Modular fuse-holders

## **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.

#### **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

#### **Applications**

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

#### Technical data overview

Volt	690 VAC
Volt (VDC)	690 VDC
Amper (A)	32 A
Product Size	For cylindrical fuse links 10.3x38.1 AM, gG and 10.3x38 Mersen Protistor and HP6M fuse-links
Mounting	Installation on to DIN rails to EN 60715
SCCR	200kA
Number of Poles	1 to 4 poles





## **Standards**

IEC 60269-2 and IEC 60947-3 Compliance **RoHS** Compliant Plastic material: NF 16101 & 16102 **Requirement 2 Compliant** Shock and vibration tested for marine and railway applications









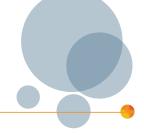






# Modulostar® CMS10

Modular fuse-holders



## Product range



CMS101





Catalog number	Reference number	Number of poles/ phases	Design	Weight	Package
CMS101	T305020	1	CMS10 single pole	61.3 g	12
CMS101N	V305021	1 + N	CMS10 single pole + neutral conductor	131.6 g	6
CMS102	W305022	2	CMS10 double pole	121.6 g	6
CMS103	X305023	3	CMS10 triple pole	197.5 g	4
CMS103N	Y305024	3 + N	CMS10 triple pole + neutral conductor	263.3 g	3
CMS104	Z305025	4	CMS10 quadruple pole	243.3 g	3







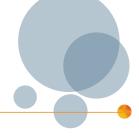
#### Modulostar® fuse-holders for 10,3x38,1 fuse-links, with indicator

Catalog number	Reference number	Number of poles/ phases	Design	Weight	Package
CMS101I	A305026	1	CMS10 single pole	60.8 g	12
CMS101NI	B305027	1 + N	CMS10 single pole + neutral conductor	131.6 g	6
CMS102I	C305028	2	CMS10 double pole	121.6 g	6
CMS103I	D305029	3	CMS10 triple pole	182.5 g	4
CMS103NI	E305030	3 + N	CMS10 triple pole + neutral conductor	263.3 g	3
CMS104I	F305031	4	CMS10 quadruple pole	243.3 g	3





# Modulostar<sup>®</sup> CMS10 Modular fuse-holders



## **Technical Data**

Technical Data	CMS10	CMS10I
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 $\mathbf{I}_{\text{th}}$	32 A	32 A
Power dissipation at Ith	3 W	3 W
Utilisation category	AC20B/DC20B	AC20B/DC20B
Rated insulation voltage U <sub>i</sub>	690 V	690 V
SCCR	200 kA	200 kA
Rated impulse withstand voltage U <sub>imp</sub>	6 kV	6 kV
Degree of protection	IP 20	IP 20
Voltage limit for blown fuse indicator	-	230 to 690V AC/DC
Indication System	-	with indicator
Connection	Max. tightening torque: 2.2Nm (19lbsin) Rigid wire = 1-16mm <sup>2</sup> (16-6AWG) Multistrand wire = 0.75-10mm <sup>2</sup> (18-8AWG) PZ2 or flat 5.5x1mm screw drivers recom- mended (max. diameter 6mm)	Max. tightening torque: 2.2Nm (19lbsin) Rigid wire = 1-16mm <sup>2</sup> (16-6AWG) Multistrand wire = 0.75-10mm <sup>2</sup> (18-8AWG) PZ2 or flat 5.5x1mm screw drivers recom- mended (max. diameter 6mm)
Operating temperature	-25°C to 60°C	-25°C to 60°C
Storage temperature	-25°C to 80°C	-25°C to 80°C
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	Shock testing according to IEC 61373 Category 1 Class B Shock testing according to IEC 60068-2-27 15g/11ms/18 shocks

## Specific usage conditions

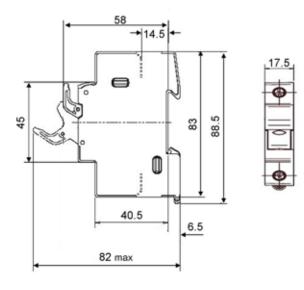
Ambient temperature	>20°C	30°(	C	40°C	5	50°C	60°C
Derating factor (I <sub>e</sub> )	1	0.95	5	0.9	C	).8	0.7
No of poles (side by side) 1 to 3			>/= /	4			
Derating factor of current (I <sub>th</sub> ) 1			0.9				
Nominal current of fuse-link gR			20 A	2	5 A	30 A	32 A
Max. operational current in fuse-holder			19 A	2	2 A	25 A	27 A
Cable wire section			2.5 mm	n² 4	mm²	6 mm <sup>2</sup>	e mm



# Modulostar<sup>®</sup> CMS10

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## **Dimensions**



## Accessories



CMS8010PAK + fuse-holder



TAGLOCKCMS810









TBB23A

## Kit for multi phase connection

Catalog number	Design	Package
CMS810PAK	links for connection of multipole units	12

## Locking devices

Catalog number	Design	Package
LOCK	Padlock	1
TAGLOCKCMS810	Locking kit (Tag and lockout)	1

#### **Power supply**

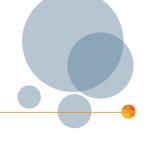
Catalog number	Application	Design	Package
TBB1A	max. rms current 90A	1 phase axial incoming power supply	50
TBB1C	max. rms current 90A	1 phase lateral incoming power supply	50
TBB23A	max. rms current 90A	2 & 3 phases axial incoming power supply	50
TBB23C	max. rms current 90A	2 & 3 phases lateral incoming power supply	50









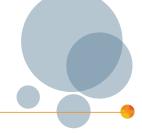


Fuse Holders, Fuse Bases and Supports / DS-LACYCS10-02-0414

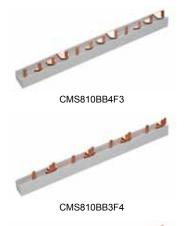
#### www.ep.mersen.com

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## **Accessories**





Catalog number	Application	Design	Package
CMS810BB4F3	Max. rms current 100A, for installation of 3 modules	quadruple pole, 10 mm <sup>2</sup> , partition 17,5 mm (distance of poles), peg design, L-shaped	10
CMS810BB3F4	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
CMS810BB2F6	Max. rms current 63A, for installation of 6 modules	double pole, 10 mm <sup>2</sup> , partition 17,5 mm (distance of poles), peg design, L-shaped	10
CMS810BB1F13	Max. rms current 63A, for installation of 13 modules	single pole, 10 mm <sup>2</sup> , partition 17,5 mm (distance of poles), peg design, L-shaped	10





