 for Cepex receptacles 16A and 32A and Cepex SCHUKO® receptacles.

Cepex receptacles may be used universally. **16A, 3 pole, 230V • 16A, 5 pole, 400V • 32A, 5 pole, 400V.**All complete with flush mounted installation box.



MENNERS* Washing To a series of the series

Anything goes.

Covers, current rating and colours may be optionally combined: neutral cover, with labelling field, with labelling field and lock, 3 pole, 5 pole and SCHUKO®.



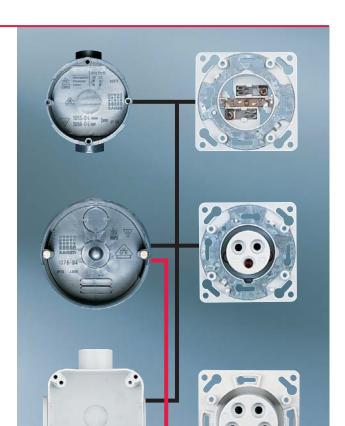
An ideal combination: Cepex receptacles 16A, 3 to 5 pole, can be installed in cavity wall or concrete installation boxes (made by Kaiser) with a fixing dimension of 67 mm.

Resistant to ball rebound.

All Cepex receptacles with neutral covers meet DIN 18032 standards for ball rebound and are suitable for use in sports facilities and comparable environments.



In silver, alpine white, pearl white and grey, the Cepex range matches common colours of various ducts and installation devices.



Single and double - a safe solution.



Cepex wall mounted receptacles.

Generous wiring space for supply cable up to 6 mm². Back box can be rotated by 180°, thus cable insertion is possible from bottom without additional work. Protection type IP 44 (Solid body larger and splash waterproof) for versatile conception.

Fitting the new on the old is no problem.

Cepex is flexible. Existing installations can be easily retrofitted. For example to replace Perilex in 70 mm flush mounted installation boxes. CEE receptacles, 3 pole, 230V can be used instead of SCHUKO® receptacles in 60 mm flush mounted installation boxes.



A frequently chosen receptacle combination: 16A CEE and SCHUKO® 16A. When used with only one supply cable, a 3 pole MCB is essential.



Cepex data port receptacles and fibre optics technology in Cepex receptacles.

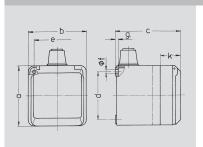
See chapter 6.

MENNEKES Cepex receptacles and Cepex double receptacles

to DIN VDE 0623, EN 60309-2 and DIN 49440, colour: grey (RAL 7035).

Enclosure and insert made of AMAPLAST.

Other voltages and frequencies available on request.



Drawing A	mp.		16		1	32	
1 MB 312 Pc	oles	3	4	5	3	4	5
Dim. in mm	a	93	93	93	93	93	93
	b	90	90	90	90	90	90
	c	87	87	87	99	99	99
	d	75	75	75	75	75	75
	e	73	73	73	73	73	73
	f	5,5	5,5	5,5	5,5	5,5	5,5
Max. cable diam.	g.	4,2	4,2	4,2	4,2	4,2	4,2
	k	33	33	33	33	33	33
	(mm)	18	18	18	18	18	18
Terminal for cond.		1,5	1,5	1,5	2,5	2,5	2,5
section (mm²) min		—4	—4	—4	—6	—6	—6

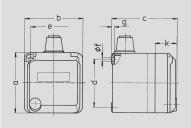
Cepex receptacles, grey

one cable entry at top with M 25 stub, three M 25 blind entries, one M 20 blind entry (can be cut out) for cables from 7 to 13 mm \varnothing

Meeting DIN 18032 standards for ball rebound.

▲ IP 44, **②**

Product group 1025, type 4105 shown.



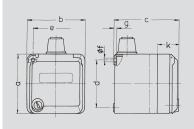
Drawing	Amp.		16		1	32	
1 MB 317	Poles	3	4	5	3	4	5
Dim. in mm	n a	93	93	93	93	93	93
	b	90	90	90	90	90	90
	c	88	88	88	100	100	100
	d	75	75	75	75	75	75
	e	73	73	73	73	73	73
	f	5,5	5,5	5,5	5,5	5,5	5,5
Max. cable dia	g.	4,2	4,2	4,2	4,2	4,2	4,2
	k	34	34	34	34	34	34
	am. (mm)	18	18	18	18	18	18
Terminal for co		1,5	1,5	1,5	2,5	2,5	2,5
section (mm²)		—4	—4	—4	—6	—6	—6

Cepex receptacles, grey

with labelling field, one cable entry at top with M 25 stub, three M 25 blind entries, one M 20 blind entry (can be cut out) for cables from 7 to 13 mm Ø



Product group 1025, type 4135 shown.



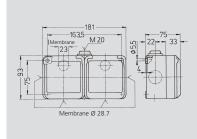
Drawing	Amp.		16		1	32	
1 MB 313	Poles	3	4	5	3	4	5
Dim. in mm	a	93	93	93	93	93	93
	b	90	90	90	90	90	90
	c	90	90	90	102	102	102
	d	75	75	75	75	75	75
	e	73	73	73	73	73	73
	f	5,5	5,5	5,5	5,5	5,5	5,5
Max. cable dia	g.	4,2	4,2	4,2	4,2	4,2	4,2
	k	36	36	36	36	36	36
	m. (mm)	18	18	18	18	18	18
Terminal for co		1,5	1,5	1,5	2,5	2,5	2,5
section (mm²) r		—4	—4	—4	—6	—6	—6

Cepex receptacles, grey

with labelling field, lockable, with safety lock, two keys, cannot be dismantled when locked, one cable entry at top with M 25 stub, three M 25 blind entries, one M 20 blind entry (can be cut out) for cables from 7 to 13 mm Ø

▲ IP 44

Product group 1025, type 4165 shown.



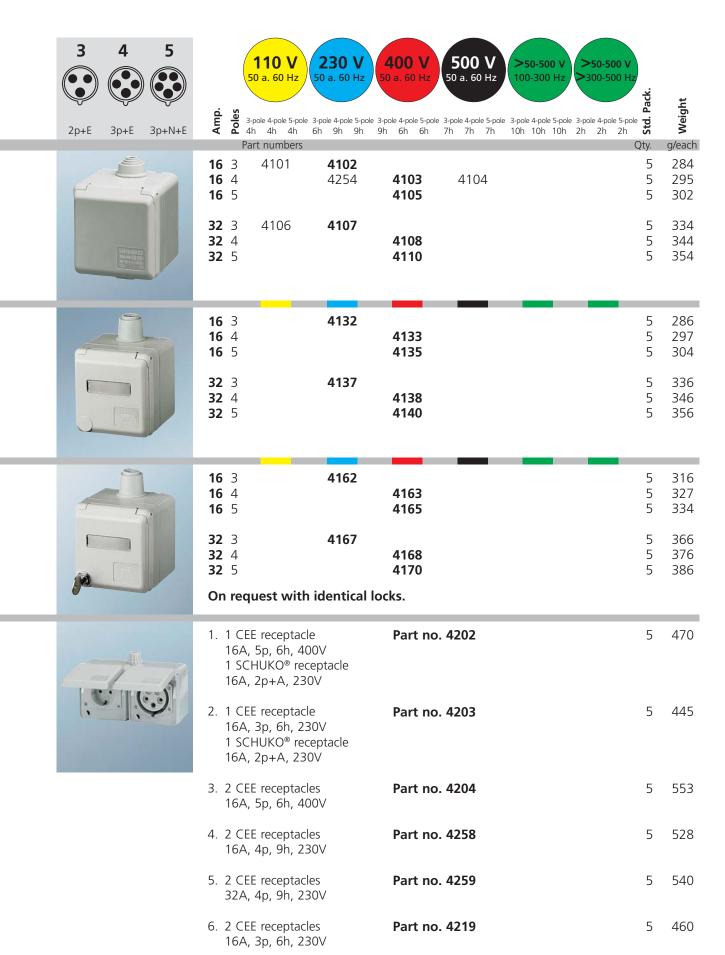
Drawing	Amp.		16	
1 MB 350	Poles	3	4	5
Dim. in mn	n			
Terminal for c section (mm²)		1,5 —4	1,5 —4	1,5 —4

Cepex double receptacles, grey

one cable entry at top with M 20 stub, four M 25 blind entries, two M 20 blind entries (can be cut out) for cables from 7 to 13 mm Ø

▲ IP 44

Product group 1027, type 4202 shown.



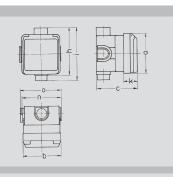
Other installation types on request.

MENNEKES Cepex flush mounted receptacles, panel mounted receptacles and flush mounted installation box

to DIN VDE 0623, EN 60309-2, colour: pearl white (RAL 1013),

Enclosure and insert made of AMAPLAST.

Other voltages and frequencies available on request.



Drawing	Amp.		16		1	32	
1 MB 336	Poles	3	4	5	3	4	5
Dim. in mn	n a	93	93	93	93	93	93
	b	90	90	90	90	90	90
	c	95	95	95	95	95	95
	h	111	111	111	111	111	111
	i	124	124	124	124	124	124
	k	33	33	33	33	33	33
	n	91	91	91	91	91	91
	0	95	95	95	95	95	95
Terminal for or section (mm²)		1,5 —4	1,5 —4	1,5 —4	2,5 —6	2,5 —6	2,5 —6

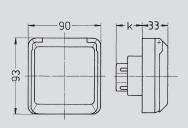
Cepex flush mounted receptacles, pearl white

with flush mounted installation box

Meeting DIN 18032 standards for ball rebound.

▲ IP 44, **♦**

Product group 1026, type 4125 shown.



Drawing	Amp.		16		I	32	
1 MB 315	Poles	3	4	5	3	4	5
Dim. in mm	k	32	32	32	48	48	48
Terminal for co section (mm²) r		1,5 —4	1,5 —4	1,5 —4	2,5 —6	2,5 —6	2,5 —6

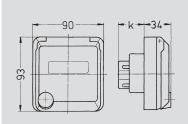
Cepex panel mounted receptacles, pearl white

also suitable for installation in cable ducts and columns

Meeting DIN 18032 standards for ball rebound.

▲ IP 44. ②

Product group 1028, type 4115 shown.



Drawing	Amp.		16		1	32	
1 MB 318	Poles	3	4	5	3	4	5
Dim. in mm	ı k	32	32	32	48	48	48
Terminal for co section (mm²)		1,5 —4	1,5 —4	1,5 —4	2,5 —6	2,5 —6	2,5 —6

Cepex panel mounted receptacles, pearl white

with labelling field, also suitable for installation in cable ducts and columns

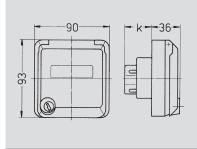


Cepex panel mounted receptacles, pearl white

with labelling field, lockable, with safety lock, two keys, cannot be dismantled when locked, also suitable for installation in cable ducts and columns

▲ IP 44

Product group 1028, type 4175 shown.

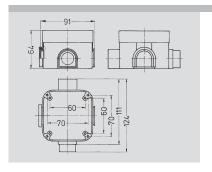


1 MB 320	Poles	3	4	5	3	4	5
Dim. in mm	ı k	32	32	32	48	48	48
Terminal for co	nd. cross	1,5	1,5	1,5	2,5	2,5	2,5 —6
section (mm²) ı	minmax.	-4	-4	-4	—6	6	6

Please see also the modular Cepex system!

The frequent types of receptacles complete with flush mounted installation box can be found in column 1.

All other Cepex versions can be installed with the flush mounted installation box and the illustrated panel mounted receptacles as flush equipment.

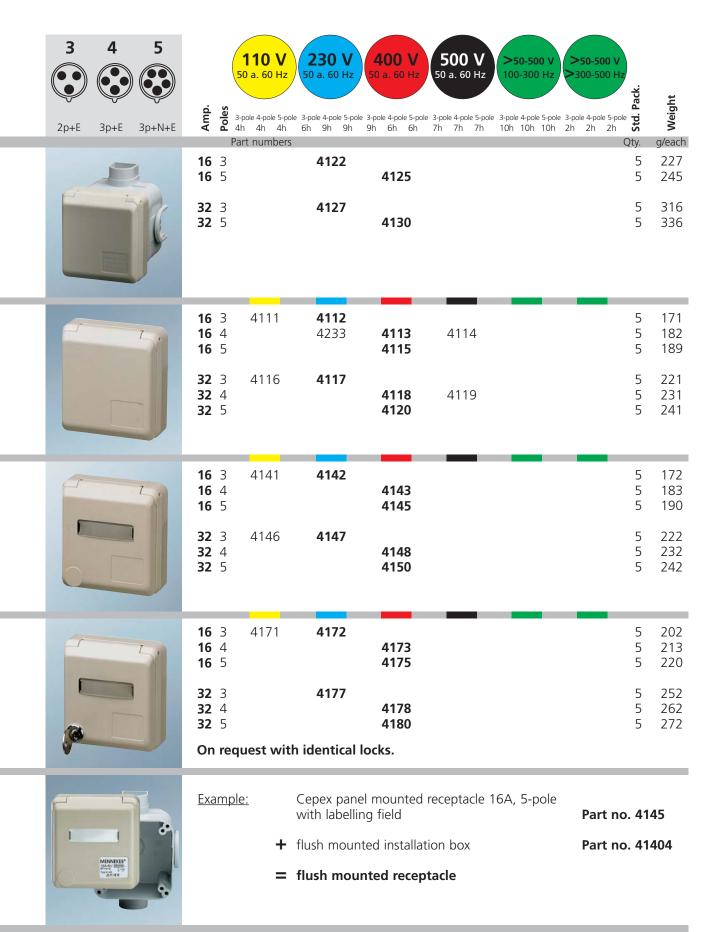


Drawing 1 MB 334 Dim. in mm

Flush mounted installation box for Cepex CEE receptacles 16A and 32A and

16A and 32A and Cepex SCHUKO® receptacles

Product group 8236, type 41404 shown.





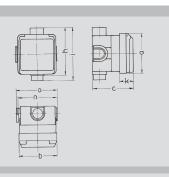
Part no. 41404 5 78

MENNEKES Cepex flush mounted receptacles, panel mounted receptacles and flush mounted installation box

to DIN VDE 0623, EN 60309-2, colour: alpine white (RAL 9010).

Enclosure and insert made of AMAPLAST.

Other voltages and frequencies available on request.



Drawing	Amp.		16		I	32	
1 MB 336	Poles	3	4	5	3	4	5
Dim. in mm	a	93	93	93	93	93	93
	b	90	90	90	90	90	90
	c	95	95	95	95	95	95
	h	111	111	111	111	111	111
	i	124	124	124	124	124	124
	k	33	33	33	33	33	33
	n	91	91	91	91	91	91
	o	95	95	95	95	95	95
Terminal for co		1,5	1,5	1,5	2,5	2,5	2,5
section (mm²) r		—4	—4	—4	—6	—6	—6

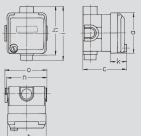
Cepex flush mounted receptacles, alpine white

with flush mounted installation box

Meeting DIN 18032 standards for ball rebound.

▲ IP 44, **♦**

Product group 1026, type 4244 shown.



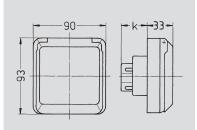
Drawing	Amp.		16			32	
1 MB 352	Poles	3	4	5	3	4	5
Dim. in mn	n a	93	93	93	93	93	93
	b	90	90	90	90	90	90
	c	98	98	98	98	98	98
	h	111	111	111	111	111	111
	i	124	124	124	124	124	124
	k	36	36	36	36	36	36
	n	91	91	91	91	91	91
	О	95	95	95	95	95	95
Terminal for o	ond. cross	1,5	1,5	1,5	2,5	2,5	2,5
section (mm²)	minmax.	-4	-4	-4	6	6	6
					1		

Cepex panel mounted receptacles, alpine white

with labelling field, lockable, with safety lock, two keys, cannot be dismantled when locked, with flush mounted installation box

▲ IP 44

Product group 1026, type 4246 shown.



Drawing	Amp.		16		I	32	
1 MB 315	Poles	3	4	5	3	4	5
Dim. in mn	n k	32	32	32	48	48	48
Terminal for or section (mm²)		1,5 —4	1,5 —4	1,5 —4	2,5 —6	2,5 —6	2,5 —6

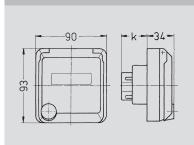
Cepex panel mounted receptacles, alpine white

suitable for installation in cable ducts and columns

Meeting DIN 18032 standards for ball rebound.

▲ IP 44, ♥

Product group 1028, type 4262 shown.



Drawing	Amp.		16		1	32	
1 MB 318	Poles	3	4	5	3	4	5
Dim. in mm	n k	32	32	32	48	48	48
Terminal for co section (mm²)		1,5 —4	1,5 —4	1,5 —4	2,5 —6	2,5 —6	2,5 —6

Cepex panel mounted receptacles, alpine white

with labelling field, suitable for installation in cable ducts and columns

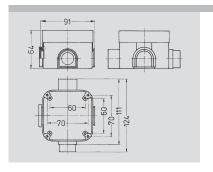
▲ IP 44

Product group 1028, type 4247 shown.

Please see also the modular Cepex system!

The frequent types of receptacles complete with flush mounted installation box can be found in columns 1 and 2.

All other Cepex versions can be installed with the flush mounted installation box and the illustrated panel mounted receptacles as flush equipment.

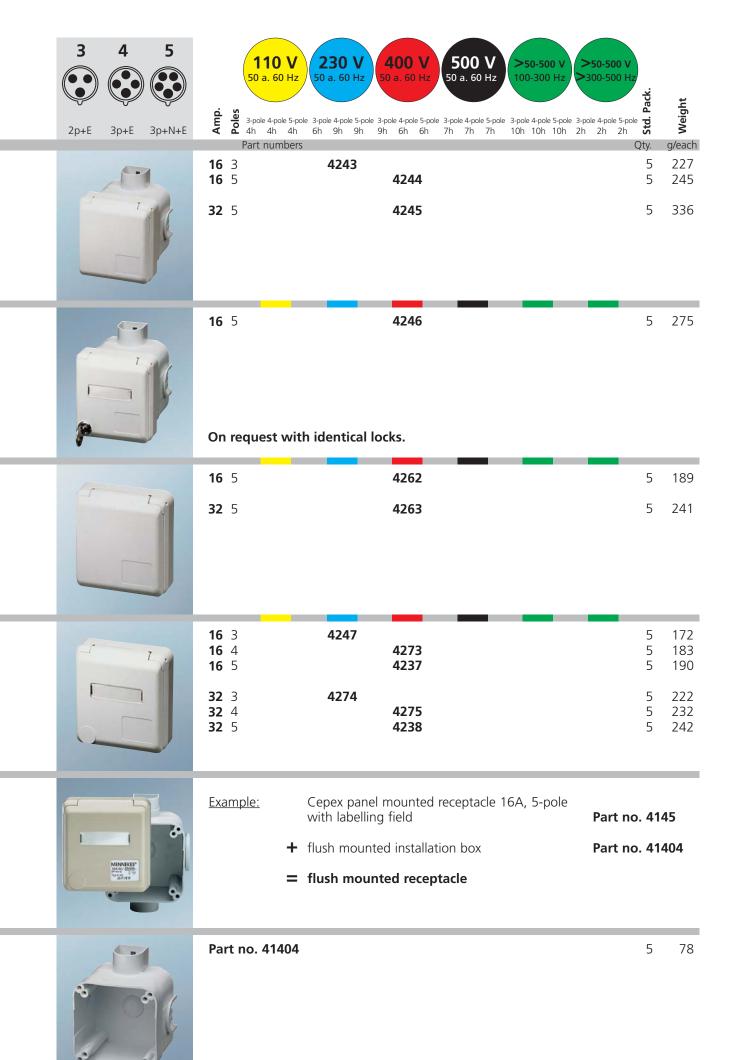


Drawing 1 MB 334 Dim. in mm

Flush mounted installation box for Cepex CEE receptacles

16A and 32A and Cepex SCHUKO® receptacles

Product group 8236, type 41404 shown.

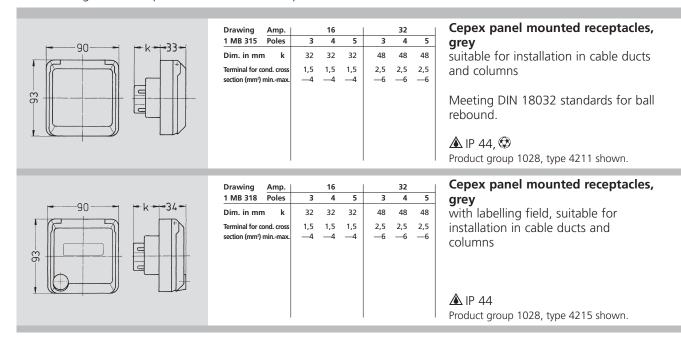


MENNEKES Cepex panel mounted receptacles and flush mounted installation box

to DIN VDE 0623, EN 60309-2, colour: grey (RAL 7035).

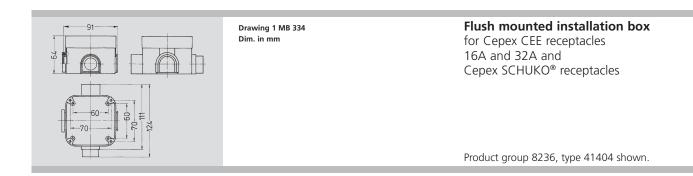
Enclosure and insert made of AMAPLAST.

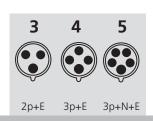
Other voltages and frequencies available on request.



Please see also the modular Cepex system!

Using the flush mounted installation box and the illustrated panel mounted receptacles, various flush mounted arrangements can be realized.





110 V 400 V 500 V 230 V >50-500 V >50-500 V 50 a. 60 Hz 50 a. 60 Hz 100-300 Hz >300-500 Hz 50 a. 60 Hz 50 a. 60 Hz

The second control of the second control of



	rait ilullibeis		Qty.	y/each
16 3		4044	_	171
16 5		4211	5	189
32 5	-)	4213	5	241



16 3 16 5	4214			_	172
16 5		4215		5	190
32 5		4217		5	242



Cepex panel mounted receptacle 16A, 5-pole Example: with labelling field

Part no. 41404

Part no. 4145

flush mounted installation box

= flush mounted receptacle



Part no. 41404 5 78





The ideal combination: Cepex receptacles installed in cavity wall or concrete installation boxes (only 16A, 3- to 5-pole and SCHUKO®)

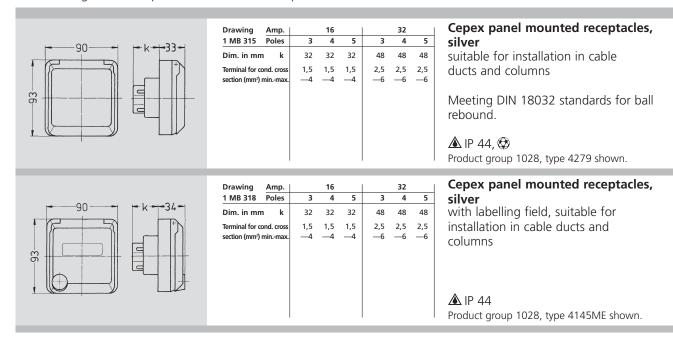
Cavity wall installation box on the left, concrete installation box on the right (made by Kaiser)

MENNEKES Cepex panel mounted receptacles and flush mounted installation box

to DIN VDE 0623, EN 60309-2, colour: silver (RAL 9006),

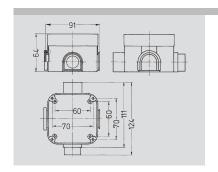
Enclosure and insert made of AMAPLAST.

Other voltages and frequencies available on request.



Please see also the modular Cepex system!

Using the flush mounted installation box and the illustrated panel mounted receptacles, various flush mounted arrangements can be realized.

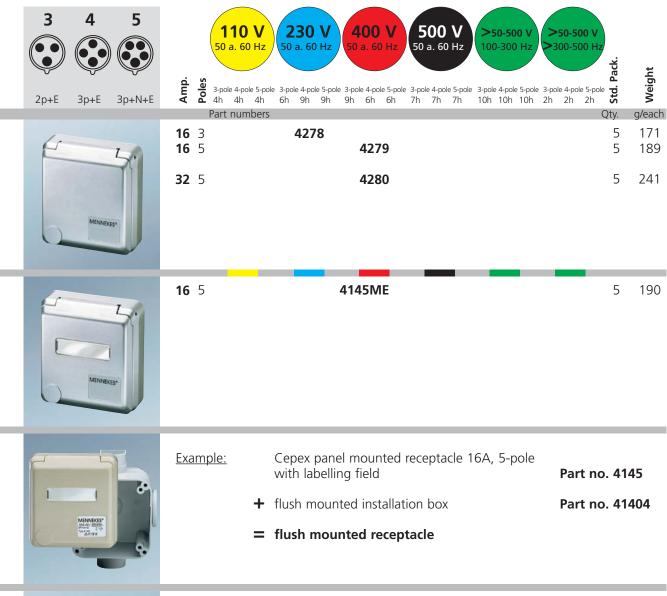


Drawing 1 MB 334

Flush mounted installation box for Cepex CEE receptacles

16A and 32A and Cepex SCHUKO® receptacles

Product group 8236, type 41404 shown.

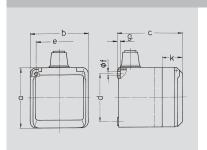




Part no. 41404 5 78

MENNEKES Cepex SCHUKO® receptacles and double receptacles

to DIN 49440, colour: grey (RAL 7035). Enclosure and insert made of **AMAPLAST**. 16A, 230V, 2-pole + E



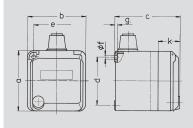
Drawing Am	p.	16
1 MB 312		
	a	93
	b	90
	c	87
	d	75
	e f	73
	f	5,5
	٦.	4,2
•	j. k	33
Max. cable diam. (m	ım)	18
Terminal for cond. cr	oss	1,5
section (mm²) minn	ıax.	-4

Cepex SCHUKO® receptacles, grey one cable entry at top with M 25 stub, three M 25 blind entries, one M 20 blind entry (can be cut out) for cables from 7 to 13 mm Ø

Meeting DIN 18032 standards for ball rebound.

▲ IP 44, **♦**

Product group 1025, type 4970 shown.

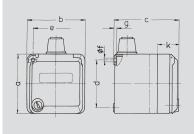


16
93
90
88
75
73
5,5
4,2
34
18
1,5
—4

Cepex SCHUKO® receptacles, grey with labelling field, one cable entry at top with M 25 stub, three M 25 blind entries, one M 20 blind entry (can be cut out) for cables from 7 to 13 mm Ø

▲ IP 44

Product group 1025, type 4973 shown.

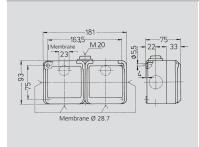


Drawing	Amp.	16
1 MB 313		
Dim. in mm	a	93
	b	90
	c	90
	d	75
	е	73
	f	5,5
	g.	4,2
	k	36
Max. cable dia	m. (mm)	18
Terminal for co	nd. cross	1,5
section (mm²) n	ninmax.	-4

Cepex SCHUKO® receptacles, grey	,
with labelling field, lockable, with	
safety lock, two keys, cannot be	
dismantled when locked, one cable	
entry at top with M 25 stub, three	
M 25 blind entries, one M 20 blind	
entry (can be cut out) for cables from	1
7 to 13 mm Ø	
A	

▲ IP 44

Product group 1025, type 4976 shown.



Drawing Amp.	16
1 MB 350	
Dim. in mm	
Terminal for cond. cross	1,5
section (mm²) minmax.	4

Cepex SCHUKO® double receptacles, grey

one cable entry at top with M 20 stub, four M 25 blind entries, two M 20 blind entries (can be cut out) for cables from 7 to 13 mm \varnothing

▲ IP 44

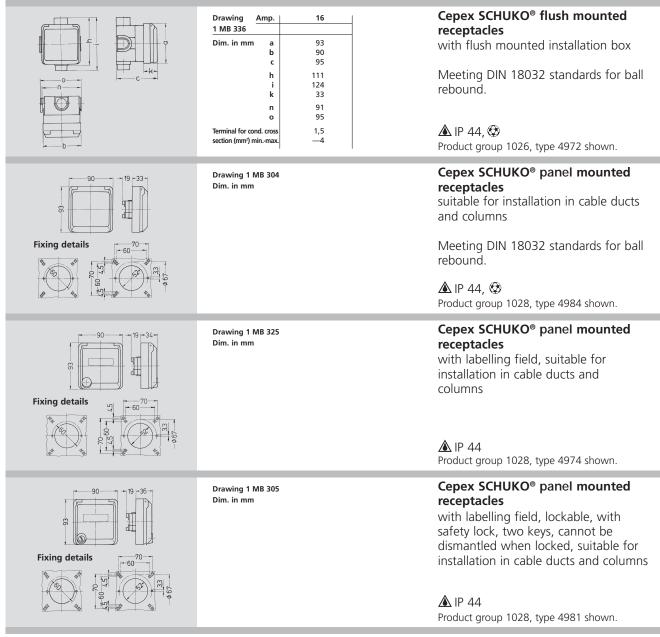
Product group 1027, type 4235 shown.

	Colour	Amp.	Volts		Std. Pack.	Weight
Mingres who is not a second of the second of	grey	16	230	Part numbers 4970	Qty.	g/each 252
	grey	16	230	4973	5	254
	grey On request with identical locks.		230	4976	5	284
	grey	16	230	4235	5	430

MENNEKES Cepex SCHUKO® flush mounted receptacle, panel mounted receptacle and flush mounted installation box

to DIN VDE 49440, colours: pearl white (RAL 1013), alpine white (RAL 9010), grey (RAL 7035) or silver (RAL 9006).

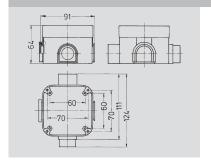
Enclosure and insert made of AMAPLAST. 16A, 230V, 2-pole + E



Please see also the modular Cepex system!

The frequent types of receptacles complete with flush mounted installation box can be found in column 1.

All other Cepex versions can be installed with the flush mounted installation box and the illustrated panel mounted receptacles as flush equipment.



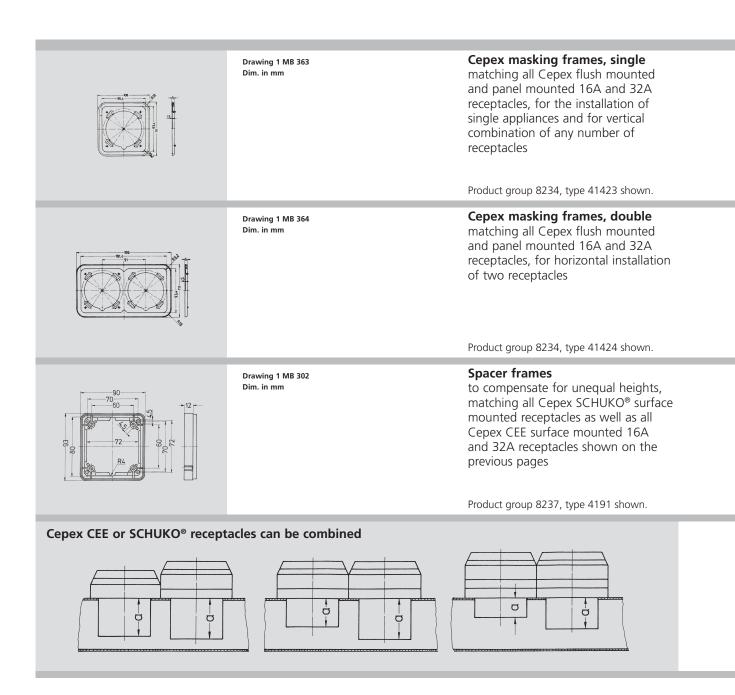
Drawing 1 MB 334 Dim. in mm Flush mounted installation box for Cepex CEE receptacles 16A and 32A and Cepex SCHUKO® receptacles

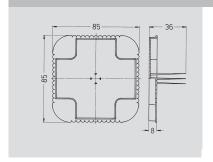
Product group 8236, type 41404 shown.

	Colour	Amp.	Volts	Dort aumhors	Std. Pack.	Weight
	white	16	230	Part numbers 4972	Qty. 5	g/each 195
MENNEKES*	white alpine white grey silver	16 16 16 16	230 230 230 230	4971 4979 4982 4984	5 5 5 5	139 139 139 139
	white alpine white silver	16 16 16	230 230 230	4974 4980 4974ME	5 5 5	140 140 140
	white alpine white	16 16	230 230	4977 4981	5 5	170 170
MENNEXES' MENNEXES' MARINE MENTER MARINE MENTER	Example: + =	Cepex SCHUKO® pane with labelling area flush mounted installa	tion bo>		Part no. 49	
	Part no. 41404				5	78

MENNEKES Cepex masking frames, spacer frames, protective

Colours: Pearl white (RAL 1013), alpine white (RAL 9010), grey (RAL 7035).





Drawing 1 MB 353 Dim. in mm

Protective cover

For flush mounted installation box to protect fixing holes and the box from plaster and dirt until the receptacle is installed

Product group 8236, type 41414 shown.

Colour	Part numbers	oft. Std. Pack.	Meight deach
white, single alpine white, single grey, single	41406 41423 41407	25 25 25 25	22 22 22 22
white, double	41408	25	37
alpine white, double	41424	25	37
grey, double	41409	25	37
white	4192	25	28
alpine white	4239	25	28
grey	4191	25	28

Using one or more spacer frames type 4191/4192/4239 the recess depth for Cepex plugs and receptacles 16A and 32A can be adjusted to suit the available space.

Cepex receptacles can be installed even when the depth of the available recess is limited, e.g., in cable ducts, columns etc. The flange also permits the prominence of the units to be adjusted to match.

If necessary, Cepex SCHUKO® receptacles and 16A and 32A Cepex CEE receptacles can be installed with a uniform profile.



Part no. 41414 upon request 8.5



2

■ CEE plugs, 16A to 125A

Plugs StarTOP®, 16A and 32A, IP 44 Page 66 and 67





Plugs ProTOP, Plugs AM-TOP®, 16A and 32A, IP 44 Page 66 and 67

Angled plugs, 16A and 32A, IP 44 Page 66 and 67





Plugs PowerTOP, highly heat resistant contact carriers, nickel-plated contacts, 63A, IP 44 Page 66 and 67

Plugs AM-TOP®, 16A and 32A, IP 67 Plugs PowerTOP, highly heat resistant contact carriers.

contact carriers, nickel-plated contacts, 63A and 125A, IP 67 Page 68 and 69

> Inlets, 16A to 125A, IP 44 and IP 67 Page 70 to 77









Panel mounted inlets RAPIDO with central locking system, 16A and 32A, IP 44 Page 74 and 75

Phase inverter plugs, 16A and 32A, IP 44 and IP 67 Page 78 to 81

Phase sequence test plugs, 16A to 63A, IP 44 Page 82 and 83

■ Plugs 16A to 125A

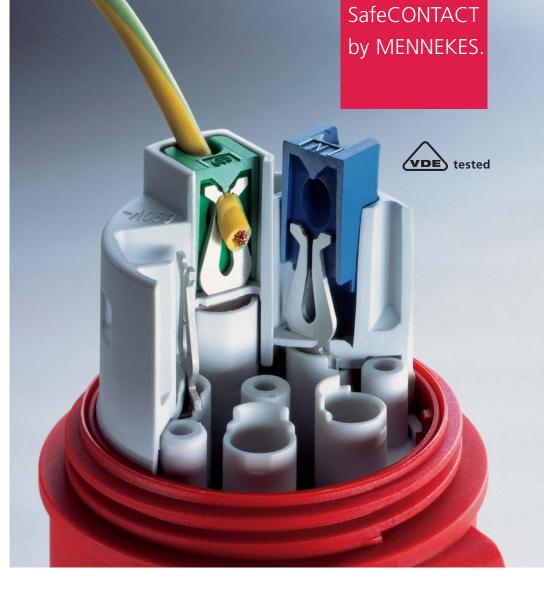
StarTOP®. Quick. Safe. Tight.

A high degree of safety. In one operation, the insulation is cut, the contact is safely established and the wire is firmly held in place.

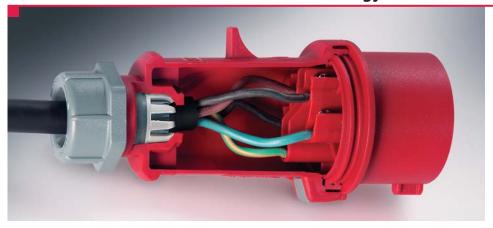


Under cover.A stable lock ensures permanent safety.





ProTOP. With standard connection technology.



Many handy features, e.g., the self-locating thread for tight and stable connection of cover and front part. Cable grip and seal in one single operation by locking the cable gland.



Ingeniously toothed.
The additional teeth on the locking ring audibly lock as the ring is tightened, thereby providing a protection against automatic release.



PowerTOP. Maximum safety under major loads.



Nickel-plated contacts for enhanced corrosion protection in aggressive and humid environments. Highly heat resistant contact carriers. Reliable frame terminals make for operational safety even without ferrules on the wires. Optimized, slim design for more convenient inserting and withdrawing. There's nothing better.

RAPIDO. Installed in no time at all.



The all-rounder without a flange, for swift installation without fixing holes and screws. For containers, portable distributors and many more applications. Installation diameter of 61 mm for wall thicknesses from 2 to 5 mm or 70 mm for wall thicknesses from 2 to 9 mm.

VarioTOP angled plug. Ergonomic. Practical. Safe.



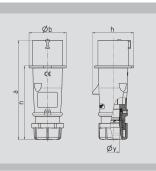
The first CEE angled plug with cable entry rotating up to 60° to the left or to the right.

MENNEKES CEE plugs

to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code.

Enclosure and insert made of AMAPLAST.

Other voltages and frequencies available on request.



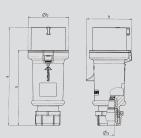
Drawing	Amp.		16			32	
2 MB 217	Poles	3	4	5	3	4	5
Dim. in mm	n a	142	147	147	186	186	180
	b	53	59	67	70	70	77
	h	59	69,4	76	81	81	89,5
	n	105,2	110,5	110,5	141	141	135
	у	14,5	16	16	22	22	22
Terminal for co	ond. cross	1	1	1	2,5	2,5	2,5
section (mm²)	minmax.	-2,5	-2,5	-2,5	6	6	—6

Plugs AM-TOP®

single part body, screw terminals, cable gland and sealing



Product group 2141, type 3 shown.



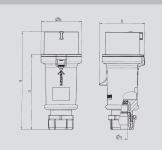
Drawing	Amp.		16			32	
2 MB 214	Poles	3	4	5	3	4	5
Dim. in mn	n a	148	160	160	197	197	197
	b	55	65,6	65,6	75	75	75
	h	61	72,5	72,5	80,5	80,5	85
	n	112	123,5	123,5	152	152	152
	у	14,5	16	16	22	22	22
Terminal for o	ond. cross	1	1	1	2,5	2,5	2,5
section (mm²)	section (mm²) minmax.		-2,5	—2,5	6	6	—6

Plugs ProTOP

with screw terminals, cable gland and sealing, strain relief and protection against kinking, enclosure with thread lock and safety slide

▲ IP 44

Product group 2197, type 13 shown.



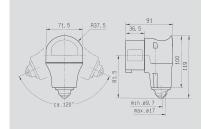
Drawing	Amp.		16		I	32	
2 MB 214	Poles	3	4	5	3	4	5
Dim. in mm	ı a	148	160	160	197	197	197
	b	55	65,6	65,6	75	75	75
	h	61	72,5	72,5	80,5	80,5	85
	n	112	123,5	123,5	152	152	152
	у	14,5	16	16	22	22	22
Terminal for co	nd. cross	1	1	1	2,5	2,5	2,5
section (mm²) ı	section (mm²) minmax.		-2,5	-2,5	6	6	6

Plugs StarTOP® with SafeCONTACT

screwless, with insulation displacing technique, cable gland and sealing, strain relief and protection against kinking, enclosure with thread lock and safety slide

▲ IP 44

Product group 2101, type 33 shown.



Drawing 2 MB 208

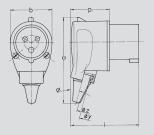
Angled plugs VarioTOP

with grommet, cable entry hood in colour code red or in electric grey

The first CEE angled plug with a cable entry that can be rotated 60° to the right or left.

▲ IP 44

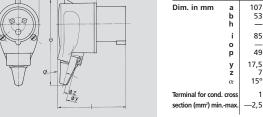
Product group 2139, type 3980 shown.



2 MB 69	Amp.		16		32	
2 MB 45	Poles	3	4	3	4	5
Dim. in mm	n a b h	107 53 —	129 58 —	96 72 —	96 72 —	101 72 115
	i o p	85 — 49	71 — 35	115 — 70	115 — 70	70 —
	y z α	17,5 7 15°	17,5 7 —	22 11 8°	22 11 8°	22 11 —
Terminal for co section (mm²)		1 —2,5	1 —2,5	2,5 —6	2,5 —6	2,5 —6

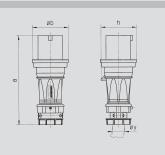
Angled plugs

with grommet



▲ IP 44

Product group 2039, type 1411 shown.



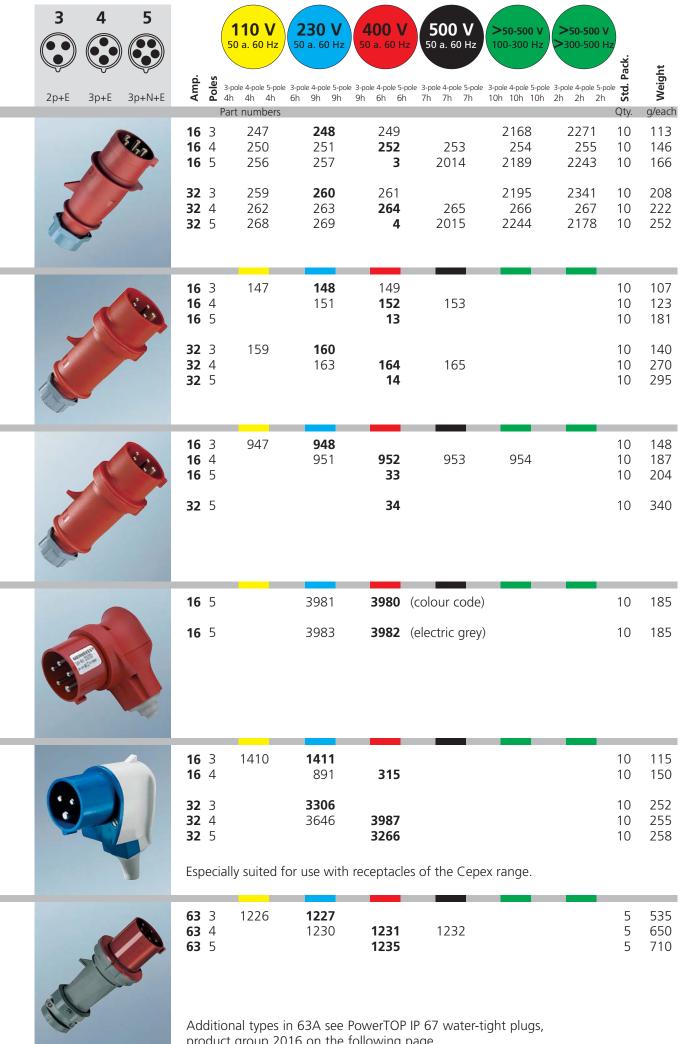
Drawing Ar 2 MB 210/2 Po	np.	-	63	-
2 IVIB 210/2 PO	ies	3	4	5
Dim. in mm	а	246	246	246
	b	100,5	100,5	100,5
	h	98,7	98,7	98,7
	у	36	36	36
Terminal for cond.	cross	6	6	6
section (mm²) min.	-max.	—16	—16	16

Plugs PowerTOP

with highly heat resistant contact carrier, frame terminals and nickel-plated contacts, gland and external cable grip

№ IP 44

Product group 2015, type 1235 shown.



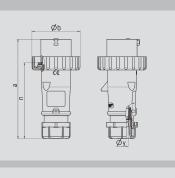
product group 2016 on the following page.

MENNEKES CEE plugs

to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code.

Enclosure and insert made of AMAPLAST.

Other voltages and frequencies available on request.



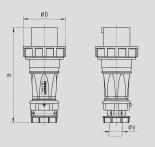
Drawing	Amp.		16		I	32	
2 MB 218	Poles	3	4	5	3	4	5
Dim. in mn	n a	142	144	147	186	186	180
	b	70	78	87	94	94	101
	n	109	111	114	145	145	138
	у	14,5	16	16	22	22	22
Terminal for o	ond. cross	1	1	1	2,5	2,5	2,5
section (mm²)	minmax.	—2,5	—2,5 ·	-2,5	6	—6	-6

Plugs AM-TOP® single part body,

single part body, screw terminals, cable gland and sealing

♦ IP 67

Product group 2149, type 300 shown.



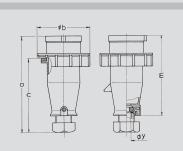
Drawing A	mp.		63		1	125	
2 MB 207/2 P	oles	3	4	5	3	4	5
Dim. in mm	a	246	246	246	293	293	293
	b	114	114	114	131	131	131
	у	36	36	36	50	50	50
Terminal for cond	l. cross	6	6	6	25	25	25
section (mm²) mir	nmax.	—16	—16	—16	—50	—50	—50

Plugs PowerTOP

with highly heat resistant contact carrier, frame terminals and nickel-plated contacts, gland and external cable grip

♦ IP 67

Product group 2016, type 1114 shown.



Drawing	Amp.	63	
2 MB 28	Poles	4	5
Dim. in mn	n a b m	254 113 —	254 113 —
	n y	191 30,5	191 30,5
Terminal for o section (mm²)		-1 ⁴	—10 4

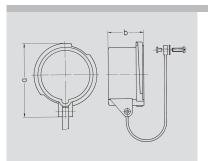
Plugs economy range

with screw terminals, single part body

♦ IP 67

Product group 2049, type 307 shown.

Protective covers, Cleanset and Plug guard



Drawing	Amp.	I	16		1	32	
2 MB 146	Poles	3	4	5	3	4	5
Dim. in mm	n a b	70 41	79 41	86 42	91 51	91 51	99 52
Drawing	Amp.		63			125	
Drawing 2 MB 146	Amp. Poles	3	63	5	3	125	5

Protective covers

for watertight plugs for wall and panel mounted inlets

for **♦♦** IP 67

Product group 8276, type 40787 shown.

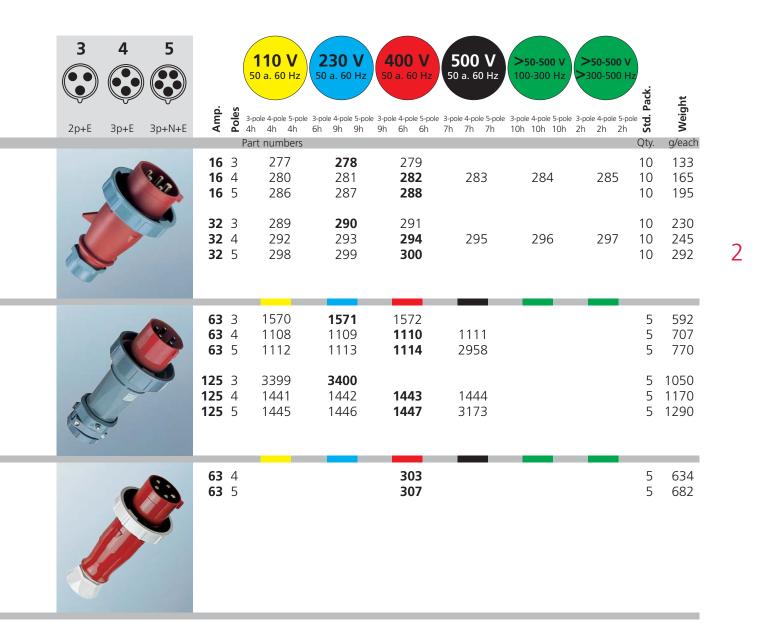


Cleanset

Care of the plugs is mainly focussed on the plug pins and should begin as soon as possible – preferably before first use. Cleanset Part no. 10900

Spare oil spray can Part no. 90502000

Product group 8300, type 10900 shown.



Plugs for use in corrosive environments and under harsh conditions in the AM-TOP and PowerTOP range

with highly heat resistant contact carrier and nickel-plated contacts, 16A and 32A, protection type IP 44 and IP 67, see chapter 10.



3	40784
4	40778
5 + 7	40785
3 + 4	40841
5 + 7	40786
3, 4 + 5	40787
3, 4 + 5	40788
	4 5 + 7 3 + 4 5 + 7 3, 4 + 5



Plug guard

Fits all CEE plugs, panel mounted and wall mounted inlets from 16A, 3-pole to 125A, 5-pole (not suitable for low voltage)

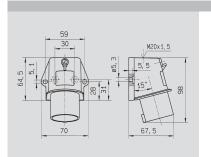
Part no. 41416

Product group 8300, type 41416 shown.

MENNEKES CEE inlets

to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code. Enclosure and insert made of **AMAPLAST**.

Other voltages and frequencies available on request.



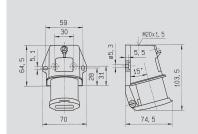
Drawing 2 MB 213 Dim. in mm

Wall/panel mounted inlets

for internal or external fixing, cable entry also possible from top or from the rear

▲ IP 44

Product group 2036, type 844 shown.



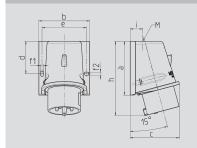
Drawing 2 MB 212

Wall/panel mounted inlets with hinged lid

for internal or external fixing, cable entry also possible from top or from the rear

▲ IP 44

Product group 2037, type 847 shown.



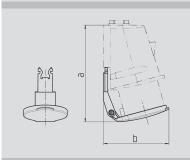
Drawing	Amp.	16	
2 MB 221	Poles	4	5
Dim. in mm	a	92,5	92,5
	b	87	87
	c	84,5	84,5
	d	55,5	55,5
	е	76	76
	f1	5,3	5,3
	f2	5,3	5,3
	h	128	128
	i	21,5	21,5
	M	25	25

Wall mounted inlets

for external fixing



Product group 2136, type 801 shown.

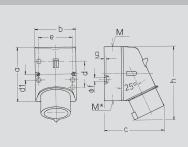


Drawing	Amp.		16	
2 MB 222	Poles	3	4	5
Dim. in mn	n a	103,5	134	134
	b	74,4	91	91

Hinged lids for retrofitting

for wall mounted inlets (part no. 800, 801, 843, 844 and phase inverters part no. 3517)

Product group 8257, type 41482 shown.



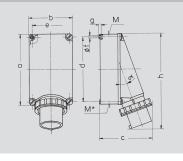
Drawing	Amp.		16			32	
2 MB 32	Poles	3	4	5	3	4	5
Dim. in mm	a b c	87 64 93	100 75 106	100 75 110	128 84 133	128 84 133	128 84 135
	d d1 e	40 50,5	10,5 59	10,5 59	11 68	11 68	11 68
	g. h	4,5 4 122	5 4 133	5 4 135	5,3 4 169	5,3 4 169	5,3 4 170
	M M*	t	20 /1 20 (I o be cu	it out	t t	25 // 25 (b o be cu	t out
Max. cable diar	n. (mm)	15	15	15	18/25	18/25	18/25
Terminal for cor section (mm²) m		—2,5	2,5	1 2,5	2,5 —6	2,5 —6	2,5 —6

Wall mounted inlets

cable entry also possible from the rear, knock-out section on the bottom part of the back box

▲ IP 44

Product group 2045, type 342 shown.



Drawing Amp.		63		125	
2 MB 36 Poles	3	4	5	4	5
Dim. in mm a b c	170	170	170	264	264
	118	118	118	163	163
	171	171	171	205	205
d	136	136	136	240	240
e	104	104	104	140	140
f	6,1	6,1	6,1	8,1	8,1
g. h M	250 40	250 40	250 40	8 355 50	355 50
M*	2x40	2x40	2x40	50	50
α	25°	25°	25°	20°	20°
Max. cable diam. (mm)	32	32	32	38	38
Terminal for cond. cross	4	4	4	16	16
section (mm²) minmax.	—10	—10	—10	—35	—35

Wall mounted inlets

(for a suitable watertight protective cover, see page 69 in this chapter)

♦ IP 67

Product group 2048, type 361 shown.

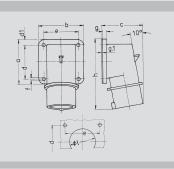


MENNEKES CEE inlets

to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code.

Enclosure and insert made of AMAPLAST.

Other voltages and frequencies available on request.



Drawing	Amp.	16		I	32	
2 MB 73	Poles	4	5	3	4	5
Dim. in mm	n a b c	85 85 75	85 85 79	75 90 87	75 90 87	75 90 90
	d d1 e	64 10 64	64 10 64	45 13 78	45 13 78	45 13 78
	f g. g.1	5,5 6 2	5,5 6 2	5,5 6 2	5,5 6 2	5,5 6 2
	h I	129 50	129 50	137 55	137 55	138 55
Terminal for co section (mm²)		1 –2,5	_2,5	2,5 —6	2,5 —6	2,5 —6

Panel mounted inlets

▲ IP 44

Product group 2051, type 379 shown.

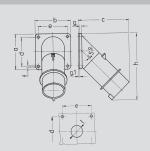


Drawing	Amp.	16		l	32	
2 MB 43	Poles	4	5	3	4	5
Dim. in mm	a b c	85 85 04	85 85 106	75 90 115	75 90 115	75 90 117
	d d1 e	64 10 64	64 10 64	45 13 78	45 13 78	45 13 78
	f g. g.1	5,5 27 2	5,5 27 2	5,5 27 2	5,5 27 2	5,5 27 2
	h I	40 50	140 50	150 55	150 55	150 55
Terminal for co section (mm²) n		 1 2,5	2,5	2,5 —6	2,5 —6	2,5 —6

Panel mounted inlets

with hinged lid





Drawing Amp.	16		32	
2 MB 39 Poles	5	3	4	5
Dim. in mm a b c	85	85	85	85
	85	85	85	85
	122	126	126	129
d	70	70	70	70
e	70	70	70	70
f	6,2	6,2	6,2	6,2
g.	6.	6.	6.	6.
g.1	2	2	2	2
h	161	163	163	170
I		30	30	30
Terminal for cond. cross		2,5	2,5	2,5
section (mm²) minmax.		—6	—6	—6

Panel mounted inlets

▲ IP 44

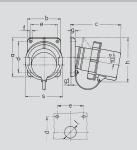
Product group 2055, type 432 shown.



Drawing	Amp.	16		32		6	3
2 MB 40	Poles	5	3	4	5	4	5
Dim. in mn	n a	85	85	85	85	114	114
	b	85	85	85	85	114	114
	c	141	141	141	144	180	180
	d	70	70	70	70	90	90
	e	70	70	70	70	90	90
	f	6,2	6,2	6,2	6,2	6,2	6,2
	g.	6.	6.	6.	6.	6.	6.
	g.1	2	2	2	2	2	2
	h	181	181	181	188	242	242
	s	86	93	93	100	113	113
	I	30	30	30	30	40	40
Terminal for o section (mm²)		_2,5	2,5 —6	2,5 —6	2,5 —6	—10	—10 4

Panel mounted inlets with hinged lid





Drawing	Amp.	1	16	32	6	3
2 MB 62	Poles	3	5	5	4	5
Dim. in mm	a	85	85	85	108	108
	b	85	85	85	101	101
	c	132	132	137	164	164
	d	70	70	70	85	85
	e	70	70	70	77	77
	f	6,3	6,3	6,3	6,5	6,5
	g.	11	11	11	12	12
	g.1	2	2	2	2	2
	h	100	107	111	130	130
	s	70	86	102	114	114
	I	30	30	30	40	40
Terminal for co section (mm²) n		_2,5	2,5	2,5 —6	—10	10 10

Panel mounted inlets

with protective cover

♦ IP 67

Product group 2067, type 1253 shown.

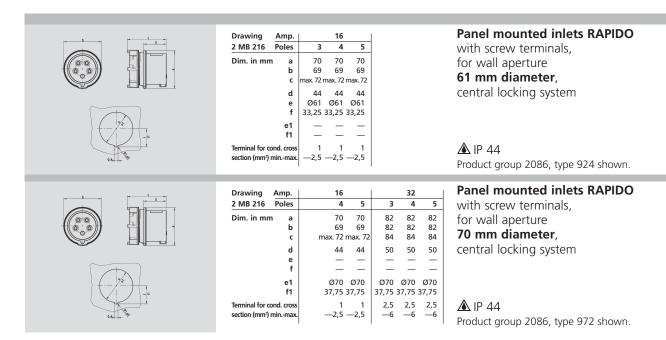


3 4 5		50 a. 60 Hz 50	230 V 0 a. 60 Hz		500 V 50 a. 60 Hz	>50-500 V 100-300 Hz >50-500 V 300-500 H 3-pole 4-pole 5-pole 3-pole 4-pole 5-pole 10h 10h 10h 2h 2h 2h		Weight
2p+E 3p+E 3p+N+E	Amp.	-pole 4-pole 5-pole 3-p h 4h 4h 6h art numbers	ole 4-pole 5-po 9h 9h	ole 3-pole 4-pole 5-pole 9h 6h 6h	e 3-pole 4-pole 5-pole 7h 7h 7h	3-pole 4-pole 5-pole 3-pole 4-pole 5-pole 10h 10h 10h 2h 2h 2h	Oty.	g/each
	16 4 16 5		372	373 379			10 10	172 176
Friday	32 3 32 4 32 5		381	385 391			10 10 10	224 235 247
	16 4 16 5	392 398	393 399	394 400	395		10 10	265 275
	32 3 32 4 32 5	401 404 410	402 405 411	403 406 412	407		10 10 10	320 342 365
	16 5		424	432			10	214
	32 3 32 4 32 5		434	438 444			10 10 10	228 242 275
•	16 5		461	462	_		10	320
	32 3 32 4 32 5		464 467 473	468 474	469		10 10 10	331 354 406
	63 4 63 5		476 479	477 480	2624		5 5	722 750
	16 3 16 5	3530	3531	1253			10 10	210 283
6	32 5			1254			10	387
	63 4 63 5			1256 1259	1257		5 5	659 705

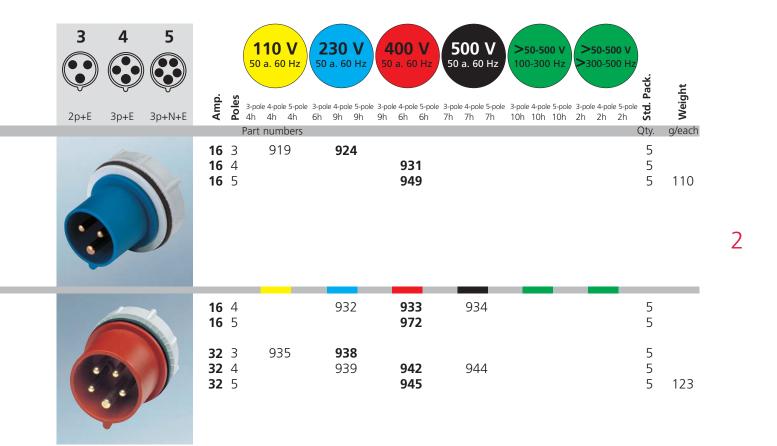
MENNEKES CEE panel mounted RAPIDO inlets

to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code. Enclosure and insert made of **AMAPLAST**.

Other voltages and frequencies available on request.



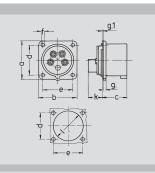
A retaining nose to hold the hinged lid of the connector must be provided by the user in order to ensure satisfactory locking.



MENNEKES CEE inlets

to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code. Enclosure and insert made of **AMAPLAST**.

Other voltages and frequencies available on request.

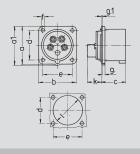


Drawing Amp.	16
2 MB 68 Poles	5
Dim. in mm a b c	75 75 42
d e f	60 60 5,5
g. g.1 k	7,3 2 13
I	52
Terminal for cond. cross section (mm²) minmax.	

Panel mounted inlets

a retaining nose to hold the hinged lid of the connector must be provided by the customer in order to ensure satisfactory locking

▲ IP 44 Product group 2084, type 853 shown.

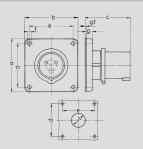


Drawing Am	р.	16	32
2 MB 68 Pol	es	5	5
Dim. in mm	a	66	72
	a1	69	78
	b	66	72
	c	43	52
	d	52	60
	e	52	60
g	f	4,5	4,5
	g.	4,5	4,5
	.1	2	2
	k	27	32
	I	59	63
Terminal for cond. c section (mm²) minr		_2,5	2,5 —6

Panel mounted inlets

a retaining nose to hold the hinged lid of the connector must be provided by the customer in order to ensure satisfactory locking

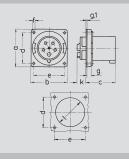
▲ IP 44 Product group 2069, type 1408 shown.



Drawing Amp.		16		1	32	
2 MB 173/2 Poles	3	4	5	3	4	5
Dim. in mm a	85,7	85,7	85,7	85,7	85,7	85,7
b	85,7	85,7	85,7	85,7	85,7	85,7
c	72	72	72	90	90	90
d	69,5	69,5	69,5	69,5	69,5	69,5
e	69,5	69,5	69,5	69,5	69,5	69,5
f	5,5	5,5	5,5	5,5	5,5	5,5
g.	11	11	11	11	11	11
g.1	2	2	2	2	2	2
l	32	36	36	47	47	47
Terminal for cond. cross section (mm²) minmax.	, ,	1,5 —4	1,5 —4	2,5 —10	2,5 —10	2,5 —10

Panel mounted inlets with nickel-plated contacts, a retaining nose to hold the hinged lid of the connector must be provided by the customer in order to ensure satisfactory locking

▲ IP 44 Product group 2083, type 838 shown.



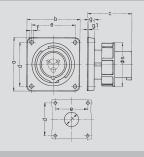
Drawing	Amp.		63	
2 MB 155	Poles	3	4	5
Dim. in mm	a	110	110	110
	b	106	106	106
	c	86	86	86
	d	90	90	90
	e	90	90	90
	f	5,5	5,5	5,5
	g.	12	12	12
	g.1	2	2	2
	k	28	28	28
Terminal for co section (mm²) n		86 6 —16	86 6 —16	86 6 —16

Panel mounted inlets with highly heat resistant contact carrier and nickel-plated contacts,

a retaining nose to hold the hinged lid of the connector must be provided by the customer in order to ensure satisfactory locking

▲ IP 44

Product group 2069, type 1688 shown.

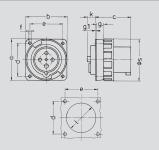


Drawing Amp.	1	16			32	
2 MB 187/2 Poles	3	4	5	3	4	5
Dim. in mm a b c	85,7	85,7	85,7	85,7	85,7	85,7
	85,7	85,7	85,7	85,7	85,7	85,7
	72	72	72	90	90	90
d	69,5	69,5	69,5	69,5	69,5	69,5
e	69,5	69,5	69,5	69,5	69,5	69,5
f	5,5	5,5	5,5	5,5	5,5	5,5
g.	11	11	11	11	11	11
g.1	2	2	2	2	2	2
l	32	36	47	47	47	47
s	71	79	89	94	94	102
Terminal for cond. cros		1,5	1,5	2,5	2,5	2,5
section (mm²) minmax		—4	—4	—10	—10	—10

Panel mounted inlets with nickel-plated contacts

♦ IP 67

Product group 2080, type 840 shown.

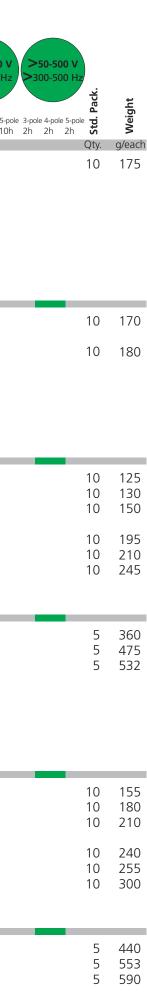


Drawing	Amp.		63		1	125	
2 MB 166	Poles	3	4	5	3	4	5
Dim. in mm	a	110	110	110	130	130	130
	b	106	106	106	130	130	130
	c	86	86	86	112	112	112
	d	90	90	90	104	104	104
	e	90	90	90	104	104	104
	f	5,5	5,5	5,5	6,5	6,5	6,5
	g.	12	12	12	18	18	18
	g.1	2	2	2	2	2	2
	k	28	28	28	28	28	28
	l	73	73	73	95	95	95
	s	113	113	113	132	132	132
Terminal for co section (mm²) n		—16	—16	—16	25 —70	25 —70	25 —70

Panel mounted inlets with highly heat resistant contact carrier and nickel-plated contacts

♦ IP 67

Product group 2076, type 1983 shown.





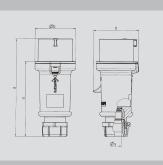
MENNEKES CEE phase inverter

to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code.

Enclosure and insert made of AMAPLAST.

Patented phase rotor system, DBP no. 196 45 852.

Other voltages and frequencies available on request.



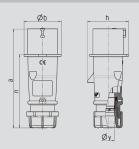
Drawing Amp.		16			32	
2 MB 214 Poles	3	4	5	3	4	5
Dim. in mm a	148	160	160	197	197	197
b	55	65,6	65,6	75	75	75
h	61	72,5	72,5	80,5	80,5	85
n	112	123,5	123,5	152	152	152
у	14,5	16	16	22	22	22
Terminal for cond. cross	1	1	1	2,5	2,5	2,5
section (mm²) minmax.	-2,5	-2,5	-2,5	6	-6	—6

Phase inverters ProTOP

with screw terminals, cable gland and sealing, strain relief and protection against kinking, enclosure with thread lock and safety slide

▲ IP 44

Product group 2144, type 3319 shown.



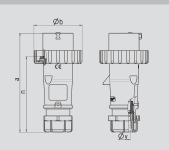
Drawing	Amp.		16			32	
2 MB 217	Poles	3	4	5	3	4	5
Dim. in mn	n a	142	147	147	186	186	180
	b	53	59	67	70	70	77
	h	59	69,4	76	81	81	89,5
	n	105,2	110,5	110,5	141	141	135
	у	14,5	16	16	22	22	22
Terminal for o	ond. cross	1	1	1	2,5	2,5	2,5
section (mm²)	minmax.	—2,5	-2,5	-2,5	6	—6	—6
					I		

Phase inverters AM-TOP®

single part body, with screw terminals, cable gland and sealing



Product group 2244, type 319 shown.



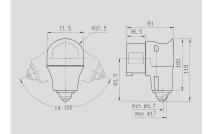
Drawing	Amp.		16		I	32	
2 MB 218	Poles	3	4	5	3	4	5
Dim. in mm	n a	142	144	147	186	186	180
	b	70	78	87	94	94	101
	n	109	111	114	145	145	138
	у	14,5	16	16	22	22	22
Terminal for co	ond. cross	1	1	1	2,5	2,5	2,5
section (mm²)	minmax.	— 2,5	—2,5 ·	-2,5	6	—6	—6

Phase inverters AM-TOP®

single part body, with screw terminals, cable gland and sealing

♦ IP 67

Product group 2147, type 328 shown.



Drawing 2 MB 208 Dim. in mm

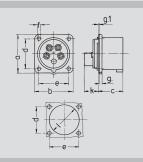
Phase inverters VarioTOP

angled plug with grommet

Cable entry hood rotating up to 60° to the left or right.

▲ IP 44

Product group 2091, type 859 shown.



Drawing	Amp.	16
2 MB 68	Poles	5
Dim. in mn	n a b c	75 75 42
	d e f	60 60 5,5
	g. g.1 k	7,3 2 13
	- 1	52
Terminal for or section (mm²)		1 —2,5

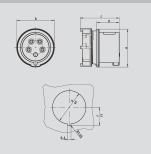
Phase inverters designed as a panel mounted inlet, a retaning pose to hold the bigged lid

a retaning nose to hold the hinged lid of the connector must be provided by the customer in order to ensure

satisfactory locking

▲ IP 44

Product group 2085, type 854 shown.



Drawing	Amp.	16			32	
2 MB 216	Poles	4	5	3	4	5
Dim. in mn	n a	70	70	82	82	82
	b	69	69	82	82	82
	c	max. 72	max. 72	84	84	84
	d	44	44	50	50	50
	е	_	_	_	_	_
	f	_	_	_	_	_
	e1	Ø70	Ø70	Ø70	Ø70	Ø70
	f1	37,75	37,75	37,75	37,75	37,75
Terminal for o	ond. cross	1	1	2,5	2,5	2,5
section (mm²)	minmax.	—2,5	-2,5	6	6	6
	-					

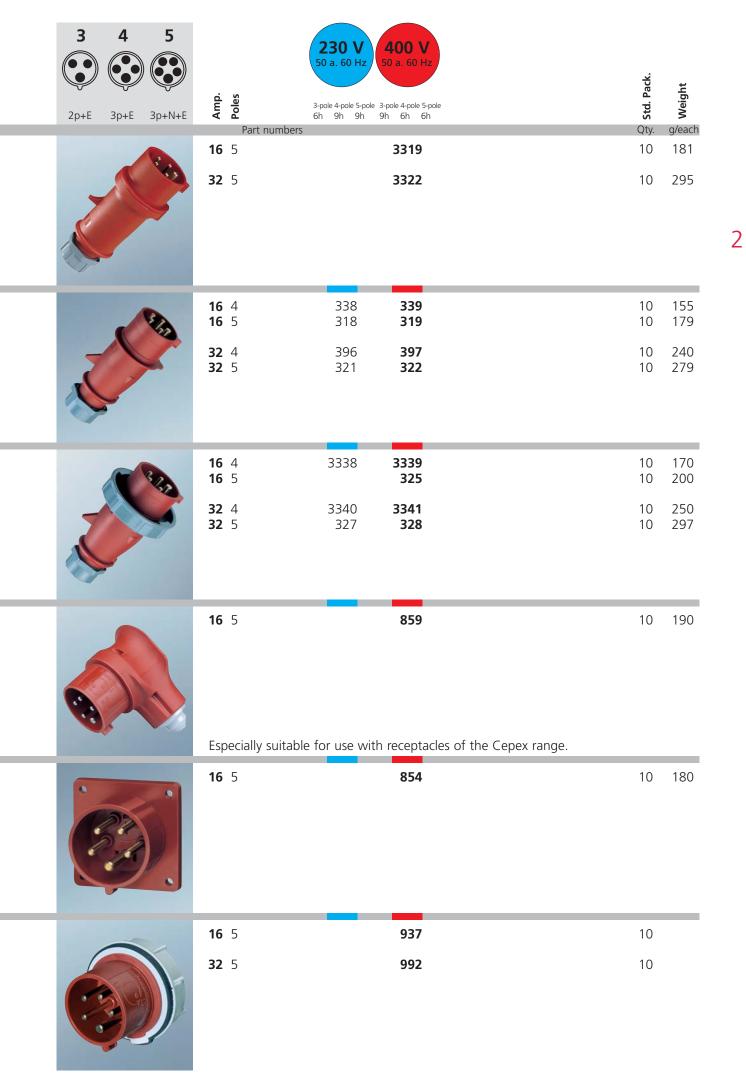
Phase inverters RAPIDO designed as a panel mounted inlet, for wall apertures

70 mm diameter,

central fixing, a retaining nose to hold the hinged lid of the connector must be provided by the customer in order to ensure satisfactory locking

▲ IP 44

Product group 2086, type 937 shown.



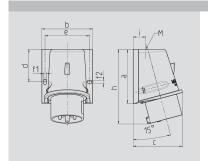
MENNEKES CEE phase inverter

to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code.

Enclosure and insert made of AMAPLAST.

Patented phase rotor system, DBP no. 196 45 852.

Other voltages and frequencies available on request.



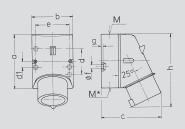
Drawing	Amp.	16	- 1
2 MB 221	Poles	4	5
Dim. in mn	n a	92,5	92,5
	b	87	87
	c	84,5	84,5
	d	55,5	55,5
	е	76	76
	f1	5,3	5,3
	f2	5,3	5,3
	h	128	128
	i	21,5	21,5
	M	25	25

Phase inverters as wall inlet, with external fixing

Hinged lid for retrofit see page 70/71.

▲ IP 44

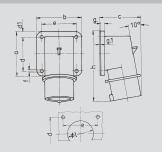
Product group 2052, type 3517 shown.



Diawing	Amp.		10			32	
2 MB 32	Poles	3	4	5	3	4	5
Dim. in mm	ı a b c	87 64 93	100 75 106	100 75 110	128 84 133	128 84 133	128 84 135
	d d1 e	40 50,5	10,5 59	10,5 59	11 68	11 68	11 68
	f g. h	4,5 4 122	5 4 133	5 4 135	5,3 4 169	5,3 4 169	5,3 4 170
	M M*	t	20 /1 20 (I o be cu	it out	t	25 VI 25 (b o be cu	t out
Max. cable dia	am. (mm)	15	15	15	18/25	18/25	18/25
Terminal for co section (mm²)		—2, ¹	2,5	2,5	2,5 —6	2,5 —6	2,5 —6

Phase inverters as wall inlet

▲ IP 44 Product group 2066, type 2511 shown.



Drawing	Amp.	16			32	
2 MB 73	Poles	4	- 5	3	4	5
Dim. in mn	n a b c	85 85 75	85	75 90 87	75 90 87	75 90 90
	d d1 e	64 10 64	10	45 13 78	45 13 78	45 13 78
	f g. g.1	5,5 6 2	5,5 6 2	5,5 6 2	5,5 6 2	5,5 6 2
	h I	129 50	129 50	137 55	137 55	138 55
Terminal for o section (mm²)		1 2,5	_2,5	2,5 —6	2,5 —6	2,5 —6

Phase inverters as panel mounted inlet without a hinged lid

▲ IP 44

Product group 2060, type 329 shown.

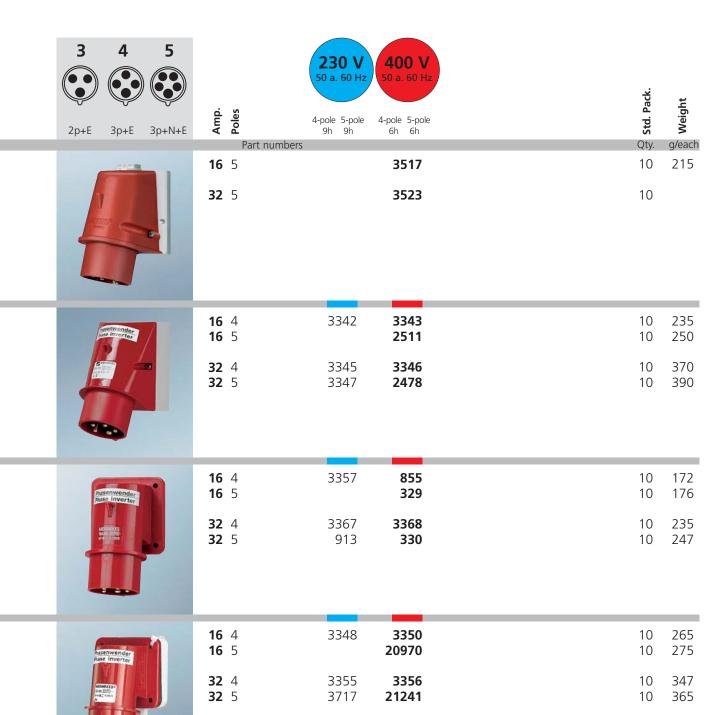


Drawing	Amp.	16			32	
2 MB 43	Poles	4	5	3	4	5
Dim. in mn	n a	85	85	75	75	75
	b	85	85	90	90	90
	c	104	106	115	115	117
	d	64	64	45	45	45
	d1	10	10	13	13	13
	e	64	64	78	78	78
	f	5,5	5,5	5,5	5,5	5,5
	g.	27	27	27	27	27
	g.1	2	2	2	2	2
	h	140	140	150	150	150
	I	50	50	55	55	55
Terminal for o section (mm²)			_2,5	2,5 —6	2,5 —6	2,5 —6

Phase inverters as panel mounted inlet with a hinged lid

▲ IP 44

Product group 2062, type 20970 shown.





Your insurance in the case of blackouts:

Emergency power supply

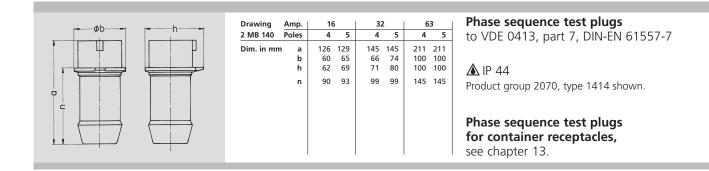
16A up to 125A from MENNEKES.

Please ask for our brochure.

2

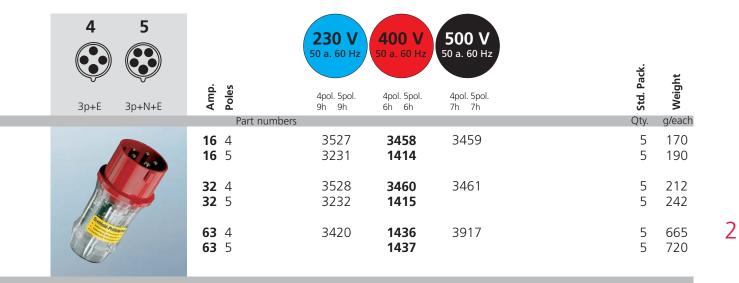
MENNEKES CEE phase sequence test plug

to VDE 0413, part 7, DIN-EN 61557-7.



MENNEKES phase sequence test plug





The test plug enables safe control of the direction of the rotating field for CEE receptacles.

According to VDE 0100 § 31b) 5, rotary current receptacles must be connected such that a right-hand rotating field is achieved - the sockets seen from front in clockwise direction. The test plug differs from a standard plug by its transparent housing indicating a right-hand or left-hand rotating field or a missing phase by means of two control lamps.

Correct rotating field: Green lamp lights up.

Incorrect rotating field: Red lamp lights up.

Phase missing: Both lamps light up. The control lamps inside the transparent housing are arranged so as to be perfectly visible from all sides.



MENNEKES®

3

CEE connectors, 16A to 125A

Connectors StarTOP®, 16A and 32A, **IP 44** Page 88 and 89





Connectors ProTOP, 16A and 32A, IP 44 Page 88 and 89

Connectors AM-TOP®, 16A and 32A, **IP 44** Page 88 and 89





Connectors PowerTOP, 63A, **IP 44** Page 88 and 89

Angled connectors, 16A, **IP 44** Page 88 and 89





Connectors AM-TOP®, 16A and 32A, IP 67 Page 90 and 91

Connectors PowerTOP, 63A and 125A, **IP 67** Page 90 and 91





Hanging connectors, 16A and 32A, IP 44 Page 90 and 91

Connectors 16A to 125A

StarTOP®. Think smarter. Be faster.

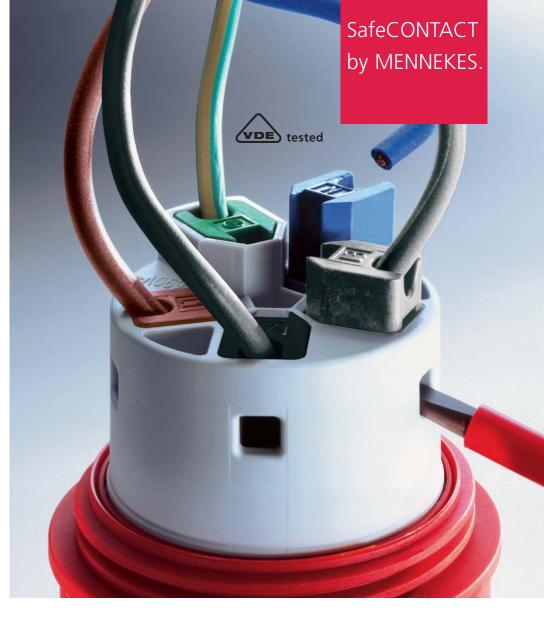
A high degree of safety.

With many handy features and its rugged design, StarTOP® is a top solution that meets the most exacting demands. In one operation, the insulation is cut, the contact is positively established and the wire powerfully held in place. Well thought-out system for professionals.



Under cover. Unlocking is only possible using tools. A stable lock ensures permanent safety.





ProTOP. With standard connection technology.



Gland with integral cable grip and seal created in one single operation. The teeth on the gland give a firm hold and protect the device from inadvertent loosening.

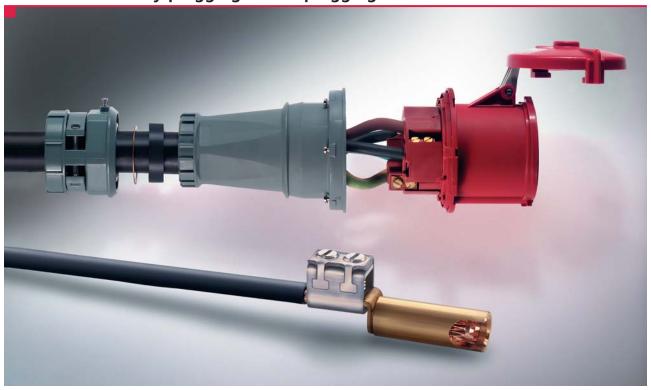


Safety right where you need it: opening aid on the hinged lid.



Plugs for the world

PowerTOP. For easy plugging and unplugging.



SoftCONTACT for 63A connectors. Torsion spring contact for 125A connectors. Less force, optimum mechanical and electric properties. Proven under harsh conditions, in humid and dirty environments.

PowerTOP. For continuous use under harsh conditions.

The external cable grip fixes the cable upstream of the seal. The inside remains free from dust and water. Now even easier to install thanks to more space for the wiring. Slim and handy shape for more convenient insertion and with drawal even when wearing protective gloves.

Safety first.

All PowerTOP plugs and receptacles comply with the amended standard EN/IEC 60 309-2. They are finger proof in accordance with BGV A2, formerly VBG 4.



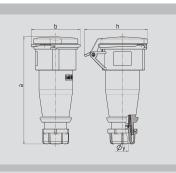


MENNEKES CEE connectors

to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code.

Enclosure and insert made of **AMAPLAST**.

Other voltages and frequencies available on request.



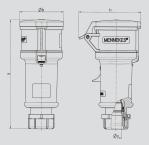
Drawing	Amp.		16			32	
3 MB 63	Poles	3	4	5	3	4	5
Dim. in mn	n a	162	165	167	209	209	208
	b	60	68	76	82	82	89
	h	83	92	98	100	100	108
	у	14,5	16	16	22	22	22
Terminal for o section (mm²)		_2,5	1 —2,5 ·	1 —2,5	2,5 —6	2,5 —6	2,5 —6

Connectors AM-TOP®

single part body, with screw terminals, cable gland and sealing

▲ IP 44

Product group 3141, type 5 shown.



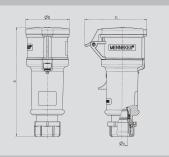
3 MB 60	Amp.		16		1	32	
3 MB 57	Poles	3	4	5	3	4	5
Dim. in mr	n a	160	174	172	214	214	210
	b	57	61	69	75	75	80
	h	83	92	98	100	100	108
	у	16	16	16	22	22	22
Terminal for o	ond. cross	1	1	1	2,5	2,5	2,5
section (mm²)	minmax.	—2,5 ·	—2,5	-2,5	6	6	6

Connectors ProTOP

with screw terminals, cable gland and sealing, strain relief and protection against kinking, enclosure with thread lock and safety slide

▲ IP 44

Product group 3197, type 15 shown.



Drawing	Amp.		16		32
3 MB 60	Poles	3	4	5	5
Dim. in mn	n a	160	174	172	210
	b	57	61	69	80
	h	83	92	98	108
	у	16	16	16	22
Terminal for c	ond. cross	1	1	1	2,5
section (mm²)	minmax.	—2,5 ·	—2,5	— 2,5	—6

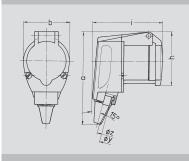
Connectors StarTOP® with SafeCONTACT

screwless,

with insulation displacing technique, cable gland and sealing, strain relief and protection against kinking, enclosure with thread lock and safety slide

▲ IP 44

Product group 3101, type 35 shown.



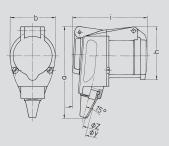
Drawing	Amp.		16
3 MB 23	Poles	3	
Dim. in mn	n a	118	
	b	59	
	h	69	
	i	88	
	у	17,5	
	z	7	
Terminal for o	ond. cross	1	
section (mm²)	minmax.	-2.5	
,			

Angled connectors

with grommet



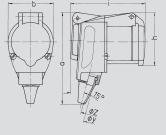
Product group 3039, type 1438 shown.



Drawing	Amp.		16
3 MB 29	Poles	3	
Dim. in mm	а	118	
	b	59	
	h	69	
	i	94	
	У	17,5	
	z	7	
Terminal for co	nd. cross	1	
section (mm²) n	ninmax.	-2,5	

Angled connectors

with grommet and with integral SCHUKO® receptacle



2,3	▲ IP 44
	Product group 30

Drawing	Amp.		63	
3 MB 58/2	Poles	3	4	5
Dim. in mm	а	264	264	264
	b	101	101	101
	h	113	113	113
	у	36	36	36
Terminal for co	nd. cross	6	6	6
section (mm²) r	ninmax.	—16	—16	—16

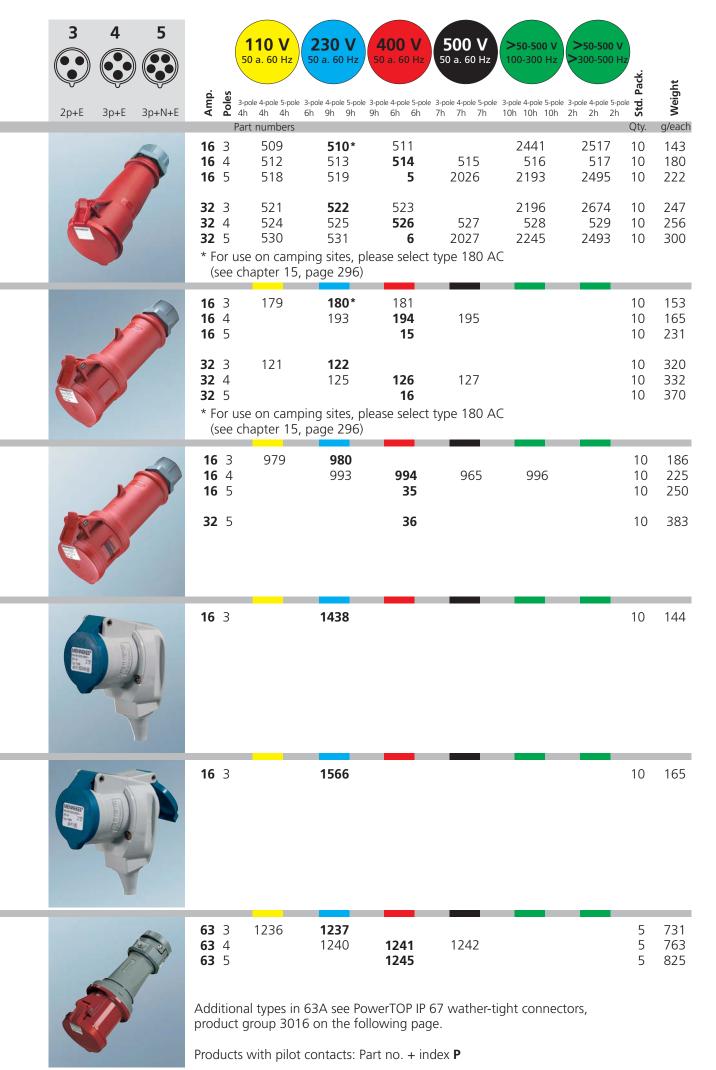
039, type 1566 shown.

Connectors PowerTOP with SoftCONTACT, with highly heat resistant contact carrier, frame terminals, gland and external cable grip

▲ IP 44

Product group 3015, type 1245 shown.



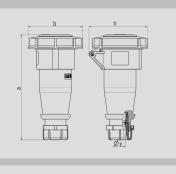


MENNEKES CEE connectors

to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code.

Enclosure and insert made of AMAPLAST.

Other voltages and frequencies available on request.



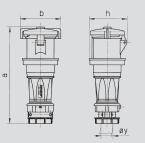
Drawing	Amp.		16		I	32	
3 MB 62	Poles	3	4	5	3	4	5
Dim. in mr	n a	146	166	172	212	212	213
	b	72	79	89	96	96	102
	h	80	88	95	98	98	105
	у	14,5	16	16	22	22	22
Terminal for o		1 —2,5	1 —2,5	1 —2,5	2,5 —6	2,5 —6	2,5 —6

Connectors AM-TOP®

single part body, with screw terminals, cable gland and sealing



Product group 3149, type 550 shown.



Drawing	Amp.		63		I	125	
3 MB 56/2	Poles	3	4	5	3	4	5
Dim. in mm	ı a	264	264	264	320	320	320
	b	118	118	118	135	135	135
	h	113	113	113	124	124	124
	у	36	36	36	50	50	50
Terminal for co	ond. cross	6	6	6	25	25	25
section (mm²) i	minmax.	—16	—16	—16	—50	—50	—50
					1		

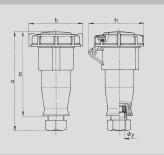
Connectors PowerTOP

with highly heat resistant contact carrier, frame terminals, gland and external cable grip

63A: with SoftCONTACT
125A: with TorsionSpringCONTACT

♦ IP 67

Product group 3016, type 1121 shown.

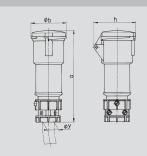


Drawing	Amp.	63	
3 MB 8	Poles	4	5
Dim. in mr	n a b h	287 125 109	287 125 109
	у	30,5	30,5
Terminal for cond. cross section (mm²) minmax.		—10	_10 _10

Connectors economy range



Product group 3049, type 569 shown.



Drawing	Amp.		16		l	32	
3 MB 51/3	Poles	3	4	5	3	4	5
Dim. in mm a		165	180	190	214	214	223
	b	60	68	76	82	82	89
	h	76	84	90	92	92	99
	у	19	19	22	24,5	24,5	28,5
Terminal for co	ond. cross	1	1	1	2,5	2,5	2,5
section (mm²)	minmax.	—2,5	-2,5	-2,5	6	6	6

Hanging connectors with cable gland

▲ IP 44

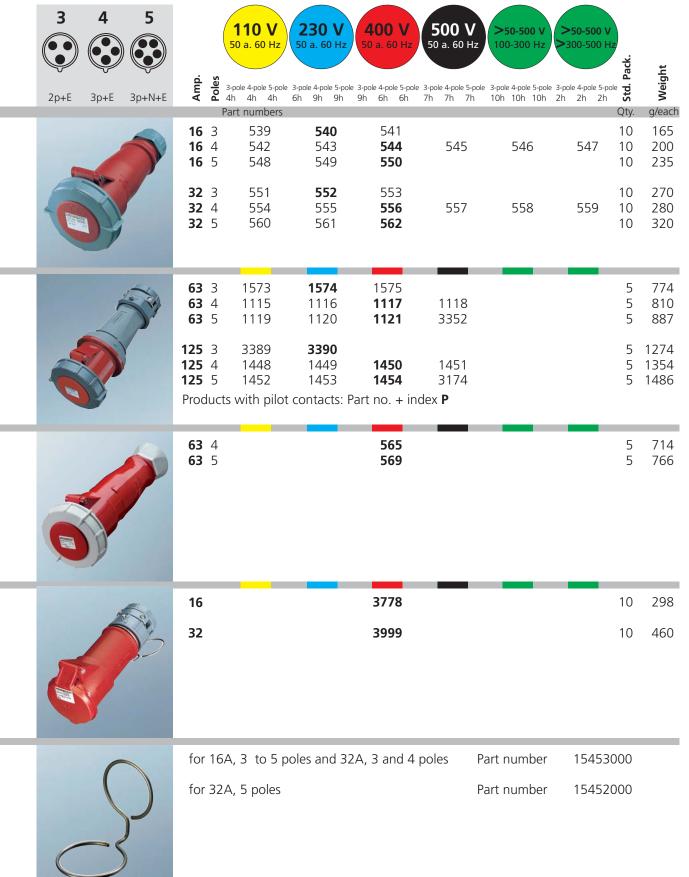
Product group 3015, type 3778 shown.

Hanging clip

for PowerTOP plugs and connectors

Type 15453000 shown.





Connectors for use in corrosive environments and under harsh conditions in the AM-TOP and PowerTOP range

with highly heat resistant contact carrier and nickel-plated contacts, 16A and 32A, protection type IP 44 and IP 67, see chapter 10.



CEE receptacles, 16A to 125A, fused, switched, switched and interlocked, electrically interlocked

Receptacles, fused, 16A to 125A, IP 44 and IP 67 Page 96 to 101





Receptacles, switched and interlocked, DUO, 16A to 125A, IP 44 and IP 67 Page 102 to 105

Receptacles, switched and interlocked, DODSCH, 16A to 63A, IP 44 and IP 55 Page 102 to 105





Horizontal receptacles, switched and interlocked, DUO, 16A, IP 44 and IP 67 Page 102 to 107

Receptacles, switched and interlocked, fused, DUO, 16A to 125A, IP 44 and IP 67 Page 108 to 111





Receptacles, electrically interlocked, 63A and 125A, IP 67 Page 112 to 115

SCHUKO® receptacle, switched and interlocked, 16A, IP 67 Page 106 and 107





Switch disconnectors, 16A to 100A, IP 67 Page 116 and 117

Receptacles - fused, switched and interlocked, electrically interlocked





DUO mechanical.



After insertion and switching on, the plug is locked in the ON position. After switching off and withdrawing the plug, the switch is locked.

All DUO receptacles up to 63A can be padlocked in the OFF position. DUO receptacles of 125A can be supplied with a padlock fitting as an extra. Also available with a triple padlock fitting.



Latching nose aligns the bayonet ring on opening and ensures largely automatic closing.



DODSCH mechanical.

(**Do**seneinsatz-**D**reh-**Sch**alter = "Plug in and twist switch")



No switch handle. Plug in and turn clockwise (= switch on). Turn counter-clockwise (= switch off) and pull out.

Safe enclosures with foamed seal: free of silicone, CFCs and halogens.



All terminal screws on the switch face front.

Switched receptacles with mechanical DUO interlock, on request available with auxiliary contacts. Please contact us for more information.



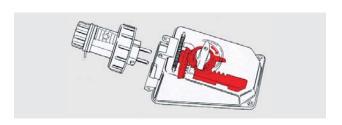
4



Plugs for the world



MES SCHUKO® receptacle.
(Mechanical Electrical Switch)



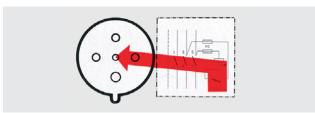
The receptacle is mechanically interlocked using a circuit breaker with thermal and electro-magnetic release. Can only be plugged in off position.

The inside: sophisticated technique in compact, robust, safe and high-quality design to ensure a long service life.



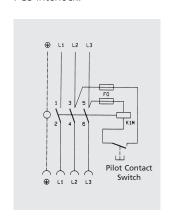


Electric and PCS electric.
(Pilot Contact Switch)

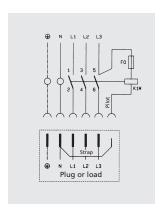


No residual voltage, even on the pilot contact. The controls for the contactor are inside the receptacle.

PCS electric.Circuit diagram for electrical PCS interlock.



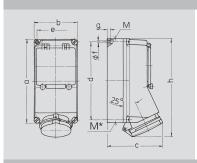
Electric.Circuit diagram for electrical interlock.



MENNEKES CEE receptacles, fused

to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST.

Other voltages and frequencies available on request.

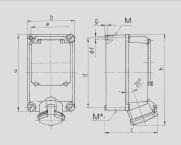


Drawing Amp.	I	16		I	32	
1 MB 168 Poles	3	4	5	3	4	5
Dim. in mm a b c	225 118 141	225 118 141	225 118 141	225 118 146	225 118 146	225 118 146
d e f	208 101 6,3	208 101 6,3	208 101 6,3	208 101 6,3	208 101 6,3	208 101 6,3
g. h	8 250	8 252	8 254	8 264	8 264	8 264
M M* Max. cable diam. (mm)	2x25	5 and 2x25 25		1x 2	5 and 2x25 25	1x 32 2x25 25
Terminal for cond. cross section (mm²) minmax.		1,5 —4	1,5 —4	2,5 —10	2,5 —10	2,5 —10

Receptacles

with DIN rail, optional fitting of Neozed, Diazed, circuit-breakers and RCD's

▲ IP 44 Product group 1063, type 5495 shown.

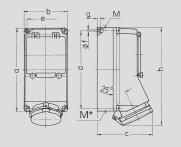


Drawing	Amp.	63	
1 MB 379	Poles	4	- 5
Dim. in mm	ı a	264	264
	b	163	163
	c	187	187
	d	240	240
	е	140	140
	f	8,1	8,1
	q.	8	8
	g. h	315	315
	M	1x 40	1x 40
	M*	2x 40	2x 40
Max. cable dia	am. (mm)	27	27

Receptacles with SoftCONTACT

with DIN rail, optional fitting of Neozed, Diazed, circuit-breakers and RCD's

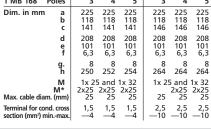
▲ IP 44 Product group 1110, type 7102 shown.



Drawing Amp	o.		16		l .	32	
1 MB 168 Pole	s	3	4	5	3	4	5
I	a b c	225 118 141	225 118 141	225 118 141	225 118 146	225 118 146	225 118 146
	d e f	208 101 6,3	208 101 6,3	208 101 6,3	208 101 6,3	208 101 6,3	208 101 6,3
g	J. h	8 250	8 252	8 254	8 264	8 264	8 264
M M Max. cable diam. (m	*		5 and 2x25 25		1x 2 25	5 and 2x25 25	
Terminal for cond. cresection (mm²) minm		1,5 —4	1,5 —4	1,5 —4	2,5 —10	2,5 —10	2,5 —10

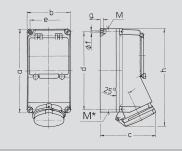
Receptacles

with fuse socket D 01 or D 02



▲ IP 44

Product group 1060, type 5004 shown.

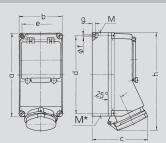


Drawing	Amp.		16		1	32	
1 MB 168	Poles	3	4	5	3	4	5
Dim. in mm	a	225	225	225	225	225	225
	b	118	118	118	118	118	118
	c	141	141	141	146	146	146
	d	208	208	208	208	208	208
	e	101	101	101	101	101	101
	f	6,3	6,3	6,3	6,3	6,3	6,3
	g.	8	8	8	8	8	8
	h	250	252	254	264	264	264
Max. cable dia	M M* m. (mm)		5 and 2x25 25		1x 2! 25	5 and 2x25 25	
Terminal for co		1,5	1,5	1,5	2,5	2,5	2,5
section (mm²) r		—4	—4	—4	—10	—10	—10

Receptacles

with fuse socket D II (E 27)





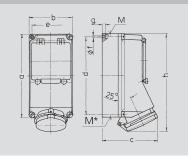
Drawing Amp.		16			32	
1 MB 168 Poles	3	4	5	3	4	5
Dim. in mm a b c	225 118 141	225 118 141	225 118 141	225 118 146	225 118 146	225 118 146
d e f	208 101 6,3	208 101 6,3	208 101 6,3	208 101 6,3	208 101 6,3	208 101 6,3
g. h	8 250	8 252	8 254	8 264	8 264	8 264
M M* Max. cable diam. (mm)		5 and 2x25 25		1x 25	and 2x25 25	
Terminal for cond. cross section (mm²) minmax.		1,5 —4	1,5 —4	2,5 —10	2,5 —10	2,5 —10

Receptacles

with circuit breaker, K-characteristics



ı	2123	2123	2123		2123	2123	
l	25	25	25	25	25	25	A 1D 44
l	1.5	1.5	1.5	2.5	2.5	2.5	<u>A</u> IP 44
	-4	-4	-4	<u>—10</u>	<u>-10</u>	<u>—10</u>	▲ IP 44 Product group 1061, type 5012 shown
							, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,



Drawing	Amp.		16			32	
1 MB 168	Poles	3	4	5	3	4	5
Dim. in mn	n a b c	225 118 141	225 118 141	225 118 141	225 118 146	225 118 146	225 118 146
	d e f	208 101 6,3	208 101 6,3	208 101 6,3	208 101 6,3	208 101 6,3	208 101 6,3
	g. h	8 250	8 252	8 254	8 264	8 264	8 264
Max. cable dia	M M* am. (mm)	1x 2! 2x25 25	5 and 2x25 25		1x 25	and 2x25 25	
Terminal for or section (mm²)		1,5 —4	1,5 —4	1,5 —4	2,5 —10	2,5 —10	2,5 —10

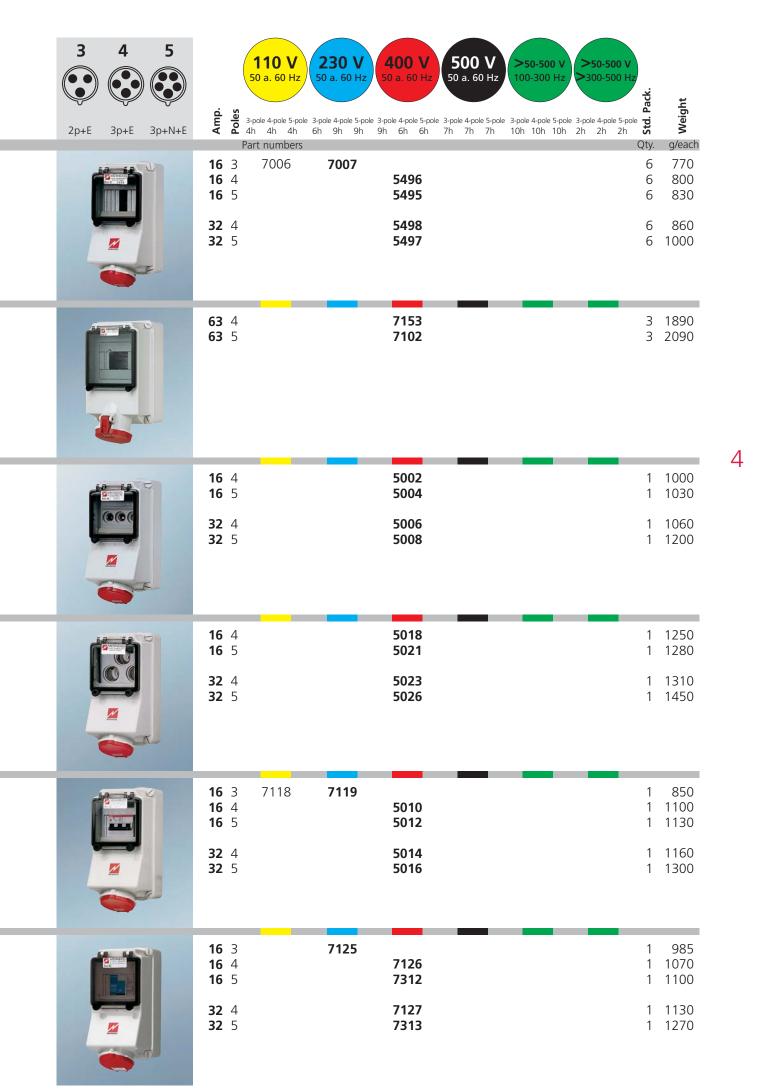
Receptacles

with RCD \boxtimes $I_{\Delta N} = 0.03A$

(other leakage current ratings on request)

▲ IP 44

Product group 1065, type 7312 shown.

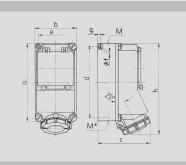


MENNEKES CEE receptacles, fused

to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code.

Enclosure and insert made of AMAPLAST.

Other voltages and frequencies available on request.



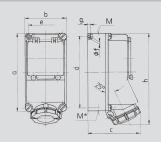
Drawing Amp.	1	16		32	
1 MB 378 Poles	3	4	5	4	5
Dim. in mm a b c	225	225	225	225	225
	118	118	118	118	118
	144	146	147	152	153
d	208	208	208	208	208
e	101	101	101	101	101
f	6,3	6,3	6,3	6,3	6,3
g.	8	8	8	8	8
h	252	255	259	268	274
M M* Max. cable diam. (mm)	2x25	25 and 2x25 25		1x25 and 2x25 25	
Terminal for cond. cross		1,5	1,5	2,5	2,5
section (mm²) minmax		—4	—4	—10	—10

Receptacles with DIN rail,

optional fitting of Neozed, Diazed, circuit-breakers and RCD's

♦ IP 67

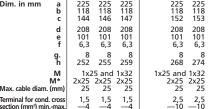
Product group 1163, type 7130 shown.



Drawing	Amp.		16		32	
1 MB 378	Poles	3	4	5	4	5
Dim. in mm	a b c	225 118 144	225 118 146	225 118 147	225 118 152	225 118 153
	d e f	208 101 6,3	208 101 6,3	208 101 6,3	208 101 6,3	208 101 6,3
	g. h	8 252	8 255	8 259	8 268	8 274
Max. cable dia	M M* m. (mm)		5 and 2x25 25		1x25 and 2x25 25	
Terminal for consection (mm²) n		1,5 —4	1,5 —4	1,5 —4	2,5 —10	2,5 —10

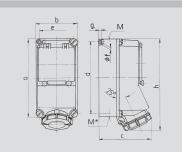
Receptacles

with fuse socket D 01 or D 02



♦ IP 67

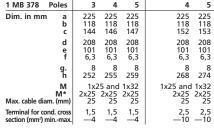
Product group 1160, type 7134 shown.



Drawing	Amp.		16		32	
1 MB 378	Poles	3	4	5	4	5
Dim. in mn	n a b c	225 118 144	225 118 146	225 118 147	225 118 152	225 118 153
	d e f	208 101 6,3	208 101 6,3	208 101 6,3	208 101 6,3	208 101 6,3
	g. h	8 252	8 255	8 259	8 268	8 274
Max. cable dia	M M* am. (mm)		5 and 2x25 25		1x25 and 2x25 25	
Terminal for or section (mm²)		1,5 —4	1,5 —4	1,5 —4	2,5 —10	2,5 —10

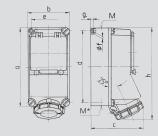
Receptacles

with fuse socket D II (E 27)



♦ IP 67

Product group 1162, type 7140 shown.

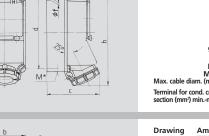


Drawing	Amp.		16		32	
1 MB 378	Poles	3	4	5	4	5
Dim. in mm	a	225	225	225	225	225
	b	118	118	118	118	118
	c	144	146	147	152	153
	d	208	208	208	208	208
	e	101	101	101	101	101
	f	6,3	6,3	6,3	6,3	6,3
	g.	8	8	8	8	8
	h	252	255	259	268	274
Max. cable dia	M M* m. (mm)		5 and 2x25 25		1x25 and 2x25 25	
Terminal for co		1,5	1,5	1,5	2,5	2,5
section (mm²) r		—4	—4	—4	—10	—10

1,5 1,5 1,5 —4 —4 —4

Receptacles

with circuit breaker, K-characteristics



Product group 1161, type 7145 shown.



Terminal for cond. cross section (mm²) min.-max.

Receptacles with RCD \square $I_{\Delta N} = 0.03A$ (other leakage current ratings

on request)

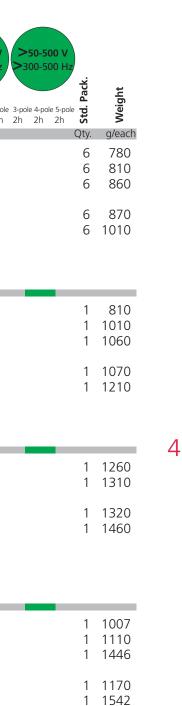
♦ IP 67

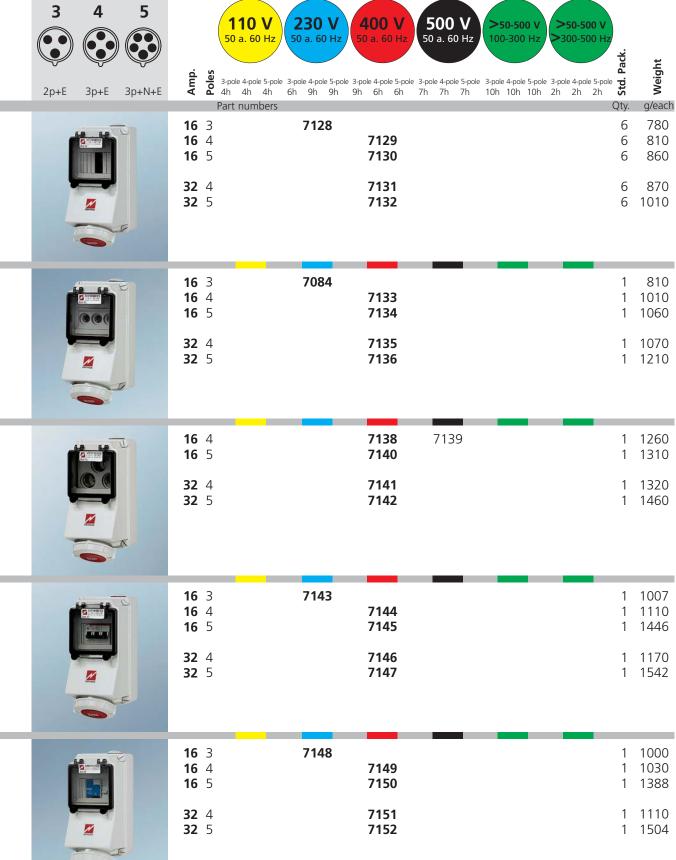
225 118 152 225 118 153

8 8 268 274

Product group 1165, type 7152 shown.





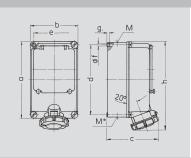


MENNEKES CEE receptacles, fused

to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code.

Enclosure and insert made of AMAPLAST.

Other voltages and frequencies available on request.

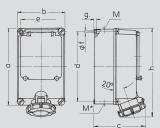


Drawing	Amp.	32		63	
1 MB 164	Poles	4	5	4	5
Dim. in mm	n a b c	264 163 177	163	264 163 193	264 163 193
	d e f	240 140 8,1	140	240 140 8,1	240 140 8,1
	g. h	8 301		8 334	8 334
Max. cable dia	M M* am. (mm)	32 2x32 25	2x32	40 2x40 27	40 2x40 27
Terminal for co section (mm²)		2,5 —10	2,5 —10	6 25	6 25

Receptacles with DIN rail 63A: SoftCONTACT

♦ IP 67

Product group 1064, type 5535 shown.

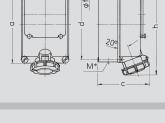


Drawing	Amp.	32	!		63	
1 MB 164	Poles	4	ŀ	5	4	5
Dim. in mm	a b c	264 163 177	16	53	264 163 193	264 163 193
	d e f	240 140 8,1	14		240 140 8,1	240 140 8,1
	g. h	301 301		8)1	8 334	8 334
Max. cable dia	M M* ım. (mm)	32 2x32 25	2x3	32 32 25	40 2x40 27	40 2x40 27
Terminal for co section (mm²) r		2,5 —10		,5 10	—25	_25

Receptacles

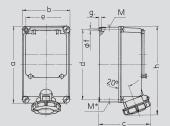
with **SoftCONTACT**

with 3 pole fuse socket D 02



♦ IP 67

Product group 1115, type 7311 shown.



Drawing	Amp.	32	2		63	
1 MB 164	Poles	4	ļ	5	4	5
Dim. in mm	a b c	264 163 177	,	264 163 184	264 163 193	264 163 193
	d e f	240 140 8,1)	240 140 8,1	240 140 8,1	240 140 8,1
	g. h	301 301		8 301	8 334	8 334
Max. cable dia	M M* m. (mm)	32 2x32 25	2	32 x32 25	40 2x40 27	40 2x40 27
Terminal for co section (mm²) r		2,5 —10	;) _	2,5 -10	6 —25	6 —25

Receptacles

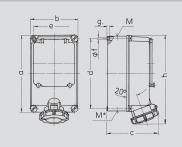
with 3 pole fuse socket D III (E 33),

63A: SoftCONTACT

(also available with NH 00)



Product group 1067, type 5041 shown.



Drawing Amp.	32		63	
1 MB 164 Poles	4	5	4	5
Dim. in mm a	264	264	264	264
b	163	163	163	163
c	177	184	193	193
d	240	240	240	240
e	140	140	140	140
f	8,1	8,1	8,1	8,1
g.	8	8	8	8
h	301	301	334	334
M	32	32	40	40
M*	2x32	2x32	2x40	2x40
Max. cable diam. (mm	25	25	27	27
Terminal for cond. cros		2,5	6	_6
section (mm²) minmax		—10	—25	25

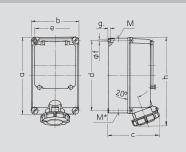
Receptacles

with **SoftCONTACT**

with 3 pole circuit breaker, K-characteristic

♦ IP 67

Product group 1116, type 7168 shown.



Drawing	Amp.	32		0.5	
1 MB 164	Poles	4	5	4	5
Dim. in mn	n a	264	264	264	264
	b	163	163	163	163
	c	177	184	193	193
	d	240	240	240	240
	e	140	140	140	140
	f	8,1	8,1	8,1	8,1
	g.	8	8	8	8
	h	301	301	334	334
Max. cable di	M	32	32	40	40
	M*	2x32	2x32	2x40	2x40
	am. (mm)	25	25	27	27
Terminal for o		2,5	2,5	6	6
section (mm²)		—10	—10	—25	—25

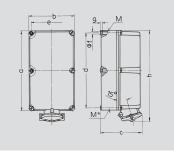
Receptacles

with SoftCONTACT with RCD

 \boxtimes $I_{\Delta N} = 0.03A$

(other leakage current ratings on request)

Product group 1117, type 7170 shown.



Drawing	Amp.	125	
1 MB 163	Poles	4	5
Dim. in mn	n a	460	460
	b	260	260
	c	236	236
	d	434	434
	e	234	234
	f	11	11
	g.	9.	9.
	h	525	525
Max. cable dia	M	63	63
	M*	2x63	2x63
	am. (mm)	44	44
Terminal for co		25	25
section (mm²)		—70	—70

Receptacles

with **TorsionSpringCONTACT**

with 3 pole fuse socket NH 00 (also available with fuse disconnector)

♦ IP 67

Product group 1069, type 5046 shown.



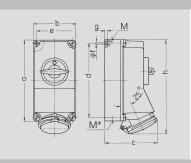
MENNEKES CEE receptacles, switched and interlocked

to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code.

Enclosure and insert made of AMAPLAST.

Other voltages and frequencies available on request.

MENNEKES CEE receptacles with DUO interlock can be padlocked.



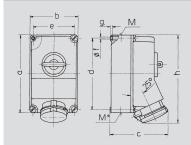
Drawing	Amp.		16		I	32	
1 MB 174	Poles	3	4	5	3	4	5
Dim. in mm	n a	225	225	225	225	225	225
	b	118	118	118	118	118	118
	c	141	141	141	146	146	146
	d	208	208	208	208	208	208
	e	101	101	101	101	101	101
	f	6,3	6,3	6,3	6,3	6,3	6,3
	g.	8	8	8	8	8	8
	h	250	252	254	264	264	264
Max. cable dia	M M* nm. (mm)		5 and 2x25 25			5 and 2x25 25	
Terminal for co		1,5	1,5	1,5	2,5	2,5	2,5
section (mm²) r		—4	—4	—4	—10	—10	—10

Receptacles

switched, with mechanical **DUO** interlock

▲ IP 44

Product group 1075, type 5103 shown.



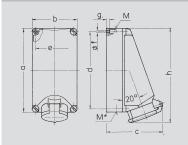
Diawing	Amp.		03	
1 MB 234	Poles	3	4	5
Dim. in mn	n a	264	264	264
	b	163	163	163
	c	192	192	192
	d	240	240	240
	e	140	140	140
	f	8,1	8,1	8,1
	g.	8	8	8
	h	300	300	300
Max. cable di	M	40	40	40
	M*	2x40	2x40	2x40
	am. (mm)	27	27	27
Terminal for co section (mm²)		_6 _25	25	6 25

Receptacles

with **SoftCONTACT** switched, with mechanical **DUO** interlock



Product group 1075, type 5959 shown.



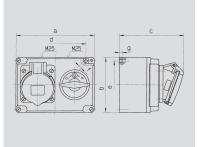
prawing	Amp.		16			32		
1 MB 142	Poles	3	4	5	3	4	5	
Dim. in mm	n a b c	225 118 139	225 118 148	225 118 150	225 118 150	225 118 150	225 118 152	
	d e f	208 101 6,3	208 101 6,3	208 101 6,3	208 101 6,3	208 101 6,3	208 101 6,3	
	g. h	8 247	8 252	8 252	8 253	8 253	8 253	
Max. cable dia	M M* am. (mm)		25 and 2x25 25			5 and 2x25 25		
Terminal for co section (mm²)		1,5 —4	1,5 —4	1,5 —4	2,5 —10	2,5 —10	2,5 —10	

Receptacles

switched, with mechanical **DODSCH** interlock

▲ IP 44

Product group 1077, type 5114 shown.



Drawing Amp	1	16	
1 MB 398 Poles	3	4	5
Dim. in mm a	170 118 134	170 118 141	170 118 137
d e f	136 104 6,1	136 104 6,1	136 104 6,1
g. M	6 25	6 25	6 25
Max. cable diam. (mn) 18	18	18
Terminal for cond. crossection (mm²) minma		1.5 —4	1.5 —4

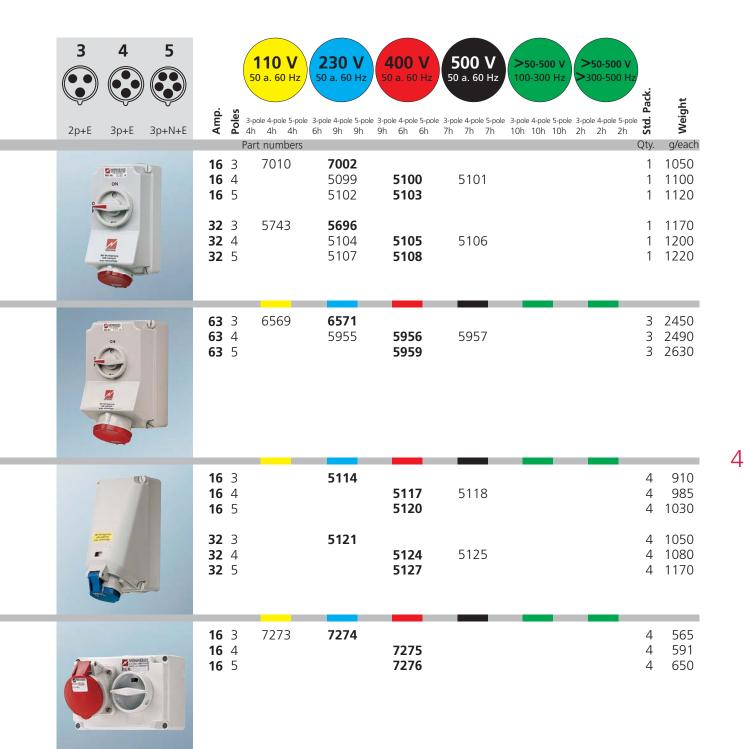
Receptacles

switched, with mechanical **DUO** interlock

▲ IP 44

Product group 1085, type 7276 shown.

DUO receptacles with switch and auxiliary contacts available on request.



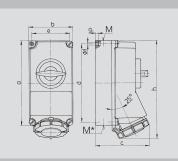
MENNEKES CEE receptacles, switched and interlocked

to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code.

Enclosure and insert made of AMAPLAST.

Other voltages and frequencies available on request.

MENNEKES CEE receptacles with DUO interlock can be padlocked.



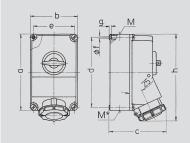
Drawing Amp.	l	16		1	32	
1 MB 207 Poles	3	4	5	3	4	5
Dim. in mm a b c	225 118 144	225 118 146	225 118 147	225 118 152	225 118 152	225 118 153
d e f	208 101 6,3	208 101 6,3	208 101 6,3	208 101 6,3	208 101 6,3	208 101 6,3
g. h	8 252	8 255	8 259	8 268	8 268	8 274
M M* Max. cable diam. (mm)	2x25	and 1 2x25 25			5 and 1 2x25 25	
Terminal for cond. cross section (mm²) minmax.		1,5 —4	1,5 —4	2,5 —10	2,5 —10	2,5 —10

Receptacles

switched, with mechanical **DUO** interlock

♦ IP 67

Product group 1074, type 5603 shown.



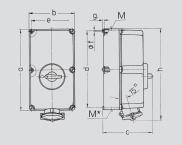
Drawing	Amp.		63	
1 MB 180	Poles	3	4	5
Dim. in mn	n a	264	264	264
	b	163	163	163
	c	196	196	196
	d	240	240	240
	e	140	140	140
	f	8,1	8,1	8,1
	g.	8	8	8
	h	300	300	300
Max. cable di	M	40	40	40
	M*	40	40	40
	am. (mm)	32	32	32
Terminal for o		6	6	_6
section (mm²)		—25	25	25

Receptacles

with **SoftCONTACT** switched, with mechanical **DUO** interlock



Product group 1074, type 5113 shown.



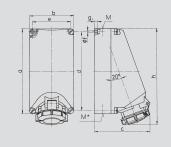
Drawing	Amp.		125	
1 MB 177	Poles	3	4	5
Dim. in mn	n a	460	460	460
	b	260	260	260
	c	283	283	283
	d	434	434	434
	e	234	234	234
	f	11	11	11
	g.	9	9	9
	h	525	525	525
Max. cable di	M	63	63	63
	M*	2x63	2x63	2x63
	am. (mm)	44	44	44
Terminal for c		25	25	25
section (mm²)		—70	—70	—70

Receptacles

with **TorsionSpringCONTACT** switched, with mechanical **DUO** interlock

♦ IP 67

Product group 1074, type 5692 shown.



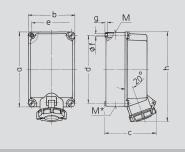
Drawing	Amp.		16			32	
1 MB 206	Poles	3	4	5	3	4	5
Dim. in mm	a	225	225	225	225	225	225
	b	118	118	118	118	118	118
	c	144	150	152	155	155	159
	d	208	208	208	208	208	208
	e	101	101	101	101	101	101
	f	6,3	6,3	6,3	6,3	6,3	6,3
	g.	8	8	8	8	8	8
	h	249	251	253	255	255	259
Max. cable dia	M M* m. (mm)		25 and 2x25 25			5 and 2x25 25	
Terminal for co		1,5	1,5	1,5	2,5	2,5	2,5
section (mm²) r		—4	—4	—4	—10	—10	—10

Receptacles

switched, with mechanical **DODSCH** interlock



Product group 1087, type 7432 shown.



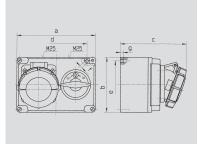
Drawing	Amp.	63	
1 MB 178	Poles	4	5
Dim. in mm	a	264	264
	b	163	163
	c	193	193
	d	240	240
	e	140	140
	f	8,1	8,1
	g.	8	8
	h	334	334
	M	2x40	2x40
Max. cable dia	M*	2x40	2x40
	m. (mm)	27	27
Terminal for co		6	_6
section (mm²) r		—25	—25

Receptacles

switched, with mechanical **DODSCH** interlock



Product group 1079, type 7444 shown.



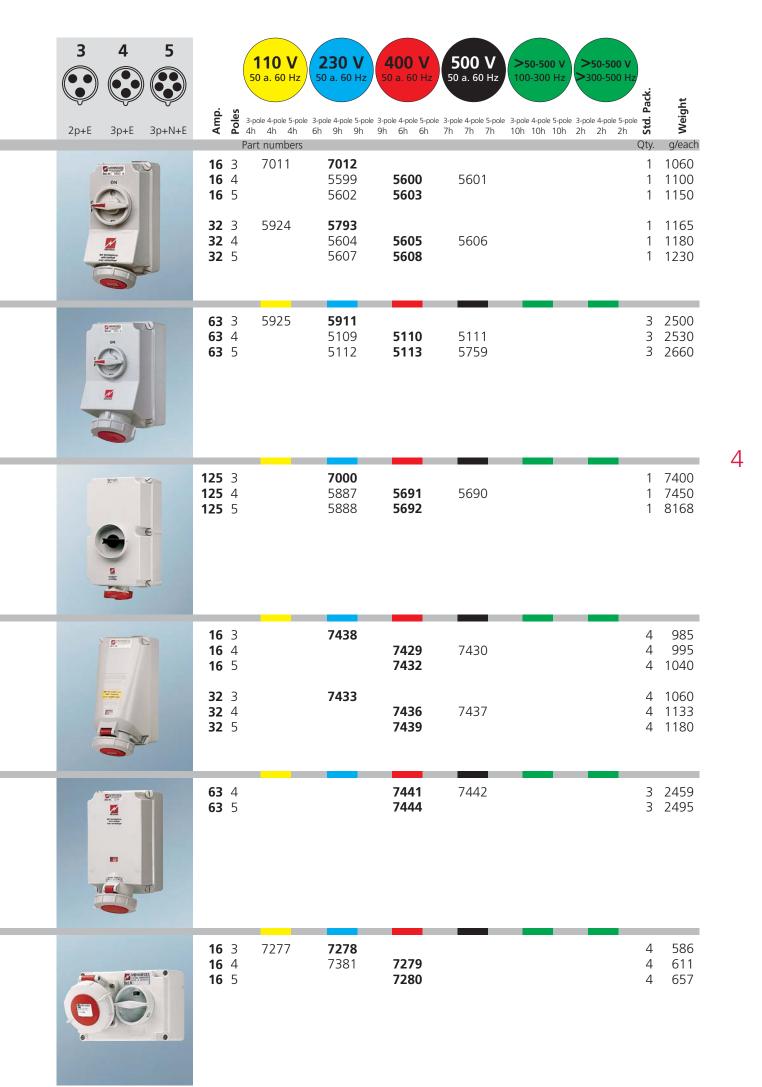
Drawing	Amp.		16	
1 MB 396	Poles	3	4	5
Dim. in mm	a	170	170	170
	b	118	118	118
	c	136	139	143
	d	136	136	136
	e	104	104	104
	f	6,1	6,1	6,1
	g.	6	6	6
Max. cable dian	M	25	25	25
	n. (mm)	18	18	18
Terminal for con		1.5	1.5	1.5
section (mm²) m		—4	—4	—4

Receptacles

switched, with mechanical **DUO** interlock

♦ IP 67

Product group 1084, type 7280 shown.



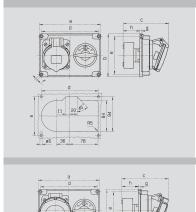
MENNEKES CEE receptacles, switched and interlocked

to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code.

Enclosure and insert made of AMAPLAST.

Other voltages and frequencies available on request.

MENNEKES CEE receptacles with DUO interlock can be padlocked.



Drawing	Amp.	16				
1 MB 397	Poles	3	4	5		
Dim. in mm	ı a	170	170	170		
	b	118	118	118		
	c	120	125	127		
	d	158	158	158		
	е	105	105	105		
	f	9	9	9		
	g.	5	5	5		
	h	47	47	47		
Terminal for co	nd. cross	1,5	1,5	1,5		
section (mm²) ı	minmax.	—4	—4	-4		

Panel mounted receptacles switched, with mechanical **DUO** interlock

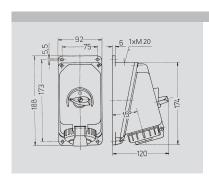
▲ IP 44 Product group 1130, type 7268 shown.

Drawing	Amp.		16	
1 MB 395	Poles	3	4	5
Dim. in mm	a	170	170	170
	b	118	118	118
	c	123	125	130
	d	158	158	158
	е	105	105	105
	f	9	9	9
	g.	5	5	5
	h	47	47	47
Terminal for co	nd. cross	1,5	1,5	1,5
section (mm²) ı	ninmax.	-4	-4	-4

Panel mounted receptacles switched, with mechanical **DUO** interlock

♦♦ IP 67 Product group 1131, type 7272 shown.

MENNEKES SCHUKO® receptacles, switched and interlocked



Drawing 1 MB 287 Dim. in mm **SCHUKO® receptacles** switched and interlocked, with circuit breaker 16A, to DIN 49442

♦ IP 67 Product group 1919, type 10801 shown.



4







3p+E 3p+N+E

 General
 3-pole 4-pole 5-pole
 3-pole 4-pole 5-pole</

400 V

50 a. 60 Hz

16 3 16 4 16 5	7265	72

110 V

50 a. 60 Hz

230 V

50 a. 60 Hz

g/each Part numbers 383 266 406 7267 4 7268 4 432

500 V

50 a. 60 Hz



16 3	7269	7270			4	404
16 4		7383	7271		4	430
16 5			7272		4	469

	Part number	Qty.	g/each
16A, 230V, 2p+E	10801	4	642

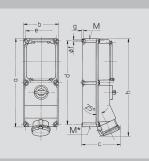
MENNEKES CEE receptacles, switched and interlocked, fused

to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code.

Enclosure and insert made of AMAPLAST.

Other voltages and frequencies available on request.

MENNEKES CEE receptacles with DUO interlock can be padlocked.



Drawing Amp.			16		3	2	6	3
1 MB 208	Poles	3	4	5	4	5	4	5
Dim. in mm	a b c	364 134 160	364 134 162	364 134 163	364 134 168	364 134 168	460 180 195	460 180 195
	d e f	347 117 6,3	347 117 6,3	347 117 6,3	347 117 6,3	347 117 6,3	440 160 8,1	440 160 8,1
	g. h	8 391	8 395	8 398	8 408	8 411	8 502	502
Max. cable dia	M M* m. (mm)	32/40 2x32 27	32/40 2x32 27	32/40 2x32 27		32/40 2x32 27	40 2x40 27	40 2x40 27
Terminal for co section (mm²) r			1,5 —4	1,5 —4	2,5 —10	2,5 —10	25	—25

Receptacles

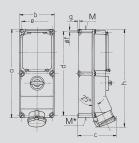
switched, with mechanical **DUO** interlock

and DIN rail

63A: SoftCONTACT

▲ IP 44

Product group 1091, type 6062 shown.



Drawing P	amp.		10		3	2	6	3
1 MB 208 P	oles	3	4	5	4	5	4	5
Dim. in mm	a b c	364 134 160	364 134 162	364 134 163	364 134 168	364 134 168	460 180 195	460 180 195
	d e f	347 117 6,3	347 117 6,3	347 117 6,3	347 117 6,3	347 117 6,3	440 160 8,1	440 160 8,1
	g. h	8 391	8 395	8 398	8 408	8 411	8 502	8 502
Max. cable diam	M M* . (mm)	32/40 2x32 27	32/40 2x32 27	32/40 2x32 27		32/40 2x32 27	40 2x40 27	40 2x40 27
Terminal for conc section (mm²) min		1,5 —4	1,5 —4	1,5 —4	2,5 —10	2,5 —10	6 —25	—25

Receptacles

switched, with mechanical

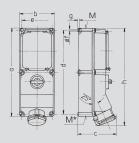
DUO interlock

and D 01 fuse socket for 16A and D 02 for 32A and 63A

63A: SoftCONTACT

▲ IP 44

Product group 1092, type 6066 shown.



Drawing	Amp.		16		3	2	6	3
1 MB 208	Poles	3	4	5	4	5	4	5
Dim. in mm	a b c	364 134 160	364 134 162	364 134 163	364 134 168	364 134 168	460 180 195	460 180 195
	d e f	347 117 6,3	347 117 6,3	347 117 6,3	347 117 6,3	347 117 6,3	440 160 8,1	440 160 8,1
	g. h	8 391	8 395	8 398	8 408	8 411	8 502	8 502
Max. cable dia	M M* m. (mm)	32/40 2x32 27	32/40 2x32 27	32/40 2x32 27	32/40 2x32 27		40 2x40 27	40 2x40 27
Terminal for co section (mm²) r			1,5 —4	1,5 —4	2,5 —10	2,5 —10	6 —25	_25

Receptacles

switched, with mechanical

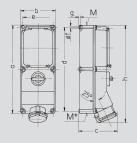
DUO interlock

and D II (E 27) fuse socket for 16A and D III (E 33) for 32A and 63A

63A: SoftCONTACT

▲ IP 44

Product group 1093, type 6071 shown.



Drawing	Amp.		16		3	2	6	3
1 MB 208	Poles	3	4	5	4	5	4	5
Dim. in mm	a b c	364 134 160	364 134 162	364 134 163	364 134 168	364 134 168	460 180 195	460 180 195
	d e f	347 117 6,3	347 117 6,3	347 117 6,3	347 117 6,3	347 117 6,3	440 160 8,1	440 160 8,1
	g. h	8 391	8 395	8 398	8 408	8 411	8 502	8 502
Max. cable dia	M M* m. (mm)	32/40 2x32 27	32/40 2x32 27	32/40 2x32 27		32/40 2x32 27	40 2x40 27	40 2x40 27
Terminal for co section (mm²) r			1,5 —4	1,5 —4	2,5 —10	2,5 —10	6 —25	—25

Receptacles

switched, with mechanical

DUO interlock

and circuit breaker, K-characteristic

63A: SoftCONTACT

▲ IP 44

Product group 1124, type 7222 shown.



Drawing	Amp.	16		32		63		
1 MB 208	Poles	3	4	5	4	5	4	5
Dim. in mm	a	364	364	364	364	364	460	460
	b	134	134	134	134	134	180	180
	c	160	162	163	168	168	195	195
	d	347	347	347	347	347	440	440
	e	117	117	117	117	117	160	160
	f	6,3	6,3	6,3	6,3	6,3	8,1	8,1
	g.	8	8	8	8	8	8	8
	h	391	395	398	408	411	502	502
Max. cable dia	M M* m. (mm)	32/40 2x32 27	32/40 2x32 27	32/40 2x32 27		32/40 2x32 27	40 2x40 27	40 2x40 27
Terminal for co		1,5	1,5	1,5	2,5	2,5	6	6
section (mm²) r		—4	—4	—4	—10	—10	—25	—25

Receptacles

switched, with mechanical

DUO interlock

and RCD \boxtimes $I_{\Delta N} = 0.03A$,

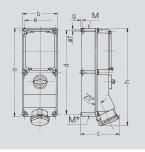
63A: **SoftCONTACT**

(other leakage current ratings

on request)

▲ IP 44

Product group 1125, type 7228 shown.



Drawing	Amp.	16		3	2	63		
1 MB 208	Poles	3	4	5	4	5	4	5
Dim. in mm	a	364	364	364	364	364	460	460
	b	134	134	134	134	134	180	180
	c	160	162	163	168	168	195	195
	d	347	347	347	347	347	440	440
	e	117	117	117	117	117	160	160
	f	6,3	6,3	6,3	6,3	6,3	8,1	8,1
	g.	8	8	8	8	8	8	8
	h	391	395	398	408	411	502	502
Max. cable dia	M M* m. (mm)	32/40 2x32 27	32/40 2x32 27	32/40 2x32 27		32/40 2x32 27	40 2x40 27	40 2x40 27
Terminal for co		1,5	1,5	1,5	2,5	2,5	6	6
section (mm²) n		—4	—4	—4	—10	—10	—25	—25

Receptacles

switched, with mechanical

DUO interlock,

circuit breaker with K-characteristics

and RCD $\propto I_{\Delta N} = 0.03A$

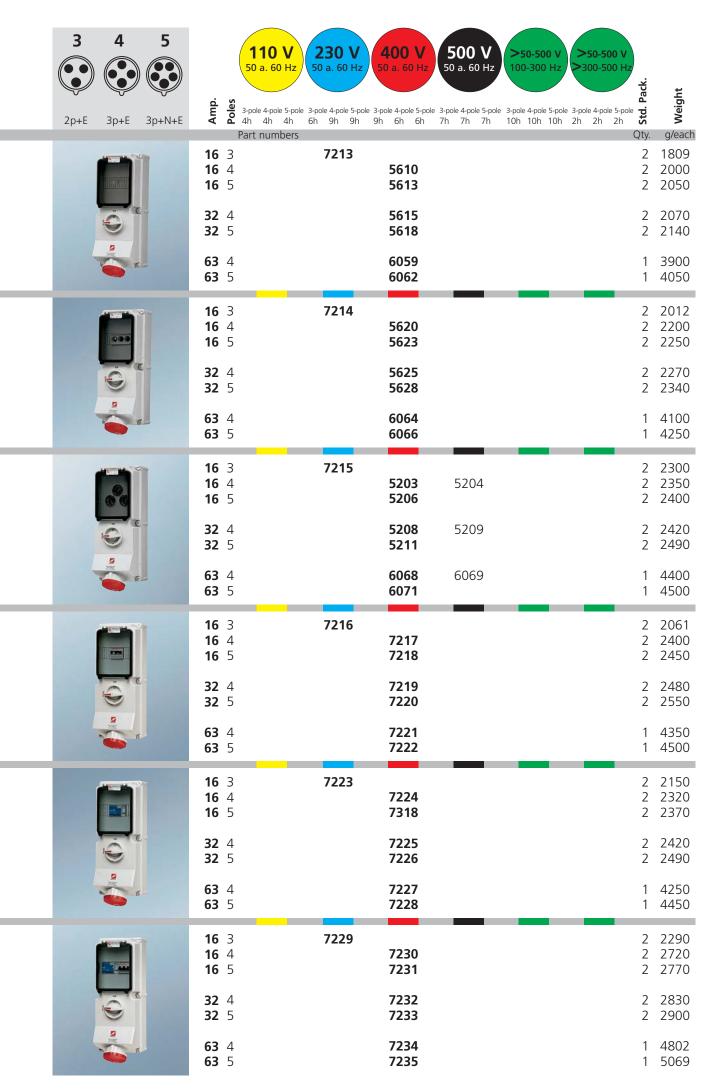
63A: **SoftCONTACT**

(other leakage current ratings on request)

▲ IP 44

Product group 1126, type 7235 shown.





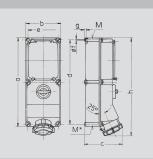
MENNEKES CEE receptacles, switched and interlocked, fused

to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code.

Enclosure and insert made of AMAPLAST.

Other voltages and frequencies available on request.

MENNEKES CEE receptacles with DUO interlock can be padlocked.



Drawing Amp.			16			2	6	3
1 MB 181	Poles	3	4	5	4	5	4	5
Dim. in mm	a b c	364 134 160	364 134 162	364 134 163	364 134 168	364 134 168	460 180 209	460 180 209
	d e f	347 117 6,3	347 117 6,3	347 117 6,3	347 117 6,3	347 117 6,3	440 160 8,1	440 160 8,1
	g. h	8 391	8 395	8 398	8 408	8 411	8 525	525
Max. cable dian Terminal for cor section (mm²) m	d. cross	2x32 27 1,5	32/40 2x32 27 1,5	32/40 2x32 27 1,5	2x32 27	2x32 27	40 2x40 27 6 —25	40 2x40 27 6 —25
5000011 (111117) 111								

Receptacles

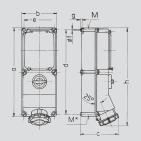
switched, with mechanical

DUO interlock and DIN rail

63A: **SoftCONTACT**

♦ IP 67

Product group 1089, type 5643 shown.



Drawing	Amp.		10		_ >	_	0	
1 MB 181	Poles	3	4	5	4	5	4	5
Dim. in mm	a b c	364 134 160	364 134 162	364 134 163	364 134 168	364 134 168	460 180 209	460 180 209
	d e f	347 117 6,3	347 117 6,3	347 117 6,3	347 117 6,3	347 117 6,3	440 160 8,1	440 160 8,1
	g. h	8 391	8 395	8 398	8 408	8 411	8 525	8 525
Max. cable dia	M M* m. (mm)	2x32	32/40 2x32 27	32/40 2x32 27			40 2x40 27	40 2x40 27
Terminal for co section (mm²) r			1,5 —4	1,5 —4	2,5 —10	2,5 —10	6 —25	_25

Receptacles

switched, with mechanical

DUO interlock

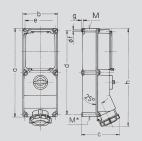
and 3 pole D II (E 27) fuse socket for 16A and D III (E 33) for 32A and 63A

63A: **SoftCONTACT**

(63A also available with NH 00)

♦ IP 67

Product group 1083, type 5226 shown.



Drawing	Amp.	1	16		3	2	6	3
1 MB 181	Poles	3	4	5	4	5	4	5
Dim. in mn	n a b c	364 134 160	364 134 162	364 134 163	364 134 168	364 134 168	460 180 209	460 180 209
	d e f	347 117 6,3	347 117 6,3	347 117 6,3	347 117 6,3	347 117 6,3	440 160 8,1	440 160 8,1
	g. h	8 391	8 395	8 398	8 408	8 411	8 525	525
Max. cable dia	M M* am. (mm)	32/40 2x32 27	32/40 2x32 27	32/40 2x32 27		32/40 2x32 27	40 2x40 27	40 2x40 27
Terminal for co section (mm²)			1,5 —4	1,5 —4	2,5 —10	2,5 —10	6 —25	—25

Receptacles

switched, with mechanical

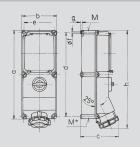
DUO interlock

and circuit breaker, K-characteristics

63A: SoftCONTACT



Product group 1127, type 7244 shown.



Drawing	Amp.	1	16		3	2	6	3
1 MB 181	Poles	3	4	5	4	5	4	5
Dim. in mm	a b c	364 134 160	364 134 162	364 134 163	364 134 168	364 134 168	460 180 209	460 180 209
	d e f	347 117 6,3	347 117 6,3	347 117 6,3	347 117 6,3	347 117 6,3	440 160 8,1	440 160 8,1
	g. h	8 391	8 395	8 398	8 408	8 411	8 525	8 525
Max. cable dia	M M* m. (mm)	32/40 2x32 27	32/40 2x32 27	32/40 2x32 27		32/40 2x32 27	40 2x40 27	40 2x40 27
Terminal for co section (mm²) n			1,5 —4	1,5 —4	2,5 —10	2,5 —10	6 —25	6 —25

Receptacles

switched, with mechanical

DUO interlock

and RCD \boxtimes $I_{\Delta N} = 0.03 \text{ A}$

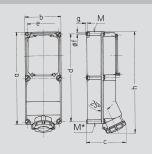
63A: **SoftCONTACT**

(other leakage current ratings

on request)

♦ IP 67

Product group 1128, type 7251 shown.



Diawing	Amp.	03	
1 MB 183	Poles	4	5
Dim. in mn	n a	460	460
	b	180	180
	c	209	209
	d	440	440
	e	160	160
	f	8,1	8,1
	g.	8	8
	h	525	525
Max. cable di	M	40	40
	M*	2x40	2x40
	am. (mm)	27	27
Terminal for o		6	_6
section (mm²)		—25	25

Receptacles

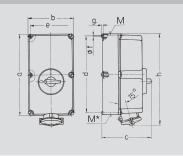
switched, with mechanical

DODSCH interlock

and 3 pole fuse socket D III (E 33) (also available with NH 00)



Product group 1182, type 7452 shown.



Drawing	Amp.		125	
1 MB 177	Poles	3	4	5
Dim. in mn	n a	460	460	460
	b	260	260	260
	c	283	283	283
	d	434	434	434
	e	234	234	234
	f	11	11	11
	g.	9	9	9
	h	525	525	525
Max. cable di	M	63	63	63
	M*	2x63	2x63	2x63
	am. (mm)	44	44	44
Terminal for o		25	25	25
section (mm²)		—70	—70	—70

Receptacles

with **TorsionSpringCONTACT**

switched, with mechanical

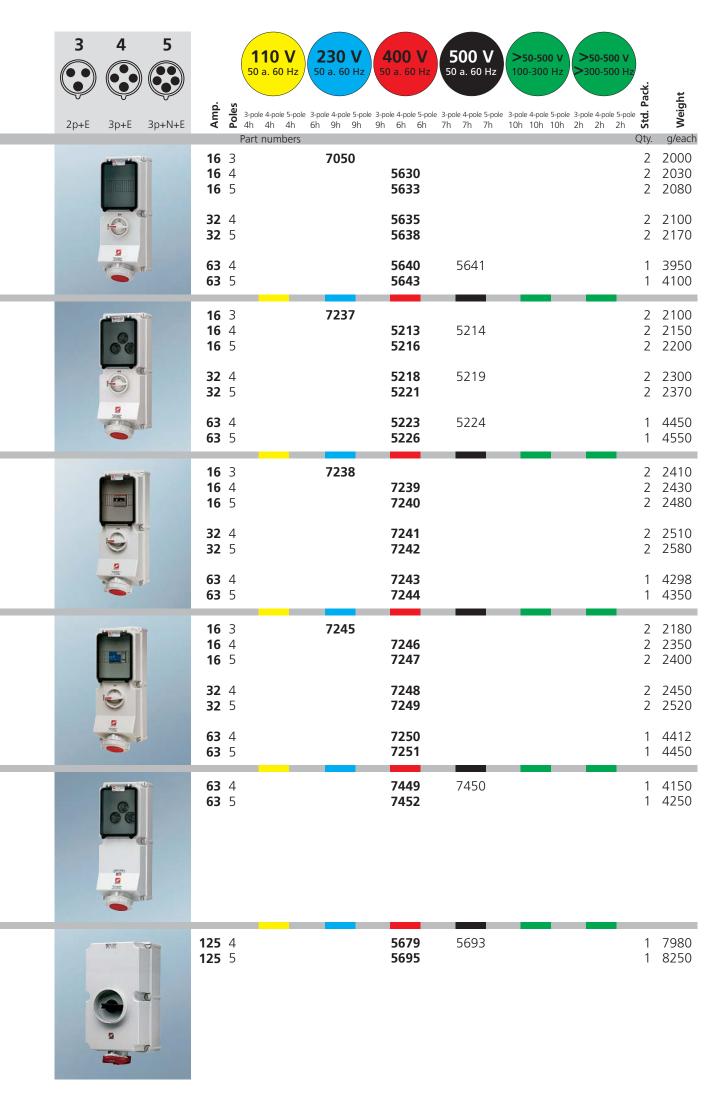
DUO interlock

and 3 pole fuse socket NH 00 (upon request with provision for an additional padlock)

♦ IP 67

Product group 1083, type 5695 shown.

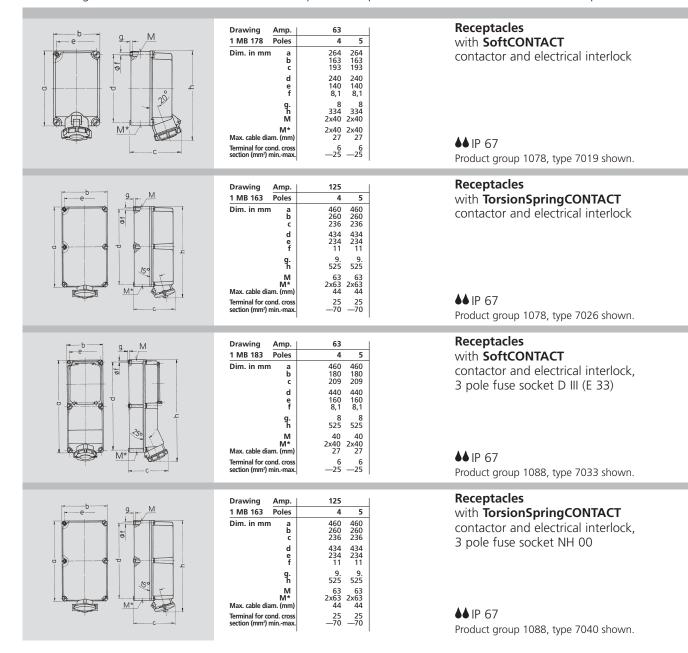


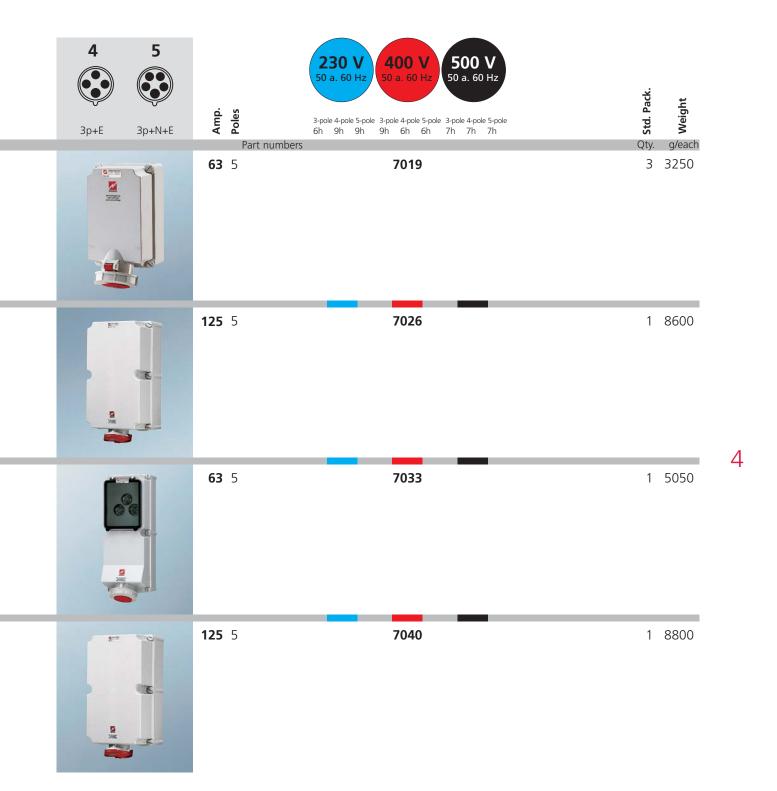


MENNEKES CEE receptacles, SoftCONTACT, electrically interlocked, fused

to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code. Enclosure and insert made of **AMAPLAST**. Other voltages and frequencies available on request.

Circuit diagram for electrical interlock and description: see product information sheets in this chapter.

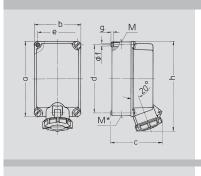




MENNEKES CEE receptacles, SoftCONTACT, PCS-electrically interlocked, fused

to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code. Enclosure and insert made of **AMAPLAST**. Other voltages and frequencies available on request.

Circuit diagram for electrical interlock and description: see product information sheets in this chapter.

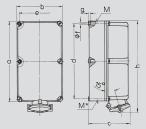


Drawing	Amp.	63	
1 MB 178	Poles	4	5
Dim. in mm	a	264	264
	b	163	163
	c	193	193
	d	240	240
	e	140	140
	f	8,1	8,1
	g.	8	8
	h	334	334
	M	2x40	2x40
Max. cable dia	M*	2x40	2x40
	m. (mm)	27	27
Terminal for co section (mm²) n		6 25	_25

Receptacles with SoftCONTACT contactor and electrical PCS interlock

♦ IP 67

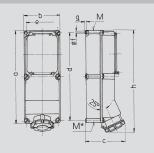
Product group 1078, type 7024.



Drawing	Amp.	125	
1 MB 163	Poles	4	5
Dim. in mm	a	460	460
	b	260	260
	c	236	236
	d	434	434
	e	234	234
	f	11	11
	g.	9.	9.
	h	525	525
Max. cable dia	M	63	63
	M*	2x63	2x63
	m. (mm)	44	44
Terminal for co		25	25
section (mm²) n		—70	—70

Receptacles with TorsionSpringCONTACT contactor and electrical PCS interlock

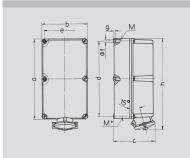
♦♦ IP 67 Product group 1078, type 7031 shown.



Drawing	Amp.	63	
1 MB 183	Poles	4	5
Dim. in mn	n a	460	460
	b	180	180
	c	209	209
	d	440	440
	e	160	160
	f	8,1	8,1
	g.	8	8
	h	525	525
Max. cable di	M	40	40
	M*	2x40	2x40
	am. (mm)	27	27
Terminal for o section (mm²)		6 —25	_6 _25

Receptacles
with SoftCONTACT
contactor and electrical
PCS interlock, 3 pole fuse socket
D III (E 33)

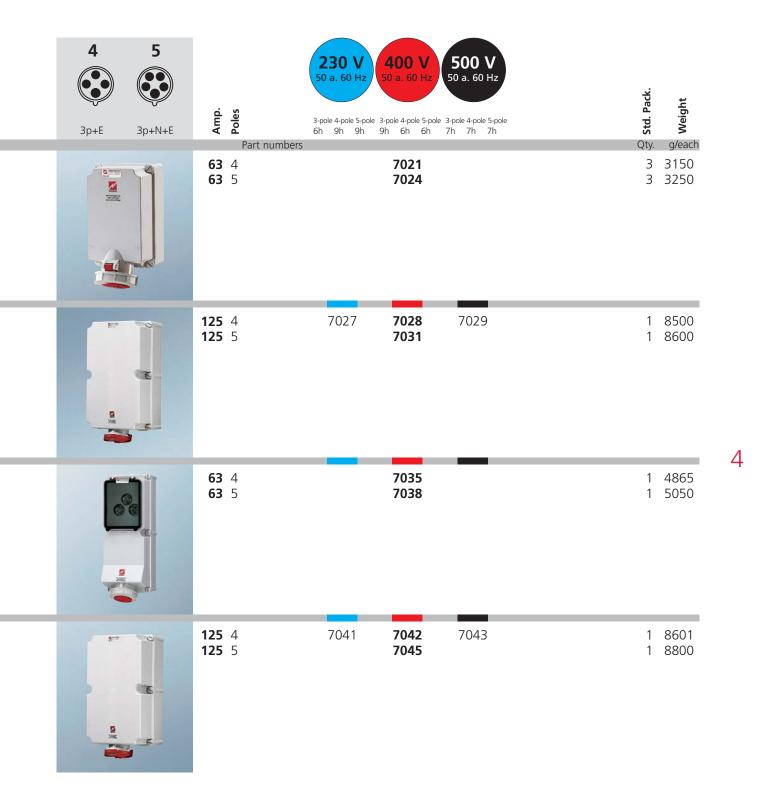
♦♦ IP 67 Product group 1088, type 7038 shown.



Drawing Amp.	13	25	
1 MB 163 Poles		4	5
Dim. in mm a b c	2	60 60 36	460 260 236
d e f	2	34 34 11	434 234 11
g. h	5	9. 25	9. 525
M M* Max. cable diam. (mm	2x	63 63 44	63 2x63 44
Terminal for cond. crossection (mm²) minma		25 70	25 —70

Receptacles with TorsionSpringCONTACT contactor and electrical PCS interlock, 3 pole fuse socket NH 00

♦♦ IP 67 Product group 1088, type 7045 shown.



MENNEKES Switch disconnectors in watertight enclosures

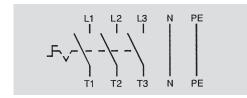
Colour: Grey (RAL 7000).
Enclosure made of **AMELAN.**Protection class **6** IP 67 watertight

2 enclosure sizes

Two different enclosure sizes fitted with switch disconnectors are available.

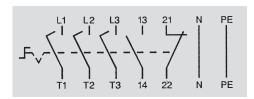
Standard types

All models are equipped as standard with three switched poles, a non-switched neutral and a safety earth contact.



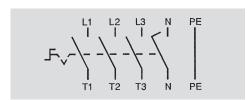
Auxiliary contacts

Disconnectors with additional auxiliary contact (1 x NO and 1 x NC) are marked in blue in the table below.



Further variations

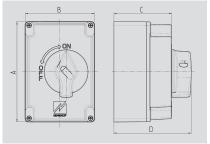
e.g., switched neutral or early break / late make NO or NC contacts on request.



Technical features:

- Rigid enclosures
 Ample space for wiring
 Padlocking facilities
 Excellent switching capacity
- Disconnecting property in accordance with EN 60947 (up to 690 V)
- Finger protection in accordance with DIN 57106 / VDE 0106 T.100
- Open terminals and captive terminal screws
- Option for additional contacts





Accessories

Set of external mounting feet (4 pcs.)

For enclosure size 170 x 118 mm

Part no. 41450

For enclosure size 263 x 168.5 mm Part no. 41449

Dimensions and part numbers

Products with additional auxiliary contact (1 x NO and 1 x NC) are marked in blue.

Rated	BS Motor rating							
current	AC3/440V	А	В	С	D		IP	
25A, 3p	7.5 kW	170	118	98	131	52241	IP 67	
25A, 3p+HS	7.5 kW	170	118	98	131	52242	IP 67	
40A, 3p	18.5 kW	263	168.5	130	161	52243	IP 67	
40A, 3p+HS	18.5 kW	263	168.5	130	161	52244	IP 67	
80A, 3p	30.0 kW	263	168.5	130	161	52245	IP 67	
80A, 3p+HS	30.0 kW	263	168.5	130	161	52246	IP 67	

MENNEKES Switch disconnectors in watertight enclosures

Colour: Grey (RAL 7000). Enclosure made of **AMELAN**. Protection class **6** IP 67 watertight

Data sheet Switch disco with / withou	onnector t auxiliary contact			without with aux. aux. contact contact	without with aux. aux. contact contact	without with aux. aux. contact contact
Part no.				52241 / 52242	52243 / 52244	52245 / 52246
Rated opera	tional voltage U IEC / EN / VDE	e / SEV	V	690	690	690
	Main switch: Isol. voltage up	o to	V	690	690	690
Rated contir	nuous current l _u IEC / EN / VDE		А	25	40	80
Rated opera AC-21A	tional current I _e		А	25	40	80
Rated opera AC-23A	tional power at	50 to 60 Hz				
	3 phase 3 pole	220-240V 380-440V 600-690V	kW kW kW	5.5 11 11	11 22 18.5	18.5 30 30
AC-3	IEC / EN / VDE 3 phase 3 pole	220-240V 380-440V 600-690V	kW kW kW	4 7.5 7.5	7.5 18.5 15	15 30 30
Rated break AC-23A / AC-	ing capacity -3 motor switch	220-240V 380-440V 600-690V	A A A	220 220 135	350 350 190	550 550 285
Maximum fu	use size (gL)		А	35	63	80
Terminal cro	ss section					
Single / multip		min. mm² max. mm²		1.0 6	4 16	6 35
Multi-strand \	wire with sleeve	max. mm²		4	10	25
Switch disco		Part no.		52242	52244	52246
Auxiliary mo		rait iio.	V	500	690	690
	tional voltage U nuous current I	9	А	16	16	16
Rated opera AC-15	tional current I _e IEC / EN	220-240V 380-440V	А	2.5/1.5	6/3	6/4
Terminal cro Single / multip Fine-strand w		min. mm² max. mm²		1.0 1.5	1.0 2.5	1.0 2.5

4



CEE plugs and receptacles, 7 pole

Receptacles and panel mounted receptacles, 7 pole, 16A and 32A, IP 44 and IP 67 Page 122 to 125





Plugs and connectors, 7 pole, 16A and 32A, IP 44 and IP 67 Page 122 to 125

Wall- and panel mounted inlets, 7 pole, 16A and 32A, IP 44 and IP 67 Page 122 to 125





Receptacles, 7 pole, switched, interlocked, 16A and 32A. IP 44 and IP 67 Page 126 and 127

CEE plugs and receptacles for supply networks 600V to 690V, 5h

Receptacles, switched, interlocked, DUO, 16A to 125A, IP 44 and IP 67 Receptacles, 16A and 32A, IP 44 Page 128 and 129





Panel mounted receptacles, 16A to 125A, IP 44 and IP 67 Plugs, 16A to 125A, IP 44 und IP 67, Connectors, 16A and 32A, IP 44 Page 130 to 133

CEE plugs and receptacles with a special "1h earth" position 🕑



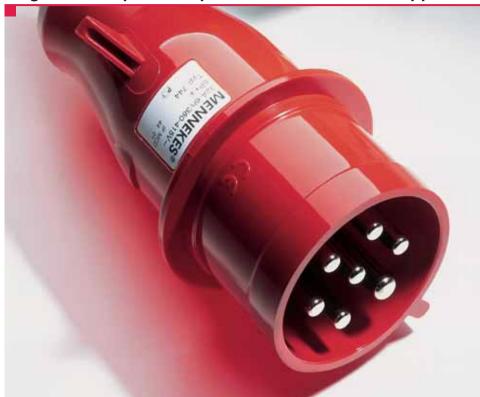
Plugs and receptacles with special "1h earth" position, 50V to 500V, **IP 44** Page 134 and 135





- Plugs and receptacles 7 pole
- Plugs and receptacles 600V 690V and "1h earth" position

Plugs and receptacles 7 pole for multifunctional applications.



These 7 pole plugs and receptacles provide solutions where there are multifunctional requirements in industry, farming and commerce.

This number of poles provides solutions in the following fields:

- Star-delta start-up
- Closed loop control
- Open loop control
- Monitoring
- Detection and alarms
- Clearing alarms
- Electrical interlocking





Position of ground contact tube with respect to polarisation keyway, designated by clockface position for 6P + 🖨, 16A and 32A.

Frequency Hz	Rated operating voltage V	Position of ground contact
50	42	1
100 to 300	above 50	10
over 300 to 500	above 50	2
DC	above 50 to 250	3
	above 250	8
	110	4
	230	9
50	400	6
	500	7
	above 500 to 690	5
50	220 to 240 downstream from isolating transformer	12



MENNEKES®

5

Plugs and receptacles 600V to 690V for the industry and for power plants.

In these supply mains acc. to EN 0309 plugs and receptacles in 5h earth position have to be used.

Due to the high electro technical and technically safty requirements for use at 690V, 63A and 125A receptacles have to be operated with an interlocking facility only.



5h 3P+⊕ 3P+N+⊕





Plugs and receptacles 16A and 32A, 4- and 5-pole must not be locked when used as surface or panel mounted receptacles in accordance with the applicable provisions.

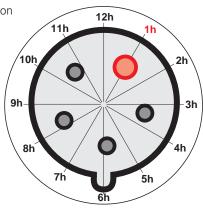
CEE plugs and receptacles with special "1h earth" position.





Ground contact position "1h earth"

(Viewed from the front of the receptacles)



Unique with "1h earth" position

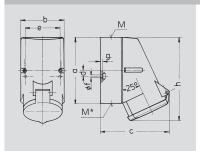
The table in chapter 20 (Information) gives details on the arrangement of the socket outlet with ground contact identifying various voltages and frequencies with clock position according to EN 60309-2:1997.

MENNEKES CEE plugs and receptacles 7 pole, with highly heat resistant contact carriers and nickel-plated contacts

to DIN VDE 0623-1, EN 60309-1, colour: electric grey and/or colour code.

Enclosure and insert made of AMAPLAST.

Other voltages and frequencies available on request.



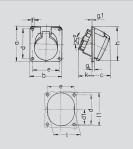
Drawing	Amp.	16	32
1 MB 257	Poles	7	7
Dim. in mm	a	128	128
	b	84	84
	c	124	138
	d	11	11
	e	68	68
	f	5,3	5,3
	g.	4	4
	h	145	160
	M M*	25 2 x 25 (blind) to be cut out	32 2 x 25 (blind) to be cut out
Max. cable dia	m. (mm)	18	25
Terminal for co		1,5	2,5
section (mm²) n		—4	—10

Receptacles

internal fixing, one cable entry at the top, two blind cable entries (can be cut out) at the bottom, enclosure can be turned through 180°

▲ IP 44

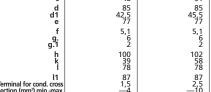
Product group 1041, type 734 shown.



Drawing Amp.	16	32
1 MB 256 Poles	7	7
Dim. in mm a b c	100 92 48	100 92 51
d d1 e	85 42,5 77	85 45,5 77
f g. g.1	5,1 6 2	5,1 6 2
h k I	100 39 78	102 58 78
I1 Terminal for cond. cross section (mm²) minmax.		87 2,5 —10

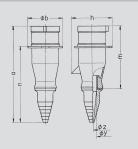
Panel mounted receptacles

20° inclination



▲ IP 44

Product group 1044, type 1045 shown.



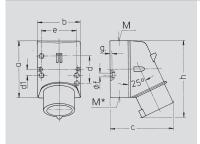
Drawing A	۹mp.	16	32
2 MB 72	oles	7	7
Dim. in mm	а	169	214
	b	67	77
	h	73	90
	m	116	141
	n	132	168
	У	16,5	24
	z	7,5	7
Terminal for con	d. cross	1	2,5 —6
section (mm²) mi	nmax.	—2,5	—6

Plugs

with grommets



Product group 2041, type 742 shown.

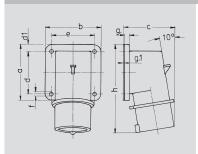


Drawing	Amp.	16	32
2 MB 147	Poles	7	7
Dim. in mn	n a b c	100 75 110	128 84 135
	d d1 e	10,5 59	11 68
	f g h	5 4 135	5,3 4 170
	M M*	20 M 20 (blind) to be cut out	2x M 25 (blind) to be cut out
Max. cable dia	am. (mm)	15	18
Terminal for or section (mm²)			2,5 —4

Wall mounted inlets

▲ IP 44

Product group 2045, type 2166 shown.

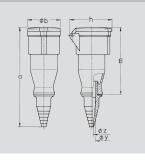


Drawing	Amp.	16	32
2 MB 71	Poles	7	7
Dim. in mn	n a	85	75
	b	85	90
	c	79	90
	d	64	45
	d1	10	13
	e	64	78
	f	5,5	5,5
	g.	6	6
	g.1	2	2
Terminal for or section (mm²)		129 1 —2,5	138 2,5 —6

Panel mounted inlets



Product group 2051, type 1075 shown.



Drawing	Amp.	16	32
3 MB 27	Poles	7	7
Dim. in mr	n a	177	225
	b	66	73
	h	85	95
	m	124	150
	у	17,5	24
	z	7,5	10
Terminal for o	ond. cross	1	2,5
section (mm²)	minmax.	—2,5	—6

Connectors

with grommets

▲ IP 44

Product group 3041, type 745 shown.



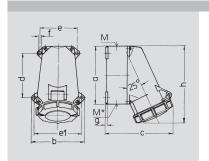
7			230 V 50 a. 60 Hz	400 V 0 a. 60 Hz	500 V 50 a. 60 Hz	ack.	þţ
6p+l	E	Poles	3-pole 4-pole 5-pole 3- 6h 9h 9h 9h	pole 4-pole 5-pole n 6h 6h	3-pole 4-pole 5-pole 7h 7h 7h	Std. Pack.	g/each
	1	Part numbers 7	733	734	1035	Qty. 10	g/each 355
	3	2 7	735	736	1040	10	463
	1	6 7	737	738	1045	10	215
	3	2 7	739	740	1050	10	300
	1	6 7	741	742	1055	10	195
	3	2 7	743	744	1060	10	295
	1	6 7		2166		10	260
	3	2 7		2167		10	430
	1	6 7	749	750	1075	10	201
	3	2 7	751	752	1080	10	282
	1	6 7	745	746	1065	10	242
	3	2 7	747	748	1070	10	350

MENNEKES CEE plugs and receptacles 7 pole, with highly heat resistant contact carriers and nickel-plated contacts

to DIN VDE 0623-1, EN 60309-1, colour: electric grey and/or colour code.

Enclosure and insert made of AMAPLAST.

Other voltages and frequencies available on request.



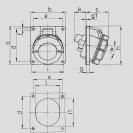
Drawing	Amp.	16	32
1 MB 406	Poles	7	7
Dim. in mm	a b c	95 102 129	120 112 150
	d e e1	64,2 77,5 88	90,2 79 98,5
	f	5,5	5,5
	g. h	132	160
	M M*	25 M 25 (blind) to be cut out	32 M 32 (blind) to be cut out
Max. cable dia	m. (mm)	18	25
Terminal for co section (mm²) r		1,5 —4	2,5 —10

Receptacles

4 external fixings, one cable entry at the top, two blind cable entries (can be cut out) at the bottom

♦ IP 67

Product group 1049, type 2648 shown.



Drawing	Amp.	16	32
1 MB 405	Poles	7	7
Dim. in mn		100 92 85 77 5,3 82 105 96 41	1000 1000 666 85 777 5,3 8 113 1100 52
Terminal for o	$\frac{\mathbf{k}}{\mathbf{l}}$ α ond. cross minmax.	72 20° 1.5	73 85 20° 2,5 —10

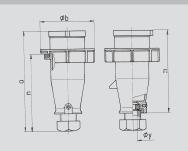
Panel mounted receptacles

20° inclination



♦ IP 67

Product group 1048, type 2317 shown.



Drawing	Amp.	16	32
2 MB 177	Poles	7	7
Dim. in mn	n a	138	166
	b	87	102
	m	116	141
	n	106	126
	у	16	21,5
Terminal for or section (mm²)		1 —2,5	2,5 —6
secuon (mm)		2,3	

Plugs

♦ IP 67

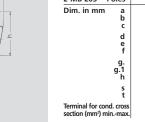
Product group 2049, type 2213 shown.



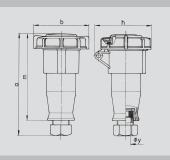
Drawing	Amp.	16	32
2 MB 203	Poles	7	7
Dim. in mm	a	85	85
	b	85	85
	c	132	137
	d	70	70
	e	70	70
	f	6,3	6,3
	g.	11	11
	g.1	2	2
	h	107	111
	s	86	102
	t	30	30
Terminal for co		1	2,5
section (mm²) n		—2,5	—6

Panel mounted inlets

with protective cap



Product group 2067, type 3914 shown.

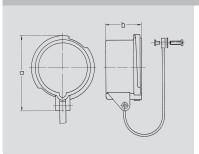


Drawing	Amp.	16	32
3 MB 55	Poles	7	7
Dim. in mr	n a	149	181
	b	96	110
	h	95	105
	m	131	158
	у	16	21,5
Terminal for o	ond. cross	1	2,5
section (mm²)	minmax.	—2,5	6

Connectors

♦ IP 67

Product group 3049, type 2255 shown.



Drawing	Amp.	16	32
2 MB 204	Poles	7	7
Dim. in mm	a	86	99
	b	42	52

Protective caps

for watertight plugs and panel mounted inlets

♦ IP 67

Product group 8276, type 40786 shown.

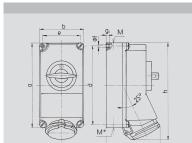


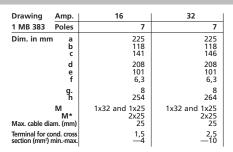
7	ċ. Si	230 V 50 a. 60 Hz	400 V 50 a. 60 Hz	500 V 50 a. 60 Hz	Std. Pack.	ght
6p+E	Amb Part numbers	6h 9h 9h		e 3-pole 4-pole 5-pole 7h 7h 7h	Std.	g/each
	16 7	3240	2746	3262	10	330
	32 7	2818	2648	2782	10	480
	16 7	2883	2459	2296	10	230
	32 7		2317	2212	10	330
	16 7	3776	3777	3913	10	245
	32 7	2405	2324	2213	10	290
	16 7		3914		10	310
	32 7		3915		10	325
	16 7	3783	3916	3784	10	270
	32 7	2406	2255	2460	10	350
	Amp. Po 7	oles		art no. .0785		
	32 7			0786		

MENNEKES CEE plugs and receptacles, switched, interlocked, 7 pole, with highly heat resistant contact carriers and nickel-plated contacts

to DIN VDE 0623-1, EN 60309-1, colour: electric grey and/or colour code.

Enclosure and insert made of **AMAPLAST**. Other voltages and frequencies available on request. MENNEKES CEE receptacles with DUO interlock can be padlocked.



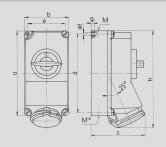


Receptacles switched,

switched, with mechanical **DUO** interlock, **3 pole switch**, can be padlocked

▲ IP 44

Product group 1075, type 5536 shown.



Drawing	Amp.	16	32
1 MB 383	Poles	7	7
Dim. in mm	n a	225	225
	b	118	118
	c	141	146
	d	208	208
	e	101	101
	f	6,3	6,3
	g.	8	8
	h	254	264
Max. cable dia	M	1x32 and 1x25	1x32 and 1x25
	M*	2x25	2x25
	am. (mm)	25	25
Terminal for co		1,5	2,5
section (mm²)		—4	—10

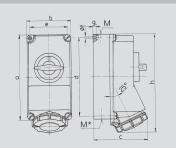
Receptacles

switched, with mechanical **DUO** interlock, **6 pole switch** with 2 auxiliary contacts (1 NO and 1 NC),

can be padlocked



Product group 1075, type 7304 shown.



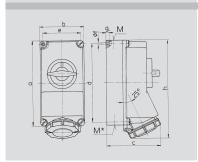
Drawing	Amp.	16	32
1 MB 382	Poles	7	7
Dim. in mm	n a	225	225
	b	118	118
	c	147	153
	d	208	208
	e	101	101
	f	6,3	6,3
	g.	8	8
	h	259	274
Max. cable dia	M	1x25 a. 1x32	1x25 a. 1x32
	M*	2x25	2x25
	nm. (mm)	25	25
Terminal for co		1.5	2.5
section (mm²)		—4	—10

Receptacles

switched, with mechanical **DUO** interlock, **3 pole switch**, can be padlocked



Product group 1074, type 5785 shown.



Drawing Amp.	16	32
1 MB 382 Poles	7	7
Dim. in mm a b c	225 118 147	225 118 153
d e f	208 101 6,3	208 101 6,3
g. h	8 259	8 274
M M* Max. cable diam. (mm)	1x25 a. 1x32 2x25 25	1x25 a. 1x32 2x25 25
Terminal for cond. cross section (mm²) minmax.		2.5 —10

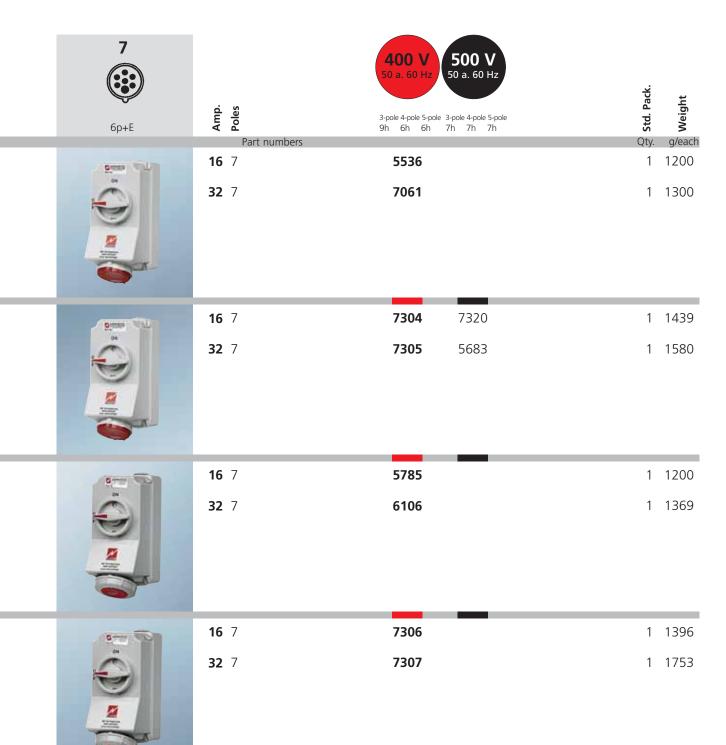
Receptacles

switched, with mechanical **DUO** interlock, **6 pole switch** with 2 auxiliary contacts (1 NO and 1 NC), can be padlocked

♦ IP 67

Product group 1074, type 7306 shown.



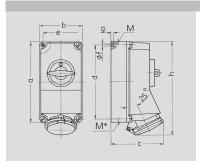


MENNEKES CEE receptacles for supply networks 600V to 690V

to DIN VDE 0623, EN 60309-1, colour: electric grey and/or colour code.

Enclosure and insert made of AMAPLAST.

MENNEKES CEE receptacles with DUO interlock can be padlocked.



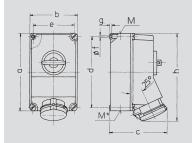
Drawing Amp.	I	16		I	32	
1 MB 174 Poles	3	4	5	3	4	5
Dim. in mm a b c	225	225	225	225	225	225
	118	118	118	118	118	118
	141	141	141	146	146	146
d	208	208	208	208	208	208
e	101	101	101	101	101	101
f	6,3	6,3	6,3	6,3	6,3	6,3
g.	8	8	8	8	8	8
h	250	252	254	264	264	264
M M* Max. cable diam. (mm)	1x2 2x25 25	5 and 2x25 25		1x2 2x25 25	5 and 2x25 25	
Terminal for cond. cross		1,5	1,5	2,5	2,5	2,5
section (mm²) minmax.		—4	—4	—10	—10	—10

Receptacles switched, with mechanical

DUO interlock, can be padlocked

▲ IP 44

Product group 1075, type 5663 shown.



	,p.		-	
1 MB 234	Poles	3	4	5
Dim. in mn	a	264	264	264
	b	163	163	163
	c	192	192	192
	d	240	240	240
	e	140	140	140
	f	8,1	8,1	8,1
	g.	8	8	8
	h	300	300	300
Max. cable di	M	40	40	40
	M*	2x40	2x40	2x40
	am. (mm)	27	27	27
Terminal for co		6	6	_6
section (mm²)		—25	25	_25

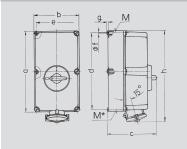
Receptacles

with **SoftCONTACT**

switched,
with mechanical
DUO interlock,
with highly heat resistant
contact carrier, can be padlocked

▲ IP 44

Product group 1075, type 6580 shown.



Drawing	Amp.		125	
1 MB 177	Poles	3	4	5
Dim. in mm	n a	460	460	460
	b	260	260	260
	c	283	283	283
	d	434	434	434
	e	234	234	234
	f	11	11	11
	g.	9	9	9
	h	525	525	525
Max. cable dia	M	63	63	63
	M*	2x63	2x63	2x63
	am. (mm)	44	44	44
Terminal for co		25	25	25
section (mm²)		—70	—70	—70

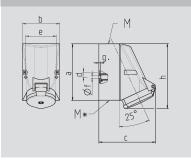
Receptacles

with **TorsionSpringCONTACT** switched, with mechanical

DUO interlock, with highly heat resistant contact carrier

♦ IP 67

Product group 1074, type 6015 shown.



Drawing	Amp.	16			32	
1 MB 43	Poles	4	5	3	4	5
Dim. in mm	n a b c	128 84 122	128 84 124	128 84 136	128 84 136	128 84 138
	d e f	11 68 5,3	11 68 5,3	11 68 5,3	11 68 5,3	11 68 5,3
	g. h M	4 144 25	4 145 25	158 32	4 158 32	4 160 32
Max. cable dia	M* am. (mm)	to be cut out to be cut		it out		
Terminal for co section (mm²)		1,5 —4	1,5 —4	2,5 —10	2,5 —10	2,5 —10

Receptacles

internal fixing, with one cable entry at the top and two blind cable entries (can be cut out) at the bottom, enclosure can be rotated through 180°

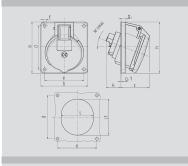
▲ IP 44

Product group 1041, type 2576 shown.



MENNEKES CEE panel mounted receptacles for supply networks 600V to 690V

to DIN VDE 0623, EN 60309-1, colour: electric grey and/or colour code. Enclosure and insert made of **AMAPLAST**.



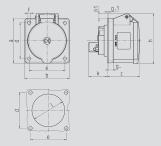
Drawing Amp.		16		I	32	
1 MB 260 Poles	3	4	5	3	4	5
Dim. in mm a b c d e f	73,5 64 52 60 52 5,5	100 92 58 85 77 5,5	100 92 58 85 77 5,5	100 92 62 85 77 5,5	100 92 62 85 77 5,5	100 92 62 85 77 5,5
g. g.1 h k	7 2 79 43	8 2 100 32	8 2 100 32	8 2 103 53	8 2 103 53	8 2 107 45
κ I 11 α Terminal for cond. cross section (mm²) minmax.	52 60 20° 1,5	55 63 20° 1,5	65 72 20° 1,5	82 20° 2,5	82 20° 2,5	72 85 20° 2,5

Panel mounted receptacles

20° inclination

▲ IP 44

Product group 1044, type 3011 shown.

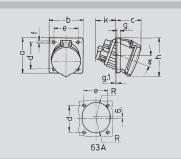


Drawing	Amp.		16		1	32	
1 MB 247	Poles	3	4	5	3	4	5
Dim. in mm	n a	75	75	75	75	75	75
	b	75	75	75	75	75	75
	c	53	53	55	64	64	65
	d	60	60	60	60	60	60
	e	60	60	60	60	60	60
	f	5,5	5,5	5,5	5,5	5,5	5,5
	g.	8	8	8	8	8	8
	g.1	2	2	2	2	2	2
	h	75	80	85	89	89	95
	h1 k l	31 43	6 32 52	9 32 54	11 39 58	11 39 58	12 39 62
Terminal for co		1,5	1,5	1,5	2,5	^{2,5}	^{2,5}
section (mm²)		—4	—4	—4	—10	—10	—10

Panel mounted receptacles

▲ IP 44

Product group 1056, type 3066 shown.



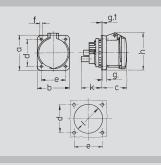
Drawing	Amp.		63	
1 MB 297	Poles	3	4	5
Dim. in mn	n a	110	110	110
	b	106	106	106
	c	85	85	85
	d	85	85	85
	e	77	77	77
	f	6,2	6,2	6,2
	g.	12	12	12
	g.1	2	2	2
	h	122	122	122
	k	69	69	69
	R	46	46	46
	α	20°	20°	20°
Terminal for o		6	6	_6
section (mm²)		25	25	—25

Panel mounted receptacles with SoftCONTACT with pilot contact, 20° inclination, with highly beat resistant.

with highly heat resistant contact carrier

▲ IP 44

Product group 1044, type 2761P shown.



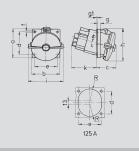
Drawing	Amp.		63	
1 MB 211	Poles	3	4	5
Dim. in mm	a	107	107	107
	b	100	100	100
	c	80	80	80
	d	85	85	85
	e	77	77	77
	f	6.	6.	6.
	g.	12	12	12
	g.1	2	2	2
	h	113	113	113
	k	55	55	55
	I	88	88	88
Terminal for co		6	6	6
section (mm²) n		—25	25	25

Panel mounted receptacles with **SoftCONTACT** with pilot contact,

with pilot contact,
with highly heat resistant
contact carrier

▲ IP 44

Product group 1056, type 3079P shown.

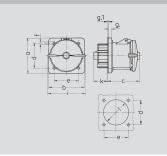


Drawing	Amp.	123	
1 MB 339	Poles	4	5
Dim. in mn	n a	114	114
	b	110	110
	c	85	85
	d	90	90
	e	90	90
	f	6,2	6,2
	g.1	13	13
	g.1	2	2
	h	135	135
	i	135	135
	k	103	103
	R	47	47
Terminal for co section (mm²)			15° 25 70

Panel mounted receptacles with TorsionSpringCONTACT with pilot contact, 15° inclination, with highly heat resistant contact carrier

♦ IP 67

Product group 1048, type 2203P shown.



Drawing	Amp.	125	-
1 MB 258	Poles	4	5
Dim. in mm	a	130	130
	b	130	130
	c	124	124
	d	104	104
	e	104	104
	f	6,5	6,5
	g.	18	18
	g.1	2	2
	i	135	135
	k	43	43
	I	95	95
Terminal for co		25	25
section (mm²) i		—70	—70

Panel mounted receptacles with TorsionSpringCONTACT with pilot contact, with highly heat resistant contact carrier

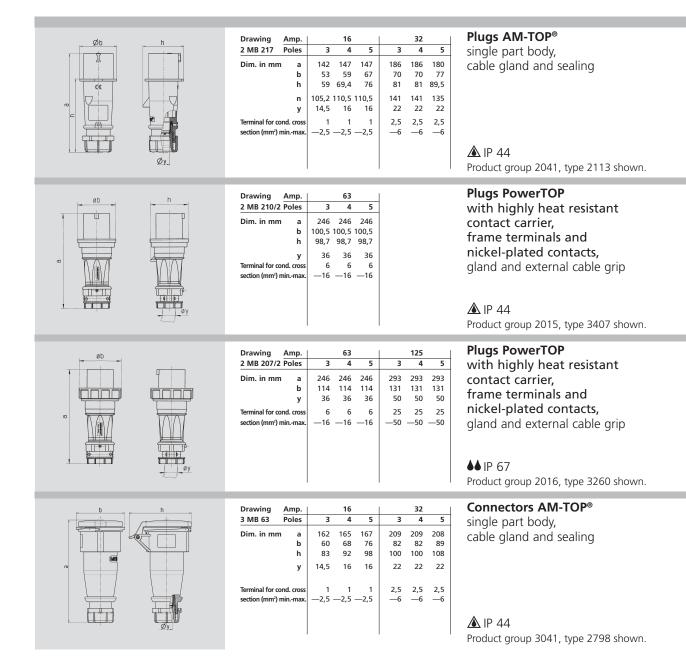
♦ IP 67

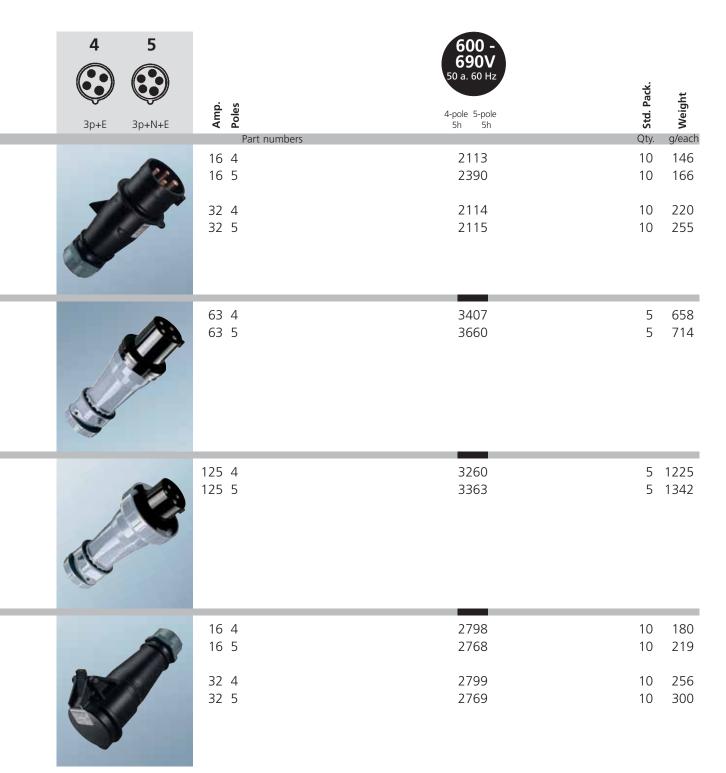
Product group 1046, type 3663P shown.

4 5 3p+E 3p+N+E	Amp. Poles	600 - 690 V 50 a. 60 Hz 4-pole 5-pole 5h 5h	Std. Pack.	Weight deach
	Part numbers 16 4 16 5	3010 2765	Qty. 10 10	g/each 177 185
	32 4	3011	10	239
	32 5	2764	10	270
	16 4	3183	10	145
	16 5	3058	10	164
	32 4	3066	10	207
	32 5	3450	10	227
	63 4	3786P	5	623
	63 5	2761P	5	653
	63 4	3079P	5	669
	63 5	3115P	5	686
	125 4	2203P	5	940
	125 5	2546P	5	1050
	125 4	3663P	5	1190
	125 5	3787P	5	1334

MENNEKES CEE receptacles and connectors for supply networks 600V to 690V

to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code. Enclosure and insert made of **AMAPLAST**.



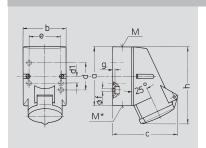


MENNEKES CEE plugs and receptacles with special "1h earth" position

Colour: electric grey.

Enclosure and insert made of AMAPLAST.

Other designs on request.



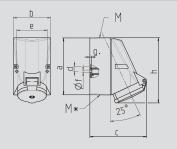
Drawing	Amp.		16	
1 MB 209	Poles	3	4	5
Dim. in mm	n a b c	87 64 99	100 75 110	100 75 113
	d d1 e	40 50	11 59	11 59
	f g. h	4,5 4 115	5 4 125	5 4 128
	M M*		20 20 (blii be cut	
Max. cable dia	am. (mm)	15	15	15
Terminal for co section (mm²)		1,5 —4	1,5 —4	1,5 —4

Receptacles

internal fixing, one cable entry at the top and one blind entry (can be cut out) at the bottom, enclosure base can be turned through 180° (for 5-pole design)

▲ IP 44

Product group 1040, type 2684 shown.



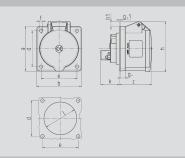
Drawing	Amp.	10			32	
1 MB 43	Poles	4	5	3	4	5
Dim. in mm	a b c	128 84 122	128 84 124	128 84 136	128 84 136	128 84 138
	d e f	11 68 5,3	11 68 5,3	11 68 5,3	11 68 5,3	11 68 5,3
	g. h M	4 144 25	4 145 25	158 32	4 158 32	4 160 32
Max. cable dia	M* nm. (mm)	2x M 25 (to be c 18			M 25 (o be ci 18/25	ut out
Terminal for co section (mm²)			1,5 —4	2,5 —10	2,5 —10	^{2,5} —10

Receptacles

internal fixing, one cable entry at the top and one blind entry (can be cut out) at the bottom, enclosure base can be turned through 180°, dimensional drawing (1 MB 213) for 63A can be found in chapter 1, page 26

▲ IP 44

Product group 1041, type 2983 shown.



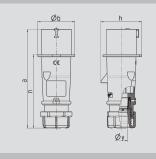
Drawing	Amp.		16		I	32	
1 MB 247	Poles	3	4	5	3	4	5
Dim. in mm	n a b	75 75 53	75 75 53	75 75 55	75 75 64	75 75 64	75 75 65
	d e f	60 60 5,5	60 60 5,5	60 60 5,5	60 60 5,5	60 60 5,5	60 60 5,5
	g. g.1 h	8 2 75	8 2 80	8 2 85	8 2 89	8 2 89	8 2 95
	h1 k l	31 43	6 32 52	9 32 54	11 39 58	11 39 58	12 39 62
Terminal for co section (mm²)		1,5 —4	1,5 —4	1,5 —4	2,5 —10	2,5 —10	2,5 —10

Panel mounted receptacles

straight



Product group 1056, type 2917 shown.



Drawing	Amp.		16		I	32	
2 MB 217	Poles	3	4	5	3	4	5
Dim. in mn	n a	142	147	147	186	186	180
	b	53	59	67	70	70	77
	h	59	69,4	76	81	81	89,5
	n	105,2	110,5	110,5	141	141	135
	у	14,5	16	16	22	22	22
Terminal for o	ond. cross	1	1	1	2,5	2,5	2,5
section (mm²)	minmax.	-2,5	-2,5	—2,5	6	-6	-6

Plugs AM-TOP®

single part body, cable gland and sealing

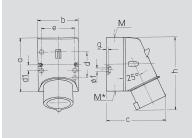
▲ IP 44

63A: PowerTOP

dimensional drawing (2 MB 207/2) for 63A can be found in chapter 2, page 68

♦ IP 67

Product group 2141/2016, type 2685 shown.



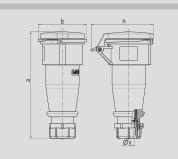
Drawing	Amp.		16			32	
2 MB 32	Poles	3	4	5	3	4	5
Dim. in mm	a b c	87 64 93	100 75 106	100 75 110	128 84 133	128 84 133	128 84 135
	d d1 e	40 50,5	10,5 59	10,5 59	11 68	11 68	11 68
	f g. h	4,5 4 122	5 4 133	5 4 135	5,3 4 169	5,3 4 169	5,3 4 170
	M M*	t	20 VI 20 (I o be cu	ıt out	to	25 VI 25 (k o be cu	it out
Max. cable dia	m. (mm)	15	15	15	18/25	18/25	18/25
Terminal for co section (mm²) i			2,5	1 2,5	2,5 —6	2,5 —6	2,5 —6

Wall mounted inlets

cable entry facility also from the rear by use of knock outs



Product group 2045, type 3230 shown.



Drawing	Amp.		16		I	32	
3 MB 63	Poles	3	4	5	3	4	5
Dim. in mn	n a	162	165	167	209	209	208
	b	60	68	76	82	82	89
	h	83	92	98	100	100	108
	у	14,5	16	16	22	22	22
Terminal for c section (mm²)		1 —2,5	1 —2,5 -	1 —2,5	2,5 —6	2,5 —6	2,5 —6

Connectors AM-TOP®

single part body, cable gland and sealing

▲ IP 44

63A: PowerTOP

dimensional drawing (3 MB 56/2) for 63A can be found in chapter 3, page 90

▲ IP 67

Product group 3141/3016, type 3007 shown.



3 4 5 2p+E 3p+E 3p+N+E	Amp.	>50- 500 V 3-pole 4-pole 5-pole 1h 1h 1h	Std. Pack.	Weight
	Part numbers 16 3 16 5	2684 2675	Qty. 10 10	g/each 180 273
	16 5 32 4	2840 2983	10 10	333 370
-	32 5	2676	10	424
	63 5	3719	5	925
1 11 10	16 3 16 5	2973 2917	10 10	136 178
CERTIFIC STATE OF THE PARTY OF	32 5	2997	10	225
-	16 3 16 5	2685 2677	10 10	113 166
7	32 4 32 5	2801 2678	10 10	222 252
	63 5	3465	5	710
	16 3	3230	10	150
	16 3 16 5	3007 2918	10 10	143 222
The state of the s	32 5	3229	10	300
	63 5	3561	5	915





Plugs for the world

Industrial Ethernet – Electrical power and data.

Cepex data port receptacles

Cepex data port receptacle enclosures, **IP 44** Page 140 and 141





data port inserts and accessories Page 140 and 141 **AMAXX®** receptacle combination data port receptacles Page 141

Cepex

MENNEKES study: Fibre optics technology

Fibre optics technology in AMAXX® receptacle combinations Page 142 to 145





Fibre optics technology in **MENNEKES** plugs and connectors Page 145

CEEplus – Energy, data and signals

CEEplus wall mounted and panel mounted receptacles with additional contacts, 16A, 230V and 400V, **IP 44**

Page 146 and 147





CEEplus plugs, inlets and connectors additional contacts, 16A, 230V and 400V, IP 44 and IP 67

Page 148 and 149

CEEplus plugs and receptacles as charging sets, max. 32A, 230V, **IP 44** Page 150 and 151





Technical informations to **CEEplus** plugs and receptacles and electric car charging sets Page 150 and 151

6

■ Industrial Ethernet – Electrical power and data.

Cepex data port receptacles. The rugged receptacles for harsh environments.



- Operates with commercial patch cables
- Clearly visible labelling field
- Suitable for double RJ 45 ports, cat. 3 to cat. 6
- Back box can be rotated by 180°, thus cable insertion is possible from top or bottom without additional work
- Further cable entries:
 2 x M25 at the side and
 1 x M20 from the rear
 (can be cut out)
- Same design as Cepex CEE- and / or SCHUKO® receptacles

Lockable - even when the cables are plugged in.

The safety lock protects against unauthorized access. Identical locks are available on request.



Membrane cable gland.

As a standard, all versions are fitted with a membrane cable gland M25 for two cables of 3 - 9 mm. Simply pierce the membrane with the cable - that's all it takes.



Cable gland.

For special requirements, a metric cable gland M25 / 2 x 8 is available as an option.



Connection space.

Generously dimensioned wiring space for swift and easy installation. The ergonomic design protects the installed components.



Plugs for the world

MENNEKES study: Fibre optics technology.

The increasing degree of automation in all industrial areas calls for safe, high performance data processing systems.

Fibre optics are used whenever they are better suited to the application than conventional copper conductors.

MENNEKES shows in a study - possibilities for fibre optics applications in modern industrial areas.







CEEplus. Additional functions.



For perfect power supply and safe data transmission.

- Your benefit: just one socket for electrical power and signals.
- Perfect compatibility:
 CEEplus plugs, connectors and receptacles may be combined with any traditional CEE products 16A, 3p, 230V or 16A, 5p, 400V.

The major benefit compared with traditional concepts:

CEEplus is compatible with standard CEE plugs and connectors. CEEplus plugs suit standard CEE receptacles and standard plugs may be plugged into CEEplus receptacles or connectors. This is of benefit e.g. for maintenance work, when the equipment and the supply systems are not of the same design.

Contacts.

The four additional contacts are accommodated on the inside of the plug housing.



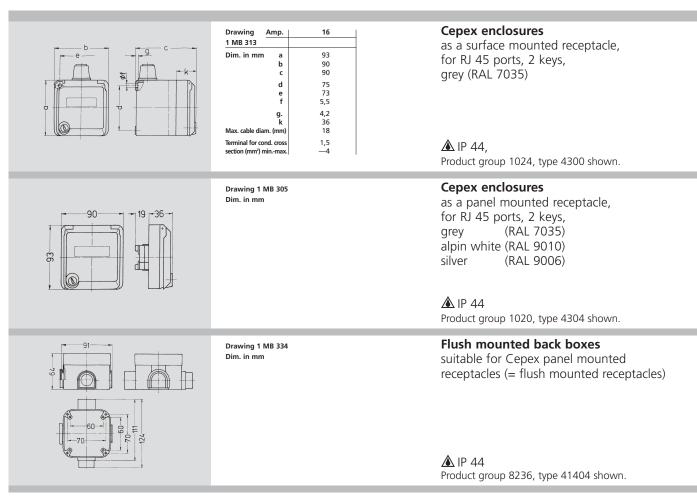
For a good connection.

The additional contacts are fitted with terminal flags for push-on-connection 2.8 x 0.5 mm.
As an alternative, a soldered connection is possible.
Contact load up to 5A at max. 30V.



MENNEKES Cepex data port receptacles and accessories

Colour: grey (RAL 7035), alpin white (RAL 9010), silver (RAL 9006) Enclosure and insert made of **AMAPLAST**.



Data port inserts / Modules for Cepex receptacles

Brand	Туре	Part no.	Std. Pack.	
АМР	Data port insert, 2 x RJ 45, cat. 6 (type AMP TWIST Dual/Outlet)	41456	10	Required accessories: (see last position)
АМР	RJ 45 connection module, (type cat. 6 SL Jack)	41457	10	Required accessories from AMP. (2 modules per enclosure)
BTR	RJ 45 connection module, type E-DAT module 8(8), cat. 6	41454	10	Required accessories for BTR-E-DAT module: holder for T-slot and top hat rail fastening, by BTR (2 modules per enclosure)
Rutenbeck	Data port insert, 2 x RJ 45, cat. 6 (type UPOS)	41451	10	Required accessories for cable duct installation for AMP (type TWIST) Rutenbeck and TKM data port inserts: installation box, Tehalit
TKM	Data port insert, 2 x RJ 45, cat. 6 (type KDMF)	41452	10	part no. L5819 and blind 100 mm channel height, single, Tehalit part no. L9120 or blind 120 mm channel height, single, Tehalit part no. L9170

6			
6			
0			
U			

	Brand	Туре	grey	alpine white	silver	Std. Pack.	Weight
	AMP	TWIST	Part numbers 4350			Qty.	g/each 284
	AMP	Jack	4360			5	284
	BTR	E-DAT module	4340			5	284
	Rutenbeck TKM	KDMS	4320 4300			5 5	284 284
		1101113	.500			3	201
MARKET							
	Lock for con	nmon key: Part no.	+ index " G "				
	AMP	TWIST	4352	4354		5	170
	AMP	Jack	4362	4364	_	5	170
	BTR	E-DAT module	4342	4344	— 4226	5	170
	Rutenbeck TKM	KDMS	4322 4302	4324 4304	4326	5 5	170 170
Table 1		NO IVIS	1302	1301		,	170
	Lock for cor	nmon key: Part no.	+ index " G "				
			41404			5	78





as a height equalizer, matching all surface mounted Cepex receptacles, grey RAL 7035

Part no. 4191 (Std. Pack.: 25)



Cable gland

M25/2x8, for 2 cables 3-8 mm, matching all Cepex surface mounted receptacles, grey RAL 7035

Part no. 41453 (Std. Pack.: 25)



AMAXX® receptacle combination Enclosure size 550 x 225 mm

black case upper part electric grey RAL 7035, hinged to the side, fusing under a transparent cover.

Cable entry:

- 2 M 40 at top (one open, one closed), 2 M 40 at bottom (closed), additionally:
- 2 M 20 at top (closed),
- 2 M 20 at bottom (closed)

Fitted with:

- 1 CEE receptacle 32A, 5p, 400V
- 1 MCB 32A, 3p, C
- 1 CEE receptacle 16A, 5p, 400V
- 1 MCB 16A, 3p, C
- 2 SCHUKO® receptacles 16A, 230V
- 2 MCB's 16A, 1p, C 1 RCD 40A, 4p, 0.03A
- 2 RJ 45 double data port receptacles cat. 6, lockable, with labelling field

for 2 cables up to 5 x 25 mm²

MENNEKES study: Fibre optics technology.

Large data transfer. Well protected. Plugs. Connectors. Combinations.



Plugs and receptacles with fibre optics. Fibre optic cable patch panel.

- Fibre optics are used whenever they are better suited to the application than conventional copper conductors:
- Interference resistance to electromagnetic fields
- Large transmission capacity with a low weight
- No possibility of sparks being created when connected and separated or in the event of mechanical defects
- Small cable dimensions
- Long distances

Illustration on top: mobile-in / mobile-out concept

6



Plugs for the world



Applications.

Data networks, vehicle systems, transmission systems with large data transfer rates, mobile measuring stations, safety systems and in situations where conditions are harsh, e.g., in mining, harbours, in the heavy industry, in the petrochemical industry, etc.

The increasing degree of automation in all industrial areas calls for safe, high performance data processing systems.

In modern data communication, fibre optics are increasingly used for

controlling processes, for image data transmission and for remote maintenance of plants. Using the new 12 channel fibre optics connection system along with various fibre optic cable patch panel systems for



harsh industrial conditions to IP 67, large amounts of data can be safely transmitted even over a long distance.

MENNEKES study: Fibre optics technology.

Fibre optics technology - For advanced industrial networks.



- 12 channels with a minimum space requirement
- Multimode and singlemode
- High dependability
- Convenient
- Suited for PC and APC polish

Illustration on the left: permanent-in / mobileout concept

Protection type IP67. Water tight. Dust tight. Rugged.

Versatile. Dependable. Convenient.

Easy fibre preparation.

The fibre carrier in the receptacle may accommodate either prefabricated conductor ends or conductors which are prepared on site. The conductor ends may be engaged in the fibre carrier and they can also be removed. Working with the fibre reserve box, even single fibres can be repaired on site.

Industrial application.

The high-tech fibre technology is accommodated in proven, rugged IP67 enclosures, which are dust and water proof.

Furthermore, the insides of the flexible protective caps of connectors, plugs and receptacles are protected from dirt and water even during use.









Plugs for the world

Please contact us – we will be pleased to provide assistance.



For measurements or other applications, any source of electrical power may be provided, e.g., 230V receptacles with an earthing contact to IP 67 as shown in the illustration.

Depending on the design, the fixed input signals may be relocated according to the 12 channels of the 12 channel receptacle (permanent in / mobile out).

Also, the input signals of a 12 channel receptacle may be relocated to suit another receptacle used as an output connection (mobile in / mobile out). Other combinations with Cepex fibre optic cable and Cepex RJ 45 data port receptacles as well as with CEE and SCHUKO® receptacles are available.





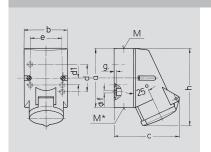




MENNEKES CEEplus receptacles and panel mounted receptacles with additional contacts for energy, data and signals

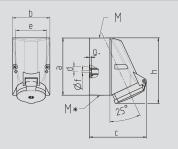
Plugs and receptacles compatible with IEC 60309 / EN 60309, colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST.

Auxiliary contacts made from silver-plated bronze.



Drawing	Amp.		16	
1 MB 209	Poles	3	4	5
Dim. in mn	n a b c	87 64 99	100 75 110	100 75 113
	d d1 e	40 50	11 59	11 59
	f g. h	4,5 4 115	5 4 125	5 4 128
	M M*	20 M	20 20 (blin be cut	20 nd)
Max. cable dia	am. (mm)	15	15	15
Terminal for or section (mm²)		1,5 —4	1,5 —4	1,5 —4

Wall mounted receptacles CEEplus with 4 additional contacts, 1 M 20 cable entry at the top and 1 M 20 blind entry (can be cut out) at the bottom, internal fastening. For solid supply lines for auxiliary contacts, an additional adapter is required.



Drawing	Amp.	16	
1 MB 43	Poles	4	5
Dim. in mn	n a	128	128
	b	84	84
	c	122	124
	d	11	11
	e	68	68
	f	5,3	5,3
	g.	4	4
	h	144	145
	M	25	25
Max. cable di	M* am. (mm)	2x M 25 (to be o 18	
Terminal for o		1,5	1,5
section (mm²)		—4	—4

W	/all	m	nounted receptacles (CEEplus
W	ith 4	4	additional contacts,	
1	M2	5	cable entry at the top	and

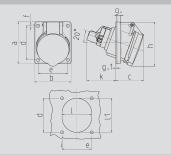
Product group 1166, type 955 shown.

2 M25 blind entries (can be cut out) at the bottom, internal fastening. Enclosure can be turned through 180°. For solid supply lines for auxiliary contacts, an additional adapter is required.

▲ IP 44

▲ IP 44

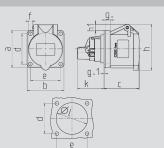
Product group 1167, type 963 shown.



Drawing Amp.	1	16
1 MB 459/453 Poles	3	5
Dim. in mm a b c c d e f g. 1 h k l α		85 85 57 70 70 5,5 1,5 100 33 70 76 20°

Panel	mounted	receptacles	CEEplus
with 4	additional	contacts.	

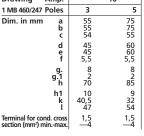
20° inclination



Drawing Amp.		16
1 MB 460/247 Poles	3	5
Dim. in mm a b c	55 55 54	75 75 55
d e f	45 45 5,5	60 60 5,5
g. g.1 h	8 2 70	8 2 85
h1 k l	10 40,5 47	9 32 54
Terminal for cond. cross section (mm²) minmax.	1,5 —4	1,5 —4

▲ IP 44

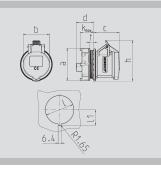
Product group 1149 (16A, 3P) and 1152 (16A, 5P), type 927 shown.



Panel mounted receptacles CEEplus with 4 additional contacts, straight



Product group 1150 (16A, 3P) and 1151 (16A, 5P), type 961 shown.



Drawing Amp.		16
1 MB 458/468 Poles	3	5
Dim. in mm a	69	69
b	57	69
c	55	52
d	38	32
h	87	98
k max.	30	32
1	Ø61	Ø61
I1	33.25	33.25
t	2-9	2-9
Terminal for cond. cross	1,5	1,5
section (mm²) minmax.	-4	-4

Panel mounted receptacles **RAPIDO CEEplus**

with 4 additional contacts, centralized fastening Ø 61 mm

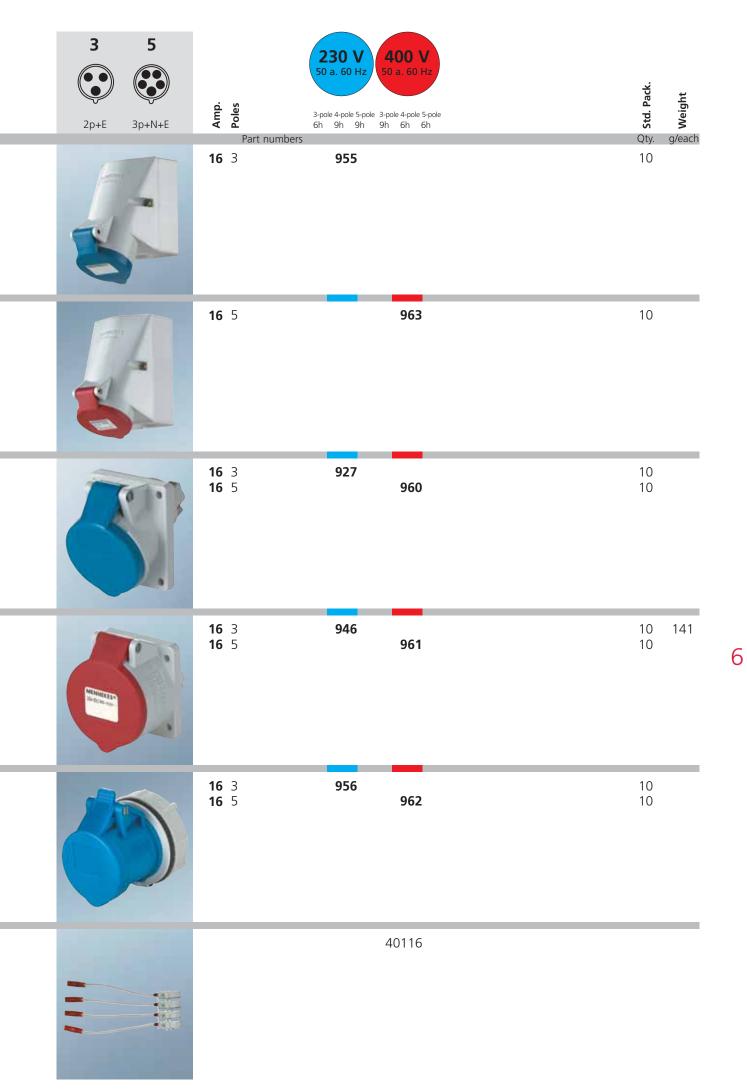
№ IP 44

Product group 1159, type 956 shown.

Accessories:

Adapter for CEEplus

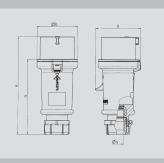
surface mounted receptacle from solid to flexible for auxiliary contacts, pre-assembled with cables and flat pin bushings.



MENNEKES CEEplus plugs, connectors and panel mounted inlets with additional contacts for energy, data and signals

Plugs and receptacles compatible with IEC 60309 / EN 60309, colour: electric grey and/or colour code. Enclosure and insert made of **AMAPLAST**.

Auxiliary contacts made from silver-plated bronze.

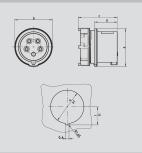


Drawing	Amp.		16	
2 MB 214	Poles	3	4	5
Dim. in mn	n a	148	160	160
	b	55	65,6	65,6
	h	61	72,5	72,5
	n	112	123,5	123,5
	У	14,5	16	16
Terminal for o	ond. cross	1	1	1
section (mm²)	minmax.	—2,5	-2,5	— 2,5

Plugs CEEplus

with 4 additional contacts, with screw terminals, cable gland and sealing, strain relief and protection against kinking, enclosure with thread lock and safety slide

▲ IP 44 Product group 2198, type 978 shown.

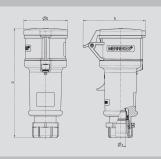


Drawing	Amp.		16
2 MB 220/216	Poles	3	5
Dim. in mm	а	70	70
	b	69	69
	c	max. 73	max. 72
	d	44	44
	е	Ø61	Ø61
	f	33,25	33,25
	e1	_	_
	f1	_	_
Terminal for cor	nd. cross	1	1
section (mm²) m	ninmax.	-2,5	—2,5

Panel mounted inlets RAPIDO CEEplus with 4 additional contacts, 61 mm diameter,

central locking system

▲ IP 44
Product group 2088, type 957 shown.

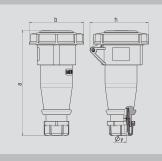


Drawing	Amp.	l	16	
3 MB 60	Poles	3	4	5
Dim. in mr	n a	160	174	172
	b	57	61	69
	h	83	92	98
	у	16	16	16
Terminal for o	ond. cross	1	1	1
section (mm²)	minmax.	—2,5 ·	—2,5 ·	-2,5

Connectors	CFFplus
	p.as

with 4 additional contacts, with screw terminals, cable gland and sealing, strain relief and protection against kinking, enclosure with thread lock and safety slide

▲ IP 44 Product group 3198, type 928 shown.



Drawing	Amp.		16	
3 MB 62	Poles	3	4	5
Dim. in mn	n a	146	166	172
	b	72	79	89
	h	80	88	95
	у	14,5	16	16
Terminal for o	ond. cross	1	1	1
section (mm²)	minmax.	—2,5	—2,5 ·	-2,5

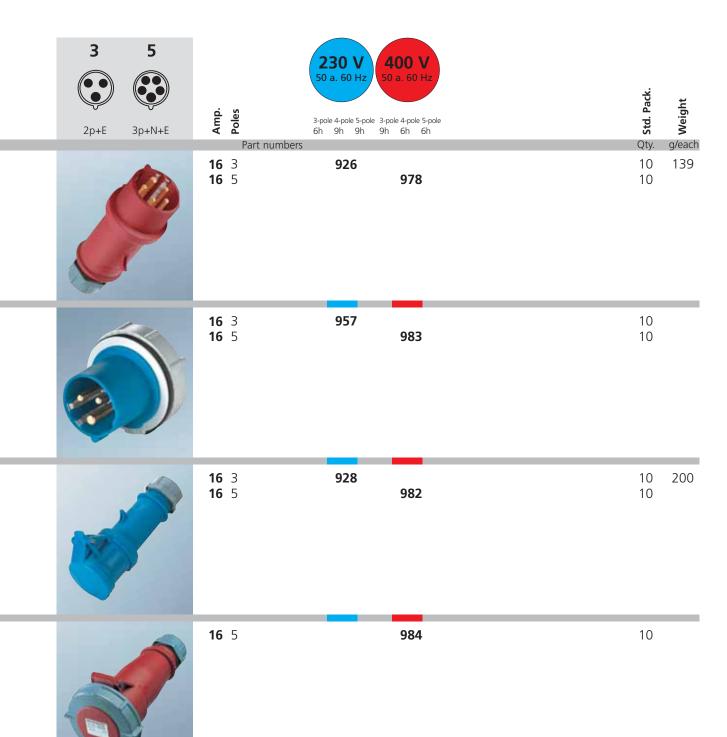
Connectors AM-TOP® CEEplus with 4 additional contacts, single part body, cable gland and sealing

♦♦ IP 67 Product group 3196, type 984 shown.

Accessories:

Hybrid cable

3/5 x 2.5 mm² + 4 x 0.75 mm² screened for plugs and connectors.



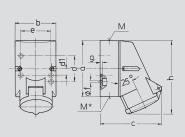


for 16A, 3P for 16A, 5P

MENNEKES CEEplus plugs and receptacles with additional contacts designed as charging sets

to IEC 62196-1 / EN 62191-1 (with VDE test mark), colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST.

Auxiliary contacts made from silver-plated bronze.

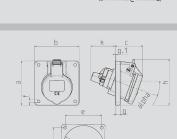


Drawing	Amp.	max. 32
1 MB 480	Poles	3
aux. conta	acts ab cd1 ef ghM*	4 87 64 99 40 50 4,5 4,5 115 (blind) to be cut out
Max. cable dia	am. (mm)	13
Terminal for co section (mm²)		1.5 —10

Wall mounted receptacles CEEplus designed as charging set

with 4 additional contacts, 1 M 20 cable entry at the top and 1 M 20 blind entry (can be cut out) at the bottom, internal fastening, for cables from 2.5 to 6.0 mm². An additional adapter is required (see page 146/147). **▲** IP 44

Product group 1168, type 958 shown.



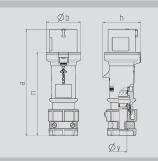
Diawing	Allip.	IIIdx. JZ
1 MB 479	Poles	3
aux. cont	acts a b c d e f g. 1 h k inmax. α	4 85 85 70 70 5,5 8 2 89 47 57-78
Terminal for cond. cross section (mm²) minmax.		1.5 —10

Panel mounted receptacles CEEplus designed as charging set

with 4 additional contacts, 20° inclination, for cables from 2.5 to 6.0 mm², An additional adapter is required (see page 146/147).

▲ IP 44

Product group 1153, type 943 shown.



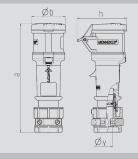
Drawing	Amp.	max. 32
2 MB 224	Poles	3
aux. cont	acts	4
	a	173
	b	55
E	h	61
ri . E	n	137
Dim.	У	17
Terminal for cond. cross		1.5
section (mm²)	minmax.	—6

Plugs CEEplus designed as charging set

with 4 additional contacts, with screw terminals, cable gland and external cable grip for cables from 2.5 to 6 mm²

▲ IP 44

Product group 2199, type 959 shown.



Drawing	Amp.	max. 32
3 MB 66	Poles	3
aux. cont	acts	4
	а	183
	b	57
Ē	h	83
Dim. in mm	у	17
Terminal for o		1.5 —6

Connectors CEEplus designed as charging set

with 4 additional contacts, with screw terminals, cable gland and external cable grip for cables from 2.5 to 6 mm²

▲ IP 44

Product group 3199, type 981 shown.

Technical data CEEplus and electric vehicle charging sets

Current / main contacts No. of poles/ main contacts Current capacity of additional contacts

Voltage on additional contacts No. of poles/ additional contact Leading/lagging Material of additional contacts Clockface position Protection

Connection cross-section min.

16A / charging plugs and receptacles, up to max. 32 A 3P or 5P / charging plugs and receptacles only 3p

5mA up to max. 5A if power contacts are subject to max. 16A. (For currents less than 10 mA and voltages less than 10V, it may be an advantage to solder the wires) min. 5V up to max. 50V

4, less than 4 on request

When connecting, 1 signal contact is lagging the other (min. 3 mm), and when disconnecting, it is leading. Silver-plated bronze

6h, other positions (h) on request

CEEplus power contacts 1.0 mm² CEEplus additional contacts 0.3 mm²

charging plugs and receptacles, power contacts 2.5 mm² charging plugs and receptacles, additional contacts 0.3 mm²

CEEplus power contacts 2.5 mm² CEEplus additional contacts 2.5 mm²

charging plugs and receptacles, power contacts 6.0 mm² charging plugs and receptacles, additional contacts 2.5 mm²

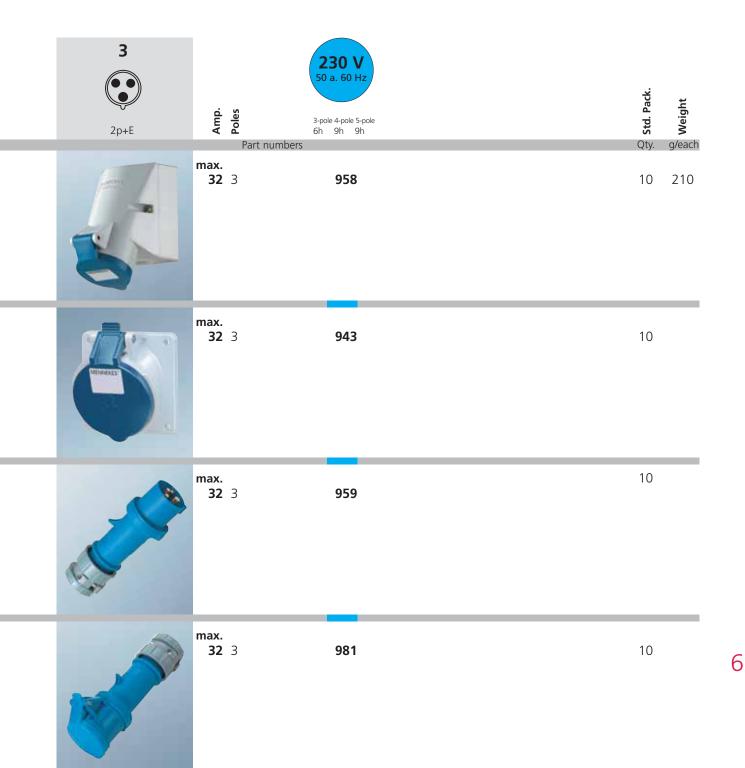
The flat pin bushings provided (red, fully insulated) can be used for connecting cross-sections 0.5 – 1.5 mm².

As an alternative, a soldered connection using a heat shrinkable insulation sleeve is possible.

The heat shrinkable sleeve is included in the delivery.

max.

Please note (Additional contacts)



Cable entry (plugs / connectors)

max.

Terminal design

Power contacts Additional contacts

Terminal connection Power contacts Additional contacts Limitation on use

Assembling and fitting High frequency characteristics 16A 3P: 7.5 mm / charging plugs and receptacles: 8.1 mm

16A 5P: 8.0 mm 16A 3P: 14.5 mm / charging plugs and receptacles: 16.5 mm

16A 5P: 16 mm

Screw-type terminal as socket-type terminal

Use fully insulated flat pin bushings 2.8 x 0.5 mm (4 bushings are included in the delivery)

OSE a Sciewower
Flat cable lugs are connected using a suitable crimping tool and they can then be pushed on without a tool.
ATTENTION! When using CEE plugs with metal housings, short-circuiting of signal contacts may occur.
Therefore never insert CEE plugs with a metal enclosure into CEEplus receptacles or connectors!
IEC 60309/EN60309 compatible plugs and receptacles, charging sets according to IEC 62196-1/EN 62196-1 with VDE mark.

See fitting instructions included in the delivery.

Crosstalk attenuation (near and far) of the system consisting of CEEplus receptacle, plug, MENNEKES hybrid cable, CEEplus connector and panel mounted inlet between power and signal component:

max. 1 MHz, min. 50 dB
Capacitance of the signal component:
wire/wire: 95 nF/km, wire/screen: 150 nF/km
Cable inductivity signal pair: 0.65 mH/km Data sheets on request!

MENNEKES hybrid cable





Plugs for the world

Receptacle combinations

AMAXX® receptacle combinations for wall mounting, IP 44 Page 160 to 162





AMAXX® portable receptacle combinations, IP 44
Page 163

AMAXX® receptacle combinations for wall mounting,
IP 67
Page 164 and 165





and floors, IP 44 Page 166 and 167

AirKRAFT® receptacle combinations for ceilings, walls and floors, IP 44
Page 168 to 170





DELTA-BOXES hanging, portable, IP 44, IP 67 and IP 68 Page 171 to 173

Receptacle strips for ceilings, walls and floors, IP 44 Page 174 and 175





Receptacle combinations, hanging, IP 44 Page 176

MENNEKES Supporter, hanging installation unit Page 177

AMAXX® receptacle combinations, resistant to chemicals, IP 44
Chapter 10
Page 220





AMAXX® receptacle combinations, resistant to chemicals, IP 67 Chapter 10 Page 221

■ **AMAXX**® receptacle combinations

AMAXX®. Superb design. Dependable technology.



AMAXX[®]. A new approach to receptacle combinations.

The enclosure has smooth surfaces, which are easy to clean. The receptacles are slightly inclined towards the bottom so that less space is required even when the feeder cables are plugged in.







AMAXX[®]. Design. Function, shape and colour.

New colour variations with AMAXX®.

The silver upper part (IP 44) in combination with the black base sets a new trend in a design-oriented technical environment.

On request, the combinations are also available in other special colours, e.g., signal yellow or red. In the standard version, the upper parts are supplied in electric grey.





AMAXX®. Well thought-out details.

The enclosure is fitted with captive screws with a double thread for swift opening and closing. For these purposes, a standard electricians' screwdriver, a 6 mm Allen

key or a larger screwdriver can be used. With the window opening towards the bottom, the electrician has both hands free, e.g., for measurements or for changing fuses. The windows can be locked using a padlock and the enclosure can be sealed, so that unauthorised access is prevented.

All external screws, e.g., for modular base plates, are from stainless steel.

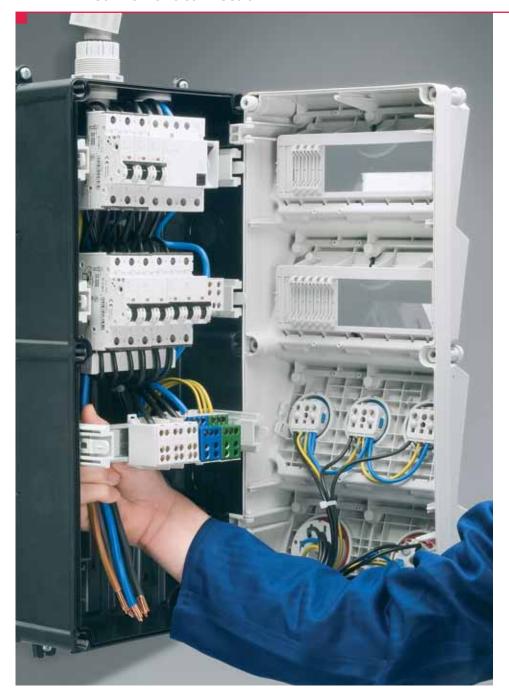






■ **AMAXX**® receptacle combinations

AMAXX®. Convenient connection.



The hinged enclosure opening on the side facilitates connection. A unique feature is the rails that can be pulled out and the large, smooth wiring space that make insertion and connection of large cables even more convenient.

AMAXX® receptacle combinations are made from high-quality AMAPLAST with excellent mechanical, thermal and electrical features.

AMAXX®. Professional concepts right from the start.



AMAXX® IP 67

Select from a large range of dust and water proof plugs and receptacles.



AMAXX® combinations from AMELAN.

High resistance to chemical, highly heat resistant contact carriers and nickel-plated contacts for use in an aggressive atmosphere (see chapter 10).

AMAXX®. Modular combination.

The sophisticated construction of the unit gives maximum flexibility with only three enclosure sizes. All enclosures are 225 mm wide and have either two, three or four segments. They measure 260 mm, 390 mm or 520 mm in height. The segments may be joined in either the horizontal or the vertical direction.

Of course, combinations may also be assembled from various single combinations, so that any size can be achieved and the variety is virtually unlimited.

All combinations are ready for connection and tested for electrical safety and quality, therefore installation on site is swiftly completed.



AMAXX®. International.

For the international market, AMAXX® units including receptacles to comply with various national standards are available, e.g., French/Belgian, Danish, Swiss and British standards, and also compliant with the NEMA standard for the USA and Canada. Please contact us.









AMAXX® for campsites, marinas, etc.

Lockable CEE receptacles, 3 pole, 230V, with fusing, give the maximum safety.



AMAXX® mobile.

For all those who need safe distribution on site. With feeder cable and plug.

■ MENNEKES® receptacle combinations

A strong team for electrical power, data and compressed air.



AirKRAFT®.

For ceilings, walls and floors.

Up to four receptacles, or data, or light, plus compressed air, plus fusing. Ready for connection or with supply cable and plug. Three colours: Signal yellow, red or

silver.



3KRAFT.

For ceilings, walls and floors.

Equipped to suit your requirements: Up to three receptacles, or data, plus compressed air. Ready for connection or with supply cable and plug.

Three colours:

Signal yellow, red or silver.

DELTA BOX. The classic unit.



With cable grip. Enclosure and insert from impact and temperature resistant AMAPLAST. Available in A IP 44, **♦** IP 67 and **♦** IP 68

Receptacle strips. The versatile units.



Suspendable, portable or for wall mounting. Ready for connection with cable grip.

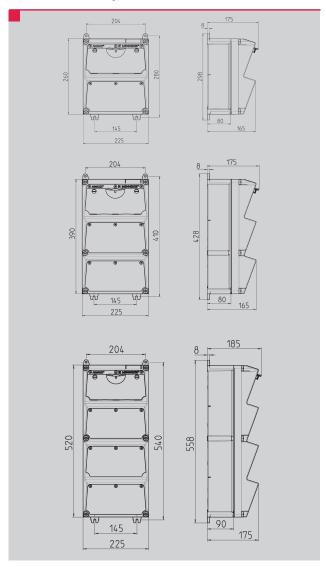
Available to A IP 44

Dimensions

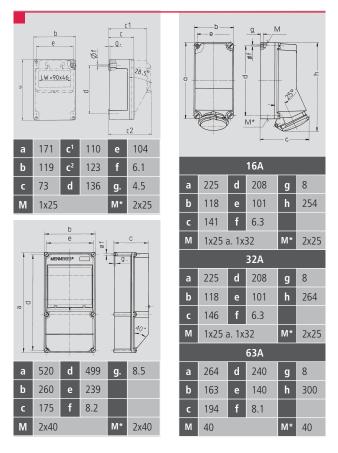


Plugs for the world

AMAXX® receptacle combinations.



Proven - MENNEKES combinations.





All combinations identified with this symbol are available from stock.

Cable entry:

- In standard version open at top left, other sides closed (to be cut out).
- Double enclosure:
 2 x M 32, triple and
 quadruple enclosure
 2 x M 40 each.
- All devices with2 x M 20 at top and at bottom (to be cut out).

Fusing:

Supplied without fusing equipment unless specified otherwise.

Take 3 steps to your preferred combination. 24 hours a day. www.AMAXX.info



Select your required combination of SCHUKO® and CEE receptacles and fuses. The configurator immediately displays the selected appliance with a descriptive text and illustration. This not only shortens the time needed to get a quotation but

also allows for shorter delivery times of AMAXX® combinations. What are you waiting for?

www.AMAXX.info

AMAXX[®] receptacle combinations, pre-wired for installation, ▲ IP44

Enclosure and insert made of AMAPLAST®

Other variations with CEE receptacles 3, 4 or 5 pole and with grounding-type receptacles of French/Belgian, British, Danish, Swiss and US-standards on request.

Upper part electric grey RAL 7035, hinged to the side, fusing under a transparent cover.
For more combinations, please contact us or visit www.AMAXX.info







CEE receptacles	1 CEE 16A, 5p, 400V	1 CEE 16A, 5p, 400V	
	1 CLL 1074, 357, 1007	1 622 10,4, 35, 1004	
CEE receptacles			
SCHUKO® receptacles			
6 SCHUKO® 16A, 230V	1 SCHUKO® 16A, 230V	2 SCHUKO® 16A, 230V	
Fusing			
1 RCD 40A, 4p, 0.03A 6 MCB's 16A, 1p, C	1 MCB 16A, 1p, C	1 RCD 40A, 4p, 0.03A 1 MCB 16A, 3p, C 2 MCB's 16A, 1p, C	
Connection			
For 1 cable up to 5 x 10 mm ²	For 1 cable up to 5 x 10 mm ²	For 1 cable up to 5 x 10 mm ²	
Enclosure size			
390 x 225 mm (HxW)	225 x 118 mm (HxW)	260 x 225 mm (HxW)	
Part no.			
930001 930001SI**	97719*	920009 920009SI**	

^{*} Combination of the proven MENNEKES range.

^{**} SI = Enclosure upper part in silver (special colour, not available from stock)

AMAXX® receptacle combinations, pre-wired for installation, **\(\Delta\)** IP44

Enclosure and insert made of AMAPLAST®

Other variations with CEE receptacles 3, 4 or 5 pole and with grounding-type receptacles of French/Belgian, British, Danish, Swiss and US-standards on request.

Upper part electric grey RAL 7035, hinged to the side, fusing under a transparent cover.

For more combinations, please contact us or visit www.AMAXX.info







CEE receptacles		
1 CEE 16A, 5p, 400V	1 CEE 32A, 5p, 400V	1 CEE 32A, 5p, 400V
	1 CEE 16A, 5p, 400V	1 CEE 16A, 5p, 400V
CEE receptacles		
SCHUKO® receptacles		
2 SCHUKO® 16A, 230V		2 SCHUKO® 16A, 230V
Fusing		
1 MCB 16A, 3p, C 2 MCB's 16A, 1p, C	1 MCB 32A, 3p, C 1 MCB 16A, 3p, C	1 RCD 40A, 4p, 0.03A 1 MCB 32A, 3p, C 1 MCB 16A, 3p, C 2 MCB's 16A, 1p, C
Connection		
For 1 cable up to 5 x 10 mm ²	For 2 cables up to 5 x 10 mm ²	For 1 cable up to 5 x 25 mm ²
Enclosure size		
260 x 225 mm (HxW)	260 x 225 mm (HxW)	390 x 225 mm (HxW)
Part no.		
920005 920005SI**	920021 920021SI**	930013 930013SI**

^{**} SI = Enclosure upper part in silver (special colour, not available from stock)

AMAXX[®] receptacle combinations, pre-wired for installation, ▲ IP44

Enclosure and insert made of AMAPLAST®

Other variations with CEE receptacles 3, 4 or 5 pole and with grounding-type receptacles of French/Belgian, British, Danish, Swiss and US-standards on request.

Upper part electric grey RAL 7035, hinged to the side, fusing under a transparent cover.
For more combinations, please contact us or visit www.AMAXX.info







CEE receptacles			
1 CEE 32A, 5p, 400V 1 CEE 16A, 5p, 400V	1 CEE 32A, 5p, 400V 2 CEE 16A, 5p, 400V	1 CEE 63A, 5p, 400V 1 CEE 32A, 5p, 400V 1 CEE 16A, 5p, 400V	
CEE receptacles			
SCHUKO® receptacles			
2 SCHUKO® 16A, 230V	4 SCHUKO® 16A, 230V	2 SCHUKO® 16A, 230V	
Fusing			
1 MCB 32A, 3p, C 1 MCB 16A, 3p, C 2 MCB's 16A, 1p, C	1 MCB 32A, 3p, C 2 MCB's 16A, 3p, C 4 MCB's 16A, 1p, C	1 RCD 63A, 4p, 0.03A 1 MCB 32A, 3p, C 1 MCB 16A, 3p, C 2 MCB's 16A, 1p, C	
Connection			
For 2 cables up to 5 x 25 mm ²	For 2 cables up to 5 x 25 mm ²	For 2 cables up to 5 x 25 mm ²	
Enclosure size			
390 x 225 mm (HxW)	520 x 225 mm (HxW)	520 x 225 mm (HxW)	
Part no.			
930010 930010SI**	940012 940012SI**	940010 940010SI**	

^{**} SI = Enclosure upper part in silver (special colour, not available from stock)

AMAXX® receptacle combinations, pre-wired for installation, **\(\Delta\)** IP44

Enclosure and insert made of AMAPLAST®

Other variations with CEE receptacles 3, 4 or 5 pole and with grounding-type receptacles of French/Belgian, British, Danish, Swiss and US-standards on request.

Upper part electric grey RAL 7035, hinged to the side, fusing under a transparent cover.

For more combinations, please contact us or visit www.AMAXX.info







CEE receptacles		
	2 CEE 16A, 5p, 400V	1 CEE 32A, 5p, 400V
		1 CEE 16A, 5p, 400V
CEE receptacles		
SCHUKO® receptacles		
4 SCHUKO® 16A, 230V	3 SCHUKO® 16A, 230V	3 SCHUKO® 16A, 230V
Fusing		
1 RCD 25A, 2p, 0.03A		1 RCD 40A, 4p, 0.03A
		1 MCB 16A, 3p, C
		3 MCB's 16A, 1p, C
with feeder cable		
2 m H07RN-F3G1.5 with	2 m H07RN-F5G2.5 with	2 m H07RN-F5G4 with
SCHUKO® plug 16A, 230V	CEE plug 16A, 5p, 400V	CEE plug 32A, 5p, 400V
Enclosure size		
260 x 225 mm (HxW)	260 x 225 mm (HxW)	390 x 225 mm (HxW)
Part no.		
920033	920034	930025
920033SI**	92003451**	930025SI**

** SI = Enclosure upper part in silver (special colour, not available from stock)

AMAXX® receptacle combinations, pre-wired for installation, ♦ IP67

Enclosure and insert made of AMAPLAST®
Other variations with CEE receptacles 3, 4 or 5 pole on request.

Upper part electric grey RAL 7035, hinged to the side, fusing under a transparent cover.
For more combinations, please contact us or visit www.AMAXX.info







CEE receptacles			
1 CEE 16A, 5p, 400V	2 CEE 16A, 5p, 400V	1 CEE 32A, 5p, 400V	
CEE receptacles			
SCHUKO® receptacles			
3 SCHUKO® 16A, 230V	2 SCHUKO® 16A, 230V	3 SCHUKO® 16A, 230V	
Fusing			
1 RCD 40A, 4p, 0.03A 1 MCB 16A, 3p, C 3 MCB's 16A, 1p, C	1 RCD 40A, 4p, 0.03A 2 MCB's 16A, 3p, C 2 MCB's 16A, 1p, C	1 RCD 40A, 4p, 0.03A 1 MCB 32A, 3p, C 3 MCB's 16A, 1p, C	
Connection			
For 2 cables up to 5 x 25 mm ²	For 2 cables up to 5 x 25 mm ²	For 2 cables up to 5 x 25 mm ²	
Enclosure size			
390 x 225 mm (HxW)	520 x 225 mm (HxW)	390 x 225 mm (HxW)	
Part no.			
930022	940013	930023	

AMAXX® receptacle combinations, pre-wired for installation, ♦ IP67

Enclosure and insert made of AMAPLAST®
Other variations with CEE receptacles 3, 4 or 5 pole on request.

Upper part electric grey RAL 7035, hinged to the side, fusing under a transparent cover.
For more combinations, please contact us or visit www.AMAXX.info





CEE receptacles	
1 CEE 32A, 5p, 400V	1 CEE 63A, 5p, 400V
1 CEE 16A, 5p, 400V	1 CEE 32A, 5p, 400V
	1 CEE 16A, 5p, 400V
CEE receptacles	
SCHUKO® receptacles	
2 SCHUKO® 16A, 230V	4 SCHUKO® 16A, 230V
Fusing	
1 RCD 40A, 4p, 0.03A	1 RCD 63A, 4p, 0.03A
1 MCB 32A, 3p, C	1 MCB 32A, 3p, C
1 MCB 16A, 3p, C	1 MCB 16A, 3p, C
2 MCB's 16A, 1p, C	4 MCB's 16A, 1p, C
Connection	
For 2 cables up to 5 x 25 mm ²	For 2 cables up to 5 x 25 mm ²
Enclosure size	
520 x 225 mm (HxW)	390 x 450 mm (HxW)
Part no.	
940014	900003

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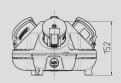
MENNEKES 3KRAFT receptacle combinations

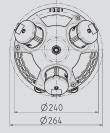
pre-wired for installation. Enclosure and insert made of **AMAPLAST**.

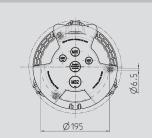
Colours: Back box in black, cover available in red (RO), yellow (GE) or silver (SI).

Other variations with CEE receptacles 3, 4 or 5 pole and with grounding-type receptacles of French/Belgian, British, Danish, Swiss and US-standards on request.

Protection type **A** IP 44







Cable entry:

at the top: $1 \times M 32$, $1 \times M 25$, $2 \times M 20$ (blind, to be cut out), $1 \times C$ cut out for quick pneumatic connection; from the side (for wall fixing or portable version): $1 \times M 25$ (blind, to be cut out).

The drawing is applicable for products on this and the following page.



1 CEE receptacle 16A, 5p, 400V 2 SCHUKO® receptacles 16A, 230V

Part no. 94350



3 SCHUKO® receptacles 16A, 230V

Part no. 94351



2 CEE receptacles 16A, 5p, 400V 1 SCHUKO® receptacle 16A, 230V

Part no. 94352



3 CEE receptacles 16A, 5p, 400V

Part no. 94358



1 CEE receptacle 16A, 5p, 400V 1 CEE receptacle 16A, 3p, 230V 1 SCHUKO® receptacle 16A, 230V

Part no. 94359



- 1 CEE receptacle 16A, 5p, 400V
- 1 CEE receptacle 32A, 5p, 400V
- 1 SCHUKO® receptacle 16A, 230V

MENNEKES 3KRAFT receptacle combinations



1 CEE receptacle 16A, 5p, 400V 1 SCHUKO® receptacle 16A, 230V

1 RJ45 double data port cat. 5e8/8

Part no. 94355



2 SCHUKO® receptacles 16A, 230V1 RJ45 double data port cat. 5e8/8

Part no. 94354



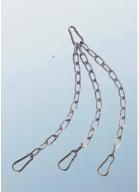
1 CEE receptacle 16A, 5p, 400V 2 SCHUKO® receptacles 16A, 230V with 3 m of feeder cable, H07RN-F5G2.5 with CEE plug 16A, 5p, 400V

Part no. 94356



3 SCHUKO® receptacle 16A, 230V with 3 m of feeder cable, H07RN-F3G1.5 with SCHUKO® plug 16A, 230V

Part no.. 94357



Accessories:

Chains for suspension from the ceiling

Part no. 106123



Quick pneumatic connection

NW 9 mm **Part no. 208620**

rait 110. 20002

NW 13 mm

Part no. 208621

Twin pneumatic connection (additional)

Part no. 41442



Handle for retrofit in 3KRAFT receptacle combinations

Part no. 195047

When ordering 3KRAFT please add to the part no. the colour code of the cover, i. e. red = RO, yellow = GE, silver = SI.

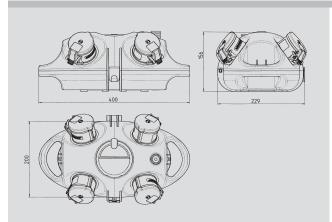
MENNEKES AirKRAFT® receptacle combinations

pre-wired for installation. Enclosure and insert made of AMAPLAST.

Colours: Back box in black, cover available in red (RO), yellow (GE) or silver (SI).

Other variations with CEE receptacles 3, 4 or 5 pole and with grounding-type receptacles of French/Belgian, British, Danish, Swiss and US-standards on request.

Protection type A IP 44



DIN rail / fusing for 4 modules beneath transparent operating lid.

Cable entry:

at the top: $1 \times M 32$, $1 \times M 25$, $2 \times M 20$ (blind, to be cut out), $1 \times C$ cut out for quick pneumatic connection; from the side (for wall fixing or portable version): $1 \times M 25$ (blind, to be cut out).

The drawing is applicable for products on this and the two following pages.



1 CEE receptacle 16A, 5p, 400V 3 SCHUKO® receptacles 16A, 230V

Part no. 94550



4 SCHUKO® receptacles 16A, 230V

Part no. 94551



4 SCHUKO® receptacles 16A, 230V 1 RCD $\stackrel{\textstyle \sim}{\sim}$ 40A, 4p, $I_{\Delta N}=0.03A$

Part no. 94566



2 CEE receptacles 16A, 5p, 400V 2 SCHUKO® receptacles 16A, 230V

Part no. 94552



2 CEE receptacles 16A, 5p, 400V 2 SCHUKO® receptacles 16A, 230V 1 RCD ☎ 40A, 4p, I_{AN} = 0.03A

Part no. 94553





3 SCHUKO® receptacles 16A, 230V 1 RJ45 double data port cat. 5e

MENNEKES AirKRAFT® receptacle combinations

pre-wired for installation. Enclosure and insert made of **AMAPLAST**. Colours: Back box in black, cover available in red (RO), yellow (GE) or silver (SI). Other variations with CEE receptacles 3, 4 or 5 pole and with grounding-type receptacles of French/Belgian, British, Danish, Swiss and US-standards on request. Protection type 🛕 IP 44



1 CEE receptacle 16A, 5p, 400V 2 SCHUKO® receptacles 16A, 230V 1 RJ45 double data port cat. 5e

Part no. 94555



1 CEE receptacle 32A, 5p, 400V 1 CEE receptacle 16A, 5p, 400V 1 MCB 16A, 3p, C 2 SCHUKO® receptacles 16A, 230V 1 MCB 16A, 1p, B

Part no. 94564

1 CEE receptacle 32A, 5p, 400V 1 CEE receptacle 16A, 5p, 400V 2 SCHUKO® receptacles 16A, 230V

Part no. 94567



2 SCHUKO® receptacles 16A, 230V 2 Micro Lynx light 7 W 1 MCB 16A, 1p, B 1 RCD \bowtie 25A, 2p, $I_{\Delta N}$ = 0.03A

Part no. 9401198

Other variations on request!



Accessories:

Chains for suspension from the ceiling

Part no. 106060



Quick pneumatic connection

NW 9 mm **Part no. 208620**

NW 13 mm **Part no. 208621**

Twin pneumatic connection (additional)

Part no. 41442

7

When ordering AirKRAFT please add to the part no. the colour code of the cover, i. e. red = RO, yellow = GE, silver = SI.

MENNEKES AirKRAFT® receptacle combinations



1 CEE receptacle 16A, 5p, 400V 3 SCHUKO® receptacles 16A, 230V with 3 m of feeder cable, H07RN-F5G2.5 with CEE plug 16A, 5p, 400V

Part no. 94556

For dimensions see drawing on page 168.



4 SCHUKO® receptacles 16A, 230V with 3 m of feeder cable, H07RN-F3G1.5 with SCHUKO® plug 16A, 230V

Part no. 94557



2 CEE receptacles 16A, 5p, 400V 2 SCHUKO® receptacles 16A, 230V 1 RCD 40A, \bowtie 4p, $|_{\Delta N}$ = 0.03A with 3 m of feeder cable, H07RN-F5G2.5 with CEE plug 16A, 5p, 400V

Part no. 94558



1 CEE receptacle 16A, 5p, 400V 1 MCB 16A, 3p, C 3 SCHUKO® receptacles 16A, 230V 1 MCB 16A, 1p, B with 3 m of feeder cable, H07RN-F5G4 with CEE plug 32A, 5p, 400V

Part no. 94559





1 CEE receptacle 32A, 5p, 400V 1 CEE receptacle 16A, 5p, 400V 1 MCB 16A, 3p, C 2 SCHUKO® receptacles 16A, 230V 1 MCB 16A, 1p, B with 3 m of feeder cable, H07RN-F5G4 with CEE plug 32A, 5p, 400V

Part no. 94565





2 SCHUKO® receptacles 16A, 230V 2 Micro Lynx light 7W 1 MCB 16A, 1p, B 1 RCD 25A, \bowtie 2p, $I_{\Delta N}$ = 0.03A with 3 m of feeder cable, H07RN-F3G2.5 with SCHUKO® plug 16A, 230V

Part no. 94570



1 CEE receptacle 16A, 5p, 400V 1 SCHUKO® receptacle 16A, 230V 2 Micro Lynx light 7W 1 MCB 16A, 1p, B 1 RCD 25A, \bowtie 2p, $l_{\Delta N}$ = 0.03A with 3 m of feeder cable, H07RN-F5G2.5 with CEE plug 16A, 5p, 400V

Part no. 94568



3 SCHUKO® receptacles 16A, 230V 1 Micro Lynx light 7W 1 MCB 16A, 1p, B 1 RCD 25A, \bowtie 2p, $I_{\Delta N} = 0.03$ A with 3 m of feeder cable, H07RN-F3G1.5 with SCHUKO® plug 16A, 230V Part no. 94569

Accessories:

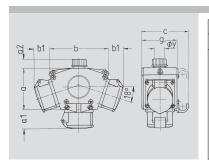
Chains for suspension from the ceiling and quick pneumatic connection see page 169.

MENNEKES receptacle combinations DELTA BOX

pre-wired for installation, with cable grip. Enclosure and insert made of AMAPLAST.

Other variations with CEE receptacles 3, 4 or 5 pole and with grounding-type receptacles of French/Belgian, British, Danish, Swiss and US-standards on request.

Protection type ▲ IP 44, ♦ IP 67 or ♦ IP 68



with receptacles		
VVICI	16A	32A
a a1 a2	114 54 30	114 64 72
b b1 c	160 42 133	160 52 133
g. y	97 17	97 27
Dim. in mm		

Hanging clip supplied with every DELTA BOX.

Other variations on request!

Cable entry:

1 x with gland diameter, \emptyset 17 mm or 27 mm

The drawing is applicable for products on this and the following page.



1 CEE receptacle 16A, 5p, 400V 2 SCHUKO® receptacles 16A, 230V ▲ IP 44

Part no. 92915



1 CEE receptacle 16A, 5p, 400V 2 SCHUKO® receptacles 16A, 230V ♦♦ IP 67

Part no. 92910





3 CEE receptacles 32A, 5p, 400V IP 44

Part no. 90839





3 SCHUKO® receptacles 16A, 230V ▲ IP 44

Part no. 92798



3 SCHUKO® receptacles 16A, 230V ▲♦♦ IP 68

Part no. 10860





2 CEE receptacles 16A, 5p, 400V 1 SCHUKO® receptacle 16A, 230V

Part no. 92916



Part no. 92911



1 CEE receptacle 16A, 5p, 400V 3 SCHUKO® receptacles 16A, 230V • IP 44

Part no. 92658



1 CEE receptacle 16A, 5p, 400V 3 SCHUKO® receptacles 16A, 230V

▲ IP 67

Part no. 89154

Part no. 92655



3 CEE receptacles 16A, 5p, 400V ▲ IP 44

Part no. 92917



3 CEE receptacles 16A, 5p, 400V ▲ IP 67

MENNEKES receptacle combinations DELTA BOX

pre-wired for installation, with cable grip. Enclosure and insert made of **AMAPLAST**. Other variations with CEE receptacles 3, 4 or 5 pole and with grounding-type receptacles of French/Belgian, British, Danish, Swiss and US-standards on request.

Protection type ▲ IP 44, ♦ IP 67 or ♦ IP 68



4 SCHUKO® receptacles 16A, 230V ▲ IP 44

Part no. 92602



4 SCHUKO® receptacles 16A, 230V **A** IP 68

Part no. 91395



2 CEE receptacles 16A, 5p, 400V 1 CEE receptacle 16A, 3p, 230V • IP 44

Part no. 92896

Part no. 92893



Part no. 92897

Part no. 92894



3 CEE receptacles 16A, 4p, 100-300 Hz

Part no. 92594



3 CEE receptacles 16A, 3p, 230V IP 44

Part no. 92898

3 CEE receptacles 16A, 3p, 230V **å** IP 67

Part no. 92895



Pneumatic connection for MENNEKES DELTA BOX

For tube dia. 9 mm

Part no. 41440



For tube dia. 13 mm

Part no. 41441





Blanking flanges to seal unused installation holes by DELTA BOXES

grey 75 x 75 mm **Part no. 41419**

MENNEKES receptacle combinations DELTA BOX

pre-wired for installation, with cable grip. Enclosure and insert made of AMAPLAST. Other variations with CEE receptacles 3, 4 or 5 pole and with grounding-type receptacles of French/Belgian, British, Danish, Swiss and US-standards on request.

Protection type ▲ IP 44, ♦ IP 67 or ♦ IP 68



1 CEE receptacle 16A, 5p, 400V 2 SCHUKO® receptacles 16A, 230V with 2 m of feeder cable, H07RN-F5G2.5 with CEE plug 16A, 5p, 400V **▲** IP 44

Part no. 92913

For dimensions see drawing on page 171.



3 CEE receptacles 16A, 5p, 400V with 2 m of feeder cable, H07RN-F5G2.5 with CEE plug 16A, 5p, 400V **▲** IP 44

Part no. 92914



1 CEE receptacle 16A, 5p, 400V 2 SCHUKO® receptacles 16A, 230V with 2 m of feeder cable, H07RN-F5G2.5 with CEE plug 16A, 5p, 400V **▲▲** IP 67

Part no. 92908



3 CEE receptacles 16A, 5p, 400V with 2 m of feeder cable, H07RN-F5G2.5 with CEE plug 16A, 5p, 400V

▲ IP 67

Part no. 92909



3 SCHUKO® receptacles 16A, 230V with 1.5 m of feeder cable, H07RN-F3G2.5 with SCHUKO® plug 16A, 230V

▲▲ IP 68, pressure watertight

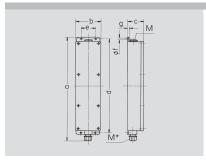


MENNEKES receptacle strips

pre-wired for installation, with cable grip. Enclosure and insert made of AMAPLAST.

Other variations with CEE receptacles 3, 4 or 5 pole and with grounding-type receptacles of French/Belgian, British, Danish, Swiss and US-standards on request.

Protection type A IP 44



401 b 97 c 63 364 d 56 f 5.5 g. M 4 20 М* 20 Dim. en mm

Hanging clip

enclosed with each receptacle strip with the dimensions 401 x 97 mm. Otherwise on request.



Cable entry:

1 x M 20 plugged at the top 1 x M 20 with gland at the bottom

The drawing is applicable for products on this and the following page.



3 CEE receptacles 16A, 5p, 400V with terminal

Part no. 96705



400 V 50 a. 60 Hz

3 CEE receptacles 16A, 4p, 100-300 Hz with terminal

Part no. 95937



3 CEE receptacles 16A, 3p, 230V with terminal

Part no. 96489



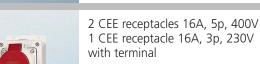
3 CEE receptacles 16A, 3p, 110V with terminal

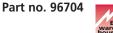
Part no. 96227



230 V

0 a. 60 H







2 CEE receptacles 16A, 5p, 400V 1 SCHUKO® receptacle 16A, 230V with terminal

Part no. 96703





1 CEE receptacle 16A, 5p, 400V 1 CEE receptacle 16A, 3p, 230V 1 SCHUKO® receptacle 16A, 230V with terminal

Part no. 96702





1 CEE receptacle 16A, 5p, 400V 2 SCHUKO® receptacles 16A, 230V with terminal





MENNEKES receptacle strips

pre-wired for installation, with cable grip. Enclosure and insert made of AMAPLAST. Other variations with CEE receptacles 3, 4 or 5 pole and with grounding-type receptacles of French/Belgian, British, Danish, Swiss and US-standards on request. Protection type A IP 44



When the receptacle strips, show on page 174, are mounted horizontally, the receptacles mounted on it can be turned 90° without dislodging the connection leads.

Other variations on request!



3 CEE receptacles 16A, 5p, 400V 1 RCD 40A, \boxtimes 4p, $I_{\Delta N} = 0.03A$ Part no. 95472



1 CEE receptacle 16A, 5p, 400V 1 CEE receptacle 16A, 3p, 230V 1 SCHUKO® receptacle 16A, 230V 1 RCD 40A, $\triangle A$ 4p, $I_{\Delta N} = 0.03A$

Part no. 95471

2 CEE receptacles 16A, 5p, 400V 1 SCHUKO® receptacle 16A, 230V 1 RCD 40A, \bowtie 4p, $I_{\Delta N} = 0.03A$ Part no. 95470



3 SCHUKO® receptacles 16A, 230V with terminal 5 pole for connection 5 x 2.5 mm²

Part no. 95996





Enclosure size: 401 x 97 x 80 mm

8 SCHUKO® receptacles 16A, 230V with terminal 3 pole for 3 x 6 mm² insert tilted through 30°

Also suitable for angled plugs! Part no. 88677







Enclosure size: 330 x 80 x 68 mm

3 SCHUKO® receptacles 16A, 230V with terminal

Part no. 96700



Drawing 1 MB 284, see chapter 11 (SCHUKO®)



Enclosure size: 330 x 80 x 68 mm

4 SCHUKO® receptacles 16A, 230V with terminal, tilted through 30°

Also suitable for angled plugs! Part no. 88678



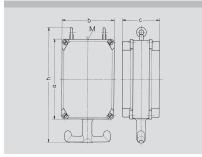
Drawing 1 MB 284, see chapter 11 (SCHUKO®)

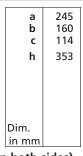
MENNEKES receptacle combinations for flexible energy supply, suspendable

pre-wired for installation. Enclosure and insert made of AMAPLAST.

Other variations with CEE receptacles 3, 4 or 5 pole and with grounding-type receptacles of French/Belgian, British, Danish, Swiss and US-standards on request.

Protection type **A** IP 44



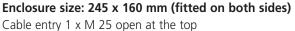


The enclosure are fitted on both sides.

Front and back are

shown.

Other variations and types with pneumatic connections on request!



The drawing is applicable for products on this page.

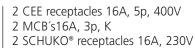


Back:



- 2 CEE receptacles 16A, 5p, 400V 2 MCB's 16A, 3p, C
- 2 SCHUKO® receptacles 16A, 230V 2 MCB's 16A, 1p, B

Part no. 92425



2 MCB's16A, 1p, B Part no. 95499





- 1 CEE receptacle 32A, 5p, 400V
- 1 MCB 32A, 3p, C
- 1 CEE receptacle 16A, 5p, 400V
- 1 MCB 16A, 3p, C
- 2 SCHUKO® receptacles 16A, 230V 2 MCB's 16A, 1p, B

Part no. 92354

- 1 CEE receptacle 32A, 5p, 400V 1 MCB 32A, 3p, C
- 1 CEE receptacle 16A, 5p, 400V
- 1 MCB 16A, 3p, C
- 4 SCHUKO® receptacles 16A, 230V
- 2 MCB's 16A, 1p, B

Part no. 92353



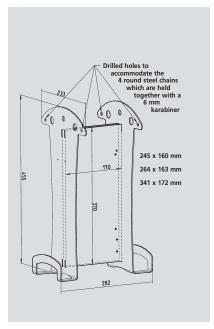


- 1 CEE receptacle 32A, 5p, 400V
- 1 CEE receptacle 16A, 5p, 400V
- 1 MCB 16A, 3p, C
- 2 SCHUKO® receptacles 16A, 230V
- 1 MCB 16A, 1p, B
- 1 RCD 40A, \boxtimes $I_{\Delta N} = 0.03A$

Part no. 92352

- 1 CEE receptacle 32A, 5p, 400V
- 1 CEE receptacle 16A, 5p, 400V
- 1 MCB 16A, 3p, C
- 4 SCHUKO® receptacles 16A, 230V
- 2 MCB's 16A, 1p, B

The swift, value for money concept for individual pieces of equipment using receptacle combinations and compressed air ports.





Hangable mounting unit

Made from light metal. With holes for front and rear installation of receptacles and receptacle combinations 2 enclosures 245 x 160 mm or 2 enclosures 264 x 163 mm or 2 enclosures 341 x 172 mm Dimensions (H x D x W): 455 x 282 x 23 mm

Colour: white aluminium (RAL 9006) With 350 mm chain set for suspension from the ceiling

Part no. 18429





Pneumatic-maintenance unit 1/4" pre-assembled

- Inlet pressure max. 16 bar
- 1 oil mist lubricator
- Water separator 0 10 bar
- Pressure reducer with pressure gauge
- 1 quick coupling 1/4"
- Connection: 1 threaded nozzle of 9 mm

Part no. 18431



Single pressure port

- 1 quick coupling 1/4"
- Connection: 1 threaded nozzle of 9 mm





Receptacle combinations EverGUM in solid rubber enclosures

EverGUM receptacle combinations, small enclosure, for wall mounting Page 182 and 183





EverGUM receptacle combinations, large enclosure, for wall mounting Page 184 and 185

EverGUM, enclosures for wall mounting Page 185





EverGUM receptacle strips, with handle for hanging, for wall mounting, portable Page 186

EverGUM receptacle combinations, compact, portable Page 187 and 188



EverGUM receptacle combinations, maxi, portable Page 189





Receptacle combinations EverGUM in solid rubber enclosures

Flexible safety. EverGUM - portable distribution boards and receptacle strips.



With the EverGUM range MENNEKES provide a solid rubber alternative to enclosures in Amaplast, Amelan and sheet steel. This is an alternative which is suitable for the most diverse environments, especially when there is likely to be exposure to rough handling or aggressive cleaning agents. These products can also be supplied to conform to the standards of other European countries.

The outstanding advantages:

- Resistant to weather and ageing
- High dimensional stability and precision
- Good resistance to acids and alkalis
- High breakdown and creep resistance
- High visibility yellow
- See also information provided in chapter 20

EverGUM - portable distribution boards.

The all-round power-packages for mobile use in industry, craft and trade. They can accept quite a knock – neither their shape nor their function will be impaired. Additional benefit: they are stackable which allows space-saving storage.

Tested safety, EverGUM details.

The closed lower side of the enclosure with a ground clearance of 77 mm prevents ingress of water. The panel mounted receptacles can be replaced from outside.

Hinged cover provided with stainless steel quick release clips. Shock hazard protected to BGV A2, even with open cover. Screw or padlock offers additional safety.





Receptacle strip EverGUM.

Window size for six or eight modules for vertical installation. Protection type IP 44.





Plugs for the world

Versatile safety. EverGUM wall-mounted distribution boards.

The closed wall-mounted enclosure in combination with the large wall-mounted distribution board (380 x 320 x 200 mm) is the ideal solution for safe power distribution of higher loads, e.g. with bus systems or larger conductor cross sections.





Well thought-out details and easy handling:

- Generously dimensioned wiring space by fixing the rails at the upper end of the wiring compartment
- Cable entry (max. M 63) at top and bottom
- High dimensional stability
- No strain on the wiring when the enclosure is open
- Circuits marked on an inscribable label



Secure wall mounting. With four screws passing from the inside through fastening straps on the outside.

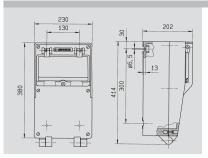


8

pre-wired for installation. Solid rubber enclosure, signal yellow.

Other variations with CEE receptacles 3, 4 or 5 pole and with grounding-type receptacles of French/Belgian, British, Danish, Swiss and US-standards on request.

Protection type **A** IP 44



The drawing is applicable for products on this and the following page.



Enclosure size: 380 x 230 mm

Cable entry:

- 1 x M 40 at the top with threaded cable gland and
- 1 x M 40 plugged at the top
- 2 x M 40 plugged at the bottom
- Space for 12 modules.



2 CEE receptacles 16A, 5p, 400V 2 Neozed D 01, 3p 2 SCHUKO® receptacles 16A, 230V 1 Neozed D 01, 1p preferably with connection for 2 cables of up to 5 x 25 mm²

Part no. 70035



2 CEE receptacles 32A, 5p, 400V 2 Neozed D 02, 3p 2 SCHUKO® receptacles 16A, 230V 1 Neozed D 01, 1p preferably with connection for 2 cables of up to 5 x 25 mm²

Part no. 70036



1 CEE receptacle 32A, 5p, 400V

- 1 Neozed D 02, 3p
- 1 CEE receptacle 16A, 5p, 400V
- 1 Neozed D 01, 3p
- 3 SCHUKO® receptacles 16A, 230V
- 3 Neozed D 01, 1p
- preferably with connection for 2 cables of up to 5 x 25 mm²

Part no. 70039





1 CEE receptacle 63A, 5p, 400V

- 1 Neozed D 02, 3p
- 2 SCHUKO® receptacles 16A, 230V
- 2 MCB's 16A, 1p, B
- 1 RCD \cong 63A, $I_{AN} = 0.03A$

Part no. 70006



1 CEE receptacle 32A, 5p, 400V

- 1 MCB 32A, 3p, C
- 1 CEE receptacle 16A, 5p, 400V
- 1 MCB 16A, 3p, C
- 3 SCHUKO® receptacles 16A, 230V
- 3 MCB's 16A, 1p, B
- preferably with connection for 2 cables of up to 5 x 25 mm²

Part no. 70007





1 CEE receptacle 32A, 5p, 400V

- 1 CEE receptacle 16A, 5p, 400V
- 1 Neozed D 01, 3p
- 3 SCHUKO® receptacles 16A, 230V
- 3 Neozed D 01, 1p
- 1 RCD \cong 40A, $I_{\Delta N} = 0.03A$ preferably with connection for
- 2 cables of up to 5 x 25 mm²

pre-wired for installation. Solid rubber enclosure, signal yellow.

Other variations with CEE receptacles 3, 4 or 5 pole and with grounding-type receptacles of French/Belgian, British, Danish, Swiss and US-standards on request.

Protection type A IP 44



- 2 CEE receptacles 16A, 5p, 400V
- 2 MCB's 16A, 3p, C
- 3 SCHUKO® receptacles 16A, 230V
- 2 MCB's 16A, 1p, B
- 1 RCD \boxtimes 40A, $I_{\Delta N} = 0.03A$

Part no. 70426



- 1 CEE receptacle 32A, 5p, 400V
- 1 MCB 32A, 3p, C
- 1 CEE receptacle 16A, 5p, 400V
- 1 MCB 16A, 3p, C
- 2 SCHUKO® receptacles 16A, 230V
- 1 MCB 16A, 1p, B
- 1 RCD \triangle 63A, $I_{\Delta N} = 0.03A$ connections for two cables of up to 5 x 25mm²

Part no. 70005





- 2 CEE receptacles 32A, 5p, 400V 2 MCB's 32A, 3p, C 2 SCHUKO® receptacles 16A, 230V 2 MCB's 16A, 1p, B 1 RCD 🖾 63A, I_{AN} = 0.03A
- Part no. 70004



1 CEE receptacle 32A, 5p, 400V 1 CEE receptacle 16A, 5p, 400V 3 SCHUKO® receptacles 16A, 230V with DIN rail for installation devices (max. 12 modules) wiring up to the DIN rail, N and PE connection rails

Part no. 70428



Fastening straps for external fastening of EverGUM combinations.

Set: 4 pieces with screws packed in a plastic bag

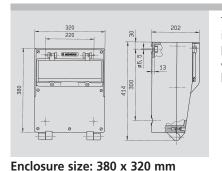
Part no. 41445

Other variations on request!

pre-wired for installation. Solid rubber enclosure, signal yellow.

Other variations with CEE receptacles 3, 4 or 5 pole and with grounding-type receptacles of French/Belgian, British, Danish, Swiss and US-standards on request.

Protection type **A** IP 44



1 x M 40 at the top with threaded cable gland and

The drawing is applicable for products on this and the following page.



Other variations on request!



1 x M 40 plugged at the top 2 x M 40 plugged at the bottom Space for 16 modules.

Cable entry:

1 CEE receptacle 32A, 5p, 400V 1 MCB 32A, 3p, C 2 CEE receptacles 16A, 5p, 400V 2 MCB's 16A, 3p, C 4 SCHUKO® receptacles 16A, 230V 4 MCB's 16A, 1p, B preferably with connection for 2 cables of up to 5 x 25 mm² Part no. 70009



1 Neozed D 02, 3p 1 CEE receptacle 16A, 5p, 400V 1 Neozed D 01, 3p 4 SCHUKO® receptacles 16A, 230V 2 Neozed D 01, 1p 1 RCD \bowtie 63A, 4p, $I_{\Delta N} = 0.03$ A preferably with connection for 2 cables of up to 5 x 25 mm²

Part no. 71061

1 CEE receptacle 63A, 5p, 400V

1 CEE receptacle 32A, 5p, 400V



1 CEE receptacle 32A, 5p, 400V 1 Neozed D 02, 3p 1 CEE receptacle 16A, 5p, 400V 1 Neozed D 01, 3p 4 SCHUKO® receptacles 16A, 230V 2 Neozed D 01, 1p preferably with connection for

2 cables of up to 5 x 25 mm²

1 CEE receptacle 63A, 5p, 400V

1 Neozed D 02, 3p



1 MCB 32A, 3p, C 2 CEE receptacles 16A, 5p, 400V 2 MCB's 16A, 3p, C 4 SCHUKO® receptacles 16A, 230V 2 MCB's 16A, 1p, B 1 RCD \bowtie 63A, 4p, $l_{\Delta N}$ = 0.03A preferably with connection for 2 cables of up to 5 x 25 mm² **Bestell-Nr. 71064**

1 CEE receptacle 32A, 5p, 400V





1 CEE receptacle 63A, 5p, 400V 1 MCB 63A, 3p, C 1 CEE receptacle 32A, 5p, 400V 1 MCB 32A, 3p, C 1 CEE receptacle 16A, 5p, 400V 1 MCB 16A, 3p, C 4 SCHUKO® receptacles 16A, 23

4 SCHUKO® receptacles 16A, 230V 2 MCB's 16A, 1p, B preferably with connection for 2 cables of up to 5 x 25 mm²

Part no. 71062



1 CEE receptacle 63A, 5p, 400V 1 CEE receptacle 32A, 5p, 400V 1 MCB 32A, 3p, C 1 CEE receptacle 16A, 5p, 400V 1 MCB 16A, 3p, C 4 SCHUKO® receptacles 16A, 230V 2 MCB's 16A, 1p, B 1 RCD \bigcirc 63A, 4p, I $_{\Delta N}$ = 0.03A preferably with connection for 2 cables of up to 5 x 25 mm²

pre-wired for installation. Solid rubber enclosure, signal yellow.

Other variations with CEE receptacles 3, 4 or 5 pole and with grounding-type receptacles of French/Belgian, British, Danish, Swiss and US-standards on request.

Protection type A IP 44



- 1 CEE receptacle 63A, 5p, 400V
- 1 Neozed D 02, 3p
- 1 CEE receptacle 32A, 5p, 400V
- 1 MCB 32A, 3p, C
- 1 CEE receptacle 16A, 5p, 400V
- 1 MCB 16A, 3p, C
- 2 SCHUKO® receptacles 16A, 230V
- 1 MCB 16A, 1p, B

Part no. 70545



As above, but 1 RCD \rightleftharpoons 100A, $I_{\Delta N} = 0.03A$

Part no. 70014



- 1 CEE receptacle 32A, 5p, 400V
- 2 CEE receptacles 16A, 5p, 400V
- 4 SCHUKO® receptacles 16A, 230V with DIN rail for installation devices (max. 16 modules)

wiring up to the DIN rail, N and PE connection rails

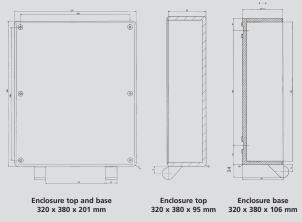
Part no. 70687

EverGUM empty enclosures from solid rubber for wall mounting

The new closed wall mounted enclosure is the ideal solution for safe power distribution of higher loads, e.g. with bus systems or larger conductor cross sections. The pictures illustrate our flexibility to meet customers' requirements. Please contact our specialists for industrial applications or project engineering. We will be pleased to answer your questions.









EverGUM empty enclosures from solid rubber for wall mounting, hinged cover without

hinged cover without openings, with N and PE terminal

Colour: signal yellow

▲ IP 44

Part no. 70850

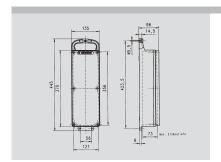
8

MENNEKES EverGUM receptacle strips

pre-wired for installation, with hinging clip. Solid rubber enclosure, signal yellow.

Other variations with CEE receptacles 3, 4 or 5 pole and with grounding-type receptacles of French/Belgian, British, Danish, Swiss and US-standards on request.

Protection type A IP 44



The drawing is applicable for products on this page.



Other variations on request!



Enclosure size: 445 x 135 mm

6 SCHUKO® receptacles 16A, 230V Feeder cable 2 m H07RN-F3G1.5 with SCHUKO® plug 16A, 230V

Part no. 70026

6 SCHUKO® receptacles 16A, 230V Feeder cable 2 m H07RN-F5G2.5 with CEE plug 16A, 5p, 400V

Part no. 70031



1 CEE receptacle 16A, 5p, 400V 4 SCHUKO® receptacles 16A, 230V Feeder cable 2 m H07RN-F5G2.5 with CEE plug 16A, 5p, 400V

Part no. 70028





3 CEE receptacles 16A, 5p, 400V Feeder cable 2 m H07RN-F5G2.5 with CEE plug 16A, 5p, 400V

Part no. 70029



3 CEE receptacles 32A, 5p, 400V Feeder cable 2 m H07RN-F5G4 with CEE plug 32A, 5p, 400V

Part no. 70034



4 SCHUKO® receptacles 16A, 230V 1 RCD \boxtimes 25A, 2p, $I_{\Delta N}$ = 0.03A Feeder cable 2 m H07RN-F3G1.5 with SCHUKO® plug 16A, 230V

Part no. 70027



4 SCHUKO® receptacles 16A, 230V 1 RCD \bowtie 40A, 4p, $I_{\Delta N}$ = 0.03A Feeder cable 2 m H07RN-F5G2.5 with CEE plug 16A, 5p, 400V

Part no. 70032



1 CEE receptacle 16A, 5p, 400V 2 SCHUKO® receptacles 16A, 230V

2 MCB's 16A, 1p, B

1 RCD \boxtimes 40A, 4p, $I_{\Delta N}$ = 0.03A Feeder cable 2 m H07RN-F5G2.5 with CEE plug 16A, 5p, 400V

Part no. 70033



1 CEE receptacle 32A, 5p, 400V 6 SCHUKO® receptacles 16A, 230V 3 MCB's 16A, 1p, B 1 RCD \bowtie 40A, 4p, $I_{\Delta N}$ = 0.03A Feeder cable 2 m H07RN-F5G4 with CEE plug 32A, 5p, 400V

Part no. 70106

MENNEKES EverGUM receptacle combinations, compact

pre-wired for installation. Solid rubber enclosure, signal yellow.

Other variations with CEE receptacles 3, 4 or 5 pole and with grounding-type receptacles of French/Belgian, British, Danish, Swiss and US-standards on request.

Protection type 1P 44

300

Enclosure size: 300 x 230 x 287.5 mm

The drawing is applicable for products on this and the following page.



 MCB's and RCD's directly accessible after opening the cover, all live parts are shock hazard protected



according to BGV A2 even with open cover.

• Screw or padlock offers additional safety.



1 CEE receptacle 32A, 5p, 400V 2 CEE receptacles 16A, 5p, 400V 2 Neozed D 01, 3p 4 SCHUKO® receptacles 16A, 230V 2 Neozed D 01, 1p Feeder cable 2 m H07RN-F5G4 with CEE plug 32A, 5p, 400V

Part no. 70433



As above, but with inlet

Part no. 70276





1 CEE receptacle 32A, 5p, 400V

1 CEE receptacle 16A, 5p, 400V

1 MCB 16A, 3p, C

4 SCHUKO® receptacles 16A, 230V 2 MCB's 16A, 1p, B

1 RCD \bowtie 40A, 4p, $I_{\Delta N}$ = 0.03A Feeder cable 2 m H07RN-F5G4 with CEE plug 32A, 5p, 400V

Part no. 70351





As above, but with inlet

Part no. 70349





2 CEE receptacles 16A, 5p, 400V 4 SCHUKO® receptacles 16A, 230V 1 RCD 40A, 4p, 1_{AN} = 0.03A Feeder cable 2 m H07RN-F5G2.5 with CEE plug 16A, 5p, 400V

Part no. 70352



2 CEE receptacles 16A, 5p, 400V 4 SCHUKO® receptacles 16A, 230V 1 RCD \bigcirc 40A, 4p, $|_{\Delta N}$ = 0.03A with inlet 16A, 5p, 400V

Part no. 70350







2 CEE receptacles 16A, 5p, 400V 4 SCHUKO® receptacles 16A, 230V Feeder cable 2 m H07RN-F5G2.5 with CEE plug 16A, 5p, 400V

Part no. 70434



2 CEE receptacles 16A, 5p, 400V 4 SCHUKO® receptacles 16A, 230V with inlet 16A, 5p, 400V

Part no. 70435





2 CEE receptacles 16A, 5p, 400V 2 MCB's 16A, 3p, C 4 SCHUKO® receptacles 16A, 230V 2 MCB's 16A, 1p, B 1 RCD \bowtie 40A, 4p, $|_{\Delta N}$ = 0.03A Feeder cable 2 m H07RN-F5G4 with CEE plug 32A, 5p, 400V

Part no. 70436

As above, but with inlet

Part no. 70437



8 SCHUKO® receptacles 16A, 230V 1 RCD \bowtie 40A, 4p, $I_{\Delta N}$ = 0.03A Feeder cable 2 m H07RN-F5G2.5 with CEE plug 16A, 5p, 400V

Part no. 70438

8 SCHUKO® receptacles 16A, 230V 1 RCD \bowtie 40A, 4p, $I_{\Delta N}$ = 0.03A with inlet 16A, 5p, 400V

MENNEKES EverGUM receptacle combinations, compact

pre-wired for installation. Solid rubber enclosure, signal yellow.

Other variations with CEE receptacles 3, 4 or 5 pole and with grounding-type receptacles of French/Belgian, British, Danish, Swiss and US-standards on request. Protection type **A** IP 44



2 CEE receptacles 16A, 5p, 400V 4 SCHUKO® receptacles 16A, 230V 2 MCB's 16A, 1p, B 1 RCD \implies 40A, 4p, $I_{\Delta N} = 0.03A$ Feeder cable 2 m H07RN-F5G2.5 with CEE plug 16A, 5p, 400V

Part no. 70412

As above, but with inlet Part no. 70410



1 CEE receptacle 32A, 5p, 400V 2 CEE receptacles 16A, 5p, 400V 2 MCB's 16A, 3p, C 4 SCHUKO® receptacles 16A, 230V 2 MCB's 16A, 1p, B 1 RCD \boxtimes 40A, 4p, $I_{\Delta N} = 0.03A$ Feeder cable 3 m H07RN-F5G4 with CEE plug 32A, 5p, 400V

Part no. 70734

As above, but with inlet Part no. 70531



6 SCHUKO® receptacles 16A, 230V 3 MCB's 16A, 1p, B 1 RCD \boxtimes 40A, 4p, $I_{\Delta N} = 0.03A$ 1 inlet 16A, 5p, 400V

Part no. 70702



8 SCHUKO® receptacles 16A, 230V 4 MCB's 16A, 1p, B 1 RCD \boxtimes 40A, 4p, $I_{\Delta N} = 0.03A$ Feeder cable 2 m H07RN-F5G2.5 with CEE plug 16A, 5p, 400V



Part no. 70724



3 CEE receptacles 16A, 5p, 400V 4 SCHUKO® receptacles 16A, 230V 2 MCB's 16A, 1p, B 1 RCD \boxtimes 40A, 4p, $I_{\Delta N} = 0.03A$ Feeder cable 2 m H07RN-F5G2.5 with CEE plug 16A, 5p, 400V

Part no. 70416

As above, but with inlet Part no. 70414



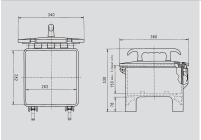
1 CEE receptacle 32A, 5p, 400V 1 CEE receptacle 16A, 5p, 400V 1 MCB 16A, 3p, K 4 SCHUKO® receptacles 16A, 230V 2 MCB's 16A, 1p, K 1 RCD \boxtimes 40A, 4p, $I_{AN} = 0.03A$ Feeder cable 2 m H07RN-F5G4 with CEE plug 32A, 5p, 400V

As above, but with inlet Part no. 70660

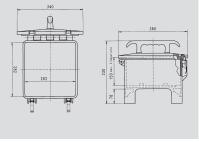
pre-wired for installation. Solid rubber enclosure, **signal yellow**.

Other variations with CEE receptacles 3, 4 or 5 pole and with grounding-type receptacles of French/Belgian, British, Danish, Swiss and US-standards on request.

Protection type A IP 44



The drawing is applicable for products on this page.



Enclosure size: 360 x 340 x 330 mm



Other variations on request!



1 CEE receptacle 63A, 5p, 400V 1 CEE receptacle 32A, 5p, 400V 1 Neozed D 02, 3p 1 CEE receptacle 16A, 5p, 400V

1 Neozed D 01, 3p

4 SCHUKO® receptacles 16A, 230V 2 Neozed D 01, 1p

1 RCD \cong 63A, 4p, $I_{\Delta N} = 0.03A$ Feeder cable 3 m H07RN-F5G10 with CEE plug 63A, 5p, 400V

Part no. 70440

As above, but with inlet

Part no. 70441



1 CEE receptacle 32A, 5p, 400V 1 MCB 32A, 3p, C 1 CEE receptacle 16A, 5p, 400V 1 MCB 16A, 3p, C 4 SCHUKO® receptacles 16A, 230V 2 MCB's 16A, 1p, B 1 RCD \cong 63A, 4p, $I_{\Delta N} = 0.03A$ Feeder cable 3 m H07RN-F5G10

with CEE plug 63A, 5p, 400V

1 CEE receptacle 63A, 5p, 400V

Part no. 70025



As above, but with inlet

Part no. 70049



2 CEE receptacles 32A, 5p, 400V 2 MCB's 32A, 3p, C 2 CEE receptacles 16A, 5p, 400V 2 MCB's 16A, 3p, C 4 SCHUKO® receptacles 16A, 230V 2 MCB's 16A, 1p, B

1 RCD \boxtimes 63A, 4p, $I_{\Delta N}$ = 0.03A Feeder cable 3 m H07RN-F5G10 with CEE plug 63A, 5p, 400V

Part no. 70442

As above, but with inlet

Part no. 70443



2 CEE receptacles 32A, 5p, 400V 2 CEE receptacles 16A, 5p, 400V 2 MCB's 16A, 3p, C 4 SCHUKO® receptacles 16A, 230V 2 MCB's 16A, 1p, B 1 RCD \boxtimes 40A, 4p, $I_{AN} = 0.03A$ Feeder cable 3 m H07RN-F5G4 with CEE plug 32A, 5p, 400V

Part no. 70444

As above, but with inlet

Part no. 70445



1 CEE receptacle 32A, 5p, 400V 3 CEE receptacles 16A, 5p, 400V 3 Neozed D 01, 3p 4 SCHUKO® receptacles 16A, 230V 2 Neozed D 01, 1p Feeder cable 3 m H07RN-F5G4 with CEE plug 32A, 5p, 400V

Part no. 70446

As above, but with inlet

Part no. 70447



1 CEE receptacle 32A, 5p, 400V 1 CEE receptacle 16A, 5p, 400V 1 MCB 16A, 3p, C 8 SCHUKO® receptacles 16A, 230V 4 MCB's 16A, 1p, B Feeder cable 3 m H07RN-F5G4 with CEE plug 32A, 5p, 400V

Part no. 70448

As above, but with inlet





Receptacles in enclosures of stainless steel or other metals

Stainless steel surface mounted receptacle combinations, for wall or with column Page 194 and 195





Stainless steel flush mounted combinations, for water and power connection Page 197





Power posts *Page 198 and 199*

CombiTOWER® Page 200 and 201





Stainless steel weather shields, for wall or with column Page 202 and 203

Receptacles in enclosures of stainless steel and other metals

Power and water on site.



Exacting ambiance demand sophisticated, reliable equipment. Wherever dependable protection against unauthorised access is required, when live as well as when switched off, MENNEKES stainless steel combinations, either surface or flush mounted, are the equipment of choice.

Power supply always close by: In the workplace, in the garden, in leisure parks ... and even in wintry conditions thanks to frost-proof taps with automatic emptying.



Easy. Swiftly installed. Wind and weather proof.





Outdoor electric appliances are exposed to unfavourable climatic conditions. Our modular system of weather shields and supports enables individual combinations of installations fixed to the wall and on the ground, with columns.

Rugged. Full of energy. Vandalism-proof.

Steel power posts provide a safe means of energy supply, protection against trespassing or the blocking of routes. Hot-dip galvanised and powder coated, these are available in various sizes.





Plugs for the world

Safe. Practical. Timelessly elegant.



Power. Compressed air. Water. Outdoors and indoors.

The solution: CombiTOWER®.

Short routes to your energy source for industry, workshops, assembly shops, loading platforms, etc.

- Protection type IP 44 with closed door, even when appliances are plugged in.
- Cable entry with closed door.
- Safety lock protects against unauthorised access.



Material properties. Important information and recommendations.

Our stainless steel products are made from high grade stainless V2A steel (material 1.4301). They are excellently suited to indoor and outdoor use.

However, in covered swimming pools, in areas where salt water is present or in electroplating plants, substances such as salt, chlorine or grinding dust in connection with alloy components of V2A stainless steel may result in chemical reactions which give rise to rust. This can be prevented by applying an additional transparent lacquer coating or by powder coating or by the use of V4A stainless steel, e.g. 1.4404.

Please contact our customer service department who will be pleased to provide exhaustive and expert advice.

MENNEKES surface mounted receptacle combinations in stainless steel, for wall fixing or with column

Stainless steel enclosure (materiaal 1.4301), surface with a flat finish (K240).

Protection type AIP 44 with closed door.

High protection factor and attractive design.

Surface mounted stainless steel combinations produced by MENNEKES are recommended for all applications where equipment must be protected from unauthorised access when live as well as when switched off, while at the same time the visual appearance is important.

The rugged construction and timeless elegance of flat finished stainless steel can meet these requirements.



Part no. 18422 drawing no. 15587 X Part no. 18424 drawing no. 15588 Part no. 18424 drawing no. 15588

Dimensional drawing for surface mounted stainless steel combination no. 83698 empty enclosure no. 18433 as above,

but with dimensions: (H x W x D): 700 x 300 x 310 mm

Surface mounted receptacle combinations from flat finished stainless steel

Dimensions (H x W x D): 530 x 400 x 220 mm, standard door with stop on right, front door with swing handle and cylinder lock – lockable even when plugs are connected. Cable entry / connection options: 2 x entry nipples M32 on bottom, 2 x brass screw plugs M16 on bottom, terminal (shock hazard protected to BGV A2)

for cables up to 5 x 25 mm²

- 1 CEE receptacle 32A, 5p, 400V
- 1 MCB 32A, 3p, C
- 1 CEE receptacle 16A, 5p, 400V
- 1 MCB 16Å, 3p, C
- 2 SCHUKO® receptacles 16A, 230V
- 2 MCB's 16A, 1p, B
- 1 RCD $\stackrel{\frown}{\sim}$ 63A, 4p, $I_{\Delta N} = 0.03A$

Part no. 83744

Surface mounted receptacle combinations from flat finished stainless steel

Dimensions (H x W x D): 700 x 530 x 350 mm, standard door stop on the right, front door with swing handle and cylinder lock – lockable even when plugs are connected.

- 2 x cable entry bushes on bottom, suitable for cable diameters from 13 to 49 mm,
- for cable diameters from 13 to 49 mm, 2 x brass screw plugs M16 on bottom,
- 1 x brass screw plug M20 on bottom, terminal (shock hazard protected to BGV A2)
- for 2 cables up to 5 x 50 mm²

- 1 CEE receptacle 125A, 5p, 400V
- 1 NH 00/3P switched fuses
- 1 CEE receptacle 63A, 5p, 400V
- 1 MCB 63A, 3p, C
- 1 CEE receptacle 32A, 5p, 400V
- 1 MCB 32Å, 3p, C
- 1 CEE receptacle 16A, 5p, 400V
- 1 MCB 16A, 3p, C
- 3 SCHUKO® receptacles 16A, 230V
- 3 MCB's 16A, 1p, B
- Back-up fuses:
- 2 Neozed D 02, 3p (E18) with safety fuses 63A
- 2 RCD's $\stackrel{\sim}{\sim}$ 63A, 4p, $I_{\Delta N} = 0.03A$

Part no. 83704

Surface mounted receptacle combinations from flat finished stainless steel

Dimensions (H x W x D):
700 x 300 x 310 mm,
standard door stop on the right,
front door with swing handle
and cylinder lock – lockable even when
plugs are connected.

2 x cable entry bushes on bottom, suitable for cable diameters from 13 to 49 mm, 1 x brass screw plug M20 on bottom, terminal (shock hazard protected to BGV A2)

for 2 cables up to 5 x 25 mm²

- 1 CEE receptacle 63A, 5p, 400V
- 1 CEE receptacle 32A, 5p, 400V
- 1 MCB 32A, 3p, C
- 1 CEE receptacle 16A, 5p, 400V
- 1 MCB 16A, 3p, C
- 4 SCHUKO® receptacles 16A, 230V
- 2 MCB's 16A, 1p, B
- 1 RCD \boxtimes 63A, 4p, $I_{\Delta N} = 0.03A$

Part no. 83698

Each surface mounted stainless steel receptacle combination comes with 1 set (4 pcs.) of **fixing straps** in a bag.









- 1 CEE receptacle 16A, 5p, 400V 1 MCB 16A, 3p, C
- 4 SCHUKO® receptacles 16A, 230V
- 4 MCB's 16A, 1p, B
- 1 RCD \boxtimes 40A, 4p, $I_{\Delta N}$ = 0.03A

Part no. 83725



Accessories

Surface mounted enclosure from flat finished stainless steel Dimensions 530 x 400 x 220 mm Part no. 18422

Column flat finished stainless steel Dimensions (H x W): 900 x 400 mm Part no. 18424

Galvanised mounting plate Part no. 18416

Weather shield flat finished stainless steel Part no. 15586



- 1 CEE receptacle 63A, 5p, 400V
- 1 MCB 63A, 3p, C
- 2 CEE receptacles 32A, 5p, 400V
- 2 MCB's 32A, 3p, C
- 2 CEE receptacles 16A, 5p, 400V
- 2 MCB's 16A, 3p, C
- 3 SCHUKO® receptacles 16A, 230V 3 MCB's 16A, 1p, B
- Back-up fuses:
- 2 Neozed D 02, 3p (E18) with safety fuses 63A
- 2 RCD's \boxtimes 63A, 4p, $I_{\Delta N} = 0.03A$

Part no. 83705

- 1 CEE receptacle 63A, 5p, 400V
- 1 MCB 63A, 3p, C
- 1 CEE receptacle 32A, 5p, 400V
- 1 MCB 32A, 3p, C
- 1 CEE receptacle 16A, 5p, 400V
- 1 MCB 16A, 3p, C
- 4 SCHUKO® receptacles 16A, 230V
- 4 MCB's 16A, 1p, B
- Back-up fuses:
- 2 Neozed D 02, 3p (E18) with safety fuses 63A
- 2 RCD's \boxtimes 63A, 4p, $I_{\Delta N} = 0.03A$

Part no. 83706

Accessories

Surface mounted enclosure from flat finished stainless steel Dimensions: 700 x 530 x 350 mm Part no. 18423

Column flat finished stainless steel Dimensions (H x W): 830 x 330 mm Part no. 18426

Galvanised mounting plate Part no. 15577

Weather shield flat finished stainless steel Part no. 15575



Accessories

Surface mounted enclosure from flat finished stainless steel Dimensions: 700 x 300 x 310 mm

Part no. 18433

Other accessories:

for enclosure size 700 x 300 x 310 mm Galvanised mounting plate

Part no. 18442

Weather shield flat finished stainless steel

Part no. 18438



Weather shield from flat finished stainless steel, available for the three sizes of enclosure shown on this page.

Column flat finished stainless steel

- detachable back panel for easy
- 1 C-profile busbar on the inside for cord grip

Cord grips not included in the scope of supply.

(Columns available only for the enclosure sizes

530 x 400 x 220 mm and 700 x 530 x 350 mm)

MENNEKES stainless steel flush mounted receptacle combinations

Front stainless steel (material 1.4301), flat finished (K240).

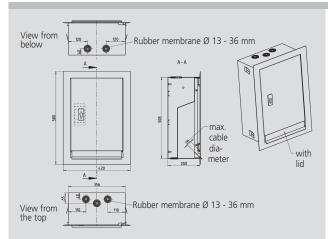
Protection type IP 43 with closed door.

Suits both, modern and classical architecture. Clean. Safe. Timelessly elegant.

The MENNEKES policy aims at combining practical power supply solutions with architectural requirements.

Flush mounted stainless steel combinations offer the ideal solution for use in public buildings such as theatres, sports stadiums and event arenas.





Flush mounted combinations, consisting of:

- . .

Front door and trim frame flat finished stainless steel

Dimensions (H x W): 580 x 420 mm front door, lockable with cylinder, lockable even when plugs are connected, door stop on the right

Flush mounted stainless steel enclosure

Dimensions (H x W x D): 520 x 360 x 200 mm cable entry bush 3 x top 2 x bottom, suitable for cable diameters from 13 to 49 mm



- 1 CEE receptacle 16A, 5p, 400V
- 1 MCB 16A, 3p, C
- 4 SCHUKO® receptacles 16A, 230V
- 4 MCB's 16A, 1p, B
- 1 RCD $\stackrel{\frown}{\boxtimes}$ 40A, 4p, $I_{\Delta N} = 0.03A$ connections for 2 cables of up to 5 x 25 mm²

Part no. 84373



- 1 CEE receptacle 32A, 5p, 400V
- 1 MCB 32A, 3p, C
- 1 CEE receptacle 16A, 5p, 400V
- 1 MCB 16A, 3p, C
- 2 SCHUKO® receptacles 16A, 230V
- 2 MCB's 16A, 1p, B
- 1 RCD \boxtimes 63A, 4p, $I_{\Delta N} = 0.03A$ connections for 2 cables of up to 5 x 25 mm²

Part no. 84374



Flush mounted enclosure stainless steel

Dimensions (H x W x D): 520 x 360 x 200 mm

with front door and trim frame from flat finished stainless steel

Dimensions (H x W): 580 x 420 mm

Part no. 18427

Galvanised mounting plate Part no. 18416



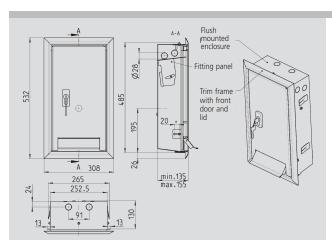
MENNEKES stainless steel flush mounted receptacle combinations for water and power connection

Trim frame and flush mounted enclosure from stainless steel (material 1.4404) flat finished (K240). Protection type \triangle IP 44 with closed door.

Power and water on site.

Power supply always close by: In the workplace, in the garden, in leisure parks ... and even in wintry conditions thanks to frost-proof taps with automatic emptying.





Flush mounted combination for water and power connections consisting of:

Front door and trim frame flat finished stainless steel

Dimensions (H x W): 532 x 308 mm front door, lockable with cylinder, lockable even when plugs or hoses are connected, door stop on the right



Flush mounted stainless steel enclosure

Dimensions (H x W x D): 485 x 265 x 130 mm cable entry bush 2 x top, suitable for cable diameters up to 25 mm (2 cable entries on top left and top right each to be cut out),

- 1 pivoting mounting angle, pre-drilled to accommodate optionally:
- 1 double Cepex receptacle, product group 1027 (CEE 16A or SCHUKO®)
- 2 single wall-mounted CEPEX receptacles (CEE receptacle 16A or SCHUKO®)
- 1 combination enclosure 170 x 118 mm

Accommodation for frost-proof tap, $^{1}/_{2}$ " (part no. 18440)

Part no. 18432



Accessories

Frost-proof outdoor tap

with automatic emptying function, angled gland for ½" hoses, rated pressure: PN 16, flexible DN 15 connection with gland, all metal parts which come into contact with liquids are made from red brass, with black plastic handle and blue marking plate, outlet with connected collar and EPDM seal with DIN/DVGW sound insulation

approval including pipe air-release valve and check valve as safety devices to DIN EN 1717 and DIN 1988 (part 4), water taps preassembled by others.

2 hexagon head screws to fasten the water tap are enclosed as detached parts.

Part no. 18440



The pivoting mounting angle and the splash guard from part of the scope of supply.

Important note:

According to VDE regulations, the above stainless steel combination for power and water connection must be protected by an RCD (0.03A).

Variations of stainless steel flush mounted combinations for power and water connection.



MENNEKES power posts

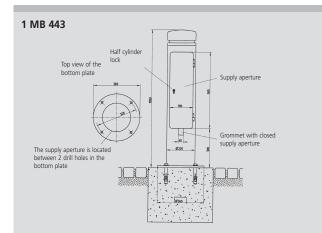
Made from steel. High energy. Vandalism-proof. Protection type ▲ IP 44 or ♦ IP 67.

Power posts provide a secure means of energy supply and at the same time a means of roping off or protecting market places, fairgrounds, harbours, arenas for outdoor events, areas of gardens and parks.

Hot-dip galvanised and powder coated power posts are available in various sizes (diameters).

The door is provided with a cylinder lock. Energy may be drawn when the door is open or – for reasons of safety – closed.

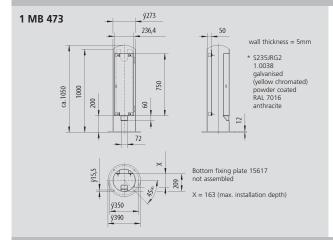
Special colours according to the RAL colour chart available upon request.



Power post

from steel tube, wall thickness 4.0 mm, hot-dip galvanised, powder-coated, colour: red, hinged supply aperture with safety lock, dimensions (H x Ø): 1050 x 220 mm (inside) weight: approx. 45 kg

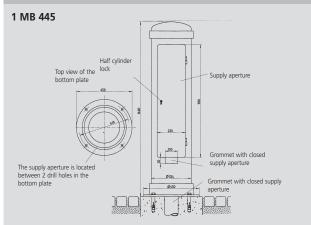
Aperture at bottom (H x W) 50 x 40 mm Fixing flange: Ø 360 mm with 4 fixing holes 15 mm For fixing to an existing fundament.



Power post

from steel tube, wall thickness 4.5 mm, hot-dip galvanised, powder-coated, colour: anthracite (RAL 7016), hinged supply aperture with safety lock, dimensions (H x Ø): 1050 x 273 mm (inside) weight: approx. 60 kg

Aperture at bottom (H x W) 60 x 70 mm Fixing flange: Ø 390 mm with 4 fixing holes 15.5 mm For fixing to an existing fundament.



Power post

from steel tube, wall thickness 4.5 mm, hot-dip galvanised, wet painted, colour: anthracite iron glitter DB703, hinged supply aperture with safety lock, dimensions (H x Ø): 1400 x 325 mm (inside) weight: approx. 100 kg

Aperture at bottom (H \times W) 50 \times 100 mm Fixing flange: Ø 450 mm with 4 fixing holes 15 mm For fixing to an existing fundament.









Туре: 1 CEE receptacle 16A, 5p, 400V 1 MCB 16A, 3p, C 2 SCHUKO® receptacles 16A, 230V 1 MCB 16A, 1p, B Cable entry: 2 x M 25 open at the top connections for 1 cable up to 5 x 6 mm² Part no. 84335



Enclosure 18500 RO Mounting plate 15561



1 CEE receptacle 32A, 5p, 400V 1 MCB 32A, 3p, C 1 CEE receptacle 16A, 5p, 400V 1 MCB 16A, 3p, C 2 SCHUKO® receptacles 16A, 230V 2 MCB's 16A, 1p, B 1 RCD $\stackrel{\textstyle \sim}{\textstyle \sim}$ 40A, 4p, $I_{\Delta N}=0.03A$ for all receptacles Cable entry: $1\ x\ M$ 32 open at the top 1 x M 32 plugged at the top



Enclosure 18503 AG Mounting plate 15617



1 CEE receptacle 63A, 5p, 400V 1 CEE receptacle 32A, 5p, 400V 1 MCB 32A, 3p, C 1 CEE receptacle 16A, 5p, 400V 1 MCB 16A, 3p, C 2 SCHUKO® receptacles 16A, 230V 2 MCB's 16A, 1p, B for all receptacles Cable entry: 2 x M 40 at the bottom 2 x M 40 at the top

connections for 2 cables up to $5 \times 25 \text{ mm}^2$ Part no. 83722



18502 AZ **Enclosure** Mounting plate 15566

9

MENNEKES stainless steel CombiTOWER®

Made from stainless steel (material 1.4301), also suited for outdoor installations.

CombiTOWER® – short routes to your energy source.

The ideal tap for industry, workshops, assembly shops, loading platforms, etc.

Suitable for combination with receptacles from 16A to 63A.

Special RAL colours available upon request.

Practical handling.

Enclosure size 1043 x 254 x 249 mm: Due to removable hood easy assembly. The hinged covers of the AMAXX® combinations can be opened smoothly.



CombiTOWER®

stainless steel with removable cover, painted **signal yellow** (RAL 1003), dimensions (H x W x D): 1043 x 254 x 249 mm, 1043 x 254 x 415 mm (with door)

Part no. 15679

Part no. 15681 (with door)

CombiTOWER®

stainless steel with removable cover,

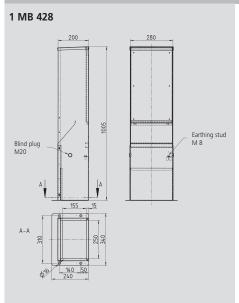
bright finish,

dimensions (H x W x D): 1043 x 254 x 249 mm, 1043 x 254 x 415 mm (with door)

Part no. 15678

Part no. 15680 (with door)





CombiTOWER®

stainless steel with mounting plate and adjustable front plate,

painted **signal yellow** (RAL 1003), dimensions (H x W x D):

1005 x 280 x 200 mm

Part no. 15524

CombiTOWER®

stainless steel

with mounting plate and front plate, **bright finish**,

dimensions (H x W x D): 1005 x 280 x 200 mm



Component options – CombiTOWER®.

Electrical outdoor installation easily made.

Short distance:

All the required supply connections (power, compressed air and water) are directly accessible at the workstation.

Easy installation:

Built-in standard rails for strain relief of feeder cable and M20 for pneumatic connection included. M8 ground stud integrated in the enclosure. Front plate may be staggered up or down, depending on the enclosure size

Easy to order:

- select the required combination size with the necessary components or receptacles
- select the CombiTOWER® type for required enclosure size and quote both catalogue numbers
- the page numbers given below will help you find the right combination





CombiTOWER® 15678, 15679, 15680, 15681:

- with fixing holes for AMAXX® combinations at the rear panel: on top: 2 threaded bolts M6 + screw nut (to hook in the combination) at bottom: 2 threaded bolts M6 + screws
- with M20 blind plug for pneumatic connections
- with M8 ground stud

CombiTOWER®s shown on the left are for use of

AMAXX® combinations

at the following sizes:

260 x 225 mm, 390 x 225 mm and 520 x 225 mm (see chapter 7)



CombiTOWER® 15524, 15525:

- with fixing holes and M5 thread in the mounting plate for different enclosure sizes, including screws and washers
- with M20 blind plug for pneumatic connections
- with M8 ground stud

CombiTOWER®s shown on the left are for use of **combinations** at the following size:

520 x 260 mm (see chapter 7)



Enclosure size 1005 x 280 x 200 mm with removable mounting plate.



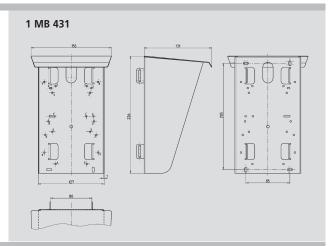
MENNEKES stainless steel weather shields for wall or with column

Energy exactly where it's needed. Simple. Swiftly installed. Wind and weather proof.

Safe energy supply in virtually any place of application.

Outdoor electrical appliances are exposed to adverse weather conditions and UV radiation.

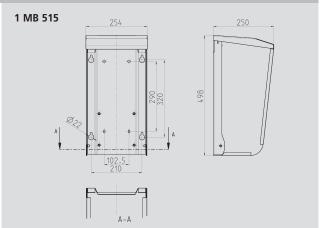
The use of different electrical appliances calls for different receptacles, which are available as handy complete combinations.

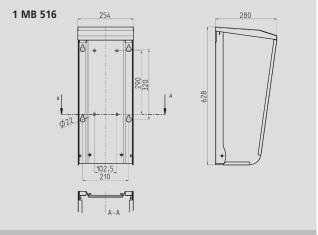


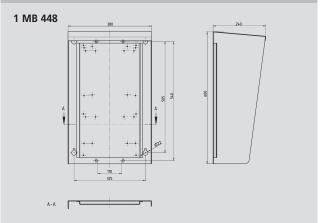
Column from stainless steel (material 1.4301)

Surface: stainless steel, bright finish (basic column for the three shields shown on the right), height approx. 1300 mm











Weather shield made from stainless steel (material 1.4301) with side blinds

for wall mounting or on a column

Dimensions (H x W x D): 226 x 155 x 131/52 mm surface: bright finish

Part no. 15542

The examples on the right show some of the individually designed concepts.



Attention! When mounting on a column, please order separately:

Stainless steel mounting clips (2 pcs. in a set)

Ø 70 – 90 mm **Set: part no. 22986**

Ø 90 – 110 mm Set: part no. 22987

Ø 110 – 130 mm **Set: part no. 22988**



Weather shield made from stainless steel (material 1.4301) with side blinds

for wall mounting or on a column

Dimensions (H x W x D): 498 x 254 x 250 mm surface: bright finish

Part no. 15682



Shield 15682

Suitable to accommodate:

AMAXX® combinations enclosure sizes 260 x 225 mm and 390 x 225 mm



Weather shield made from stainless steel (material 1.4301) with side blinds

for wall mounting or on a column

Dimensions (H x W x D): 628 x 254 x 280 mm surface: bright finish

Part no. 15683



Shield 15683

Suitable to accommodate:

AMAXX® combinations enclosure sizes 520 x 225 mm



Weather shield made from stainless steel (material 1.4301) with side blinds

for wall mounting or on a column

Dimensions (H x W x D): 600 x 380 x 240/160 mm surface: bright finish

Part no. 15531



Shield 15531

Suitable to accommodate:

Combinations enclosure sizes 520 x 260 mm

EverGUM combinations enclosure sizes 380 x 230 mm and 380 x 320 mm







CEE plugs and receptacles for special applications

with highly heat resistant contact carriers and nickel plated contacts

for use in corrosive environments

Receptacles and plugs AM-TOP®, 16A and 32A, IP 44 and IP 67 Page 208 and 209





Connectors and phase inverters AM-TOP®, 16A and 32A, IP 44 and IP 67 Page 210 and 211

for use under harsh conditions

Receptacles, 16A to 125A, IP 44 and IP 67 Page 212 and 213





Plugs PowerTOP, 16A to 125A, IP 44 and IP 67 Page 212 to 215

Connectors PowerTOP, 16A to 125A, IP 44 and IP 67 Page 214 to 217



of AMELAN with high resistance to chemicals

Receptacles and DUO receptacles, switched and interlocked, 16A to 63A, IP 67 Page 218 and 219

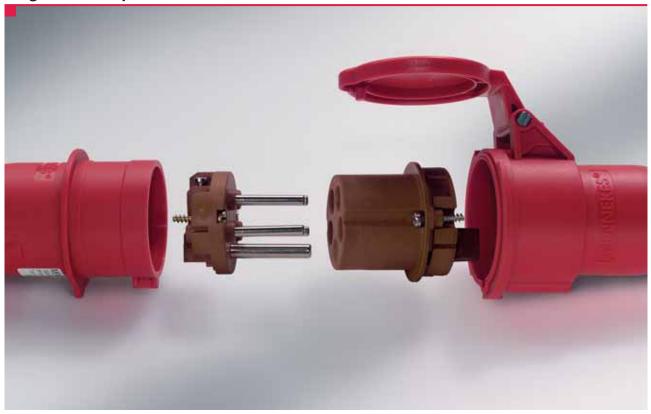




receptacle combinations, wall mounted, IP 44 and IP 67
Page 220 and 221

CEE plugs and receptacles for special applications

Plugs and receptacles for use in corrosive environments.



Highly heat resistant contact carriers. Nickel plated contacts. 16A and 32A.

These appliances are guaranteed to be resistant to corrosive environments: High humidity, salt or acidic air, corrosive gases and vapours.

Accordingly, they are mainly used in the food processing industry, in breweries, dairies, farms and market gardens, wineries.

Plugs and receptacles for use under harsh conditions.

Highly heat resistant contact carriers for areas with severe conditions are standard with 63A and 125A.

For use in corrosive environments, the contacts are additionally nickel plated.







Plugs for the world

PowerTOP stands up to the harsh conditions.



A very functional design makes for easy handling when inserting and withdrawing. The external cable grip protects the gasket from strain and makes the wiring compartment larger. A glance at the outside of the plug is sufficient to check on the effectiveness of

the cable grip. Harsh environments such as **salt-, coal and slate mines, construction sites, shipyards, docks and heavy industry like steel plants** meet all requirements for quality and sturdiness.

Plugs and receptacles made of AMELAN with high resistance to chemicals.

AMELAN is the plastic used by MENNEKES for plugs and receptacles destined for use in environments where they are exposed to certain chemicals or other corrosive substances. AMELAN has excellent resistance to fuels, oils and fats, dilute acids and alkalines, cleaning fluids, most aqueous salt solutions and a wide variety of chemicals including aliphatic hydrocarbons. AMELAN is a plastic that combines high mechanical, thermal and electrical properties with excellent dimensional stability and resistance to chemicals. They are fit for action in chemical plants, in refineries, in the food processing industry, in washdown areas and so on.







AMELAN is resistant to:

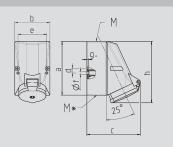
- sea water
- detergents
- trichlorethylene
- toluene
- edible fat
- aqueous soap solution
- caustic soda
- motor oils
- milk
- caustic potash
- washing up liquid
- fruit juices
- diesel oil
- gasoline
- aqueous ammonia solution



MENNEKES CEE receptacles, plugs and inlets for use in corrosive environments

with highly heat resistant contact carrier and nickel plated contacts

to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code. Enclosure and insert made of **AMAPLAST**. Other voltages and frequencies available on request.



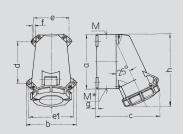
1 MB 209	Amp.		16		l	32	
1 MB 43	Poles	3	4	5	3	4	5
Dim. in mm	a b c	87 64 99	128 84 122	128 84 124	128 84 136	128 84 136	128 84 138
	d e f	40 50 4,5	11 68 5,3	11 68 5,3	11 68 5,3	11 68 5,3	11 68 5,3
	g. h M	115 20	4 144 25	4 145 25	158 32	4 158 32	4 160 32
Max. cable dia	M* m. (mm)	M20 2 (blind) to 15	2xM25 o be cu 18		2x to 18/25	M25 (k o be cu 18/25	ıt out
Terminal for co section (mm²) r	nd. cross	1,5 —4	1,5 —4	1,5 —4	2,5 —10	2,5 —10	2,5 —10

Receptacles

with highly heat resistant contact carrier and nickel plated contacts, internal fixing, one cable entry at top, two blind cable entries (can be cut out) at bottom, enclosure can be turned through 180°

▲ IP 44

Product group 1040/1041, type 20235 shown.



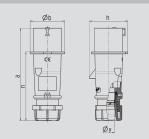
Drawing	Amp.		16			32	
1 MB 219	Poles	3	4	5	3	4	5
Dim. in mm	n a b c	95 102 115	95 102 124	95 102 129	120 112 143	120 112 143	120 112 150
	d e e1	64,2 77,5 88	64,2 77,5 88	64,2 77,5 88	90,2 79 98,5	90,2 79 98,5	90,2 79 98,5
	f g. h	5,5 5 128	5,5 5 128	5,5 5 132	5,5 5 160	5,5 5 160	5,5 5 160
	M M*	20 20 (blind) t			t	32 M 32 (o be cu	ut out
Max. cable dia	am. (mm)	15	18	18	25	25	25
Terminal for co section (mm²)			1,5 —4	1,5 —4	2,5 —10	^{2,5} —10	^{2,5} —10

Receptacles

with highly heat resistant contact carrier and nickel plated contacts, with 4 external fixing holes, with one cable entry at top and one blind cable entry (can be cut out) at bottom

♦ IP 67

Product group 1049, type 21371 shown.



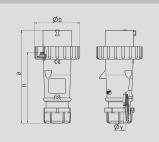
Drawing	Amp.		16		I	32	
2 MB 217	Poles	3	4	5	3	4	5
Dim. in mm	а	142	147	147	186	186	180
	b	53	59	67	70	70	77
	h	59	69,4	76	81	81	89,5
	n	105,2	110,5	110,5	141	141	135
	У	14,5	16	16	22	22	22
Terminal for co	nd. cross	1	1	1	2,5	2,5	2,5
section (mm²) r	ninmax.	-2,5	-2,5	-2,5	<u>—</u> 6	6	6

Plugs AM-TOP®

single part body, screw terminals, with highly heat resistant contact carrier and nickel plated contacts, cable gland and sealing

▲ IP 44

Product group 2141, type 21421 shown.



Drawing	Amp.		16			32	
2 MB 218	Poles	3	4	5	3	4	5
Dim. in mn	n a	142	144	147	186	186	180
	b	70	78	87	94	94	101
	n	109	111	114	145	145	138
	у	14,5	16	16	22	22	22
Terminal for co	ond. cross	1	1	1	2,5	2,5	2,5
section (mm²)	minmax.	—2,5 ·	—2,5 ·	-2,5	—6	-6	 6

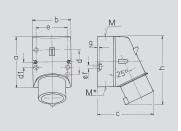
Plugs AM-TOP®

single part body, screw terminals,

with highly heat resistant contact carrier and nickel plated contacts, cable gland and sealing

♦ IP 67

Product group 2149, type 21363 shown.



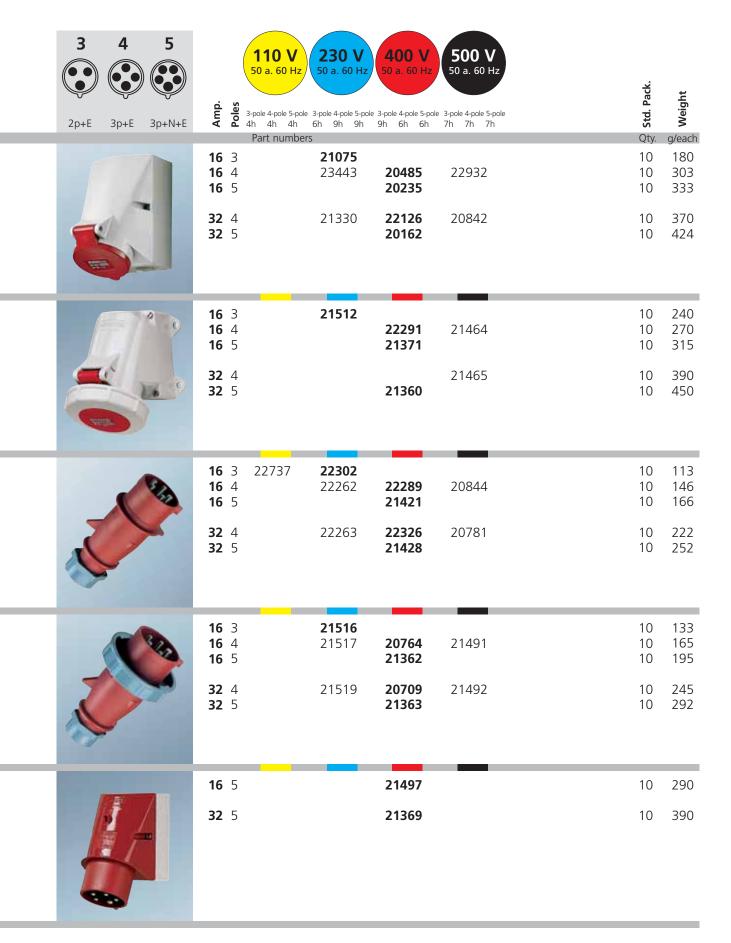
Drawing	Amp.		16			32	
2 MB 32	Poles	3	4	5	3	4	5
Dim. in mm	a b c	87 64 93	100 75 106	100 75 110	128 84 133	128 84 133	128 84 135
	d d1 e	40 50,5	10,5 59	10,5 59	11 68	11 68	11 68
	f g. h	4,5 4 122	5 4 133	5 4 135	5,3 4 169	5,3 4 169	5,3 4 170
	M M*	t	20 /1 20 (I o be cu	it out	l to	25 VI 25 (k o be cu	it out
Max. cable dia	m. (mm)	15	15	15	18/25	18/25	18/25
Terminal for co section (mm²) r			2,5	1 2,5	2,5 —6	2,5 —6	2,5 —6

Inlets

with highly heat resistant contact carrier and nickel plated contacts, cable entry also possible on the rear side, enclosure base with stamped recess for quick cutting out

📤 IP 44

Product group 2045, type 21497 shown.



Protective covers for watertight plugs

see page 210/211.

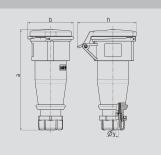
Receptacles and plugs with highly heat resistant contact carrier and nickel plated contacts in 63A and 125A

see page 212 to 215.

MENNEKES CEE connectors and phase inverters for use in corrosive environments

with highly heat resistant contact carrier and nickel plated contacts

to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code. Enclosure and insert made of **AMAPLAST**. Other voltages and frequencies available on request.



Drawing	Amp.		16			32	
3 MB 63	Poles	3	4	5	3	4	5
Dim. in mn	n a	162	165	167	209	209	208
	b	60	68	76	82	82	89
	h	83	92	98	100	100	108
	у	14,5	16	16	22	22	22
Terminal for o	ond. cross	1	1	1	2,5	2,5	2,5
section (mm²)	minmax.	—2,5 ·	—2,5 ·	-2,5	—6	—6	6

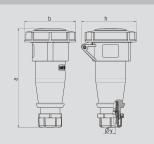
Connectors AM-TOP®

single part body, screw terminals,

with highly heat resistant contact carrier and nickel plated contacts, cable gland and sealing

▲ IP 44

Product group 3141, type 21422 shown.



Drawing	Amp.		16			32	
3 MB 62	Poles	3	4	5	3	4	5
Dim. in mm	ı a	146	166	172	212	212	213
	b	72	79	89	96	96	102
	h	80	88	95	98	98	105
	у	14,5	16	16	22	22	22
Terminal for co	ond. cross	1	1	1	2,5	2,5	2,5
section (mm²) ı	minmax.	—2,5 ·	—2,5 ·	—2,5	—6	-6	6
	ļ				l		

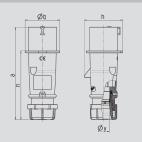
Connectors AM-TOP®

single part body, screw terminals,

with highly heat resistant contact carrier and nickel plated contacts, cable gland and sealing

♦ IP 67

Product group 3149, type 21366 shown.



Drawing	Amp.		16		I	32	
2 MB 217	Poles	3	4	5	3	4	5
Dim. in mn	n a	142	147	147	186	186	180
	b	53	59	67	70	70	77
	h	59	69,4	76	81	81	89,5
	n		110,5		141	141	135
	У	14,5	16	16	22	22	22
Terminal for c	ond. cross	1	1	1	2,5	2,5	2,5
section (mm²)	minmax.	-2,5	-2,5	—2,5	—6	6	6

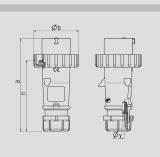
Phase inverters AM-TOP®

single part body, screw terminals,

with highly heat resistant contact carrier and nickel plated contacts, cable gland and sealing

▲ IP 44

Product group 2244, type 22811 shown.



Drawing	Amp.		16			32	
2 MB 218	Poles	3	4	5	3	4	5
Dim. in mn	n a	142	144	147	186	186	180
	b	70	78	87	94	94	101
	n	109	111	114	145	145	138
	у	14,5	16	16	22	22	22
Terminal for o	ond. cross	1	1	1	2,5	2,5	2,5
section (mm²)	minmax.	—2,5 ·	—2,5 ·	-2,5	6	6	6

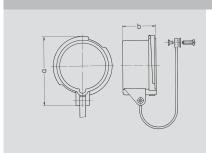
Phase inverters AM-TOP®

single part body, screw terminals,

with highly heat resistant contact carrier and nickel plated contacts, cable gland and sealing

▲ IP 44

Product group 2147, type 22814 shown.



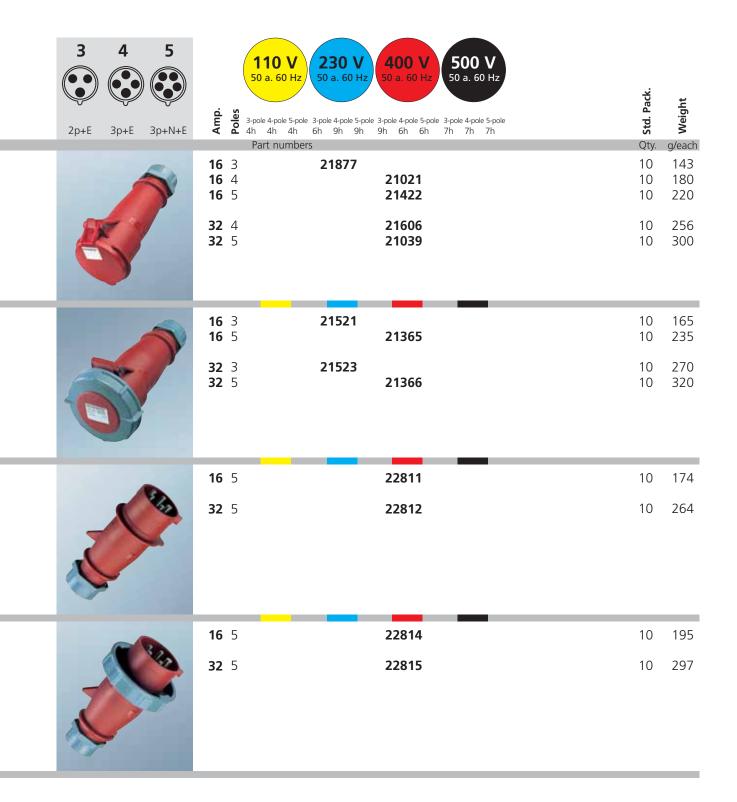
Drawing	Amp.	I	16		I	32	
2 MB 146	Poles	3	4	5	3	4	5
Dim. in mm	ı a b	70 41	79 41	86 42	91 51	91 51	99 52
Drawing	Amp.		63			125	
2 MB 146	Poles	3	4	5	3	4	5
Dim. in mm	ı a b	108 73	108 73	108 73	119 79	119 79	119 79

Protective covers

for watertight plugs

♦ IP 67

Product group 8226, type 40786 shown.



Connectors

with highly heat resistant contact carrier and nickel plated contacts in 63A and 125A

see page 214 to 217.

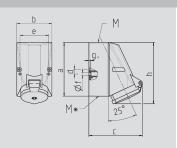


for amp.	for poles	Part numbers
16	3	40784
16	4	40778
16	5	40785
32	3	40841
32	4	40841
32	5	40786

MENNEKES CEE receptacles and plugs for use under harsh conditions

with highly heat resistant contact carrier and nickel plated contacts

to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code. Enclosure and insert made of **AMAPLAST**. Other voltages and frequencies available on request.



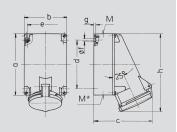
1 MB 209	Amp.		16		l	32	
1 MB 43	Poles	3	4	5	3	4	5
Dim. in mm	a b c	87 64 99	128 84 122	128 84 124	128 84 136	128 84 136	128 84 138
	d e f	40 50 4,5	11 68 5,3	11 68 5,3	11 68 5,3	11 68 5,3	11 68 5,3
	g. h M	4 115 20	4 144 25	4 145 25	158 32	4 158 32	4 160 32
	M*	(blind) to		it out		M25 (k	it out
Max. cable dia Terminal for co section (mm²) r	nd. cross	15 1,5 —4	18 1,5 —4	18 1,5 —4	2,5 —10	2,5 —10	2,5 —10

Receptacles

with highly heat resistant contact carrier and nickel plated contacts, internal fixing, one cable entry at top, two blind cable entries (to be cut out) at bottom, enclosure base can be turned 180°

▲ IP 44

Product group 1040/1041, type 20235 shown.



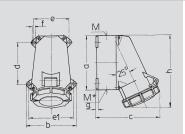
Drawing	Amp.		63	- 1
1 MB 213	Polen	3	4	5
Dim. in mm	n a b c	170 118 164	170 118 164	170 118 164
	d e f	134,5 103 6,1	134,5 103 6,1	134,5 103 6,1
	g. h M	216 40	216 40	216 40
Max. cable dia Terminal for co section (mm²)	ond. cross	(blind) 1 32 6		M 40 ut out 32 6
section (min)	min. max.	23	23	2.5

Receptacles SoftCONTACT

with highly heat resistant contact carrier and nickel plated contacts, internal fixing, one cable entry at top, two blind cable entries (to be cut out) at bottom, enclosure base can be turned 180°

▲ IP 44

Product group 1041, type 21253 shown.



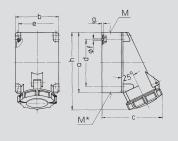
Drawing	Amp.		16		I	32	- 1
1 MB 219	Poles	3	4	5	3	4	5
Dim. in mn	n a	95	95	95	120	120	120
	b	102	102	102	112	112	112
	c	115	124	129	143	143	150
	d	64,2	64,2	64,2	90,2	90,2	90,2
	e	77,5	77,5	77,5	79	79	79
	e1	88	88	88	98,5	98,5	98,5
	f	5,5	5,5	5,5	5,5	5,5	5,5
	g.	5	5	5	5	5	5
	h	128	128	132	160	160	160
	M M*	20 20 (blind) t	25 25 o be cu	25 25 ut out	l t	32 M 32 (o be cu	it out
Max. cable di	am. (mm)	15	18	18	25	25	25
Terminal for c		1,5	1,5	1,5	2,5	^{2,5}	_2,5
section (mm²)		—4	—4	—4	—10	—10	_10

Receptacles

with highly heat resistant contact carrier and nickel plated contacts, with 4 external fixing holes, with one cable entry at top and one blind cable entry (to be cut out) at bottom

♦ IP 67

Product group 1049, type 21371 shown.



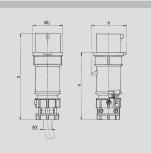
1 MB 112	Amp.		63		125	- 1
1 MB 162/163	Poles	3	4	5	4	5
Dim. in mm	a b c	170 118 171	170 118 171	170 118 171	264 163 203	264 163 203
	d e f	134,5 103 6,1	134,5 103 6,1	134,5 103 6,1	240 140 8,1	240 140 8,1
	g. h M	216 40	216 40	6 216 40	8 313 50	8 313 50
	M*		И 40 (l		50	50
Max. cable diar	n. (mm)	32	32	32	38	38
Terminal for cor section (mm²) m		6 25	_6 25	6 25	25 —35	25 —35

Receptacles

with highly heat resistant contact carrier and nickel plated contacts 63A: SoftCONTACT

♦ IP 67

Product group 1049/1050, type 21361 shown.



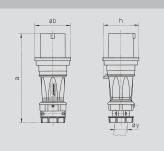
Drawing	Amp.		16		I	32	
2 MB 174	Poles	3	4	5	3	4	5
Dim. in mm	n a	162	172	186	199	199	213
	b	54	60	69	72	72	79
	h	60	67	77	83	83	91
	n	126	136	149	154	154	169
	У	19	19	22	24,5	24,5	28,5
Terminal for co	ond. cross	1	1	1	2,5	2,5	2,5
section (mm²) ı	minmax.	—2,5 ·	—2,5 ·	2,5	—6	6	6

Plugs PowerTOP

with highly heat resistant contact carrier and nickel plated contacts, cable gland and external cable grip

№ IP 44

Product group 2015, type 3935 shown.



Drawing A	mp.		63	
2 MB 210/2 P	2 MB 210/2 Poles		4	5
Dim. in mm	а	246	246	246
	b	100,5	100,5	100,5
	h	98,7	98,7	98,7
	у	36	36	36
Terminal for cond. cross		6	6	6
section (mm²) minmax.		—16	—16	—16

Plugs PowerTOP

with highly heat resistant contact carrier, frame terminals and nickel plated contacts,

cable gland and external cable grip

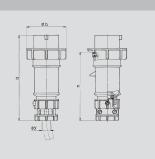
№ IP 44

Product group 2015, type 1235 shown.

3 4 5 2p+E 3p+E 3p+N+E	mp.	h 4h 4h	6h 9h 9h	400 V 50 a. 60 Hz e 3-pole 4-pole 5-pole 9h 6h 6h	500 V 50 a. 60 Hz e 3-pole 4-pole 5-pole 7h 7h 7h	Std. Pack.	Weight
	16 3 16 4 16 5	Part numbe	21075 23443	20485 20235	22932	Qty. 10 10 10	g/each 180 303 333
	32 4 32 5		21330	22126 20162	20842	10 10	370 424
	63 4 63 5			23964 21253		5 5	880 925
	Products	with pilo	t contacts:	Part no. + i	ndex P		
	16 3 16 4 16 5		21512	22291 21371	21464	10 10 10	240 270 315
	32 4 32 5			21360	21465	10 10	390 450
•	63 4 63 5			24315 21361	_	5 5	920 970
	125 4 125 5			21233 21468		3 3	1910 2020
	Products	with pilo	t contacts:	Part no. + i	ndex P		
	16 3 16 4 16 5	3918 3925 3934	3919 3927 3936	3920 3926 3935	3928	10 10 10	175 198 241
	32 3 32 4 32 5	3942 3945 3951	3943 3946 3952	3944 3947 3977	3948	10 10 10	267 284 363
	63 3 63 4 63 5	1226	1227 1230	1231 1235	1232	5 5 5	535 650 710

MENNEKES CEE plugs and connectors for use under harsh conditions with highly heat resistant contact carrier resp. with highly heat resistant contact carrier and nickel plated contacts

to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code. Enclosure and insert made of **AMAPLAST**. Other voltages and frequencies available on request.



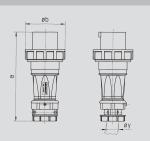
Drawing	Amp.		16			32	
2 MB 171	Poles	3	4	5	3	4	5
Dim. in mn	n a	162	172	186	199	199	213
	b	71	79	89	95	95	102
	n	129	139	152	157	157	172
	у	19	19	22	24,5	24,5	28,5
Terminal for o	ond. cross	1	1	1	2,5	2,5	2,5
section (mm²)	minmax.	—2,5 ·	—2,5 ·	2,5	—6	6	6

Plugs PowerTOP

with highly heat resistant contact carrier and nickel plated contacts, cable gland and external cable grip

▲ IP 67

Product group 2016, type 3821 shown.



Drawing A	mp.		63		I	125	
2 MB 207/2 P	oles	3	4	5	3	4	5
Dim. in mm	а	246	246	246	293	293	293
	b	114	114	114	131	131	131
	у	36	36	36	50	50	50
Terminal for cond	l. cross	6	6	6	25	25	25
section (mm²) mir	nmax.	—16	—16	—16	—50	50	—50

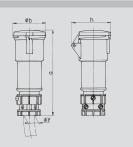
Plugs PowerTOP

with highly heat resistant contact carrier, frame terminals <u>and nickel</u> <u>plated contacts</u>,

cable gland and external cable grip

♦ IP 67

Product group 2016, type 1114 shown.



Drawing	Amp.		16			32	
3 MB 51/3	Poles	3	4	5	3	4	5
Dim. in mm	ı a	165	180	190	214	214	223
	b	60	68	76	82	82	89
	h	76	84	90	92	92	99
	у	19	19	22	24,5	24,5	28,5
Terminal for co	ond. cross	1	1	1	2,5	2,5	2,5
section (mm²)	minmax.	-2,5	—2,5 ·	-2,5	—6	-6	6

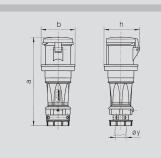
Connectors PowerTOP

with highly heat resistant contact carrier,

cable gland and external cable grip

▲ IP 44

Product group 3015, type 3964 shown.



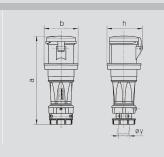
Drawing A	mp.		63	
3 MB 58/2 Pc	oles	3	4	5
Dim. in mm	а	264	264	264
	b	101	101	101
	h	113	113	113
	у	36	36	36
Terminal for cond	. cross	6	6	6
section (mm²) min	max.	—16	—16	—16

Connectors PowerTOP with SoftCONTACT

with highly heat resistant contact carrier and frame terminals, cable gland and external cable grip

▲ IP 44

Product group 3015, type 1245 shown.



Drawing	Amp.		63	
3 MB 58/2	Poles	3	4	5
Dim. in mm	ı a	264	264	264
	b	101	101	101
	h	113	113	113
	у	36	36	36
Terminal for co	ond. cross	6	6	6
section (mm²)	minmax.	—16	—16	—16

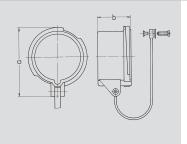
Connectors PowerTOP with SoftCONTACT

with highly heat resistant contact carrier, frame terminals and nickel plated contacts,

cable gland and external cable grip

▲ IP 44

Product group 3015, type 3474 shown.



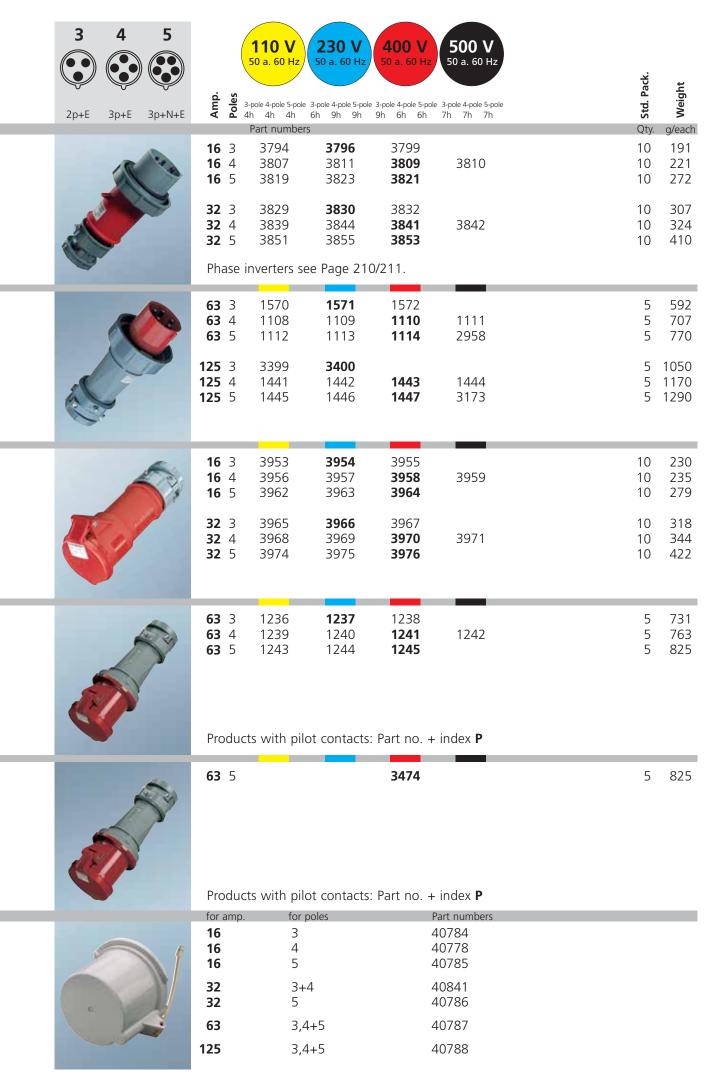
Drawing	Amp.	I	16			32	
2 MB 146	Poles	3	4	5	3	4	5
Dim. in mr	n a b	70 41	79 41	86 42	91 51	91 51	99 52
Drawing	Amp.		63			125	
2 MB 146	Poles	3	4	5	3	4	5
					119		

Protective covers

for watertight plugs, inlets and panel mounted inlets

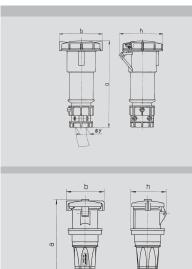
▲ IP 67

Product group 8226, type 40787 shown.



MENNEKES CEE connectors for use under harsh conditions with highly heat resistant contact carrier resp. with highly heat resistant contact carrier and nickel plated contacts

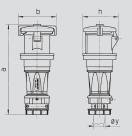
to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST. Other voltages and frequencies available on request.



Drawing	Amp.		16			32	
3 MB 48/3	Poles	3	4	5	3	4	5
Dim. in mm	а	171	182	194	217	217	229
	b	78	85	96	103	103	110
	h	79	88	95	99	99	105
	у	19	19	22	24,5	24,5	28,5
Terminal for co	nd. cross	1	1	1	2,5	2,5	2,5
section (mm²) r	ninmax.	—2,5 ·	—2,5 ·	-2,5	—6	6	6

Connectors PowerTOP with highly heat resistant contact carrier, cable gland and external cable grip

♦ IP 67 Product group 3016, type 3881 shown.

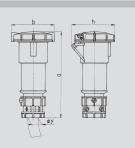


Drawing	Amp.		63			125	
3 MB 56/2	Poles	3	4	5	3	4	5
Dim. in mm	n a	264	264	264	320	320	320
	b	118	118	118	135	135	135
	h	113	113	113	124	124	124
	у	36	36	36	50	50	50
Terminal for co	ond. cross	6	6	6	25	25	25
section (mm²)	minmax.	—16	—16	—16	—50	— 50	—50
	,						

Connectors PowerTOP with highly heat resistant contact carrier and frame terminals, cable gland and external cable grip

63A: with SoftCONTACT 125A: with TorsionsSpringCONTACT

♦ IP 67 Product group 3016, type 1121 shown.

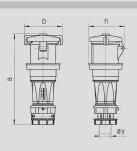


Drawing	Amp.		16			32	
3 MB 48/3	Poles	3	4	5	3	4	5
Dim. in mm	ı a	171	182	194	217	217	229
	b	78	85	96	103	103	110
	h	79	88	95	99	99	105
	у	19	19	22	24,5	24,5	28,5
Terminal for co	ond. cross	1	1	1	2,5	2,5	2,5
section (mm²)	minmax.	—2,5 ·	-2,5	-2,5	—6	-6	6

Connectors PowerTOP with highly heat resistant contact carrier and nickel plated contacts,

cable gland and external cable grip

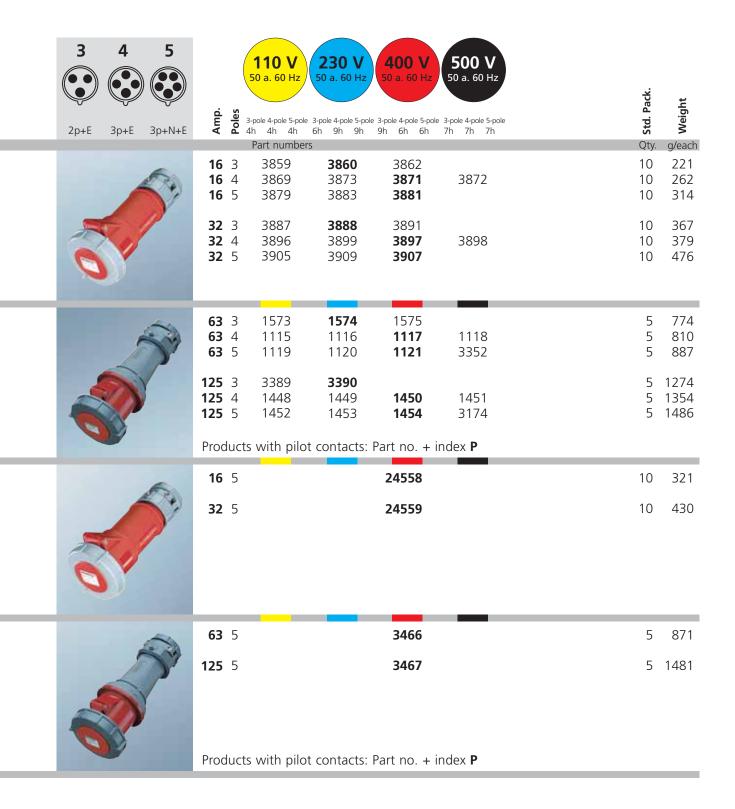
♦ IP 67 Product group 3016, type 24558 shown.



Drawing	Amp.		63		l	125	
3 MB 56/2	Poles	3	4	5	3	4	5
Dim. in mm	а	264	264	264	320	320	320
	b	118	118	118	135	135	135
	h	113	113	113	124	124	124
	у	36	36	36	50	50	50
Terminal for co	nd. cross	6	6	6	25	25	25
section (mm²) n	ninmax.	—16	—16	—16	—50	— 50	—50

Connectors PowerTOP with SoftCONTACT, with highly heat resistant contact carrier, frame terminals and nickel plated contacts, cable gland and external cable grip

♦ IP 67 Product group 3016, type 3466 shown.



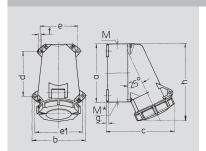
EverGUM receptacles combinations in solid rubber enclosures

for use in corrosive environments and for use under harsh conditions see chapter 8.

MENNEKES CEE receptacles with high resistance to chemicals with highly heat resistant contact carrier and nickel plated contacts

to DIN VDE 0623, EN 60309-2, colour: grey (RAL 7000) and colour code.

Enclosure and insert made of **AMELAN**. Other voltages and frequencies are available on request. MENNEKES CEE receptacles with DUO interlock can be padlocked.



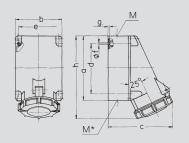
Drawing	Amp.		16		I	32	
1 MB 219	Poles	3	4	5	3	4	5
Dim. in mm	n a	95	95	95	120	120	120
	b	102	102	102	112	112	112
	c	115	124	129	143	143	150
	d	64,2	64,2	64,2	90,2	90,2	90,2
	e	77,5	77,5	77,5	79	79	79
	e1	88	88	88	98,5	98,5	98,5
	f	5,5	5,5	5,5	5,5	5,5	5,5
	g.	5	5	5	5	5	5
	h	128	128	132	160	160	160
	M M*	20 20 (blind) t		25 25 ut out	t	32 M 32 (o be co	ut out
Max. cable dia	ım. (mm)	15	18	18	25	25	25
Terminal for co		1,5	1,5	1,5	2,5	^{2,5}	^{2,5}
section (mm²)		—4	—4	—4	—10	—10	—10

Receptacles

with four external fixings, with one cable entry at top and one blind cable entry (can be cut out) at bottom

♦ IP 67

Product group 1049, type 3769 shown.



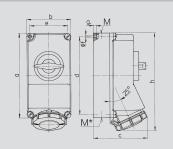
Drawing	Amp.		63	
1 MB 112	Poles	3	4	5
Dim. in mn	n a b c	170 118 171	170 118 171	170 118 171
	d e f	134,5 103 6,1	134,5 103 6,1	134,5 103 6,1
	g. h M	216 40	6 216 40	6 216 40
Max. cable dia	M* am. (mm)	(blind) 1 32		M 40 ut out 32
Terminal for or section (mm²)			_25	6 25

Receptacles SoftCONTACT

internal and external fixings, two blind cable entries (can be cut out) at bottom, lower part of enclosure can be turned through 180°, with 6 blind holes for mounting special terminals if required

♦ IP 67

Product group 1049, type 3774 shown.



Drawing A	mp.		16		I	32	
1 MB 207 Pc	oles	3	4	5	3	4	5
Dim. in mm	a	225	225	225	225	225	225
	b	118	118	118	118	118	118
	c	144	146	147	152	152	153
	d	208	208	208	208	208	208
	e	101	101	101	101	101	101
	f	6,3	6,3	6,3	6,3	6,3	6,3
	g.	8	8	8	8	8	8
	h	252	255	259	268	268	274
Max. cable diam.	M M* (mm)	1xM25 and 1xM32 2x25 2x25 2x25 25 25 25				5 and 1 2x25 25	
Terminal for cond-		1,5	1,5	1,5	2,5	2,5	2,5
section (mm²) min		—4	—4	—4	—10	—10	—10

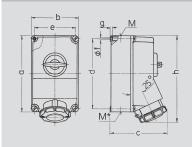
Receptacles

switched,

with mechanical **DUO** interlock, can be padlocked



Product group 1074, type 7285 shown.



Drawing	Amp.		63	
1 MB 180	Poles	3	4	5
Dim. in mm	n a	264	264	264
	b	163	163	163
	c	196	196	196
	d	240	240	240
	e	140	140	140
	f	8,1	8,1	8,1
	g.	8	8	8
	h	300	300	300
Max. cable dia	M	40	40	40
	M*	40	40	40
	am. (mm)	32	32	32
Terminal for co		6	_6	6
section (mm²)		—25	25	—25

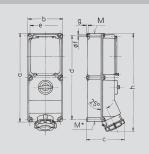
Receptacles SoftCONTACT

switched.

with mechanical **DUO** interlock, can be padlocked

♦ IP 67

Product group 1074, type 7290 shown.



Drawing	Amp.		16		3	2	6	3
1 MB 181	Poles	3	4	5	4	5	4	5
Dim. in mm	ı a b c	364 134 160	364 134 162	364 134 163	364 134 168	364 134 168	460 180 209	460 180 209
	d e f	347 117 6,3	347 117 6,3	347 117 6,3	347 117 6,3	347 117 6,3	440 160 8,1	440 160 8,1
	g. h	8 391	8 395	8 398	8 408	8 411	8 525	8 525
Max. cable dia	M M* nm. (mm)	32/40 2x32 27				32/40 2x32 27	40 2x40 27	40 2x40 27
Terminal for co section (mm²) i			1,5 —4	1,5 —4	2,5 —10	2,5 —10	6 —25	6 —25

Receptacles

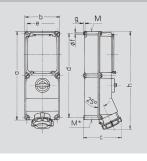
switched,

with mechanical **DUO** interlock and mounting rail, can be padlocked

63A: **SoftCONTACT**

▲ IP 67

Product group 1089, type 7292 shown.



Drawing	Amp.		16		3	2	6	3
1 MB 181	Poles	3	4	5	4	5	4	5
Dim. in mm	a b c	364 134 160	364 134 162	364 134 163	364 134 168	364 134 168	460 180 209	460 180 209
	d e f	347 117 6,3	347 117 6,3	347 117 6,3	347 117 6,3	347 117 6,3	440 160 8,1	440 160 8,1
	g. h	8 391	8 395	8 398	8 408	8 411	8 525	8 525
Max. cable dia	M M* m. (mm)	32/40 2x32 27	32/40 2x32 27	32/40 2x32 27		32/40 2x32 27	40 2x40 27	40 2x40 27
Terminal for co section (mm²) n			1,5 —4	1,5 —4	2,5 —10	2,5 —10	6 —25	_25

Receptacles

switched,

with mechanical **DUO** interlock and 3-pole fuse base D 01 for 16A and D 02 for 32A and 63A, can be padlocked

63A: SoftCONTACT

▲ IP 67

Product group 1098, type 7298 shown.



AMAXX® receptacle combinations, resistant to chemicals, pre-wired for installation, **\(\Delta\)** IP44



Enclosure and insert made of AMELAN, highly heat resistant contact carriers and nickel plates contacts.

Other variations with CEE receptacles 3, 4 or 5 pole and with grounding-type receptacles of French/Belgian, British, Danish, Swiss and US-standards on request.

Upper part grey RAL 7000, hinged to the side, fusing under a transparent cover. For more combinations, please contact us or visit www.AMAXX.info







CEE receptacles		
1 CEE 16A, 5p, 400V	1 CEE 32A, 5p, 400V	1 CEE 32A, 5p, 400V 1 CEE 16A, 5p, 400V
CEE receptacles		
SCHUKO® receptacles		
2 SCHUKO® 16A, 230V	2 SCHUKO® 16A, 230V	3 SCHUKO® 16A, 230V
Fusing		
1 RCD 40A, 4p, 0.03A 1 MCB 16A, 3p, C 2 MCB's 16A, 1p, C	1 RCD 40A, 4p, 0.03A 1 MCB 32A, 3p, C 2 MCB's 16A, 1p, C	1 MCB 32A, 3p, C 1 MCB 16A, 3p, C 3 MCB's 16A, 1p, C
Connection		
for 1 cable up to 5 x 10 mm ²	for 1 cable up to 5 x 10 mm ²	for 2 cables up to 5 x 25 mm ²
Enclosure size		
260 x 225 mm (HxW)	260 x 225 mm (HxW)	390 x 225 mm (HxW)
Part number		
920037	920038	930030

AMAXX[®] receptacle combinations, resistant to chemicals, pre-wired for installation, ♦♦ IP67



Enclosure and insert made of AMELAN, highly heat resistant contact carriers and nickel plates contacts.

Other variations with CEE receptacles 3, 4 or 5 pole on request.

Upper part grey RAL 7000, hinged to the side, fusing under a transparent cover. For more combinations, please contact us or visit www.AMAXX.info





CEE receptacles	
1 CEE 32A, 5p, 400V 1 CEE 16A, 5p, 400V	1 CEE 63A, 5p, 400V 1 CEE 32A, 5p, 400V 1 CEE 16A, 5p, 400V
CEE receptacles	
SCHUKO® receptacles	
2 SCHUKO® 16A, 230V	4 SCHUKO® 16A, 230V
Fusing	
1 RCD 63A, 4p, 0.03A 1 MCB 32A, 3p, C 1 MCB 16A, 3p, C 2 MCB's 16A, 1p, C	1 RCD 63A, 4p, 0.03A 1 MCB 32A, 3p, C 1 MCB 16A, 3p, C 4 MCB's 16A, 1p, C
Connection	
for 2 cables up to 5 x 25 mm ²	for 2 cables up to 5 x 25 mm ²
Enclosure size	
520 x 225 mm (HxW)	390 x 450 mm (HxW)
Part number	
940016	900004



11	SCHUKO® plugs and receptacles Grounding-type plugs and receptacles according to various national standards	
12	Plugs and receptacles for low voltages, \bigcirc downstream of an isolating transformer, \bigcirc DC \bigcirc	
13	Plugs and receptacles for containers and terminals	
14	Plugs and receptacles for hazardous areas Zone 22	
15	Plugs and receptacles for campsites and mobile consumers	
16	Plugs and receptacles 200A to 400A	
17	Cable connection boxes, hinged windows, enclosures	
18	Plugs and receptacles for military purpose Plugs and receptacles for fire brigades and civil protection organisations Plugs and receptacles made from light weight alloy	
19	References	
20	Regulations and standards Index of Part numbers	•

Index of Part numbers



- SCHUKO® plugs and receptacles
- Grounding-type receptacles according to various national standards

SCHUKO® panel mounted receptacles, IP 54 Page 228 and 229





Grounding-type
panel mounted
receptacles according
to various national
standards,
IP 44
Page 230 and 231,
234 and 235

SCHUKO® surface mounted receptacles and bases for wall mounted receptacles, IP 44 Page 228 and 229





SCHUKO®
receptacle strips,
IP 44 and
SCHUKO®
receptacles,
switched, interlocked,
IP 67
Page 236 and 237

SCHUKO® snap-in receptacles, IP 20 Page 232 and 233





SCHUKO® plugs and SCHUKO® connectors, IP 44
Page 238 and 239

SCHUKO® receptacles and panel mounted receptacles, IP 68 Page 240 and 241





SCHUKO® plugs, inlets and connectors, IP 68 Page 242 and 243

- SCHUKO® plugs and receptacles
- Grounding-type receptacles according to various national standards



For Europe. With the hammer symbol.



For plugs and receptacles with an earth contact, national systems are still applicable. MENNEKES offer a broad range of products to suit European markets. Same design, same dimensions, but various models:

D, E, NL, A, L
F, B, CZ, SK, PL
DK
СН
GB
USA, CAN

Optionally screw or plug-in terminals.





Preparation of conductors for screwless terminals



Length to be stripped: 10 – 12 mm



Solid conductors 1.5 to 2.5 mm² cores. Strip them and you're done.



Flexible conductors 1.5 to 2.5 mm^2 cores with terminal pins, pin length 10-12~mm



Flexible conductors 1.5 to 2.5 mm² cores with end sleeve for strands, crimped so as to be gas-tight; in the case of insulating jackets the stripped length must be longer.



Flexible conductors with 1.5 to 2.5 mm² cores, ultrasonically welded

Plug-in and screw terminals are designed as connecting terminals for through-wiring. To release the conductors, press on the plug-in terminal using a screw driver.







Plugs for the world



Rapid snap-in, little space required.

Although the European designs for Germany, Denmark and France/Belgium differ, they have one thing in common: space-saving installation in a channel.

Receptacles per running meter. Get ready – get set - go.

The snap-in technique. A simple but highly efficient method for swift installation. What do you need? A special channel (or an enclosure with a suitable aperture) with fixed dimensions or sized per running meter, any number of receptacles with or without fusing by means of automatic circuit breakers or RCD. Connect, snap-in, done.



Snap-in receptacles can also be fastened to DIN rails using a mounting rack.



Snap-in receptacles are suitable for convenient installation in channel systems of adequate size.

Pressure watertight.



Pressure watertight.

Whether fixed or mobile: in the event of flooding or water jets, pressure watertight plugs and receptacles are the first choice.

Protection type 🍑 IP 68

Switched. Interlocked. Watertight.

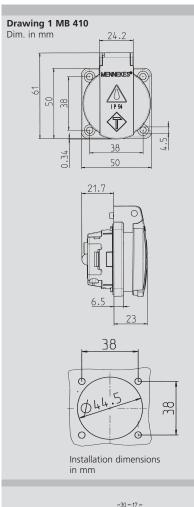


MES SCHUKO® receptacle Mechanical Eectrical Scwitch.
Switching by MCB with thermal and electromagnetic release.
Can only be plugged into in the off position.
Protection type IP 67

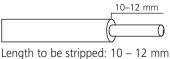
MENNEKES SCHUKO® receptacles, AMAPLAST

to DIN 49440-1, 2P+E, 230V

Protective covers, blind and mounting flanges



Preparation of conductors for screwless terminals.





Solid conductors 1.5 to 2.5 mm² cores. Strip them and you're done.



Flexible conductors 1.5 to 2.5 mm 2 cores with terminal pins, pin length 10 – 12 mm



Flexible conductors 1.5 to 2.5 mm² cores with end sleeve for strands, crimped so as to be gas-tight; in the case of insulating jackets the stripped length must be longer.



Flexible conductors with 1.5 to 2.5 mm² cores, ultrasonically welded

SCHUKO® panel mounted receptacles

with hinged lid, without shutter,

3 plug-in terminals or 3 screw terminals

as connecting terminals for $1.5 - 2.5 \text{ mm}^2$

▲ IP 54 �

Product group 1936/1930, type 11011 shown.

SCHUKO® panel mounted receptacles

with hinged lid, with shutter,

3 plug-in terminals or 3 screw terminals

as connecting terminals for $1.5 - 2.5 \text{ mm}^2$

▲ IP 54 **⊕**

Product group 1936/1930, type 11060 shown.

SCHUKO® panel mounted receptacles

without hinged lid, with or without shutter,

3 plug-in terminals or 3 screw terminals

as connecting terminals for 1.5 – 2.5 mm²

Product group 1938/1937, type 11512 shown.

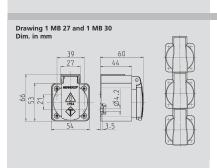
Drawing 1 MB 281 Dim. in mm

SCHUKO® panel mounted receptacles

with hinged lid, also suitable for cable ducts and flush mounted installation boxes

▲ IP 44 **⊕**

Product group 1928, type 10750 shown.





Receptacles can be vertically arranged in a row. Slide on top, slot on bottom of the enclosure.

SCHUKO® receptacles

with hinged lid, with 3 plug-in terminals for connection of 1.5 – 2.5 mm², threaded cable entry M 20 x 1.5 at top and blind entry (for cut out) M 20 x 1.5 at bottom, can be arranged in a row using slot and slide

▲ IP 44 �

Product group 1929, type 10082 shown.

Base for wall mounted receptacles

with cable entry and screws

▲ IP 44

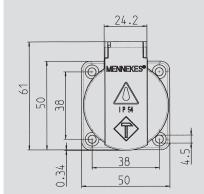
Product group 8313, type 10714 shown.

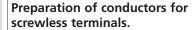
	Colour	Amp.	Volts	with plug-in terminals	with screw terminals	Std. Pack.	Weight g/each
	without Shutter grey blue black red	16 16 16 16	230 230 230 230 230	11010 11011 11012 11013	11030 11031 11032 11033	100 20 100 100	44 44 44 44
	with Shutter grey blue Other colours on request.	16 16	230 230	11060 11061	_ 11081	100 100	46 46
	without Shutter grey black with Shutter blue Other colours on request.	16 16	230 230 230	11511 11512 11561	11531 11532 11581	100 100	38 38 40
	without Shutter blue black red Connecting protective caps for fastening to panel mounted black		230 230 230 acles of prod	– – – uct group 19	_	10 10 10 ize 75 x 7	61 61 61
	grey blue black	16 16 16	230 230 230	10081 10082 10083	-	10 10 10	98 98 98
	grey blue black You would like to have a dif 10081, 10082 or 10083? For e Please combine one of the ab product groups 1930 and 1936	xample ove pa	e with shutte anel mounted	r or with sc	rew terminals		54 54 54

MENNEKES grounding-type receptacles according to French/Belgian and Danish standards

16A or 13A, 2P+E, 230V

Drawing 1 MB 410 (applicable for product group 1930: SCHUKO® panel mounted receptacles and grounding-type panel mounted receptacles according to French/Belgian and Danish standards) Dim. in mm







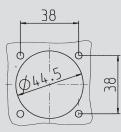
Length to be stripped: 10 - 12 mm



Solid conductors 1.5 to 2.5 mm² cores. Strip them and you're done.



Flexible conductors 1.5 to 2.5 mm² cores with terminal pins, pin length 10 – 12 mm



Installation dimensions in mm

Flexible conductors 1.5 to 2.5 mm² cores with end sleeve for strands, crimped so as to be gas-tight; in the case of insulating jackets the stripped length must be longer.



Flexible conductors with 1.5 to 2.5 mm² cores, ultrasonically welded

Grounding-type panel mounted receptacles, French/Belgian standard, with hinged lid, with shutter, 3 plug-in terminals or

3 screw terminals

as connecting terminals for $1.5 - 2.5 \text{ mm}^2$

▲ IP 44 **۞**

Product group 1936/1930, type 11161 shown.

Grounding-type panel mounted receptacles, French/Belgian standard, with hinged lid, without Shutter,

3 plug-in terminals or 3 screw terminals

as connecting terminals for 1.5 - 2.5 mm²

🛦 IP 44 🎓

Product group 1936/1930, type 11111 shown.

Grounding-type panel mounted receptacles, French/Belgian standard, without hinged lid, with or without shutter,

3 plug-in terminals or 3 screw terminals

as connecting terminals for 1.5 - 2.5 mm²

IP 20 🗇

Product group 1938/1937, type 11661 shown.

Grounding-type panel mounted receptacles, Danish standard,

with hinged lid, with or without shutter, 3 plug-in terminals

as connecting terminals for 1.5 - 2.5 mm²

▲ IP 44 **⊕**

Product group 1930, type 11200 shown.

Grounding-type panel mounted receptacles, Danish standard, without hinged lid, with shutter, 3 plug-in terminals

as connecting terminals for 1.5 - 2.5 mm²

IP 20 🗇

Product group 1938, type 11750 shown.

Grounding-type wall mounted receptacles to French/Belgian or **Danish standards**

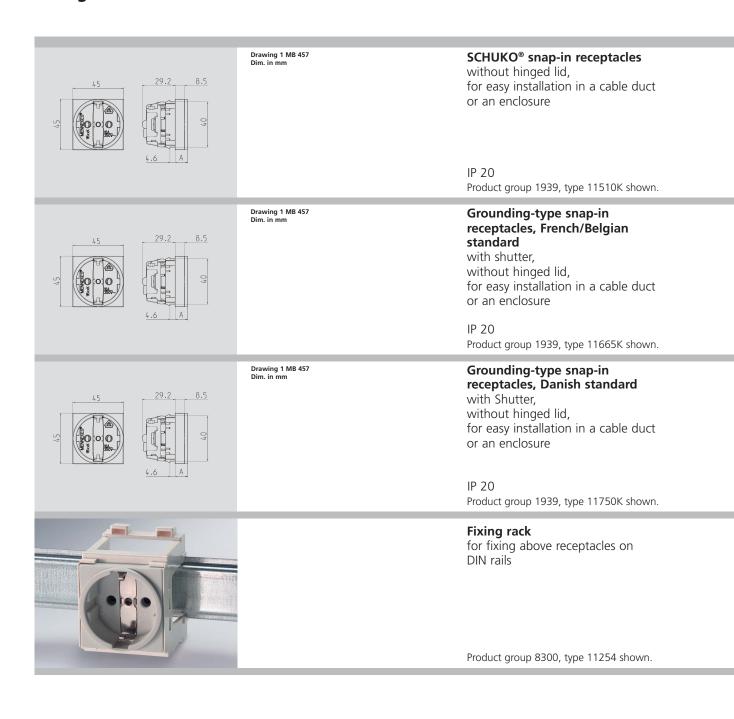
available on request.

Please contact us!

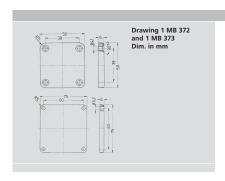
You may also want to combine one of the panel mounted receptacles with a hinged lid from product groups 1930 and 1936 shown on this page with the base shown on page 228/229. (Not possible for panel mounted receptacles of product groups 1937, 1938, 1943, 1944, 1945, 1946 or for snap-in receptacles!)

Colour	Amp.	Volts	terminals Part numbers	with screw terminals	Oty.	Weight Weight
with Shutter grey blue black Other colours on You can combine	16 16 16 request.	230 230 230 230 wall mou	11160 11161 11162	11180 11181 –	100 100 100	46 46 46
without Shutte blue Other colours on You can combine	16	230 wall mou	11111 nted receptacle	11131 s (see last	100 position).	44
with Shutter blue without Shutte blue Other colours on	16	230	11661 11611	11681 -	100	40 38
with Shutter grey without Shutte grey You can combine	r	230 230 wall mou	11250 11200 Inted receptacle	– – es (see las	100 100 t position).	46 44
with Shutter grey	13	230	11750	-	100	38
tc	rounding-type pando Danish standard, base for wall mou	grey ınted rece	eptacles, grey		o. 11250 o. 10714	

MENNEKES SCHUKO® snap-in receptacles to DIN 49440-1, 2P+E, 230V MENNEKES grounding-type snap-in receptacles to French/Belgian and Danish standard Fixing rack



Blanking flanges



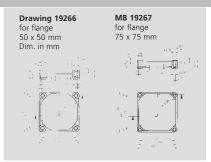
Blanking flanges to close unused apertures available in 2 sizes



grey 75 x 75 mm 41419
for product group 1928
(SCHUKO® panel mounted receptacles, large flange 75 x 75 mm)
grey 50 mm x 50 mm 41418
for product groups 1930 and 1936 (SCHUKO® and other earthing type panel mounted receptacles with flange size 50 x 50 mm)

Colour	Amp.	Volts	terminals Part numbers	with screw terminals	Oty.	Weight g/each
grey red white For fixing on DIN rails with the	16 16 16	230 230 230 230	11510K 11513K 11515K	-	10 10 10	g/eacii
with Shutter white For fixing on DIN rails with the	fixing	g rack sh	11665K own below.	-	10	
with Shutter grey For fixing on DIN rails with the		230 g rack sh	11750K own below.	-	10	
			11254		10	

Fixing frame



Fixing frame

for swift and safe fastening of panel mounted receptacles

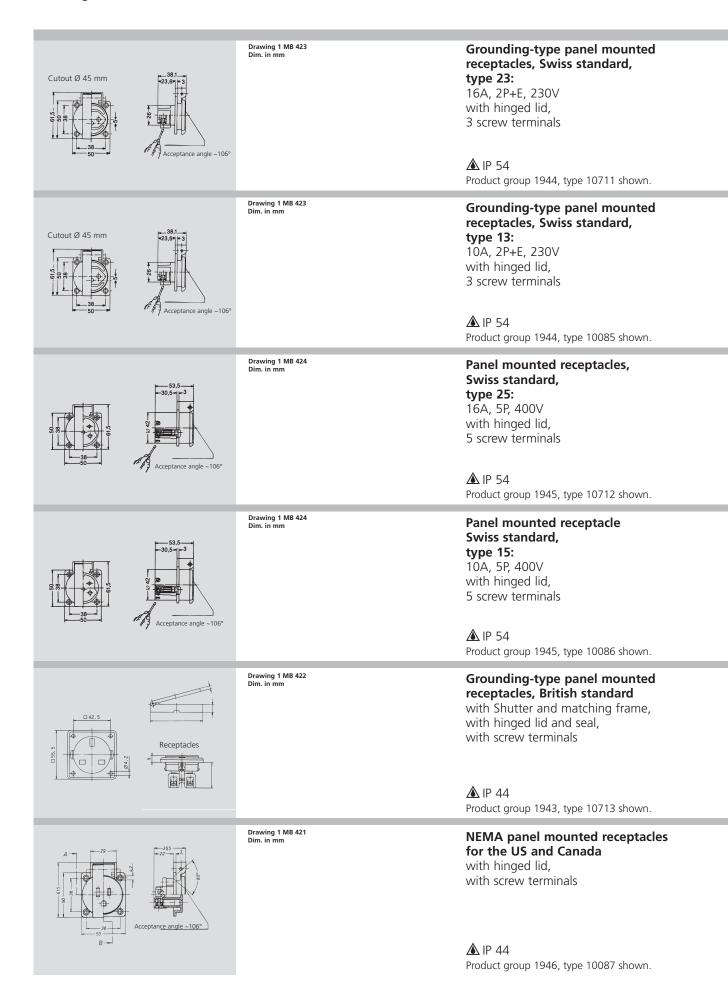
for SCHUKO® receptacles with flange size 50 x 50 mm / hole distance 38 x 38 mm (product group 1930)

for SCHUKO® receptacles with flange size 75 x 75 mm / hole spacing 60 x 60 mm (product group 1928) Part no. 19266106

Part no. 19267000

MENNEKES grounding-type receptacles

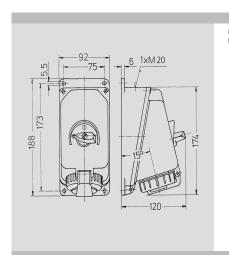
according to Swiss standard 10A and 16A, 2P+E, 230V or 10A and 16A, 5p, 400V, according to British standard 13A, 2P+E, 230V, according to NEMA (USA, Canada) 15A, 2P+E, 125V



Colour	Amp.	Volts	with plug-in terminals	with screw terminals	Std. Pack.	Weight
Body grey, lid blue	16	230	Part numbe	10711	Qty. 20	g/each 40
grey	10	230	-	10085	20	37
Body grey, lid red	16	400	-	10712	20	65
grey	10	400	-	10086	20	57
black	13	230	-	10713	20	63
The receptacles on this pag part no. 10714.		125 t be com	– bined with er	10087 nclosure base	20	45

MENNEKES SCHUKO® receptacles, switched and interlocked

to DIN 49442



Drawing 1 MB 287 Dim. in mm

SCHUKO® receptacles switched, interlocked

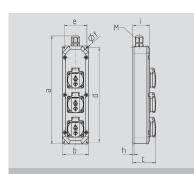
with MCB 16A, to DIN 49442

♦ IP 67

Product groep 1919, type 10801 shown.

MENNEKES SCHUKO® receptacle strips

pre-wired for installation, enclosure and insert made of AMAPLAST.



a b c d e f h i M	330 80 68 290 70 4,3 3,8 51 20
Dim. in mm	

This drawing is applicable to part nos. 96700 and 88678.



SCHUKO® receptacle strip pre-wired for installation, with cable grip, one M 20 cable entry at top (plugged) and one at bottom (threaded)

3 SCHUKO® receptacles 16A, 230V with terminal, connection for one cable up to 3 x 2.5 mm²

Part no. 96700



SCHUKO® receptacle strip pre-wired for installation, with cable grip, one M 20 cable entry at top (plugged) and one at bottom (threaded)

4 SCHUKO® receptacles 16A, 230V with terminal, connection for one cable up to 3 x 2.5 mm² receptacles angled at 30°, also suitable for angled plugs.

Part no. 88678

 Formula
 Part numbers
 Qty.
 g/each

 grey
 16
 230
 10801
 4
 625



- b - 9 - C - M	a b c d e
* * *	d
	e
	T
	g.
	g. M M*
	IVI
	Dim.
M* ##	in mm
The same of the sa	

abodef o.e.*	401 97 63 364 56 5,5 4 20
Dim. in mm	

This drawing is applicable to part no. 95996.



SCHUKO® receptacle strip

pre-wired for installation, with cable grip, one M 25 cable entry at top (plugged) and one at bottom (threaded)
1 x M 25 boven (met wartel) en
1 x M 25 onder (met blindstop)

Hanging clip supplied with every receptacle strip 401 x 97 mm.

3 SCHUKO® receptacles 16A, 230V with terminal, connection for one cable up to 5 x 2.5 mm²

Part no. 95996



SCHUKO® receptacle strip

pre-wired for installation, with cable grip, one M 25 cable entry at top (plugged) and one at bottom (threaded)

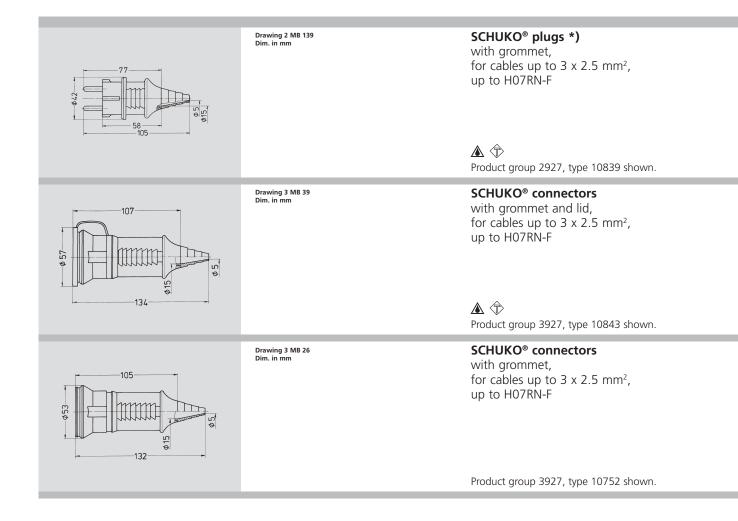
Hanging clip supplied with every receptacle strip 401 x 97 mm.

8 SCHUKO® receptacles 16A, 230V with terminal, with connection for one cable up to 3 x 6mm². Receptacles angled at 30°, also suitable for angled plugs.

Part no. 88677

MENNEKES SCHUKO® plugs and connectors, AMAPLAST

to DIN 49440-2 / 49440-3 / 49441 and DIN VDE 0620, 16A, 2P+E, 230V

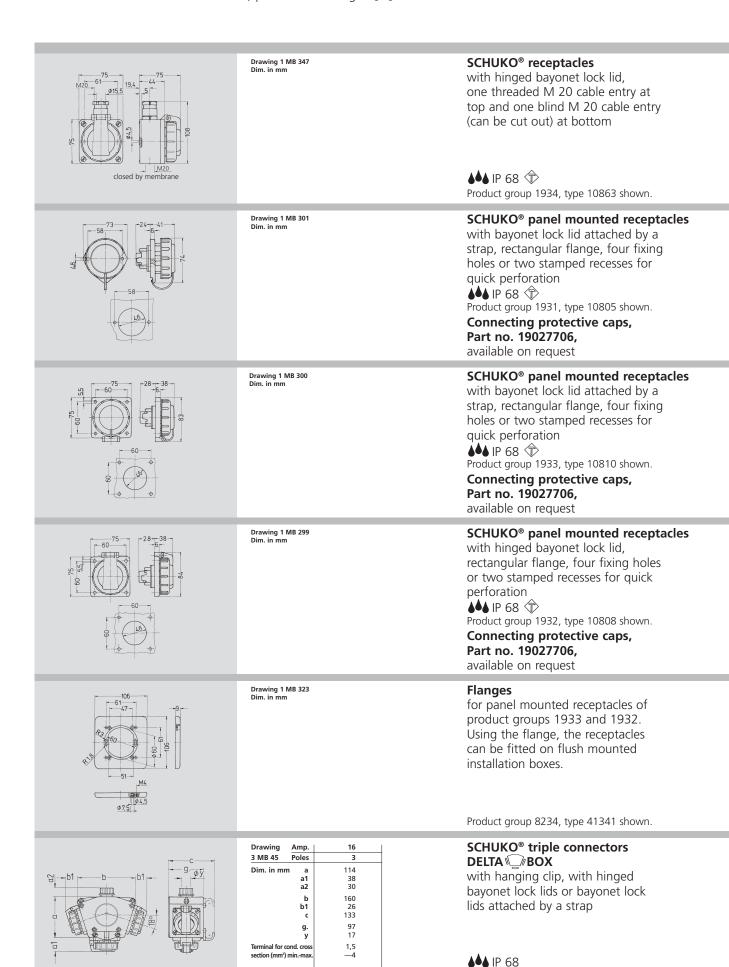


	Colour		Amp.	Volts		Std. Pack.	Weight
	G.W.G.) /		10	220	Part numbers	Qty.	g/each
	grey black	- 40	16 16	230 230	10749 10754	20 20	47 47
	orange		16	230	10734	20	47
	blue		16	230	10838	20	47
G	red		16	230	10839	20	47
	yellow		16	230	10840	20	47
	green		16	230	10841	20	47
	grey		16	230	10751	10	75
	black		16	230	10755	10	75
	orange		16	230	10842	10	75
	blue		16	230	10843	10	75
	red		16	230	10844	10	75
	yellow		16	230	10845	10	75 75
	green		16	230	10846	10	75
	grey		16	230	10752	10	65
	black		16	230	10756	10	65

*) The modified plug with double PE-conductor acc. to german and french-belgian standard will be available 1^{st.} quarter 2007.

MENNEKES SCHUKO® plugs and receptacles, pressure watertight, AMAPLAST

to DIN 49442/43 and DIN VDE 0620, pressure watertight 68

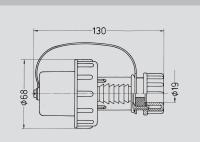


Product group 3932, type 10860 shown.

Colour		Amp.	Volts	Part numbers	Otd. Pack.	g/each
blue/grey		16	230	10863	10	180
blue/grey		16	230	10805	10	96
blue/grey		16	230	10810	10	107
blue/grey		16	230	10808	10	109
grey				41341		
blue/grey	hinged bayonet lock lid	16	230	10860	5	795
blue/grey	bayonet lock lid attached by a strap	16	230	10859	5	789
For SCHUK	O [®] plugs and recep	tacles	in bron	ze green, see chapt	er 18.	

MENNEKES SCHUKO® plugs and receptacles, pressure watertight, AMAPLAST

to DIN 49442/43 and DIN VDE 0620, IP 66 and pressure watertight 68



Drawing 2 MB 163 Dim. in mm

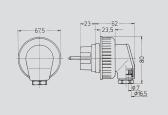
SCHUKO® plugs

with bayonet ring, with protective cap attached by a strap, for cables up to 3 x 2.5 mm², up to H07RN-F



♦♦♦ IP 68 �

Product group 2930, type 10828 shown.



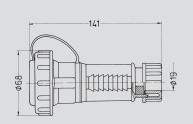
Drawing 2 MB 161 Dim. in mm

SCHUKO® angled plugs

with cable gland, for cables up to 3 x 2.5 mm², up to H07RN-F

IP 66

Product group 2928, type 10818 shown.



Drawing 3 MB 41

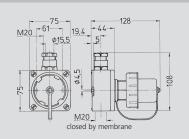
SCHUKO® connectors

with bayonet lock lid attached by a strap, for cables up to 3 x 2.5 mm², up to H07RN-F



▲▲ IP 68

Product group 3929, type 10833 shown.



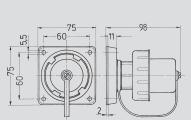
Drawing 2 MB 167

SCHUKO® inlets

with bayonet ring, with protective cap attached by a strap, one threaded M 20 cable entry at top and one blind M 20 cable entry (can be cut out) at bottom

▲ IP 68

Product group 2934, type 10864 shown.

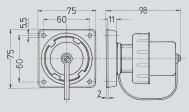


Drawing 2 MB 164 Dim. in mm

SCHUKO® panel mounted inlets

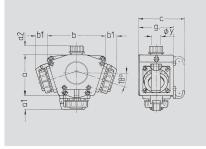
with bayonet ring,

with protective cap attached by a strap



▲ IP 68 **⊕**

Product group 2931, type 10852 shown.



Drawing	Amp.	16
3 MB 45	Poles	3
Dim. in mi	m a	114
	a1	38
	a2	30
	b	160
	b1	26
	c	133
	g.	97
	у	17
Terminal for	cond. cross	1,5
section (mm ²)	minmax.	-4

SCHUKO® triple connectors **DELTA** BOX

with hanging clip, with bayonet lock lids attached by a strap, feeder cable 1.5 m H07RN-F3G2.5 and SCHUKO® plug

▲♦ IP 68

Product group 8003, type 92386 shown.

	Colour	Amp.	Volts	Part numbers	otd. Pack.	Meight g/each
	*) The modified plug with double french-belgian standard will be			10828 *) cc. to german and	5	134
	blue	16	230	10818	10	125
	blue/grey	16	230	10833	5	136
	*) The modified inlet with doubl french-belgian standard will b				10	200
	*) The modified panel mounted and french-belgian standard v	inlet v			10 germa	130 an
	blue/grey	16	230	92386	1	1430



12

 CEE plugs and receptacles for low voltages, downstream of an isolating transformer, for DC



Receptacles for low voltages, 16A to 63A, IP 44 Page 248 to 255





Panel mounted receptacles for low voltages, 16A to 63A, IP 44 Page 248 to 255

Plugs and wall mounted inlets for low voltages, 16A to 63A, IP 44 Page 250 to 255





Connectors for low voltages, 16A to 63A, IP 44 Page 250 to 255

Plugs, receptacles and combinations downstream of an isolating transformer, 16A and 32A, IP 44 and IP 67
Page 256 to 261





Plugs and connectors downstream of an isolating transformer, 16A and 32A, IP 44 and IP 67 Page 258 and 259

Wall mounted and panel mounted receptacles for DC, 16A to 63A, IP 44 and IP 67 Page 262 and 263 266 and 267





Plugs and connectors for DC, 16A to 63A, IP 44 and IP 67 Page 264 and 265

Plugs and receptacles for low voltages downstream of an isolating transformer, for DC

Plugs and receptacles for low voltages.



When portable electric appliances are used in environments where conductive materials are present and where movement is restricted, they must be operated at low voltage or they must be electrically isolated, e.g. in or on boilers, containers, pipework systems, steel scaffolding or similar installations. The same applies to rooms containing exposed conductive materials. Portable lamps must be operated at low voltage.

Stationary appliances may be operated at a safe low voltage or they may be electrically isolated, e.g. lamps installed temporarily for maintenance purposes, cleaning or other types of work, which are connected to the power supply by means of movable cables.

Only use tools of protection class II or III.

Also, lamps for barrels and movable lamps for ovens must be operated at low voltage.

Furthermore, low voltage ≤ 25V AC should be used for all mobile appliances without insulation which are used on animals, e.g. vacuum cleaners, shears, milking machines, etc.

Requirements on plugs and receptacles for low voltages.

Plugs and receptacles must be different from those used at other voltages and must not be provided with an earth contact (VDE 0100 part 410:1997-01).

The benefits at a glance.

Comfortable access to generously dimensioned terminals. Cable grip may be adjusted to suit a max. cable diameter of 24.7 mm.











Plugs and receptacles downstream of isolating transformers.



Electrical isolation (VDE 0100 part 410) is used to operate isolated electric tools in areas where conductive materials are present and where movement is restricted, e.g. in or on boilers, containers, pipework systems, steel scaffolding or similar installations. The same applies to rooms containing exposed conductive materials.

Further information:

VDE regulations
VDE 0100 part 410
VDE 0100 part 704
VDE 0100 part 705
VDE 0100 part 706
VDE 0100 part 15
Information provided by the
Employers' Liability I Insurance
Association
BGI 594
BGI 608



Plugs and receptacles for DC.

Plugs and receptacles for DC are used for example for maintenance of rail vehicles and in electroplating shops, laboratories and test stations. We offer a large range of plugs and receptacles up to 63A.







DUO mechanical.

After insertion and switching on, the plug is locked in the ON position. After switching off and withdrawing the plug, the switch is locked in the OFF position.



DODSCH mechanical.

(**Do**seneinsatz-**D**reh-**Sch**alter = "Plug in and twist" switch). Insert the plug and turn clockwise (= switch ON).
Turn counter-clockwise (= switch O

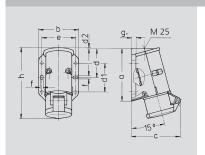
Turn counter-clockwise (= switch OFF) and withdraw the plug.

MENNEKES CEE receptacles and panel mounted receptacles for low voltages

to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code.

Enclosure and insert made of AMAPLAST.

Other voltages and frequencies are available on request.



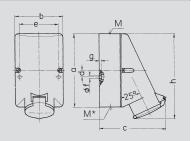
Drawing	Amp.		16		32	
1 MB 294	Poles	2	3	2	3	
Dim. in mm	n a b c	96 73 90	96 73 90	96 73 90	96 73 90	
	d d1 d2	53 52 2	53 52 2	53 52 2	53 52 2	
	e f g	62 5,3 8	62 5,3 8	62 5,3 8	62 5,3 8	
Terminal for co section (mm²)		129 4 —10	129 4 —10	129 4 —10	129 4 —10	

Receptacles

external fixing, one cable entry at top and one blind cable entry (can be cut out) at the rear side

▲ IP 44

Product group 1037, type 1845 shown.



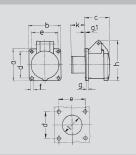
Drawing	Amp.		16			32	1
1 MB 137	Poles	2	3		2	3	
Dim. in mm	n a b c	128 84 120	128 84 120		128 84 120	128 84 120	
	d e f	11 68 5,3	11 68 5,3		11 68 5,3	11 68 5,3	
	g. h	4 146	4 146		4 146	4 146	
	M M*	25 2x25 (blind)		cut out	32 2x25 (blind)		cut out
Max. cable dia Terminal for co section (mm²)	ond. cross	18	18 4		25 4 —2x6	25 4 —10	

Receptacles

internal fixing, one cable entry at top and two blind cable entries (can be cut out) at bottom, lower part of enclosure base can be turned 180°

▲ IP 44

Product group 1041, type 578 shown.



Drawing	Amp.		16		32	
1 MB 136	Poles	2	3	2	3	
Dim. in mm	n a b c	55 55 44	55 55 44	55 55 44	55 55 44	
	d e f	45 45 4,2	45 45 4,2	45 45 4,2	45 45 4,2	
	g. g.1 h	8 2 67	8 2 67	8 2 67	8 2 67	
Terminal for co		22 34 4 —10	22 34 4 —10	22 34 4 —10	22 34 4 —10	

Panel mounted receptacles

▲ IP 44

Product group 1047, type 603 shown.



Drawing	Amp.		16		32	
1 MB 292	Poles	2	3	2	3	
Dim. in mm	a b c	75 75 44	75 75 44	75 75 44	75 75 44	
	d e f	60 60 5,5	60 60 5,5	60 60 5,5	60 60 5,5	
	g. g1. h	8 2 77	8 2 77	8 2 77	8 2 77	
Terminal for co section (mm²) n		22 34 4 —10	22 34 4 —10	22 34 4 —10	22 34 4 —10	

Panel mounted receptacles

also suitable for cable ducts and flush mounted installation boxes

▲ IP 44

Product group 1056, type 1657 shown.

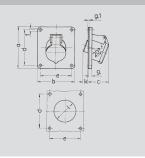


Drawing A	Amp.		16	I	32	
1 MB 231 F	oles	2	3	2	3	
Dim. in mm	a b c	68 62 42	68 62 42	68 62 42	68 62 42	
	d e f	53 47 4,5	53 47 4,5	53 47 4,5	53 47 4,5	
	g. g1. h	8 2 72	8 2 72	8 2 72	8 2 72	
Terminal for con- section (mm²) mi		32 55 4 —10	32 55 4 —10	32 55 4 —10	32 55 4 —10	

Panel mounted receptacles

▲ IP 44

Product group 1045, type 2855 shown.



Drawing Amp.	32
1 MB 236 Poles	3
Dim. in mm a b c	100 92 42
d	85
e	77
f	5,1
g.	8
g.1	2
k	31
I	60
Terminal for cond. cross	4
section (mm²) minmax.	—10

Panel mounted receptacles

▲ IP 44

Product group 1044, type 2837 shown.

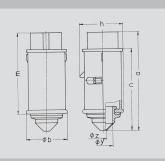
	2	3		20–25V 50 a. 60 Hz	40–50V 50 a. 60 Hz	20-25V 40-50V 100-200 Hz	20-25V 40-50V 300 Hz	20–25V 40–50V 400 Hz	20–25V 40–50V 400–500 Hz	20–25V 40–50V	ید	
	2-pole	3-pole	Amp.	– art numbers	12h	4h	2h	3h	11h	10h	Std. Pack.	g/each
			16 2 16 3	1825 1832	1831 1837	1835				1829	10 10	184 204
	32 2 32 3	1838 1845	1844 1850	1848				1842	10 10	184 204		
		16 2 16 3	577 584	578 585	586				583	10 10	285 303	
	The state of the s		32 2 32 3	590 597	591 598	599				596	10 10	285 303
	CEE SILL SILL SILL SILL SILL SILL SILL SI	16 2 16 3	603 610	604 611	612				609	10 10	108 130	
		32 2 32 3	616 623	617 624	625				622	10 10	108 130	
		79 .	16 2 16 3	1602 1657	1603 1661	1823				2617	10 10	116 138
	MENNEKE ISA-012) 37	s ,	32 2 32 3	1693 1594	3290 1595	1579				2488	10 10	116 138
		70 0	16 2 16 3	1270 2845	2855 1272	2860				2841	10 10	125 143
	CEEDING AS THE SECOND S	32 2 32 3	1271 2870	2864 1273	2852				2869	10 10	125 143	
			32 3			2837				- '	10	178

MENNEKES CEE plugs, connectors and inlets for low voltages

to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code.

Enclosure and insert made of AMAPLAST.

Other voltages and frequencies are available on request.



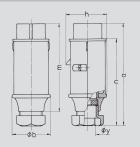
Drawing	Amp.		16		32	
2 MB 159	Poles	2	3	2	3	
Dim. in mm	а	130	130	130	130	
	b	55	55	55	55	
	h	58	58	58	58	
	m	108	108	108	108	
	n	107	107	107	107	
	у	25	25	25	25	
	z	9	9	9	9	
Terminal for co	nd. cross	4	4	4	4	
section (mm²) n	ninmax.	—10	—10	—10	—10	
	,			l		

Plugs

with grommet



Product group 2074, type 637 shown.



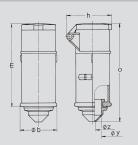
Drawing	Amp.		16		32	
2 MB 158	Poles	2	3	2	3	
Dim. in mn	n a	150	150	150	150	
	b	55	55	55	55	
	h	58	58	58	58	
	m	128	128	128	128	
	n	130	130	130	130	
	У	24,7	24,7	24,7	24,7	
Terminal for o	ond. cross	4	4	4	4	
section (mm²) minmax.		—10	—10	—10	—10	

Plugs

with cable gland



Product group 2075, type 677 shown.



Drawing	Amp.		16		32	
3 MB 37	Poles	2	3	2	3	
Dim. in mn	n a	144	144	144	144	
	b	55	55	55	55	
	h	67	67	67	67	
	m	122	122	122	122	
	у	25	25	25	25	
	z	9.	9.	9.	9.	
Terminal for o	ond. cross	4	4	4	4	
section (mm²)	minmax.	—10	—10	—10	—10	

Connectors

with grommet



Product group 3074, type 681 shown.



Drawing	Amp.		16		32	
3 MB 36	Poles	2	3	2	3	
Dim. in mm	a	164	164	164	164	
	b	55	55	55	55	
	h	67	67	67	67	
	m	142	142	142	142	
	у	24,7	24,7	24,7	24,7	
Terminal for cor	nd. cross	4	4	4	4	
section (mm²) m	ninmax.	—10	—10	—10	—10	

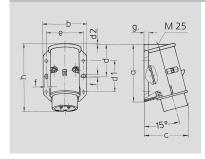
Connectors

with cable gland



▲ IP 44

Product group 3075, type 729 shown.



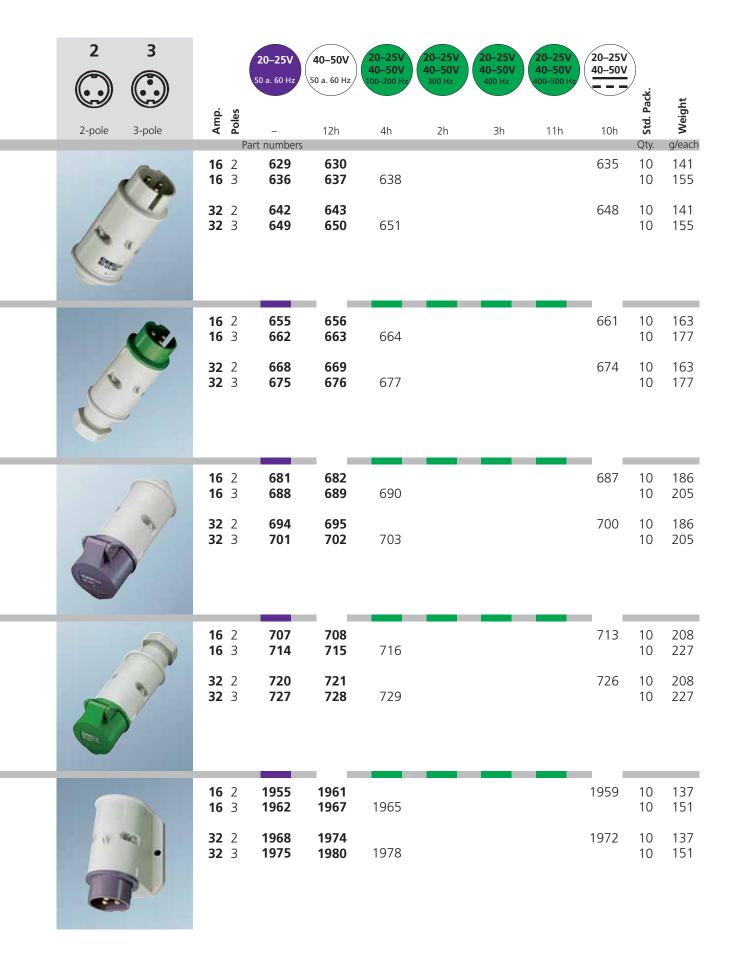
Drawing	Amp.		16	I	32	
2 MB 160	Poles	2	3	2	3	
Dim. in mm	a b c	96 73 74	96 73 74	96 73 74	96 73 74	
	d d1 d2	53 52 2	53 52 2	53 52 2	53 52 2	
	e f g	62 5,3 8	62 5,3 8	62 5,3 8	62 5,3 8	
Terminal for co section (mm²) r		116 4 —10	116 4 —10	116 4 —10	116 4 —10	

Wall mounted inlets

external fixing, one cable entry at top and one blind cable entry (can be cut out) at the rear side

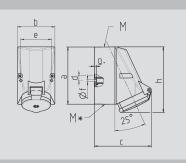
▲ IP 44

Product group 2045, type 1962 shown.



MENNEKES CEE plugs and receptacles for low voltage 63A

DIN VDE 0623, EN 60309-2 applies only to plugs and receptacles for low voltage with rated currents of 16A and 32A. In designing the 63A low voltage appliances, MENNEKES has taken this standard as a basis with regard to the shape and to safety along with requirements specified by customers. This has resulted in two systems. On this page, products of **system 1** are shown.



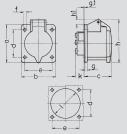
Drawing	Amp.	l	63	
1 MB 43	Poles	2	3	
Dim. in mn	n a b c	128 84 136	128 84 136	
	d e f	11 68 5,3	11 68 5,3	
	g. h M	4 158 32	4 158 32	
Max. cable di	M* am. (mm)		M 25 to be c 18/25	ut out
Terminal for o section (mm²)	ond. cross	2,5 —10	2,5 —10	

Receptacles

(System 1), with highly heat resistant contact carrier and nickel plated contacts, internal fixing, one cable entry at top and two blind cable entries (can be cut out) at bottom, lower part of enclosure base can be turned 180° (63A is not standardised)

▲ IP 44

Product group 1041, type 22356 shown.

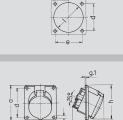


Drawing	Amp.		63	
1 MB 140	Poles	2	3	
Dim. in mm	n a b c	85 75 64	85 75 64	
	d e f	60 60 5,3	60 60 5,3	
	g. h h1	4,5 88 5	4,5 88 5	
	k I	37 60	37 60	
Terminal for co section (mm²)		—10 4	_1 ⁴	

Panel mounted receptacles

(System 1), with highly heat resistant contact carrier and nickel plated contacts

(63A is not standardised)



Drawing A	lmp.		63	
1 MB 238	oles	2	3	
Dim. in mm	a b c	100 92 50	100 92 50	
	d d1 e	85 41 77	85 41 77	
	f g. h	5,1 6 102	5,1 6 102	
	k I I1	58 80 80	58 80 80	
Terminal for con	d. cross	4	4	

▲ IP 44

Product group 1056, type 24081 shown.

Panel mounted receptacles

(System 1), with highly heat resistant contact carrier and nickel plated contacts

(63A is not standardised)



I IVID ZOO	Poles		2	
Dim. in mm	a b c	100 92 50	100 92 50	
	d d1 e	85 41 77	85 41 77	
	f g. h	5,1 6 102	5,1 6 102	
	k I I1	58 80 80	58 80 80	
Terminal for co section (mm²) n		—1 ⁴	—1 ⁴	

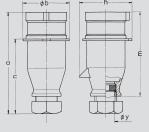
▲ IP 44

Product group 1044, type 22174 shown.

Plugs

(System 1), with cable gland, with highly heat resistant contact carrier and nickel plated contacts

(63A is not standardised)



Drawing	Amp.		63	
2 MB 64	Poles	2	3	
Dim. in mm	ı a	163	163	
	b	71	71	
	h	83	83	
	m	140	140	
	n	117	117	
	у	21	21	
Terminal for co	nd. cross	4	4	
section (mm²) i	10	—10		

▲ IP 44

Product group 2042, type 22175 shown.



Drawing	Amp.		63	
3 MB 22	Poles	2	3	
Dim. in mn	n a	174	174	
	b	66	66	
	h	89	89	
	m	150	150	
	у	21	21	
Terminal for o	ond. cross	4	4	
section (mm²)	minmax.	—10	—10	

Connectors

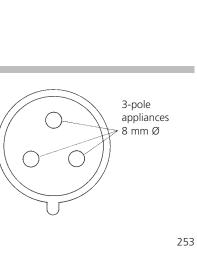
(System 1), with cable gland, highly heat resistant contact carrier and nickel plated contacts

(63A is not standardised)

№ IP 44

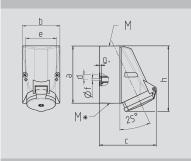
Product group 3042, type 22176 shown.





MENNEKES CEE plugs and receptacles for low voltage 63A

DIN VDE 0623, EN 60309-2 applies only to plugs and receptacles for low voltage with rated currents of 16A and 32A. In designing the 63A low voltage appliances, MENNEKES has taken this standard as a basis with regard to the shape and to safety along with requirements specified by customers. This has resulted in two systems. On this page, products of **system 2** are shown.



Drawing	Amp.		63	
1 MB 43	Poles	2	3	
Dim. in mr	n a b c	128 84 136	128 84 136	
	d e f	11 68 5,3	11 68 5,3	
	g. h M	4 158 32	4 158 32	
Max. cable d	M*		M 25 to be c	ut out
Terminal for of section (mm²)	ond. cross	2,5	2,5 —10	

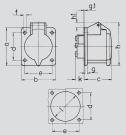
Receptacles

(System 2), with highly heat resistant contact carrier and nickel plated contacts, internal fixing, one cable entry at top and two blind cable entries (can be cut out) at bottom, lower part of enclosure base can be turned 180°

(63A is not standardised)

▲ IP 44

Product group 1041, type 23768 shown.

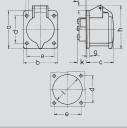


Drawing	Amp.		63	
1 MB 140	Poles	2	3	
Dim. in mn	n a b c	85 75 64	85 75 64	
	d e f	60 60 5,3	60 60 5,3	
	g. h h1	4,5 88 5	4,5 88 5	
	k I	37 60	37 60	
Terminal for o section (mm²)		—10 4	_1 ⁴	

Panel mounted receptacles

(System 2), with highly heat resistant contact carrier and nickel plated contacts

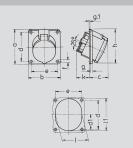
(63A is not standardised)



b	75	75	
c	64	64	
d	60	60	
e	60	60	
f	5,3	5,3	
g.	4,5	4,5	
h	88	88	
h1	5	5	
k	37	37	
I	60	60	
Terminal for cond. cross section (mm²) minmax.		—1 ⁴	

	ΙP	44	ı
/ • \	II.	44	ŀ

Product group 1056, type 23866 shown.

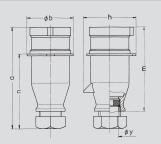


Drawing	Amp.		63	
1 MB 238	Poles	2	3	
Dim. in mm	n a b c	100 92 50	100 92 50	
	d d1 e	85 41 77	85 41 77	
	f g. h	5,1 6 102	5,1 6 102	
	k 1	58 80 80	58 80 80	
Terminal for co		4 —10	10	

Panel mounted receptacles

(System 2), with highly heat resistant contact carrier and nickel plated contacts

(63A is not standardised)



Drawing	Amp.		63	
2 MB 64	Poles	2	3	
Dim. in mn	n a	163	163	
	b	71	71	
	h	83	83	
	m	140	140	
	n	117	117	
	у	21	21	
Terminal for o	ond. cross	4	4	
section (mm²)	minmax.	10	—10	

▲ IP 44

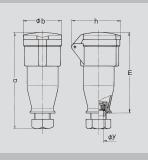
Product group 1044, type 23765 shown.

Plugs

(System 2), with cable gland, highly heat resistant contact carrier and nickel plated contacts (63A is not standardised)



Product group 2042, type 23762 shown.



Drawing	Amp.		63	
3 MB 22	Poles	2	3	
Dim. in mn	n a	174	174	
	b	66	66	
	h	89	89	
	m	150	150	
	у	21	21	
Terminal for o	ond. cross	4	4	
section (mm²)	minmax.	—10	—10	

Connectors

(System 2), with cable gland, highly heat resistant contact carrier and nickel plated contacts (63A is not standardised)

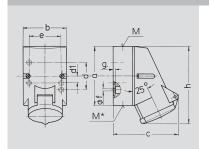
№ IP 44

Product group 3042, type 23771 shown.



MENNEKES CEE receptacles and panel mounted receptacles downstream of isolating transformer

Earthing contact in the 12 o'clock position in accordance with DIN VDE 0623, EN 60309-2. Colour: electric grey. Enclosure and insert made of AMAPLAST. Other versions available on request.

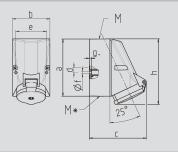


Drawing	Amp.		•	16		_
1 MB 209	Poles	3		4	5	7
Dim. in mm	a b c	87 64 99	7	00 75 10	100 75 113	1
	d d1 e	40 50		11 59	11 59	
	f g. h	1,5 4 15	12	5 4 25	5 4 128	
	M M*	20 Mi	20 (20 blir	20 nd) out	
Max. cable dia	m. (mm)	15		15	15	
Terminal for co section (mm²) r		1,5 –4	1	,5 -4	1,5 —4	

Receptacles

internal fixing, one cable entry at top and two blind cable entries (can be cut out) at bottom; in the 4 pole version, the lower part of the enclosure base can be turned 180°

▲ IP 44 Product group 1040, type 767 shown.

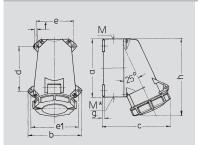


Drawing	Amp.	10	5			32	
1 MB 43	Poles	4	1	5	3	4	5
Dim. in mm	ı a b c	128 84 122	1 8	28 34 24	128 84 136	128 84 136	128 84 138
	d e f	1: 68 5,3	3 6	11 58 ,3	11 68 5,3	11 68 5,3	11 68 5,3
	g. h M	14 2!	1 14	4 45 25	4 158 32	4 158 32	4 160 32
Max. cable dia	M* nm. (mm)	2x M 25 to be 18	cut o		t	M 25 (I o be cu 18/25	it out
Terminal for co section (mm²)		1,!	5 1 1 —	,5 -4	2,5 —10	2,5 —10	2,5 —10

Receptacles

internal fixing, one cable entry at top and two blind cable entries (can be cut out) at bottom, in the 4 pole version, the lower part of the enclosure base can be turned 180°

▲ IP 44 Product group 1041, type 3147 shown.

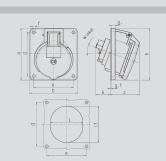


Drawing	Amp.		16			32	
1 MB 219	Poles	3	4	5	3	4	5
Dim. in mn	n a b c	95 102 115	95 102 124	95 102 129	120 112 143	120 112 143	120 112 150
	d e e1	64,2 77,5 88	64,2 77,5 88	64,2 77,5 88	90,2 79 98,5	90,2 79 98,5	90,2 79 98,5
	f g. h	5,5 5 128	5,5 5 128	5,5 5 132	5,5 5 160	5,5 5 160	5,5 5 160
	M M*	20 20 (blind) t		25 25 ut out	t	32 M 32 (o be co	ut out
Max. cable dia	am. (mm)	15	18	18	25	25	25
Terminal for or section (mm²)			1,5 —4	1,5 —4	2,5 —10	2,5 —10	^{2,5} —10

Receptacles

with four external fixings, one cable entry at top and one blind cable entry (can be cut out) at bottom

♦ IP 67 Product group 1049, type 3224 shown.

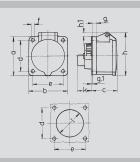


Drawing	Amp.		16		l	32	
1 MB 260	Poles	3	4	5	3	4	5
Dim. in mn		73,5 64 52 60 52 5,5 7 2 79 43	100 92 58 85 77 5,5 8 2 100 32	100 92 58 85 77 5,5 8 2 100 32	100 92 62 85 77 5,5 8 2 103	100 92 62 85 77 5,5 8 2 103 53	100 92 62 85 77 5,5 8 2 107 45
Terminal for o		52 60 20° 1,5 —4	55 63 20° 1,5 —4	65 72 20° 1,5 —4	67 82 20° 2,5 —10	67 82 20° 2,5 —10	72 85 20° 2,5 —10

Panel mounted receptacles

▲ IP 44

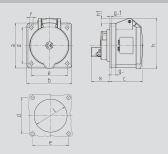
Product group 1044, type 3220 shown.



Drawing A	mp.		16	
1 MB 259 P	oles	3	4	5
Dim. in mm	a	62	72	72
	b	62	65	65
	c	54	54	54
	d	47	52	52
	e	47	52	52
	f	5,5	5,5	5,5
	g.	8	8	8
	g.1	2	2	2
	h	68	77	85
	h1	7	7	11
	k	28	28	28
	l	50	52	57
Terminal for conc	l. cross	1,5	1,5	1,5
section (mm²) mir	nmax.	—4	—4	—4

Panel mounted receptacles

№ IP 44 Product group 1055, type 3222 shown.



Drawing	Amp.		16		I	32	
1 MB 247	Poles	3	4	5	3	4	5
Dim. in mm	a	75	75	75	75	75	75
	b	75	75	75	75	75	75
	c	53	53	55	64	64	65
	d	60	60	60	60	60	60
	e	60	60	60	60	60	60
	f	5,5	5,5	5,5	5,5	5,5	5,5
	g.	8	8	8	8	8	8
	g.1	2	2	2	2	2	2
	h	75	80	85	89	89	95
	h1 k l	31 43	6 32 52	9 32 54	11 39 58	11 39 58	12 39 62
Terminal for co		1,5	1,5	1,5	2,5	2,5	2,5
section (mm²) r		—4	—4	—4	—10	—10	—10

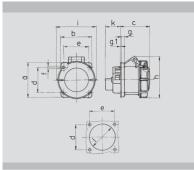
Panel mounted receptacles

№ IP 44 Product group 1056, type 3067 shown.

3 4 2p+E 3p+E	t o	Oownstream of isolating transformer 3-pole 4-pole 12h 12h Part numbers	of Std. Pack.	Weight deach
	16 3 16 4	767 768	10 10	180 240
	32 3 32 4	3141 3147	10 10	355 370
1	16 3 16 4	2904 3223	10 10	240 270
	32 3 32 4	3012 3224	10 10	380 390
	16 3 16 4	3217 3218	10 10	132 186
	32 3 32 4	3219 3220	10 10	250 260
CEE MA MANUEL HAS A	16 3 16 4	3221 3222	10 10	127 148
1100	16 3 16 4	3053 3052	10 10	136 152
CERCIS 34 560-28-20	32 3 32 4	3088 3067	10 10	203 217

MENNEKES CEE plugs and receptacles downstream of isolating transformer

Earthing contact in the 12 o'clock position in accordance with DIN VDE 0623, EN 60309-2. Colour: electric grey. Enclosure and insert made of **AMAPLAST.**Other versions available on request.

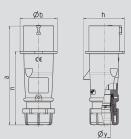


Drawing	Amp.		16		I	32	
1 MB 141	Poles	3	4	5	3	4	5
Dim. in mm	a	75	75	75	85	85	85
	b	75	75	75	75	75	75
	c	60	61	61	70	70	72
	d	60	60	60	60	60	60
	e	60	60	60	60	60	60
	f	5,5	5,5	5,5	5,5	5,5	5,5
	g.	8	8	8	8	8	8
	g.1	2	2	2	2	2	2
	h	83	88	95	99	99	105
	i	78	85	96	103	103	110
	k	26	27	27	34	34	34
	l	50	54	57	62	62	65
Terminal for co		1,5	1,5	1,5	2,5	^{2,5}	^{2,5}
section (mm²) r		—4	—4	—4	—10	—10	—10

Panel mounted receptacles

♦ IP 67

Product group 1046, type 809 shown.

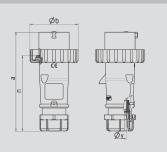


Drawing	Amp.		16			32	
2 MB 217	Poles	3	4	5	3	4	5
Dim. in mn	n a	142	147	147	186	186	180
	b	53	59	67	70	70	77
	h	59	69,4	76	81	81	89,5
	n	105,2	110,5	110,5	141	141	135
	у	14,5	16	16	22	22	22
Terminal for o	ond. cross	1	1	1	2,5	2,5	2,5
section (mm²)	minmax.	-2,5	—2,5	—2,5	6	6	6
					1		

Plugs AM-TOP®

single part body, screw terminals, cable gland and sealing





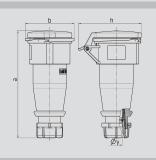
Drawing	Amp.		16		I	32	
2 MB 218	Poles	3	4	5	3	4	5
Dim. in mm	n a	142	144	147	186	186	180
	b	70	78	87	94	94	101
	n	109	111	114	145	145	138
	у	14,5	16	16	22	22	22
Terminal for co	ond. cross	1	1	1	2,5	2,5	2,5
section (mm²)	minmax.	— 2,5	—2,5 ·	-2,5	6	—6	—6

Plugs AM-TOP®

single part body, screw terminals, cable gland and sealing



Product group 2149, type 886 shown.



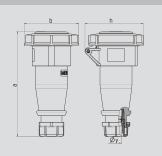
Drawing	Amp.		16			32	
3 MB 63	Poles	3	4	5	3	4	5
Dim. in mm	a	162	165	167	209	209	208
	b	60	68	76	82	82	89
	h	83	92	98	100	100	108
	у	14,5	16	16	22	22	22
Terminal for co	nd. cross	1	1	1	2,5	2,5	2,5
section (mm²) r	ninmax.	—2,5 ·	—2,5 ·	—2,5	—6	—6	—6

Connectors AM-TOP®

single part body, screw terminals, cable gland and sealing



Product group 3141, type 1003 shown.



Drawing	Amp.		16		ĺ	32	
3 MB 62	Poles	3	4	5	3	4	5
Dim. in mm	a	146	166	172	212	212	213
	b	72	79	89	96	96	102
	h	80	88	95	98	98	105
	у	14,5	16	16	22	22	22
Terminal for co	nd. cross	1	1	1	2,5	2,5	2,5
section (mm²) r	minmax.	—2,5	—2,5 ·	-2,5	6	—6	6

Connectors AM-TOP®

single part body, screw terminals, cable gland and sealing

♦ IP 67

Product group 3149, type 1029 shown.

3 4 2p+E 3p+E	÷ 50	Jownstream of isolating ransformer 3-pole 4-pole 12h 12h Part numbers	of Std. Pack.	g/each
-	16 3 16 4	806 807	10 10	150 170
	32 3 32 4	808 809	10	236 245
0	16 3 16 4	860 861	10 10	113 146
	32 3 32 4	862 863	10 10	208 222
10	16 3 16 4	886 887	10 10	133 165
	32 3 32 4	888 889	10 10	230 245
1	16 3 16 4	1003 1004	10 10	143 180
	32 3 32 4	1005 1006	10 10	247 256
	16 3 16 4	1029 1030	10 10	165 200
	32 3 32 4	1031 1032	10	270 280

Portable receptacle combinations with isolating transformers

Ready wired for installation, enclosure made of solid rubber or cast resin. Protection type \triangle IP 44

For use in boiler and tank construction, shipbuilding, works on or in pipelines, pipe trenches, narrow confined areas, steel structures, tunnels, galleries.

Single-phase isolating transformer to VDE 0551/EN 60742

Complies with the requirements of the Employers' Liability I Insurance Association: BGI 594 (use of electric appliances in areas of increased electrical risk).





MENNEKES receptacle combination EverGUM maxi

Enclosure:

solid rubber enclosure 360 x 340 x 330 mm (L x W x H), signal yellow RAL 1003, stackable, with 2 handles and stainless steel quick lock 4 CEE receptacles 16A, 2p, 24V 4 Neozed D 01, 1p (E 14), with fusing accessories 1 MCB 16A, 1p, K with starting current limiting device Feeder cable 3m H07RN-F2X1.5 with contour plug 10A, 2p, 230V Isolating transformer VDE 0551 / EN 60742, 230/24V, 1500VA max. duty ratio 75%





As above, however:

2 CEE receptacles 16A, 2p, 42V 2 Neozed D01, 1p (E 14), with fusing accessories 1 MCB 16A, 1p, K with starting current limiting device Isolating transformer VDE 0551 / EN 60742, 230/42V, 1500VA max. duty ratio 75%

Part no. 71054

As above, however:

1 SCHUKO® receptacle 16A, 230V 1 MCB 6A, 1p+N, C 1 MCB 16A, 1p, K with starting current limiting device Isolating transformer VDE 0551/EN 60742, 230/230V, 1500VA max. duty ratio 75%

Part no. 71055



MENNEKES receptacle combination EverGUM compact

Enclosure:

solid rubber enclosure 306 x 230 x 287 mm (L x W x H), signal yellow RAL 1003, stackable, with handle and stainless steel quick lock, lockable 2 CEE receptacles 16A, 2p, 42V 1 glass tube fuse 4A (primary side) Feeder cable 3m H07RN-F2X1.5 with contour plug 10A, 2p, 230V Isolating transformer VDE 0551/EN 60742, 230/42V, 630VA

Part no. 71052

Portable receptacle combinations with isolating transformers

Ready wired for installation, enclosure made of solid rubber or cast resin. Protection type \triangle IP 44



MENNEKES receptacle combination

Enclosure:

cast resin $190 \times 160 \times 220 \text{ mm}$ (L x W x H), black RAL 9005, with handle

1 CEE receptacle 16A, 2p, 42V 1 glass tube fuse 4A (primary side) Feeder cable 2m H05VVH2-F2X0.75 with contour plug 10A, 2p, 230V Isolating transformer VDE 0551/ EN 60742, cast resin T40/E, 230/42V, 630VA

Part no. 71059



MENNEKES receptacle combination

Enclosure:

cast resin 190 \times 160 \times 220 mm (L \times W \times H), black RAL 9005, with handle

1 SCHUKO® receptacle 16A, 230V 1 glass tube fuse 4A (primary side) Feeder cable 2m H05VVH2-F2X0.75 with contour plug 10A, 2p, 230V Isolating transformer VDE 0551/EN 60742, cast resin T40/E, 230/230V, 630VA

Part no. 71060



MENNEKES receptacle combination

Enclosure:

cast resin $165 \times 100 \times 155 \text{ mm}$ (L x W x H), black RAL 9005, with handle

1 CEE receptacle 16A, 2p, 24V 1 glass tube fuse 2A (primary side) Feeder cable 2m H05VVH2-F2X0.75 with contour plug 10A, 2p, 230V Isolating transformer VDE 0551/ EN 60742, cast resin T40/E, 230/24V, 320VA

Part no. 71056



As above, however:

1 CEE receptacle 16A, 2p, 42V 1 glass tube fuse 2A (primary side) Feeder cable 2m H05VVH2-F2X0.75 with contour plug 10A, 2p, 230V Isolating transformer VDE 0551 / EN 60742, cast resin T40/E, 230/42V, 320VA

Part no. 71057

As above, however:

1 SCHUKO® receptacle 16A, 230V 1 glass tube fuse 2A (primary side) Feeder cable 2m H05VVH2-F2X0.75 with contour plug 10A, 2p, 230V Isolating transformer VDE 0551/ EN 60742, cast resin T40/E, 230/230V, 320VA

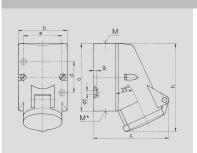
Part no. 71058

MENNEKES CEE plugs and panel mounted receptacles for direct current

in accordance with DIN VDE 0623, EN 60309-2. Colour: electric grey.

Enclosure and insert made of AMAPLAST.

Other versions available on request.

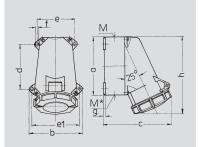


Drawing	Amp.	16
1 MB 369	Poles	3
Dim. in mm	a b c	87 64 99
	d e f	40 50 4,5
	g	4 115
Max. cable dia	M M* m. (mm)	20 20 (blind) to be cut out 15
Terminal for co section (mm²) r		1,5 —4

Receptacles

internal fixing, one cable entry at top and one blind cable entry (can be cut out) at bottom

▲ IP 44 Product group 1040, type 2152 shown.

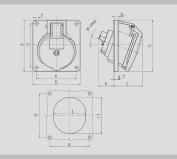


Drawing	Amp.	l	16			32	
1 MB 219	Poles	3	4	5	3	4	5
Dim. in mm	n a	95	95	95	120	120	120
	b	102	102	102	112	112	112
	c	115	124	129	143	143	150
	d	64,2	64,2	64,2	90,2	90,2	90,2
	e	77,5	77,5	77,5	79	79	79
	e1	88	88	88	98,5	98,5	98,5
	f	5,5	5,5	5,5	5,5	5,5	5,5
	g.	5	5	5	5	5	5
	h	128	128	132	160	160	160
Max. cable dia	M M*	20 20 (blind) t	25 25 o be cu 18	25 25 ut out 18	32 t 25	32 M 32 (to be cu	32 blind) ut out 25
Terminal for co	nd. cross	1,5	1,5	1,5	2,5	2,5	2,5
section (mm²) i		—4	—4	—4	—10	—10	—10

Receptacles

with 4 external fixings, one cable entry at top and one blind cable entry (can be cut out) at bottom

♦♦ IP 67 Product group 1049, type 2812 shown.

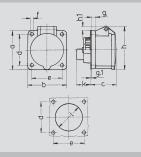


Drawing	Amp.		16		I	32	
1 MB 260	Poles	3	4	5	3	4	5
Dim. in mm	a b c d e f g.1 h k l 11 α	73,5 64 52 60 52 5,5 7 2 79 43 52 60 20°	100 92 58 85 77 5,5 8 2 100 32 55 63 20° 1,5	100 92 58 85 77 5,5 8 2 100 32 65 72 20° 1,5	100 92 62 85 77 5,5 8 2 103 53 67 82 20° 2,5	100 92 62 85 77 5,5 8 2 103 53 67 82 20° 2,5	100 92 62 85 77 5,5 8 2 107 45 72 85 20° 2,5
section (mm²) n	ninmax.	<u>-4</u>	<u>4</u>	<u>-4</u>	<u>–10</u>	<u>—10</u>	<u>—10</u>

Panel mounted receptacles

20° inclination

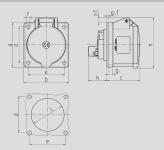
▲ IP 44 Product group 1044, type 3214 shown.



Drawing	Amp.		16	
1 MB 259	Poles	3	4	5
Dim. in mm	a b c	62 62 54	72 65 54	72 65 54
	d	47	52	52
	e	47	52	52
	f	5,5	5,5	5,5
	g.	8	8	8
	g.1	2	2	2
	h	68	77	85
	h1	7	7	11
	k	28	28	28
	l	50	52	57
Terminal for cor		1,5	1,5	1,5
section (mm²) m		—4	—4	—4

Panel mounted receptacles straight

Product group 1055, type 3215 shown.



Drawing	Amp.		16			32	
1 MB 247	Poles	3	4	5	3	4	5
Dim. in mn	n a	75	75	75	75	75	75
	b	75	75	75	75	75	75
	c	53	53	55	64	64	65
	d	60	60	60	60	60	60
	e	60	60	60	60	60	60
	f	5,5	5,5	5,5	5,5	5,5	5,5
	g.	8	8	8	8	8	8
	g.1	2	2	2	2	2	2
	h	75	80	85	89	89	95
	h1 k l	31 43	6 32 52	9 32 54	11 39 58	11 39 58	12 39 62
Terminal for co		1,5	1,5	1,5	2,5	2,5	2,5
section (mm²)		—4	—4	—4	—10	—10	—10

78 85 26 27 50 54

1,5 —4 —4

Panel mounted receptacles straight

Panel mounted	receptacles
straight	

Product group 1056, type 3216 shown.

♦ IP 67

▲ IP 44

▲ IP 44

85 75 72

60 60 5,5

8 2 105

103 103 110 34 34 34 62 62 65

Product group 1046, type 2289 shown.

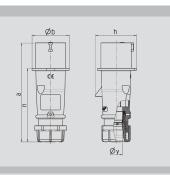
3 2p+E	Amp. Poles	>50- 250V 3h Part numbers	Std. Pack.	Weight deach
	16 3	2152	10	180
	16 3	2812	10	240
CREATING TO A STATE OF THE PARTY OF THE PART	16 3	3214	10	132
	16 3	3215	10	127
	16 3	3216	10	136
	16 3	2289	10	150

MENNEKES CEE plugs and connectors for direct current

in accordance with DIN VDE 0623, EN 60309-2. Colour: electric grey.

Enclosure and insert made of AMAPLAST.

Other versions available on request.



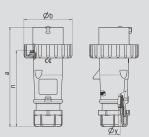
Drawing	Amp.		16			32	
2 MB 217	Poles	3	4	5	3	4	5
Dim. in mm	ı a	142	147	147	186	186	180
	b	53	59	67	70	70	77
	h	59	69,4	76	81	81	89,5
	n y	105,2 14,5	110,5 16	110,5 16	141 22	141 22	135 22
Terminal for co		1	1	1	2,5	2,5	2,5
section (mm²)	minmax.	<i>—</i> 2,5	—2,5	—2,5	_b	<u>6</u>	—6

Plugs AM-TOP®

single part body, screw terminals, cable gland and sealing

▲ IP 44

Product group 2141, type 2184 shown.



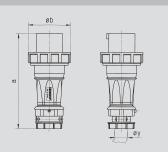
Drawing	Amp.		16		1	32	
2 MB 218	Poles	3	4	5	3	4	5
Dim. in mn	n a	142	144	147	186	186	180
	b	70	78	87	94	94	101
	n	109	111	114	145	145	138
	у	14,5	16	16	22	22	22
Terminal for o	ond. cross	1	1	1	2,5	2,5	2,5
section (mm²)	minmax.	—2,5 ·	—2,5 ·	—2,5	6	—6	—6
		l			I		

Plugs AM-TOP®

single part body, screw terminals, cable gland and sealing

♦ IP 67

Product group 2149, type 2422 shown.



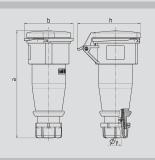
Drawing	Amp.		63		I	125	
2 MB 207/2	Poles	3	4	5	3	4	5
Dim. in mm	a	246	246	246	293	293	293
	b	114	114	114	131	131	131
	у	36	36	36	50	50	50
Terminal for cor	nd. cross	6	6	6	25	25	25
section (mm²) m	inmax.	—16	—16	—16	50	—50	— 50

Plugs PowerTOP

with highly heat resistant contact carrier and nickel-plated contacts, cable gland and external cable grip

♦ IP 67

Product group 2013, type 2849 shown.



Drawing	Amp.		16		I	32	
3 MB 63	Poles	3	4	5	3	4	5
Dim. in mr	n a	162	165	167	209	209	208
	b	60	68	76	82	82	89
	h	83	92	98	100	100	108
	у	14,5	16	16	22	22	22
Terminal for o section (mm²)			1 —2,5	1 —2,5	2,5 —6	2,5 —6	2,5 —6

Connectors AM-TOP®

single part body, screw terminals, cable gland and sealing



Product group 3141, type 2185 shown.



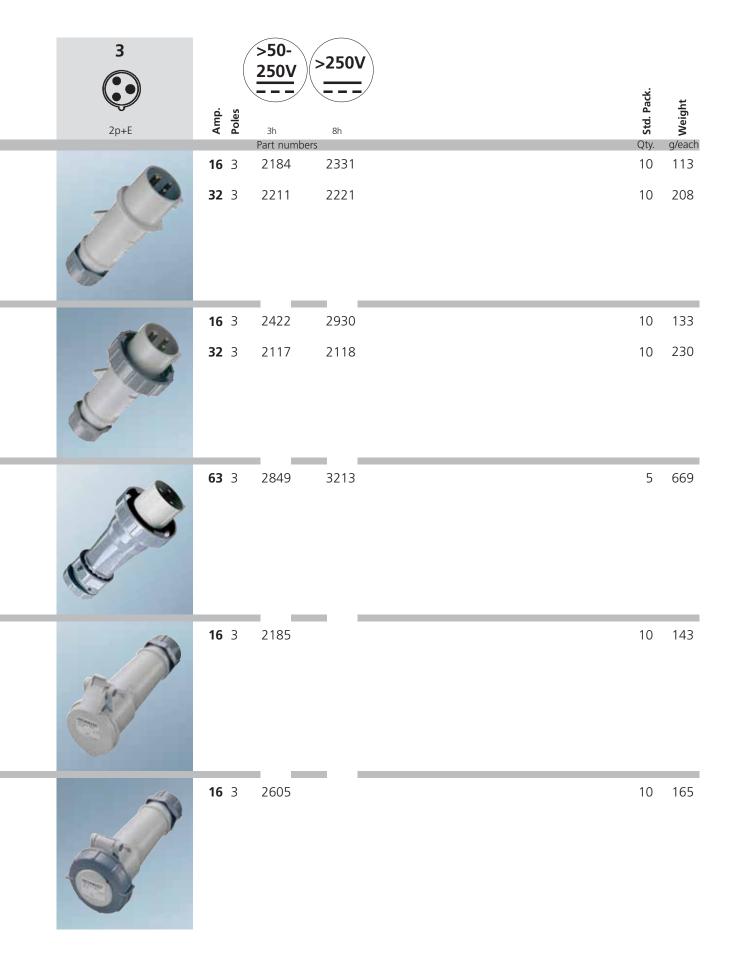
Drawing	Amp.		16		ĺ	32	
3 MB 62	Poles	3	4	5	3	4	5
Dim. in mm	a	146	166	172	212	212	213
	b	72	79	89	96	96	102
	h	80	88	95	98	98	105
	у	14,5	16	16	22	22	22
Terminal for co	nd. cross	1	1	1	2,5	2,5	2,5 —6
section (mm²) r	ninmax.	— 2,5	—2,5	-2,5	6	6	6

Connectors AM-TOP®

single part body, screw terminals, cable gland and sealing

♦ IP 67

Product group 3149, type 2605 shown.

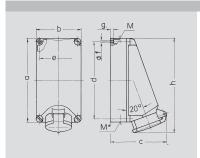


MENNEKES CEE receptacles, switched and interlocked, for direct current

in accordance with DIN VDE 0623, EN 60309-2. Colour: electric grey.

Enclosure and insert made of **AMAPLAST**.

Other versions available on request.



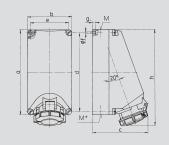
Drawing Amp.		16		I	32	
1 MB 142 Poles	3	4	5	3	4	5
Dim. in mm a b c	225	225	225	225	225	225
	118	118	118	118	118	118
	139	148	150	150	150	152
d	208	208	208	208	208	208
e	101	101	101	101	101	101
f	6,3	6,3	6,3	6,3	6,3	6,3
g.	8	8	8	8	8	8
h	247	252	252	253	253	253
M M* Max. cable diam. (mm)		25 and 2x25 25			25 and 2x25 25	
Terminal for cond. cross section (mm²) minmax.	1,5	1,5	1,5	2,5	2,5	2,5
	—4	—4	—4	—10	—10	—10

Receptacles switched with m

switched, with mechanical **DODSCH** interlock

▲ IP 44

Product group 1077, type 5467 shown.



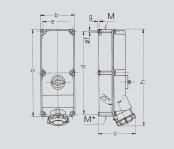
Drawing	Amp.		16		I	32	
1 MB 206	Poles	3	4	5	3	4	5
Dim. in mm	a	225	225	225	225	225	225
	b	118	118	118	118	118	118
	c	144	150	152	155	155	159
	d	208	208	208	208	208	208
	e	101	101	101	101	101	101
	f	6,3	6,3	6,3	6,3	6,3	6,3
	g.	8	8	8	8	8	8
	h	249	251	253	255	255	259
Max. cable dian	M M* n. (mm)		25 and 2x25 25			5 and 2x25 25	
Terminal for cor		1,5	1,5	1,5	2,5	^{2,5}	^{2,5}
section (mm²) m		—4	—4	—4	—10	—10	—10

Receptacles

switched, with mechanical **DODSCH** interlock



Product group 1187, type 7445 shown.



Drawing	Amp.		63
1 MB 283	Poles	3	
Dim. in mm	a b c	460 180 209	
	d e f	440 160 8,1	
	g h	8 525	
Max. cable dia	M M* m. (mm)	40 2x40 27	
Terminal for co section (mm²) n		4 —25	

Receptacles

switched, with mechanical **DUO** interlock, padlockable

♦ IP 67

Product group 1074, type 5806 shown.





13



CEE plugs and receptacles for containers and terminals

Receptacles and panel mounted receptacles, 32A, IP 67 Page 272 and 273





Receptacles, switched and interlocked, DUO, 32A, IP 67 Page 272 and 273

Plugs and panel mounted inlets, 32A, IP 67 Page 272 to 275





Connectors, 32A, IP 67 Page 274 and 275

Phase sequence test plug, 32A, IP 44 Page 274 and 275





AMAXX receptacle combinations, 32A, IP 67 Page 275

Plugs and receptacles for containers and terminals

The safe connection all over the world.



Nowadays perishable goods are transported around the world in refrigerated containers by land, sea and air. Whatever the application, MENNEKES plugs and receptacles prove their worth. In container terminals, loading and transfer stations, ports, airports, in warehouses and on board of ships.



Nickel plated contacts and highly heat resistant contact carriers guarantee increased protection against corrosion and overheating.



3h 3P+⊕ Internationally standardised refrigerated containers: earthing contact in the 3 o' clock position to IEC 309-2/EN 60309-2, protection type IP 67.

Proven technology. Easy to assemble.

Rugged single part body. When fastening the screws, the cable grip engages and the seal is compressed. The serrations on the gland give firm hold and prevent accidental loosening. At the same time, the gland gives good protection against kinking.



Plugs for the world



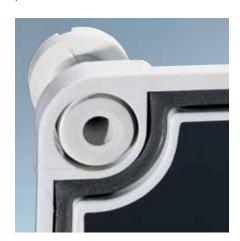


Demonstrated over decades, in thousands of applications.

On ships and in container terminals. Receptacles with DUO interlock. Dependable and safe. After insertion and switching on, the plug is locked in the ON position. After switching off and withdrawing the plug, the switch is locked in the OFF position.

Safe. Tight. Durable.

Safe enclosures with foamed seals: free of silicone, CFCs and halogens. Even after years of use, the high plasticity of the seal guarantees protection to class IP 67.





Switched and interlocked receptacles.

Also available as a fused design and with a monitoring receptacle. Ample wiring space to suit all prescribed cable or wire cross sections.

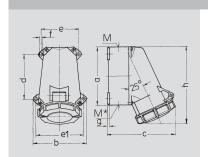
On-site planning results in individual solutions – world-wide.

Container plugs and receptacles for one of the biggest freight companies in the world – the photo shows one of the numerous variations offered by MENNEKES. In consultation with the customer and with on site planning, container receptacle combinations are tailored to suit individual requirements with regard to both, size and fittings.



MENNEKES CEE plugs and receptacles for containers with highly heat resistant contact carrier and nickel plated contacts

Earthing contact in the 3 o'clock position in accordance with DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code. Enclosure and insert made of AMAPLAST. Other versions available on request.



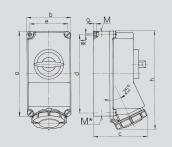
Drawing	Amp.		16			32	
1 MB 219	Poles	3	4	5	3	4	5
Dim. in mm	n a	95	95	95	120	120	120
	b	102	102	102	112	112	112
	c	115	124	129	143	143	150
	d	64,2	64,2	64,2	90,2	90,2	90,2
	e	77,5	77,5	77,5	79	79	79
	e1	88	88	88	98,5	98,5	98,5
	f	5,5	5,5	5,5	5,5	5,5	5,5
	g.	5	5	5	5	5	5
	h	128	128	132	160	160	160
Max. cable dia	M M*	20 20 (blind) t	25 25 o be cu 18	25 25 ut out 18		32 M 32 (o be cu 25	
Terminal for co	ond. cross	1,5	1,5	1,5	2,5	2,5	2,5
section (mm²)		—4	—4	—4	—10	—10	—10

Receptacles

with highly heat resistant contact carrier and nickel plated contacts, 4 external fixings, one cable entry at top and one blind cable entry (can be cut out) at bottom

♦ IP 67

Product group 1049, type 2644 shown.



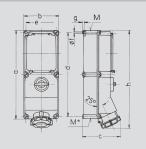
Drawing	Amp.		16			32	
1 MB 207	Poles	3	4	5	3	4	5
Dim. in mm	n a	225	225	225	225	225	225
	b	118	118	118	118	118	118
	c	144	146	147	152	152	153
	d	208	208	208	208	208	208
	e	101	101	101	101	101	101
	f	6,3	6,3	6,3	6,3	6,3	6,3
	g.	8	8	8	8	8	8
	h	252	255	259	268	268	274
Max. cable dia	M M* nm. (mm)		and 1 2x25 25			5 and 1 2x25 25	
Terminal for co		1,5	1,5	1,5	2,5	2,5	2,5
section (mm²)		—4	—4	—4	—10	—10	—10

Receptacles

with highly heat resistant contact carrier and nickel plated contacts, switched, with mechanical **DUO** interlock, may be padlocked in the OFF position

♦ IP 67

Product group 1074, type 5792 shown.



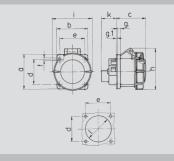
Drawing	Amp.		16		3	2	6	3
1 MB 181	Poles	3	4	5	4	5	4	5
Dim. in mm	n a b c	364 134 160	364 134 162	364 134 163	364 134 168	364 134 168	460 180 209	460 180 209
	d e f	347 117 6,3	347 117 6,3	347 117 6,3	347 117 6,3	347 117 6,3	440 160 8,1	440 160 8,1
	g. h	8 391	8 395	8 398	8 408	8 411	8 525	8 525
Max. cable dia	M M* am. (mm)	32/40 2x32 27	32/40 2x32 27	32/40 2x32 27		32/40 2x32 27	40 2x40 27	40 2x40 27
Terminal for co section (mm²)			1,5 —4	1,5 —4	2,5 —10	2,5 —10	6 —25	_25

Receptacles

with highly heat resistant contact carrier and nickel plated contacts, switched, with mechanical DUO interlock and DIN rail, may be padlocked in the OFF position

♦ IP 67

Product group 1089, type 5946 shown.



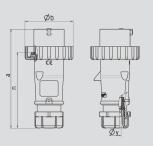
Drawing	Amp.		16		1	32	
1 MB 141	Poles	3	4	5	3	4	5
Dim. in mm	n a	75	75	75	85	85	85
	b	75	75	75	75	75	75
	c	60	61	61	70	70	72
	d	60	60	60	60	60	60
	e	60	60	60	60	60	60
	f	5,5	5,5	5,5	5,5	5,5	5,5
	g.	8	8	8	8	8	8
	g.1	2	2	2	2	2	2
	h	83	88	95	99	99	105
	i	78	85	96	103	103	110
	k	26	27	27	34	34	34
	l	50	54	57	62	62	65
Terminal for co		1,5	1,5	1,5	2,5	2,5	2,5
section (mm²)		—4	—4	—4	—10	—10	—10

Panel mounted receptacles

with highly heat resistant contact carrier and nickel plated contacts



Product group 1046, type 2123 shown.



Drawing	Amp.		16		I	32	
2 MB 218	Poles	3	4	5	3	4	5
Dim. in mm	ı a	142	144	147	186	186	180
	b	70	78	87	94	94	101
	n	109	111	114	145	145	138
	у	14,5	16	16	22	22	22
Terminal for co	nd. cross	1	1	1	2,5	2,5	2,5
section (mm²) ı	minmax.	—2,5	—2,5 ·	— 2,5	6	—6	—6
					1		

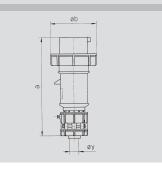
Plugs AM-TOP®

single part body, screw terminals,

with highly heat resistant contact carrier and nickel plated contacts, cable gland and sealing

♦ IP 67

Product group 2149, type 2175 shown.



Drawing /	۹mp.	32
2 MB 211	oles	4
Dim. in mm	а	201
	b	95
	у	max. 19
		min. 14

Plugs PowerTOP

with highly heat resistant contact carrier and nickel plated contacts, cable gland and external cable grip, contact pins sealed with gaskets

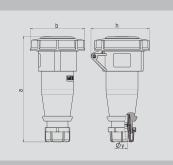
♦ IP 67

Product group 2026, type 2600 shown.

4 3p+E	O <mark>le s</mark> Part number	400 - 440V 4-pole 3h	Std. Pack.	g/each
	32 4	2644	10	390
Direction of the second of the	32 4	5792	1	1180
	32 4	5946	2	2070
	32 4	2123	10	245
	32 4	2175	10	311
	32 4	2600	10	345
				273

MENNEKES CEE plugs and receptacles for containers with highly heat resistant contact carrier and nickel plated contacts

Earthing contact in the 3 o' clock position in accordance with DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code. Enclosure and insert made of **AMAPLAST**. Other versions available on request.



Drawing	Amp.		16		I	32	
3 MB 62	Poles	3	4	5	3	4	5
Dim. in mr	n a	146	166	172	212	212	213
	b	72	79	89	96	96	102
	h	80	88	95	98	98	105
	у	14,5	16	16	22	22	22
Terminal for o	ond. cross	1	1	1	2,5	2,5	2,5 —6
section (mm²)	minmax.	—2,5	—2,5 ·	-2,5	<u>—</u> 6	 6	—6

Connectors AM-TOP®

with highly heat resistant contact carrier and nickel plated contacts, single part body, screw terminals, cable gland and sealing

♦ IP 67

Product group 3149, type 2117 shown.

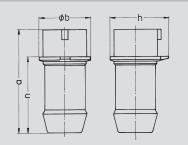


Diawing	Amp.	10		32		0	3
2 MB 40	Poles	5	3	4	5	4	5
Dim. in mm	a	85	85	85	85	114	114
	b	85	85	85	85	114	114
	c	141	141	141	144	180	180
	d	70	70	70	70	90	90
	e	70	70	70	70	90	90
	f	6,2	6,2	6,2	6,2	6,2	6,2
	g.	6.	6.	6.	6.	6.	6.
	g.1	2	2	2	2	2	2
	h	181	181	181	188	242	242
	s	86	93	93	100	113	113
	I	30	30	30	30	40	40
Terminal for co section (mm²) n		_2,5	2,5 —6	2,5 —6	2,5 —6	—10	—1 ⁴

Panel mounted inlets

with hinged lid, with highly heat resistant contact carrier and nickel plated contacts

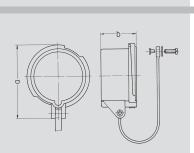




Drawing	Amp.	16	5	32	2	6	3
2 MB 140	Poles	4	5	4	5	4	5
Dim. in mm	n a	126	129	145	145	211	211
	b	60	65	66	74	100	100
	h	62	69	71	80	100	100
	n	90	93	99	99	145	145

Phase sequence test plugs

earthing contact in the 3 o' clock position, conforming to VDE 0413 part 9



Drawing		32
2 MB 146	Poles	4
Dim. in mm	а	91
	b	51

▲ IP 44

Product group 2070, type 3718 shown.

Protective caps for plug 32A, 4p

Part no. 40841

♦♦ IP 67 Product group 8226, type 40841 shown.



The product examples on this page only show 2 possibilities of the large range of combinations. Please contact us and, we will be pleased to provide advice.



EverGUM distribution board to supply two consumers using an integral timer.







Amp. Poles	4-pole 3h	Std. Pack	Weihgt
	Part numbers	Qty.	g/each
32 4	2177	10	280



32 4 2692 10 354



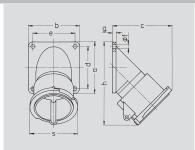
32 4 3718 5 212



Houlder for plug 32A, 4p

Part no. 41342

Product group 8215, type 41342 shown.



Drawing	Amp.	32
2 MB 186	Poles	4
Dim. in mm	а	85
	b	85
	c	100
	d	70
	е	70
	f	6,2
	g.	6
	h	138
	s	82



AMAXX® receptacle combination for containers and terminals

pre-wired for installation Protection type IP67

Enclosure size: 520 x 225 mm

black case upper part electric grey RAL 7035, hinged to the side, fusing under a transparent cover

Cable entry:

2 x M 40 at top (one open, one closed) 2 x M 40 at bottom (closed)

additionally:

2 x M 20 at top (closed) 2 x M 20 at bottom (closed) Fitted with:

3 CEE receptacles 32A, 4p, 400V, 3h switched, with mechanical DUO-interlock 3 MCB's 32A, 3p, C 3 monitoring sockets MS3102E 14S2S

Connection:

for 2 cables up to 5 x 25 mm² and for monitoring sockets 12 x 4 mm²

Part no. 940019



Plugs for the world

■ CEE plugs and receptacles for hazardous areas, (Ex) zone 22

Terminology of explosion protection, provisions, guidelines, standards
Page 282 to 289



Receptacles, switched, interlocked, DUO, 16A to 63A, IP 67, for zone 22 Page 280 and 281





Plugs, 16A to 63A, IP 67, for zone 22 Page 280 and 281

14

Plugs and receptacles for hazardous areas, zone 22

Well protected against dust.



Rugged enclosures with good chemical resistance and a high degree of IP protection – these features make MENNEKES plugs and receptacles the products of choice for industrial use in zone 22 hazardous areas.





The MENNEKES range of plugs and receptacles: wall mounted receptacles with mechanical DUO interlock and matching plugs with the appropriate number of poles and rated current to IP 67. Wall mounted receptacles only accommodate plugs with the same rated voltage, rated current and number of poles.

The dust proof test in accordance with EN 60529 demonstrates that MENNEKES zone 22 plugs and receptacles stay clean – at least on the inside and this is what counts.



All the information you require at a glance.

IP 67 protection

T60°C maximum outside temperature of enclosure in service

3 D protection against dust explosions, zone 22

II not for underground use

Approval no. of test authority



Plugs for the world

Meeting all requirements.



MENNEKES plugs and receptacles 16A, 32A, and 63A with 3-, 4- or 5-poles and various voltages.

Load-break switch, designed for maximum power as per AC 3 and AC 23.

High degree of safety

enclosure can only be

opened using specially approved tools.

in every detail. The







Ergonomic ribs and wings for optimum handling.

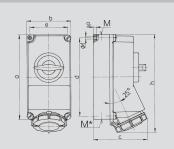
Uniform contact pressure across



MENNEKES switched and interlocked CEE receptacles and plugs

for use in hazardous areas where combustible dust is present to meet zone 22 requirements.

Other voltages and frequencies are available on request. For detailed information, please see page 278/279 and 282 to 289.



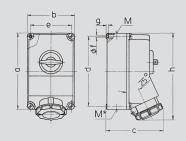
Drawing	Amp.		16			32	
1 MB 207	Poles	3	4	5	3	4	5
Dim. in mm	a	225	225	225	225	225	225
	b	118	118	118	118	118	118
	c	144	146	147	152	152	153
	d	208	208	208	208	208	208
	e	101	101	101	101	101	101
	f	6,3	6,3	6,3	6,3	6,3	6,3
	g.	8	8	8	8	8	8
	h	252	255	259	268	268	274
M		1xM25 and 1xM32			1xM25 and 1xM32		
M*		2x25 2x25 2x25			2x25 2x25 2x25		
Max. cable diam. (mm)		25 25 25			25 25 25		
Terminal for con		1,5	1,5	1,5	2,5	2,5	2,5
section (mm²) m		—4	—4	—4	—10	—10	—10

Receptacles for zone 22 switched,

with mechanical **DUO** interlock, explosion-proof cable entry and explosion-proof sealing plug, padlockable

♦ IP 67

Product group 1011, type 7413 shown.



Drawing	Amp.		63	
1 MB 180	Poles	3	4	5
Dim. in mm	a	264	264	264
	b	163	163	163
	c	196	196	196
	d	240	240	240
	e	140	140	140
	f	8,1	8,1	8,1
	g.	8	8	8
	h	300	300	300
Max. cable dia	M	40	40	40
	M*	40	40	40
	m. (mm)	32	32	32
Terminal for co		6	6	_6
section (mm²) r		—25	25	25

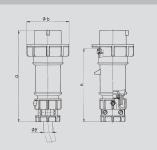
Receptacles for zone 22

switched,

with mechanical **DUO** interlock, explosion-proof cable entry and explosion-proof sealing plug, padlockable

♦ IP 67

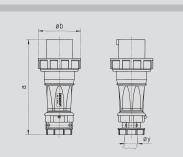
Product group 1011, type 7417 shown.



Drawing	Amp.		16		1	32	
2 MB 171	Poles	3	4	5	3	4	5
Dim. in mm	ı a	162	172	186	199	199	213
	b	71	79	89	95	95	102
	n	129	139	152	157	157	172
	у	19	19	22	24,5	24,5	28,5
Terminal for cond. cross		1	1	1	2,5	2,5	2,5
section (mm²) minmax.		—2,5	—2,5 ·	-2,5	6	6	6
					'		

Receptacles for zone 22

with cable gland and external cable grip



Drawing Amp.		63			125	
2 MB 207/2 Poles	3	4	5	3	4	5
Dim. in mm a	246	246	246	293	293	293
b	114	114	114	131	131	131
у	36	36	36	50	50	50
Terminal for cond. cross	6	6	6	25	25	25
section (mm²) minmax.	—16	—16	—16	50	—50	—50

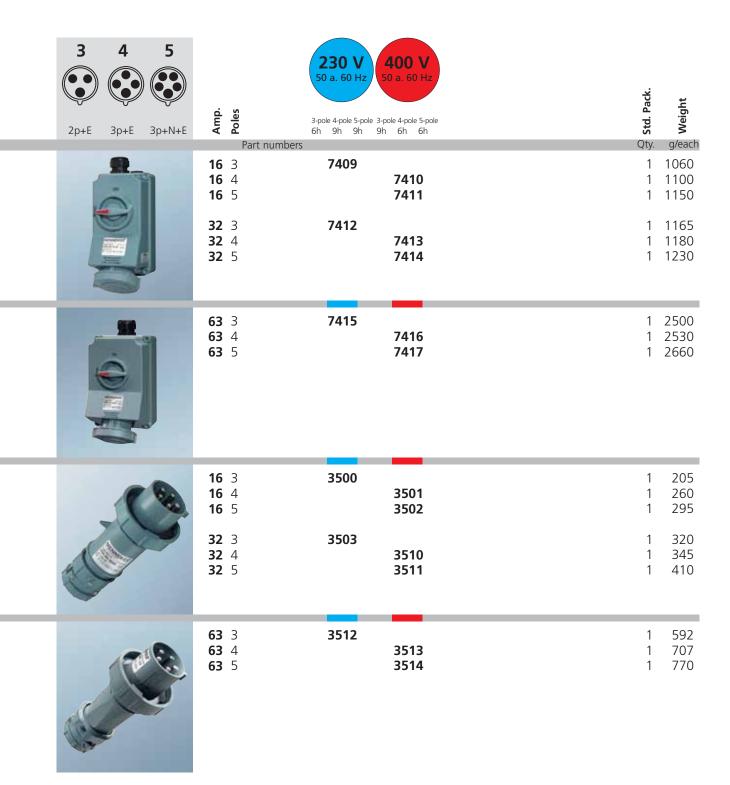
♦ IP 67

Product group 2011, type 3510 shown.

Receptacles for zone 22 with cable gland and external cable grip

♦ IP 67

Product group 2011, type 3514 shown.





Our plugs and receptacles are tested and approved by the accredited testing authority. Approval no. BVS 04 E 125

Plugs and receptacles for hazardous areas where combustible dust is present according to zone 22

Terms of dust explosion protection, decrees, directives, standards

Terms

Excerpt from EN 61241-10:2004 (IEC 61241-10:2004)

"Electrical apparatus for use in the presence of combustible dust – Part 10: Classification of areas where combustible dusts are or may be present" and

Excerpt from EN 50281-1-1:1999

"Electrical apparatus for use in the presence of combustible dust – Part 1-1: Electrical apparatus protected by enclosures – Construction and testing".

Area

Three-dimensional region or space.

Atmospheric conditions

(Surrounding conditions)

Conditions that include variations in pressure and temperature above and below reference levels of 101.3 kPa (1 013 mbar) and 20°C (293 K), provided that the variations have a negligible effect on the explosive properties of the combustible dust.

Dust

Small solid particles including fibres and flyings in the atmosphere which settle out under their own weight, but which may remain suspended in air for some time (includes dust and grit as defined in ISO 4225).

Combustible dust

Dust, fibres or flyings that can burn or glow in air and could form explosive mixtures with air at atmospheric pressure and normal temperatures.

Conductive dust

Dust with electrical resistivity equal to or less than $10^3 \Omega \times m$.

Explosive dust atmosphere

Mixture with air, under atmospheric conditions, of flammable substances in the form of dust, fibres or flyings in which, after ignition, combustion spreads throughout the unconsumed mixture.

Hazardous area (dust)

Area in which combustible dust in cloud form is, or can be expected to be, present in quantities such as to require special precautions for the construction and use of equipment in order to prevent ignition of an explosive dust/air mixture.

NOTE: Hazardous areas are divided into zones based upon the frequency and duration of the occurrence of explosive dust/air mixtures.

Ignition temperature of a dust layer

Lowest temperature of a hot surface at which ignition occurs in a dust layer of specified thickness on this hot surface (see EN 50281-2-1).

Ignition temperature (of a dust cloud)

Lowest temperature of the hot inner wall of a furnace at which ignition occurs in a dust cloud in air contained therein (see EN 50281-2-1).

Dust ignition protection

All relevant measures specified in this standard (e.g. dust ingress protection and surface temperature limitation) applied to electrical apparatus to avoid ignition of a dust layer or cloud.

Dust-tight enclosure

Enclosure capable of preventing the ingress of all observable dust particles.



Dust-protected enclosure

Enclosure in which the ingress of dust is not totally prevented but dust does not enter in sufficient quantity to interfere with the safe operation of the equipment; dust shall not accumulate in a position within the enclosure where it is liable to cause an ignition hazard.

Maximum surface temperature

Highest temperature which is attained by any part of the surface of electrical apparatus when tested under the defined dust free conditions.

NOTE: This temperature is attained under the test condition. Increasing the layer thickness can increase this temperature due to the thermal insulation properties of dust.

Maximum permissible surface temperature

Highest temperature a surface of electrical apparatus is allowed to reach in practical service to avoid ignition; the maximum permissible surface temperature will depend upon the type of dust; its layer thickness, and the application of a safety factor.

NOTE: For details see EN 50281-1-2, clause 6.

Equipment group II

This classification applies to equipment for use in all areas (except for underground work in mines and mine equipment above ground which may be subject to a risk from mine gas), which may be exposed to an explosive atmosphere. Equipment group II is classified into three categories, depending on the occurrence of an explosive atmosphere in the application area.

Equipment group II category 1

Equipment designed to be capable of functioning in conformity with the operational parameters established by the manufacturer and ensuring a very high level of protection.

Equipment in this category is intended for use in areas in which explosive atmospheres caused by

air/dust mixtures are present continuously, for long periods or frequently.

Equipment in this category must ensure the requisite level of protection, even in the event of rare incidents relating to equipment, and is characterized by means of protection such that:

- in the event of failure of one means of protection, at least an independent second means provides the requisite level of protection; or
- the requisite level of protection is assured in the event of two faults occurring independently of each other.

Equipment group II category 2

Equipment designed to be capable of functioning in conformity with the operational parameters established by the manufacturer and of ensuring a high level of protection.

Equipment in this category is intended for use in areas in which explosive atmospheres caused by air/dust mixtures are likely to occur.

The means of protection relating to equipment in this category ensure the requisite level of protection, even in the event of frequently occurring disturbances or equipment faults which normally have to be taken into account.

Equipment group II category 3

Equipment designed to be capable of functioning in conformity with the operating parameters established by the manufacturer and ensuring a normal level of protection.

Equipment in this category is intended for use in areas in which explosive atmospheres caused by air/dust mixtures are unlikely to occur or, if they do occur, are likely to do so only infrequently and for short periods only.

Equipment in this category ensures the requisite level of protection during normal operation.

Equipment

Machines, apparatuses, stationary or mobile appliances, control or equipment components as well as warning and preventive systems which alone or in combination with each other are intended to produce, transfer, store, measure, control and convert power and/or to process materials which have some potential for ignition and may therefore cause explosion.

Normal operation

Situation when the process equipment is operating within its design parameters.

NOTE: Minor releases of dust which may form a cloud or layer (e.g. releases from filters) can be part of normal operation.

Zones exposed to explosive dust/air mixtures

Areas exposed to an explosive dust atmosphere are classified into zones on the basis of the frequency and duration of the occurrence of explosive dust/air mixtures. Layers, deposits and accumulations of combustible dust, which are to be considered in the same way as any other cause leading to the formation of an explosive atmosphere.

Zone 20

A place in which an explosive atmosphere, in the form of a cloud of combustible dust in air, is present continuously, or for long periods or frequently for short periods.

Zone 21

A place in which an explosive atmosphere, in the form of a cloud of combustible dust in air, is likely to occur occasionally in normal operation.

Zone 22

A place in which an explosive atmosphere, in the form of a cloud of combustible dust in air, is not likely to occur in normal operation but, if it does occur, will persist for a short period only.

Examples of zones for explosive dust atmospheres

Zone 20

- Locations inside the dust containment;
- hoppers, silos, etc, cyclones and filters;
- dust transport systems, except some parts of belt and chain conveyors, etc;
- blenders, mills, dryers, bagging equipment, etc.

Zone 21

- Areas outside dust containment and in the immediate vicinity of access doors subject to frequent removal or opening for operation purposes when internal explosive dust/air mixtures are present.
- Areas outside dust containment in the proximity of filling and emptying points, feed belts, sampling points, truck dump stations, belt dump over points, etc. where no measures are employed to prevent the formation of explosive dust/air mixtures.
- Areas outside dust containment where dust accumulates and where, due to process operations, the dust layer is likely to be disturbed and form explosive dust/air mixtures.
- Areas inside dust containment where explosive dust clouds are likely to occur (but neither continuously, nor for long periods, nor frequently), e.g. silos (if filled and/or emptied only occasionally) and the dirty side of filters, if large self-cleaning intervals exist.



Zone 22

- Outlets from bag filter vents which, in the event of a malfunction, can emit explosive dust/air mixtures.
- Locations near equipment opened at infrequent intervals or equipment that, from experience, can easily form leaks where, due to above atmospheric pressure, dust is blown out; pneumatic equipment, flexible connections that can become damaged, etc.
- Storage of bags containing dusty products. Failure of bags can occur during handling, causing dust emission.
- Areas that are normally classified as zone 21 can fall into zone 22 when measures are employed to prevent the formation of explosive dust/air mixtures. Such measures include exhaust ventilation. The measures taken should be carried out in the vicinity of (bag) filling and emptying points, feed belts, sampling points, truck dump stations, belt dump over points, etc.
- Areas where controllable dust layers are formed that are likely to be disturbed and create explosive dust/air mixtures. Only if the layer is removed by cleaning before hazardous dust/air mixtures can be formed, is the area designated non-hazardous.

Containers enclosing dust

They are used as parts of equipment in processes where substances are handled, processed, conveyed, or stored which, among other measures, prevent the release of dust into the ambient atmosphere.

Source of dust release

This is a point or a place from where combustible dust may be released into the atmosphere. The dust may escape from a dust enclosing container or may result from dust deposits.

Release sources

They are classified in the order of decreasing hazard as follows:

- Permanent formation of dust clouds: Places where a dust cloud constantly occurs or can be expected over a long period of time or occurs frequently for short periods of time;
- Primary degree of release: A source from which an occasional release of combustible dust can be expected under normal operating conditions;
- Secondary degree of release: A source from which no release of combustible dust can be expected under normal operating conditions. If dust is released, it will only be on rare occasions and for short periods of time.

Extent of zones of explosive dust/air mixtures

The extent of a zone of explosive dust/air mixtures is defined as the distance from the edge of the dust source up to the point (in any direction) where the risk arising from such zone is considered to be non existent. It must be remembered that fine dust can be carried upwards, away from the source, due to the movement of air in a building.

Definition of zones

The definition of the explosive area (zone) must be made on the basis of the operational requirements. The following shall be considered: places of release, possible movement of air in the equipment, constructional design, weather effects such as wind and rain for outdoor equipment, type and quantity of dust, grain size, humidity, product throughput, dust deposits, risk of dust dispersion. When defining the zones, the EU directive 1999/92 EC, the decree on operational safety and the explosion protection regulations must be observed.

Combustion and explosion parameters of dust

Ignition temperature, glow ignition temperature and conductibility of dust can be found in the special brochure entitled BIA report (Institut für Arbeitssicherheit – BIA – St. Augustin.)

Installation of electrical equipment in areas exposed to dust explosion from July 01, 2003

Areas exposed to dust explosion classified as zones 20, 21 and 22 may occur e.g. in

- Various industries
- Chemical, plastic producing and processing, metal processing, pharmaceutical industries, feed industry, rubber, wood, lacquer, leather, food and textile industries.
- Factories, warehouses, potato and other agricultural processing, milk powder producing works, mills and peat processing works, factories for the processing of magnesium; warehouses in agricultural collectives, in docks and in logistics plants associated with the storage of unpacked, combustible plastics and food and the related raw materials.
- EquipmentCoal processing and coal dust equipment.

Please note:

- EU directive 1999/92 EC
- Ordinance on Operational Safety (Betriebssicherheitsverordnung – BetrSichV) dated September 27, 2002
- Explosion Protection Regulations EX-RL (BGR 104)
- EN 50281-3:2002 (VDE 0165 part 102:2003-05)

 "Electrical equipment for use in the presence of combustible dust. Classification of areas where combustible dusts are or may be present".
- EN 50281-1-2:1998 (VDE 0165 part 2:1999-11)
 "Electrical equipment for use in the presence of combustible dust. Selection, installation and maintenance".

The electrical equipment, protective systems and components used must be in line with the EU

directive 94/9 CE (ATEX) and must be designed according to the applicable EN standards. Compliance with the EU directive and standards is demonstrated by a type approval issued by a nominated control body (e.g. PTB, EXAM) and certified by a declaration of conformity issued by the manufacturer.

The surface temperature of the equipment must not be so high that dispersed dust or dust deposited on the equipment may ignite.

For this to apply, the following conditions must be complied with:

- a) The surface temperature must not exceed 2/3 of the ignition temperature in °C of the particular dust/air mixture.
- b) On surfaces where a hazardous deposit of dust capable of glow ignition cannot be effectively prevented, a temperature of 75K below the glow ignition temperature of the dust must not be exceeded. In the case of a layer thickness greater than 5 mm, a further reduction of the surface temperature is necessary. In the case of dust deposits with a layer thickness greater than 5 mm, the temperature of the surface of the enclosure must be further reduced if necessary.
- c) The lower of the values determined according to a) and b) above shall be applicable.

No connectors or adapters may be used.

Selection of plugs and receptacles for zone 22 areas where combustible dusts are or may be present

Only plugs and receptacles may be used which are in line with EU directive 94/9 EC (ATEX) and are designed according to standard EN 50281-1-1:1999. Only plugs and receptacles should be used which have been type tested by a nominated control body. Plugs and receptacles must be approved for group IID, at least category 3. In order to prevent dust ingress, the maximum IP protection according to EN 60529, e.g. IP 67 should be used.



Plugs for the world

The MENNEKES Ex-plugs and receptacles for use in zone 22 where there is a risk of dust explosion shown on the following pages comply with these requirements.

Obligation to retrofit existing equipment by January 01, 2006.

The decree on operational safety, which converts the EU directive 1999/92 EC into German law, provides that all equipment must be adapted to the required state of the art by January 01, 2006. In the past, equipment of good industrial quality was used in the former zone 11, which has been replaced by zones 21 and 22, which was not approved by a control body and only complied with the requirements of the former VDE standard 0165:1991-02. Such equipment must be replaced by new equipment according to the EU directive 94/9 EC (ATEX), if a risk assessment by the operator and by the inspection authority so requires.

MENNEKES Ex-plugs and receptacles for zone 22

As a result of their high IP protection and their robust enclosure with good chemical resistance, the MENNEKES EX-plugs and receptacles are well suited for the power supplies for mobile, explosion-proof electrical equipment, for a use in industry in zone 22 areas where an explosive atmosphere in the form of a cloud of combustible dust may arise, in moist rooms and outdoors at ambient temperatures from -20°C to +40°C.

The surface temperature of the enclosure does not exceed +60°C, so that there is a sufficient safety margin between the ignition and the glow ignition temperatures of many types of dust. Dust ingress is effectively prevented by the IP 67 dust- and waterproof enclosure according to EN 60529.

The plugs and receptacles are based on the standardised system for industrial plugs and receptacles to EN 60309-1:1999 and 60309-2:1999. Furthermore, the plugs and receptacles are in line with EN 50281-1-1:1998 "Protection provided by enclosure".

The system of plugs and receptacles is made up of a wall mounted receptacle with mechanical interlocking (DUO interlock) and the matching plug with the appropriate number of poles and rated current, protection IP 67. Only wall mounted receptacles and plugs with the same rated voltage, the same rated current and the same number of poles may be plugged together. All plugs and sockets have a protective (PE) conductor. The wall mounted receptacle is provided with a disconnecting switch with a breaking capacity of AC 3 and AC 23 (see technical data). Therefore, overloads can be switched off by the wall mounted receptacle without risk. The switch is suitable as a main switch and is in line with IEC 60947-3, EN 60947-3 and the VDE provision 660 part 107: Forced activation of contacts during switching off and on. The on and off positions of the switch are marked on the outside of the enclosure of the wall mounted receptacle. The connecting terminals of the switches are finger proof according to VDE 0106 part 100 and are protected to IP 20. All external conductors and the neutral conductor are switched. The receptacle insert with contact bushings is ready wired with the switch using single wires. The protective conductor is connected to a separate PE terminal on the switch. The interlocking mechanism is installed in the upper part of the enclosure of the wall mounted receptacle, so as to prevent the receptacle being switched on without the plug being connected and the plug being unplugged when under load. The plug can only be plugged in or unplugged when the receptacle is switched off. The receptacle can be locked using a padlock when in the off position. The plug is made up of the front portion with the contact carrier, the nickel plated contact pins and the cover with cable entry.

Conformity with standards

The plugs and receptacles are in conformity with the EU directive 94/9 EC "Equipment and Protective Systems I Intended for the Use in Potentially Explosive Atmospheres" and the EU directive 89/336 EC "Electromagnetic Compatibility".

components are in line with the following standards, if applicable:
EN 50281-1-1; DIN EN 50281-1-1:1999-10
(VDE 0170/0171 part 15-1-1)

The plugs and receptacles and installed

EN 60309-1; DIN EN 60309-1:2000-05 (VDE 0623 part 1)

EN 60309-2; DIN EN 60309-2:2000-05 (VDE 0623 part 20)

EN 60947-3; DIN EN 60947-3:2001-12 (VDE 660 part 107)

Type testing

The plugs and receptacles are type tested according to EN 50281-1, e.g. by a nominated control body, in accordance with the EU directive 94/9 EC.

Type test certificate no.
04 BVS 04 E 125
Identification according to EU directive 94/9 EC:
⟨Ex⟩ II 3 D T 60 °C C€

Protection type

The ignition protection of the plugs and receptacles according to EN 50281-1-1:1998 is "Protection provided by enclosure". With the existing seals and the design of the enclosure, IP 67 to EN 60529 is achieved when the hinged cover is closed and the plug is locked using the bayonet ring.



Technical data - Plugs and receptacles 16A, 32A and 63A

		Wall-mounted rece	eptacles					
Rated current			l _n	Α	16	32	63	
Rated operating vo	oltage,	3 poles	Un	V		200 – 250)	
·	3 ·	4, 5 poles			380 – 415			
Rated frequency		·	f	Hz	50 – 60			
Position of retaining		h		6				
Ambient temperat	ure		T _u	°C		-20 to +40)	
Storage temperatu	ire		Т	°C		-40 to +80)	
IP protection with	closed and secured					IP 67		
hinged cover or pl	ugged-in plug							
Cable entry in th	e enclosure		A ₁	mm	1 x M32	x 1.5	2 x M40	
Number and conne	ecting threads EN 60	423			3 x M25	x 1.5		
Cable entry, included in the supply				St.	1 x M25	1 x M32	1 x M40	
Cable cross section	n for M 40 x 1.5			mm		22 to 32		
Cable cross section	n for M 32 x 1.5			mm		18 to 25		
Cable cross section	n for M 25 x 1.5			mm		13 to 18		
Explosion-proof se	aling plug, included i	n the supply		St.	1 x M32	3 x M25	1 x M40	
					2 x M25			
Cross section for	connection, min. –	max.						
of the term	ninals on the switch							
one or mor	re wires			mm ²		2.5 – 16		
stranded w	vire without ferrule			mm ²	1.5 – 4	2.5 – 10	6 – 50	
stranded w	vire with ferrule DIN 4			mm ^²	1.5 – 4	2.5 – 10	6 – 50	
	Tech	nical data of the ins	stalled sw	itch		ı		
· · · · · · · · · · · · · · · · · · ·	current, encapsulated		l _{the}	А	32	63	80	
Rated breaking cap	pacity			I	1	I		
AC-3	3 poles	220 V – 240 V		kW	3	7.5	15	
	3 a. 4 poles	380 V – 440 V		kW	7.5	18.5	37	
AC-23 A(B)	2 poles, 1 phase	230 V		kW	4	7.5	15	
	3 u. 4 poles,	380 V – 440 V		kW	11	22	45	
	3 phase							
		Dl						
		Plug	Τ.		46	22		
Rated current			I _n	Α	16	32	63	
Cable entry								
Cable diameter, m	in. – max.	3 a. 4 poles,	D	mm	9 – 19	11-24.5		
		5 poles			11.4 – 22	11-28.5	12 – 36	
	Cross section for connection, min. – max.							
	vire without ferrule			mm ²	1 – 2.5		6 – 16	
stranded wire with ferrule DIN 46228				mm ^f	1 – 2.5	2.5 – 6	6 – 16	





 CEE plugs and receptacles for camp sites, mobile consumers, trailers and mobile homes

Construction regulations and standards Page 294 and 295



Built-in plugs, CaraCONTACT, 16A, IP 44 Page 296





Angled connectors, 16A, IP 44 Page 296

Wall mounted inlets, 16A, IP 44 Page 296





Plugs and connectors, 16A, IP 44 Page 296 and 297

Wall mounted and panel mounted receptacles, 16A, IP 44 Page 297





Receptacle combinations and stainless steel weather shields for camp sites Page 298 and 299

Plugs and receptacles for camp sites and mobile consumers

Safe and reliable in everyday use.



Plugs and receptacles for camp sites and caravans, docksides and boats, trailers and mobile homes.

Built-in plug CaraCONTACT.

A smart concept produced by the MENNEKES development division.

The horizontal fit of the CaraCONTACT plug relieves strain on the cable and protects it from damage. Smooth insertion of lid and connector. The test label of TÜV Rheinland is testimony to its suitability for purpose. National and international test labels demonstrate electrical safety.



Example of a typical combination for camp site and dockside use: 6 receptacles, 6 over-current and 2 residual current protection devices.



Angled connector with integrated SCHUKO® receptacle for operating electrical appliances outside the caravan; e.g. external lighting, lawnmowers, radios, etc.



Panel mounted receptacle equipped with an eyelet for a padlock. Protects against unauthorised use.





Plugs for the world

Versatile applications.



MENNEKES CombiTOWER® suitable for fitting with combinations 260 x 225 mm, 390 x 225 mm and 520 x 225 mm.

MENNEKES CombiTOWER® is availlable with a bright stainless steel or a signal yellow finish.

All CombiTOWER® are fitted with two apertures which may be used for compressed air pipes or water hoses at your discretion.

CombiTOWER®
On request with lockable door.

Stainless steel weather shields.





The modular system of weather shields and columns enables wall mounted and ground fixed installations to be combined.



For more information on material properties and recommendations, please see the product information pages in chapter 9.

CEE-plugs and receptacles

for electrical installations for caravans and camp sites, boats and dockside power supplies, market and fairground booths, trailers and mobile homes

Construction regulations and standards

Electrical installations on camp sites and in caravans

Electrical connection for caravans

DIN VDE 0100 part 708:2006/02 applies to construction. This regulation applies to the power supply to parking spaces allotted in camp sites and the connection of caravans.

For the power supply to each parking space at least one receptacle with an earth contact conforming to EN 60309 must be installed. The rated current of the receptacle must be at least 16A.
For a 230V, 16A AC power supply a 230V, 16A, 2p+E receptacle conforming to EN 60309-2:1999, standard sheet 2-I must be used.

The point of origin of the power supply to the caravan place must not be more than 20 m away. The receptacles at the point of origin must be provided at a height of 0.8 to 1.5 m. Each receptacle must have its own overcurrent protection device. The receptacles must be protected separately by residual current protection devices with a rated residual current that must not exceed 30 mA.

Extension cables must be fitted with earthed connectors and plugs conforming to EN 60309-2. The extension cable must conform to type H07RN-F3 G2.5 and must be no more than 25m in length.

DIN VDE 0100 part 754:2006-02 applies to construction. This regulation applies to the connection of caravans.

Connections for caravans must be made with an earthed inlet conforming to EN 60309. The connection point must be on the outside of the caravan and must be covered by a lid. The rated inlet current must be at least 16A. For a 230V, 16A AC power supply, a 230V, 16A, 2p+E inlet conforming to EN 60309-2:1999, standard sheet 2-II must be used.

Plugs and receptacles on caravans must comply with protection class IP 55 due to special conditions or must be accommodated in such a manner that this rating is achieved.



Electrical installations for boats, yachts and dockside power supply (marinas)

DIN VDE 0100 part 721/1984-04 applies to construction. For each berth an earthed receptacle conforming to EN 60309-2:1992, standard sheet 2-I, must be provided: 230V, 16A, 2p+E, IP X4.

The point of origin of the power supply to the berths must not be more than 20 m away. The receptacles of the point of origin must be provided at a min. height of 1.0 m if they are accommodated on floating equipment or on moles. Each receptacle must be fused with its own overcurrent protection device of max. 16A. Each group of receptacles must be protected by a residual current protection device with a rated residual current that must not exceed 30 mA. One residual current protection device must not serve more than six receptacles.

Extension cables must be fitted with earthed connectors and plugs conforming to EN 60309. They must be fitted with an earthed plug conforming to EN 60309-2, standard sheet 2-II, and with an earthed connector conforming to EN 60309-2:1992, standard sheet 2-I, data as above.

The extension cable must conform to type H07RN-F3G2.5 and must be no more than 25m in length.

On-board connections must be made with an earthed inlet conforming to EN 60309. For a 230V, 16A AC power supply, a 230V, 16A, 1p+E inlet conforming to EN 60309-2:1992, standard sheet 2-II, must be used.

The plugs and receptacles must conform to enclosure protection type IP X4 at the least.

Electrical installations for market and fairground booths, trailers and mobile homes

DIN VDE 0100 part 722/1984-05 applies to construction. For supply to a power circuit direct from origin, earthed receptacles conforming to EN 60309-2:1992, standard sheet 2-I, 220 to 240V, 16A, 2p+E, IP X4 are to be provided. Residual current protection devices with a rated residual current of \leq 0.5A and an overcurrent protection device with a rated current of max. 16A must be installed upstream of these receptacles. If there is more than one power circuit, a distribution board fitted with plugs and receptacles must be used, in accordance with EN 60439-4 (VDE 0660 part 501).

The vehicles must be fitted with inlets marked with the receptacle data, in accordance with EN 60309-2:1992, standard sheet 2-II.

Connection and extension cables must conform to type H07RN-F at the least and be fitted with an earthed plug conforming to EN 60309-2, standard sheet 2-II, and with an earthed connector conforming to EN 60309-2:1992, standard sheet 2-I, data as above.

In view of the electric power required by market or fairground booths, CEE plugs and receptacles conforming to EN 60309, 380-415V, 3p+N+E, with rated currents of 32A and 63A, IP X4, may also be used (see draft VDE 0100 part 740:1998-10).

MENNEKES CEE-plugs and receptacles

for electric appliances on camp sites, in caravans, for docksides and boats

to DIN VDE 0623, EN 60309-2, colour: electric grey and/or colour code.

Enclosure and insert made of **AMAPLAST**.

Other versions on request.



Built-in plug CaraCONTACT with nickel plated contacts 16A, 3P, 230V

▲ IP 44

Lid: electric grey Part no. 8001

Lid: black

Part no. 8008

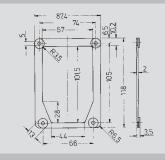




Counter frame for built-in plug

CaraCONTACT no. 8001, 8008

Part no. 40744





Angled connector 16A, 3P, 230V with integral SCHUKO® receptacle 16A, 230V with grommet

▲ IP 44

Part no. 1566



Angled connector 16A, 3P, 230V

▲ IP 44

Part no. 1438

with grommet



Connector ProTOP

with screw terminals, cable gland and sealing, strain relief and protection against kinking, enclosure with thread lock and safety slide 16A, 3P, 230V

▲ IP 44

Part no. 180AC



Wall mounted inlet

for internal or external fixing 16A, 3P, 230V

▲ IP 44

Part no. 844

Hinged lid for retrofitting wall mounted inlet

Part no. 41482



Wall mounted inlet with hinged lid

for internal or external fixing 16A, 3P, 230V

▲IP 44

Part no. 847



Wall mounted inlet

16A, 3P, 230V

▲IP 44

Part no. 332





ProTOP plug

with screw terminals, cable gland and sealing, strain relief and protection against kinking, enclosure with thread lock and safety slide 16A, 3P, 230V

▲ IP 44

Part no. 148



Angled plug

with grommet 16A, 3P, 230V

№ IP 44

Part no. 1411



Panel mounted receptacle with TwinCONTACT

screwless spring terminal, suitable for through wiring, straight

flange: 55 x 55 mm fixing hole spacing: 45 x 45 mm

16A, 3p, 230V **▲**IP 44

Part no. 1619



Panel mounted receptacle with TwinCONTACT

screwless spring terminal, suitable for through wiring, straight

flange: 62 x 62 mm

fixing hole spacing: 47 x 47 mm

16A, 3p, 230V **№** IP 44 Part no. 1350



Panel mounted receptacle with TwinCONTACT

screwless spring terminal, suitable for through wiring, 20° inclination flange: 73,5 x 64 mm fixing hole spacing: 60 x 52 mm

16A, 3p, 230V **▲**IP 44

Part no. 1632



Panel mounted receptacle with TwinCONTACT

screwless spring terminal, suitable for through wiring, straight

flange: 75 x 75 mm fixing hole spacing: 60 x 60 mm 16A, 3p, 230V

▲ IP 44

Bestell-Nr. 1668



Panel mounted receptacle

equipped with an eyelet for a padlock, 20° inclination, flange: 68 x 62mm fixing hole spacing: 47 x 47mm 16A, 3P, 230V

▲IP 44

Part no. 851



Plug with eyelet 16A, 3P, 230V

▲ IP 44

Part no. 852

(matching panel mounted receptacle 851 on the left)



Receptacle with TwinCONTACT

screwless spring terminal, external fixing, cable entry from top 16A, 3p, 230V **▲**IP 44

Part no. 1341



Adapter cable

3-core rubber sheathed cable 1.5 m long with CEE connector 16A, 3P, 230V and SCHUKO® plug 16A, 230V

Part no. 8004



Adapter cable

3-core rubber sheathed cable 1.5 m long with SCHUKO® connector 16A, 230V and CEE plug 16A, 3P, 230V

Part no. 8005

MENNEKES AMAXX® receptacle combinations for camp sites

pre-wired for installation. Enclosure and insert made of **AMAPLAST**. Other variations on request! Protection type **\Delta** IP 44



AMAXX® receptacle combination Enclosure size: 260 x 225 mm

black case, upper part electric grey RAL 7035, hinged to the side,

fusing under a transparent cover

Fitted with:

3 CEE receptacles 16A, 3p, 230V (with eyelet)

3 RCD's \boxtimes 25A, 2p, $I_{\Delta N} = 0.03A$

3 MCB's 16A, 1p, B

Cable entry:

2 M 32 at top (on open, on closed)

2 M 32 at bottom (closed)

additionally:

2 M 20 at top (closed)

2 M 20 at bottom (closed)

Connection:

for 1 cable up to 5 x 10 mm²

Part no. 920031 Part no. 920031SI *



(illustration similar)

AMAXX® receptacle combination Enclosure size: 520 x 225 mm

black case, upper part electric grey RAL 7035,

hinged to the side,

fusing under a transparent cover

Fitted with:

6 CEE receptacles 16A, 3p, 230V (with eyelet)

6 RCD's \boxtimes 25A, 2p, $I_{AN} = 0.03A$

6 MCB's 16A, 1p, B

Cable entry:

2 M 40 at top (on open, on closed)

2 M 40 at bottom (closed)

additionally:

2 M 20 at top (closed)

2 M 20 at bottom (closed)

Connection:

for 2 cables up to 5 x 25 mm²

Part no. 940011

Part no. 940011SI *

MENNEKES AMAXX® receptacle combinations for camp sites already comply to the standard and regulations which came into force 01.07.2007 according to DIN VDE 0100-708:2006-02 and DIN VDE 0100-754:2006-02.

^{*} SI = Upper part are silver (special colour)

MENNEKES stainless steel CombiTOWER® and weather shields for wall mounting or with column

made from stainless steel (material 1.4301), suitable for outdoor installation

Outdoor electric appliances, e.g. on camp sites, may be exposed to unfavourable climatic conditions and UV radiance. Weather shields provide the protection that is needed.

The ideal energy filling station for camp sites.

Matches combinations with receptacles 16A to 63A.



Our modular system of weather shields and colums enables individual combination of installations fixed on the wall and on the ground.

For more information see chapter 9.





CombiTOWER

stainless steel with removable cover, and front plate, painted signal yellow (RAL 1003), dimensions (H x W x D): 1043 x 254 x 249 mm, 1043 x 254 x 415 mm (with door) matching for the AMAXX® receptacle combinations 920031 and 940011 on the left or similar

Part no. 15679

Part no. 15681 (with door)

High safety due to signal yellow colour. Special RAL colours available on request.



CombiTOWER

stainless steel with removable cover, and front plate, stainless steel finish, dimensions (H x W x D): 1043 x 254 x 249 mm, 1043 x 254 x 415 mm (with door) matching for the AMAXX® receptacle combinations 920031 and 940011 on the left

Part no. 15678

or similar

Part no. 15680 (with door)



Weather shield

made from stainless steel (material 1.4301) dimensions (H x W x D): 498 x 254 x 250 mm matching for the AMAXX® receptacle combination 920031 or similar

Part no. 15682



Weather shield

made from stainless steel (material 1.4301) dimensions (H x W x D): 628 x 254 x 280 mm matching for the AMAXX® receptacle combination 940011 or similar

Part no. 15683



Column

from stainless steel (material 1.4301) Surface: stainless steel, bright finish (basic column for the two shields shown on the left), height approx. 1300 mm

Part no. 15530





■ Plugs and receptacles, 200A to 400A

Receptacles, panel mounted receptacles, 200A to 400A, IP 67 Page 304 and 305





Plugs, inlets and panel mounted inlets, 200A to 400A, IP 67 Page 306 and 307

Connectors, 200A to 400A, IP 67 Page 308 and 309





Receptacles, switched and interlocked, 200A to 400A, IP 55 Page 310 and 311

Protective caps for plugs and inlets, 200A to 400A, Page 308 and 309



16

■ Plugs and receptacles, 200A to 400A

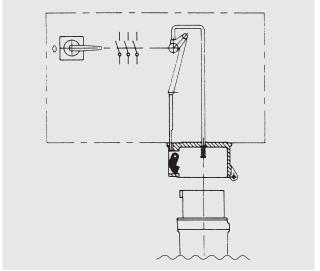
Heavy duty versions for industry.



The heavy duty range supplements the plugs and receptacles currently covered by EN 60309-2, making available rated currents of 200A, 250A and 400A and rated voltages of up to 1000V.

Their design is based on the following standards: IEC 309-1, EN 60309-1, DIN VDE 0623, part 1.





Mechanical lock.

For mobile consumers of rated current > 125A we have included a heavy duty range with 200A, 250A and 400A in our programme. This can be supplied for rated voltages of 230V to 1000V and seawater resistant.

The heavy duty range is suitable for use in very harsh conditions, e.g. building sites:

- drilling rigs
- tunnel construction
- gravel pits
- strip mining
- container terminals and crane connections in harbours; seawater resistant
- for versatile power supply at large-scale indoor and outdoor events
- power supply to market places
- airports
- quarries

Permissible rated current depending on the conductor cross section.

Rated dimension	Rated current Ith	Flexible conductors with single or multiple strands
200A	200A	70 mm²
200A	250A	150 mm²
2504	250A	120 mm²
250A	315A	150 mm²
400.4	400A	185 mm²
400A	450A	240 mm²



Testing of these combinations demonstrated that these plugs, connectors and receptacles may be operated in mines at a rated voltage of 1000V.



Plugs for the world

Shock hazard protected using contact covers.

Contact bushings on receptacles and connectors are fitted with covers which positively prevent getting into contact with live bushings. Shock hazard protected in accordance with IEC 309-1/ EN 60309-1.





Network R1 S2 T3 N Pilot Wall mounted receptacle * Plug * Plug * * with pilot contacts Consumers

Surface protection for contacts.

Contacts 200A to 400A are protected against corrosive atmosphere by silver plating. Contacts (250A and 400A) are accessible from the front side so that there is no need to undo the connection cable when exchanging damaged parts.

Plugs, connectors, inlets and wall mounted receptacles are supplied with flared bushings for cables of diameter 45 to 65 mm. The outside cable grip facilitates connection.

Two pilot contacts are a standard fitting in all plugs and receptacles. The pilot contacts lag when the plug is inserted and lead when it is withdrawn. If required, plugs and receptacles can be electrically interlocked.



Connection terminals in plugs and receptacles 200A for conductor cross sections of 70 to 150 mm², 250A and 400A for conductor cross sections of 70 to 185 mm² or with flexible conductors, and 70 to 240 mm² with single or multiple strand conductors.

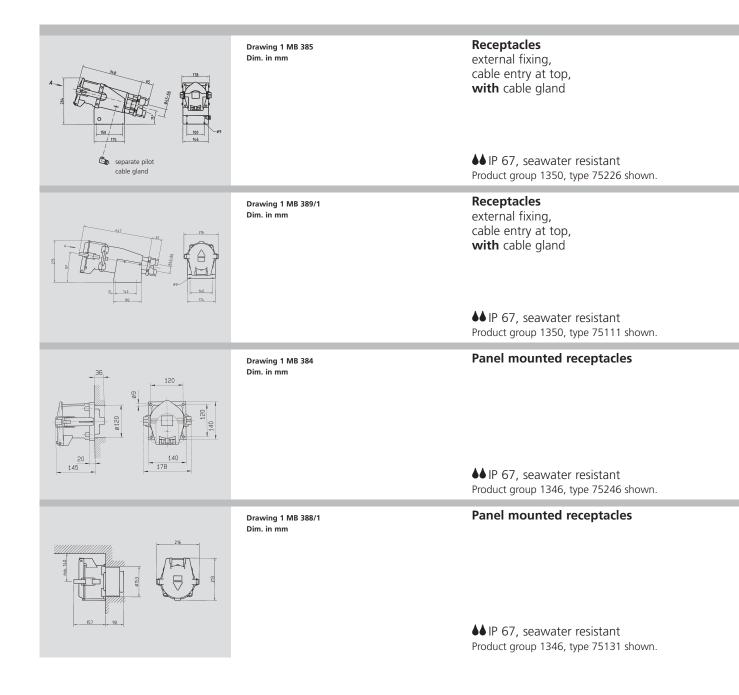


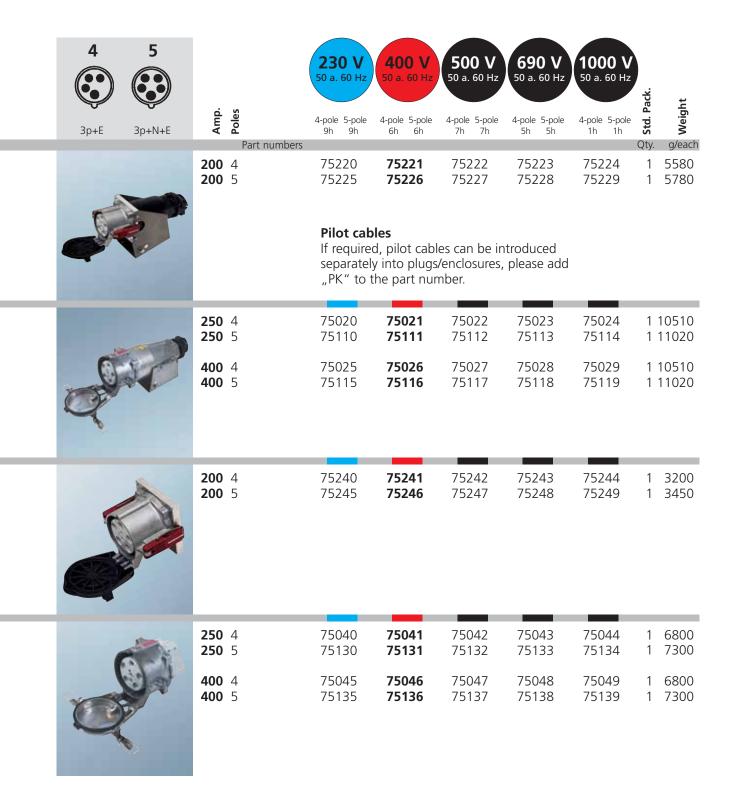


Receptacles and panel mounted receptacles

Design based on IEC 309-1, EN 60309-1, DIN VDE 0623 part 1.

Contact carrier made of creep resistant plastic, enclosure made of aluminium and/or plastic. Other voltages and frequencies as well as larger cable entries available on request.



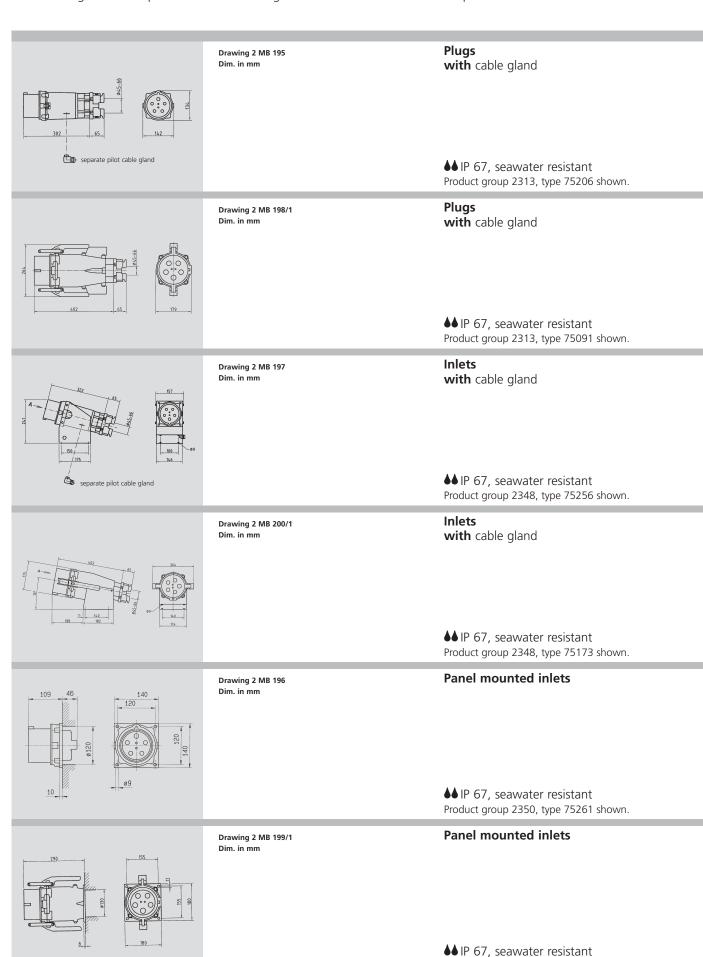


Plugs, inlets and panel mounted inlets

Design based on IEC 309-1, EN 60309-1, DIN VDE 0623 part 1.

Contact carrier made of creep resistant plastic, enclosure made of aluminium and/or plastic.

Other voltages and frequencies as well as larger cable entries available on request.



Product group 2350, type 75295 shown.

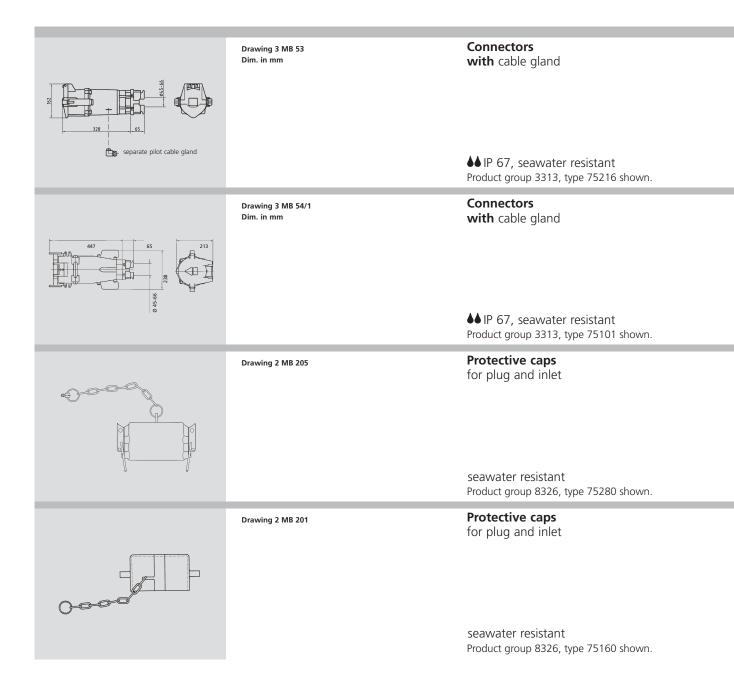
	4	5			230 V 50 a. 60 Hz	400 V 50 a. 60 Hz	500 V 50 a. 60 Hz	690 V 50 a. 60 Hz	1000 V 50 a. 60 Hz	ķ	
	3p+E	3p+N+E	Amp.	Poles	4-pole 5-pole 9h 9h	4-pole 5-pole 6h 6h	4-pole 5-pole 7h 7h	4-pole 5-pole 5h 5h	4-pole 5-pole 1h 1h	Std. Pack.	Weight
			200 200		75200 75205	75201 75206	75202 75207	75203 75208	75204 75274	Qty. 1 1	g/each 3000 3200
					separately	l, pilot cable	es can be in enclosures, aber.				
			250 250		75000 75090	75001 75091	75002 75092	75003 75093	75004 75094	1	
	9		400 400		75005 75095	75006 75096	75007 75097	75008 75098	75009 75099	1	8290 8610
			200 200		75250 75255	75251 75256	75252 75257	75253 75258	75254 75259	1 1	4780 4980
	3				separately	d, pilot cabl	es can be in /enclosures, nber.				
			250 250			75172 75173	75373 75381	75374 75382		1	9660 9980
			400 400			75389 75398	75390 75399	75391 75400		1	9660 9980
	8		200 200		75260 75265	75261 75266	75262 75267	75263 75268	75264 75269	1 1	2200 2400
			250 250		75283 75286	75284 75287	75285 75288	75170 75289	_	1	8100 8600
			400 400		75290 75294	75291 75295	75292 75296	75293 75297		1	8100 8600
l											

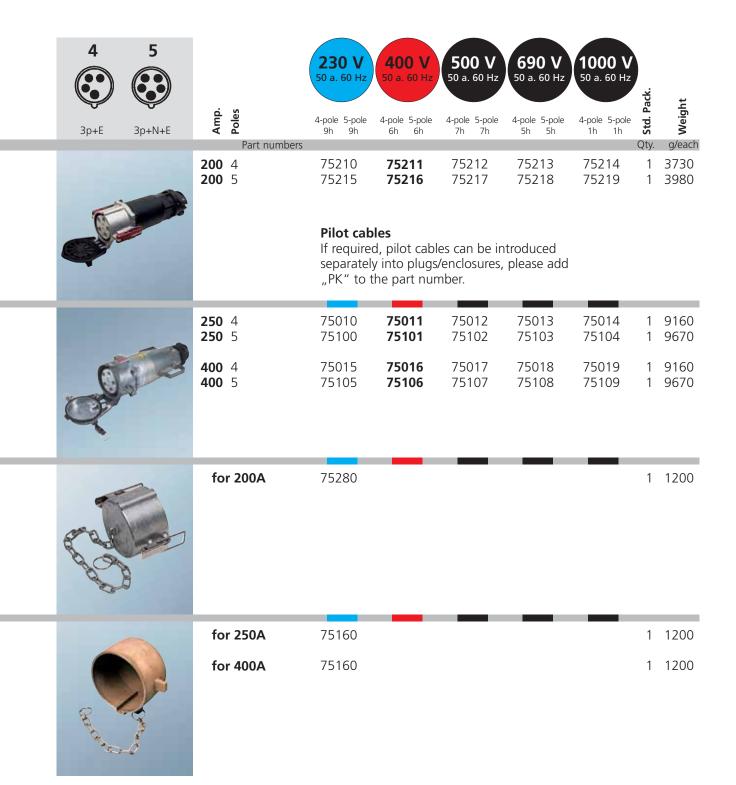
Connectors, protective caps

Design based on IEC 309-1, EN 60309-1, DIN VDE 0623 part 1.

Contact carrier made of creep resistant plastic, enclosure made of aluminium and/or plastic.

Other voltages and frequencies as well as larger cable entries available on request.

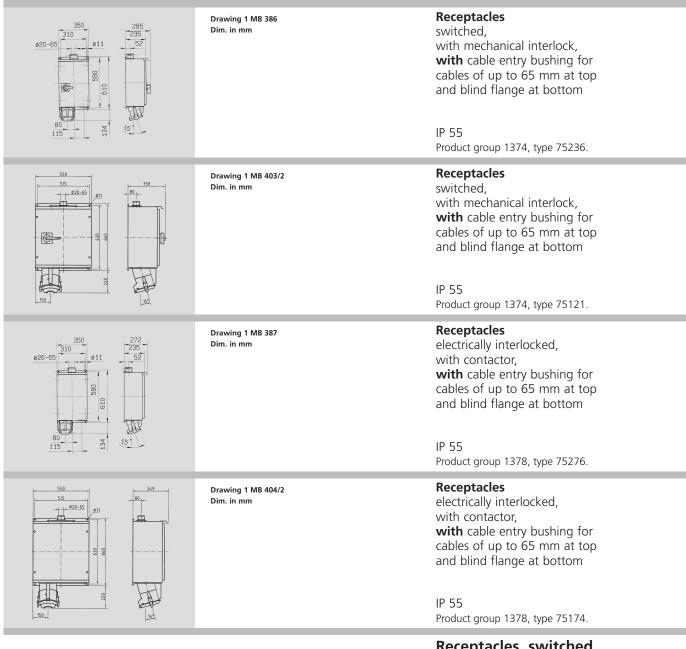




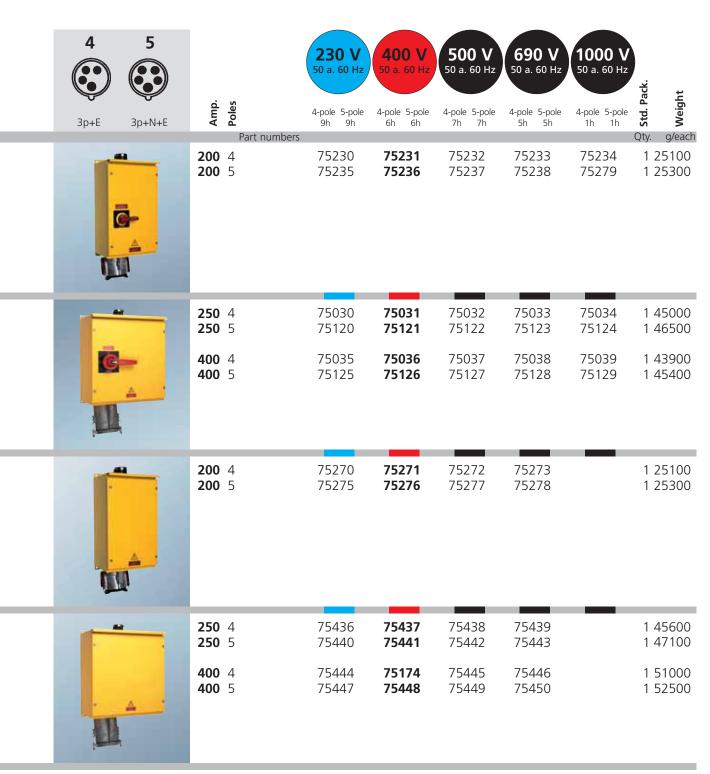
Receptacles, switched and interlocked

Design based on IEC 309-1, EN 60309-1, DIN VDE 0623 part 1.

Contact carrier made of creep resistant plastic, enclosure made of sheet steel, painted in RAL 1021. Other voltages and frequencies as well as larger cable entries available on request. Enclosures made of plastic or stainless steel on request.



Receptacles, switched and interlocked, 200A, 250A, 400A, either 4p or 5p, are available in seawater resistant design on request.



Entries for other cable diameters (> 65 mm) and other accessories are also available.

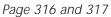
Please contact us.





Cable connection boxes, hinged windows, enclosures

Cable connection boxes AMAPLAST





Hinged windows and accessories Page 318 and 319



AMAPLAST enclosures Page 320 and 321

EverGUM solid rubber enclosures, signal yellow Page 322 and 323





EverGUM solid rubber enclosures, signal yellow Page 322 and 323

17

Cable connection boxes, hinged windows, enclosures

Cable connection boxes for lamp posts.



Protection IP 44.
Dimensions in accordance with DIN 43626.
Protection class II.

Shock hazard protected for finger touch by a latching cover in accordance with BGV A2 (formerly VBG4). Cable connection boxes may be fitted with either one or two fuse bases D 01/E 14 and 5 connection terminals rated for 2 x 16mm² or 3 x 10mm². The fuse elements are factory wired.



Suitable for installation in lamp posts with an internal diameter of 82mm or more and a door aperture of 75 x 250mm or more.
The cable connection boxes are generally supplied pre-wired, which results in a significant reduction of costs. The transparent

cover of the casing can be easily removed for access to the fuses.

AMAPLAST and EverGUM enclosures.



AMAPLAST and EverGUM enclosures are characterized by an excellent stability and the following outstanding features:

- good electrical insulation
- high mechanical strength
- wear resistance
- abrasion resistance
- dimensional stability
- self-extinguishing
- heat resistance
- high cold resistance
- ageing resistance
- seawater resistance

For more information on enclosure materials, please see the product information pages in chapters 7, 8 and 10.

Hinged windows.

Hinged windows are suitable for fitting in enclosures (e.g. MENNEKES enclosures), machines, cable ducts and switchgear cabinets.

Using angle plates and mounting rails, the hinged windows together with built-in modules can be fitted into enclosures or the doors of switchgear cabinets.



Hinged windows with or without protective cover can be supplied to fit module spacing of 2, 5, 6, 8 and 12. Optionally lockable with bracket and padlock.



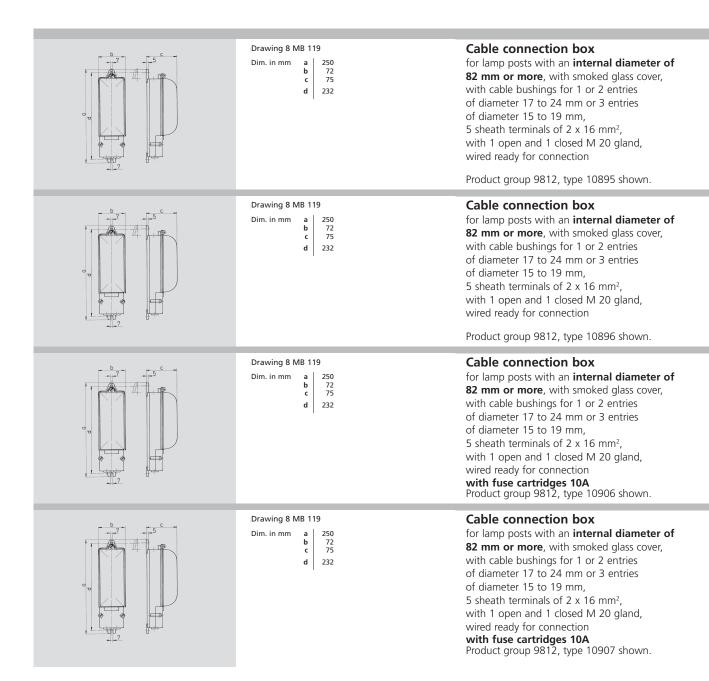
17

MENNEKES connection boxes made of AMAPLAST

Dimensions to DIN 43628.

Protection type A IP 44.

Other versions, e.g. **4-pole** design, are available on request.



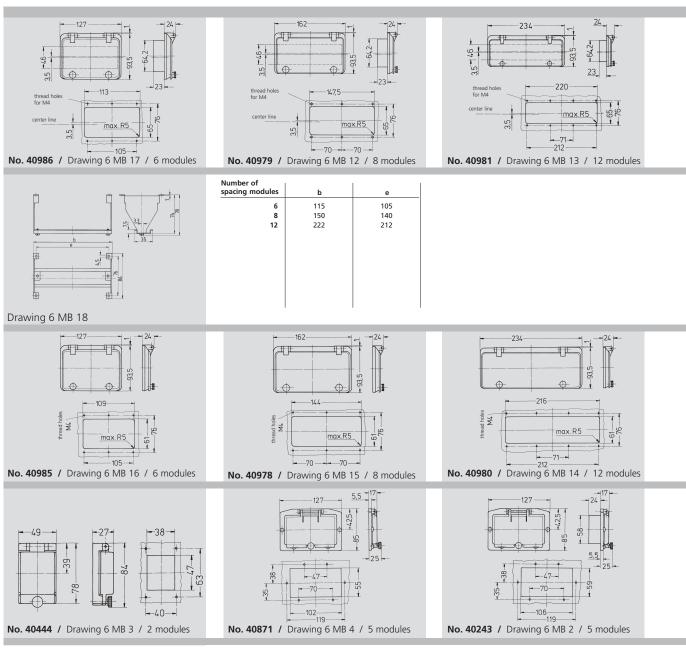
	D-type fuse sockets	Voltage up to		Std. Pack.	Weight
	1 x D 01 (E 14)	400	Part numbers 10895	Qty. 15	g/each 420
	2 x D 01 (E 14)	400	10896	15	463
	1 x D 01 (E 14)	400	10906	15	435
	2 x D 01 (E 14)	400	10907	15	494

MENNEKES hinged windows made of AMAPLAST and accessories

Protection types ▲ IP 44 or ▲ IP 67

Locking mechanism with padlock

for MENNEKES hinged windows



If required, hinged windows may be locked using a padlock as shown on the right.

			Frame colour	Window colour	Part numbers	Std. Pack.	Weight also
		Hinged window with protec	tive cover, with		i art numbers	Qty.	g/cacii
	for 6 modules	electric grey	smoked glass	40986		128	
	for 8 modules	electric grey	smoked glass	40979	as required	169	
		for 12 modules	electric grey	smoked glass	40981	as r	225
	♦♦ IP 67						
		Installation kit for hinged w for fitting modules in doors and	•				
		for 6 modules (for hinged w	indow 40986)		41431	ired	99
		for 8 modules (for hinged window 40979)			41432	as required	111
	for 12 modules (for hinged w	indow 40981)		41433		135	
		Hinged window without pro	otective cover,	with knurled scre	WS		
		for 6 modules	electric grey	smoked glass	40985	eq	107
		for 8 modules	electric grey	smoked glass	40978	as required	127
	14	for 12 modules	electric grey	smoked glass	40980	as r	169
		♦♦ IP 67					
		Hinged window with knurled	screws				
		for 2 modules without protective cover	electric grey	smoked glass	40444	ed	42
	for 5 modules without protective cover 1)	electric grey	smoked glass	40871	as required	75	
	for 5 modules with protective cover 1)	electric grey	smoked glass	40243	ä	94	
		▲ IP 44		nged window spi	ring		
		Locking mechanism	n n n n n				



with padlock

to lock hinged windows

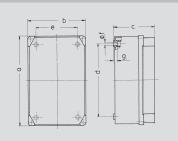
Part no. 41501



MENNEKES enclosures made of AMAPLAST

Protection type ▲ IP 44 or ♦ IP 67

For information on material properties and resistance, see chapters 9 and 19.



Part Number	s	10176	10178	10179	10181
Dim. in mm	a (a) b (b) c (c) d e f g.	170 (158) 118 (108) 64 (55) 134,5 103 6,1	170 (158) 118 (108) 96 (85) 134,5 103 6,1	245 (230) 160 (145) 101 (85) *201 *133 5,5	341 (320) 172 (152) 107 (95) 272 140 8,5 6,5

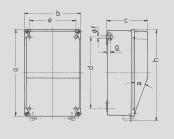
Enclosures

made of AMAPLAST, mounting plate made of insulating material

Part no. 10176 and 10178: **bb** IP 67 Part no. 10179 and 10181: **b** IP 44

The dimensions in brackets show the inner dimensions. *Additional blind fixing holes (can be cut out), spaced 137 x 172 mm

Drawing 5 MB 8



Part Number	s	10696	10757	10679	10758
Dim. in mm	a (a) b (b) c (c) d e f g.n α	245 (230) 160 (145) 151 (137) *201 *133 5,5 10 — 34°	245 (230) 160 (145) 116 (102) *201 *133 5,5 10 259 20°	341 (320) 172 (152) 149 (135) 272 140 8,5 6,5 - 34°	341 (320) 172 (152) (152) (149 (135) 272 140 8,5 6,5 355 34°

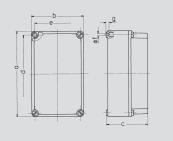
Enclosures

made of AMAPLAST, mounting plate made of insulating material

The dimensions in brackets show the inner dimensions. *Additional blind fixing holes (can be cut out), spaced 137 x 172 mm

Drawing 5 MB 6, 5 MB 36





Part Numbers		10183	10185
(a a) b) c c) d e f	264 (250) 163 (150) 126 (110) 240 140 8,1	264 (250) 163 (150) 126 (110) 240 140 8,1

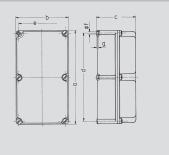
Enclosures

made of AMAPLAST, mounting plate made of insulating material

The dimensions in brackets show the inner dimensions.

Drawing 5 MB 31





Part Numers		10441/10442	10186/10188	10189
Dim. in mm	a	460	460	460
	(a)	(406)	(441)	(437)
	b	180	260	260
	(b)	(126)	(195)	(194)
	c	148	150	228
	(c)	(131)	(128)	(208)
	d	440	434	434
	e	160	234	234
	f	8,1	11	11
	g.	8	9.	9.

Enclosures

made of AMAPLAST, mounting plate:

Part no. 14443 made of zinced sheet

steel

Part no. 10187 made of insulating

material

The dimensions in brackets show the inner dimensions.

Drawing 5 MB 30

♦ IP 67

	External box dimensions		Colour	Part no.	Oty. Std. Pack.	Weight B/each
	170 x 118 x 64	Box Baseplate	electric grey	10176 10177	Qty.	335 50
	170 x 118 x 96	Box Baseplate	electric grey	10178 10177	 uired	383 50
	245 x 160 x 101	Box Baseplate	electric grey	10179 10180	as required	660 80
4	341 x 172 x 107	Box Baseplate	electric grey	10181 10182		920 110
	245 x 160 x 151 245 x 160 x 116	Box without hinge with hinge Baseplate Box	electric grey electric grey	10696 10757 10180	as required	740 750 80
0.	341 x 172 x 149 341 x 172 x 149	without hinge with hinge Baseplate	electric grey electric grey	10679 10758 10182	as r	1035 1045 110
	264 x 163 x 126	Box Baseplate	electric grey	10183 10184		975 125
	264 x 163 x 126	Box Cover Base Baseplate	transparent smo electric grey	ked glass 10185 10184	as required	975 125
	460 x 180 x 148	Box Baseplate	electric grey zinced	10441 10443		2080 410
	460 x 180 x 148	Box Cover Base Baseplate	transparent smo electric grey zinced	ked glass 10442 10443		2080 410
	460 x 260 x 150	Box Baseplate	electric grey	10186 10187	as required	2900 550
	460 x 260 x 150	Box Cover Base Baseplate	transparent smo electric grey	ked glass 10188 10187	- <i>;</i>	2900 550
	460 x 260 x 228	Box Baseplate	electric grey	10189 10187		3450 550

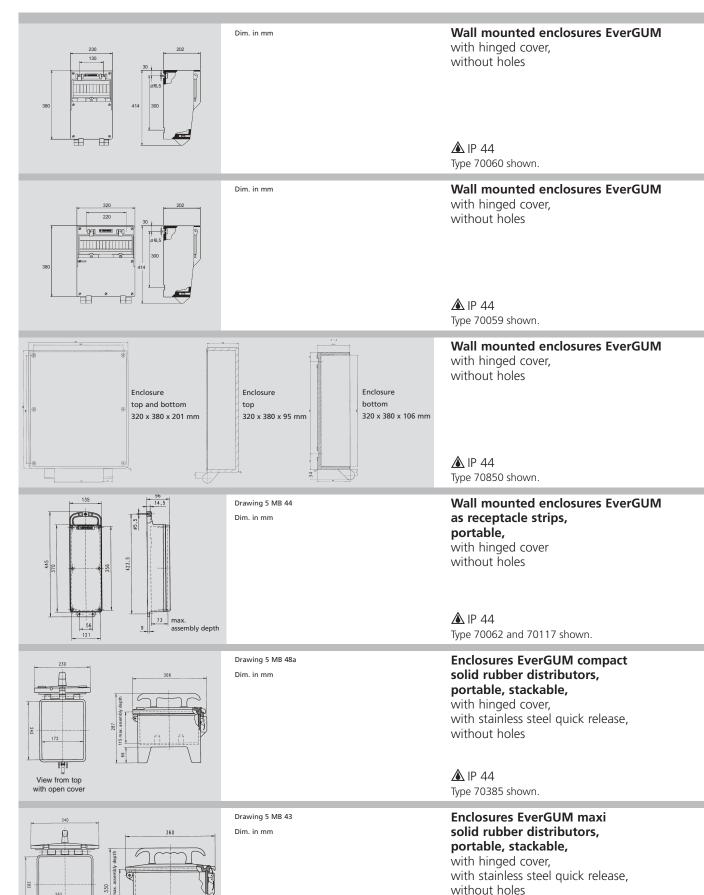
On request with holes for cable entries.

MENNEKES solid rubber enclosures made of EverGUM, signal yellow

Protection type AIP 44.

For information on material properties and resistance, see chapters 10 and 20. EverGUM solid rubber enclosures are also available in black or other colours.

Please contact us.



▲ IP 44

Type 70061 shown.

322

with open cover

	Components	Colour	Part no.	oty. Std. Pack.	Meight 8/each
	with N+PE terminal with hinged window and DIN-rail for 12 modules	signal yellow	70060	1	6022
	with N+PE terminal with hinged window and DIN-rail for 16 modules	signal yellow	70059	1	8200
	with N+PE terminal	signal yellow	70850	1	
	with N+PE terminal with hinged window and DIN-rail for 6 modules	signal yellow signal yellow	70062 70117	2	
	with 1 DIN-rail for 12 modules, with N+PE terminal	signal yellow	70385	1	4950
	with N+PE terminal	signal yellow	70061	1	
THE PARTY OF THE P	1 DIN-rail for 12 modules, without N+PE terminal	signal yellow	70061ZA	1	
	2 DIN-rails for 12 modules, with N+PE terminal	signal yellow	70061ZB	1	





TM plugs and receptacles for military purpose

cee panel mounted receptacles TM, 16A to 125A, IP 67 Page 328 and 329

Hinged windows TM, IP 44 and IP 67 Page 334 und 335





CEE plugs, inlets and connectors TM, 16A to 125A, IP 67 Page 330 and 331

SCHUKO® plugs and receptacles TM, 16A, IP 68 Page 332 and 333





SCHUKO® triple connectors TM, DELTA-BOXES, IP 68 Page 334 and 335

 Plugs and receptacles for fire brigades and civil protection

CEE plugs and receptacles and combinations, IP 67 / IP 54 Page 338 and 339





SCHUKO® plugs and receptacles and DELTA-BOXES, IP 68 / IP 67 Page 336, 337 and 339

 CEE plugs and receptacles made from light weight alloy

CEE receptacles, 16A to 32A CEE plugs, 32A and 63A CEE connectors, 32A Page 340 and 341





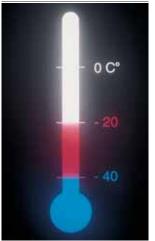
CEE receptacles, switched, interlocked, fused, 16A to 63A Enclosures Page 342 and 343 18

Plugs and receptacles for military purpose, for fire brigades and civil protection and plugs and receptacles made from light weight alloy



Plugs and receptacles to the German Defence Equipment Standard.

MENNEKES TM plugs and receptacles, colour bronze green RAL 60301-F9, have been designed to stand up to especially tough conditions.





To cope with any conditions.

Nickel-plated contacts, highly heat resistant contact carriers. Enclosure made from impact resistant AMAPLAST so as to be extremely cold resistant.



Plugs and receptacles for fire brigades and civil protection.





Plugs and connectors PowerTOP:

highly heat resistant contact carrier, frame terminals, cable gland and external cable grip, plugs additional with nickel plated contacts. Protection type IP 67 watertight



Panel mounted receptacle TwinCONTACT:

with screwless spring terminal, suitable for through wiring. Colour-coded terminals for unmistakable connections. Protection type IP 67 watertight



Marked with the hammer symbol, pressure watertight. Made of AMAPLAST.

Wherever there is a danger of flooding, very high standards have to be met by electrical connections.

MENNEKES pressure

MENNEKES pressure watertight SCHUKO® plugs and receptacles conforming to DIN 49442/443 also meet VDE 0620 standard for severe conditions.



Suitable for harsh mechanical conditions and flooding. Ideal for use in civil protection applications.

Plugs and receptacles made from light weight alloy.

Plugs and receptacles made from light weight alloy are particularly suitable for environments involving high thermal stress and flying sparks. The contacts are nickel plated and the contact carriers are made of highly heat resistant material. The devices are painted grey-green with a hammer finish. Special paints, e.g. with decontamination properties, are available on request.

By simply turning the lower part of the enclosure by 180°, the cable entry to the wall mounted receptacle can be provided at the top or at the bottom as needed.

Switched receptacle, with mechanical DUO interlock and two SCHUKO® receptacles. The upper parts of CEE and SCHUKO® receptacles are fused.



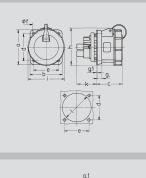


MENNEKES panel mounted receptacles TM and protective covers

to DIN EN 60309-2, colour: bronze-green RAL 6031-F9. Enclosure and insert made of AMAPLAST. Appliances with part numbers in italics are approved to VG 96919.

Other voltages and frequencies available on request.

Protection type **♦** IP 67.



Drawing	Amp.	10	6	3	32	63
1 MB 217/1	Poles	3	5	3	5	5
Dim. in mm	a	75	75	85	85	107
	b	75	75	75	75	100
	c	60	60	67	73	82
	d	60	60	60	60	85
	e	60	60	60	60	77
	f	5,5	5,5	5,5	5,5	6,5
	g	8	8	8	8	12
	g·1	2	2	2	2	2
	h	81	95	95	106	115
	i	70	88	94	102	114
	k	26	27	34	34	55
	I	52	57	58	65	88
Terminal for co section (mm²) n		1,5 —4	1,5 —4	^{2,5} —10	^{2,5} —10	—25

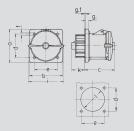
Panel mounted receptacles TM straight,

with highly heat resistant contact carrier and nickel plated contacts

▲ IP 67

(form AS)

Product group 1047, type 20458 shown.



Drawing	Amp.	12!	5
1 MB 258	Poles	4	1 5
Dim. in mm	n a b c	130 130 124	130
	d e f	104 104 6,!	1 104
	g. g.1 i	18 13!	2 2
	k I	43 95	
Terminal for co section (mm²)		2! —70	

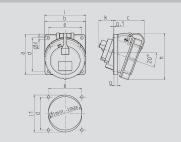
Panel mounted receptacles TM straight,

with highly heat resistant contact carrier and nickel plated contacts

♦ IP 67

(form AS)

Product group 1046.



Drawing	Amp.	1	6	3	2	63
1 MB 474	Poles	3	5	3	5	5
Dim. in mn	abc def g.l.h	73,5 64 61 60 52 5,5 7 2 88 70	85 85 65 70 70 5,5 8 2 98 87	85 85 65 70 70 5,5 8 2 101 94	100 92 71 85 77 5,5 8 2 110	114 114 114 98 90 90 5,5 12 2 135 112 70
Terminal for co	k I min. I max. I1 ond. cross minmax.	43 57 60 — 1,5 —4	31 67 76 — 1,5 —4	54 76 76 — 25 —10	48 76 76 — 2,5 —10	70 92 105 105 6 —25

Panel mounted receptacles TM

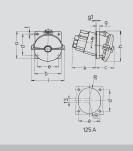
20° inclination,

with highly heat resistant contact carrier and nickel plated contacts

♦ IP 67

(form BS)

Product group 1039, type 22188 shown.



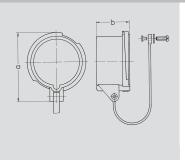
Drawing	Amp.		125	
1 MB 339	Poles		4	5
Dim. in mm	a b c		114 110 85	114 110 85
	d e f		90 90 6,2	90 90 6,2
	g. g.1 h		13 2 135	13 2 135
	i k R	:	135 103 47	135 103 47
Terminal for co section (mm²) r			15° 25 70	15° 25 70

Panel mounted receptacles TM

15° inclination,

with highly heat resistant contact carrier and nickel plated contacts

♦ IP 67 Product group 1048. (form BS)



Drawing	Amp.	I	16		l	32	
2 MB 146	Poles	3	4	5	3	4	5
Dim. in mn	n a b	70 41	79 41	86 42	91 51	91 51	99 52
Drawing	Amp.		63			125	
2 MB 146	Poles	3	4	5	3	4	5
Dim. in mn	n a	108	108	108	119	119	119

Protective covers TM

for watertight plugs and inlets

(form G) for **♦** IP 67

Product group 8226, type 40927 shown.

40930

40931

63

125

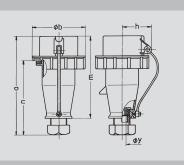
5

MENNEKES CEE plugs, inlets and connectors TM

to DIN EN 60309-2, colour: bronze-green RAL 6031-F9. Enclosure and insert made of AMAPLAST. Appliances with part numbers in italics are approved to VG 96919.

Other voltages and frequencies available on request.

Protection type **♦** IP 67.



Drawing	Amp.		16		32
2 MB 149/1	Poles	3	5	3	5
Dim. in mm	ı a	135	157	173	180
	b	70	87	92	102
	h	40	48	50	54
	m	114	126	152	152
	n	95	116	126	132
	у	15	16	21,5	21,5
Terminal for co	nd. cross	1	1	2,5	2,5
section (mm²) ı	minmax.	-2,5	-2,5	6	-6

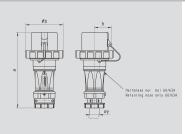
Plugs and phase inverters TM with protective cap,

with highly heat resistant contact carrier and nickel plated contacts

♦ IP 67

(form CP)

Product group 2072, type 20453 shown.



Drawing A	Amp.		63			125	
2 MB 207/1 P	oles	3	4	5	3	4	5
Dim. in mm	a	245	245	245	300	300	300
	b	114	114	114	131	131	131
	h	59	59	59	65	65	65
у	min.	14.5	14.5	14.5	25	25	25
У	max.	36	36	36	50	50	50
Terminal for cond	d. cross	6	6	6	25	25	25
section (mm²) mi	nmax.	—16	—16	16	50	50	— 50

Plugs PowerTOP TM with protective cap,

with highly heat resistant contact carrier, frame terminals and nickel plated contacts, cable gland and external cable grip

♦ IP 67

(form CP)

Product group 2073, type 20454 shown.



Drawing Amp).	1	6	3	32	63
2 MB 62/1 Pole	s	3	5	3	5	5
	a	85	85	85	85	106
	o	85	85	85	85	101
	c	128	128	129	135	152
	d	70	70	70	70	85
	e	70	70	70	70	77
	f	6,3	6,3	6,3	6,3	6,5
	g	11	11	11	11	12
	n	105	107	108	111	130
	s	70	86	92	101,5	114
Terminal for cond. cre		1	1	2,5	2,5	—10
section (mm²) minm		-2,5	—2,5	—6	—6	—10

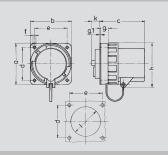
Panel mounted inlets TM with protective cap,

with highly heat resistant contact carrier and nickel plated contacts

♦ IP 67

(form BP)

Product group 2067, type 20463 shown.



Drawing	Amp.	125
2 MB 206	Poles	5
Dim. in mm	a b c	130 130 120
	d e f	104 104 6,5
	g. g1 h	18 2 131
	k I	28 95
Terminal for co section (mm²) r		25 —70

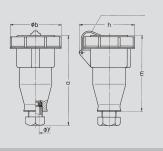
Panel mounted inlets TM with protective cap,

with highly heat resistant contact carrier and nickel plated contacts

♦ IP 67

(form BP)

Product group 2077.



Drawing A	Amp.		16	3	32
3 MB 19/1	oles	3	5	3	5
Dim. in mm	а	144	162	188	188
	b	70	87	92	102
	h	78	95	97	104
	m	121	132	155	160
	у	15	16	21,5	21,5
Terminal for con	d. cross	1	1	2,5	2,5
section (mm²) mi	nmax.	—2,5	-2,5	6	 6

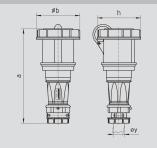
Connectors TM

with highly heat resistant contact carrier and nickel plated contacts

♦ IP 67

(form DS)

Product group 3049, type 20456 shown.



Drawing Amp.		63			125	
3 MB 56/1+2 Poles	3	4	5	3	4	5
Dim. in mm a	260	260	260	320	320	320
b	113	113	113	135	135	135
h	115	115	115	124	124	124
y min	. 25	25	25	_	_	_
y max	د. 50	50	50	50	50	50
Terminal for cond. cros	s 6	6	6	25	25	25
section (mm²) minmax	. —16	—16	—16	—50	—50	—50
	1			1		

Connectors PowerTOP TM

with highly heat resistant contact carrier, frame terminals and nickel plated contacts, cable gland and external cable grip

♦ IP 67

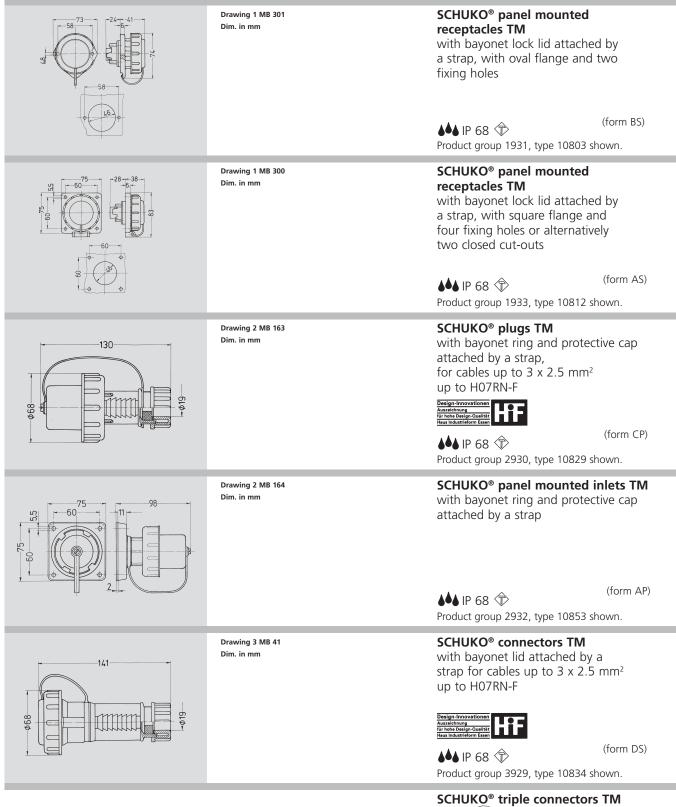
(form DS)

Product group 3013, type 20457 shown.

3 ••• 2p+E	4 3p+E	5 3p+N+E	Amp.	Poles		230 V 50 a. 60 Hz 3-pole 5-pole 6h 9h	400 V 50 a. 60 Hz 5-pole 6h	440 V 60 Hz	> 50- 500 V and 300- 500 Hz 3-pole 5-pole 2h 2h	Std. Pack.	Weight
			16	3	Part no.	22848				Qty. 10	g/each 171
A			16	5	VG-norm 96919 - Part no.	23155	20452	23167	23179	10	269
7		0	32	3	VG-norm 96919 - Part no.	23279	CP001	CP003	CP004	10	300
			32	5	VG-norm 96919 - Part no.	23156	20453	23168	23180	10	382
	~		16 32		VG-norm 96919 - Part no. / VG-norm Part no. / VG-norm	m 96919 -		CP007 CP057 (Pha: CP058 (Pha:		10 10	271 284
			63	5	Part no.	23157	20454	23169	23181	5	886
	40				VG-norm 96919 -	CP010	CP009	CP011	CP012		
			125	5	Part no. VG-norm 96919 -	<i>23158</i> CP014	22915 CP013	<i>23170</i> CP015	<i>23182</i> CP016	5	1496
					VG-1101111 90919 -	CP014	CPUIS	CPUIS	CPUIO		
-											
			16	3	Part no. VG-norm 96919 -	24210 BP013				10	212
			16	5	Part no. VG-norm 96919 -	51 0 15	20461 BP001			10	290
			32	3	Part no. VG-norm 96919 -	23249 BP042	2.00.			10	314
		7	32	5	Part no. VG-norm 96919 -		20462 BP005			10	400
		P	63	5	Part no. VG-norm 96919 -		20463 BP009			5	710
	U		125	5	Part no. VG-norm 96919 -		23433 BP014			5	1274
	,		16	3	Part no. VG-norm 96919 -	22831 DS017				10	165
(F)			16	5	Part no. VG-norm 96919 -	23159	20455 DS001	23171 DS003	23183 DS004	10	290
1		8	32	3	Part no. VG-norm 96919 -	23215 DS042				10	355
	D y		32	5	Part no. VG-norm 96919 -	23160 DS006	20456 DS005	23172 DS007	23184 DS008	10	376
	4		63	5	Part no. VG-norm 96919 -	<i>23161</i> DS010	20457 DS009	<i>23173</i> DS011	<i>23185</i> DS012	5	890
			125	5	Part no. VG-norm 96919 -	23162 DS014	22916 DS013	23174 DS015	23186 DS016	5	1490

MENNEKES SCHUKO® plugs and receptacles TM made of AMAPLAST, pressure watertight

to DIN 49442/43 and DIN VDE 0620, colour: bronze green RAL 6031-F9. Appliances with part numbers in *italics* are approved to VG 96926. Pressure watertight ••• IP 68.

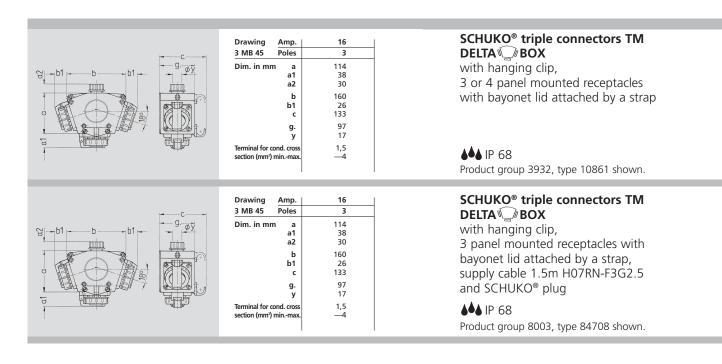


DELTA BOX
see following page

	Colour	Amp.	Volts			Std. Pack.	Weight
	bronze green	16	230	Part no. VG-norm 96926 -	10803 BS001	Qty. 10	g/each 96
	bronze green	16	230	Part no. VG-norm 96926 -	10812 AS001	10	107
		g witl		Part no. VG-norm 96926 - E-conductor acc. to govailable 1st. quarter 20	erman and	5	124
	bronze green*) The modified pan and french-belgia	el mo	230 Dunted inle ndard will	Part no. VG-norm 96926 - t with double PE-con be available 1st. quart	ductor acc. to	10 germa	130 n
	bronze green	16	230	Part no. VG-norm 96926 -	10834 DS001	5	136

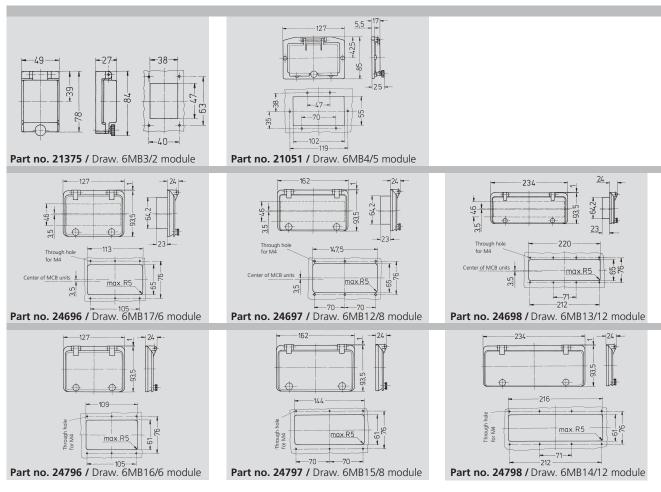
MENNEKES SCHUKO® plugs and receptacles TM made of AMAPLAST, pressure watertight

to DIN 49442/43 and DIN VDE 0620, colour: bronze green RAL 6031-F9. Pressure watertight ••• IP 68.



MENNEKES hinged windows TM made of AMAPLAST

Protection type ▲ IP 44 resp. ♦ IP 67, colour: bronze green RAL 6031-F9



	Colour	Accessories	Amp.	Volts		Std. Pack.	Weight
	- 11 0				Part numbers	Qty.	g/each
	Type with 3 re	eceptacles					
	bronze green	Hanging clip	16	230	10861	5	795
10.10	Type with 4 re	eceptacles					
	bronze green	Hanging clip	16	230	83840	5	902
	bronze green	Hanging clip	16	230	84708	1	1430

	Frame colour	Window		Std. Pack.	Weight
Hinged windows TM with	out protective co	over, with knur	Part numbers led screws	Qty.	g/each
for 2 modules	bronze green	smoked glass	21375	70	42
for 5 modules 1)	bronze green	smoked glass	21051	as required	75
¹) with	as				
Hinged windows TM with	protective cove	r, with knurled	screws		
for 6 modules		smoked glass	24696		128
for 8 modules	bronze green	smoked glass	24697	as required	169
for 12 modules	bronze green	smoked glass	24698	as I	225
♦♦ IP 67					
Hinged windows TM with	out protective co	over, with knur	led screws		
for 6 modules	bronze green	smoked glass	24796	0	107
for 8 modules	bronze green	smoked glass	24797	as required	127
for 12 modules	bronze green	smoked glass	24798	as	169
♦ IP 67					

MENNEKES SCHUKO® receptacles, pressure watertight, for fire brigades and civil protection

to DIN 49442/43 and DIN VDE 0620. Enclosure and insert made of AMAPLAST . Protection type P 68 pressure watertight.	Coloni	Amp.	Volts		Std. Pack.	Weight
SCHUKO® receptacles with hinged bayonet lock lid, one threaded M 20 cable entry at top and one blind M 20 cable entry (can be cut out) at bottom IP 68 pressure watertight hammer tested Product group 1934, type 10863 shown.	blue	/ 16	230	10863	Qty. 10	g/each 180
SCHUKO® panel mounted receptacles with bayonet lock lid attached by a strap, with oval flange and two fixing holes IP 68 pressure watertight hammer tested Product group 1931, type 10805 shown.	blue	/ 16	230	10805	10	96
SCHUKO® panel mounted receptacles with bayonet lock lid attached by a strap, with square flange and four fixing holes or alternatively two closed cut-outs IP 68 pressure watertight hammer tested Product group 1933, type 10810 shown.	blue	/ 16	230	10810	10	107
SCHUKO® panel mounted receptacles with hinged bayonet lock lid, with square flange and four fixing holes or alternatively two closed cut-outs Let Bressure watertight hammer tested Product group 1932, type 10808 shown.	blue	/ 16	230	10808	10	109

Protective cover

for the above panel mounted receptacles, available on request. Part no. 19027706

to DIN 49442/43 and DIN VDE 0620. Enclosure and insert made of AMAPLAST. Protection type IP66 or ALP 68 pressure watertight.

Colour	Amp.	Volts		Std. Pack.	Weight
			Part numbers	Qty.	g/each

10828*)

5

134

SCHUKO® plugs

with bayonet ring, with protective cap attached by a strap, for cables of up to 3 x 2.5 mm² up to H07RN-F



♦♦♦ IP 68 pressure watertight hammer tested Product group 2930, type 10828 shown.

The modified plug with double PE-conductor acc. to german and french-belgian standard will be available 1st. quarter 2007.

SCHUKO® angled plugs

with cable gland, for cables of up to 3 x 2.5 mm² up to H07RN-F



blue **16** 230 10818 125 10

IP 66

Product group 3928, type 10818 shown.

SCHUKO® connectors

with bayonet lock lid attached by a strap, for cables of up to 3 x 2.5 mm² up to H07RN-F



♦♦♦ IP 68 pressure watertight

hammer tested Product group 3929, type 10833 shown.



blue/ grey

blue/

grey

16 230

10833

136 5

SCHUKO® inlets

with bayonet ring, with protective cap attached by a strap, one threaded M 20 cable entry at top and one blind M 20 cable entry (can be cut out) at bottom

♦ IP 68 pressure watertight hammer tested



blue/ grey

16 230

230

16

10864*)

10 200

10

130

Product group 2934, type 10864 shown.



▲ IP 68 pressure watertight hammer tested Product group 2931, type 10852 shown.



The modified inlet with double PE-conductor acc. to german and french-belgian standard will be available 1st. quarter 2007.



blue/ **16** 230 10852*) grey

*) The modified panel mounted inlet with double PE-conductor acc. to german and french-belgian standard will be available 1st. quarter 2007.

For drawings and dimensions, please see chapter 11.

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MENNEKES CEE plugs and receptacles, watertight, for fire brigades and civil protection

to DIN VDE 0623, A. 60309-2, colour: electric grey and/or colour code. Enclosure and insert made of **AMAPLAST.** Protection type **A** IP 67 watertight.

230 V	1
50 a. 60 Hz	\

3-pole 5-pole

Poles

400 V 50 a. 60 Hz

5-pole

	Std. Pack.	Weight
--	------------	--------

Panel mounted receptacles with TwinCONTACT screwless spring terminals,

screwless spring terminals, suitable for through wiring, straight



Part numbers Qty. g/each 16 3 1708 10 150 16 5 10 206 1131 32 5 10 297 1820

♦ IP 67

Product group 1136, type 1131 shown.

Panel mounted receptacles with TwinCONTACT screwless spring terminals, suitable for through wiring,



16 16	_	1701	3485	. •	143 210
32	5		1808	10	315

♦ IP 67

20° inclination

Plugs PowerTOP

Product group 1135, type 3485 shown.

with highly heat resistant contact carrier and nickel plated contacts, cable gland and external cable grip



16 16	_	3796	3821	 205 295
32	5		3853	

♦ IP 67

carrier,

Product group 2016, type 3821 shown.

with highly heat resistant contact

cable gland and external cable grip

Connectors PowerTOP



16 16	3 5	3860	3881	10 10	314 330
32	5		3907	10	430

♦ IP 67

Product group 3016, type 3881 shown.

voor Amp.	voor Poles	Part numbers
16 16	3 5	40784 40785
32	5	40786

voor ♦♦ IP 67

Protective covers for watertight plugs

Product group 8276, type 40785 shown.

For drawings and dimensions, please see chapter 1 for panel mounted receptacles chapter 2 for plugs

chapter 3 for connectors



Your insurance in the case of blackouts:

Emergency power supply 16A up to 125A from MENNEKES.

Please ask for our brochure.

MENNEKES multiple distribution boards for fire brigades and civil protection

Enclosure made of **AMAPLAST** or solid rubber, receptacles enclosure and insert made of AMAPLAST.

Protection type ▲ IP 54 splash watertight, ♦ IP 67 watertight or ♦ IP 68 pressure watertight.

šťď.

Weight

Multiple distribution board 230V:

SCHUKO® triple connectors DELTA BOX

with hanging clip, hinged bayonet lid

♦♦♦ IP 68 pressure watertight Product group 3932, type 10860 shown.



Fitted with Colour Part numbers g/each 3 SCHUKO® 795 blue 10860 receptacles 16A, 230V

Multiple distribution board 230V:

SCHUKO® triple connectors **DELTA** BOX

with hanging clip, bayonet lock lid attached by a strap

▲▲ IP 68 pressure watertight Product group 3932, type 10859 shown.



3 SCHUKO® receptacles 16A, 230V

blue 789 10859

Multiple distribution board 230V:

SCHUKO® triple connectors **DELTA BOX** with hanging clip, bayonet lock lid attached by a strap, feeder cable 1.5m H07RN-F3G2.5 with SCHUKO® plug, incl. protective cover attached by a strap

▲ IP 68 pressure watertight Product group 8003, type 92386 shown.



3 SCHUKO® receptacles 16A, 230V

5 1430 blue 92386

Multiple distribution board 230V/400V:

Triple connectors DELTA BOX

with hanging clip, hinged bayonet lid, feeder cable 2m H07RN-F5G2.5 with CEE plug 16A, 5p, 400V

▲ IP 67 watertight Product group 8003, type 92908 shown.



1 CEE receptacle 16A, 5p, 400V

2 SCHUKO® receptacles 16A, 230V

red 92908

blue

Multiple distribution board 400V:

Triple connectors DELTA BOX

with hanging clip. hinged bayonet lid, feeder cable 2m H07RN-F5G2.5 with CEE plug 16A, 5p, 400V

▲ IP 67 watertight Product group 8003, type 92909 shown.



3 CEE receptacles 16A, 5p, 400V

red 92909

Multiple distribution board 230V/400V:

EverGUM solid rubber enclosure, compact, portable, stackable, signal yellow, hinged protective cover with stainless steel quick lock, lockable, feeder cable 3m H07RN-F5G2.5 with CEE plug 16A, 5p, 400V

▲ IP 54 splash watertight Product group 8010, type 7401729 shown.



receptacle IP 67 16A, 5p, 400V 1 RCD 🖾 40A, 4p, $I_{\Delta N} = 0.03A$

3 SCHUKO® receptacles IP 68 16A, 230V

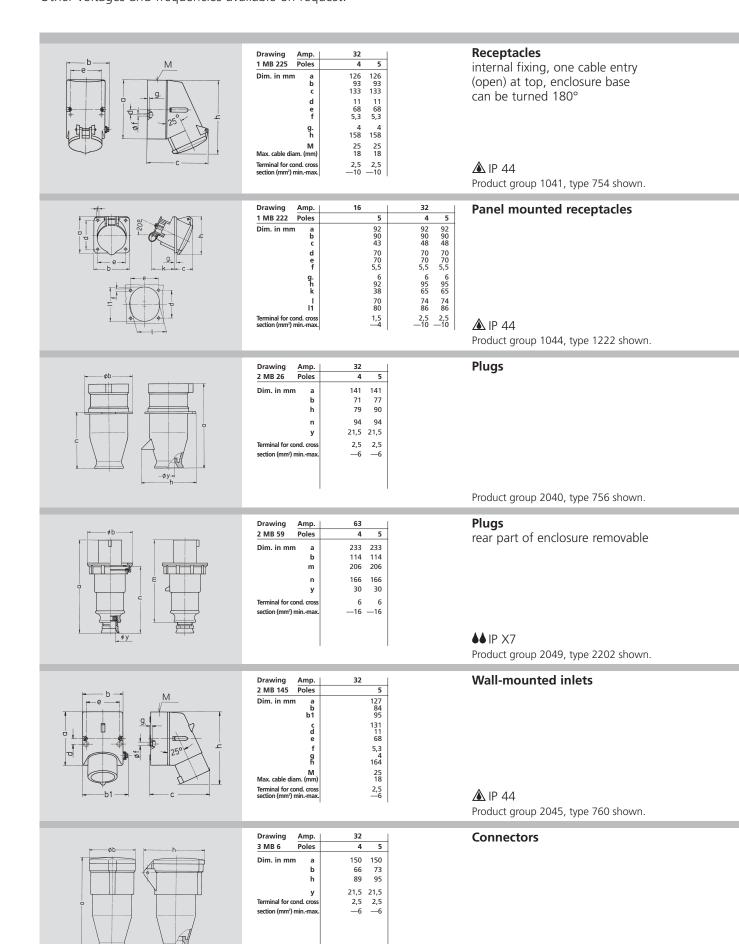
red 7401729

blue

18

MENNEKES CEE plugs and receptacles made from light weight alloy

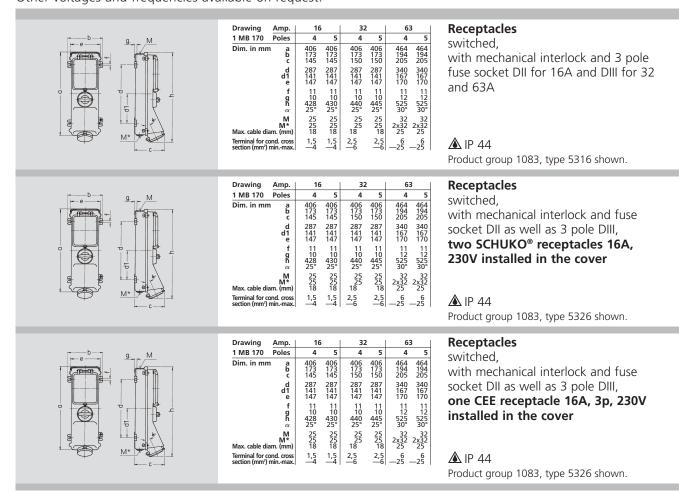
to DIN VDE 0623, colour: grey-green paint with hammer finish. Insert made of **AMAPLAST**, enclosure made from light weight alloy. Other voltages and frequencies available on request.



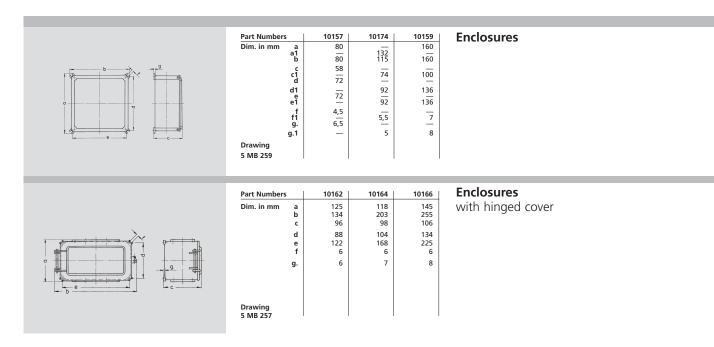
Product group 3040, type 758 shown.

MENNEKES CEE receptacles made from light weight alloy, switched, interlocked, fused

to DIN VDE 0623, EN 60309-2, colour: grey-green paint with hammer finish. Insert made of **AMAPLAST**, enclosure made from light weight alloy. Other voltages and frequencies available on request.



MENNEKES enclosures made from light weight alloy



	Internal-box dimensions	Box- colour		Std. Pack.	Weight
_			Part numbers	Qty.	g/each
	75 x 75 x 50 mm	grey/green paint with hammer-finish effect	10157	þ	250
	105 x 104 x 65 mm	grey/green paint with hammer-finish effect	10174	as required	500
	140 x 140 x 90 mm	grey/green paint with hammer-finish effect	10159	ö	720
	105 x 105 x 85 mm	grey/green paint with hammer-finish effect	10162	p	550
	168 x 104 x 82 mm	grey/green paint with hammer-finish effect	10164	as required	800
	222 x 132 x 92 mm	grey/green paint with hammer-finish effect	10166	ס	1470

References



Containerterminal Le Havre, France





SANSIBAR Sylt, Germany



Winery Schloss Wackerbarth, Radebeul, Germany

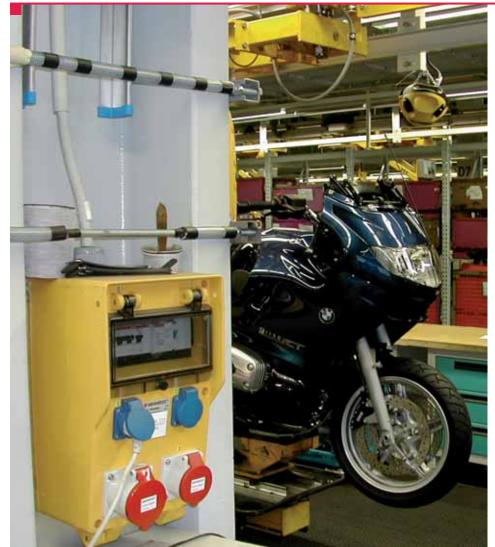


Timesavers Goes, The Netherlands



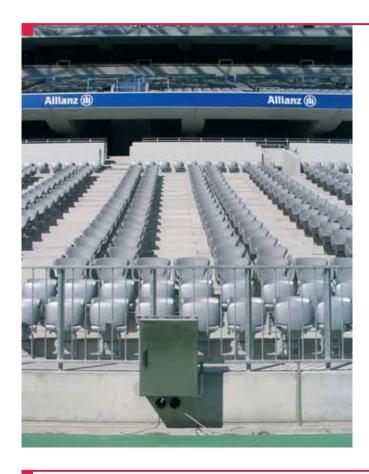
Audi Training center, Leipzig, Germany





BMW motorcycle plant, Berlin, Germany

References



Football stadium "Allianz Arena", Munich, Germany

Football stadium "Veltins Arena", Gelsenkirchen, Germany







Football stadium Borussia-Park Mönchengladbach, Germany



Formula 1 racing course, Bahrain



Formula 1 racing course, Shanghai

References



SRK Hannes Glogner, Husum, Germany



Norddeutsche Affinerie AG, Hamburg, Germany





Water purification plant Berlin/Schönerlinde, Germany



Deutsche Bahn, Germany



Hobby Mobile Home plant, Rendsburg, Germany

References



Railway washing plant, Husum, Germany



Kali + Salz, Grasleben, Germany



Barbara Erzbergbau, Porta-Westfalica, Germany

Rex Ceramica, Maranello, Italy





IKEA Cologne, Germany





Vienna Brunnenmarkt, Austria

References



Ski resort Lech, Arlberg, Austria



Ski resort Winterberg, Germany







MWB Motorplant Bremerhaven AG, Germany





Karstadt Dortmund, Germany

Using our catalogue

This catalogue is intended exclusively for use by the trade. In this respect we draw attention to the "Joint Declaration on the Use and Installation of Electrical Equipment" published in May 1998 by the Federal Ministry of Labour, the Federal Agency for Occupational Health and Safety, the Electrical Engineering and Precision Fitters Employers' Liability Insurance Association, the German Electrical Engineering Commission at DIN and VDE (DKE), the German Electricity Association (VDEW), the Central Association of German Electricians (ZVEH), the "Safety in the Home" campaign (DSH) and the Central Association of Electrical and Electronics Industries "Zentralverband Elektrotechnik- und Elektronikindustrie (ZVEI)".

While correct to the best of our knowledge, the information we provide with respect to laws and regulations is in no way binding. Such information is provided purely by way of assistance and makes no claim to completeness. You cannot and should not relieve your electrician from his obligation to independently acquire information to enable him to conform to "the state of safety engineering in your country".

Our information is in accordance with the up to date situation on January 15, 2004.

The nature and composition of our appliances are exclusively as quoted in the product description to which the part numbers refer directly.



CEE plugs and receptacles



MENNEKES CEE plugs and receptacles conform to the following standards de normen

IEC 60309-1

IEC 60309-2

EN 60309-1

EN 60309-2

DIN EN 60309-1/VDE 0623 part 1

DIN EN 60309-2/VDE 0623 part 20

Applications

CEE plugs and receptacles can and, under certain circumstances, must be used in industry, in commerce, in agriculture, in parks, in damp and wet environments, outdoors, on building sites, in caravans, on boats and yachts, on camp sites, for dockside power supply installations (marinas), on works premises where there is a fire hazard, at markets and fairground booths and for trailers and mobile homes.

Using CEE plugs and receptacles will usually enable the planners and builders of electrical installations to comply with the "regulations for the construction of low voltage systems as per DIN VDE 0100".

AMAPLAST

This plastic material used by MENNEKES (PA, PC) has the following outstanding characteristics: good electrical insulation, virtually unbreakable, wear resistant, abrasion resistant, dimensionally stable, self-extinguishing, heat resistant, highly resistant to cold temperatures, resistant to ageing, sea-water, oil and gasoline.

AMELAN

This plastic material (PBT) combines outstanding mechanical, thermal and electrical properties with excellent dimensional stability and resistance to chemicals.

Enclosures and inserts

The enclosures and inserts of the currently available CEE plugs and receptacles are moulded from AMAPLAST, a high quality thermoplastic material which is virtually indestructible. The long service life of the inserts means that there is no need to keep a stock of spares. Accordingly, spare inserts have not been included in this catalogue.

In areas where the presence of chemicals or other aggressive substances requires the use of another plastic material, MENNEKES propose a further top quality product line with enclosures moulded from high-grade **AMELAN**.

CEE plugs and receptacles with enclosures made of aluminium alloy are available for use in environments exposed to flying sparks or high thermal or mechanical stress.

Contact material, small parts

Female and male contacts are made of brass; screws, springs, etc. are made of rust-proof material or surface-coated steel.

Characteristics of CEE plugs and receptacles

MENNEKES CEE plugs and receptacles are distinguished by the following features, which facilitate installation and keep maintenance costs to a minimum:

- Easy to install
- Wiring space easily accessible
- Power screwdrivers can be used for installation
- Mostly fitted with Pozidriv screws (size 2)
- High contact pressure
- Low effort required for insertion and withdrawal
- Low transition resistance
- Easy-to-grip plugs

CEE plugs and receptacles

Application

CEE plugs and receptacles with operating voltages up to 690 VDC or AC, frequencies up to 500Hz and rated currents up to 250A, including plugs and receptacles for low voltage systems have become the standard all over the world. Basically suitable for indoor and outdoor applications in industry, they are also used on building sites, farms, commercial premises, for caravans, mobile homes, boats, yachts and in households. CEE plugs and receptacles are polarised and non-reversible.

Ambient temperature

CEE plugs and receptacles are suitable for ambient temperatures between -25°C to +40°C.

Chemical resistance of combination units and wall mounted receptacles, switched and interlocked; switched, fused

For the production of combination units and wall mounted receptacles, MENNEKES use a high quality polycarbonate material which has excellent optical and electrical insulating properties. It also has a very good resistance to mechanical and thermal stresses. However, in contact with very aggressive chemical materials, oils, leaches or solvents this polycarbonate material could be adversely affected. Therefore, under very aggressive conditions, we recommend the use of AMELAN, a thermoplastic material with a high resistance to chemicals and aggressive substances. In chapters 6 and 9, you will find a selection of combination units and switched interlocked receptacles made from this material.

Products made from solid rubber blends, e.g. MENNEKES EverGUM, are resistant to weather and ageing. Under UV radiation, colour pigments may fade with time. This is inevitable even to the latest state of the art yet it does not compromise the function in any way.

Cable glands

Since January 1, 2000, all PG cable gland sizes to DIN 40430 used so far are replaced by metric sizes to EN 60423 within the framework of European harmonisation. This switchover mainly affects bushings and sealing plugs, which are supplied as accessories with our enclosures. Cable glands with a metric thread comply with DIN EN 50262. Accordingly, MENNEKES is switching all glands over to metric sizes. However some devices with PG cable glands may still be sold by dealers. Users have no obligation to retrofit the new units; therefore devices with PG cable glands may be installed and operated as before. The following table offers information to facilitate conversion.

Please note the information in the dimensional drawings of the various items.

Material properties of solid rubber products

Solid rubber blends are preferably used wherever products are exposed to high mechanical and/or chemical loads. Solid rubber excels by its outstanding dimensional stability; it is largely resistant to acid and lye and has a high resistance to breakdown and leakage current.

Metric	Typical sealing area	Typical capacity of terminal
M 12	2.5 – 6.5	3.0 - 6.5
M 16	2.5 - 8.0	3.5 - 8.0
M 20	5.0 - 12.0	6.0 - 12.0
M 25	9.0 – 18.0	12.0 - 18.0
M 32	14.0 – 25.0	17.0 - 25.0
M 40	18.0 – 32.0	20.0 - 32.0
M 50	24.0 – 38.0	26.0 - 38.0
M 63	30.0 – 44.0	30.0 - 44.0



Definitions to DIN EN 60309

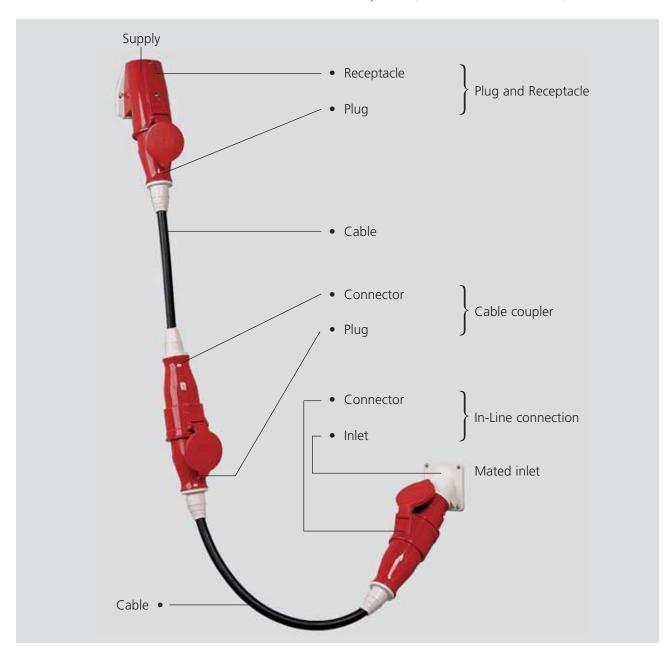
Throughout this catalogue, CEE plugs and receptacles are named as provided for by DIN EN 60309-1 (VDE 0623 part 1):2000-05, paragraph 2.

<u>Rated current</u> is the current intended for the plugs and receptacles by the manufacturer.

<u>Insulation voltage</u> is the voltage intended for the plugs and receptacles by the manufacturer to which voltage testing, creep distance and clearance refer.

<u>Rated operating voltage</u> is the nominal voltage of the power source for which these plugs and receptacles are intended.

The illustration shows how to use CEE plugs and receptacles (DIN EN 60309-1:2000-05).



Brief particulars on standards, regulations and guidelines

Standards and regulations

IEC

The International Electrotechnical Commission is the world organisation for international standardisation of electrical equipment.

IECEE

IEC system for conformity testing for standards for safety of electrical equipment, formerly CEE. Now IECEE.

CEE

Now IECEE.

CENELEC

Comité Européen de Normalisation
Electrotrotechnique (European Electrotechnical
Standardisation Committee).
CENELEC is made up of the national
electrotechnical standards committees of Belgium,
Denmark, Germany, Finland, France, Greece,
Ireland, Italy, Luxembourg, the Netherlands,
Norway, Austria, Portugal, Sweden; Switzerland,
Spain, the Czech Republic and the United Kingdom.
CENELEC members are obliged to adopt European
standards (EN) without change.

CEE plugs and receptacles

The following European standards have been published by CENELEC:

EN 60309-1:1999 EN 60309-2:1999

As all EU members are obliged to adopt European standards without change, the EN standards have been published in Germany as DIN EN standards and VDE regulations:

EN 60309-1 = DIN EN 60309-1 (VDE 0623 part 1):2000-05

EN 60309-2 = DIN EN 60309-2 (VDE 0623 part 20):2000-05

Both EN standards comply with the IEC publications IEC 60309-1:1999 and IEC 60309-2:1999 which were adopted by CENELEC without change.

Development of CEE plugs and receptacles

The system for CEE plugs and receptacles was devised by CEE, which gave the system its name.

CEE publication no. 17 (2nd edition) of April 1966 was the basis for IEC publications IEC 309-1:1988 and IEC 309-2:1992.

CEE publication no. 17 was published in Germany as VDE regulation VDE 0623/03.72, VDE 0623a/03.77 as well as

DIN 49462	part 1/02.72
	part 2/02.72
	part 3/02.72
DIN 49463	part 1/05.77
	part 2/05.77
DIN 49465	part 1/03.72
	part 2/03.72
	part 3/03.72
	part 4/03.72.

These standards are not applicable any longer. They were replaced by DIN EN 60309.

Current MENNEKES CEE plugs and receptacles included in this catalogue comply with the new standards

EN 60309-1:1999 EN 60309-2:1999



Low voltage directive 73/23 EEC

Plugs and receptacles are subject to the EC low voltage directive 73/23 EEC and must therefore be provided with the CE mark to ensure free traffic of goods within the EU.

A manufacturer's declaration is available on request.

VDE test mark, certificates

Current plugs and receptacles have been tested by the VDE Test and Certification Institute in Offenbach, Germany. Furthermore, various other certificates from international inspection authorities have been obtained. A copy of test certificates is available on request.

Hereafter, only the EN standards will be specified.

CEE plugs and receptacles for rated operating voltages above 50V

Position of the earth contact

Plugs and receptacles with rated voltages above 50V must have an earth contact. To prevent incorrect insertion, a nose on the plug fits into a keyway in the receptacle, thus ensuring that the earth contact pin or tube is correctly positioned in accordance with the required electrical standard.

The earth contact positions for the various frequencies and voltages are assigned a clockface position, in accordance with table 104 taken from EN 60309-2:1999 (see table 104 on the next page).

The diameter of the earth contact pin is larger than that of the phase contact pins, which prevents incorrect insertion.

It must be impossible for the user to change the position of the earth contact or of any neutral contacts relative to the keyway of a receptacle or to the nose of a plug.

It also must be impossible to install a plug insert in the casing of a receptacle or connector.

Brief particulars on standards, regulations and guidelines

Position of the earth contact sleeve with respect to the polarizing keyway for various voltages and frequencies, identified by clockface positions in accordance with table 104 taken from EN 60309-2:1999.

Туре	Frequency Rated operating voltage			ound contact ¹⁾	Examples:
	1.1-	V	16/20 A	63/60 A	
	Hz 50 and 60	100 to 130	32/30 A	125/100 A	Front view
1P+N+⊕*			4	4	of receptacle
	60	277	5	5	or receptacie
		100 to 130	4	4	
	50 and 60	200 to 250	6 9	<u>6</u> 9	L2 ₀ + 2L3
	50 and 60	380 to 415	7	7	
2D. (1)		480 to 500	12	12	(Hule On)
2P+ ⊕	100 +- 200	with isolating transformer			
	100 to 300	above 50	-		
	above 300 to 500	above 50	2		400V= 6 ^h
	DC	above 50 to 250	3	3	
22.11.01		above 250	8	8	
2P+N+ ⊕ *	50 and 60	125/250 single phase	12	12	
		100 to 130	4	4	\\\\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
	50 and 60	200 to 250	9	9	
		380 to 415	6	6	
	60	440 to 460 ²⁾	11	11	230V= 9 ^h
3P+ ⊕	50 and 60	480 to 500	7	7	
311 @		600 to 690	5	5	1) The position of the
	50	380	3	-	earth contact is
	60	440³)	3		given as a clockface
	100 to 300	above 50	10		number.
	above 300 to 500	above 50	2		2) Mainly for marine
		57/100 to 75/130	4	4	installations.
		120/208 to 144/250	9	9	3) Only for refrigerated
	50 and 60	200/346 to 240/415	6	6	containers
		277/480 to 288/500	7	7	(ISO standard)
3P+N+ ⊕		347/600 to 400/690	5	5	
	60	250/400 to 265/460 ²⁾	11	11	Positions marked
	50	220/380	3	_	with a dash (-) are
	60	250/440 ³⁾	3		not standardised.
	100 to 300	above 50	_		
	above 300 to 500	above 50	2	_	
All	All rated voltages ar	nd all frequencies not	1	1	
types	covered by other co				

The 230/400V version (6 o'clock position) is specially marked in this catalogue by part numbers in bold.

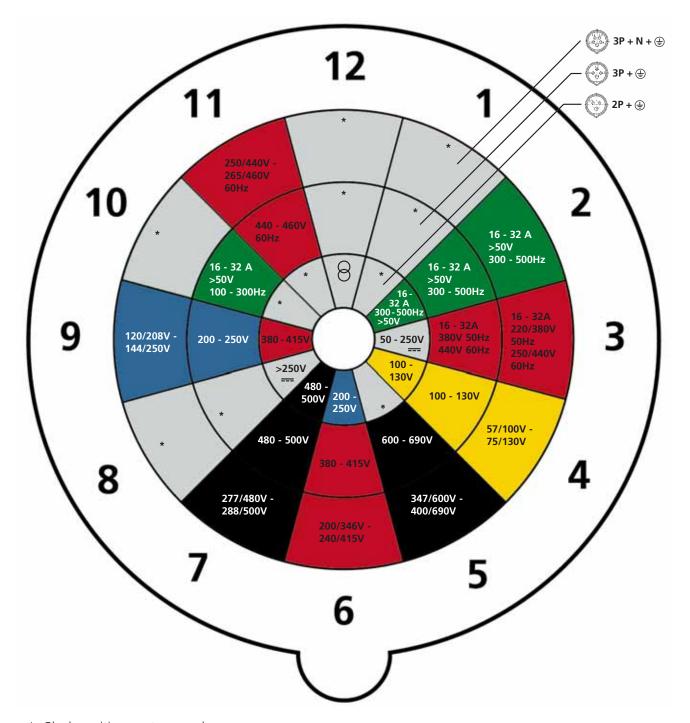
^{*} Devices of series II are mainly used in the US and in Canada.



Clock positions

acc. to EN 60309-2:1998, Series I (Europe)

Position of ground contact sleeve with respect to major keyway for various voltages and frequencies. The colour codes correspond to the nominal voltage.



* Clock positions not normed and free for use for special applications.

Brief particulars on standards, regulations and guidelines

Marking and position of contacts

On rewirable plugs and receptacles the contacts must be marked with symbols as follows:

- Where there are three phase conductors the phase contacts are to be marked L1, L2, L3 or 1, 2, 3; the neutral contact (if present) is to be marked N and the earth contact is to be marked ⊕.
- Where there is one phase conductor the live pole L/+ is to be marked with a symbol suitable for both (DC) and (AC) and with symbol ⊕ for the earth contact, if applicable.

• For a defined transition period the markings R1, S2, T3 may be used instead of L1, L2, L3.

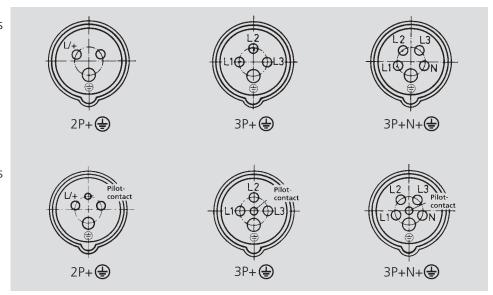
The contact tubes of receptacles and connectors with rated voltages above 50V must be arranged clockwise as viewed from the front.

Receptacles and connectors U > 50V (EN 60309-2:1999; standard sheet 2-I).

16A and 32A

Receptacles and connectors U > 50V (EN 60309-2:1999; standard sheet 2-III a).

63A and 125A



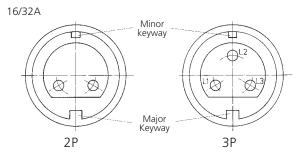
Viewed from the front, the pins of plugs and inlets must be arranged in the opposite way.

CEE plugs and receptacles for rated voltages of up to 50V (low voltage)

Since no earth contact is required in plugs and receptacles of rated voltage up to 50V, two keyways instead of one are provided the collar. They are accordingly termed the major and minor keyways. The major keyway is always in the

6 o'clock position. Depending on voltages and frequencies, the minor keyway is always in accordance with table 103 taken from EN 60309-2:1999, standard sheet 2-VIII (and in the following drawings).

Arrangement of the minor keyway (major keyway 6 o'clock) for various voltages and frequencies using clockface positions in accordance with table 103 taken from EN 60309-2:1999.



Drawing: receptacles and connectors U = 40 to 50V, 50 to 60Hz, minor keyway in 12 o'clock position

Rated operating voltage of plug	Frequency	Clockface position of keyway	Positions 1, 8 and 9 are reserved for
or receptacle in V	Hz	(major keyway = 6 o'clock)	future standards.
20 to 25	50 and 60	no minor keyway	
40 to 50	50 and 60	12	
	100–200	4	
20 to 25	300	2	For design reasons,
and	400	3	positions 5, 6 and
40 to 50	> 400–500	11	7 are not available
	DC	10	for use.

Interlocks and breaking capacity

Plugs and receptacles without an interlock must have an adequate breaking capacity, i.e. it must be possible to insert and withdraw plugs in the manner specified and as often as specified. After testing they must exhibit no damage that would impair further use, and the holes for the plug contacts must not show any significant sign of damage.

Receptacles and connectors that do not meet the test requirements for breaking capacity and service characteristics must be fitted with an interlock.

An interlock is a mechanical or electrical device which ensures that voltage is only applied to the contacts of a plug once they have been inserted into a receptacle or connector as intended, which prevents a plug being withdrawn with the power switched on or which makes contacts voltage-free before disconnecting.

A distinction is made between interlocked plugs and receptacles with

- mechanical interlocks
- electrical interlocks.

Brief particulars on standards, regulations and guidelines

In the case of receptacles and connectors \geq 63/60A, EN 60309-2 requires that a distinction is made between products used with or without interlocks.

As MENNEKES plugs and receptacles have adequate breaking capacity, standard \geq 63/60A versions are fitted with short contact tubes without pilot contact. In the 63A and 125A versions, the short contact tubes meet the finger-touch requirements of BGV A2 (VBG 4).

Receptacles and connectors \geq 63/60A for electrical interlocking (standard part number + index P, e.g. 1454 P) are fitted with long contact tubes and pilot contact for leading and lagging. The interlock makes up for the lack of finger-touch safety.

Plugs and receptacles with mechanical interlocks

Mechanical interlocks for plugs and receptacles with a rated operating voltage greater than 50V must conform to EN 60309-2:1999, standard sheet 2-V. The mechanical switch of a mechanically interlocked receptacle or connector must not be operational until the proper plug has been inserted. Built-in switches for mechanical interlocking of switched AC receptacles must have a breaking capacity conforming at least to DIN EN 60947-3 (VDE 0660 part 107), utilisation category AC 22. The breaking capacity must be suitable for the appliance connected.

Plugs and receptacles with electrical interlocks

In the case of plugs and receptacles ≥ 63/60A with a rated operating voltage greater than 50V intended for electrical interlocking (part no. + index "P"), a built-in pilot contact can be used to switch off power to a receptacle or connector The requisite switch can either be provided in the receptacle or on the corresponding circuit distribution board. In the case of receptacles with an integrated auxiliary switch fitted behind the pilot tube, the switch is triggered by the pilot pin of the plug. The advantage of this solution is that the pilot tube itself is not live (PCS interlock).

Plugs and receptacles for isolating and switching purposes

DIN VDE 0100-460 requires provision to be made for the isolation of any electrical circuit from the live conductors of the power supply system. This also applies to any item of electrical equipment that has to be isolated from the power supply by means of a built-in or assigned switch. The terms "isolate" and "disconnect" are both used in this context. Electrical equipment usually has to be isolated from the main supply whenever mechanical or electrical maintenance is carried out.

According to DIN VDE 0100-537, plugs and receptacles isolating all conductors are suitable for the disconnection of power for maintenance purposes if they are able to switch off the load current in the electrical equipment in question. A plug and receptacle connection is a simple way of satisfying the requirement for "visible isolation".

Shock hazard protection

Shock hazard protection must be achieved in accordance with EN 60309-1:1999 section 9 by designing plugs and receptacles in such a way that, when engaged properly, no live parts of receptacles, couplings, plugs and inlets are exposed so that they may be touched.

It must also be impossible to establish a connection of plugs and connectors while any of the contacts are exposed to touch.

Neutral contact tubes and pilot contacts of receptacles and connectors are deemed to be live parts.



Protection type

Plugs and receptacles used to be classified according to the degree of protection against the entry of moisture:

splashproof -> drop in a triangle
watertight -> 2 drops

Today, complete IP protection according to IEC 60529, EN 60529 is specified for plugs and receptacles, as they are tested in line with this standard.

IP 44 = Protection from solid bodies with a diameter \geq 1 mm, splashproof

IP 67 = Protection from dust ingress, protection against immersion

Information on IP protection (IP code) can be found in DIN EN 60529:2000-09 (VDE 0470 part 1).

Having been properly installed, receptacles and connectors must provide the degree of protection defined by the rating, whether the plug is inserted or not.

The protection type for plugs and inlets only applies if they are in contact with the matching piece of the connector or with a fixed cover, if applicable.

Plugs and receptacles must be IP 44 or IP 67. Plugs and receptacles with rated currents of 100/125A must be IP 67.

100/125 A receptacles that are fastened to an enclosure or form a structural unit with the enclosure can be IP 44.

For receptacles IP 67, a bayonet system has been adopted as the standard in order to simplify their use especially under rough working conditions.

IP 44 or IP 67 is indicated on the appliances.

■ CEE plugs and receptacles Brief particulars on standards, regulations and guidelines

IP protection types for enclosures in accordance with IEC 60529, EN 60529, **DIN EN 60529 (VDE 0470 part 1)**

1st number of the code:

Protection against the ingress of foreign bodies and shock hazard protection.

	Description			
Code	Enclosure protected against ingress of:	Test	Protection against contact with:	Test
0				
1	Solid body larger than 50 mm	Gauge plug diameter 50 mm	Back of hand	Gauge probe diameter 50 mm
2	Solid body larger than 12 mm	Gauge plug diameter 12.5 mm	Finger	Jointed metal finger
3	Solid body larger than 2.5 mm	Gauge plug diameter 2.5 mm	Tool	Gauge probe diameter 2.5 mm
4	Solid body larger than 1 mm	Gauge plug diameter 1 mm		
5	Dust in harmful quantities	Talc	Wire	Gauge probe diameter 1 mm
6	Dust overall	Talc		

2nd number of the code:

Protection against the ingress of moisture.

	Description	
Code	Protection against advers effects from:	Test
0		
1	Drop of water falling vertically	
2	Drop of water falling vertically on enclosure inclined by up to 15°	
3	Water spray	
4	Splash water	
5	Water jet	
6	Strong water jet	
7	Temporary immersion	0,15m
8	Continuous immersion	By arrangement between manu- facturer and user. Extra severe test conditions as com- pared to code 7



Retaining device

A retaining device is a mechanical device which, after a plug or connector has been inserted, holds it in position and prevents inadvertent withdrawal. Plugs and receptacles must be equipped with retaining devices in accordance with table 109 taken from EN 60309-2:1999.

		Receptacles and connectors			Plugs and inlets			
Rated			Standard sheet	t		Standard sheet		
Current	Moisture	Retaining	Rated operatin	g voltage	Retaining	Rated operating	g voltage	
(A)	protection	device	over 50V	up 50V	device	over 50V	up 50V	
16/20	IP 44	Hinging lid	2-I	2-VIII	Nose or groove	2-II	2-IX	
and	(splashproof)		continuation 1	continuation 1		continuation 1	continuation 1	
32/30	IP 67	Bayonet	2-I	2-VIII	Nose or groove	2-II	2-IX	
	(watertight)	system	continuation 2	continuation 2	and bayonet ring	continuation 2	continuation 2	
63/60	IP 44	Hinging lid and	2-III	-	Nose or groove	2-IV	-	
	(splashproof)	bayonet system	continuation 1			continuation 1		
	IP 67	Bayonet	2-III	-	Bayonet ring	2-IV	_	
	(watertight)	system	continuation 2			continuation 2		
125/100	IP 67	Bayonet	2-III	-	Bayonet ring	2-IV	_	
	(watertight)	system	continuation 2			continuation 2		

^{1) 125/100} receptacles that are fastened to an enclosure or form a structural unit with the enclosure can be IP 44.

Markings and symbols in accordance with EN 60309-1:1999, section 7

The following information must be marked on plugs and receptacles:

- Rated current in amperes
- Rated operating voltage(s) or voltage range(s)
- Symbol denoting type of current if the plug or receptacle is not rated for both AC and DC, or if it is rated for AC with frequencies other than 50 or 60Hz, or if voltage is different for AC and DC.
- Rating frequency if greater than 60Hz
- Name or trademark of manufacturer or dealer
- Type reference or part number
- IP protection type
- Symbol indicating the position of the ground contact or keyway, if any
- Optionally, insulating voltage may be indicated

The following symbols are used:

A Ampere V Volts Hz Hertz

Alternating current

=== Direct current

Ground

IP XX Type of protection to EN 60529

On CEE plugs and receptacles these markings are easily visible after installation and connection and when in service as intended.

The marking indicating insulation voltage is on the insert and not visible after installation and connection and when in service as intended.

Brief particulars on standards, regulations and guidelines

Colour coding

If the rated operating voltage is indicated by a colour coding in addition to compulsory markings, such colour coding must be in accordance with DIN EN 60309-1:1999, table 2:

Rated volta	-	erat	ing	Colour	code	RAL*
20	to	25	V	violet		4001
40	to	50	V	white	0	7035
100	to	130	V	yellow		1021
200	to	250	V	blue		5007
380	to	480	V	red		3013
500	to	690	V	black		9005
over						

green

60 to 500 Hz

Over-current protection devices

In accordance with DIN VDE 0100-550:1988-04, over-current protection of circuits with receptacles must account for the permissible load of the cable and the rated current of the receptacle and be based on the lower value. Over-current protection of cables and lines must conform to DIN VDE 0100-430.

Test marks and certificates

VDE test mark

Most plugs and receptacles featured in this catalogue have been tested and certified by VDE-Prüf- und Zertifizierungsinstitut, Offenbach (VDE Test and Certification Institute in Offenbach, Germany). Their marking includes the VDE test symbol to demonstrate that an independent testing and certification board has confirmed that the plug or receptacle concerned meets all the relevant standards.

CCA-CENELEC

6010

The CENELEC Certification Agreement (CCA) obliges its signatories to mutually recognize test reports issued for electrical equipment included in their field of responsibility and in conformity with harmonised standards. After successful testing in Germany, e.g. by VDE Prüf- und Zertifizierungsinstitut, an application for a CCA certificate can be filed, on the basis of which a national test mark of one of the CENELEC member countries can be awarded.

^{*} RAL determined by MENNEKES, as in EN 60309-1:1999 no specification is provided for.



IECEE system

The IECEE system promotes world-wide mutual recognition of test results published by testing and certification boards in the member countries in the interests of simplifying certification internationally. Electrical equipment is tested for conformity with IEC standards, the relevant standard for CEE plugs and receptacles being IEC 60309. The manufacturer is awarded a CB certificate together with a test report.

CE mark

When EC directive 93/68/EEC was published, the EC low voltage directive 73/23/EEC was included in the group of directives that prescribe the CE mark. Since January 1, 1997 the CE mark is compulsory. The CE mark on a low voltage electrical device indicates that the manufacturer has issued a voluntary written declaration to the effect that the product conforms to the low voltage directive. Conformity with all applicable European Community directives is a prerequisite for placing the product on the market within the European Union (EU).

The CE mark is not a substitute for the VDE test mark. The VDE test mark may be used together with the CE mark.

All MENNEKES CEE plugs and receptacles comply with the low voltage directive. The CE mark \mathbf{C} is provided on the product and/or on the packaging.

Choice and installation of plugs and receptacles

In accordance with DIN VDE 0100-550:1988-04, only the following plugs and receptacles must be used to connect electrical equipment to the main supply:

- plugs and receptacles conforming to DIN VDE 0620,
- plugs and receptacles conforming to EN 60309,
- plugs and receptacles for special applications.

For three-phase current only plugs and receptacles conforming to EN 60309 must be used. Exemptions are only granted for installations in private households, commercial buildings, hotels, etc.

Five pole CEE plugs and receptacles conforming to EN 60309 are to be used for the connection of unspecified three-phase appliances of up to 32A, 400V; 50Hz, e.g. on building sites, in loading areas, on farms and on other sites serving mobile electrical equipment.

Three-phase extension cables of up to 32A for such sites must be 5 core with 5 pole plugs or receptacles at either end.

Brief particulars on standards, regulations and guidelines

Operating areas subject to fire hazards

DIN VDE 0100-482:2003-06 applies to selection and construction of electrical installations in operating areas subject to fire hazards. Plugs and receptacles conforming to DIN VDE 0620 and EN 60309-2 may be used. Type of protection:

- Fire hazard due to combustible dust or/and easily inflammable materials (fibres): IP 5X
- Fire hazard due to easily inflammable solid matters other than dust or/and easily inflammable materials: IP 4X

The required protection type IP 4X is complied with using CEE plugs and receptacles IP 44, type IP 5X is complied with using CEE plugs and receptacles IP 67.

Building sites

On building sites, DIN VDE 0100-704:2001-05 expressly recommends the use of plugs and receptacles to DIN EN 60309-2 (VDE 0623 part 20):

All circuits with plugs and receptacles up to 32A must be protected

- using RCDs with a release current of $I_{\Delta N} \leq 30 \text{mA}$ or
- be supplied with extra low voltage (SELV)
- be supplied individually using isolating transformers (one winding per receptacle).

Farms and market gardens

DIN VDE 0100-705:1992-10 applies to the installation of electrical equipment.
DIN VDE 0105-15:1986-02 provides information on plugs and receptacles allowed for the operation of such installations.

- 2 pole earthed plugs and receptacles conforming to DIN VDE 0620-1:2002-01, appendix B for severe operating conditions, symbol in designs as per to DIN 49440, DIN 49441, DIN 49442 and DIN 49443
- CEE plugs and receptacles to EN 60309

The enclosures of these plugs and receptacles must be made of insulating material.

Type of protection at least:

- IP 44, if not exposed to dust,
- IP 54, if exposed to dust

in accordance with EN 60529.

All circuits with plugs and receptacles must be protected using RCDs with a release current of $I_{\Delta N} \leq 30 \text{mA}$.

Circuits for receptacles with a rated current \leq 63A must be protected using a circuit breaker or a combination of RCD/circuit breaker.



Camp sites

DIN VDE 0100-708 applies to the installation of electrical equipment. For power supply to each space a receptacle with earth contact conforming to EN 60309-2 must be installed. The rated current of plugs and receptacles must be at least 16A. For AC voltage supply of 230V, 16A, plugs and receptacles 230V, 16A, 2p + PE according to EN 60309-2, standard sheet 2-I must be used. For each vehicle at least one receptacle must be provided. Each receptacle must have its own overload protection. It must be equipped with a residual current-operated device (RCD) with a rated residual current $I_{\Delta N} \le 30$ mA which also switches off the neutral conductor.

Extension cables must be fitted with earthed connections and plugs conforming to EN 60309. In case of a nominal current of 16A, a H07RN-F type electric cable with a minimum cross section of 2.5 mm² must be used.

Caravans

The installation of electrical equipment for caravans must comply with DIN VDE 0100-754. Connections for caravans must be made by means of an earthed inlet conforming to EN 60309. The connection point must be on the outside of the caravan and must be covered by a lid. Plugs and receptacles exposed to weathering must be IP 55, or they must be installed in a place where this type of protection is achieved.

Boats and yachts, dockside power supply (marinas)

DIN VDE 0100-721 applies to the installation of electrical equipment. For power supply to each berth a receptacle with earth contact conforming to EN 60309-2, standard sheet 2-I, i.e. 200 to 250V, 16A, 2p + PE, IP 44 must be provided.

Boats must be fitted with inlets conforming to EN 60309-2, standard sheet 2-II, with receptacle data marked on them. Connection and extension cables musts be fitted with an earthed plug as per EN 60309-2, standard sheet 2-II and an earthed connector as per EN 60309-2, standard sheet 2-I with data marked as above.

Market and fairground booths, trailers and mobile homes

DIN VDE 0100-722 applies to the installation of electrical equipment. For power supply to one circuit earthed receptacles conforming to EN 60309-2, standard sheet 2-I, i.e. 200 to 250V, 16A, 2p + PE, IP 44 must be provided.

If there is more than one circuit, a special distribution board as per EN 60439-4 (VDE 0660 part 501) with plugs and receptacles as per EN 60309 must be provided. Trailers must be fitted with inlets as per EN 60309-2, standard sheet 2-II. Connection and extension cables must be fitted with an earthed plug as per EN 60309-2, standard sheet 2-II and with an earthed coupling as per EN 60309-2, standard sheet 2-I. Due to the required electrical output of trailers and mobile homes, CEE plugs and receptacles as per EN 60309, i.e. 380 to 415 V, 3p + N + PE with a rated current of 32A or 63A, IP 44 may be used.

Damp and wet areas and rooms, outdoor equipment

DIN VDE 0100-737 applies to the installation of electrical equipment. Plugs and receptacles as per DIN VDE 0620 and EN 60309 may be used. The class of protection of plugs and receptacles depends on their application. A minimum protection class of IP 44 is recommended.

Brief particulars on standards, regulations and guidelines

Applicable law

The European Union (EU), the German Federal Government which is responsible for translating EU directives into national law, the Federal Lands as well as the employers' liability insurance associations place requirements on safety and design of electrical equipment. As part of the information provided by this catalogue it seems appropriate to include excerpts from legal norms containing such safety requirements.

Act on Power and Gas Supply (Energy Management Act) dated Nov. 10, 2001.

Excerpt:

§ 1 Scope

The scope of the act is to achieve secure, value for money and environmentally compatible line-conducted electricity and gas supply in the public interest.

§ 2 Definitions

- (1) Electricity and gas are defined as energies in so far as these are used for line-conducted energy supply.
- (2) Electrical energy equipment is used for the generation, transmission or distribution of energy unless it merely serves for the transmission of signals.

§ 16 Requirements of electrical energy equipment

- (1) Electrical energy equipment must be erected and operated in such a way as to ensure technical safety. In addition to legal provisions, generally accepted rules of engineering practice must be observed. (2) Compliance with generally accepted rules of
- engineering practice is assumed if the technical directions below are complied with:
- 1. Equipment for the generation, transmission and distribution of electricity - technical directions of VDE Verband der Elektrotechnik Elektronik Informationstechnik e.V.
- 2. Equipment for the generation, transmission and distribution of gas - technical directions of Deutscher Verein des Gas- und Wasserfachs e.V.

Ordinance on the General Terms and Conditions for Electricity Supply to Customers at Fixed Rates (AVBEItV) dated June 21, 1979.

Excerpt:

§ 12

(4) Materials and equipment used must conform to the state of safety engineering applicable in the European Community. The mark of an officially accredited test centre (e.g. VDE mark, GS mark) indicates that this condition has been fulfilled.

First Ordinance on the Equipment Safety Law (Gerätesicherheitsgesetz) dated June 11, 1979, amended as of Sept. 25, 1995

Excerpt:

ξ2

- (1) Electrical equipment may only be placed on
- 1. it complies with the state of safety engineering applicable in the European Community.

§ 3

(1) Placing on the market requires that the electrical equipment is provided with the CE mark by means of which the manufacturer confirms that safety requirements according to § 2 are complied with and that conformity assessment procedures according to appendix IV of directive 73/23 EEC have been carried out.



EC Low Voltage Directive RL 73/23 EEC dated Feb. 19, 1973 (amended as of July 22, 1993 – RL 93/68 EC)

Excerpt:

Article 2:

(1) The member states take all expedient measures to ensure that electrical equipment is only placed on the market if it is manufactured in conformity with the state of safety engineering applicable in the community in such a way as not to put at risk the safety of persons, livestock or property when properly installed, maintained and used as intended.

Ordinance on health and safety protection when providing and using working equipment, on safety in operation of equipment that needs to be supervised and organisation of occupational health and safety procedures (ordinance on occupational safety – BetrSichV) dated Sept. 27, 2002.

§ 1 Scope

(1) This ordinance applies to the provision of working equipment by employers and the use of working equipment by employees in their work.

§ 2 Definitions

- (1) Working equipment in the sense of this ordinance includes tools, equipment, machines or plants. Plants in the sense of sentence 1 are composed of various interdependent functional units the safe operation of which is considerably determined by their interdependency; e.g. plants that have to be supervised in the sense of § 2 clause 2a of the Equipment Safety Law (Gerätesicherheitsgesetz).
- (2) Provision in the sense of this ordinance incorporates all measures that the employer has to take so as to ensure that employees are provided with working equipment in compliance with this ordinance

The provision in the sense of sentence 1 also comprises installation, e.g. the assembly of working equipment including installation in the manner required for safe operation.

(3) Operation in the sense of this ordinance incorporates all measures concerning working equipment, e.g. testing, putting into operation, shutdown, use, repair and maintenance, testing, safety measures in the case of failure, modification, dismantling, and transportation.

§ 4 Requirements on the provision and use of working equipment

- (1) The employer must take all measures required in line with the principles of § 4 of the Labour Protection Law so as to provide employees with working equipment which is suitable for the conditions prevailing at the workplace and for which health and safety protection are ensured when used as intended. If it is impossible to ensure full health and safety protection of employees, the employer shall take appropriate measures to ensure that risks are minimised. Sentences 1 and 2 apply accordingly to installation of working equipment the safety of which is dependant upon assembly.
- (3) The employer shall ensure that working equipment is only operated if it is suitable for the intended purpose according to the provisions of this ordinance.

Brief particulars on standards, regulations and guidelines

Accident Prevention Regulation
"Electrical Plant and Equipment"
BGV A2 (VBG 4) dated April 01, 1979

Excerpt:

§ 2

(2) Sentence 1 "The rules of electrical engineering in the sense of this accident prevention regulation are the generally accepted rules of electrical engineering practice stipulated in the VDE regulations to which the Employers' Liability Insurance Associations refer in their information bulletin".

§ 3

(1) "The employer must ensure that electrical plant and equipment is installed, modified and maintained in accordance with the rules of electrical engineering practice by a qualified electrician or under the supervision of a qualified electrician. The employer must also ensure that the electrical plant and equipment is operated in accordance with the rules of electrical engineering practice."

The appendix to the instructions for the implementation of these regulation lists, among other things, the following regulations: VDE 0100, VDE 0101, VDE 0105, VDE 0620 and EN 60309 (VDE 0623) etc.

In connection with the Equipment Safety Law, a "Joint Declaration" was made on April 25, 1978 by the leading representative bodies in trade and industry. This declaration was replaced by the Product Liability Act of December 15, 1989 and the Product Safety Act of April 22, 1997. Both acts translate EU directives into German law.

Joint Declaration on the Use and Installation of Electrical I Installation Material dated May 1998

Various organisations (BMA, BAuA, BFE, VDE, DKE, VDEW, ZVEH, DSH, ZVEI) have formulated their safety objectives in a joint declaration.

Excerpt:

- Plants for production, transmission and distribution of electricity must comply with the safety engineering standards applicable in the EU. These standards will be met when complying with the VDE regulations.
- Electrical equipment may only be installed, extended, modified and operated by authorised persons. In addition to energy supply companies these are registered electricians.
- The only material and equipment which may be used is that which has been produced according to the standards of safety engineering applicable in the EU.

Persons in positions of responsibility should note:

The laws, ordinances and accident prevention regulations all make reference to the VDE regulations. When action is taken either by public authorities (Labour Inspectorate) or by the Employers' Liability Insurance Association inspectors, they take full account of the VDE regulations.

Disclaimer

While correct to the best of our knowledge as of January 15, 2004, this information is given without commitment.

Please note the information provided on page 1 of this chapter.



References:

IEC publications, EN standards, VDE regulations are available from VDE-Verlag GmbH Bismarckstr. 33
D-10625 Berlin

Laws, ordinances and EU directives are available from Deutsches Informationszentrum für technische Regeln (DITR) im DIN Burggrafenstr. 6 D-10772 Berlin.

Low-voltage systems terminology and power supply systems

Terminology

Excerpt from DIN VDE 0100-200:1998-06

Power installations are electrical systems with equipment for the generation, conversion, storage, transmission, distribution and consumption of electrical energy with the aim of doing work, e.g. in the form of mechanical work, the production of heat or light or in electrochemical processes (A 1.1).

The **distribution network** consists of all lines and cables from the electrical power generator to the load (A 1.2).

The **house connection** box is the interface between the distribution network and the load. Over-current protection devices, isolator blades, switches or other connecting and disconnecting devices can be fitted in the house connection box (DIN VDE 0100-732:1995-07, item 2.3).

The **load** is defined as all electrical equipment connected downstream of the house connection box or, in the absence of the latter, downstream of the output terminals of the last distributor, upstream of the outlets (A 1.4).

Main circuits contain equipment for the generation, conversion, distribution, switching and consumption of electrical energy (A 1.5.1).

Auxiliary circuits are circuits for supplementary functions, e.g. control, signalling and measuring circuits (A 1.5.2).

House installations are power systems with a rated voltage of up to 250V for private households or power systems which resemble these in scope and nature (A 1.8).

Electrical equipment. All equipment used for the purpose of generation, conversion, transmission, distribution and application of electrical energy, e.g. machinery, transformers, switching, measuring and protective devices, lines and cables and electrical appliances (2.7.1).

Mobile equipment is equipment that can easily be moved from one place to another while connected to the power supply (2.7.4).

Phase conductors are conductors which connect the power source with the load but do not originate at the centre or star point (A 3.1).

The **neutral conductor N** is connected to the centre or star point and provides assistance in the transmission of electrical energy (2.1.3).

The **protective earth conductor PE** is a conductor providing protection against electric shock which is connected to any of the following parts:

- exposed conductive parts of electrical equipment
- conductive objects which are not a part of the electrical equipment
- main earthing terminal
- earth electrode
- earthing point of power source or artificial star point (2.4.5).

Brief particulars on standards, regulations and guidelines

The PEN-conductor is a conductor which combines the functions of the neutral and protective earth conductor (2.4.6).

Live part. Any conductor or conductive part which normally carries voltage. This includes the neutral conductor but not the PEN conductor (2.3.1).

Exposed conductive part. Touchable conductive part of electrical equipment which normally is not live but may become live when equipment is malfunctioning (2.3.2).

Power supply systems

Excerpt from DIN VDE 0100-300:1996-01

Power supply systems are identified by the following abbreviations depending on their type (AC, DC) and the number of live conductors and earth connection:

<u>First letter</u> – earthing of the power source (312.2):

- T direct earthing of one point
- I insulation of all live parts from earth or earthing of one point via a source of impedance.

<u>Second letter</u> – earthing of exposed conductive parts of the electrical installation

- T exposed conductive part with direct earthing, irrespective of whether a point of the electrical installation is earthed
- N exposed conductive part directly connected to the earthed point of the electrical installation (in AC systems the earthed point is generally the star point or, in absence of a star point, a phase conductor).

Other letters that may be used – arrangement of neutral conductor and protective earth conductor

- S protection using a conductor which is separate from the neutral conductor or the earthed phase conductor (in DC systems earthed negative or positive conductor)
- C functions of neutral conductor and protective earth conductor combined in one conductor (PEN conductor).

TN systems (312.2.1)

In TN systems, one point is directly earthed; the exposed conductive parts of the electrical installation are connected with this point via protective earth conductors.

One can differentiate between three types of TN systems according to arrangement of neutral and protective earth conductors:



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Networks L2 O exposed conductive part exposed conductive part Fig. 7: TN-C network L1 < L3 exposed conductive part Fig. 8: TN-C-S network exposed conductive part Fig. 9: TT network Impedance¹ exposed conductive part Fig. 10: IT network

¹⁾ The system may be disconnected from earth. The neutral conductor may be, but must not be, spreaded.

- TN-S system: A separate protective earth conductor throughout the system, figure 6.
- TN-C system: Functions of neutral and protective earth conductors are combined in one conductor throughout the system, figure 7.
- TN-C-S system: In part of the system, functions of neutral and protective earth conductors are combined in one conductor, figure 8.

TT system (312.2.2)

In a TT system one point is earthed directly; the exposed conductive parts of the electrical installation are connected to earthing electrodes which are electrically separated from the system earthing electrode, fig. 9.

IT system (312.2.3)

In an IT system all live parts are disconnected from earth, or one point is earthed via a source of impedance; the exposed conductive parts of the electrical installation are either

- earthed separately or
- earthed jointly or
- all connected to the earthing of the system, fig. 10.

N = Neutral conductor

PE = Protective earth conductor

PEN = Protective earth neutral conductor

T = Terre (earthing)

I = Isolation

S = Separated neutral and protective

earth conductors

C = Combined neutral and protective

earth conductor

Symbols according to IEC 617-11:1993

* Neutral conductor (N)

— 7 Protective earth conductor (PE)

PEN conductor: combines the functions of neutral and protection-earth conductor (PEN)

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GENERAL CONDITIONS OF SALE AND DELIVERY

1. Validity of the Conditions
Supplies, services and quotations are exclusively subject to the
conditions set forth herein. They apply to any future business
relationship, even if they are not expressly agreed at the time of
transaction.
The general business conditions of the purchaser shall only be
binding if they have been expressly accepted in writing.

2. Quotations and signing of contracts
Our quotations are submitted without commitment. The sales
contract will only become valid by our order confirmation or by the
execution of the order. Supplements, amendments or additional
agreements shall only be binding if they have been expressly
accepted in writing.

accepted in writing.

3. Drawings, illustrations, dimensions, weights, rights of third parties Drawings, illustrations, dimensions, data on weights and other performance data shall only be binding upon us when this has been expressly declared in writing. We reserve our unlimited proprietary rights and our copyright with respect to quotations, drawings and other documents. They shall only be disclosed to third parties with our prior consent, and they shall be returned at our request if the order is not placed with us. The same shall apply to the Buyer's documents which may be disclosed to third parties with whom we are permitted to place orders related to the supply. In the case of delivery of parts as per drawing or sample, the Buyer shall release us from any claims third partles may assert against us arising from an infringement of protective rights. If a third party orders us not to manufacture or supply because of a protective right held by him, we are entitled to stop work without checking the legal situation and to request reimbursement of the expenses incurred.

4. Prices, price changes
The prices are quoted in EURO and do not include VAT. VAT will be
charged additionally at the rate applicable on the date of delivery.
Prices quoted in price lists for resale are recommended prices
excluding VAT, given without commitment. We reserve the right to
invoice the prices applicable on the date of delivery.
In the case of follow-up orders, we are not bound to the prices
quoted for previous orders.

5. Price basis The prices apply to deliveries ex our works, without packaging, Packaging is invoiced at cost price. For reusable packaging, a rental based on the cost price will be charged. Reusable packaging remains our property and must be immediately returned freight

6. Terms of payment, no setting off
Our invoices are payable within 10 days following receipt of our invoice or our statement of account less 2% cash discount, within 30 days following the date of the invoice no ten cash or, at the latest, 30 days following the due date and receipt of the supplies or services. Payments must be made nett, free D-Kirchhundem. Cheques will only be accepted under the usual reservations, and payment by bill requires our prior consent and the bill must comply with the purchasing conditions of the German Federal Bank. Discount charges and tax on the bill are at the Buyer's charge and also be supplied to the sum when the bill is negotiated. For all payments, the date of fulfilment is the date on which we can dispose of the sum. Non-compliance with our terms of payment shall constitute default without a reminder. In case of default, we may charge interest from the date upon which the payment falls due at a rate of 8% per annum above the applicable basic rate, in accordance with \$247 BGB (German Civil Code), with the reservation of asserting any other rights we may have. If the Buyer is a consumer in the sense of §13 BGB, the rate of interest is 5% per annum above the applicable basic rate, in accordance with \$247 BGB. The right to claim higher damages is reserved. In the event that the Buyer shall fail to fulfil the terms of payment in respect of any invoice and a deadline for payment has expired without result, we are entitled to withdraw from the contract, to request return of the goods and to claim damages. The Buyer shall not be entitled to set off payment for goods delivered by virtue of any debt claim, unless the claim is undisputed, final and absolute.

7. Subsequent provision of securities, right to decline to make

Subsequent provision of securities, right to decline to make inther deliveries

7. Subsequent provision of securities, right to decline to make further deliveries

The Buyer's credit worthiness is a precondition to our obligation to provide supplies and services. If following the signing of a contract we learn that the Buyer's financial circumstances are such that payment of the amount which will become due appears doubtful, that his financial position is getting significantly worse or that a petition in insolvency or judicial execution has been filed, that payments have ceased, payments are in default, that the business is dissolved or transferred, that goods or stock or outstanding debts etc. are pawned or subsequently assigned by way of security, we may decline to make further deliveries except upon receipt of cash or a satisfactory form of security. We may also grant the Buyer a reasonable period of time for making a payment or providing security, and we may withdraw from the contract on expiry of this period should the Buyer fail to comply with our request.

period should the Buyer fail to comply with our request.

8. Delivery periods, impossibility
Meeting delivery times presupposes that all documents and releases to be provided by the Buyer have been received, that he has observed the agreed terms of payment and that he has fulfilled all his other obligations. If the Buyer fails to meet these obligations in time, the delivery periods will be extended as necessary. This shall not apply if the Buyer is not responsible for the delay.

We shall not be held responsible for delays in deliveries and services due to Acts of God or to events which significantly affect deliveries or render them impossible (strikes, lock-outs, lack of means of transport, orders of the authorities etc., which also apply if they occur at the premises of our subcontractors or their subcontractors), even when the delivery periods and dates are binding upon us. We shall be entitled to extend the delivery periods by the duration of the hold-up plus an adequate lead time or to withdraw from the non-fulfilled contract in whole or in part. If despatch or delivery is postponed at the Buyer's request by more than one month from the notification of readiness for transport, we are entitled to charge a storage fee for each commenced month at the rate of 0.5 % of the price of the delivery concerned, the maximum amount being 5%. Both parties may provide proof of higher or lower storage fees.

9. Withdrawal from the contract by the Buyer, limitation of liability. If we are responsible for the non-observance of binding delivery periods and dates, or if we are in delay, the Buyer may request compensation of 0.5% for the delay for each full lweek of delay up to a maximum amount of 5% of the value invoiced for the delivery affected by the delay, provided that he can furnish proof that he as suffered damage from the delay. This only applies to that part of the delivery which could not be used as intended as a result of the delay Any claims for damages put forward by the Buyer arising from delayed delivery or a delivery even after expiration of a legal period which may have been set. This does not apply to our obligatory liability or has seen of intended as a result of to the Buyer's disadvantage. Within the framework of legal regulations, the Buyer can only withdraw from the contract if we are responsible for the delay. In the event of a delay, the Buyer must declare at our request, within an adequate period of time, whether he will withdraw from the contract and/or claim damages instead of the delivery or insist on delivery.

10. Shipment, transfer of risk
The risk in the goods shall pass to the Buyer when the goods are despatched or collected. Parcels are generally delivered prepaid, and the postal charges incurred plus VAT are invoiced. If the despatch or collection is delayed at the Buyer's request or impossible for reasons beyond our control, the purchase price is nevertheless due for payment, and the risk shall be transferred to the Buyer on the date when the goods are ready for despatch. If the goods are returned for reasons beyond our control, the Buyer shall bear the risk until their receipt at our premises.

11. Refusal to accept
The Buyer shall not be entitled to refuse deliveries because of minor imperfections.

12. Material defects

12. Material defects We are liable for material defects as described below: All goods or services supplied which reveal a material defect within the limitation period, without consideration of the operation time, will be repaired, replaced by new goods or rendered again at our discretion, provided that the cause of the material defect was already existing at the time of transfer of risk. Claims for material defects will come under the statute of limitation after 12 months. This does not apply if longer limitation periods are provided for by law (§§ 438 BGB paragraph 1, no. 2 (Buildings and structures and related things), 479 BGB paragraph 1 (Right to recourse) and 634a BGB paragraph 1, no. 2 (Building defects). The Buyer should complain about material defects without any delay.

structures and related things), 479 BGB paragraph 1 (Right to recourse) and 634a BGB paragraph 1, no. 2 (Building defects). The Buyer should complain about material defects without any delay. In the case of complaints the Buyer shall be entitled to hold back payment in a reasonable proportion to the material defects which have occurred. The Buyer shall only be entitled to hold back payment when a complaint is beyond any doubt. If it turns out that a complaint is unjustified, we are entitled to seek reimbursement of expenses incurred. In the case of a complaint the Buyer shall grant us an adequate period of time to effect an improvement. If such improvement fails after the second trial, the Buyer may withdraw from the contract without prejudice to any claim for damages or a reduction in the purchase price. Claims for damages are subject to the following limitations of liability:
Claims for damages will not be accepted when there is an insignificant deviation from the agreed quality or when the usability is impating and the interest of the six devices of the production of the production of the contract of the contract.

The Buyer outside the above limits or claims other than those defined in clause 12 against us and our agents d

13. Deficiency in title

13. Deficiency in title
Save as otherwise agreed, we undertake to make deliveries free from industrial protective rights and copyrights of third parties only in the country of the place of delivery. If a third party asserts justified claims against the Buyer arising from an infringement of these rights by products supplied by us and used as provided for in the contract, we will be liable to the Buyer within the period stated in clause 12, paragraph 2 as follows:
We will at our discretion and at our expense either obtain a right to use the goods supplied or replace them. If this is not possible for us to achieve under reasonable conditions, the Buyer is entitled to withdraw from the contract or to reduce the price, as provided for by law.

Our obligation to compensate for damages is subject to clauses 12 and 15.

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Our obligation to compensate for damages is subject to clauses 12 and 15.

The above obligations shall only be binding upon us if the Buyer notifies us immediately in writing of any claims made by third parties, if he does not acknowledge an infringement of rights and if all defensive measures and agreements for a settlement are reserved for us. If the Buyer ceases to use the products supplied in order to limit the damage or for any other well-founded reason, he must inform the third party that such cessation does not imply acknowledgement of an infringement of industrial protective rights and copyrights.

Claims of the Buyer will not be considered if he is himself answerable for the infringement of industrial protective rights and copyrights. Claims by the Buyer will also not be considered if the infringement of industrial protective rights and copyrights arises from Buyer's special instructions, an application which we could not possibly foresee or the fact that our products have either been modified by the Buyer or combined with products from another source. In any case of infringement of industrial protective rights and copyrights, the Buyer's rights as specified in clause 13, paragraph 2 and the provisions of clause 12 paragraphs 4, 5 and 9 shall apply.

Claims by the Buyer made against us and our agents other than or beyond those defined in this clause covering deficiency in title will not be considered.

14. Contractor's recourse as per § 478 et. seq. BGB (German civil

Code) in the case of recourse by the contractor as per § 478 BGB we may offer the creditor pursuing recourse compensation equivalent to the claims for damages provided for by law. An exclusion or limitation of the claim for damages is subject to the provisions of clauses 12, 13 and 15 of these Conditions. § 377 HGB (German commercial Code) will not be affected.

15. Failure to deliver
If we are unable to deliver the goods, the Buyer will be entitled to claim damages, unless we are not responsible for the problem. The Buyer's claim for damages shall be limited to 10% of the value of that part of the delivery which cannot be put into operation due to such failure. This limitation does not apply to our compulsory liability in cases of intent, gross misconduct, loss of life, injuries or damage to health. This does not imply a shift of the onus of proof to the Buyer's disadvantage. The Buyer's right to withdraw from the contract is not affected by this.

16. Variation of the contract

In the event that unforeseeable circumstances in the sense of clause 8, paragraph 2 result in a considerable change in the economic situation or in the contents of the supply or influence significantly the Supplier's operations so that it is unreasonable to

expect him to fulfil the contract, each party to the contract may request that the contract is amended in good faith. If such a variation is not justifiable from an economic point of view, the parties to the contract shall be entitled to withdraw from the contract or, in the case of permanent debt, to terminate it. If either party intends to exercise such right to withdraw or terminate, it shall notify the other party immediately following occurrence of the reasons for withdrawal or termination. This also applies if an extended delivery period has previously been agreed by the parties to the contract.

77. Other claims for damages
Other claims for damages and for reimbursement of expenses (hereinafter referred to as claims for damages) made by the buyer shall not be considered, irrespective of the legal justification. This applies especially to any infringement of duties under the obligation relationship and to illicit acts.
This does not apply in the case of compulsory liability, e.g. under the product liability act, in cases of intent, gross misconduct, injury to life, body or health, or in case of an infringement of essential contractual obligations. The daim for damages in case of an infringement of essential contractual obligations, however, is limited to foreseeable damage typical for the contract, unless liability is compulsory in cases of intent, gross misconduct, injury to life, body or health and the contractual obligations, however, is limited to foreseeable damage typical for the contract, unless liability is compulsory in cases of intent, gross misconduct, injury to the properties of the contractual obligations of the contract, and the contractual contractual obligations of the contract, unless liability is compulsory in cases of intent, gross misconduct, injury to the properties of the contractual contractu

this clause, all such claims shall come under the statute of claims for material defects stated in clause 12, paragraph 3.

18. Reservation of proprietary rights
All goods supplied shall remain our property until all claims, secondary claims, claims for damages and future claims have been paid in full and all cheques and bills have been cashed. The Buyer is entitled to process and resell the purchased goods subject to the following conditions:

a) The Buyer's right to process the purchased goods in the ordinary course of business will case if payments are suspended, or if an application for an insolvency procedure concerning his assets is filed, notwithstanding our right to revoke such right at any time. When reselling the goods, the Buyer shall mention the reservation of proprietary rights, and he shall transfer to us his claims against third parties resulting from the resale of our goods as per b) and c) below. Any use of the goods for carrying out work contracts and contracts for work and materials is also considered as resale.

The Buyer is not entitled to pawn or transfer the goods by way of security. In the event of seizure by third parties, the Buyer shall inform us immediately in writing, giving details of the reditor concerned.

The Buyer is not entitled to cede claims resulting from a transfer of our goods, unless such transfer is made within the framework of factoring, where the factoring profit exceeds the value of our secured claims. Once the factoring profit as been credited our claim will become due. The Buyer must inform us about such factoring.

b) By processing the purchased goods the Buyer does not acquire any proprietary rights in the new product (§ 950 BGB). If our goods are processed, mixed or combined with goods of third parties, we are entitled to co-ownership according to the proportion of the value of our goods.

C) The Buyer hereby transfers to us his claims against third parties and additional rights resulting from the resale of our goods.

C) The buyer hereby transfers to us his cla

means of an inspection or the Buyer's accounts. Sums which are received from claims transferred to us shall be remitted separately. Reservation of proprietary rights shall also remain valid if we include part of the claims in a regular invoice, draw up the balance and have it acknowledged. The reservation of proprietary rights not only applies to the acknowledged abstract balance but also to the causal balance. We hereby undertake to release fully paid deliveries if the value of the security under the reservation of proprietary rights exceeds our claims by more than 20%. If the Buyer suspends payment, he shall send us, immediately following announcement of such suspension, a list of all existing goods which are subject to our proprietary rights, including processed goods, and a list of all calims he may have against his customers including copies of the associated invoices.

against his customers including copies of the associated involces.

The Buyer shall hold the goods as a fiduciary for us. He shall
insure them against fire, theft and water. The Buyer hereby
transfers to us his claims for any damages he may have against
insurance companies or other entities responsible for
compensation up to the sum of our claims.
If we have withdrawn from the contract we are entitled
to request return of the goods which are subject to our
proprietary rights.
The rights resulting from the reservation of proprietary rights
and all special rights thereto as stipulated in these provisions
shall be valid as contingent liabilities which we have entered
into in the Buyer's interest, until they are released in full.

19. Validity of the Conditions of sale and delivery, binding character of the contract If any provision in these Conditions of sale and delivery or any agreement in the delivery contract is invalid, such provision or agreement shall not affect the validity of the remaining provisions or agreements. The invalid provision or agreement shall be replaced by a valid provision or agreement which shall meet as closely as possible and as legally permissible the economic purpose of the original one.

If the Buyer is not a fully qualified merchant as specified in the HGB (German commercial code), a legal entity under public law or a special frud under public law, only the provisions of clause 18 "Reservation of proprietary rights" shall apply.

20. Place of fulfilment, Place of jurisdiction, Governing law
The place of fulfilment for delivery and payment is Kirchhunden.
Any lawsuits resulting from the contractual relationship between
the parties shall be brought before the court competent in the area
of Kirchhunden.
The relationship between our company and the Buyer shall be
exclusively governed by the law of the Federal Republic of
Germany.
The Vienna convention of the United Nations for the international
sale of goods shall not apply.



Service is our commitment.















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