



Mounting to a Flat Surface\*



Mounting to DIN35\*

- ❖ Industrial Design
- ❖ Two-Stage Protection

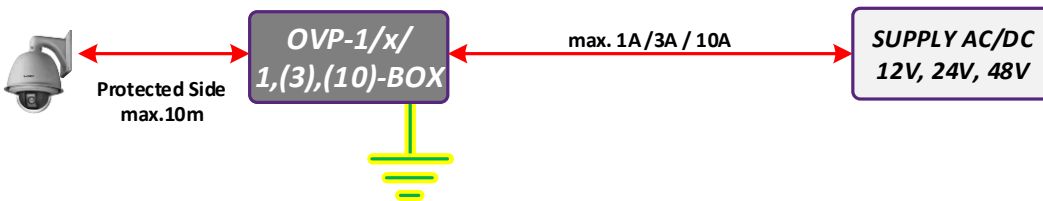
- ❖ PE Terminal Galvanically Isolated
- ❖ Operating Range – 40°C to +70°C

PRODUCT NAME	CODE	NOTE
OVP-1/12/1-BOX	4-401-119	1x 12VDC/1A nebo 6VAC/1A
OVP-1/24/1-BOX	4-401-120	1x 24VDC/1A nebo 24VAC/1A
OVP-2/12/1-BOX	4-401-122	2x 12VDC/1A nebo 6VAC/1A
OVP-2/24/1-BOX	4-401-123	2x 24VDC/1A nebo 24VAC/1A

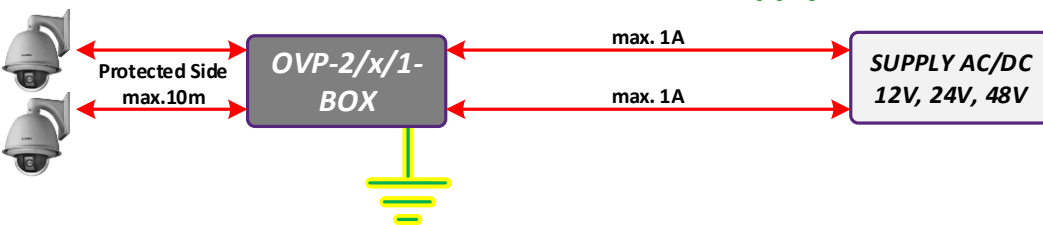
PRODUCT NAME	CODE	NOTE
OVP-1/12/3-BOX	4-401-131	1x 12VDC/3A nebo 6VAC/3A
OVP-1/24/3-BOX	4-401-132	1x 24VDC/3A nebo 12VAC/3A
OVP-1/24/10-BOX	4-401-126	1x 24VDC/10A nebo 24VAC/10A
OVP-1/48/10-BOX	4-401-127	1x 48VDC/10A

\* Holder for Mounting to DIN35 and Flat Surface is Included.

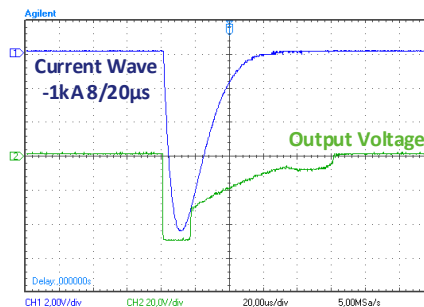
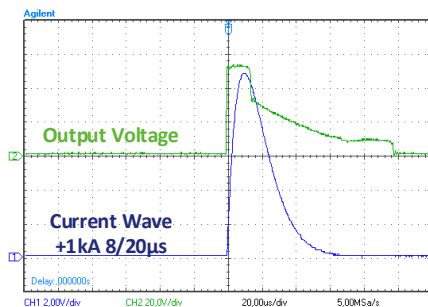
### OVP-1/x/x-BOX - Single-Channel Protections of Supply Lines



### OVP-2/x/x-BOX - Dual-Channel Protections of Supply Lines



### Test C2 in Accordance with IEC61643:21-2000



## Description and Technical Parameters

OVP-x/x/x are overvoltage protections of supply lines 12, 24 and 48V with max. current 1A, 3A or 10A.

The grounding PE terminal is galvanically isolated from signal terminals.

Parameter	Values	Unit
Overvoltage Protection Number of Protected Lines	1 (OVP-1/x/x), 2 (OVP-2/x/x)	
Supply Line Parameters	x/12/1 x/24/1 x/48/1 x/24/10 x/48/10 1/12/3 1/24/3	
Nominal Operating Voltage	12 24 48 24 48 12 24	VDC
Maximal Operating Voltage DC	15 42 59 45 65 15 42	V
Maximal Operating Voltage AC	10 29 41 31 45 10 29	V
Nominal Operating Current	1 1 1 10 10 3 3	A
Overvoltage Protection Line - Line		
C2 Nominal Discharge Current In (8/20)	1 1 1 1 1 1 1	kA
C2 Maximal Discharge Current (8/20)	2 2 2 2 2 2 2	kA
Voltage Protection Level Up at In	22 58 78 155 151 30 48	V
Overvoltage Protection Line - PE		
C2 Nominal Discharge Current In (8/20)	1 1 1 1 1 1 1	kA
C2 Maximal Discharge Current (8/20)	2 2 2 2 2 2 2	kA
Voltage Protection Level Up at In	560 560 560 462 443 560 560	V
Environment Operating Range	-40...+70	°C
Storage Temperature	-40...+70	°C
Mechanical Dimensions - w / h / l	BOX:	Page 3
Weight	0.14	kg
Connection	Terminals	
PE Connection	Wire 2.5	mm <sup>2</sup>
Durability	100 000	Hours
Tested in Accordance with IEC61643:21-2000		
The producer retains the right to change any technical parameters without previous written or published notification.		


## Installation and Settings

1. Mount on a protected surface.
2. Ground the yellow-green wire to the closest earth bar (earthed in accordance to national standards).
3. Connect power supply to the terminals on the unprotected side and the device to the terminals on the protected side.

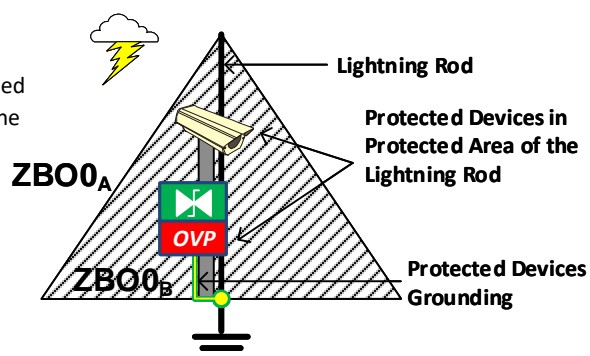
## Outdoor Installation

Overvoltage protections guarantee reliable operation even in outdoor installations.

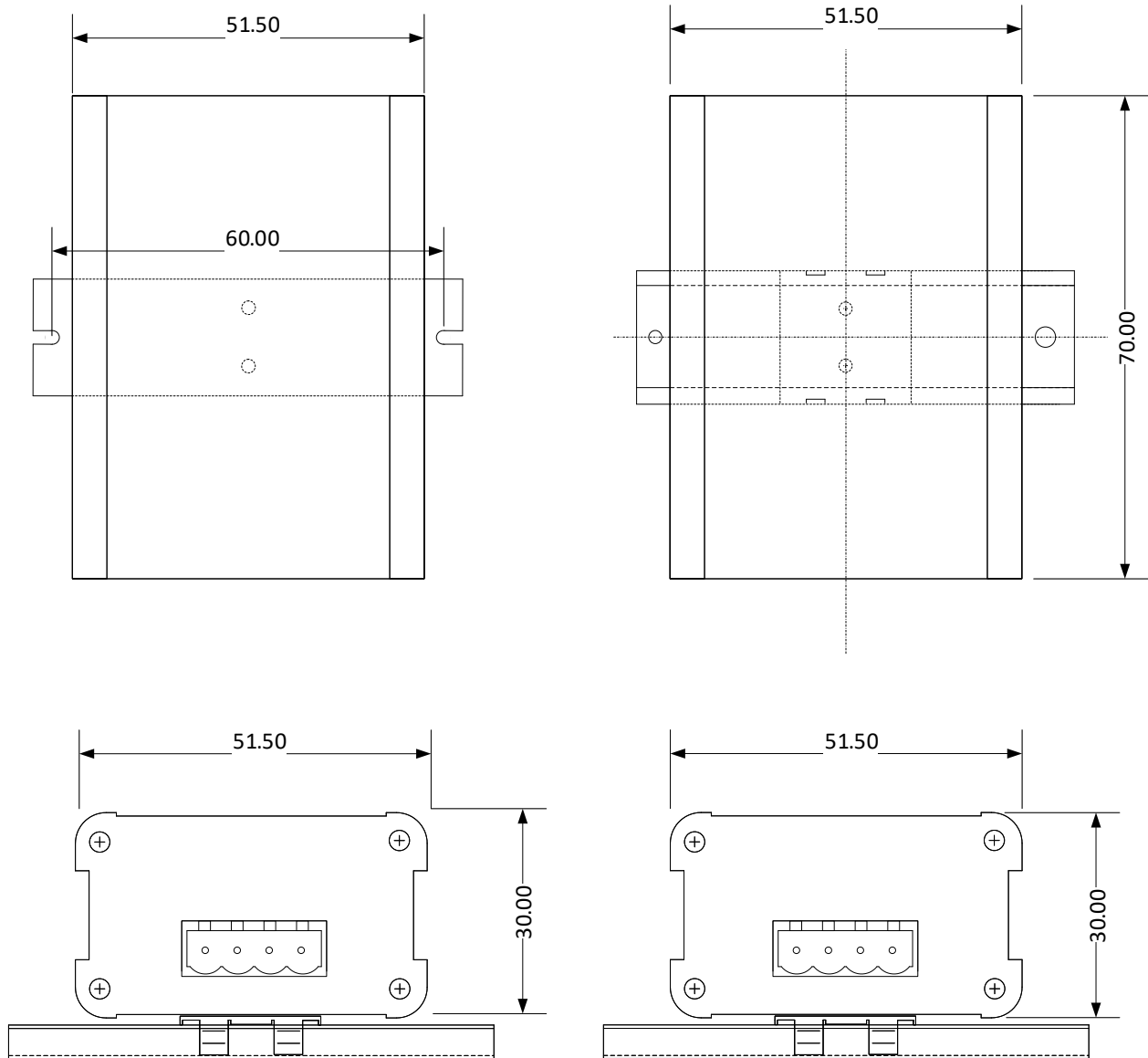
The optimum placement of the devices and cables is in the protected area of a lightning conductor, i.e. ZBO0<sub>B</sub> zone acc. to IEC 62305-4. The channels are protected in two ways:

 - Class D protection consisting of lightning arresters

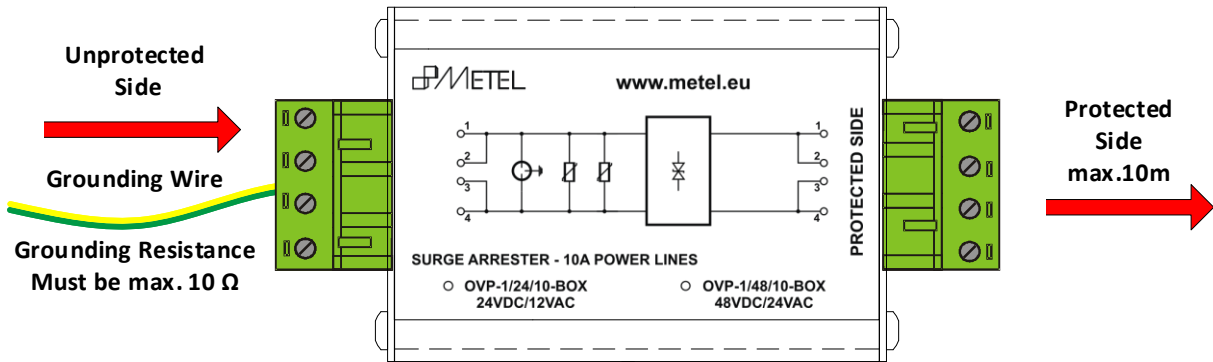
 - Varistor Protections



### Dimensions OVP-BOX



### Connection OVP-1/x/10-BOX



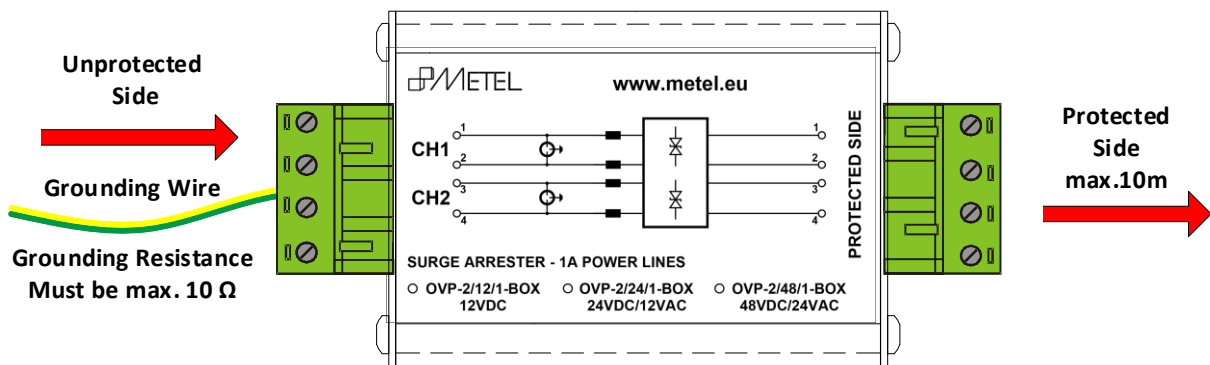
Between terminals 1 and 3 or 2 and 4, connect the supply voltage input, where potential overvoltage is possible. Connect the protected device between terminals 1 and 3 or 2 and 4 at the PROTECTED SIDE output.

**Note:**

Terminals 1 and 2 are interconnected.

Terminals 3 and 4 are interconnected.

### Connection OVP-2/x/1-BOX



CH1 - Channel 1, connect the input of the supply voltage between terminals 1 and 2 where potential overvoltage is possible.

Connect the protected device between terminals 1 and 2 at the PROTECTED SIDE output.

CH2 - Channel 2, connect the input of the supply voltage between terminals 3 and 4 where potential overvoltage is possible.

Connect the protected device between terminals 3 and 4 at the PROTECTED SIDE output.

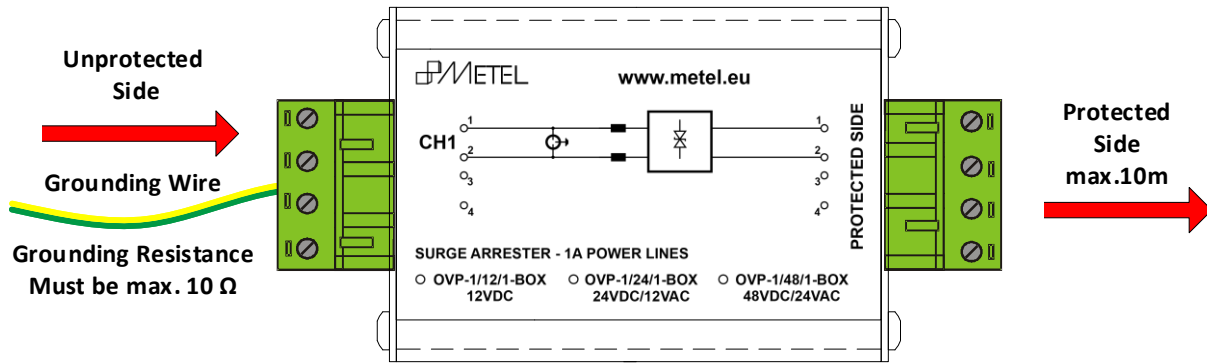
**Note:**

The connection of input and output terminals is "equivalent".

**Example:**

If you connect a positive voltage to terminal 1, this voltage will be at the terminal 1 protected side.

Connection OVP-1/x/1-BOX



CH1 - Channel 1, connect the input of the supply voltage between terminals 1 and 2 where potential overvoltage is possible. Connect the protected device between terminals 1 and 2 at the PROTECTED SIDE output.

**Note:**

The connection of inputs terminal 1 and 2 are "equivalent". Input and output terminals 3 and 4 are not connected.

**Example:**

If you connect positive voltage to terminal 1, this voltage will be at the terminal 1 protected side.