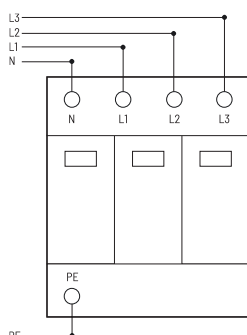


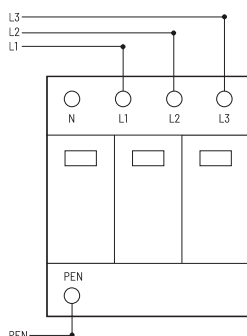


Typical connection

5-wire networks (TN-S and TT)



4-wire networks (TN-C network)



Manuals and documents in further languages:
<https://eltako.com/redirect/MUA-50>

MUA-50

Modular device for DIN-EN 60715 TH35 rail mounting.

TÜV certified according to IEC 61643-11, certificate number: AN 50567910 0001.

4 modules = 72 mm wide.

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 DIN rail mounting and modular design enable quick installation and maintenance.

Combines protection classes Type 1, 2, and 3 in one device, thus enabling comprehensive surge protection from the building entrance to the terminal device.

The use of an MUA-50 combined surge arrester **is mandatory according to DIN VDE 0100 443/534 for new buildings and for expansions with high-power consumers (e.g., wall boxes, 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 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	Type 1+2+3	

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

MUA-50	Modular surge arrester type 1+2+3 DIN rail mounting	Art. No. 28380001	150,00 €/pc.
Repl.: EM/MUA-50MOD	Replacement module MOD for MUA-50	Art. No. 28380007	25,00 €/pc.
Repl.: EM/MUA-50GTD	Replacement module GTD for MUA-50	Art. No. 28380006	30,00 €/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