## K-11 RELAY BLOCK

### APPLICATION AREA

The K-11 block of relays is designed for installation in contactor switches or in switching stations of normal design and can be operated in three-phase AC networks with rated voltage up to 500 V and with isolated neutral point of the supply transformer.

The K-11 block combines the following functions of switching relays:

- leakage shutoff protection relay for 500 VAC networks (KZ1 module)
- control relay (KS module)
- relay to monitor presence of phase-to-phase 500V voltages (K24 module)
- time-delay relay (KZW module)
- toggle switch for control mode (REMOTE/LOCAL)

#### DESIGN

The K-11 block of relays is encapsulated in an enclosure with the IP-20 index of protection and suitable for mounting on the TS-35 DIN rail. The enclosure is provided with plugged connectors to communicate with the following circuits:

- KS module:
  - control inputs: terminals 1-2,
  - functional contacts (NO): terminals 31-32 and 33-34,
- KZ1 module:
  - measuring inputs: terminals 3-4,
  - functional contacts: terminals 19-20 (NO) and 21-20 (NC)
- KZW module:
  - control inputs: terminals 16-17,
  - functional contacts: terminals 27-28 (NO) and 29-30 (NC)
- power supply 24 V AC: terminals 6-7
- REMOTE/LOCAL toggle switch: terminal 8-9-10 and 11-12-13

## INSTALLATION

The enclosure of the relay block is snap-on mounted on a standard top hat mounting rail of 35 mm size.

The module is to be connected to the monitored network according to the application diagram with use of LY-1.5...2.5 mm<sup>2</sup> conductors (lug terminals must be squeezed beforehand on bare ends of connecting conductors).

# TECHNICAL PARAMETERS

Rated power supply voltage
24 V AC

KS module

**-** resistance of the control loop  $600\Omega \pm 20\%$ 

**-** tripping time < 400 ms

KZ1 module

- shutoff input resistance 25 k $\Omega$  ± 20%

- reclosure factor < 1.5

KZW module

 $\overline{\phantom{a}}$  delay time 2-3 s

K24 module

range of monitored phase-to-phase
voltages
400 – 600 V

Rated voltage across contacts
250 V AC

Rated continuous current of contacts 6 A

Rated insulation voltage 250 V AC

Dimensions (W x H x D)
90 x 75 x 125 mm

Index of protectionIP 20



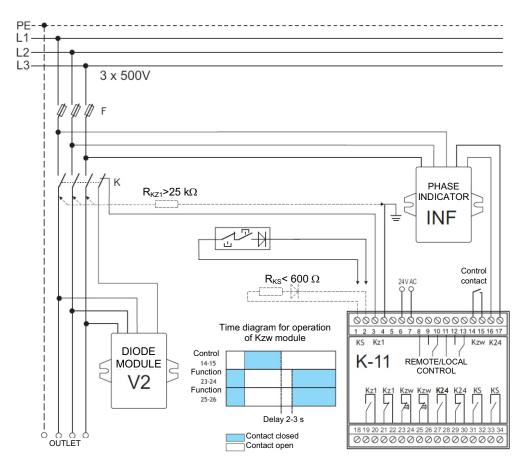


Fig. 1 Application diagram

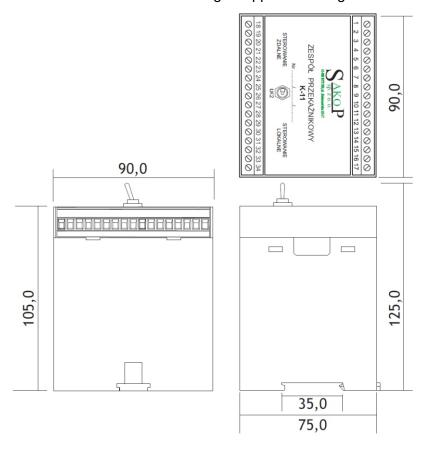


Fig. 2 Dimensional drawing

