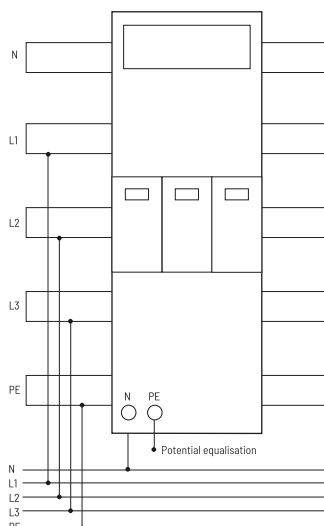
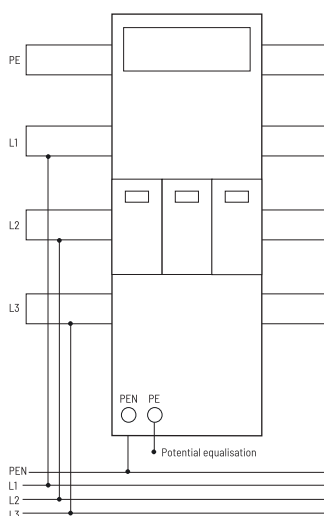


**Typical connection**

5-wire networks (TN-S and TT)



4-wire networks (TN-C network)



Further connection information in the operating instructions.



Manuals and documents in further languages:
<https://eltako.com/redirect/MUA-100>

MUA-100

Mounted on 5 mm and 10 mm busbars.

TÜV-certified according to IEC 61643-11, certificate number: AN 50567910 0001.**The modular combined surge arrester reliably protects electrical systems against transient overvoltages.****Offers high protection against direct lightning strikes in TT, TN-C, and TN-S systems. 12.5 kA surge current withstand capacity per pole. Simple busbar mounting and modular design enable quick installation and maintenance.**

A fuse cover and a terminal lever are included in delivery.

Can optionally be equipped with the SM/MUA-100 fuse module, which enables a protected outgoing circuit from the MUA-100 to an APZ or RfZ panel.

Combines protection classes Types 1, 2, and 3 in one device, thus enabling comprehensive surge protection from the building entrance to the terminal device.**According to DIN VDE 0100 443/534**, the use of a MUA-100 combined surge arrester **is mandatory for new buildings and extensions with high-power consumers** (e.g., wallboxes, heat pumps, PV systems).

If external lightning protection is present, a protection level is required:

Type 1 in the main distribution board (e.g., MUA-100, MUA-50)

Type 2 in the sub-distribution board (e.g., MUA-30, MUA-20)

A Type 2 surge arrester in the sub-distribution board is only required if the cable length to the main distribution board with Type 1+2+3 installed is more than 10 meters.

TECHNICAL DATA

Nominal AC voltage (50/60 Hz)	U_c/U_n	240 V
Maximum continuous operating voltage (AC)	$(L1-N) U_c$ $(N-PE) U_c$	300 V 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_{scrr}	25 kA
TOV withstand 120 min	U_T	442 V
TOV withstand 200 ms	U_T	1200 V
EN 61643-11 Performance characteristics	Typ 1+2+3	

Standards: IEC 61643-11; VDE 0100-534; VDE AR-N-4100

MUA-100	Modular surge arrester type 1+2+3 busbar mounting	Art. No. 28380000	215,00 €/pc.
Optional: SM/MUA-100	Fuse module for MUA-100	Art. No. 28380004	25,00 €/pc.
Repl.: EM/MUA-100	Replacement module for MUA-100	Art. No. 28380005	35,00 €/pc.

Selection Guide

Application scenario	Recommended arrester
Sub-distribution without external lightning protection, cable < 10 m	MUA-20
Sub-distribution with sensitive electronics, cable > 10 m	MUA-30 or MUA-50
Main distribution without external lightning protection	MUA-30
Main distribution with external lightning protection	MUA-50
Busbar system with external lightning protection	MUA-100