

# **OVP**

# Overvoltage and lightning protection units - Series OVP

#### Use:

- sensor technologies (0/4...20 mA)
- microcomputers input protection
- protection of sensors and readers
- telecommunication technologies
- · devices and technologies

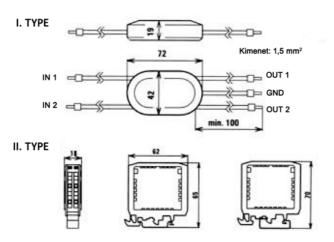


Two-wire overvoltage protection units OVP are aimed for sensor protection, electronic equipment, signal lines, and current loops lines 0/4-20mA against overvoltage, static electricity and surge protection. They are provided in the manufacture of wire-bound orifice for off-road installation as well as installation on DIN-rail into switch boards.

Two-wire overvoltage protection units have degree-like voltage restriction. Until a slow performance protection gets started, the overvoltage coming into existence is restricted by a fast protection. From the point of view of overvoltage restriction there are two types produced:

Those with a fast restriction between signal conductors /type A/, or those against protective ground /type B/. It is recommended that the GND outlet is to be anchored into the protective ground by the shortest possible way. If the earth lead is too long, it decreases the protection efficiency and the reaction time is geting longer. When overcoming  $P_{max}$  the protection gets short-circuited. The protection is guaranteed by EMC 89/336 EEC. The protection is bi-polar. The attached lead is connected with the IN braces, where the overvoltage existence, is expected. The protected equipment is plugged into the brace OUT.

#### **Mechanical dimensions:**



#### **Technical data:**

signal type:

Restricton voltage (U<sub>nom</sub>):

loops lines 0/4...20 mA

slow: 90  $V_{pp}$ 

fast: 5,8 V<sub>pp</sub>, 19 V<sub>pp</sub>, 33 V<sub>pp</sub>  $I_{ESM} = 50A$  for impulse 8/20 µs

Active resistance of one seam only:

Inductivity:

Reverse current:

Ambience temperature:

Mechanical dimensions:

13 Ohm ± 10%

1,8 µH (OVP 12, 22, 32, 42)

200 µH (OVP 13, 23, 33, 43)

10 μA by U<sub>nom</sub>

600W/1 ms

Undistinguished impulsed Power P<sub>max</sub>:

Cover:

I. type (Outdoor oval ver.) IP54
II. type(for 35 mm DIN-rail) IP20

-25...+65 C

I.type 42 x 79 x 19 mm

II. type 18 x 62 x 65 mm

weight:

I. type.: 40 g, II. type.: 50 g

## The electrical connecting principle:

OVP 12, 42, 13, 43

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(C) IN 1 OUT 1 (F)

V2

D1

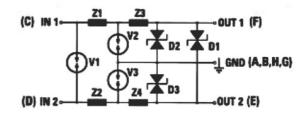
GND (A,B,H,G)

V3

Z4

OUT 2 (E)

OVP 22, 32, 23, 33



## **Example of order:**

OVP 32/33 - Two-wire protection with fast protection between signal conductors and protective ground, work voltage  $33 \, V_n$ , DIN-rail installation 35mm

# **Example of use**

