

Modular surge arrester
MUA-100

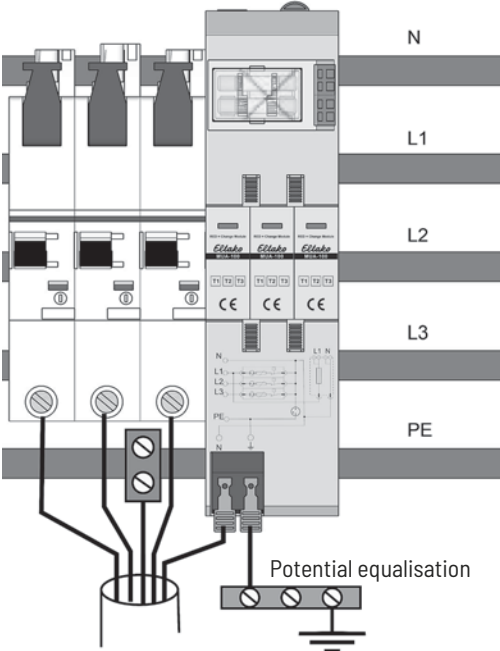


Only skilled electricians may install this electrical equipment otherwise there is the risk of fire or electric shock!

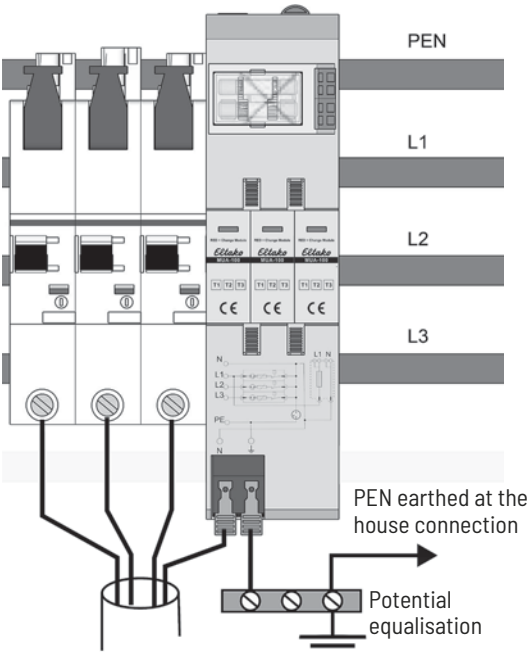
Temperature at mounting location: -20°C up to +50°C.
Storage temperature: -25°C up to +70°C.
Relative humidity: annual average value < 75%.

Modular 12.5 kA Type 1+2+3 surge arrester for mounting on 5 mm and 10 mm busbars.
Suitable for TT, TN-C, and TN-S systems. A fuse cover and a terminal lever are included.

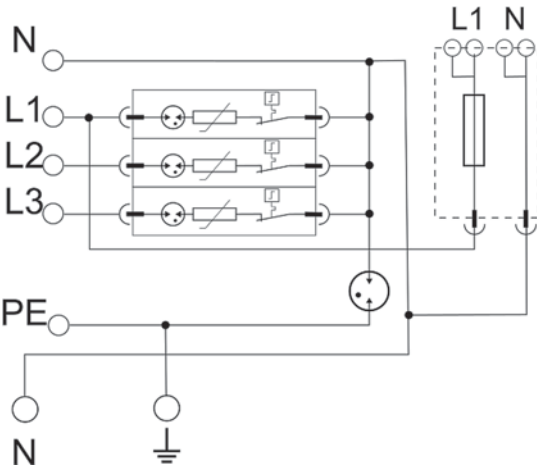
5-wire networks (TN-S and TT)



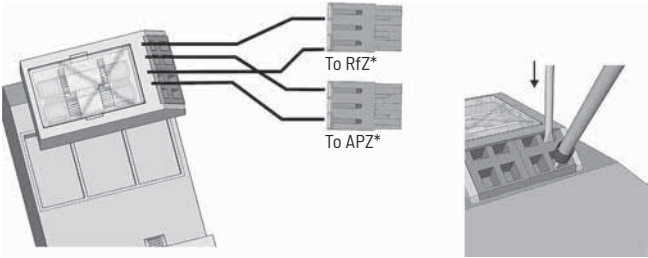
4-wire networks (TN-C system)



Circuit diagram



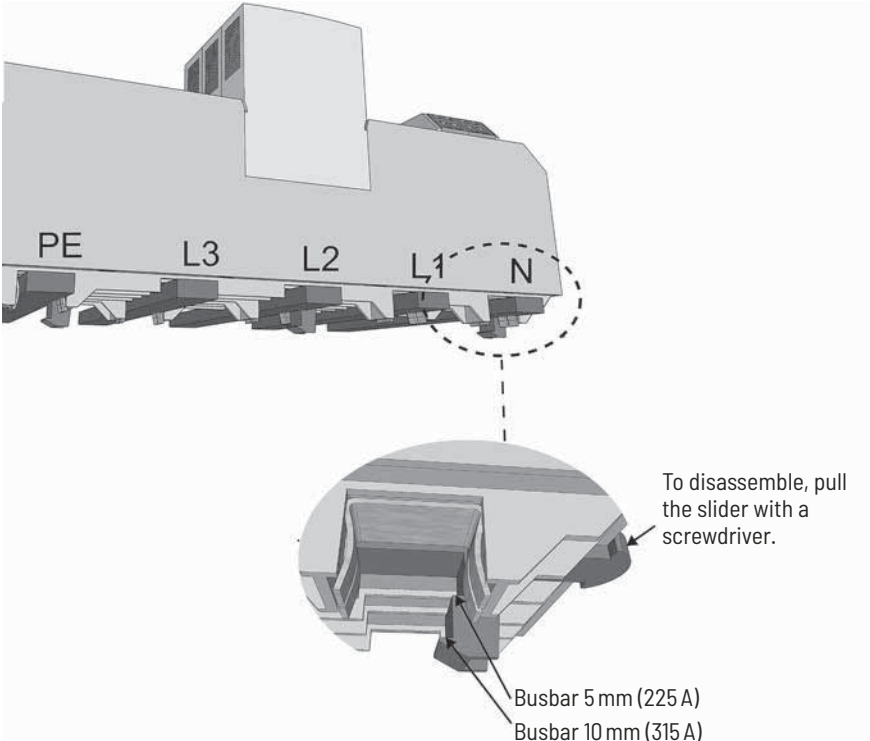
Fuse module optional



Remove the fuse cover on the MUA-100. Insert the SM/MUA-100 fuse module (article number: 28380004) from above and press down until it clicks into place. To insert the control cables to the APZ and RfZ into the terminals, open the terminals with a screwdriver.

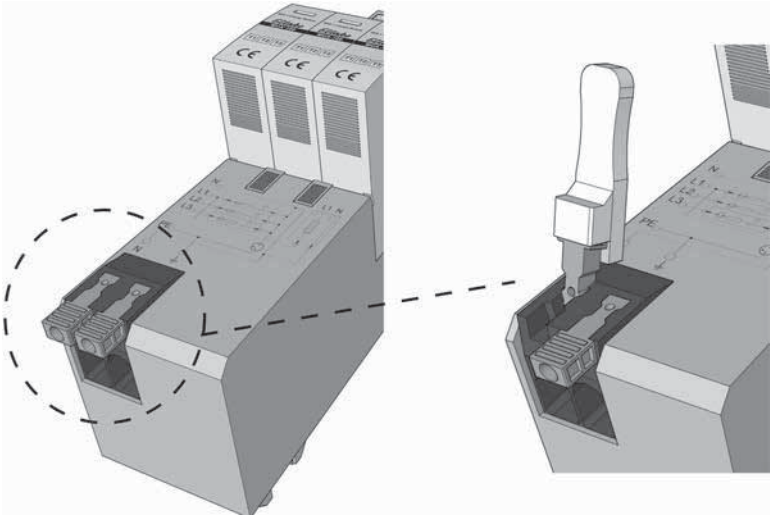
Mounting on a busbar

Place the device on the busbar at the desired position from the front and press until it clicks into place.



Opening the terminals

The terminals can be easily opened using the included terminal lever.



Terms

RfZ: Room for additional applications

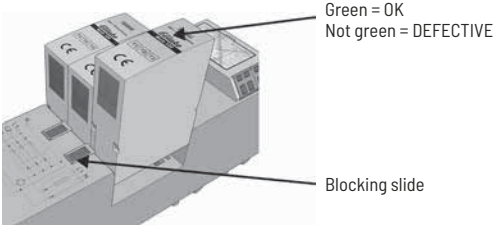
NAR: Network-side connection room

APZ: Meter cabinet connection point

Maintenance

If an error message appears (the viewing window is not green), the affected modules must be replaced.

The modular design allows for individual replacement. To do so, move the locking sliders on both sides of the module to release the blockage. The module can be removed and replaced with a new one.



Technical data

Nominal AC voltage (50/60 Hz)	U_o/U_n	240 V
Maximum continuous operating voltage (AC)	(L1-N) U_c	300 V
	(N-PE) U_c	305 V
Nominal discharge current (8/20 μ s)	(L-N)(N-PE) I_n	20 kA/80 kA
Maximum discharge current (8/20 μ s)	(L-N)(N-PE) I_{max}	50 kA/100 kA
Impulse discharge current (10/350 μ s)	(L-N)(N-PE) I_{imp}	12.5 kA/50 kA
Specific energy	(L-N)(N-PE) W/R	39 kJ/ Ω / 225 kJ/ Ω
Charge	(L-N)(N-PE) Q	3.75 As/15 As
Open circuit voltage of combination	U_{oc}	6 kV
Wave generation voltage protection level	(L-N)(N-PE) U_p	1500 V/1500 V
Follow current interrupt rating	(N-PE) I_n	100 ARMS
Response time	(L-N)(N-PE) t_A	< 100 ns/< 100 ns
Overcurrent protection (max.)		160 A gG
Short circuit current rating (AC)	$I_{sc cr}$	25 kA
TOV withstand 120 min	U_T	442 V
TOV withstand 200 ms	U_T	1200 V

Standards: IEC 61643-11; VDE 0100-534, VDE AR-N-4100
TÜV certificate: AN 50567910 0001



Warning!
Connection and installation should only be carried out by a qualified electrician.
Regional regulations of the responsible grid operator must be strictly observed. The devices may only be used within the limits specified in the technical data.
If covers are opened when replacing modules and live parts are visible, this part of the system must be de-energised.
During service, only replacement modules TRS100-12.5 MOD (article no.: 6010115) may be used.

Manuals and documents in further languages:



<https://eltako.com/redirect/MUA-100>



Must be kept for later use!

ELTAKO GmbH
D-70736 Fellbach
Technical Support English:
☎ +49 711 943 500 25
✉ technical-support@eltako.de
eltako.com

20/2025 Subject to change without notice.