

PHOTOVOLTAIC

FUSE LINKS & FUSE HOLDERS FOR PHOTOVOLTAIC APPLICATIONS

HORUS[®]
PHOTOVOLTAIC
PROTECTION



PMX 1000V DC

PV fuse holder
for cylindrical fuse links

PMX 10x38



10x38



14x51



22x65

**PROTECTING
THE WORLD**





RATED CURRENT 32A
RATED VOLTAGE 690V AC 1000V DC
MAXIMUM POWER DISSIPATION 4W
PROTECTION INDEX IP20

STANDARDS
IEC/EN 60269-1
IEC/EN 60269-2
UL 4248-1
UL 4248-19
UL 486E
CSA C22.2 N° 4248-1
CSA 22.2 N° 65



Modular fuse holders that offer 1000V DC rated voltages

Modular fuse holder for cylindrical fuse link size 10x38 according IEC/EN 60269 standard.

Compact design, with reduced dimensions.

Ventilation zones optimized for a better heat dissipation.

Manufactured with a high quality materials

- Silver plated copper contacts.
- Plastic materials with high temperature resistance and self-extinguishable.
- All the materials are according to the European Directive RoHS.



Extended range of accessories is available.

UL certification (File E359201).
CSA certification (File 221680).



Accessories

REFERENCE	DESCRIPTION	PACKING Uni /BOX
480005	PINS FOR MULTIPOLE ASSEMBLY	12
485050	HANDLE TIES FOR MULTIPOLE ASSEMBLY	12
485051	LOCK ACCESSORY	5
485052	SPECIAL IP20 PROTECTION ACCESSORY	24
485053	PHASE SEPARATOR ACCESSORY	12
485056	REPLACEMENT FUSING INDICATOR 1000V DC	12
485656	SCREWS PROTECTION ACCESSORY	20

Range

REFERENCE	INDICATOR	POLES	MODULES	PACKING Uni /BOX
485150	—	1P	1	12/192
485151	—	2P	2	6/96
485152	•	1P	1	12/192
485153	•	2P	2	6/96

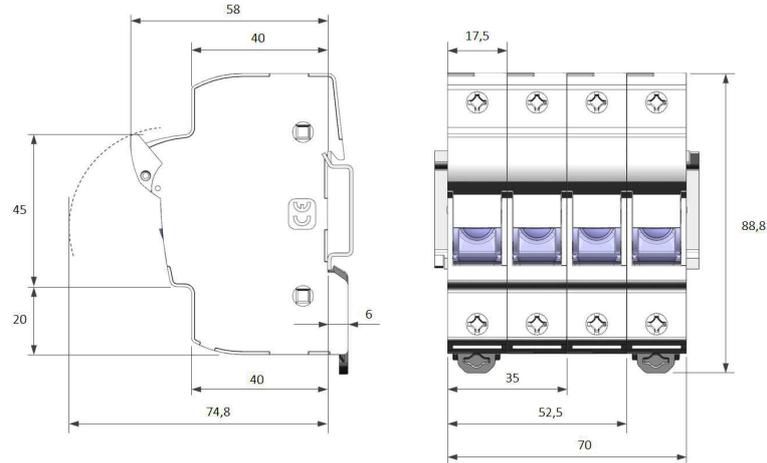


Technical data

Rated current	32A	
Rated voltage	690V AC 1000V DC	
Maximum power dissipation	4W	
Power dissipation per pole	80% $I_n > 0,27W$ 100% $I_n > 0,43W$	
Utilization category as per EN 60947-3	690V > AC-21B 1000V DC > DC-20B	
Pollution degree	3	
Protection index *	IP20	
Rated impulse withstand voltage	6kV U_{imp}	
Ambient temperature of service	-20°C ... 70°C	
Storage temperature	-40°C ... 80°C	
Derating by number of poles	POLES	I_{MAX}
	1 ... 4	I_n
	5 ... 6	0,8 x I_n
	7 ... 9	0,7 x I_n
	≥ 10	0,6 x I_n
Correction of the admissible current in function of the temperature	20° C	1
	30° C	0,95
	40° C	0,90
	50° C	0,80
	60° C	0,70
	70° C	0,60

* For wires of section ≤ 6mm² is necessary the use of the accessory to guarantee IP20 in clamps zone. ► **FIG. 4**

Dimensions



Weight

1P	57gr
2P	114gr

Weight without packing

Standards

- IEC/EN 60269-1
- IEC/EN 60269-2
- UL4248-1 Fuse holders
- UL4248-19 Photovoltaic fuse holders
- UL486E Wiring terminals
- CSA C22.2 N° 4248-1 Fuse holder assemblies
- CSA 22.2 N° 65 Wire connectors

Certifications





Application characteristics

For mounting on DIN/EN standard rail DIN 46277/1-3 (EN50022)
Clip fixation with 2 positions

Screw fixation Available with accessory
▶ **FIG. 7**

Connecting wire
Copper wires only

WIRES	METRIC	AWG	WIRING
1	0,75...16mm ² Solid / Stranded	8...18 AWG Solid / Stranded	
2 Same cross section and type	0,75...10mm ² Solid 0,75...6mm ² Stranded	8...18 AWG Solid 10...18 AWG Stranded	

Wire-end terminals The use of wire-end terminals may allow to increase the connecting wire section.
Wire-end terminals recommended mounting:



The use of wire-end terminals could not guarantee the IP20 protection degree.

Ferrules It's recommended use of ferrules in wires with section ≤ 2,5mm²



The product is delivered with the terminals opened and ready to connect

Tightening torque on terminals	2,5 Nm / 22 lb.in
Screws with a combined head	SLOT + PZ2
Multipolar assembly	▶ FIG. 1
Fuse holders with fuse indicator	NEON VERSION 350...1000V DC
Special zone for sealing	1,5 mm ² wire
Label holder for a better circuit identification	▶ FIG. 2 Suitable size for label: 11x9 mm
Accessory available to lock the fuse holder by a padlock	▶ FIG. 3 (máx. 3 padlocks of Ø 3mm)

Accessories

FIG. 1 | Multipolar assembly

Standard system by DF, 3 clips and 1 pin for each union between poles

- 480005** PINS FOR MULTIPOLE ASSE
- 485050** HANDLE TIES FOR MULTIPOLE ASSEMBLY

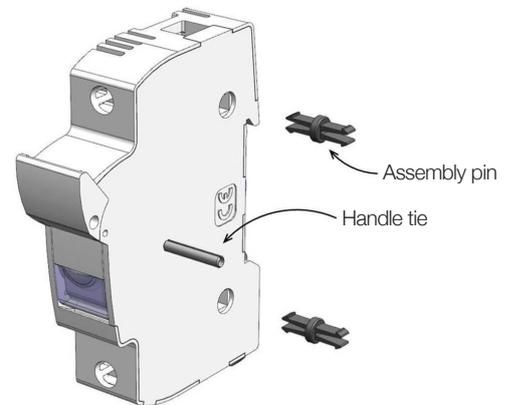
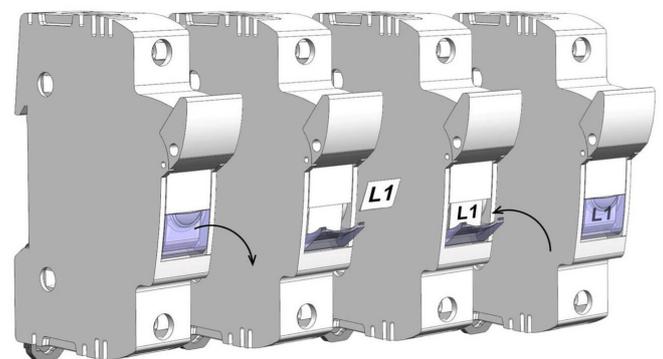


FIG. 2 | Identification by label

Open the label holder part with the fuse holder closed, put on the label and close it



Label measures **11x9mm**



Accessories

FIG. 3 | Lock of the fuse holder

Systems to avoid the operation and connection when the fuse holder is open or closed

485051 LOCK ACCESSORY

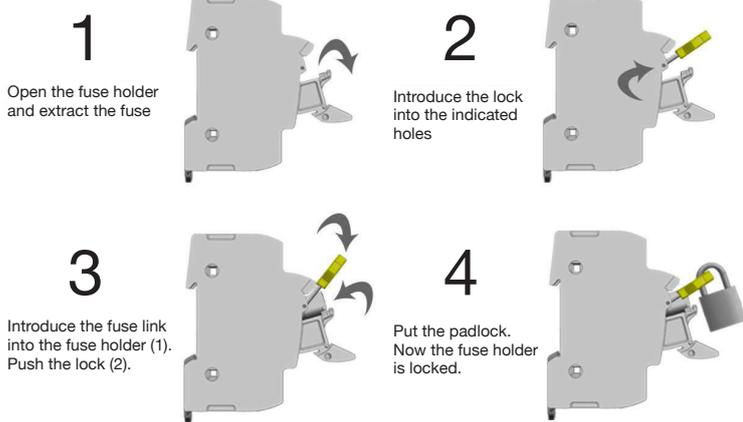
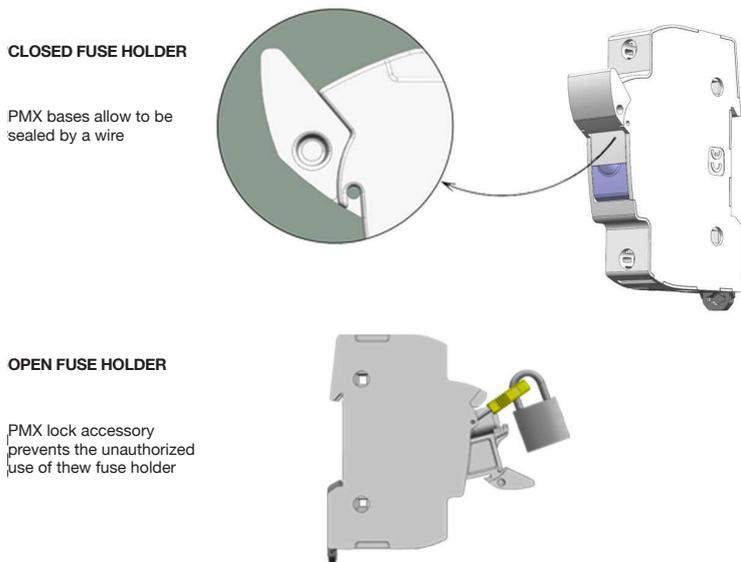


FIG. 4 | Special IP20 protection

The accessory must be positioned in the wire entries, if it's necessary to achieve the IP20 degree of protection with thin wires

485052 SPECIAL IP20 PROTECTION ACCESSORY

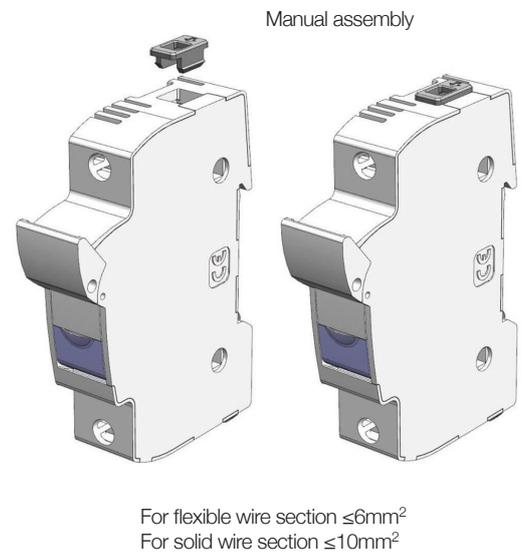
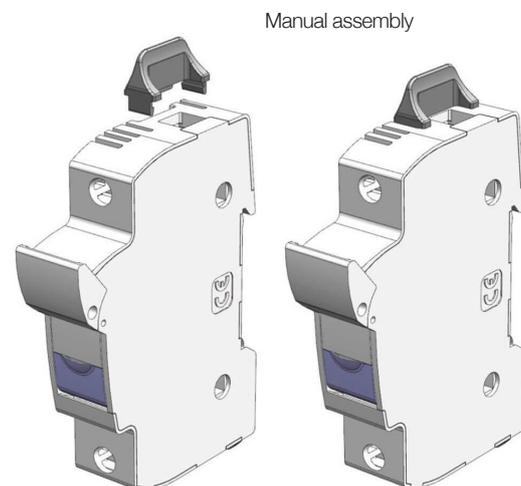


FIG. 5 | Phase separators accessory

The accessory increases the distance between phases in multipolar assemblies

485053 PHASE SEPARATOR ACCESSORY





Accessories

FIG. 6 | Screw's protection accessory

Protection accessory to avoid the screws manipulation and improve the protection degree

485656 SCREW'S PROTECTION ACCESSORY

Manual assembly

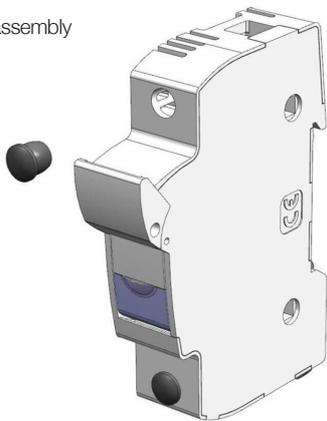


FIG. 7 | Screw fixation accessory

First mount the accessory with screws, then mount the fuse holder (there are available different accessories depending on the number of the fuse holder)

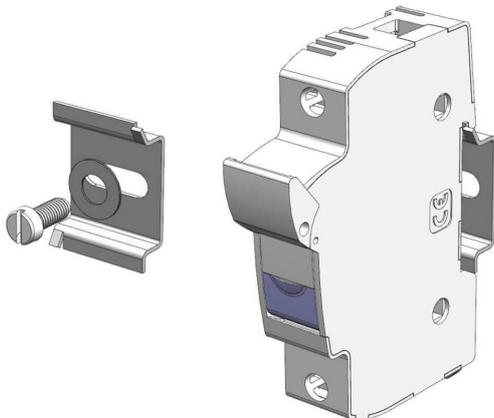
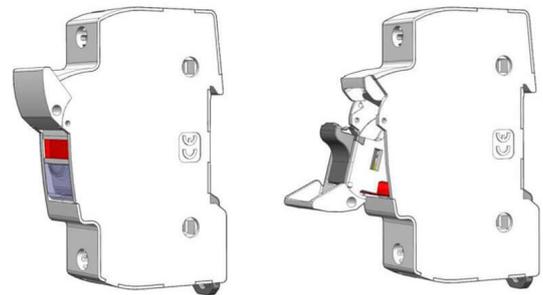


FIG. 8 | Fusing indicator replacement instructions

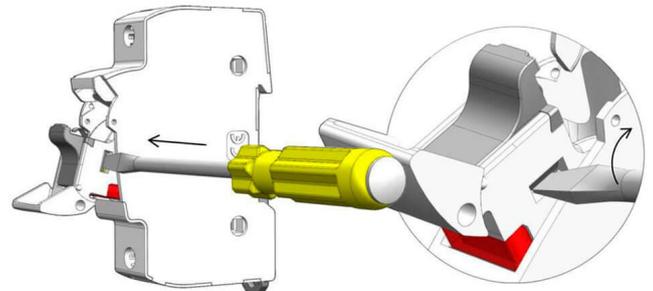
1

Open the fuse holder



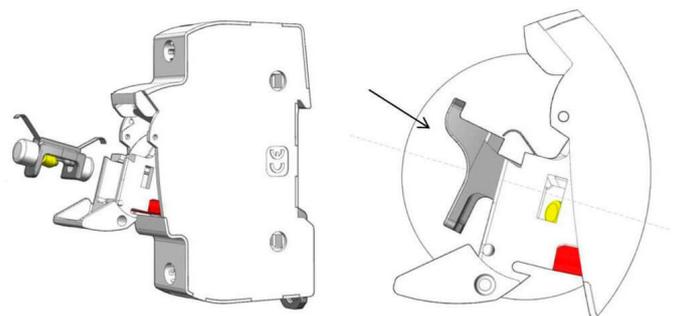
2

Using a flat screwdriver, remove the cover with a slight rotation of the tool



3

Replace the fusing indicator. Enter the cover on the handle with a slight angle





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