

VOLTAGE DETECTION SYSTEM

VDS 002



The voltage detection system (VDS) is used to detect the presence of phase voltages on MV power lines.

The VDS 002 consists of the following structural parts:

- a set of sensors (depending on the level of the sampled voltage)
- cabling
- evaluation unit for VDS002

The VDS002 is designed for mounting in indoor switchgear cabinets. The length of the connecting cabling can be adapted to customer wishes. The evaluation unit of VDS002 is equipped with plastic parts for fixing to the side wall of the MV switchgear cabinet.

Compared to VDS 001 the VDS002 is further equipped with relay inputs. The VDS 002 incorporates 2 relays which in combination with yellow indication diodes form a group mounted on the front panel of the evaluation unit. In illuminated condition the yellow indication diodes indicate the closed switching position of the relay. The R1 relay closes if there is voltage on all the power phases. On the other hand, the R2 relay closes only if there is no a voltage at none of the phases. In all other cases none of the relays becomes closed. The relays are used to control auxiliary voltage ranging from 18 to 275 V AC (V DC). The presence of auxiliary voltage is indicated by a green diode installed in the front panel of the evaluation unit.

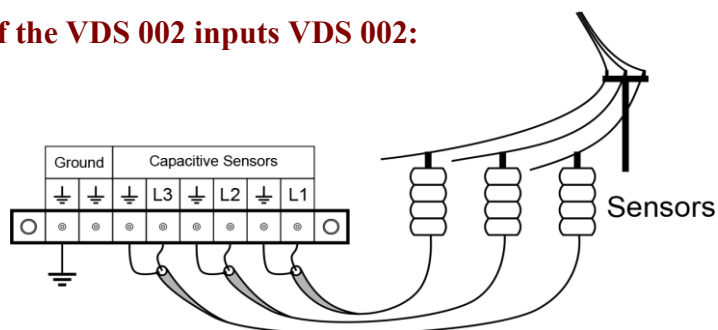
The VDS001 satisfies the requirements of ČSN EN 61243–5 standard, as well as the voltage requirements of GOST 1516.3 – 96 standard.

Other technical parameters, if such are required, need to be agreed with the manufacturer.

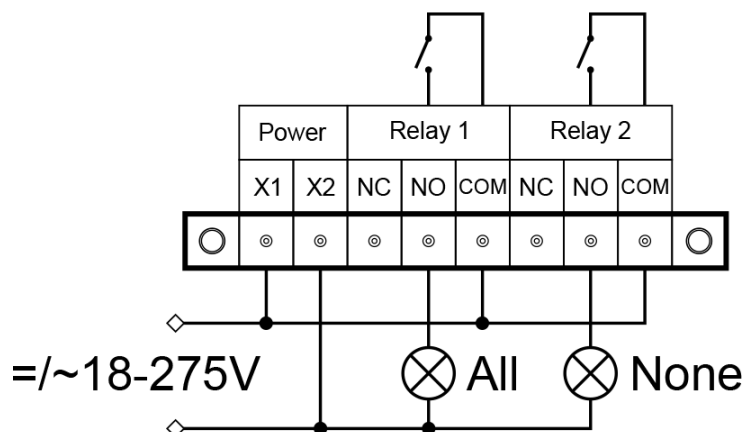
KPB Intra

Instrument Transformers

Circuit details of the VDS 002 inputs VDS 002:



Connection of the VDS 002 outputs



Technical parameters of the VDS 002

Highest voltage of the system:	12, 24, 38.5 kV
AC withstand test voltage:	28, 42, 50, 80 (90) kV
Lightning impulse withstand test voltage:	75, 125, 180 (195) kV
Rated primary voltage:	6 - 12 kV, 15 - 22 kV, 30 - 35 kV
Frequency:	50 Hz
Temperature class of electrical insulation:	E
Operating conditions:	operating temperature range: -5°C to +40°C
Standards:	IEC 61243-5, GOST 1516.3-96

Technical drawing of the VDS 002 unit

