

# Phase-Asymmetry Relay Type PS2DK

## Monitoring of Phase-Asymmetry and Phase Sequence

### Phase-Asymmetry Relay PS2DK



Phase asymmetry relays PS2DK are used for the protection of electric motors against asymmetries in the 3-phase mains without neutral and for monitoring the phase-sequence.

The switching-point is adjustable and can be adapted to the situation in the mains.

If a motor, running with 2 phases, creates the 3rd phase, the sensitivity can be increased.

With mains with high harmonics it can be necessary to reduce the sensitivity..

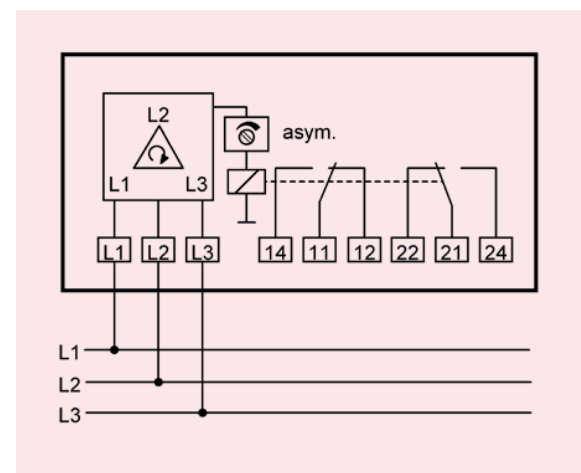
When the sensitivity is reduced to minimum (25% = potentiometer turned fully right), the device works as a phase-sequence relay. It trips only at wrong phase-sequence or missing phase.

If there is a wrong phase-sequence when switching on the device, the relay does not pick up.

- Monitoring of phase-asymmetry
- Monitoring of phase-sequence
- Adjustable sensitivity 5...25 %
- Output-relay with 2 change-over contacts
- Switching delay adjustable 0,1 ... 5 s
- LED for display state of operation

Order-number

**P222505**



### Technical Data

Rated supply Voltage Us

3-phase 380-415 V, without neutral

Admissible tolerance

+10%...-15%

Power consumption

app. 3 VA

Frequency

50/60 Hz

Relay output

2 change-over contacts

Type of contact

**type 2** see "General technical informations"

Test conditions

see "General technical informations"

rated ambient temperature range

-20°C...+55°C

Switching point asymmetry

adjustable 5...25%

Hysteresis

app. 2%

Delay at phase-loss (< 240 V)

app. 0,2 s

Switch-back delay at voltage recovery

app. 0,5 s

Switching-delay at asymmetry

adjustable 0,1...5 s

Switching point at symmetric

not defined

decrease of voltage

Dimensions (H x W x D)

Housing K: 75 x 22,5 x 115 mm

Attachment

on 35 mm DIN-rail or with screws M4 (option)

Protection housing / terminals

IP 30/20

Weight

150 g