PSK Controllers Ltd.

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PCD

Phase control relay with asymmetry detection

- Monitors its own supply voltage.
- detects phase failure, phase sequence and phase asymmetry.
- Detect phase failure with regenerated voltage present (back EMF).
- Asymmetry rate from 7% to 15% of Un
- Detects loss of neutral.
- LED indicates for relay status



When the phase sequence and voltage are correct, the output relay energizes and the red LED is lit. In the event of a wrong phase sequence, phase failure, total loss of phase, asymmetry between the phases, voltage exceeds or descends (with respect to the adjustment value) output relay switches into off-position and the red LED extinguished.

General specifications

- Casing: 60mm
- Asymmetry adjustment: ±5% → ±20%
- Hysteresis: 3%
- Terminal block protection IP20 acc IEC 60529
- Self-extinguishing plastic housing UL V0 acc IEC 529
- Mounting position: on DIN-rail TS 35 according to EN 50022
- Mounting position: vertically
- Terminal: acc IEC 60947-7-1, IEC 60998-1
- Terminal Capacity:1x4mm² without multicore cable end 1x0.5 to 2.5mm² with/without multicore cable end

Incoming supply circuit

- Voltage Failure in one phase detects 190 265Vac
- Symmetry voltage drop in 3 phase detects 190 265Vac
- Frequency: 50 / 60 Hz
- Galvanic isolation of power supply / measurement: No
- Power consumption: 1.6 VA in ~

Output circuit & Display

- Output relay status indication RED LED
- Relay: 1 C/O
- Rated voltage: 250 Vac
- Switching capacity ac: 2000 VA (8A / 250V) COS φ = 1
- Switching capacity dc: 3 A 30 Vdc
- Max switching capacity ac: 10 A
- Mechanical life: 1 x 10⁶ operations
- Electrical life at 1000 VA COS Ψ=1: 200.000 operations

Environmental conditions

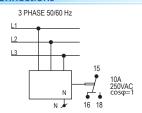
- Permissible ambient temperature: -20°C....+50°C
- Storage temperature: -25°C....+70°C
- Transport temperature: -25°C....+70°C
- Relative humidity (acc. IEC 721-3-3 CLASS 3K3): 15% to 85%
- Vibration resistance (acc. IEC 68-2-6): 10 TO 55 H



Dimensions & weight

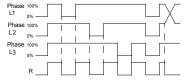
- Width: 62 mm
- Height: 65 mm
- Depth (excl. DIN-profile): 72 mm
- Weight: 137 gram

Connections

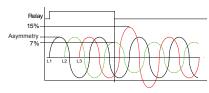


Function

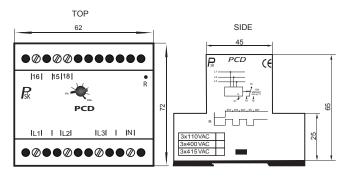




Voltage asymmetry



Dimensions



Ordering information

