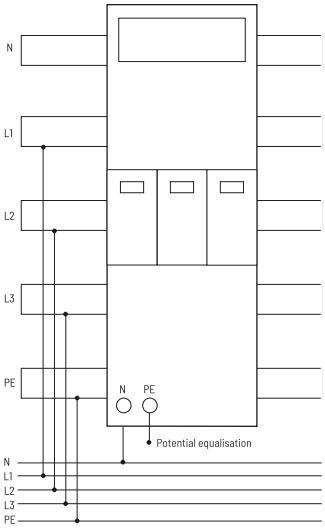
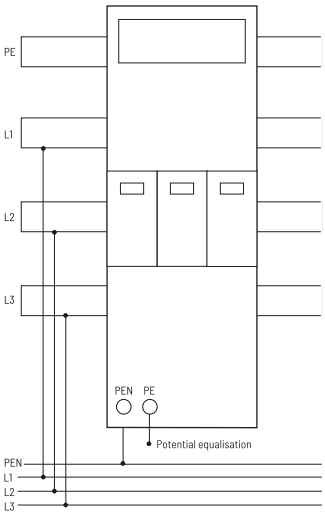


**Typical connection**

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

NEW

Mounted on 5 mm and 10 mm busbars.
**TÜV-certified according to IEC 61643-11, certificate number: AN 50567910 0001.**
**The modular combined surge arrestor reliably protects electrical systems against transient overvoltages with and without external lightning protection.**
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 arrestor **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 arrestor 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)** | **$U_o/U_n$** | **240 V** |
| **Maximum continuous operating voltage (AC)** | **(L1-N) $U_c$**<br>**(N-PE) $U_c$** | **300 V**<br>**305 V** |
| **Nominal discharge current (8/20 µs)** | **(L-N)(N-PE) $I_n$** | **20 kA/80 kA** |
| **Maximum discharge current (8/20 µs)** | **(L-N)(N-PE) $I_{max}$** | **50 kA/100 kA** |
| **Impulse discharge current (10/350 µs)** | **(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)** | **$I_{sccr}$** | **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 arrestor type 1+2+3 busbar mounting | **Art. No. 28380000** | **227,90 €/pc.** |
| **Optional: SM/MUA-100** | Fuse module for MUA-100 | **Art. No. 28380004** | **26,50 €/pc.** |
| **Repl.: EM/MUA-100** | Replacement module for MUA-100 | **Art. No. 28380005** | **37,10 €/pc.** |

**Selection Guide**

| Application scenario | Recommended arrestor |
|---|---|
| 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 and without external lightning protection | MUA-50 |
| Busbar system with and without external lightning protection | MUA-100 |

Recommended retail prices excluding VAT.