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

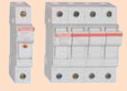
- Finger safe
- Degree of protection: IP20
- Optional visual blown fuse indicator
- **DIN** rail mounting
- Modular design
- Lockable
- Multi-pole assembly kit available
- Sealable in closed and open position
- Plastic material UL94V2 mini
- Flame retardant materials with glow wire flammability index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

Applications

- All circuits up to 400V for protection of motors, transformers, low voltage distribution, control circuits
- Non-load operation

Technical data overview

| Volt (VAC) | 500 VAC |
|-----------------|--|
| Volt (VDC) | 500 VDC |
| Amper (A) | 25 A |
| Product Size | For cylindrical fuse links 8.5x31.5 AM, gG |
| Mounting | Installation on to DIN rails to EN 60715 |
| 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













Product range



CMS81



CMS82



CMS83



CMS83N

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

| Catalog number | Reference number | Number of poles/ phases | Design | Weight | Package |
|-------------------|---------------------|----------------------------|--------------------------------------|---------|---------|
| CMS810N | D305006 | N | CMS8 neutral conductor | 65.8 g | 12 |
| CMS81 | X305000 | 1 | CMS8 single pole | 60.8 g | 12 |
| CMS81N | Y305001 | 1 + N | CMS8 single pole + neutral conductor | 70 g | 6 |
| CMS82 | Z305002 | 2 | CMS8 double pole | 121.6 g | 6 |
| CMS83 | A305003 | 3 | CMS8 triple pole | 182.5 g | 4 |
| CMS83N | B305004 | 3 + N | CMS8 triple pole + neutral conductor | 263.3 g | 3 |
| CMS84 | C305005 | 4 | CMS8 quadruple pole | 243.3 g | 3 |





CMS83NI

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

| Catalog number | Reference number | Number of poles/ phases | Design | Weight | Package |
|-------------------|------------------|----------------------------|--------------------------------------|---------|---------|
| CMS81I | E305007 | 1 | CMS8 single pole | 60.8 g | 12 |
| CMS81NI | F305008 | 1 + N | CMS8 single pole + neutral conductor | 131.6 g | 12 |
| CMS82I | G305009 | 2 | CMS8 double pole | 121.6 g | 6 |
| CMS83I | H305010 | 3 | CMS8 triple pole | 182.5 g | 6 |
| CMS83NI | J305011 | 3 + N | CMS8 triple pole + neutral conductor | 163.3 g | 4 |
| CMS84I | K305012 | 4 | CMS8 quadruple pole | 243.3 g | 3 |

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Modulostar® CMS8 Modular fuse-holders



Technical Data

| | CMS8 | CMS8I |
|---|--|--|
| 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 |
| Power dissipation at I _{th} | 2.5 W | 2.5 W |
| Utilisation category | AC20B/DC20B | AC20B/DC20B |
| Rated insulation voltage U _i | 500 V | 500 V |
| Rated impulse withstand voltage U _{imp} | 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 = 1-16mm² (16-6AWG) multistrand wire = 0.75-10mm² (18-8AWG) PZ2 or flat 5.5x1mm screw drivers recommended (max. diameter 6mm) | max. tightening torque: 2.2Nm (19lbsin) rigid wire = 1-16mm² (16-6AWG) multistrand wire = 0.75-10mm² (18-8AWG) PZ2 or flat 5.5x1mm screw drivers recommended (max. diameter 6mm) |
| Operating temperature | -25C to 60°C | -25C to 60°C |
| Storage temperature | -25C to 80°C | -25C 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 60068-2-27 15g/11ms/18 shocks Shock testing according to IEC 61373 Category 1 Class B * for specific usage please contact us | Shock testing according to IEC 60068-2-27 15g/11ms/18 shocks Shock testing according to IEC 61373 Category 1 Class B * for specific usage please contact us |

Specific usage conditions

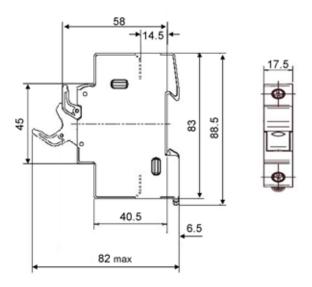
| Ambient temperature | >20°C | 30°C | 40°C | 50°C | 60°C |
|-----------------------------------|-------|------|------|------|------|
| Derating factor (I _e) | 1 | 0.95 | 0.9 | 8.0 | 0.7 |

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



Dimensions

Modulostar® CMS8 fuse-holders for cylindrical fuse-links class 8.5x31.5mm



Dimensions in mm

Accessories



CMS8010PAK + fuse-holder

Kit for multi phase connection

| Catalog number | Reference number | Design | Weight kg¹) | Package |
|-------------------|------------------|---|----------------|---------|
| CMS810PAK | Z233725 | links for connection of multipole units | 0,00058 | 12 |



LOCK TAGLOCKCMS810

Locking devices

| Catalog number | Reference number | Design | Weight kg¹) | Package |
|-------------------|---------------------|-------------------------------|----------------|---------|
| LOCK | M223525 | Padlock | 0.042 | 1 |
| TAGLOCKCMS810 | A235773 | Locking kit (Tag and lockout) | 0.009 | 1 |

Accessories



Power supply

| | Reference number | Design | Application | Weight kg ¹⁾ | Package |
|--------|---------------------|--|----------------------|----------------------------|---------|
| TBB1A | D210315 | 1 phase axial incoming power supply | max. rms current 90A | 0.010 | 50 |
| TBB1C | E210316 | 1 phase lateral incoming power supply | max. rms current 90A | 0.010 | 50 |
| TBB23A | F210317 | 2 & 3 phases axial incoming power supply | max. rms current 90A | 0.023 | 50 |
| TBB23C | G210318 | 2 & 3 phases lateral incoming power supply | max. rms current 90A | 0.023 | 50 |



CMS810BB4F3



CMS810BB3F4





CMS810BB1F13

Wiring bars / Insulated bus bars

| Trining bats / insulated bas bats | | | | | | | | |
|-----------------------------------|---------------------|--|---|----------------------------|---------|--|--|--|
| Catalog number | Reference number | Design | Application | Weight kg ¹⁾ | Package | | | |
| CMS810BB4F3 | X210309 | quadruple pole, 10 mm², partition 17,5 mm (distance of poles), peg design, L-shaped | Max. rms current 100A, for installation of 3 modules | 0.106 | 10 | | | |
| CMS810BB3F4 | W210308 | triple pole, 10 mm², partition 17,5 mm (distance of poles), peg design, L-shaped | Max. rms current 100A, for installation of 4 modules | 0.085 | 10 | | | |
| CMS810BB2F6 | V210307 | double pole, 10 mm², partition 17,5 mm (distance of poles), peg design, L-shaped | Max. rms current 63A, for installation of 6 modules | 0.075 | 10 | | | |
| CMS810BB1F13 | T210306 | single pole, 10 mm², partition 17,5 mm (distance of poles), peg design, L-shaped | Max. rms current 63A, for installation of 13 modules | 0.036 | 10 | | | |



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