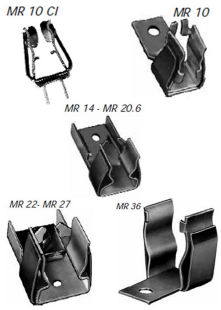
Clips for Cylindrical fuses IEC

Ø sizes 10, 14, 20, 22, 27, 36, 45, 55

FUSE HOLDERS, FUSE BASES AND SUPPORTS

FUSE CLIPS



FEATURES & BENEFITS

- Silver plated copper clips: extremely high thermal and electric conductivity (except nickel plated copper for MR20)
- Stainless steel pressure springs: highly resistant to salt spray
- Screwing on isolators mounting type
- Screwing on bars or insulated bars mounting type
- Welding on P.C.B. mounting type (MR 10 CI)

Mersen offers an extensive offer of fuse clips for low voltage and high voltage cylindrical fuses

They match perfectly our selection of fuses. They are designed to mount easily, to save space and provide tight contact.

You can choose from a wide range of traditional and space-saving fuse blocks, fuse clips and fuse holders.

TECHNICAL DATA OVERVIEW

Ampere Range (A)	1 ... 250 A
Size per Standard	For Ø 10, 14, 20, 22, 27, 36, 45, 55

PRODUCT RANGE

MR10CIRES-SORT

MR 10 and MR 10 CI

Catalog number	Item number	Rated current I_n	Maximum RMS continuous current through IN rated current fuses	Recommended copper cable section	Package	Weight
MR10RESSORT	B098004	32 A	32 A	6 mm²	20	7 g
MR10CIRESSORT	Y098507	32 A	32 A	6 mm²	1000	4.5 g
MR10RESSORTSP	C098994	32 A	32 A	6 mm²	20	5.7 g

MR 14

Catalog number	Item number	Rated current I_n	Maximum RMS continuous current through IN rated current fuses	Recommended copper cable section	Package	Weight
MR14SPRING	G098170	63 A	63 A	10 mm²	10	16 g

MR 20

Catalog number	Item number	Rated current I_n	Maximum RMS continuous current through IN rated current fuses	Recommended copper cable section	Package	Weight
MR20RESSORT	H099988	125 A	125 A	35 mm²	20	40 g

MR 22

Catalog number	Item number	Rated current I_n	Maximum RMS continuous current through IN rated current fuses	Recommended copper cable section	Package	Weight
MR22SPRING	K098909	135 A	135 A	35 mm²	20	40 g

MR 27

Catalog number	Item number	Rated current I_n	Maximum RMS continuous current through IN rated current fuses	Recommended copper cable section	Package	Weight
MR27RESSORT	Y092734	250 A	250 A	120 mm²	20	50 g

MR 36

Catalog number	Item number	Rated current I_n	Maximum RMS continuous current through IN rated current fuses	Recommended copper cable section	Package	Weight
MR36R	M091275	250 A	250 A	120 mm²	1	85 g

MR 45

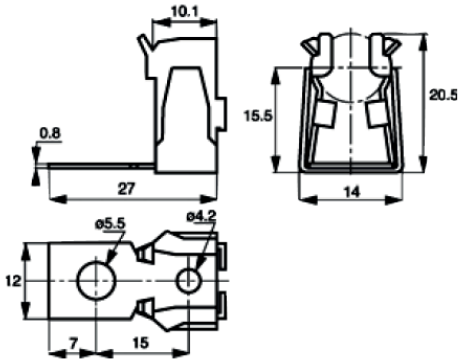
Catalog number	Item number	Rated current I_n	Maximum RMS continuous current through IN rated current fuses	Recommended copper cable section	Package	Weight
MR45R	L096472	315 A	315 A	185 mm²	1	0.44 kg
MR45SPL	S210236	315 A	315 A	185 mm²	1	0.23 kg

MR 55

Catalog number	Item number	Rated current I_n	Maximum RMS continuous current through IN rated current fuses	Recommended copper cable section	Package	Weight
MR55R	L078969	315 A	315 A	185 mm²	1	0.45 kg

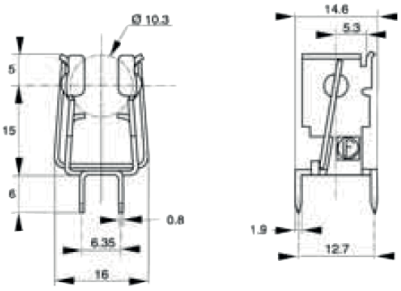
DIMENSIONS

MR10RESSORT



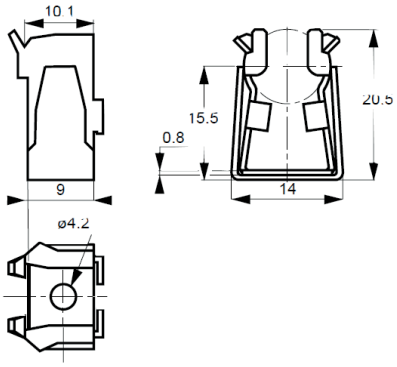
Dimensions in mm

MR10CIRESSORT



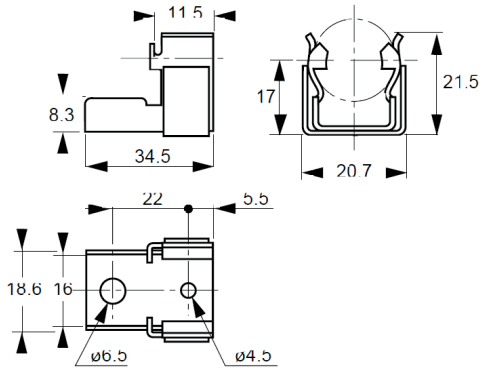
Dimensions in mm

MR10RESSORTSP



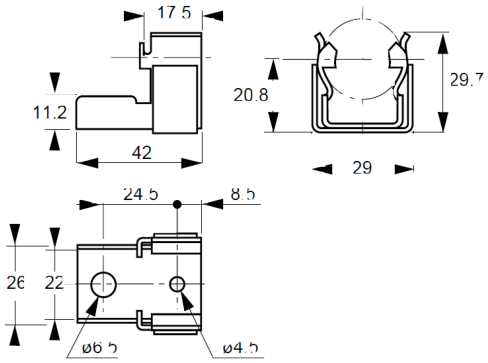
Dimensions in mm

MR14SPRING



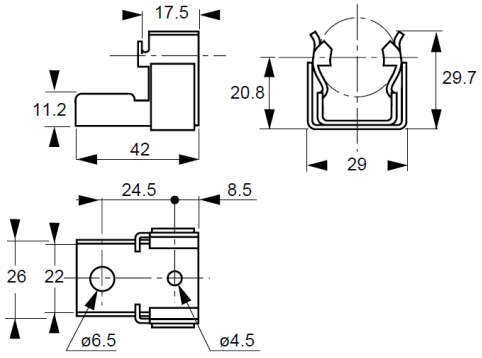
Dimensions in mm

MR20.6RESSORT



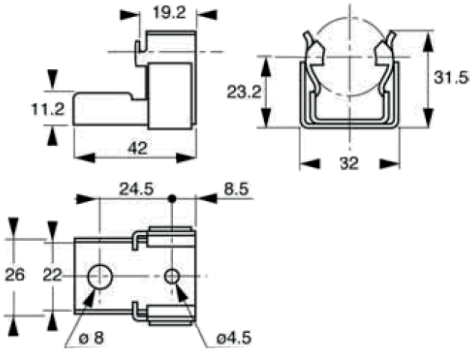
Dimensions in mm

MR22SPRING



Dimensions in mm

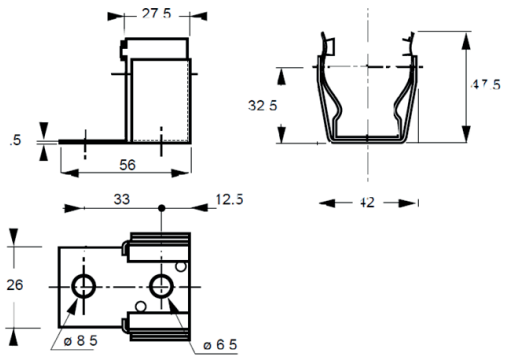
MR27RESSORT



Dimensions in mm

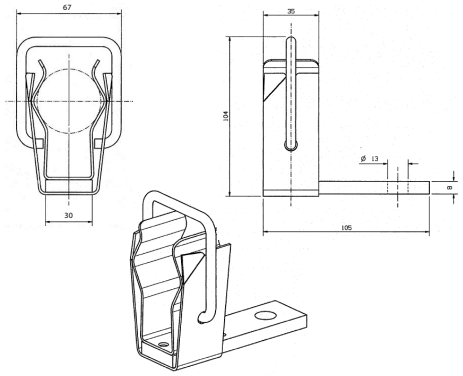
DIMENSIONS

MR36R



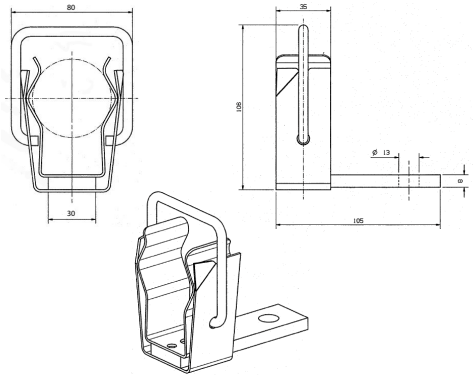
Dimensions in mm

MR45



Dimensions in mm

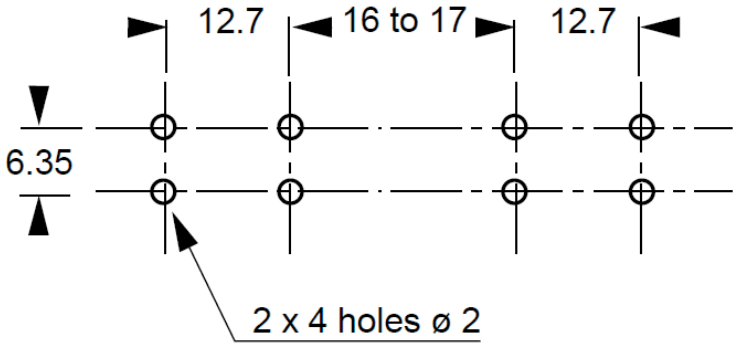
MR55



Dimensions in mm

Mouting Instructions

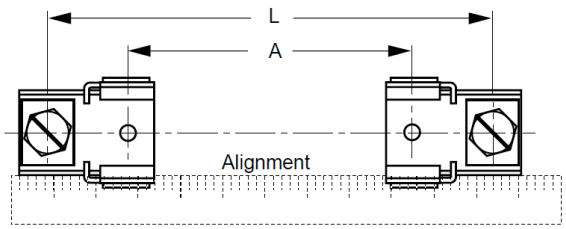
P.C.B. Drilling for MR10 CI clip (10x38 size fuse)

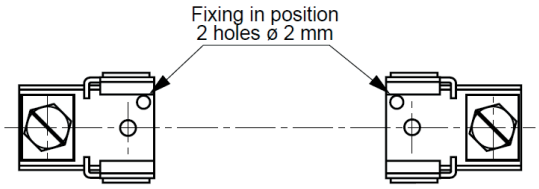


Dimensions in mm

DIMENSIONS

Clip Mounting





Mounting of two elastic stop pins of 2 mm dia. for fixing clips in position

Fuse size	A	L
10 x 38	31	61
10 x 180	173	203
14 x 51	42	86
22 x 58	42	91
20 x 51	36	85
20 x 127	113	162
20 x 190	175	224
27 x 60	41	91
36 x 127	100	166
36 x 190	165	231
36 x 250	223	289
45 x 192	228	363
45 x 292	328	463
45 x 367	403	538
45 x 442	478	613
45 x 537	573	708
55 x 259	228	363
55 x 520	489	624

Dimensions in mm

Compact fuse holders CCR

FUSE HOLDERS, FUSE BASES AND SUPPORTS

IEC CYLINDRICAL FUSE HOLDERS

The innovative and comprehensive range of Mersen fuse-holders.

CCR fuse-holders are finger-safe under IEC standards to an IP20 grade of protection, including fuse changing (with the flick of a finger). CCR fuse-holders are available in 1, 2, 3 poles, in IEC version in a very special compact design. Multi-pole units can also be field assembled by ordering pin-ties assembly kit. CCR range is made of tough and durable thermoplastic material.

TECHNICAL DATA OVERVIEW

Voltage Range AC	400 ... 500 VAC
Ampere Range (A)	25 ... 32 A
SCCR	CCR8 = 20 kA, CCR10 = 120 kA
Mounting	Installation on to DIN rails to EN 60719
Body Material	PA6.6 UL94V0
Product Size	For cylindrical fuse links 8x31 and 10x38
Number of Poles	1-pole, 2-pole, 3-pole, 1+N

FEATURES & BENEFITS

- Very compact design for small space applications
- Single pole + neutral conductor in one single module
- Finger safe
- Degree of protection: IP20
- DIN rail mounting
- Flame retardant materials with glow wire flammability index to 960°C

APPLICATIONS

- All circuits up to 500VAC for protection of motors, transformers, low voltage distribution, control circuits
- Non-load operation
- Special applications where small room is available:
  - street lighting connection boxes
  - street christmas light connecting boxes
  - swimming pool connecting boxes

STANDARDS

- IEC 60269-2
- IEC 60269-3 and 60947-3 for single pole models
- RoHS Compliant

PRODUCT RANGE

CCR81

CCR8 for fuse-links 8,5x31mm, 25A, 400V

Catalog number	Reference number	Number of poles/phases	Design	Standard complience	Weight	Package
CCR81	C200769	1	CCR8 single pole	IEC60947-3 IEC60269-2 IEC60269-3 + NF	58 g	12
CCR81N	A218730	1 + N	CCR8 single pole + neutral conductor in one module	IEC60947-3 IEC60269-2 IEC60269-3 + NF	58 g	12
CCR82	V233721	2	CCR8 double pole	IEC60269-2	0.125 kg	6
CCR83	W233722	3	CCR8 triple pole	IEC60269-2	0.1887 kg	4
CCR810N	Z214635	-	neutral conductor	IEC60947-3 IEC60269-2 IEC60269-3 + NF	58 g	12

CCR101N

CCR10 for fuse-links 10x38mm, 32A, 500V

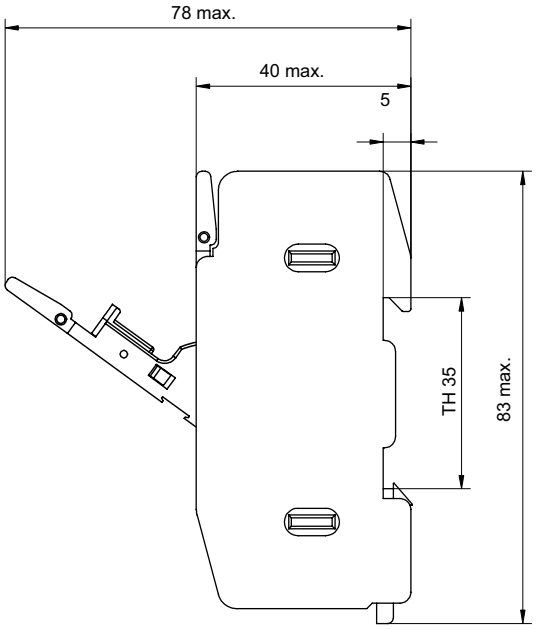
Catalog number	Reference number	Number of poles/phases	Design	Standard complience	Weight	Package
CCR101	N218213	1	CCR10 single pole	IEC60947-3 IEC60269-2 IEC60269-3 + NF	58 g	12
CCR101N	H215655	1 + N	CCR10 single pole + neutral conductor in one module	IEC60947-3 IEC60269-2 IEC60269-3 + NF	62.9 g	12
CCR102	X233723	2	CCR10 double pole	IEC60269-2	0.1258 kg	6
CCR103	Y233724	3	CCR10 triple pole	IEC60269-3	0.1887 kg	4
CCR810N	Z214635	-	neutral conductor	IEC60947-3 IEC60269-2 IEC60269-3 + NF	58 g	12

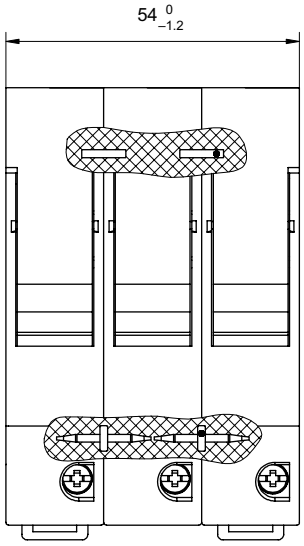
TECHNICAL DATA

	CCR8	CCR10
Size	8 x 31	10 x 38
Number of poles/phases	1, 1+N, 2, 3	1, 1+N, 2, 3
Conventional free air thermal current with fuse links I_{th}	25 A	32 A
Power dissipation at I_{th}	2.5 W	3 W
Utilization category to IEC/EN 60947-3 U_e = AC 400 V; I_e = 25 A U_e = AC 500 V; I_e = 32 A	 AC 20 B -	 - AC 20 B
Rated insulation voltage U_i	500 V	500 V
Rated operational voltage U_e	400 V	500 V
Rated impulse withstand voltage U_{imp}	6 kV	6 kV
Degree of protection	IP 20	IP 20
Rated short circuit making capacity U_e = AC 400 V; I_e = 25 A U_e = AC 500 V; I_e = 32 A	 20 kA -	 - 120 kA
Standard cable terminal	Philips slot head screws rigid wire 1-10mm², multistranded wire 1-6mm², M = 2 Nm	Philips slot head screws rigid wire 1-10mm², multistranded wire 1-6mm², M = 2 Nm
Rated short circuit making capacity U_e = AC 400 V; I_e = 25 A U_e = AC 500 V; I_e = 32 A	AC 20 B - 20 kA -	- AC 20 B - 120 kA

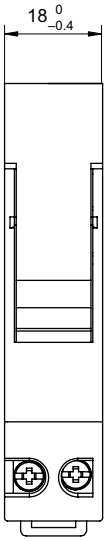
DIMENSIONS

Compact fuse-holder CCR for cylindrical fuse-links
CCR 8 for fuse-links size 8x31mm, Ø 8mm
CCR 10 for fuse-links size 10x38mm, Ø 10mm
Neutral conductor CCR810N

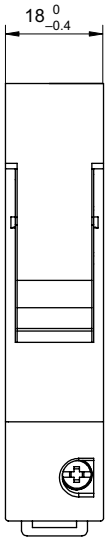




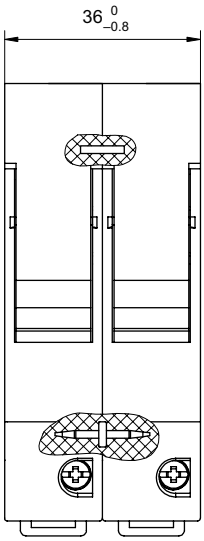
(CCR83/CCR103)



(CCR81N/CCR101N)



(CCR81/CCR101/CCR810N)

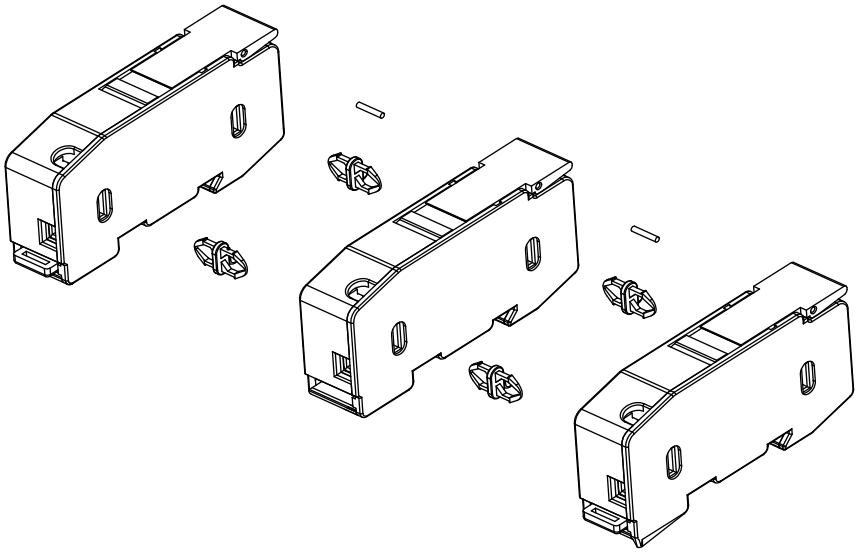


(CCR82/CCR102)

Dimensions in mm

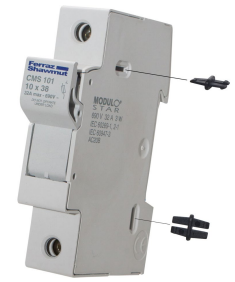
DIMENSIONS

Accessory: CMS810PAK
Links for connection of multi pole units CCR8 and CCR10



Dimensions in mm

ACCESSORIES



CMS8010PAK + fuse-holder

Kit for multi phase connection

Catalog number	Reference number	Description	Weight	Package
CMS810PAK	Z233725	Links for connection of multipole units	0.5 g	12

Compact fuse-holders CC8, CC10, CC14, CC22

FUSE HOLDERS, FUSE BASES AND SUPPORTS

IEC CYLINDRICAL FUSE HOLDERS

The innovative and comprehensive range of Mersen fuse-holders.

CC fuse-holders are available in 1, 2, 3 poles, in IEC version in a very special compact design. Multi-pole units can also be field assembled by ordering pin-ties assembly kit. CC range is made of tough and durable thermoplastic material.

TECHNICAL DATA OVERVIEW

Voltage Range AC	400 ... 690 VAC
Ampere Range (A)	25 ... 125 A
Mounting	Installation on symmetrical DIN rails with adapter Screw-on mounting in back of panel
Number of Poles	1-pole

FEATURES & BENEFITS

- Very compact design for small space applications
- Panel mounted for all sizes
- DIN rail mounted sizes 14x51 and 22x58

APPLICATIONS

- All circuits up to 690V for protection of motors, transformers, low voltage distribution, control circuits
- Non-load operation
- Special applications where small room is available like street lighting connection boxes

STANDARDS

- IEC 60269-2
- RoHS Compliant

CE RoHS

PRODUCT RANGE

Modulostar® CC8 for fuse-links 8x31mm, 25A, 400V

Catalog number	Item number	Number of poles/phases	Package	Weight
CC81	E215146	1	12	48 g

CC101

Modulostar® CC10 for fuse-links 10x38mm, 32A, 500V

Catalog number	Item number	Number of poles/phases	Package	Weight
CC101	S211570	1	12	50 g

Modulostar® CC14 for fuse-links 14x51mm, 50A, 690V

Catalog number	Item number	Number of poles/phases	Package	Weight
CC141	S219781	1	12	0.11 kg

Modulostar® CC14 for fuse-links 14x51mm, 50A, 690V, rail mounting

Catalog number	Item number	Number of poles/phases	Package	Weight
CC141R	Z211047	1	12	0.11 kg

Modulostar® CC22 for fuse-links 22x58mm, 125A, 690V

Catalog number	Item number	Number of poles/phases	Package	Weight
CC221	X214127	1	6	0.19 kg

CC221R

Modulostar® CC22 for fuse-links 22x58mm, 125A, 690V, rail mounting

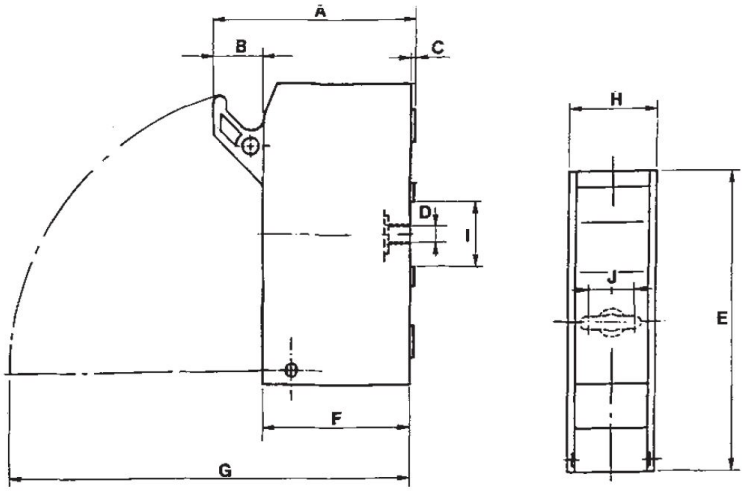
Catalog number	Item number	Number of poles/phases	Package	Weight
CC221R	B217190	1	6	0.19 kg

TECHNICAL DATA

	CC8	CC10	CC14	CC22
Size	8x31	10x38	14x51	22x58
Number of poles/phases	1	1, 1+1, 2, 3, 3+N	1, 1+1, 2, 3, 3+N	1, 1+1, 2, 3, 3+N
Conventional free air thermal current with fuse links I_{th}	-	-	50 A	125 A
Utilization category to IEC/EN 60947-3 U_e = AC 400 V; I_e = 25 A	-	AC 20 B	AC 20 B	AC 20 B
Rated insulation voltage U_i	-	-	690 V	690 V
Rated short circuit making capacity U_e = AC 400 V; I_e = 25 A	-	20 kA	20 kA	20 kA
Rated voltage U^n	400 V	500 V	690 V	690 V
Rated current	25 A	32 A	50 A	125 A
Wiring cross sections	1x10mm²	1x10mm²	1x25mm²	1x50mm²
Rated short circuit making capacity U_e = AC 400 V; I_e = 25 A	- -	AC 20 B 20 kA	AC 20 B 20 kA	AC 20 B 20 kA

DIMENSIONS

Modular fuse-holders for cylindrical fuse-links class CC



	CC8/10	CC.14	CC.22
A	40	62	71
B	9	15,5	16
C	2	1	1
D	5,5	7,25	7,25
E	77,5	94	106
F	33	45,5	55
G	100	127	148
H	17,5	27	34
I	46	20,3	20,3
J	-	15,2	18
K	77,5	112	139
L	60	85	105
M	42,5	6	6
N	-	58	71

Dimensions in mm

Ferrule fuse-links 10x38 aM 400 to 690VAC

LOW VOLTAGE IEC FUSES

IEC CYLINDRICAL FUSE-LINKS

Mersen aM and gG fuse-links cover a wide range of physical sizes and ampere ratings for 400, 500, and 690VAC for protection in electrical distribution circuits and various industrial applications. Most ratings are available in size 8x31 and size 10x38 with an optional indicator, and in size 14x51 and 22x58 with an optional striker to activate an auxiliary contact. Size 10x38 is also available with striker. All cylindrical fuse-links have ceramic bodies and silver-plated contacts.

Cylindrical fuse-links “aM” are partial range fuses. They protect electrical devices in case of unacceptable high short-circuit against destruction due high current limiting and low thermal let-through values. They cut off currents more than 6.3xIn until the maximum breaking capacity (rated breaking capacity). Cylindrical fuse-links “aM” are mainly used for the protection of installation switch gear in otor circuit currents. For classification of the cylindrical fuse-links the nominal current of the fuse-link can be selected respective to the nominal current of the motor.

Our technology and process was designed to ensure highly reliable technical performance.

TECHNICAL DATA OVERVIEW

Voltage Range AC	400 ... 690 VAC
Ampere Range (A)	0.16 ... 32 A
Speed/Characteristic	aM
I.R. AC (IEC)	120 kA
Body Material	Ceramic
Body Style	cylindrical
Contact Materials	Silver plated copper
Product Size	10x38 mm

FEATURES & BENEFITS

- Reduced size
- Visual indication of fuse operation
- Safest and most reliable protection system
- Optional indicator

APPLICATIONS

- aM type for protection of motors, transformers and other loads with in-rush currents.

STANDARDS

- IEC 60269-1 & -2 (electrically only for the range with striker)
- Approved by various shipping organizations

PRODUCT RANGE

FR10AM40V32

Size 10,3x38 aM 400/500VAC without indicator

Catalog number	Item number	Rated voltage AC (IEC)	Rated current I_n	Rated breaking capacity AC	Power dissipation at I_n	Weight
FR10AM50V0.16	E214617	500 V	0.16 A	120 kA	0.07 W	8.3 g
FR10AM50V0.25	M215130	500 V	0.25 A	120 kA	0.08 W	8.3 g
FR10AM50V0.5	W216150	500 V	0.5 A	120 kA	0.07 W	8.3 g
FR10AM50V1	F217171	500 V	1 A	120 kA	0.1 W	8.3 g
FR10AM50V2	H218714	500 V	2 A	120 kA	0.14 W	8.3 g
FR10AM50V4	W219232	500 V	4 A	120 kA	0.28 W	8.3 g
FR10AM50V6	F222208	500 V	6 A	120 kA	0.38 W	8.3 g
FR10AM50V8	Z201295	500 V	8 A	120 kA	0.55 W	8.3 g
FR10AM50V10	Y211552	500 V	10 A	120 kA	0.62 W	8.3 g
FR10AM50V12	A213601	500 V	12 A	120 kA	0.82 W	8.3 g
FR10AM50V16	F214618	500 V	16 A	120 kA	0.87 W	8.3 g
FR10AM50V20	X216151	500 V	20 A	120 kA	1.05 W	8.3 g
FR10AM40V25	G217172	400 V	25 A	120 kA	1.2 W	8.3 g
FR10AM40V32	J218715	400 V	32 A	120 kA	1.8 W	8.3 g

FR10AM50V10I

Size 10,3x38 aM 400/500VAC with indicator

Catalog number	Item number	Rated voltage AC (IEC)	Rated current I_n	Rated breaking capacity AC	Power dissipation at I_n	Weight
FR10AM50V1I	X219233	500 V	1 A	120 kA	0.1 W	8.3 g
FR10AM50V2I	G222209	500 V	2 A	120 kA	0.14 W	8.3 g
FR10AM50V4I	K200753	500 V	4 A	120 kA	0.28 W	8.3 g
FR10AM50V6I	K201811	500 V	6 A	120 kA	0.38 W	8.3 g
FR10AM50V8I	Z211553	500 V	8 A	120 kA	0.55 W	8.3 g
FR10AM50V10I	H213102	500 V	10 A	120 kA	0.62 W	8.3 g
FR10AM50V12I	D214110	500 V	12 A	120 kA	0.82 W	8.3 g
FR10AM50V16I	P215132	500 V	16 A	120 kA	0.87 W	8.3 g
FR10AM50V20I	V216655	500 V	20 A	120 kA	1.05 W	8.3 g
FR10AM40V25I	L217682	400 V	25 A	120 kA	1.2 W	8.3 g

FR10AM40V16P

Size 10,3x38 aM 400VAC with striker

Catalog number	Item number	Rated voltage AC (IEC)	Rated current I_n	Rated breaking capacity AC	Power dissipation at I_n	Weight
FR10AM40V2P	Z084984	400 V	2 A	100 kA	0.18 W	9.2 g
FR10AM40V4P	Y085259	400 V	4 A	100 kA	0.2 W	9.2 g
FR10AM40V6P	W085257	400 V	6 A	100 kA	0.21 W	9.2 g
FR10AM40V8P	A084985	400 V	8 A	100 kA	0.29 W	9.2 g
FR10AM40V10P	B084986	400 V	10 A	100 kA	0.36 W	9.2 g
FR10AM40V12P	X085258	400 V	12 A	100 kA	0.43 W	9.2 g
FR10AM40V16P	C084757	380 V	16 A	100 kA	0.57 W	9.2 g
FR10AM40V20P	V085256	380 V	20 A	100 kA	0.72 W	9.2 g
FR10AM25V25P	A076038	250 V	25 A	100 kA	1.2 W	9.2 g
FR10AM25V32P	B076039	250 V	32 A	100 kA	1.6 W	9.2 g

Ferrule fuse-links 10x38 aM 400 to 690VAC

PRODUCT RANGE

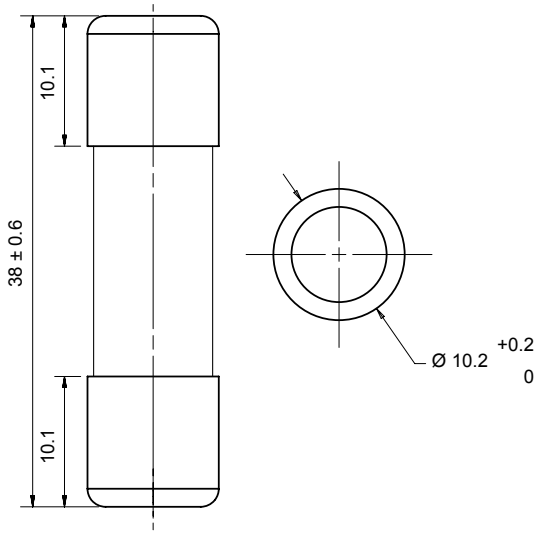
FR10AM69V10

Size 10,3x38 aM 690VAC without indicator

Catalog number	Item number	Rated voltage AC (IEC)	Rated current I_n	Rated breaking capacity AC	Power dissipation at I_n	Weight
FR10AM69V1	H302779	690 V	1 A	120 kA	0.1 W	8.3 g
FR10AM69V2	J302780	690 V	2 A	120 kA	0.14 W	8.3 g
FR10AM69V4	K302781	690 V	4 A	120 kA	0.28 W	8.3 g
FR10AM69V6	L302782	690 V	6 A	120 kA	0.38 W	8.3 g
FR10AM69V8	M302783	690 V	8 A	120 kA	0.55 W	8.3 g
FR10AM69V10	N302784	690 V	10 A	120 kA	0.62 W	8.3 g
FR10AM69V12	P302785	690 V	12 A	120 kA	0.78 W	8.3 g

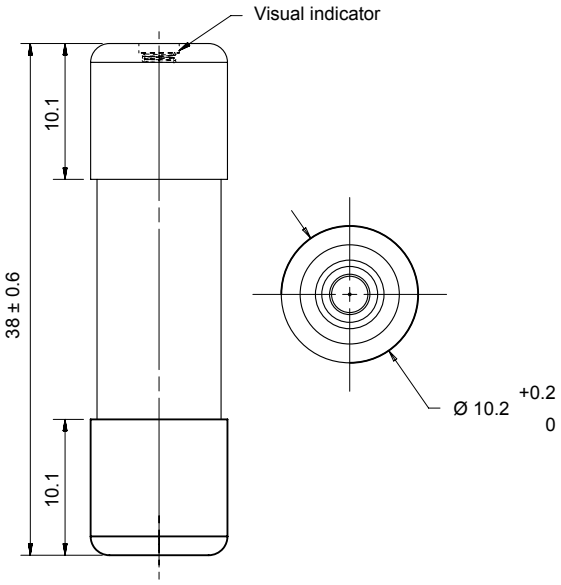
DIMENSIONS

Size 10x38 aM without indicator (1001210)



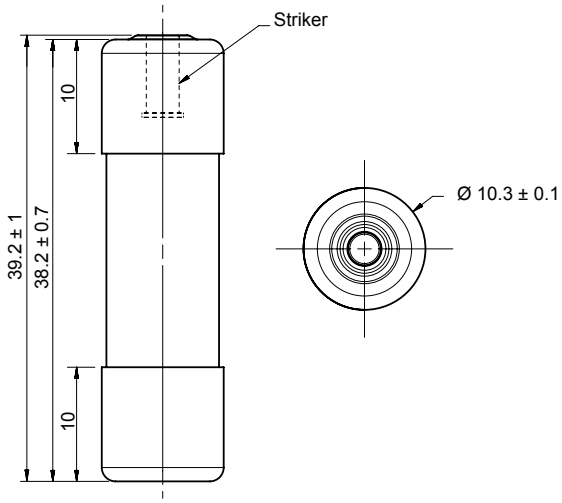
Dimensions in mm

Size 10x38 aM with indicator (1002537)



Dimensions in mm

Size 10x38 aM with striker (33907)



Dimensions in mm

Ferrule fuse-links 10x38 gG 400 to 690VAC

LOW VOLTAGE IEC FUSES

IEC CYLINDRICAL FUSE-LINKS

Mersen aM and gG fuse-links cover a wide range of physical sizes and ampere ratings for 400, 500, and 690VAC for protection in electrical distribution circuits and various industrial applications. Most ratings are available in size 8x31 and size 10x38 with an optional indicator, and in size 14x51 and 22x58 with an optional striker to activate an auxiliary contact. Size 10x38 is also available with striker. All cylindrical fuse-links have ceramic bodies and silver-plated contacts.

Cylindrical fuse-links “gG” are used for the protection of cables, motors and LV-networks. They limit and cut off unacceptable overcurrents and short-circuit currents up to their nominal breaking capacity. Cylindrical fuse-links “gG” also protect electrical equipment and installations against the dynamic effect of high short-currents.

Our technology and process was designed to ensure highly reliable technical performance.

TECHNICAL DATA OVERVIEW

Voltage Range AC	400 ... 690 VAC
Ampere Range (A)	0.5 ... 32 A
Speed/Characteristic	gG
I.R. AC (IEC)	120 kA
Body Material	Ceramic
Body Style	cylindrical
Contact Materials	Silver plated copper
Product Size	10x38 mm

FEATURES & BENEFITS

- Reduced size
- Full range protection
- Visual indication of fuse operation
- Safest and most reliable protection system

APPLICATIONS

- gG type for protection of line, cable against overload and short circuit in various industrial application and electrical distribution circuits.

STANDARDS

- IEC 60269-1 & -2 (electrically only for the range with striker)
- Approved by Lloyd’s Register of Shipping and Bureau Veritas

Ferrule fuse-links 10x38 gG 400 to 690VAC

PRODUCT RANGE

FR10GG50V6

FR10GG40V32

Size 10,3x38 gG 400/500VAC without indicator

Catalog number	Reference number	Rated voltage AC (IEC)	Rated current I_n	Rated breaking capacity AC	Power dissipation at In	Weight
FR10GG50V0.5	C211027	500 V	0.5 A	120 kA	0.07 W	8.3 g
FR10GG50V1	B212061	500 V	1 A	120 kA	0.45 W	8.3 g
FR10GG50V2	D213098	500 V	2 A	120 kA	0.5 W	8.3 g
FR10GG50V4	X213598	500 V	4 A	120 kA	0.85 W	8.3 g
FR10GG50V6	K215128	500 V	6 A	120 kA	0.95 W	8.3 g
FR10GG50V8	D217169	500 V	8 A	120 kA	1.15 W	8.3 g
FR10GG50V12	W219761	500 V	12 A	120 kA	1.4 W	8.3 g
FR10GG50V10	S218194	500 V	10 A	120 kA	1.3 W	8.3 g
FR10GG50V16	G200750	500 V	16 A	120 kA	1.9 W	8.3 g
FR10GG50V20	D211028	500 V	20 A	120 kA	2.4 W	8.3 g
FR10GG50V25	E213099	500 V	25 A	120 kA	2.7 W	8.3 g
FR10GG40V32	A214107	400 V	32 A	120 kA	2.8 W	8.3 g

FR10GG40V32I

Size 10,3x38 gG 400/500VAC with indicator

Catalog number	Reference number	Rated voltage AC (IEC)	Rated current I_n	Rated breaking capacity AC	Power dissipation at In	Weight
FR10GG50V2I	S216653	500 V	2 A	120 kA	0.5 W	8.3 g
FR10GG50V4I	E217170	500 V	4 A	120 kA	0.85 W	8.3 g
FR10GG50V6I	T218195	500 V	6 A	120 kA	0.95 W	8.3 g
FR10GG50V8I	V219231	500 V	8 A	120 kA	1.15 W	8.3 g
FR10GG50V10I	E222207	500 V	10 A	120 kA	1.3 W	8.3 g
FR10GG50V12I	H200751	500 V	12 A	120 kA	1.4 W	8.3 g
FR10GG50V16I	H201809	500 V	16 A	120 kA	1.9 W	8.3 g
FR10GG50V20I	X211551	500 V	20 A	120 kA	2.4 W	8.3 g
FR10GG50V25I	W212585	500 V	25 A	120 kA	2.7 W	8.3 g
FR10GG40V32I	Z213600	400 V	32 A	120 kA	2.8 W	8.3 g

Size 10,3x38 gG 250/400VAC with striker

Catalog number	Reference number	Rated voltage AC (IEC)	Rated current I_n	Rated breaking capacity AC	Power dissipation at In	Weight
FR10GG40V2P	G083703	400 V	2 A	100 kA	0.6 W	9.2 g
FR10GG40V4P	D084758	400 V	4 A	100 kA	0.75 W	9.2 g
FR10GG40V6P	Y084799	400 V	6 A	100 kA	0.9 W	9.2 g
FR10GG40V8P	F083955	400 V	8 A	100 kA	1 W	9.2 g
FR10GG40V10P	A084801	400 V	10 A	100 kA	1.1 W	9.2 g
FR10GG40V12P	G083956	400 V	12 A	100 kA	1.25 W	9.2 g
FR10GG40V16P	X084798	380 V	16 A	100 kA	1.35 W	9.2 g
FR10GG40V20P	Z084800	380 V	20 A	100 kA	1.45 W	9.2 g
FR10GG25V25P	H083957	250 V	25 A	100 kA	1.7 W	9.2 g
FR10GG25V32P	E083954	250 V	32 A	100 kA	2.2 W	9.2 g

Ferrule fuse-links 10x38 gG 400 to 690VAC

PRODUCT RANGE

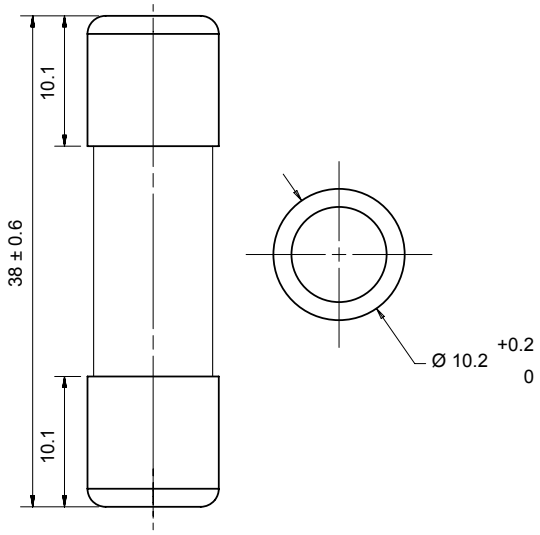
FR10GG69V6

Size 10,3x38 gG 690VAC without indicator

Catalog number	Reference number	Rated voltage AC (IEC)	Rated current I_n	Rated breaking capacity AC	Power dissipation at In	Weight
FR10GG69V1	R302787	690 V	1 A	120 kA	0.45 W	9 g
FR10GG69V2	S302788	690 V	2 A	120 kA	0.55 W	9 g
FR10GG69V4	T302789	690 V	4 A	120 kA	0.6 W	9 g
FR10GG69V6	V302790	690 V	6 A	120 kA	0.9 W	9 g
FR10GG69V8	W302791	690 V	8 A	120 kA	1 W	9 g
FR10GG69V10	X302792	690 V	10 A	120 kA	1.15 W	9 g
FR10GG69V12	Y302793	690 V	12 A	120 kA	1.4 W	9 g
FR10GG69V16	Z302794	690 V	16 A	120 kA	1.9 W	9 g

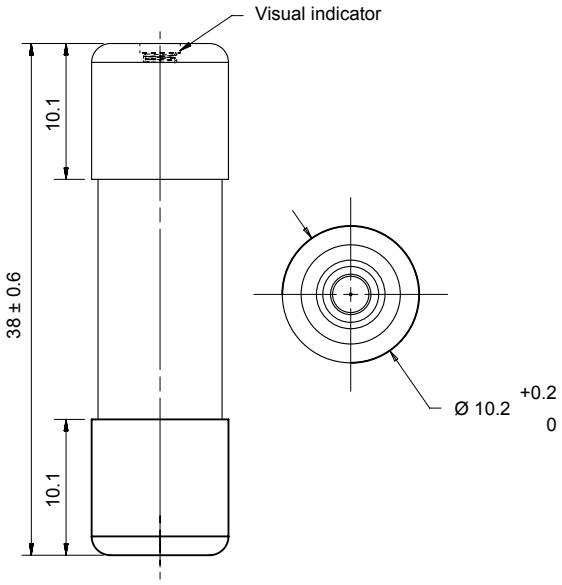
DIMENSIONS

Size 10x38 gG without indicator (1001210)



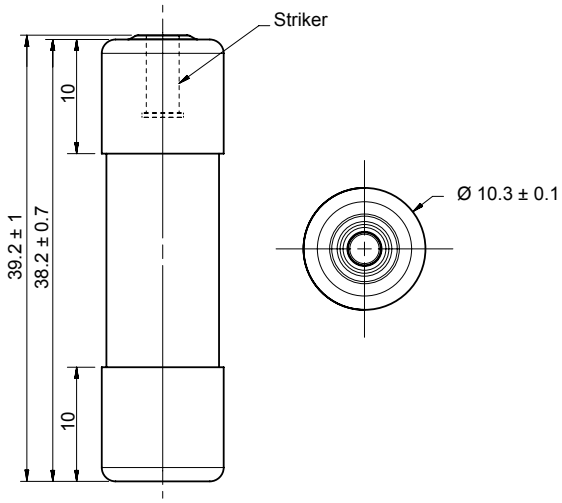
Dimensions in mm

Size 10x38 gG with indicator (1002537)



Dimensions in mm

Size 10x38 gG with striker (33907)



Dimensions in mm

Ferrule fuse-links 14x51 aM 500 to 690VAC

LOW VOLTAGE IEC FUSES

IEC CYLINDRICAL FUSE-LINKS

Mersen aM and gG fuse-links cover a wide range of physical sizes and ampere ratings for 400, 500, and 690VAC for protection in electrical distribution circuits and various industrial applications. Most ratings are available in size 8x31 and size 10x38 with an optional indicator, and in size 14x51 and 22x58 with an optional striker to activate an auxiliary contact. Size 10x38 is also available with striker. All cylindrical fuse-links have ceramic bodies and silver-plated contacts.

Cylindrical fuse-links “aM” are partial range fuses. They protect electrical devices in case of unacceptable high short-circuit against destruction due high current limiting and low thermal let-through values. They cut off currents more than 6.3xIn until the maximum breaking capacity (rated breaking capacity). Cylindrical fuse-links “aM” are mainly used for the protection of installation switch gear in otor circuit currents. For classification of the cylindrical fuse-links the nominal current of the fuse-link can be selected respective to the nominal current of the motor.

Our technology and process was designed to ensure highly reliable technical performance.

TECHNICAL DATA OVERVIEW

Voltage Range AC	500 ... 690 VAC
Ampere Range (A)	0.25 ... 50 A
Speed/Characteristic	aM
I.R. AC (IEC)	120 kA
Body Material	Ceramic
Body Style	cylindrical
Contact Materials	Silver plated copper
Product Size	14x51 mm

FEATURES & BENEFITS

- Reduced size
- Striker version available for remote indication of fuse operation
- Safest and most reliable protection system

APPLICATIONS

- aM type for protection of motors, transformers and other loads with in-rush currents.

STANDARDS

- IEC 60269-1 & -2
- Approved by Lloyd’s Register of Shipping and Bureau Veritas

Ferrule fuse-links 14x51 aM 500 to 690VAC

PRODUCT RANGE

FR14AM69V12

FR14AM50V50

Size 14,3x51 aM 500/690VAC without indicator

Catalog number	Item number	Rated voltage AC (IEC)	Rated current I_n	Rated breaking capacity AC	Power dissipation at I_n	Weight
FR14AM69V0.25	B212590	690 V	0.25 A	120 kA	0.1 W	21 g
FR14AM69V0.5	L213105	690 V	0.5 A	120 kA	0.9 W	21 g
FR14AM69V1	E213605	690 V	1 A	120 kA	0.13 W	21 g
FR14AM69V2	H214114	690 V	2 A	120 kA	0.18 W	21 g
FR14AM69V4	K214622	690 V	4 A	120 kA	0.28 W	21 g
FR14AM69V6	S215135	690 V	6 A	120 kA	0.42 W	21 g
FR14AM69V8	T215642	690 V	8 A	120 kA	0.55 W	21 g
FR14AM69V10	Z216659	690 V	10 A	120 kA	0.65 W	21 g
FR14AM69V12	M217177	690 V	12 A	120 kA	0.75 W	21 g
FR14AM69V16	Q217686	690 V	16 A	120 kA	1.05 W	21 g
FR14AM69V20	P218720	690 V	20 A	120 kA	1.3 W	21 g
FR14AM69V25	E219769	690 V	25 A	120 kA	1.55 W	21 g
FR14AM69V32	G1011477	690 V	32 A	120 kA	2.05 W	21 g
FR14AM69V40	J1011479	690 V	40 A	120 kA	2.65 W	21 g
FR14AM50V32	M222214	500 V	32 A	120 kA	2.05 W	21 g
FR14AM50V40	Q200758	500 V	40 A	120 kA	2.65 W	21 g
FR14AM50V45	L211035	500 V	45 A	120 kA	2.85 W	21 g
FR14AM50V50	E211558	500 V	50 A	120 kA	2.95 W	21 g

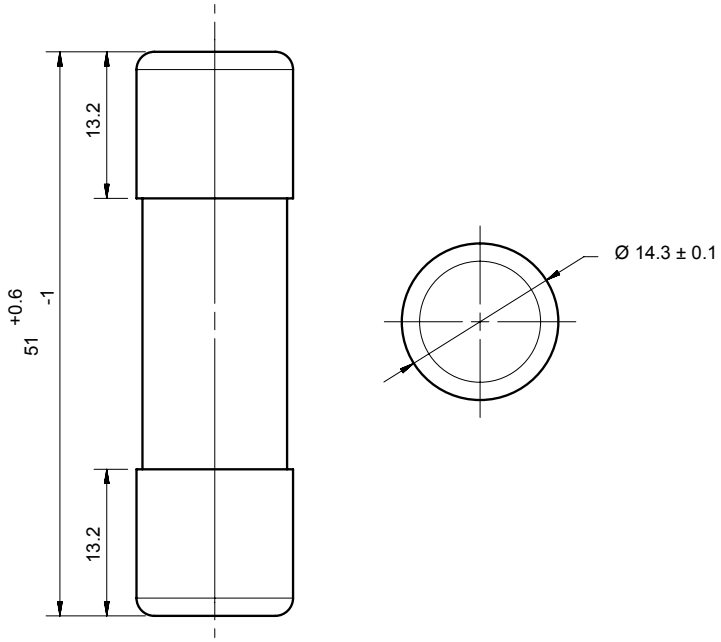
FR14AM50V25P

Size 14,3x51 aM 500VAC with striker

Catalog number	Item number	Rated voltage AC (IEC)	Rated current I_n	Rated breaking capacity AC	Power dissipation at I_n	Weight
FR14AM50V1P	W215644	500 V	1 A	120 kA	0.13 W	21 g
FR14AM50V2P	B216661	500 V	2 A	120 kA	0.18 W	21 g
FR14AM50V4P	C218203	500 V	4 A	120 kA	0.28 W	21 g
FR14AM50V6P	E219240	500 V	6 A	120 kA	0.42 W	21 g
FR14AM50V8P	N222215	500 V	8 A	120 kA	0.55 W	21 g
FR14AM50V10P	S200760	500 V	10 A	120 kA	0.65 W	21 g
FR14AM50V12P	R201817	500 V	12 A	120 kA	0.75 W	21 g
FR14AM50V16P	G211560	500 V	16 A	120 kA	1.05 W	21 g
FR14AM50V20P	E212593	500 V	20 A	120 kA	1.3 W	21 g
FR14AM50V25P	H213608	500 V	25 A	120 kA	1.55 W	21 g
FR14AM50V32P	N214625	500 V	32 A	120 kA	2.05 W	21 g
FR14AM50V40P	X215645	500 V	40 A	120 kA	2.65 W	21 g
FR14AM50V45P	C216662	500 V	45 A	120 kA	2.85 W	21 g
FR14AM50V50P	D218204	500 V	50 A	120 kA	2.95 W	21 g

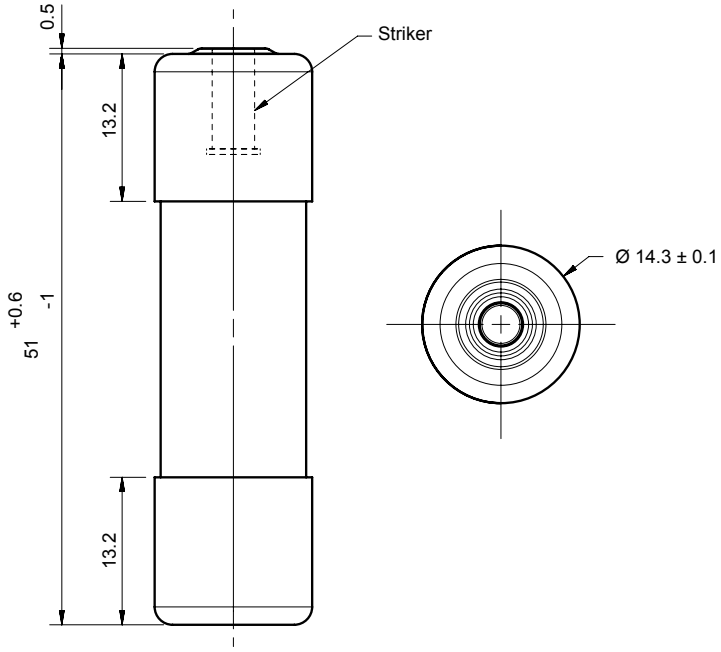
DIMENSIONS

Size 14x51 aM without indicator (1001212)



Dimensions in mm

Size 14x51 aM with striker (1001211)



Dimensions in mm

Ferrule fuse-links 14x51 gG 500 to 690VAC

LOW VOLTAGE IEC FUSES

IEC CYLINDRICAL FUSE-LINKS

Mersen aM and gG fuse-links cover a wide range of physical sizes and ampere ratings for 400, 500, and 690VAC for protection in electrical distribution circuits and various industrial applications. Most ratings are available in size 8x31 and size 10x38 with an optional indicator, and in size 14x51 and 22x58 with an optional striker to activate an auxiliary contact. Size 10x38 is also available with striker. All cylindrical fuse-links have ceramic bodies and silver-plated contacts.

Cylindrical fuse-links “gG” are used for the protection of cables, motors and LV-networks. They limit and cut off unacceptable overcurrents and short-circuit currents up to their nominal breaking capacity. Cylindrical fuse-links “gG” also protect electrical equipment and installations against the dynamic effect of high short-currents.

Our technology and process was designed to ensure highly reliable technical performance.

TECHNICAL DATA OVERVIEW

Voltage Range AC	500 ... 690 VAC
Ampere Range (A)	1 ... 50 A
Speed/Characteristic	gG
I.R. AC (IEC)	120 kA
Body Material	Ceramic
Body Style	cylindrical
Contact Materials	Silver plated copper
Product Size	14x51 mm

FEATURES & BENEFITS

- Reduced size
- Full range protection
- Striker version available for remote indication of fuse operation
- Safest and most reliable protection system

APPLICATIONS

- gG type for protection of line, cable against overload and short circuit in various industrial application and electrical distribution circuits.

STANDARDS

- IEC 60269-1 & -2
- Approved by Lloyd’s Register of Shipping and Bureau Veritas

Ferrule fuse-links 14x51 gG 500 to 690VAC

PRODUCT RANGE

FR14GG50V50

Size 14,3x51 gG 500/690VAC without indicator

Catalog number	Item number	Rated voltage AC (IEC)	Rated current I_n	Rated breaking capacity AC	Power dissipation at I_n	Weight
FR14GG69V1	K218716	690 V	1 A	120 kA	0.6 W	21 g
FR14GG69V2	Y219234	690 V	2 A	120 kA	0.75 W	21 g
FR14GG69V4	A219765	690 V	4 A	120 kA	1.1 W	21 g
FR14GG69V6	H222210	690 V	6 A	120 kA	1.25 W	21 g
FR14GG69V8	D222965	690 V	8 A	120 kA	1.45 W	21 g
FR14GG69V10	L200754	690 V	10 A	120 kA	1.65 W	21 g
FR14GG69V12	L201812	690 V	12 A	120 kA	1.8 W	21 g
FR14GG69V16	A211554	690 V	16 A	120 kA	2.35 W	21 g
FR14GG69V20	Z212588	690 V	20 A	120 kA	2.75 W	21 g
FR14GG69V25	C213603	690 V	25 A	120 kA	3.1 W	21 g
FR14GG69V32	L1010170	690 V	32 A	120 kA	3.6 W	21 g
FR14GG69V40	P1010173	690 V	40 A	120 kA	4 W	21 g
FR14GG69V50	Q1010174	690 V	50 A	120 kA	4.8 W	21 g
FR14GG50V32	W216656	500 V	32 A	120 kA	3.6 W	21 g
FR14GG50V40	X218198	500 V	40 A	120 kA	4 W	21 g
FR14GG50V50	Z219235	500 V	50 A	120 kA	4.8 W	21 g

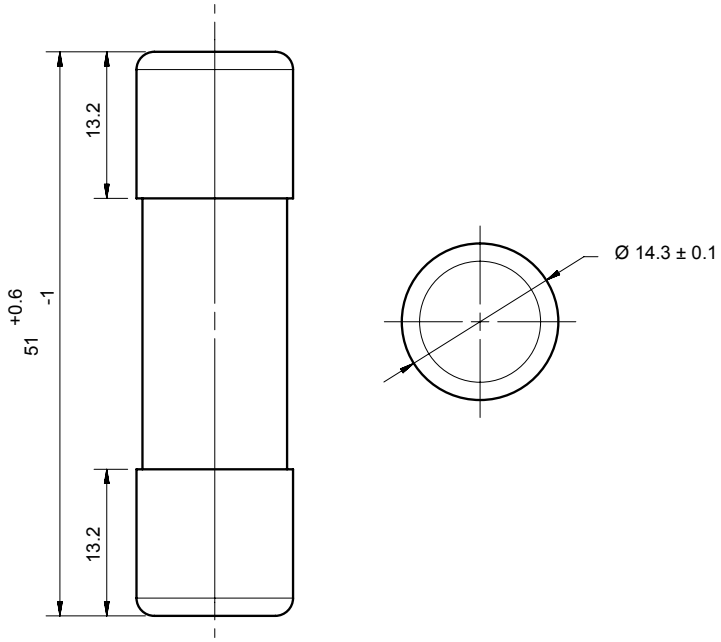
FR14GG50V50P

Size 14,3x51 gG 500VAC with striker

Catalog number	Item number	Rated voltage AC (IEC)	Rated current I_n	Rated breaking capacity AC	Power dissipation at I_n	Weight
FR14GG50V2P	J211033	500 V	2 A	120 kA	0.75 W	21 g
FR14GG50V4P	H212067	500 V	4 A	120 kA	1.1 W	21 g
FR14GG50V6P	G214113	500 V	6 A	120 kA	1.25 W	21 g
FR14GG50V8P	R215134	500 V	8 A	120 kA	1.45 W	21 g
FR14GG50V10P	Z216153	500 V	10 A	120 kA	1.65 W	21 g
FR14GG50V12P	L217176	500 V	12 A	120 kA	1.8 W	21 g
FR14GG50V16P	Z218200	500 V	16 A	120 kA	2.35 W	21 g
FR14GG50V20P	B219237	500 V	20 A	120 kA	2.75 W	21 g
FR14GG50V25P	L222213	500 V	25 A	120 kA	3.1 W	21 g
FR14GG50V32P	P200757	500 V	32 A	120 kA	3.6 W	21 g
FR14GG50V40P	P201815	500 V	40 A	120 kA	4 W	21 g
FR14GG50V50P	D211557	500 V	50 A	120 kA	4.8 W	21 g

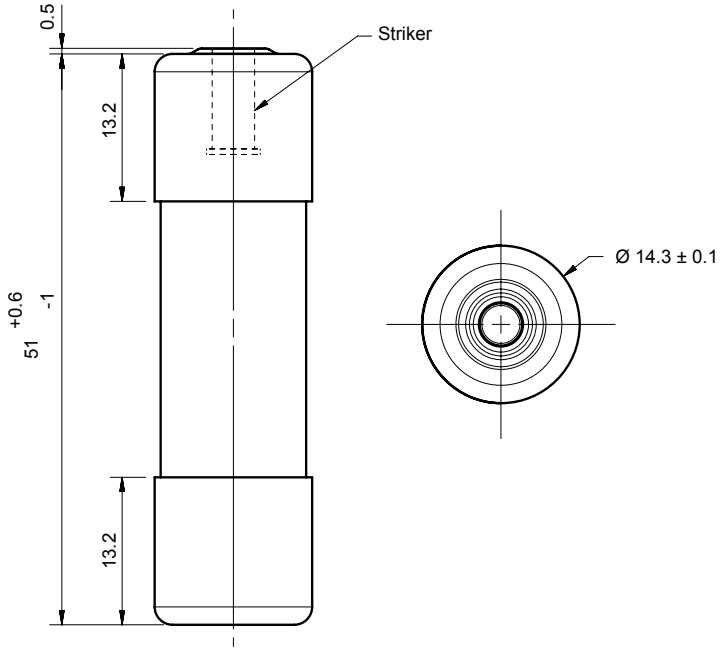
DIMENSIONS

Size 14x51 gG without indicator (1001212)



Dimensions in mm

Size 14x51 gG with striker (1001211)



Dimensions in mm

Ferrule fuse-links 22x58 aM 500 to 690VAC

LOW VOLTAGE IEC FUSES

IEC CYLINDRICAL FUSE-LINKS

Mersen aM and gG fuse-links cover a wide range of physical sizes and ampere ratings for 400, 500, and 690VAC for protection in electrical distribution circuits and various industrial applications. Most ratings are available in size 8x31 and size 10x38 with an optional indicator, and in size 14x51 and 22x58 with an optional striker to activate an auxiliary contact. Size 10x38 is also available with striker. All cylindrical fuse-links have ceramic bodies and silver-plated contacts.

Cylindrical fuse-links “aM” are partial range fuses. They protect electrical devices in case of unacceptable high short-circuit against destruction due high current limiting and low thermal let-through values. They cut off currents more than 6.3xIn until the maximum breaking capacity (rated breaking capacity). Cylindrical fuse-links “aM” are mainly used for the protection of installation switch gear in otor circuit currents. For classification of the cylindrical fuse-links the nominal current of the fuse-link can be selected respective to the nominal current of the motor.

Our technology and process was designed to ensure highly reliable technical performance.

TECHNICAL DATA OVERVIEW

Voltage Range AC	500 ... 690 VAC
Ampere Range (A)	1 ... 125 A
Speed/Characteristic	aM
I.R. AC (IEC)	120 kA
Body Material	Ceramic
Body Style	cylindrical
Contact Materials	Silver plated copper
Product Size	22x58 mm

FEATURES & BENEFITS

- Reduced size
- Striker version available for remote indication of fuse operation
- Safest and most reliable protection system

APPLICATIONS

- aM type for protection of motors, transformers and other loads with in-rush currents.

STANDARDS

- IEC 60269-1 & -2
- Approved by Lloyd’s Register of Shipping and Bureau Veritas

Ferrule fuse-links 22x58 aM 500 to 690VAC

PRODUCT RANGE

FR22AM50V125

Size 22x58 aM 500/690VAC without striker

Catalog number	Item number	Rated voltage AC (IEC)	Rated current I_n	Rated breaking capacity AC	Power dissipation at I_n	Weight
FR22AM69V1	M219776	690 V	1 A	120 kA	0.2 W	54 g
FR22AM69V2	T222220	690 V	2 A	120 kA	0.25 W	54 g
FR22AM69V4	Q222976	690 V	4 A	120 kA	0.35 W	54 g
FR22AM69V6	Y200765	690 V	6 A	120 kA	0.45 W	54 g
FR22AM69V8	N201308	690 V	8 A	120 kA	0.6 W	54 g
FR22AM69V10	X201822	690 V	10 A	120 kA	0.75 W	54 g
FR22AM69V12	T211042	690 V	12 A	120 kA	0.85 W	54 g
FR22AM69V16	M211565	690 V	16 A	120 kA	1.15 W	54 g
FR22AM69V20	S212076	690 V	20 A	120 kA	1.35 W	54 g
FR22AM69V25	J212597	690 V	25 A	120 kA	1.7 W	54 g
FR22AM69V32	V213113	690 V	32 A	120 kA	2.2 W	54 g
FR22AM69V40	N213613	690 V	40 A	120 kA	2.7 W	54 g
FR22AM69V50	R214122	690 V	50 A	120 kA	3.6 W	54 g
FR22AM69V63	C215650	690 V	63 A	120 kA	4.8 W	54 g
FR22AM69V80	H216667	690 V	80 A	120 kA	6.2 W	54 g
FR22AM50V100	Y217693	500 V	100 A	120 kA	6.65 W	54 g
FR22AM50V125	J218209	500 V	125 A	120 kA	9.9 W	54 g

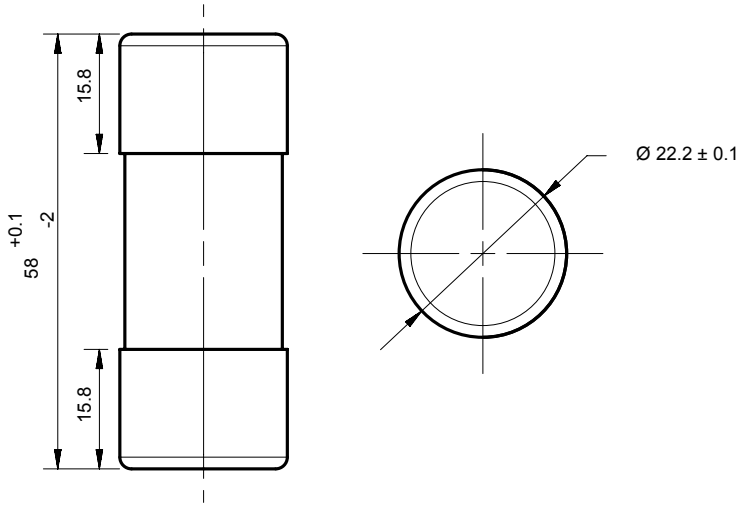
FR22AM50V100P

Size 22x58 aM 500/690VAC with striker

Catalog number	Item number	Rated voltage AC (IEC)	Rated current I_n	Rated breaking capacity AC	Power dissipation at I_n	Weight
FR22AM69V1P	E215652	690 V	1 A	120 kA	0.2 W	54 g
FR22AM69V2P	J216162	690 V	2 A	120 kA	0.25 W	54 g
FR22AM69V4P	A217695	690 V	4 A	120 kA	0.35 W	54 g
FR22AM69V6P	Y218728	690 V	6 A	120 kA	0.45 W	54 g
FR22AM69V8P	Q219779	690 V	8 A	120 kA	0.6 W	54 g
FR22AM69V10P	S222978	690 V	10 A	120 kA	0.75 W	54 g
FR22AM69V12P	R201311	690 V	12 A	120 kA	0.85 W	54 g
FR22AM69V16P	W211044	690 V	16 A	120 kA	1.15 W	54 g
FR22AM69V20P	W212079	690 V	20 A	120 kA	1.35 W	54 g
FR22AM69V25P	Q213615	690 V	25 A	120 kA	1.7 W	54 g
FR22AM69V32P	X214633	690 V	32 A	120 kA	2.2 W	54 g
FR22AM69V40P	F215653	690 V	40 A	120 kA	2.7 W	54 g
FR22AM69V50P	K216669	690 V	50 A	120 kA	3.6 W	54 g
FR22AM69V63P	A1022166	690 V	63 A	120 kA	4.8 W	54 g
FR22AM69V80P	C1022168	690 V	80 A	120 kA	6.2 W	54 g
FR22AM50V63P	B217696	500 V	63 A	120 kA	4.8 W	54 g
FR22AM50V80P	Z218729	500 V	80 A	120 kA	6.2 W	54 g
FR22AM50V100P	T222979	500 V	100 A	120 kA	6.65 W	54 g
FR22AM50V125P	S201312	500 V	125 A	120 kA	9.9 W	54 g

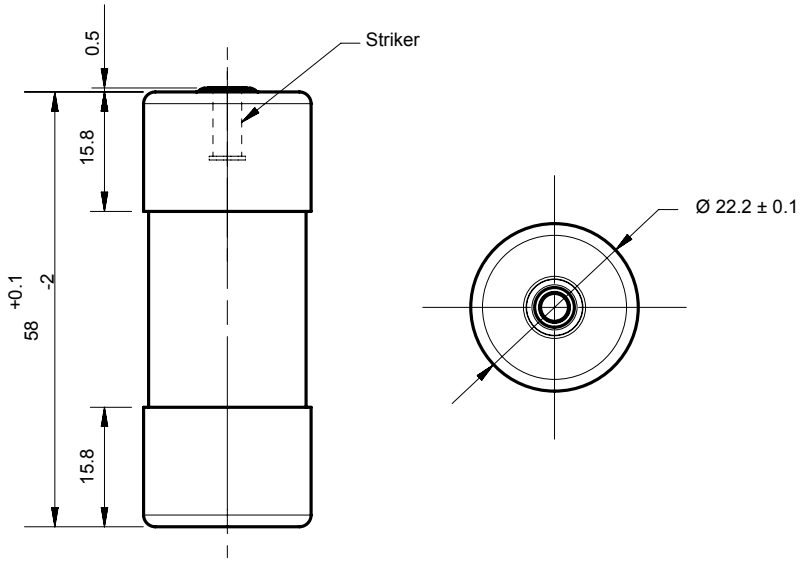
DIMENSIONS

Size 22x58 aM without indicator (1001214)



Dimensions in mm

Size 22x58 aM with striker (1001213)



Dimensions in mm

Ferrule fuse-links 22x58 gG 500 to 690VAC

LOW VOLTAGE IEC FUSES

IEC CYLINDRICAL FUSE-LINKS

Mersen aM and gG fuse-links cover a wide range of physical sizes and ampere ratings for 400, 500, and 690VAC for protection in electrical distribution circuits and various industrial applications. Most ratings are available in size 8x31 and size 10x38 with an optional indicator, and in size 14x51 and 22x58 with an optional striker to activate an auxiliary contact. Size 10x38 is also available with striker. All cylindrical fuse-links have ceramic bodies and silver-plated contacts.

Cylindrical fuse-links “gG” are used for the protection of cables, motors and LV-networks. They limit and cut off unacceptable overcurrents and short-circuit currents up to their nominal breaking capacity. Cylindrical fuse-links “gG” also protect electrical equipment and installations against the dynamic effect of high short-currents.

Our technology and process was designed to ensure highly reliable technical performance.

TECHNICAL DATA OVERVIEW

Voltage Range AC	500 ... 690 VAC
Ampere Range (A)	2 ... 125 A
Speed/Characteristic	gG
I.R. AC (IEC)	120 kA
Body Material	Ceramic
Body Style	cylindrical
Contact Materials	Silver plated copper
Product Size	22x58 mm

FEATURES & BENEFITS

- Reduced size
- Full range protection
- Striker version available for remote indication of fuse operation
- Safest and most reliable protection system

APPLICATIONS

- gG type for protection of line, cable against overload and short circuit in various industrial application and electrical distribution circuits.

STANDARDS

- IEC 60269-1 & -2
- Approved by Lloyd’s Register of Shipping and Bureau Veritas

PRODUCT RANGE

FR22GG69V2

Size 22x58 gG 500/690VAC without indicator

Catalog number	Item number	Rated voltage AC (IEC)	Rated current I_n	Rated breaking capacity AC	Power dissipation at I_n	Weight
FR22GG69V2	F219241	690 V	2 A	120 kA	0.9 W	54 g
FR22GG69V4	H219772	690 V	4 A	120 kA	1.25 W	54 g
FR22GG69V6	P222216	690 V	6 A	120 kA	1.4 W	54 g
FR22GG69V8	L222972	690 V	8 A	120 kA	1.6 W	54 g
FR22GG69V10	T200761	690 V	10 A	120 kA	1.9 W	54 g
FR22GG69V12	J201304	690 V	12 A	120 kA	2 W	54 g
FR22GG69V16	S201818	690 V	16 A	120 kA	2.5 W	54 g
FR22GG69V20	P211038	690 V	20 A	120 kA	3.4 W	54 g
FR22GG69V25	N212072	690 V	25 A	120 kA	3.5 W	54 g
FR22GG69V32	F212594	690 V	32 A	120 kA	3.7 W	54 g
FR22GG69V40	J213609	690 V	40 A	120 kA	4.3 W	54 g
FR22GG69V50	P214626	690 V	50 A	120 kA	5.3 W	54 g
FR22GG69V63	Y215646	690 V	63 A	120 kA	6.3 W	54 g
FR22GG69V80	Q217180	690 V	80 A	120 kA	7.4 W	54 g
FR22GG50V100	E218205	500 V	100 A	120 kA	8.3 W	54 g
FR22GG50V125	J219773	500 V	125 A	120 kA	11.3 W	54 g

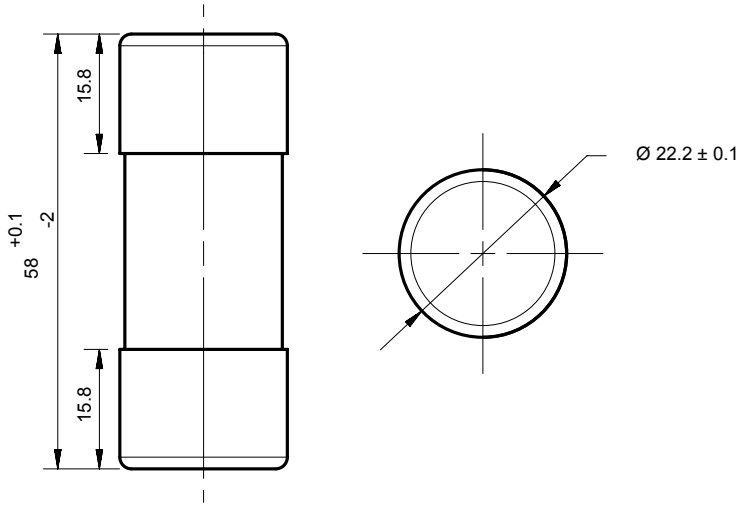
FR22GG50V125P

Size 22x58 gG 500/690VAC with striker

Catalog number	Item number	Rated voltage AC (IEC)	Rated current I_n	Rated breaking capacity AC	Power dissipation at I_n	Weight
FR22GG69V2P	N093760	690 V	2 A	120 kA	0.9 W	54 g
FR22GG69V4P	R214628	690 V	4 A	120 kA	1.25 W	54 g
FR22GG69V6P	A215648	690 V	6 A	120 kA	1.4 W	54 g
FR22GG69V8P	F216665	690 V	8 A	120 kA	1.6 W	54 g
FR22GG69V10P	W217691	690 V	10 A	120 kA	1.9 W	54 g
FR22GG69V12P	W218726	690 V	12 A	120 kA	2 W	54 g
FR22GG69V16P	L219775	690 V	16 A	120 kA	2.5 W	54 g
FR22GG69V20P	P222975	690 V	20 A	120 kA	3.4 W	54 g
FR22GG69V25P	M201307	690 V	25 A	120 kA	3.5 W	54 g
FR22GG69V32P	S211041	690 V	32 A	120 kA	3.7 W	54 g
FR22GG69V40P	R212075	690 V	40 A	120 kA	4.3 W	54 g
FR22GG69V50P	M213612	690 V	50 A	120 kA	5.3 W	54 g
FR22GG69V63P	T1022160	690 V	63 A	120 kA	4.8 W	54 g
FR22GG69V80P	Z1022165	690 V	80 A	120 kA	6.2 W	54 g
FR22GG50V63P	S214629	500 V	63 A	120 kA	4.8 W	54 g
FR22GG50V80P	F216159	500 V	80 A	120 kA	6.2 W	54 g
FR22GG50V100P	T217183	500 V	100 A	120 kA	8.3 W	54 g
FR22GG50V125P	H218208	500 V	125 A	120 kA	11.3 W	54 g

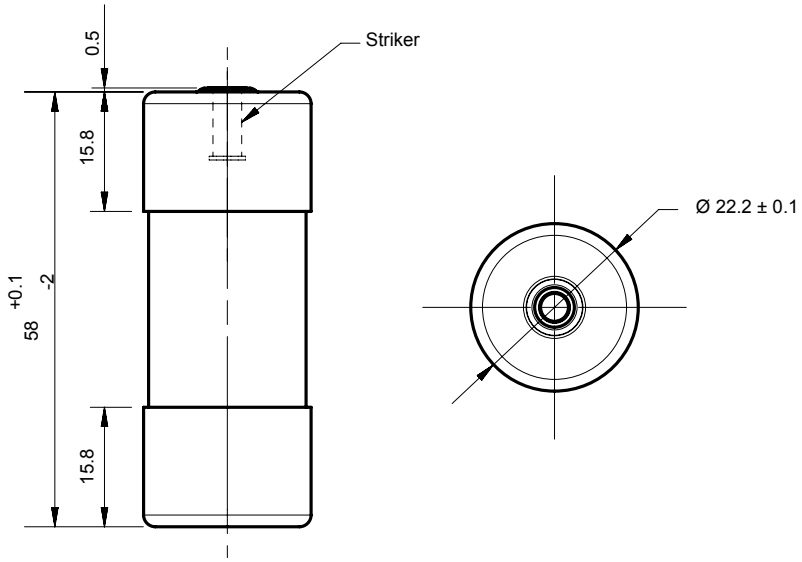
DIMENSIONS

Size 22x58 gG without indicator (10012114)



Dimensions in mm

Size 22x58 gG with striker (1001213)



Dimensions in mm

Ferrule fuse-links 8x31 aM 400VAC

LOW VOLTAGE IEC FUSES

IEC CYLINDRICAL FUSE-LINKS

Mersen aM and gG fuse-links cover a wide range of physical sizes and ampere ratings for 400, 500, and 690VAC for protection in electrical distribution circuits and various industrial applications. Most ratings are available in size 8x31 and size 10x38 with an optional indicator, and in size 14x51 and 22x58 with an optional striker to activate an auxiliary contact. Size 10x38 is also available with striker. All cylindrical fuse-links have ceramic bodies and silver-plated contacts.

Cylindrical fuse-links “aM” are partial range fuses. They protect electrical devices in case of unacceptable high short-circuit against destruction due high current limiting and low thermal let-through values. They cut off currents more than 6.3xIn until the maximum breaking capacity (rated breaking capacity). Cylindrical fuse-links “aM” are mainly used for the protection of installation switch gear in otor circuit currents. For classification of the cylindrical fuse-links the nominal current of the fuse-link can be selected respective to the nominal current of the motor.

Our technology and process was designed to ensure highly reliable technical performance.

TECHNICAL DATA OVERVIEW

Voltage AC	400 VAC
Ampere Range (A)	1 ... 12 A
Speed/Characteristic	aM
I.R. AC (IEC)	20 kA
Body Material	Ceramic
Body Style	cylindrical
Contact Materials	Silver plated copper
Product Size	8x31 mm

FEATURES & BENEFITS

- Reduced size
- Visual indication of fuse operation
- Safest and most reliable protection system

APPLICATIONS

- aM type for protection of motors, transformers and other loads with in-rush currents.

STANDARDS

- IEC 60269-1 & -2

CE

Ferrule fuse-links 8x31 aM 400VAC

PRODUCT RANGE

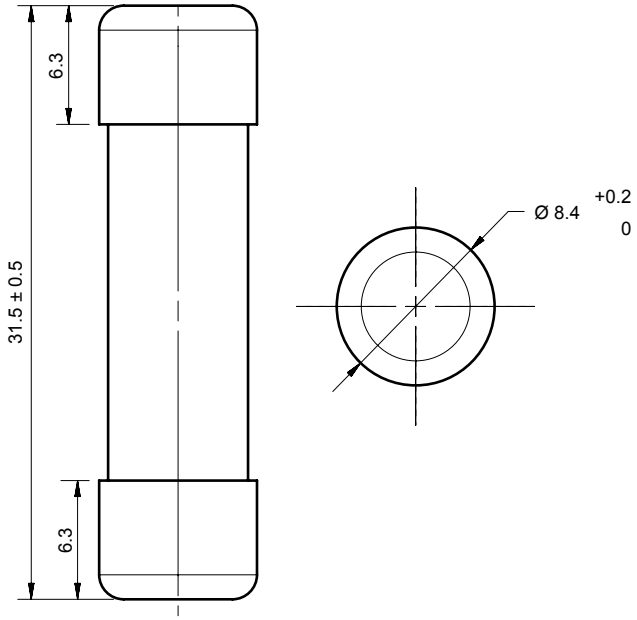
FR8AM40V2

Size 8,5x31,5 aM 400VAC without indicator

Catalog number	Item number	Rated voltage AC (IEC)	Rated current I_n	Rated breaking capacity AC	Power dissipation at I_n	Weight
FR8AM40V1	C217168	400 V	1 A	20 kA	0.09 W	4.4 g
FR8AM40V2	R218193	400 V	2 A	20 kA	0.15 W	4.4 g
FR8AM40V4	S219229	400 V	4 A	20 kA	0.26 W	4.4 g
FR8AM40V6	C222205	400 V	6 A	20 kA	0.35 W	4.4 g
FR8AM40V8	F200749	400 V	8 A	20 kA	0.47 W	4.4 g
FR8AM40V10	W201292	400 V	10 A	20 kA	0.55 W	4.4 g
FR8AM40V12	V1007188	400 V	12 A	20 kA	0.7 W	4.4 g

DIMENSIONS

Size 8x31 aM without indicator (1001204)



Dimensions in mm

Ferrule fuse-links 8x31 gG 400VAC

LOW VOLTAGE IEC FUSES

IEC CYLINDRICAL FUSE-LINKS

Mersen aM and gG fuse-links cover a wide range of physical sizes and ampere ratings for 400, 500, and 690VAC for protection in electrical distribution circuits and various industrial applications. Most ratings are available in size 8x31 and size 10x38 with an optional indicator, and in size 14x51 and 22x58 with an optional striker to activate an auxiliary contact. Size 10x38 is also available with striker. All cylindrical fuse-links have ceramic bodies and silver-plated contacts.

Cylindrical fuse-links “gG” are used for the protection of cables, motors and LV-networks. They limit and cut off unacceptable overcurrents and short-circuit currents up to their nominal breaking capacity. Cylindrical fuse-links “gG” also protect electrical equipment and installations against the dynamic effect of high short-currents.

Our technology and process was designed to ensure highly reliable technical performance.

TECHNICAL DATA OVERVIEW

Voltage AC	400 VAC
Ampere Range (A)	0.5 ... 25 A
Speed/Characteristic	gG
I.R. AC (IEC)	20 kA
Body Material	Ceramic
Body Style	cylindrical
Contact Materials	Silver plated copper
Product Size	8x31 mm

FEATURES & BENEFITS

- Meet IEC, NFC and UNE standard
- Reduced size
- Full range protection
- Safest and most reliable protection system
- Visual indication of fuse operation

APPLICATIONS

- gG type for protection of line, cable against overload and short circuit in various industrial application and electrical distribution circuits.

STANDARDS

- IEC 60269-1 & -2

CE

Ferrule fuse-links 8x31 gG 400VAC

PRODUCT RANGE

FR8GG40V4

FR8GG40V25

Size 8,5x31,5 400VAC gG without indicator

Catalog number	Item number	Rated voltage AC (IEC)	Rated current I_n	Rated breaking capacity AC	Power dissipation at I_n	Weight
FR8GG40V0.5	P218191	400 V	0.5 A	20 kA	0.55 W	4.4 g
FR8GG40V1	C218709	400 V	1 A	20 kA	0.35 W	4.4 g
FR8GG40V2	Q219227	400 V	2 A	20 kA	0.45 W	4.4 g
FR8GG40V4	W222958	400 V	4 A	20 kA	-	4.4 g
FR8GG40V6	A211025	400 V	6 A	20 kA	0.83 W	4.4 g
FR8GG40V8	B213096	400 V	8 A	20 kA	1 W	4.4 g
FR8GG40V10	A214613	400 V	10 A	20 kA	1.2 W	4.4 g
FR8GG40V16	P216650	400 V	16 A	20 kA	1.7 W	4.4 g
FR8GG40V20	F217677	400 V	20 A	20 kA	2 W	4.4 g
FR8GG40V25	D218710	400 V	25 A	20 kA	2.4 W	4.4 g

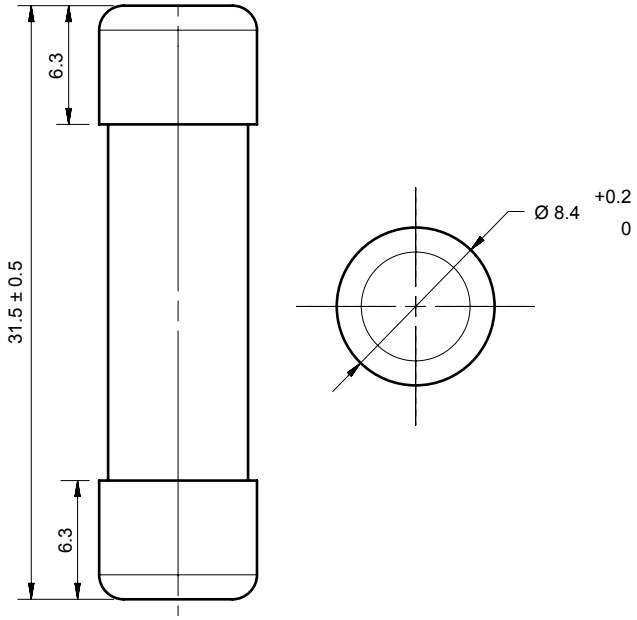
FR8GG40V25I

Size 8,5x31,5 gG 400VAC with indicator

Catalog number	Item number	Rated voltage AC (IEC)	Rated current I_n	Rated breaking capacity AC	Power dissipation at I_n	Weight
FR8GG40V2I	B222204	400 V	2 A	20 kA	0.45 W	4.4 g
FR8GG40V4I	X222959	400 V	4 A	20 kA	0.65 W	4.4 g
FR8GG40V6I	V201291	400 V	6 A	20 kA	0.83 W	4.4 g
FR8GG40V8I	B211026	400 V	8 A	20 kA	1 W	4.4 g
FR8GG40V12I	C213097	400 V	12 A	20 kA	1.3 W	4.4 g
FR8GG40V16I	Y214105	400 V	16 A	20 kA	1.7 W	4.4 g
FR8GG40V20I	J215127	400 V	20 A	20 kA	2 W	4.4 g
FR8GG40V25I	S216147	400 V	25 A	20 kA	2.4 W	4.4 g

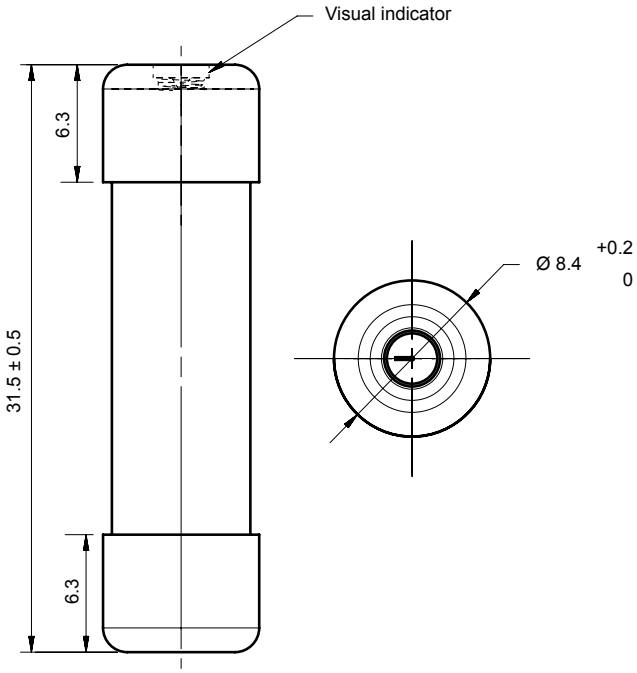
DIMENSIONS

Size 8x31 gG without indicator (1001204)



Dimensions in mm

Size 8x31 gG with indicator (1001203)



Dimensions in mm

Modulostar® CMC10

FUSE HOLDERS, FUSE BASES AND SUPPORTS

IEC CYLINDRICAL FUSE HOLDERS

The innovative and comprehensive Modulostar® range of Mersen fuse-holders. Modular fuse-holders are finger-safe under IEC standards to an IP20 grade of protection, including fuse changing (with the flick of a finger). Modular fuse-holders are available in 1, 2, 3 or 4 poles, with or without visual blown fuse indicator. Multi-pole units can also be field assembled by ordering pin-ties assembly kit. Modulostar® range is made of tough and durable thermoplastic or thermoset material.

TECHNICAL DATA OVERVIEW

Voltage AC	690 VAC
Voltage DC	690 VDC
Amper (A)	32 A
SCCR	200kA
Mounting	Installation on to DIN rails to EN 60715
Product Size	For cylindrical fuse links 10x38 aM, gG and 10x38 Mersen Protistor®
Number of poles	1 to 4 poles

FEATURES & BENEFITS

- Modular design
- Compact design for space saving
- DIN rail mounting
- Degree of protection: IP20
- Finger safe
- Easy access to the fuse
- Lockable without accessory
- Sealable in closed & open position
- Optional visual blown fuse indicator
- Multi-pole assembly kit available
- Plastic material UL94V2 mini
- Plastic material R22HL2 for railway application
- Flame retardant materials with glow wire flammability index to 960°C
- Schock and vibration tested for marine and railway applications

APPLICATIONS

- All circuits up to 690V for protection of motors, transformers, low voltage distribution, control circuits, drive protection, metering
- Non-load operation

STANDARDS

- IEC 60269-2 and IEC 60947-3 Compliance
- RoHS, Reach compliant
- Marine certificates

PRODUCT RANGE

CMC102

CMC103N

Modulostar® compact fuse-holders for 10.3x38.1 fuse-links, without indicator

Catalog number	Item number	Number of poles/phases	Design	Package	Weight
CMC101	P1062705	1	CMC10 single pole	12	45 g
CMC101N	G1062698	1 + N	CMC10 single pole + neutral conductor	6	95 g
CMC102	H1062699	2	CMC10 double pole	6	92 g
CMC103	E1062696	3	CMC10 triple pole	4	0.14 kg
CMC103N	Y1062690	3 + N	CMC10 triple pole + neutral conductor	3	0.19 kg
CMC104	Z1062691	4	CMC10 quadruple pole	3	0.19 kg
CMC810N	W1062688	N	CMC8 CMC10 neutral conductor	12	48 g

CMC101I

CMC103I

Modulostar® compact fuse-holders for 10.3x38.1 fuse-links, with standard indicator

Catalog number	Item number	Number of poles/ phases	Design	Voltage limit for blown fuse indicator	Package	Weight
CMC101I	S1062708	1	CMC10 single pole	-	12	46 g
CMC101NI	J1062700	1 + N	CMC10 single pole + neutral conductor	-	6	95 g
CMC102I	L1062702	2	CMC10 double pole	-	6	93 g
CMC103I	F1062697	3	CMC10 triple pole	-	4	0.14 kg
CMC103NI	A1062692	3 + N	CMC10 triple pole + neutral conductor	-	3	0.19 kg
CMC104I	B1062693	4	CMC10 quadruple pole	-	3	0.19 kg
-	on demand	-	Version with special indicator	Standard: 220V-700V AC/ DC Very low: 20V-50V AC/DC Low: 50V-250V AC/DC	-	-

TECHNICAL DATA

	CMC10	CMC10I
Size	10x38	10x38
Number of poles/phases	1, 1+N, 2, 3, 3+N, 4	1, 1+N, 2, 3, 3+N, 4
Conventional free air thermal current with fuse links I_{th}	32 A	32 A
Max. power dissipation of fuse links P_n	3W	3W
Max. power dissipation	4 W	4 W
Power dissipation of fuse-holder	0.4 W	0.4 W
Utilisation category	AC20B/DC20B	AC20B/DC20B
Rated insulation voltage U_i	1000 V	1000 V
SCCR	200 kA	200 kA
Rated impulse withstand voltage U_{imp}	6 kV	6 kV
Degree of protection	IP 20	IP 20
Voltage limit for blown fuse indicator	-	220V to 700VAC/DC
Indication System	-	with indicator
Operating temperature	-40°C to 70°C with carrier operation -50°C to 90°C without carrier operation	-40°C to 70°C with carrier operation -50°C to 90°C without carrier operation
Storage temperature	-40°C to 70°C	-40°C to 70°C
Connection	Max. tightening torque: 2Nm (17.7lbs.-in) Rigid / Stranded wire = 1-16mm² (16-6AWG) Max. 2x6mm² PZ2 or flat 5.5x1mm screw drivers recommended (max. diameter 6mm)	Max. tightening torque: 2Nm (17.7lbs.-in) Rigid / Stranded wire = 1-16mm² (16-6AWG) Max. 2x6mm² PZ2 or flat 5.5x1mm screw drivers recommended (max. diameter 6mm)
Vibration	Withstand on the 3 main axis*: Sinusoidal vibration testing according to IEC 60068-2-6 2 to 13Hz x= 1 mm peak 13 to 100Hz y= 0.7g peak according to french marine application Random vibration testing according to IEC 61373 Category 1 Class B	Withstand on the 3 main axis*: Sinusoidal vibration testing according to IEC 60068-2-6 2 to 13Hz x= 1 mm peak 13 to 100Hz y= 0.7g peak according to french marine application Random vibration testing according to IEC 61373 Category 1 Class B
Shock	Shock testing according to IEC 61373 Category 1 Class B Shock testing according to IEC 60068-2-27 15g/11ms/18 shocks * for specific usage please contact us	Shock testing according to IEC 61373 Category 1 Class B Shock testing according to IEC 60068-2-27 15g/11ms/18 shocks * for specific usage please contact us

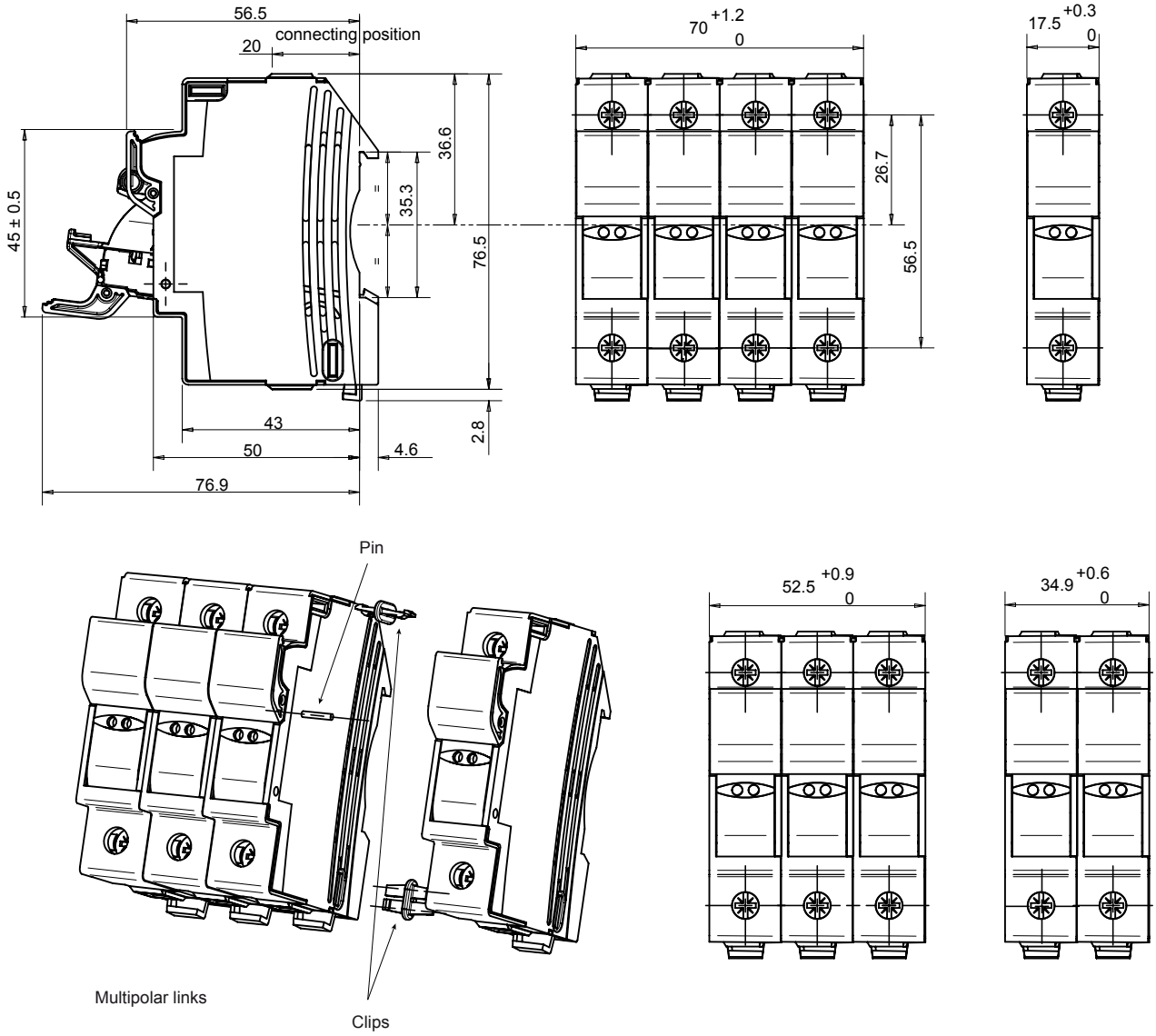
SPECIFIC USAGE CONDITIONS

Ambient temperature	-40° to 20°C	30°C	40°C	50°C	60°C	70°C	80°C	90°C
Derating factor (I_e)	1	1	1	0.92	0.83	0.73	0.62	0.48
Humidity	95%	90%	80%	50%	-	-	-	-
Dampness derating	1	0.95	0.90	-	-	-	-	-

No of poles (side by side)	1 to 3	>/= 4
Derating factor of current (I_{th})	1	0.9

DIMENSIONS

MODULOSTAR® CMC10 fuse-holders for cylindrical fuse-links class 10x38mm



Dimensions in mm

ACCESSORIES

CMS810PAK

Kit for multi phase connection

Catalog number	Item number	Features	Package	Weight
CMS810PAK	Z233725	Links for connection of multipole units	12	0.5 g

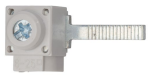
ACCESSORIES

LOCK

Locking devices

Catalog number	Item number	Features	Package	Weight
LOCK	M223525	Padlock	1	0.48 kg

TBB1AL



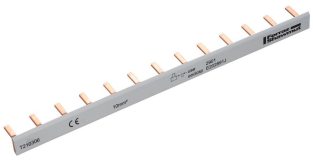
TBB1CL

Power supply

Catalog number	Item number	Application	Features	Package	Weight
TBB1AL	X1068370	Max. rms current 90A	1 phase axial incoming power supply	50	10.1 g
TBB1CL	Y1068371	Max. rms current 90A	1 phase lateral incoming power supply	50	10 g
TBB23A	F210317	Max. rms current 90A	2 & 3 phases axial incoming power supply	50	23.3 g
TBB23C	G210318	Max. rms current 90A	2 & 3 phases lateral incoming power supply	50	23.1 g

TBB23A

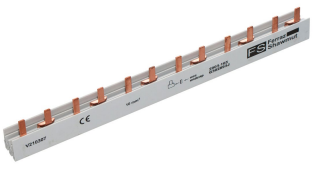
TBB23C



CMS810BB1F13

Wiring bars / Insulated bus bars

Catalog number	Item number	Application	Features	Package	Weight
CMS810BB1F13	T210306	Max. rms current 63A, for installation of 13 modules	single pole, 10 mm², partition 17,5 mm (distance of poles), peg design, L-shaped	10	33.5 g
CMS810BB2F6	V210307	Max. rms current 63A, for installation of 6 modules	double pole, 10 mm², partition 17,5 mm (distance of poles), peg design, L-shaped	10	80 g
CMS810BB3F4	W210308	Max. rms current 100A, for installation of 4 modules	triple pole, 10 mm² partition 17,5 mm (distance of poles), peg design, L-shaped	10	84 g
CMS810BB4F3	X210309	Max. rms current 100A, for installation of 3 modules	quadruple pole, 10 mm², partition 17,5 mm (distance of poles), peg design, L-shaped	10	0.12 kg



CMS810BB2F6

Modulostar® CMC8

FUSE HOLDERS, FUSE BASES AND SUPPORTS

IEC CYLINDRICAL FUSE HOLDERS

The innovative and comprehensive Modulostar® range of Mersen fuse-holders. Modular fuse-holders are finger-safe under IEC standards to an IP20 grade of protection, including fuse changing (with the flick of a finger). Modular fuse-holders are available in 1, 2, 3 or 4 poles, with or without visual blown fuse indicator. Multi-pole units can also be field assembled by ordering pin-ties assembly kit. Modulostar® range is made of tough and durable thermoplastic or thermoset material.

TECHNICAL DATA OVERVIEW

Voltage AC	400 VAC
Amper (A)	25 A
Mounting	Installation on to DIN rails to EN 60715
Product Size	For cylindrical fuse links 8x32 aM, gG
Number of poles	1 to 4 poles

FEATURES & BENEFITS

- Modular design
- Compact design for space saving
- DIN rail mounting
- Degree of protection: IP20
- Finger safe
- Easy access to the fuse
- Lockable without accessory
- Sealable in closed and open position
- Optional visual blown fuse indicator
- Multi-pole assembly kit available
- Plastic material UL94V2 mini
- Plastic material R22HL2 for railway application
- Flame retardant materials with glow wire flammability index to 960°C
- Schock and vibration tested for marine and railway applications

APPLICATIONS

- All circuits up to 500VAC for protection of motors, transformers, low voltage distribution, control circuits, metering
- Non-load operation

STANDARDS

- IEC 60269-2 and IEC 60947-3 Compliance
- RoHS REACH Compliant
- Marine certificates

PRODUCT RANGE

CMC81

CMC83N

Modulostar® fuse-holders for 8.5x31.5 fuse-links, without indicator

Catalog number	Item number	Number of poles/phases	Design	Package	Weight
CMC810N	W1062688	N	CMC8 CMC10 neutral conductor	12	48 g
CMC81	V1062687	1	CMC8 single pole	12	45 g
CMC81N	P1062682	1+N	CMC8 single pole + neutral conductor	6	95 g
CMC82	Q1062683	2	CMC8 double pole	6	92 g
CMC83	M1062680	3	CMC8 triple pole	4	0.14 kg
CMC83N	H1062676	3+N	CMC8 triple pole + neutral conductor	3	0.19 kg
CMC84	J1062677	4	CMC8 quadruple pole	3	0.19 kg

CMC81I

CMC83NI

Modulostar® fuse-holders for 8.5x31.5 fuse-links, with standard indicator

Catalog number	Item number	Number of poles/phases	Design	Package	Weight
CMC81I	X1062689	1	CMC8 single pole	12	49 g
CMC81NI	R1062684	1 + N	CMC8 single pole + neutral conductor	6	95 g
CMC82I	S1062685	2	CMC8 double pole	6	93 g
CMC83I	N1062681	3	CMC8 triple pole	4	0.14 kg
CMC83NI	K1062678	3 + N	CMC8 triple pole + neutral conductor	3	0.19 kg
CMC84I	L1062679	4	CMC8 quadruple pole	3	0.19 kg

TECHNICAL DATA

	CMC8	CMC8I
Size	8.5x31.5	8.5x31.5
Number of poles/phases	1, 1+N, 2, 3, 3+N, 4	1, 1+N, 2, 3, 3+N, 4
Conventional free air thermal current with fuse links I_{th}	25 A	25 A
Max. power dissipation of fuse links P_n	2,5 W	2,5 W
Power dissipation of fuse-holder	0.4 W	0.4 W
Utilisation category	AC20B/DC20B	AC20B/DC20B
Rated insulation voltage U_i	690 V	690 V
Rated impulse withstand voltage U_{imp}	6 kV	6 kV
Degree of protection	IP 20	IP 20
Voltage limit for blown fuse indicator	-	220 to 700V AC/DC
Indication System	-	with indicator
Operating temperature	-40°C to 70°C with carrier operation -50°C to 90°C without carrier operation	-40°C to 70°C with carrier operation -50°C to 90°C without carrier operation
Storage temperature	-40°C to 70°C	-40°C to 70°C
Connection	Max. tightening torque: 2Nm (17.7lbs.-in) Rigid / Multistrand wire = 1-16mm² (16-6AWG) Max. 2x6mm² PZ2 or flat 5.5x1mm screw drivers recommended (max. diameter 6mm)	Max. tightening torque: 2Nm (17.7lbs.-in) Rigid / Multistrand wire = 1-16mm² (16-6AWG) Max. 2x6mm² PZ2 or flat 5.5x1mm screw drivers recommended (max. diameter 6mm)

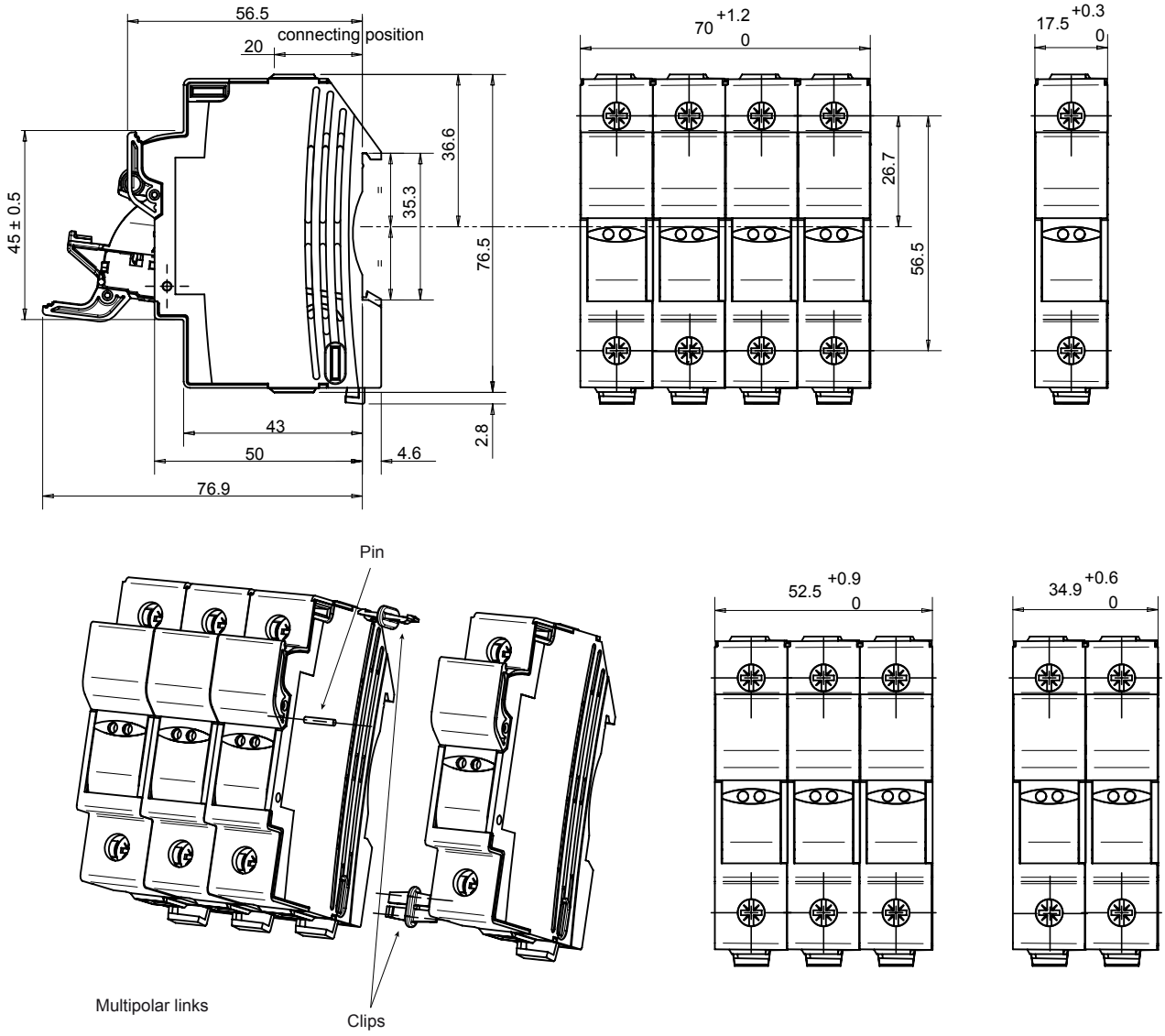
SPECIFIC USAGE CONDITIONS

Ambient temperature	-40°C to 20°C	30°C	40°C	50°C	60°C	70°C	80°C	90°C
Derating factor (I_e)	1	1	1	0.92	0.83	0.73	0.62	
Humidity	95%	90%	80%	50%	-	-	-	-
Dampness derating	1	0.95	0.90	-	-	-	-	-

No of poles (side by side)	1 to 3	>/= 4
Derating factor of current (I_{th})	1	0.9

DIMENSIONS

Modulostar® CMC8 fuse-holders for cylindrical fuse-links class 8.5x31.5mm



Dimensions in mm

ACCESSORIES

CMS810PAK

Kit for multi phase connection

Catalog number	Item number	Features	Package	Weight
CMS810PAK	Z233725	Links for connection of multipole units	12	0.5 g

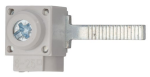
ACCESSORIES

LOCK

Locking devices

Catalog number	Item number	Features	Package	Weight
LOCK	M223525	Padlock	1	0.48 kg

TBB1AL



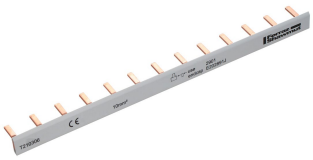
TBB1CL

Power supply

Catalog number	Item number	Application	Features	Package	Weight
TBB1AL	X1068370	Max. rms current 90A	1 phase axial incoming power supply	50	10.1 g
TBB1CL	Y1068371	Max. rms current 90A	1 phase lateral incoming power supply	50	10 g
TBB23A	F210317	Max. rms current 90A	2 & 3 phases axial incoming power supply	50	23.3 g
TBB23C	G210318	Max. rms current 90A	2 & 3 phases lateral incoming power supply	50	23.1 g

TBB23A

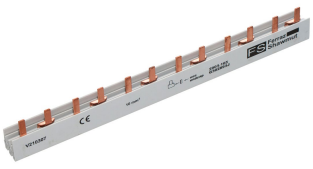
TBB23C



CMS810BB1F13

Wiring bars / Insulated bus bars

Catalog number	Item number	Application	Features	Package	Weight
CMS810BB1F13	T210306	Max. rms current 63A, for installation of 13 modules	single pole, 10 mm², partition 17,5 mm (distance of poles), peg design, L-shaped	10	33.5 g
CMS810BB2F6	V210307	Max. rms current 63A, for installation of 6 modules	double pole, 10 mm², partition 17,5 mm (distance of poles), peg design, L-shaped	10	80 g
CMS810BB3F4	W210308	Max. rms current 100A, for installation of 4 modules	triple pole, 10 mm² partition 17,5 mm (distance of poles), peg design, L-shaped	10	84 g
CMS810BB4F3	X210309	Max. rms current 100A, for installation of 3 modules	quadruple pole, 10 mm², partition 17,5 mm (distance of poles), peg design, L-shaped	10	0.12 kg



CMS810BB2F6

Modulostar® CMS14

Modular fuse-holders

FUSE HOLDERS, FUSE BASES AND SUPPORTS

IEC CYLINDRICAL FUSE HOLDERS

The innovative and comprehensive Modulostar® range of Mersen fuse-holders. Modular fuse-holders are finger-safe under IEC standards to an IP20 grade of protection, including fuse changing (with the flick of a finger). Modular fuse-holders are available in 1, 2, 3 or 4 poles, with or without visual blown fuse indicator, in IEC version or IEC + UL version. Multi-pole units can also be field assembled by ordering pin-ties assembly kit. In size 14 or 22, the range also offers the possibility to use microswitches (supplied with the holders or ordered separately) to allow remote indication. Modulostar® range is made of tough and durable thermoplastic or thermoset material.

TECHNICAL DATA OVERVIEW

Voltage AC	690 VAC
Voltage DC	690 VDC
Amper (A)	50 A
Rated operational current I_e	</= 50A
SCCR	100kA
Mounting	Installation on to DIN rails to EN 60715
Product Size	For cylindrical fuse links 14x51 aM, gG and 14x51 Mersen Protistor® fuse-links
Number of poles	1 to 4 poles

FEATURES & BENEFITS

- Finger safe
- Degree of protection: IP20
- Optional visual blown fuse indicator
- DIN rail mounting
- Modular design
- Lockable
- Multi-pole assembly kit available
- Sealable in closed and open position
- Plastic material UL94V2 mini
- Flame retardant materials with glow wire flammability index to 960°C
- Shock and vibration tested for marine and railway applications

APPLICATIONS

- All circuits up to 690V for protection of motors, transformers, low voltage distribution, control circuits, drive protection
- Non-load operation

STANDARDS

- IEC 60269-2 and IEC 60947-3 Compliance
- RoHS Compliant
- Plastic material: NF 16101 & 16102 Requirement 2 Compliant

PRODUCT RANGE

CMS142

CMS143N

Modulostar® fuse-holders for 14x51 fuse-links, without indicator

Catalog number	Item number	Number of poles/phases	Standard complience	Package	Weight
CMS14N	T331056	N	CMS 14 neutral conductor	6	0.14 kg
CMS141	A331016	1	CMS 14 single pole	6	0.14 kg
CMS141N	T331010	1 + N	CMS 14 single pole + neutral conductor	3	0.29 kg
CMS142	R331031	2	CMS 14 double pole	3	0.27 kg
CMS143	S331032	3	CMS 14 triple pole	2	0.42 kg
CMS143N	D331042	3 + N	CMS 14 triple pole + neutral conductor	1	0.56 kg
CMS144	F331021	4	CMS 14 quadruple pole	1	0.57 kg

CMS141I

Modulostar® fuse-holders for 14x51 fuse-links, with indicator

Catalog number	Item number	Number of poles/phases	Standard complience	Package	Weight
CMS141I	L331049	1	CMS 14 single pole	6	0.14 kg
CMS141NI	M331050	1 + N	CMS 14 single pole + neutral conductor	3	0.30 kg
CMS142I	M331004	2	CMS 14 double pole	3	0.29 kg
CMS143I	K331071	3	CMS 14 triple pole	2	0.43 kg
CMS143NI	Q331007	3 + N	CMS 14 triple pole + neutral conductor	1	0.57 kg

Modulostar® fuse-holders for 14x51 fuse-links, for installation of indicator and/or auxiliary micro switch

Catalog number	Item number	Number of poles/ phases	Design	Package	Weight
CMS141P	W331058	1	CMS14 single pole	6	0.14 kg
CMS141NP	X331059	1 + N	CMS14 single pole + neutral conductor	3	0.30 kg
CMS142P	G331022	2	CMS14 double pole, two auxiliary microswitches	3	0.29 kg
CMS143P	R331054	3	CMS14 triple pole	2	0.43 kg
CMS143NP	Z331015	3 + N	CMS14 triple pole + neutral conductor	1	0.56 kg

CMS143NM

Modulostar® fuse-holders for 14x51 fuse-links, with auxiliary microswitch

Catalog number	Item number	Number of poles/ phases	Design	Package	Weight
CMS141M	Z331038	1	CMS14 single pole	6	0.15 kg
CMS141NM	L331026	1 + N	CMS14 single pole + neutral conductor	3	0.31 kg
CMS142M	A331062	2	CMS14 double pole, two auxiliary microswitches	3	0.29 kg
CMS143M	F331067	3	CMS14 triple pole	2	0.43 kg
CMS143M2	H331069	3	CMS14 triple pole, two auxiliary microswitches	2	0.43 kg
CMS143NM	E331043	3 + N	CMS14 triple pole + neutral conductor	1	0.61 kg

Modulostar® fuse-holders for 14x51 fuse-links, with indicator and auxiliary microswitch

Catalog number	Item number	Number of poles/ phases	Design	Package	Weight
CMS141MI	S331055	1	CMS14 single pole	6	0.16 kg
CMS141NMI	Q331030	1 + N	CMS14 single pole + neutral conductor	3	0.30 kg
CMS142MI	X331036	2	CMS14 double pole, two auxiliary microswitches	3	0.29 kg
CMS143MI	P331006	3	CMS14 triple pole	2	0.45 kg
CMS143M2I	Y331037	3	CMS14 triple pole, two auxiliary microswitches	2	0.43 kg
CMS143NMI	H331000	3 + N	CMS14 triple pole + neutral conductor	1	0.57 kg

TECHNICAL DATA

	CMS14	CMS14I	CMS14P	CMS14M	CMS14MI
Size	14x51	14x51	14x51	14x51	14x51
Number of poles/phases	1, 1+N, 2, 3, 3+N, 4	1, 1+N, 2, 3, 3+N	1, 1+N, 2, 3, 3+N	1, 1+N, 2, 3, 3+N	1, 1+N, 2, 3, 3+N
Conventional free air thermal current with fuse links I_{th}	50 A	50 A	50 A	50 A	50 A
Power dissipation at I_{th}	5 W	5 W	5 W	5 W	5 W
Utilisation category	AC20B/DC20B	AC20B/DC20B	AC20B/DC20B	AC20B/DC20B	AC20B/DC20B
Rated insulation voltage U_i	690 V	690 V	690 V	690 V	690 V
SCCR	100 kA	100 kA	100 kA	100 kA	100 kA
Rated impulse withstand voltage U_{imp}	8 kV	8 kV	8 kV	8 kV	8 kV
Degree of protection	IP 20	IP 20	IP 20	IP 20	IP 20
Voltage limit for blown fuse indicator	-	230 to 690V AC/DC	-	-	230 to 690V AC/DC
Indication System	-	with indicator	Can receive an indicator and/or an auxiliary microswitch	with auxiliary micro-switch	with indicator and auxiliary micro-switch
Operating temperature	-25°C to 60°C	-25°C to 60°C	-25°C to 60°C	-25°C to 60°C	-25°C to 60°C
Storage temperature	-25°C to 80°C	-25°C to 80°C	-25°C to 80°C	-25°C to 80°C	-25°C to 80°C
Connection	Max. tightening torque: 3.5Nm (30lbs.-in) Rigid wire = 1.5-35mm² (16-3AWG) Stranded wire = 1.5-25mm² (16-4AWG) PZ2 or flat 5.5x1mm screw drivers recom-mended (max. diameter 6mm)	Max. tightening torque: 3.5Nm (30lbs.-in) Rigid wire = 1.5-35mm² (16-3AWG) Stranded wire = 1.5-25mm² (16-4AWG) PZ2 or flat 5.5x1mm screw drivers recom-mended (max. diameter 6mm)	Max. tightening torque: 3.5Nm (30lbs.-in) Rigid wire = 1.5-35mm² (16-3AWG) Stranded wire = 1.5-25mm² (16-4AWG) PZ2 or flat 5.5x1mm screw drivers recom-mended (max. diameter 6mm)	Max. tightening torque: 3.5Nm (30lbs.-in) Rigid wire = 1.5-35mm² (16-3AWG) Stranded wire = 1.5-25mm² (16-4AWG) PZ2 or flat 5.5x1mm screw drivers recom-mended (max. diameter 6mm)	Max. tightening torque: 3.5Nm (30lbs.-in) Rigid wire = 1.5-35mm² (16-3AWG) Stranded wire = 1.5-25mm² (16-4AWG) PZ2 or flat 5.5x1mm screw drivers recom-mended (max. diameter 6mm)
Vibration	Withstand on the 3 main axis*: Sinusoidal vibration testing according to IEC 60068-2-6 2 to 13Hz x= 1 mm peak 13 to 100Hz y= 0.7g peak according to french marine application Random vibration testing according to IEC 61373 Category 1 Class B	Withstand on the 3 main axis*: Sinusoidal vibration testing according to IEC 60068-2-6 2 to 13Hz x= 1 mm peak 13 to 100Hz y= 0.7g peak according to french marine application Random vibration testing according to IEC 61373 Category 1 Class B	Withstand on the 3 main axis*: Sinusoidal vibration testing according to IEC 60068-2-6 2 to 13Hz x= 1 mm peak 13 to 100Hz y= 0.7g peak according to french marine application Random vibration testing according to IEC 61373 Category 1 Class B	Withstand on the 3 main axis*: Sinusoidal vibration testing according to IEC 60068-2-6 2 to 13Hz x= 1 mm peak 13 to 100Hz y= 0.7g peak according to french marine application Random vibration testing according to IEC 61373 Category 1 Class B	Withstand on the 3 main axis*: Sinusoidal vibration testing according to IEC 60068-2-6 2 to 13Hz x= 1 mm peak 13 to 100Hz y= 0.7g peak according to french marine application Random vibration testing according to IEC 61373 Category 1 Class B
Shock	Shock testing according to IEC 61373 Category 1 Class B Shock testing according to IEC 60068-2-27 15g/11ms/18 shocks * for specific usage please contact us	Shock testing according to IEC 61373 Category 1 Class B Shock testing according to IEC 60068-2-27 15g/11ms/18 shocks * for specific usage please contact us	Shock testing according to IEC 61373 Category 1 Class B Shock testing according to IEC 60068-2-27 15g/11ms/18 shocks * for specific usage please contact us	Shock testing according to IEC 61373 Category 1 Class B Shock testing according to IEC 60068-2-27 15g/11ms/18 shocks * for specific usage please contact us	Shock testing according to IEC 61373 Category 1 Class B Shock testing according to IEC 60068-2-27 15g/11ms/18 shocks * for specific usage please contact us

SPECIFIC USAGE CONDITIONS

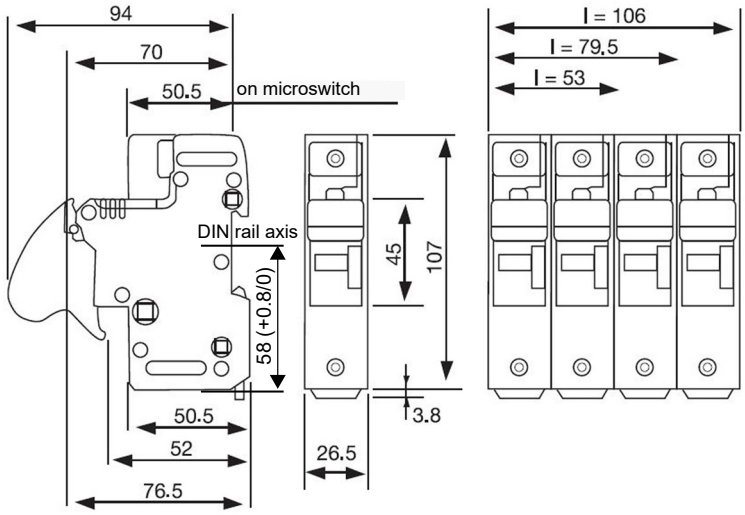
Ambient temperature	>20°C	30°C	40°C	50°C	60°C
Derating factor (I_e)	1	0.95	0.9	0.8	0.7

No of poles (side by side)	1 to 3	4 to 6	>/= 7
Derating factor of current (I_{th})	1	0.95	0.9

Nominal current of fuse-link gR	25 A	32 A	40 A	50 A	63 A
Max. operational current in fuse-holder	23 A	28 A	34 A	40 A	46 A
Cable wire section	4 mm²	6 mm²	10 mm²	10 mm²	16 mm²

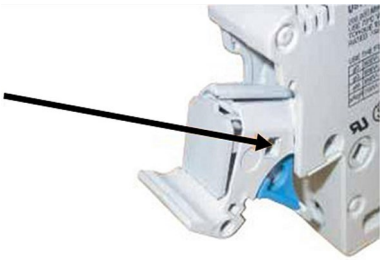
DIMENSIONS

Modulostar® CMS14 fuse-holders for cylindrical fuse-links class 14x51mm



Dimensions in mm

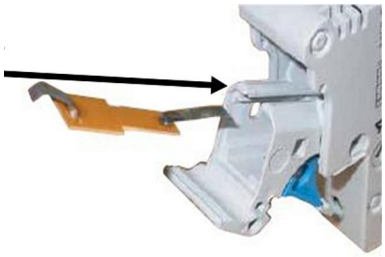
FUNCTIONS



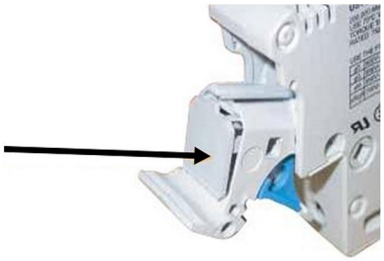
Indicator light kit for CMS14

With the indicator light a blown fuse can be quickly located if power is still on.

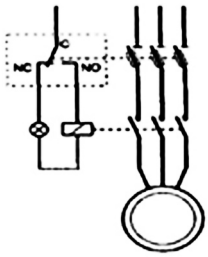
1. Carefully remove the cover with 2 screw drivers.



2. Slip the indicator light's to insert into the rails, being careful not to twist the contact tabs.



3. Put the cover back on.



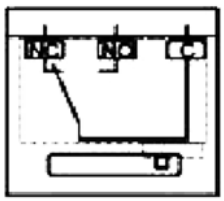
Auxiliary microswitch functions

Fuse melting: a fuse-holder containing a fuse with a striker sends out a signal when the fuse element melts.

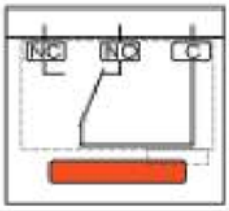
Pre-isolation: when opening the fuse-holder, the microswitch sends a signal before the opening of the main contacts.

Presence: sends a signal when the holder is closed with no fuse in it.

FUNCTIONS



With the fuse in the handle closed state



No fuse - Fuse blown handle open

Characteristics

Rated insulation voltage: 250VAC

Rated operational current following IEC 60947-5 & -1

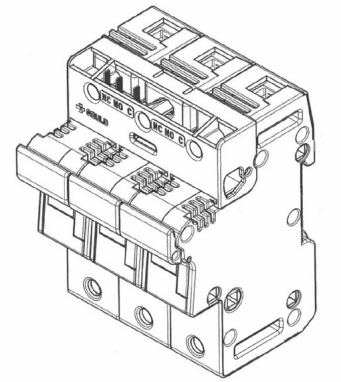
Utilization category AC15: 4A/24V, 4A/48V, 3A/127V, 2.5A/240V

Utilization category DC13: 3A/24V, 1A/48V, 0.2A/127V, 0.1A/240V

Minimum operational current and voltage: 1mA/4V AC or DC

Auxiliary microswitch is designed to operate equally well on dual-current (1mA 4V minimum) or medium-current (5A maximum) circuits. However, a given product should only be used to switch one type of circuit during its working life.

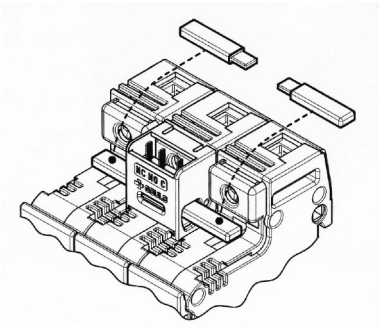
Connection: Faston lugs



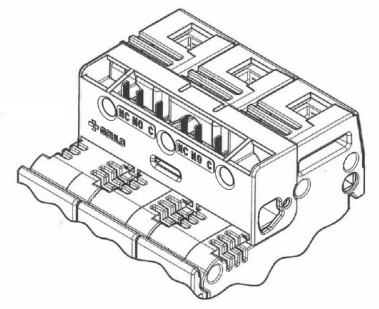
Auxiliary microswitch can only be mounted on previously prepared fuse disconnectors. Use of the auxiliary microswitch for fuse melting requires the use of fuses with strikers.

1 auxiliary microswitch

CMS14W2

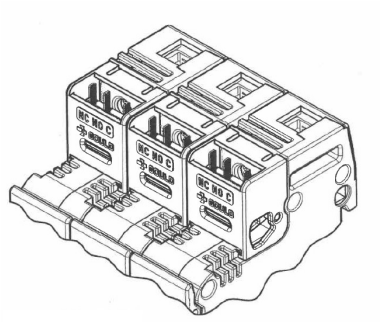


CMS14W1 + CMS1422BP

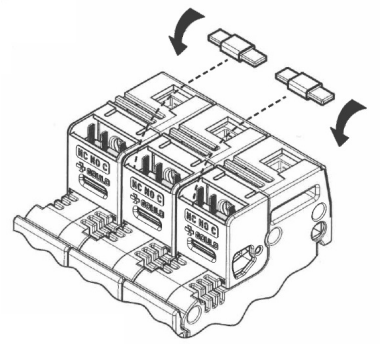


2 auxiliary microswitches

CMS14W3

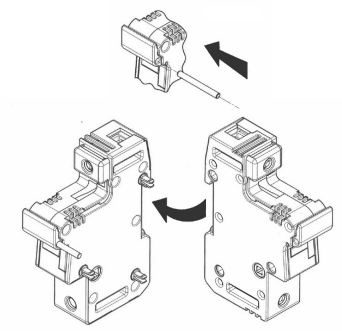


3 auxiliary microswitches
Independent
3 x CMS14W1



Mechanically interconnected
3 x CMS14W1 + 2 X CMS1422PTH

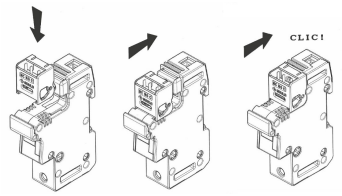
ACCESSORIES



Assembly kit

Kit for multi phase connection

Catalog number	Item number	Features	Package	Weight
CMS1422PAK	Z218223	links for connection of multipole units	10	2.1 g



Auxiliary Switches

Catalog number	Item number	Features	Design	Package	Weight
CMS1422BP	CMS1422BP	Enlargement pin for auxiliary microswitch	-	10	1.5 g
CMS1422PTH	CMS1422PTH	Auxiliary microswitch assembly pin (between 2 kits)	2 kits de contact auxiliaire 3 pôles US22	10	0.5 g
CMS14W1	CMS14W1	Auxiliary microswitch kit 1 pole CMS14	Kit 2 contacts auxiliaires 3 pôles CMS22	1	20 g
CMS14W2	CMS14W2	Auxiliary microswitch kit 3 poles CMS14	-	1	25 g
CMS14W3	CMS14W3	2 Auxiliary microswitches kit 3 poles CMS14	-	1	29 g

ACCESSORIES

LOCK

Locking devices

Catalog number	Item number	Features	Package	Weight
LOCK	M223525	Padlock	1	0.48 kg

TBB1A

TBB1C

Power supply

Catalog number	Item number	Application	Features	Package	Weight
TBB1A	D210315	Max. rms current 90A	1 phase axial incoming power supply	50	10.1 g
TBB1C	E210316	Max. rms current 90A	1 phase lateral incoming power supply	50	10 g
TBB23A	F210317	Max. rms current 90A	2 & 3 phases axial incoming power supply	50	23.3 g
TBB23C	G210318	Max. rms current 90A	2 & 3 phases lateral incoming power supply	50	23.1 g

TBB23A

TBB23C

Wiring bars / Insulated bus bars

Catalog number	Item number	Application	Design	Package	Weight
Wiring bars / Insulated Busbars					
CMS14BB1F12	Y210310	Max. rms current 63A, for installation of 12 modules	single poledeux pôles	5	47.4 g
CMS14BB2F6	Z210311	Max. rms current 63A, for installation of 6 modules	double poletrois pôles	5	0.1 kg
CMS14BB3F4	A210312	Max. rms current 100A, for installation of 4 modules	triple pole	5	0.12 kg

Indication facilities

Catalog number	Item number	Features	Package	Weight
CMS1422LHI	A225653	Indicator light kit	1	10 g

Modulostar® CMS22

Modular fuse-holders

FUSE HOLDERS, FUSE BASES AND SUPPORTS

IEC CYLINDRICAL FUSE HOLDERS

The innovative and comprehensive Modulostar® range of Mersen fuse-holders. Modular fuse-holders are finger-safe under IEC standards to an IP20 grade of protection, including fuse changing (with the flick of a finger). Modular fuse-holders are available in 1, 2, 3 or 4 poles, with or without visual blown fuse indicator, in IEC version or IEC + UL version. Multi-pole units can also be field assembled by ordering pin-ties assembly kit. In size 14 or 22, the range also offers the possibility to use microswitches (supplied with the holders or ordered separately) to allow remote indication. Modulostar® range is made of tough and durable thermoplastic or thermoset material.

TECHNICAL DATA OVERVIEW

Voltage AC	690 VAC
Voltage DC	690 VDC
Amper (A)	125 A
Rated operational current I_e	< / = 125A
SCCR	100kA
Mounting	Installation on to DIN rails to EN 60715
Product Size	For cylindrical fuse links 22x58
Number of poles	1 to 4 poles

FEATURES & BENEFITS

- Finger safe
- Degree of protection: IP20
- Optional visual blown fuse indicator
- DIN rail mounting
- Modular design
- Lockable
- Multi-pole assembly kit available
- Sealable in closed and open position
- Plastic material UL94V2 mini
- Flame retardant materials with glow wire flammability index to 960°C
- Shock and vibration tested for marine and railway applications

APPLICATIONS

- All circuits up to 690V for protection of motors, transformers, low voltage distribution, control circuits.
- Non-load operation

STANDARDS

- IEC 60269-2 and IEC 60947-3 Compliance
- RoHS Compliant
- Plastic material: NF 16101 & 16102 Requirement 2 Compliant

PRODUCT RANGE

CMS222

CMS223

CMS223N

Modulostar® fuse-holders for 22x58 fuse-links, without indicator

Catalog number	Item number	Number of poles/phases	Design	Package	Weight
CMS22N	K331094	N	CMS22 neutral conductor	6	0.22 kg
CMS221	T331079	1	CMS22 single pole	6	0.22 kg
CMS221N	H331092	1 + N	CMS22 single pole + neutral conductor	3	0.47 kg
CMS222	Q331122	2	CMS22 double pole	3	0.44 kg
CMS223	E331135	3	CMS22 triple pole	2	0.66 kg
CMS223N	A331108	3 + N	CMS22 triple pole + neutral conductor	1	0.93 kg
CMS224	Q331099	4	CMS22 quadruple pole	1	0.88 kg

CMS221I

Modulostar® fuse-holders for 22x58 fuse-links, with indicator

Catalog number	Item number	Number of poles/phases	Design	Package	Weight
CMS221I	B331086	1	CMS22 single pole	6	0.20 kg
CMS221NI	W1001462	1 + N	CMS22 single pole + neutral conductor	3	0.41 kg
CMS222I	D331134	2	CMS22 double pole	3	0.43 kg
CMS223I	L331095	3	CMS22 triple pole	2	0.66 kg
CMS223NI	N1001455	3 + N	CMS22 triple pole + neutral conductor	1	0.92 kg

CMS223P

Modulostar® fuse-holders for 22x58 fuse-links,for installation of indicator and/or auxiliary microswitch

Catalog number	Item number	Number of poles/phases	Design	Package	Weight
CMS221P	Y331083	1	CMS22 single pole	6	0.22 kg
CMS223P	V331126	3	CMS22 triple pole	2	0.64 kg
CMS223NP	M331073	3 + N	CMS22 triple pole + neutral conductor	1	0.92 kg

CMS223NM

Modulostar® fuse-holders for 22x58 fuse-links, with auxiliary microswitch

Catalog number	Item number	Number of poles/ phases	Design	Package	Weight
CMS221M	S331078	1	CMS22 single pole	6	0.22 kg
CMS221NM	W1016642	1 + N	CMS22 single pole + neutral conductor	3	0.43 kg
CMS222M	V331080	2	CMS22 double pole, two auxiliary microswitches	3	0.47 kg
CMS223M	B331109	3	CMS22 triple pole	2	0.66 kg
CMS223M2	C331087	3	CMS22 triple pole, two auxiliary microswitches	2	0.68 kg
CMS223NM	T331102	3 + N	CMS22 triple pole + neutral conductor	1	0.86 kg

PRODUCT RANGE

Modulostar® fuse-holders for 22x58 fuse-links, with indicator and auxiliary microswitch

Catalog number	Item number	Number of poles/ phases	Design	Package	Weight
CMS221MI	N331074	1	CMS22 single pole	6	0.23 kg
CMS221NMI	N1016589	1 + N	CMS22 single pole + neutral conductor	3	0.5 kg
CMS222MI	P331098	2	CMS22 double pole, two auxiliary microswitches	3	0.46 kg
CMS223MI	E331112	3	CMS22 triple pole	2	0.66 kg
CMS223M2I	Q331076	3	CMS22 triple pole, two auxiliary microswitches	2	0.94 kg
CMS223NMI	W331104	3 + N	CMS22 triple pole + neutral conductor	1	0.93 kg

TECHNICAL DATA

	CMS22	CMS22I	CMS22P	CMS22M	CMS22MI
Size	22x58	22x58	22x58	22x58	22x58
Number of poles/phases	1, 1+N, 2, 3, 3+N, 4	1, 1+N, 2, 3, 3+N	1, 3+N, 3	1, 1+N, 2, 3, 3+N	1, 1+N, 2, 3, 3+N
Conventional free air thermal current with fuse links I_{th}	125 A	125 A	125 A	125 A	125 A
Power dissipation at I_{th}	9.5 W	9.5 W	9.5 W	9.5 W	9.5 W
Utilisation category	AC20B/DC20B	AC20B/DC20B	AC20B/DC20B	AC20B/DC20B	AC20B/DC20B
Rated insulation voltage U_i	690 V	690 V	690 V	690 V	690 V
SCCR	100 kA	100 kA	100 kA	100 kA	100 kA
Rated impulse withstand voltage U_{imp}	8 kV	8 kV	8 kV	8 kV	8 kV
Degree of protection	IP 20	IP 20	IP 20	IP 20	IP 20
Voltage limit for blown fuse indicator	-	230 to 690V AC/DC	-	-	230 to 690V AC/DC
Indication System	-	with indicator	-	with auxiliary micro-switch	with indicator and auxiliary micro-switch
Operating temperature	-25°C to 60°C	-25°C to 60°C	-25°C to 60°C	-25°C to 60°C	-25°C to 60°C
Storage temperature	-25°C to 80°C	-25°C to 80°C	-25°C to 80°C	-25°C to 80°C	-25°C to 80°C
Connection	Max. tightening torque: 4Nm (35lbs.-in) Rigid wire = 1.5-50mm² (16-1AWG) Multistrand wire = 35mm² (3AWG) PZ2 or flat 6.5x1.2mm screw drivers recom-mended (max. diameter 7mm)	Max. tightening torque: 4Nm (35lbs.-in) Rigid wire = 1.5-50mm² (16-1AWG) Multistrand wire = 35mm² (3AWG) PZ2 or flat 6.5x1.2mm screw drivers recom-mended (max. diameter 7mm)	Max. tightening torque: 4Nm (35lbs.-in) Rigid wire = 1.5-50mm² (16-1AWG) Multistrand wire = 35mm² (3AWG) PZ2 or flat 6.5x1.2mm screw drivers recom-mended (max. diameter 7mm)	Max. tightening torque: 4Nm (35lbs.-in) Rigid wire = 1.5-50mm² (16-1AWG) Multistrand wire = 35mm² (3AWG) PZ2 or flat 6.5x1.2mm screw drivers recom-mended (max. diameter 7mm)	Max. tightening torque: 4Nm (35lbs.-in) Rigid wire = 1.5-50mm² (16-1AWG) Multistrand wire = 35mm² (3AWG) PZ2 or flat 6.5x1.2mm screw drivers recom-mended (max. diameter 7mm)
Vibration	Withstand on the 3 main axis*: Sinusoidal vibration testing according to IEC 60068-2-6 2 to 13Hz x= 1 mm peak 13 to 100Hz y= 0.7g peak according to french marine application Random vibration testing according to IEC 61373 Category 1 Class B	Withstand on the 3 main axis*: Sinusoidal vibration testing according to IEC 60068-2-6 2 to 13Hz x= 1 mm peak 13 to 100Hz y= 0.7g peak according to french marine application Random vibration testing according to IEC 61373 Category 1 Class B	Withstand on the 3 main axis*: Sinusoidal vibration testing according to IEC 60068-2-6 2 to 13Hz x= 1 mm peak 13 to 100Hz y= 0.7g peak according to french marine application Random vibration testing according to IEC 61373 Category 1 Class B	Withstand on the 3 main axis*: Sinusoidal vibration testing according to IEC 60068-2-6 2 to 13Hz x= 1 mm peak 13 to 100Hz y= 0.7g peak according to french marine application Random vibration testing according to IEC 61373 Category 1 Class B	Withstand on the 3 main axis*: Sinusoidal vibration testing according to IEC 60068-2-6 2 to 13Hz x= 1 mm peak 13 to 100Hz y= 0.7g peak according to french marine application Random vibration testing according to IEC 61373 Category 1 Class B
Shock	Shock testing according to IEC 61373 Category 1 Class B Shock testing according to IEC 60068-2-27 15g/11ms/18 shocks * for specific usage please contact us	Shock testing according to IEC 61373 Category 1 Class B Shock testing according to IEC 60068-2-27 15g/11ms/18 shocks * for specific usage please contact us	Shock testing according to IEC 61373 Category 1 Class B Shock testing according to IEC 60068-2-27 15g/11ms/18 shocks * for specific usage please contact us	Shock testing according to IEC 61373 Category 1 Class B Shock testing according to IEC 60068-2-27 15g/11ms/18 shocks * for specific usage please contact us	Shock testing according to IEC 61373 Category 1 Class B Shock testing according to IEC 60068-2-27 15g/11ms/18 shocks * for specific usage please contact us

SPECIFIC USAGE CONDITIONS

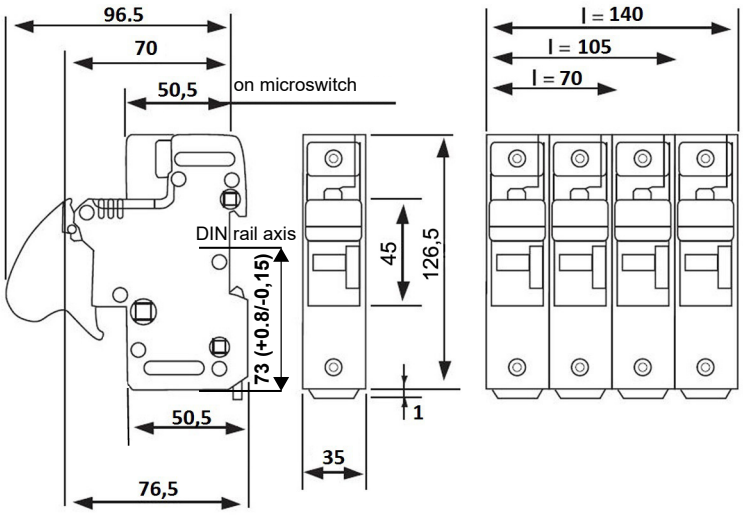
Ambient temperature	>20°C	30°C	40°C	50°C	60°C
Derating factor (I_e)	1	0.95	0.9	0.8	0.7

No of poles (side by side)	1 to 3	4 to 6	>/= 7
Derating factor of current (I_{th})	1	0.95	0.9

Nominal current of fuse-link gR	50 A	63 A	80 A	100 A	125 A	135 A
Max. operational current in fuse-holder	47 A	54 A	70 A	83 A	91 A	96 A
Cable wire section	10 mm²	16 mm²	25 mm²	35 mm²	50 mm²	50 mm²

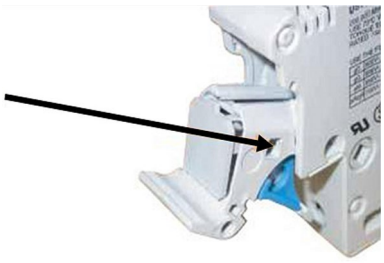
DIMENSIONS

Modulostar® CMS22 fuse-holders for cylindrical fuse-links class 22x58mm



Dimensions in mm

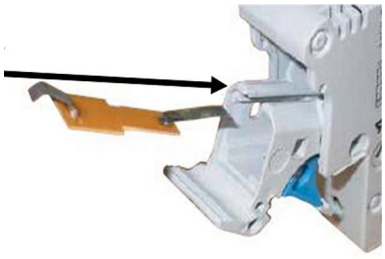
FUNCTIONS



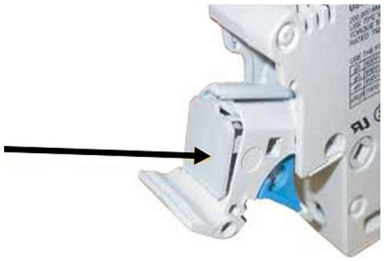
Indicator light kit for CMS22

With the indicator light a blown fuse can be quickly located if power is still on.

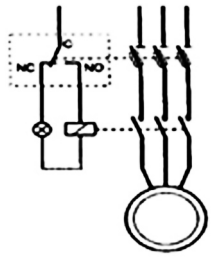
1. Carefully remove the cover with 2 screw drivers.



2. Slip the indicator light's to insert into the rails, being careful not to twist the contact tabs.



3. Put the cover back on.



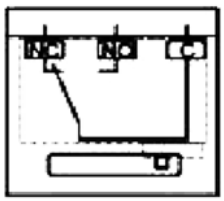
Auxiliary microswitch functions

Fuse melting: a fuse-holder containing a fuse with a striker sends out a signal when the fuse element melts.

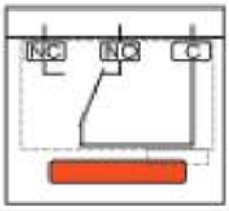
Pre-isolation: when opening the fuse-holder, the microswitch sends a signal before the opening of the main contacts.

Presence: sends a signal when the holder is closed with no fuse in it.

FUNCTIONS



With the fuse in the handle closed state



No fuse - Fuse blown handle open

Characteristics

Rated insulation voltage: 250VAC

Rated operational current following IEC 60947-5 & -1

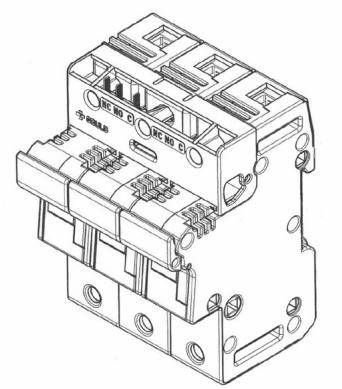
Utilization category AC15: 4A/24V, 4A/48V, 3A/127V, 2.5A/240V

Utilization category DC13: 3A/24V, 1A/48V, 0.2A/127V, 0.1A/240V

Minimum operational current and voltage: 1mA/4V AC or DC

Auxiliary microswitch is designed to operate equally well on dual-current (1mA 4V minimum) or medium-current (5A maximum) circuits. However, a given product should only be used to switch one type of circuit during its working life.

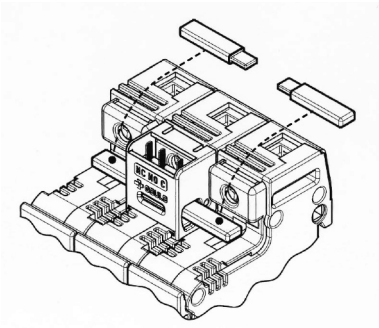
Connection: Faston lugs



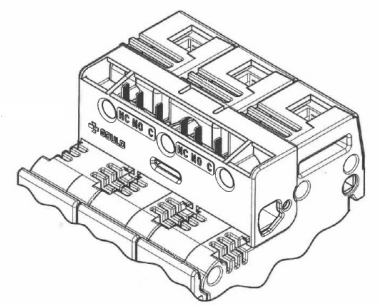
Auxiliary microswitch can only be mounted on previously prepared fuse disconnectors. Use of the auxiliary microswitch for fuse melting requires the use of fuses with strikers.

1 auxiliary microswitch

CMS22W2

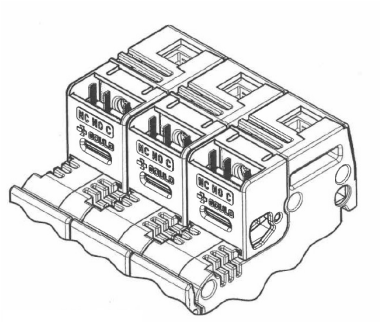


CMS22W1 + CMS1422BP



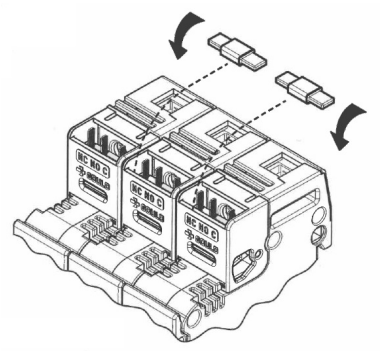
2 auxiliary microswitches

CMS22W3



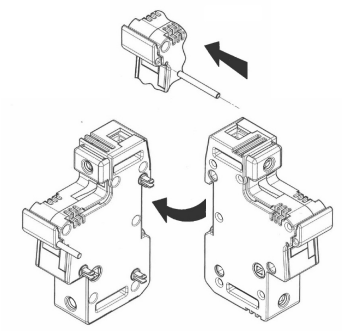
3 auxiliary microswitches

3 x CMS22W1



3 x CMS22W1 + 2 x CMS1422PTH

ACCESSORIES



Assembly kit

Kit for multi phase connection

Catalog number	Item number	Features	Package	Weight
CMS1422PAK	Z218223	links for connection of multipole units	10	2.1 g

ACCESSORIES

Auxiliary Switches

Catalog number	Item number	Features	Design	Package	Weight
CMS1422BP	CMS1422BP	Enlargement pin for auxiliary microswitch	-	10	1.5 g
CMS1422PTH	CMS1422PTH	Auxiliary microswitch assembly pin (between 2 kits)	2 kits de contact auxiliaire 3 pôles US22	10	0.5 g
CMS22W1	CMS22W1	Auxiliary microswitch kit 1 pole CMS22	-	1	20 g
CMS22W2	CMS22W2	-	Auxiliary microswitch kit 3 poles CMS22	1	32 g
CMS22W3	CMS22W3	-	2 Auxiliary microswitches kit 3 poles CMS22Kit contact auxiliaire 3 pôles CMS22	1	35 g

Locking devices

LOCK

Catalog number	Item number	Features	Package	Weight
LOCK	M223525	Padlock	1	0.48 kg

Power supply

TBB1A

TBB1C

TBB23A

TBB23C

Catalog number	Item number	Application	Features	Package	Weight
TBB1A	D210315	Max. rms current 90A	1 phase axial incoming power supply	50	10.1 g
TBB1C	E210316	Max. rms current 90A	1 phase lateral incoming power supply	50	10 g
TBB23A	F210317	Max. rms current 90A	2 & 3 phases axial incoming power supply	50	23.3 g
TBB23C	G210318	Max. rms current 90A	2 & 3 phases lateral incoming power supply	50	23.1 g

Wiring bars / Insulated bus bars

Catalog number	Item number	Application	Design	Package	Weight
Wiring bars / Insulated Busbars					
CMS22BB1F12	B210313	Max. rms current 90A, for installation of 12 modules	single pole2 pôles	5	81 g
CMS22BB2F6	C210314	Max. rms current 150A, for installation of 6 modules	double poleun pôle	5	0.30 kg

Indication facilities

Catalog number	Item number	Features	Package	Weight
CMS1422LHI	A225653	Indicator light kit	1	10 g

Modulostar® CMS27 - Ultrasafe™ US27

Modular fuse-holders

FUSE HOLDERS, FUSE BASES AND SUPPORTS

UL/CSA FUSE HOLDERS

The innovative and comprehensive Modulostar® range of Mersen fuse-holders.

Modular fuse-holders are finger-safe as per IEC standards to an IP20 grade of protection. Including fuse changing, with the flick of a finger. Modular fuse-holders are available in 1, 2 or 3 poles, with or without visual blown fuse indicators, in IEC + UL version.

Multi-pole units can also be field assembled by ordering pin-ties assembly kit. The range offers the possibility to use microswitches (supplied with the holders or ordered separatly) to allow remote indication. Modulostar® range is made of tough and durable thermoplastic or thermoset material.

TECHNICAL DATA OVERVIEW

UL ratings AC / DC	800 V, 150 A, 200 kA
Rated insulation voltage U_i	800 V
SCCR	200 kA
Mounting	Installation on to DIN rails to EN 60715
Product Size	For cylindrical fuse links 27x60 or J60
Number of poles	1 to 4 poles

FEATURES & BENEFITS

- Finger safe
- Degree of protection: IP20
- Optional visual blown fuse indicator & microswitch
- Designs available for DIN rail mounting and direct mounting on board
- Modular design
- Multi-pole assembly kit available
- Plastic material UL94V2 mini
- Flame retardant materials with glow wire flammability index to 960°C

APPLICATIONS

- All circuits up to 800V using semi-conductor fuses for protection of small inverters, UPS systems, motor drives, etc.
- Non-load operation

STANDARDS

- IEC 60269-2 and IEC 60947-3 Compliance
- UL4248-1 Compliant
- RoHS Compliant
- Plastic material: NF 16101 & 16102 Requirement 2 Compliant
- CCC (screw terminal connection only)

PRODUCT RANGE

CMS271

Modulostar® fuse holders for 27x60 fuse-links, without indicator

Catalog number	Item number	Number of poles/phases	Design	Package	Weight
CMS271	R210580	1	single pole	3	0.30 kg
CMS271N	S210581	1 + N	single pole + neutral conductor	1	0.72 kg
CMS272	T210582	2	double pole	1	0.67 kg
CMS273	V210583	3	triple pole	1	0.91 kg
CMS273N	W210584	3 + N	triple pole + neutral conductor	1	1.25 kg
CMS27N	B210152	N	neutral conductor	3	0.37 kg

US271I

UltraSafe™ fuse holders for 27x60 fuse-links, with indicator

Catalog number	Item number	Number of poles/phases	Design	Package	Weight
US271I	J226420	1	single pole	3	0.30 kg
US271NI	K226421	1+N	single pole + neutral conductor	1	0.73 kg
US272I	L226422	2	double pole	1	0.67 kg
US273I	M226423	3	triple pole	1	1 kg
US273NI	N226424	3+N	triple pole + neutral conductor	1	1.27 kg

UltraSafe™ fuse holders for 27x60 fuse-links, without indicator

US273

Catalog number	Item number	Number of poles/phases	Design	Package	Weight
US271	G320005	1	single pole	3	0.30 kg
US272	H320006	2	double pole	1	0.66 kg
US273	J320007	3	triple pole	3	0.9 kg
US27N	R232729	N	neutral conductor	3	0.37 kg

US271MI

UltraSafe™ fuse holders for 27x60 fuse-links, with auxiliary microswitch and indicator

Catalog number	Item number	Number of poles/phases	Design	Package	Weight
US271MI	R227600	1	single pole	1	0.32 kg
US272M2I	T227602	2	double pole, 2 microswitches	1	0.7 kg
US272MI	S227601	2	double pole, 1 microswitch	1	0.68 kg

UltraSafe™ fuse holders for 27x60 fuse-links, with auxiliary microswitch, indicator and ring lug connection

Catalog number	Item number	Number of poles/phases	Design	Package	Weight
US271MIRING	Z227607	1	single pole	1	0.54 kg
US272M2IRING	B227609	2	double pole, 2 microswitches	1	1.00 kg

PRODUCT RANGE

UltraSafe™ fuse holders for 27x60 fuse-links, with indicator and ring lug connection

Catalog number	Item number	Number of poles/phases	Design	Package	Weight
US271NIRING	E223518	1+N	single pole + neutral conductor	1	0.8 kg
US27IRING	B223515	1	single pole	3	0.47 kg
US272IRING	C223516	2	double pole	1	1.00 kg
US273IRING	D223517	3	triple pole	3	1.39 kg
US27NIRING	F223519	N	neutral conductor	3	0.34 kg

TECHNICAL DATA

	CMS27	US27I	US27	US27M	US27MIRING	US27IRING
Size	27x60	27x60	27x60	27x60	27x60	27x60
Installation mode	direct mounting on board: 2xM4 screw with tightening torque 1-1.2Nm (8 to 10.6lbs-in)	direct mounting on board: 2xM4 screw with tightening torque 1-1.2Nm (8 to 10.6lbs-in)	direct mounting on board: 2xM4 screw with tightening torque 1-1.2Nm (8 to 10.6lbs-in)	direct mounting on board: 2xM4 screw with tightening torque 1-1.2Nm (8 to 10.6lbs-in)	direct mounting on board: 2xM4 screw with tightening torque 1-1.2Nm (8 to 10.6lbs-in)	direct mounting on board: 2xM4 screw with tightening torque 1-1.2Nm (8 to 10.6lbs-in)
Number of poles/phases	1, 1+N, 2, 3, 3+N	1, 1+N, 2, 3, 3+N	1, 1+N, 2, 3	1, 2	1, 2	1, 1+N, 2, 3
Conventional free air thermal current with fuse links I_{th}	140 A	140 A	140 A	140 A	140 A	140 A
Max. power dissipation of fuse links P_n	11 W	11 W	11 W	11 W	11 W	11 W
Utilisation category	AC20B/DC20B	AC20B/DC20B	AC20B/DC20B	AC20B/DC20B	AC20B/DC20B	AC20B/DC20B
Rated insulation voltage U_i	800 V	800 V	800 V	800 V	800 V	800 V
Rated impulse withstand voltage U_{imp}	8 kV	8 kV	8 kV	8 kV	8 kV	8 kV
Degree of protection	IP 20	IP 20	IP 20	IP 20	IP 20	IP 20
Voltage limit for blown fuse indicator	-	230 to 690V AC/DC	-	-	-	230 to 690V AC/DC
Indication System	-	with indicator	-	with auxiliary microswitch	with auxiliary microswitch and special connection	with indicator and special connection
Operating temperature	-25°C to 60°C	-25°C to 60°C	-25°C to 60°C	-25°C to 60°C	-25°C to 60°C	-25°C to 60°C
Storage temperature	-25°C to 80°C	-25°C to 80°C	-25°C to 80°C	-25°C to 80°C	-25°C to 80°C	-25°C to 80°C
Connection	rigid wire = 1.5-50mm²(16-1/0AWG) multistrand wire = 1.5-16mm² (16-6AWG) recommended tightening torque: 3.5Nm (30lbs-in) PZ3 or flat 8x1.2mm screw drivers recommended	rigid wire = 1.5-50mm² (16-1/0AWG) multistrand wire = 1.5-16mm² (16-6AWG) recommended tightening torque: 3.5Nm (30lbs-in) PZ3 or flat 8x1.2mm screw drivers recommended	rigid wire = 1.5-50mm² (16-1/0AWG) multistrand wire = 1.5-16mm² (16-6AWG) recommended tightening torque: 3.5Nm (30lbs-in) PZ3 or flat 8x1.2mm screw drivers recommended	rigid wire = 1.5-50mm² (16-1/0AWG) multistrand wire = 1.5-16mm² (16-6AWG) recommended tightening torque: 3.5Nm (30lbs-in) PZ3 or flat 8x1.2mm screw drivers recommended	-	-
Auxiliary switches						
Rated insulation voltage AC	250 V	250 V	250 V	250 V	250 V	250 V
Rated operational current to IEC 60947-5-1/AC15	4A/24V, 4A/48V, 3A/127V, 2,5A/240V	4A/24V, 4A/48V, 3A/127V, 2,5A/240V	4A/24V, 4A/48V, 3A/127V, 2,5A/240V	4A/24V, 4A/48V, 3A/127V, 2,5A/240V	4A/24V, 4A/48V, 3A/127V, 2,5A/240V	4A/24V, 4A/48V, 3A/127V, 2,5A/240V
Rated operational current to IEC 60947-5-1/AC13	3A/24V, 1A/48V, 0,2A/127V, 0,1A/240V	3A/24V, 1A/48V, 0,2A/127V, 0,1A/240V	3A/24V, 1A/48V, 0,2A/127V, 0,1A/240V	3A/24V, 1A/48V, 0,2A/127V, 0,1A/240V	3A/24V, 1A/48V, 0,2A/127V, 0,1A/240V	3A/24V, 1A/48V, 0,2A/127V, 0,1A/240V
Min. operational current AC/DC	100 mA	100 mA	100 mA	100 mA	100 mA	100 mA
Min_operational_voltage AC/DC	20 V	20 V	20 V	20 V	20 V	20 V
Connection	Faston lugs	Faston lugs	Faston lugs	Faston lugs	Faston lugs	Faston lugs

SPECIFIC USAGE CONDITIONS

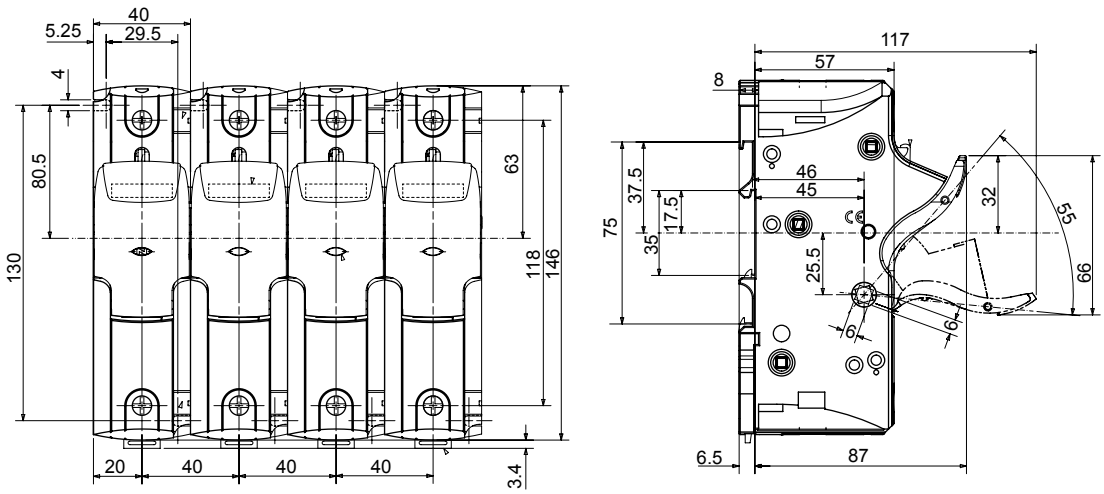
Ambient temperature	> 20°C	30°C	40°C	50°C	60°C
Derating factor (I_e)	1	0.95	0.9	0.8	0.7

No of poles (side by side)	1 to 3	4 to 6	>= 7
Derating factor of current (I_{th})	1	0.95	0.9

Nominal current of fuse-link gR	100 A	110 A
Max. operational current in fuse-holder	96 A	102 A
Cable wire section	25 mm²	35 mm²

DIMENSIONS

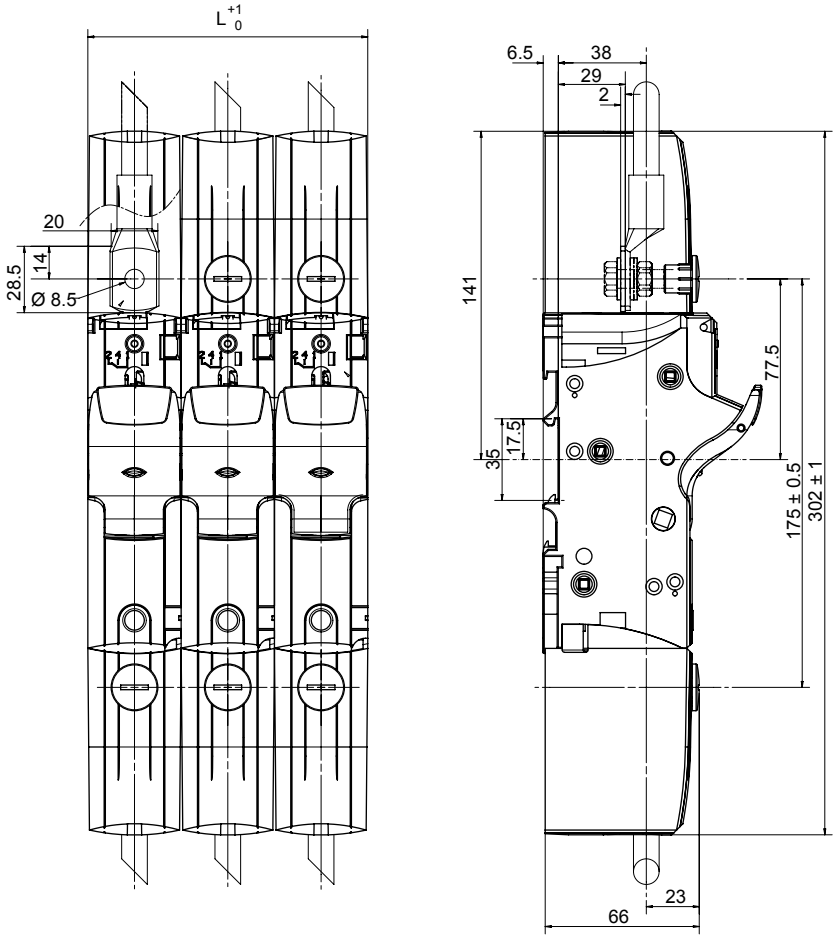
Modulostar® CMS27 Ultrasafe™ US27 fuse-holders for cylindrical fuse-links class 27x60mm
Terminal connection: screw, U bolt or connector (0114931)



Dimensions in mm

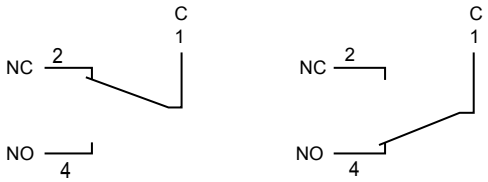
DIMENSIONS

Modulostar® CMS27 Ultrasafe™ US27 fuse-holders for cylindrical fuse-links class 27x60mm terminal connection: ring lug (C118276)



Dimensions in mm

Auxiliary Microswitch



ACCESSORIES

Kit for multi phase connection

Catalog number	Item number	Design	Package	Weight
US27PAK	US27PAK	links for connection of multipole units	10	3 g

ACCESSORIES

Auxiliary Switches

Catalog number	Item number	Design	Package	Weight
US27W1	US27W1	Microswitch kit	1	20 g

Modulostar® CUS10

FUSE HOLDERS, FUSE BASES AND SUPPORTS

IEC+UL/CSA FUSE HOLDERS

Mersen's innovative Modulostar CUS10 fuse holders are finger-safe under IEC standards to an IP20 grade of protection, including fuse changing (with the flick of a finger). Modulostar CUS10 fuse holders are available in 1, 2, 3 or 4 poles, with or without visual blown fuse indicator, in UL + IEC version. Multi-pole units can also be field assembled by ordering pin-ties assembly kit. Made of tough and durable thermoplastic or thermoset material. For use with Mersen midget fuses.

TECHNICAL DATA OVERVIEW

UL ratings AC	800 VAC, 32 A, 200 kA
UL ratings DC	1000 VDC, 32 A, 100 kA
Voltage Range AC	690 ... 1000 VAC
Voltage Range DC	690 ... 1000 VDC
Amper (A)	32 A
SCCR	200 kA
Mounting	Installation on to DIN rails to EN 60715
Product Size	For cylindrical fuse links 10x38 or Midget
Number of poles	1 to 4 poles

FEATURES & BENEFITS

- Modular design
- Compact design for space saving
- DIN rail mounting
- Degree of protection: IP20
- Finger safe
- Easy access to the fuse
- Lockable without accessory
- Sealable in closed & open position
- Optional visual blown fuse indicator
- Multi-pole assembly kit available
- Plastic material UL94V2 mini
- Plastic material R22HL2 for railway application
- Flame retardant materials with glow wire flammability index to 960°C
- Schock and vibration tested for marine and railway applications

APPLICATIONS

- All circuits up to 690V for protection of motors, transformers, low voltage distribution, control circuits, drive protection
- Non-load operation

STANDARDS

- UL Recognized Component, UL4248, guide IZLT2
- CSA Component acceptance C22.2
- IEC 60269-2 and IEC 60947-3
- RoHS, Reach compliant
- Marine certificates

PRODUCT RANGE

CUS101

CUS103N

Modulostar™ compact fuse holders for 10.3x38.1 fuse-links, without indicator

Catalog number	Item number	Number of poles/phases	Design	Package	Weight
CUS101	G1062721	1	CUS10 single pole	12	45 g
CUS101N	C1062717	1+N	CUS10 single pole + neutral conductor	6	95 g
CUS102	D1062718	2	CUS10 double pole	6	92 g
CUS103	A1062715	3	CUS10 triple pole	4	0.14 kg
CUS103N	W1062711	3+N	CUS10 triple pole + neutral conductor	3	0.19 kg
CUS104	X1062712	4	CUS10 quadruple pole	3	0.19 kg
CUS10N	H1062722	N	CUS10 neutral conductor	12	49 g

CUS101I

CUS103NI

Modulostar™ compact fuse holders for 10.3x38.1 fuse-links, with standard indicator

Catalog number	Item number	Number of poles/ phases	Design	Voltage limit for blown fuse indicator	Package	Weight
CUS101I	J1062723	1	CUS10 single pole	-	12	46 g
CUS101NI	E1062719	1+N	CUS10 single pole + neutral conductor	-	6	95 g
CUS102I	F1062720	2	CUS10 double pole	-	6	93 g
CUS103I	B1062716	3	CUS10 triple pole	-	4	0.14 kg
CUS103NI	Y1062713	3+N	CUS10 triple pole + neutral conductor	-	3	0.19 kg
CUS104I	Z1062714	4	CUS10 quadruple pole	-	3	0.19 kg
-	on demand	-	Version with special indicator	Standard: 220V-700V AC/DC Very low: 20V-50V AC/DC Low: 50V-250V AC/DC 1000V: 220 - 1000V AC/DC	-	-

TECHNICAL DATA

	CUS10	CUS10I
Size	10x38	10x38
Number of poles/phases	1, 1+N, 2, 3, 3+N, 4	1, 1+N, 2, 3, 3+N, 4
UL ratings AC	800 VAC, 32 A, 200 kA	800 VAC, 32 A, 200 kA
UL ratings DC	1000 VDC, 32 A, 100 kA	1000 VDC, 32 A, 100 kA
Conventional free air thermal current with fuse links I_{th}	32 A	32 A
Max. power dissipation of fuse links P_n	3W	3W
Max. power dissipation	4 W	4 W
Power dissipation of fuse-holder	0.4 W	0.4 W
Utilisation category	AC20B/DC20B	AC20B/DC20B
Rated insulation voltage U_i	1000 V	1000 V
SCCR	200 kA	200 kA
Rated impulse withstand voltage U_{imp}	6 kV	6 kV
Degree of protection	IP 20	IP 20
Voltage limit for blown fuse indicator	-	220 to 700V AC/DC
Indication System	-	with indicator
Operating temperature	-40°C to 70°C with carrier operation -50°C to 90°C without carrier operation	
Storage temperature	-40°C to 70°C	-40°C to 70°C
Connection	Max. tightening torque: 2Nm (17.7lbs.-in) Rigid / Multistrand wire = 1-16mm² (16-6AWG) Max. 2x6mm² PZ2 or flat 5.5x1mm screw drivers recommended (max. diameter 6mm)	

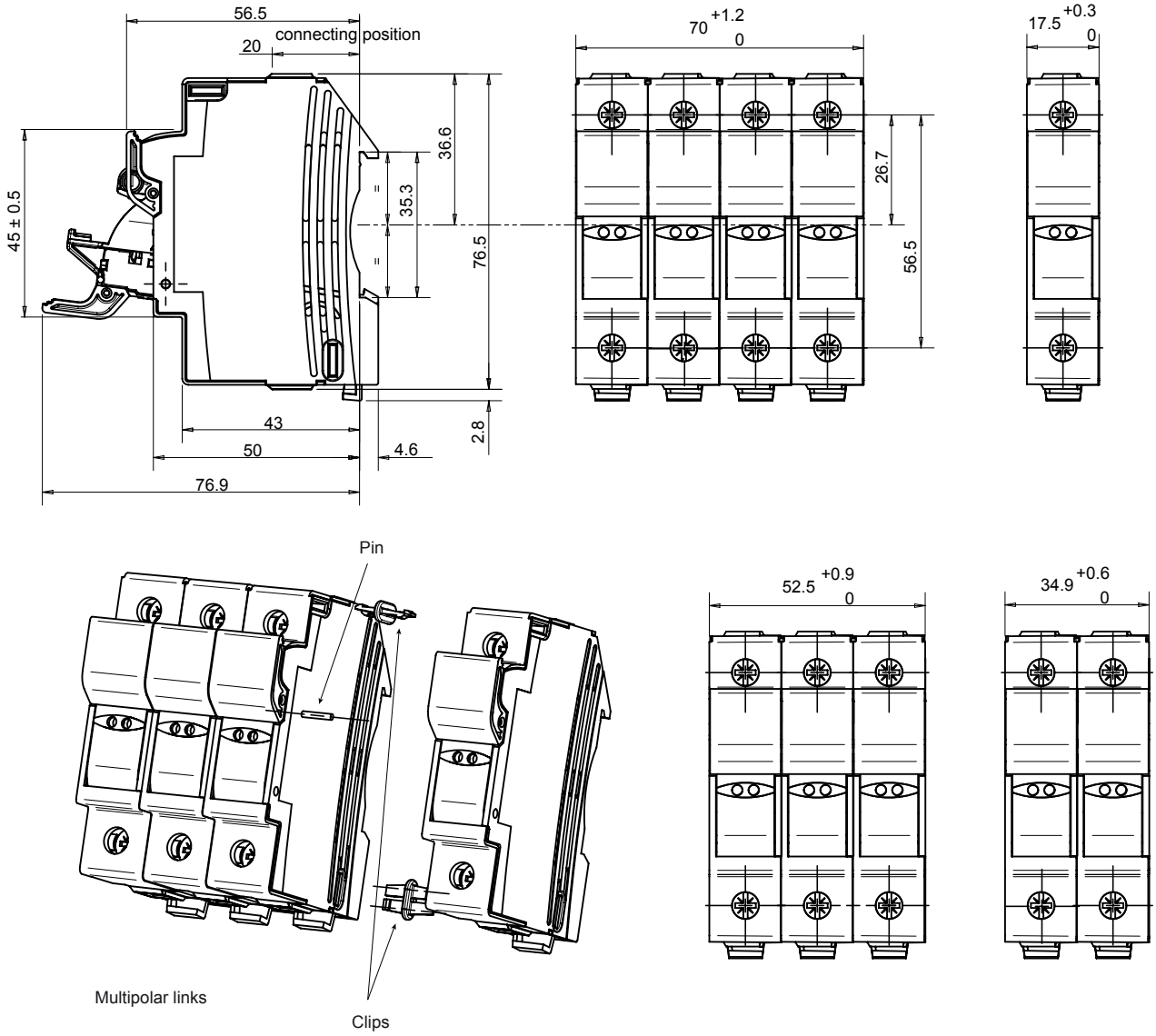
SPECIFIC USAGE CONDITIONS

Ambient temperature	-40° to 20°C	30°C	40°C	50°C	60°C	70°C	80°C	90°C
Derating factor (I_e)	1	1	1	0.92	0.83	0.73	0.62	0.48
Humidity	95%	90%	80%	50%	-	-	-	-
Dampness derating	1	0.95	0.90	-	-	-	-	-

No of poles (side by side)	1 to 3	>/= 4
Derating factor of current (I_{th})	1	0.9

DIMENSIONS

MODULOSTAR® CUS10 fuse-holders for cylindrical fuse-links class 10x38mm



Dimensions in mm

ACCESSORIES

CMS810PAK

Kit for multi phase connection

Catalog number	Item number	Features	Package	Weight
CMS810PAK	Z233725	Links for connection of multipole units	12	0.5 g

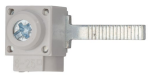
ACCESSORIES

LOCK

Locking devices

Catalog number	Item number	Features	Package	Weight
LOCK	M223525	Padlock	1	0.48 kg

TBB1AL



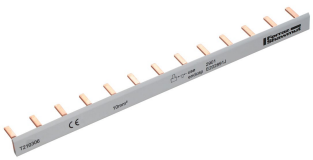
TBB1CL

Power supply

Catalog number	Item number	Application	Features	Package	Weight
TBB1AL	X1068370	Max. rms current 90A	1 phase axial incoming power supply	50	10.1 g
TBB1CL	Y1068371	Max. rms current 90A	1 phase lateral incoming power supply	50	10 g
TBB23A	F210317	Max. rms current 90A	2 & 3 phases axial incoming power supply	50	23.3 g
TBB23C	G210318	Max. rms current 90A	2 & 3 phases lateral incoming power supply	50	23.1 g

TBB23A

TBB23C



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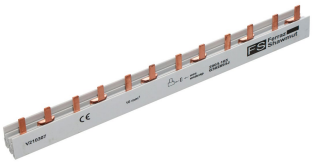


CMS810BB2F6

Wiring bars / Insulated bus bars

Catalog number	Item number	Application	Features	Package	Weight
Wiring bars / Insulated Busbars					
CMS810BB1F13	T210306	Max. rms current 63A, for installation of 13 modules	single pole, 10 mm², partition 17,5 mm (distance of poles), peg design, L-shaped	10	33.5 g
CMS810BB2F6	V210307	Max. rms current 63A, for installation of 6 modules	double pole, 10 mm², partition 17,5 mm (distance of poles), peg design, L-shaped	10	80 g
CMS810BB3F4	W210308	Max. rms current 100A, for installation of 4 modules	triple pole, 10 mm² partition 17,5 mm (distance of poles), peg design, L-shaped	10	84 g
CMS810BB4F3	X210309	Max. rms current 100A, for installation of 3 modules	quadruple pole, 10 mm², partition 17,5 mm (distance of poles), peg design, L-shaped	10	0.12 kg

PV Modular fuse-holder CUS101HEL

FUSE HOLDERS, FUSE BASES AND SUPPORTS

IEC+UL/CSA FUSE HOLDERS

The innovative and comprehensive Modulostar® range of Mersen fuse-holders.

CUS101HEL series are specially designed for the protection of PV systems.

Modular fuse-holders are finger-safe under IEC and UL standards to an IP20 grade of protection, including fuse changing (with the flick of a finger). Modular fuse-holders CUS101HEL are available in 1 pole, with or without visual blown fuse indicator.

Modulostar® range is made of tough and durable thermoplastic material.

They are especially recommended to be used in combination with Mersen fuse-links HP6M and HP10M.

TECHNICAL DATA OVERVIEW

Voltage DC	1000 VDC
Amper (A)	32 A
SCCR	100kA
Mounting	Installation on to DIN rails to EN 60715
Product Size	For cylindrical fuse links 10x38 gPV fuses
Number of Poles	1-pole

FEATURES & BENEFITS

- Modular design
- Compact design for space saving
- DIN rail mounting
- Degree of protection: IP20
- Finger safe
- Easy access to the fuse
- Lockable without accessory
- Sealable in closed & open position
- Optional visual blown fuse indicator
- Plastic material UL94V2 mini
- Flame retardant materials with glow wire flammability index to 960°C
- Very low power dissipation

APPLICATIONS

- All photovoltaic applications up to 1000V
- Combiner box applications
- PV string/array level protection
- Inverters

STANDARDS

- IEC60269-1&2
- UL listed UL4248/19
- CSA Certified
- RoHS, Reach compliant

PV Modular fuse-holder CUS101HEL

PRODUCT RANGE

CUS101HEL

CUS101IHEL

PV Modular fuse-holder CUS101HEL

Catalog number	Item number	Number of poles/ phases	Design	Voltage limit for blown fuse indicator	Package
CUS101HEL	K1062724	1	CUS101HEL single pole	-	12
CUS101IHEL	X1062758	1	CUS101IHEL single pole	220 - 1000V	12

TECHNICAL DATA

	CUS101HEL
Size	10x38
Number of poles/phases	1
Conventional free air thermal current with fuse links I_{th}	32 A
Max. power dissipation of fuse links P_n	3W
Max. power dissipation	4 W
Power dissipation of fuse-holder	0.4 W
Rated insulation voltage U_i	1000 V
Degree of protection	IP 20
Operating temperature	-40°C to 70°C with carrier operation -50°C to 90°C without carrier operation
Storage temperature	-40°C to 70°C
Connection	Max. tightening torque: 2Nm (17.7lbs.-in) Rigid / Multistrand wire = 1-16mm² (16-6AWG) Max.2x6mm² PZ2 or flat 5.5x1mm screw drivers recommended (max. diameter 6mm)

SPECIFIC USAGE CONDITIONS

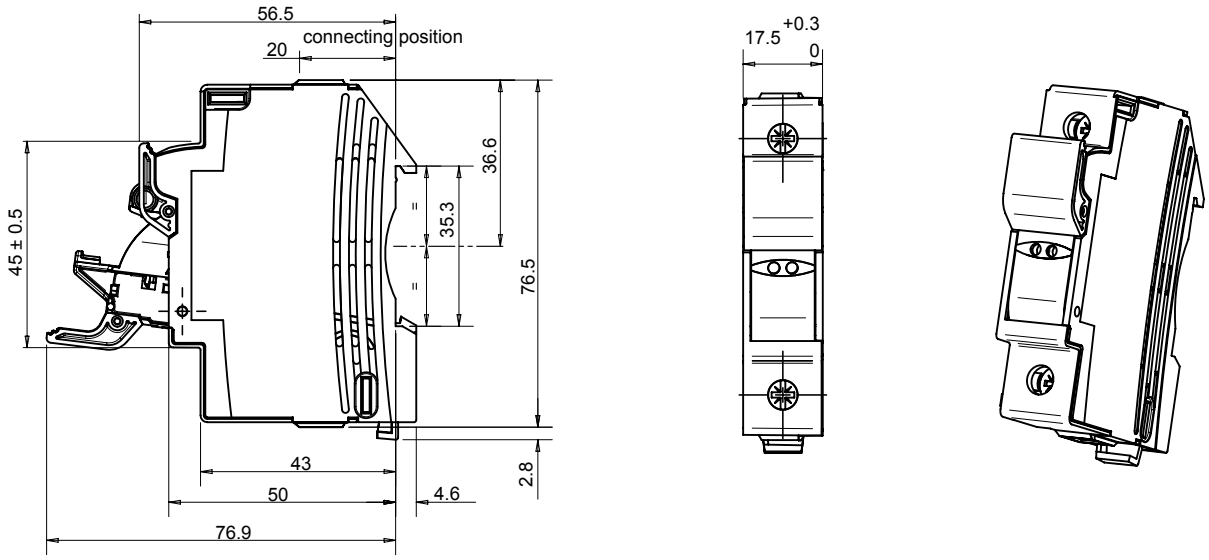
Ambient temperature	-40° to 20°C	30°C	40°C	50°C	60°C	70°C	80°C	90°C
Derating factor (I_e)	1	1	1	0.92	0.83	0.73	0.62	0.48
Humidity	95%	90%	80%	50%	-	-	-	-
Dampness derating	1	0.95	0.90	-	-	-	-	-

No of poles (side by side)	1 to 3	>/= 4
Derating factor of current (I_{th})	1	0.9

PV Modular fuse-holder CUS101HEL

DIMENSIONS

MODULOSTAR® CUSCC fuse-holders for cylindrical fuse-links class 10x38mm



Dimensions in mm

ACCESSORIES

CMS810PAK

Kit for multi phase connection

Catalog number	Item number	Features	Package	Weight
CMS810PAK	Z233725	Links for connection of multipole units	12	0.5 g

LOCK

Locking devices

Catalog number	Item number	Features	Package	Weight
LOCK	M223525	Padlock	1	0.48 kg

PV Modular fuse-holder CUS101HEL

ACCESSORIES

TBB1A

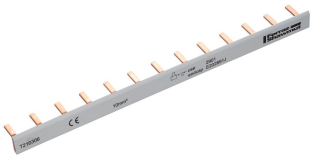
TBB1C

TBB23A

TBB23C

Power supply

Catalog number	Item number	Application	Features	Package	Weight
TBB1A	D210315	Max. rms current 90A	1 phase axial incoming power supply	50	10.1 g
TBB1C	E210316	Max. rms current 90A	1 phase lateral incoming power supply	50	10 g
TBB23A	F210317	Max. rms current 90A	2 & 3 phases axial incoming power supply	50	23.3 g
TBB23C	G210318	Max. rms current 90A	2 & 3 phases lateral incoming power supply	50	23.1 g



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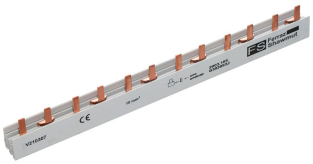

CMS810BB2F6

Wiring bars / Insulated bus bars

Catalog number	Item number	Application	Features	Package	Weight
CMS810BB1F13	T210306	Max. rms current 63A, for installation of 13 modules	single pole, 10 mm², partition 17,5 mm (distance of poles), peg design, L-shaped	10	33.5 g
CMS810BB2F6	V210307	Max. rms current 63A, for installation of 6 modules	double pole, 10 mm², partition 17,5 mm (distance of poles), peg design, L-shaped	10	80 g
CMS810BB3F4	W210308	Max. rms current 100A, for installation of 4 modules	triple pole, 10 mm² partition 17,5 mm (distance of poles), peg design, L-shaped	10	84 g
CMS810BB4F3	X210309	Max. rms current 100A, for installation of 3 modules	quadruple pole, 10 mm², partition 17,5 mm (distance of poles), peg design, L-shaped	10	0.12 kg