Monitoring relays - OCTO series

OPLR3

- Installation design
- Width 35mm
- Voltage monitoring in 3-phase mains
- Connection of neutral wire necessary
- 2 change over contacts



Technical data

1. Functions

Undervoltage monitoring in 3-phase mains (each phase against the neutral wire) with fixed threshold, adjustable tripping delay and fixed hysteresis

5s

indication of supply voltage

indication of relay output

2. Time ranges

Adjustment range Start-up suppression time: Tripping delay: 0.5s

3. Indicators

Green LED ON: Yellow LED ON/OFF:

4. Mechanical design

Self-extinguishing plastic housing, IP rating IP40 Mounted on DIN-Rail TS 35 according to EN 50022 Mounting position: any Shockproof terminal connection according to VBG 4 (PZ1 required), IP rating IP20 Initial torque: max. 1Nm

- Terminal capacity:
 - 1 x 0.5 to 2.5mm² with/without multicore cable end 1 x 4mm² without multicore cable end
 - 2 x 0.5 to 1.5mm² with/without multicore cable end
 - 2 x 2.5mm² flexible without multicore cable end

5. Input circuit

3N~ 400/230V Supply voltage: terminals N-L1-L2-L3 (= measuring voltage) Tolerance: -30% to +10% 48 to 63Hz 16VA (1.7W) Rated frequency: Rated consumption: Duration of operation: 100% <300ms Reset time: Residual ripple for DC: >85% of the supply voltage Drop-out voltage:

6. Output circuit

2 potential free change over contacts	
Switching capacity (distance < 5mm): 750VA (3A / 250V AC)	
Switching capacity (distance > 5mm): 1250VA (5A / 250V AC)	
Fusing:	5A fast acting
Mechanical life:	20 x 10 ⁶ operations
Electrical life:	2 x 10 ⁵ operations
	at 1000VA resistive load
Switching frequency:	max. 60/min at 100VA resistive load
	max. 6/min at 1000VA resistive load
	(according to IEC 947-5-1)
Insulation voltage:	250V AC (according to IEC 664-1)
Surge voltage:	4kV, overvoltage category III
Surge vonage.	
	(according to IEC 664-1)

7. Measuring circuit

Overload capacity:

Input:

3N~ 400/230V terminals N-L1-L2-L3 (= supply voltage) 3N~ 459/265V

Input resistance: Switching threshold U_s : fixed, 195V AC ($U_N \times 0.85$) Hysteresis: fixed, approx. 5%

8. Accuracy

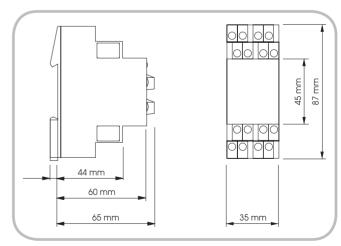
Base accuracy: Adjustment accuracy: Repetition accuracy: Voltage influence: ±1% Temperature influence: ≤0.1% / °C

±4% (of maximum scale value) ≤5% (of maximum scale value)

9. Ambient conditions

-25 to +55°C (according to IEC 68-1) -25 to +70°C Ambient temperature: Storage temperature: Transport temperature: -25 to +70°C Relative humidity: 15% to 85% (according to IEC 721-3-3 class 3K3) 2, if built-in 3 Pollution degree: (according to IEC 664-1)

10. Dimensions



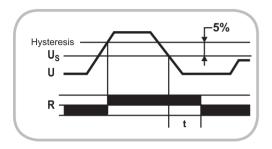
Functions

Undervoltage monitoring in 3-phase mains (each phase against the neutral wire) with fixed threshold, adjustable tripping delay and fixed hysteresis

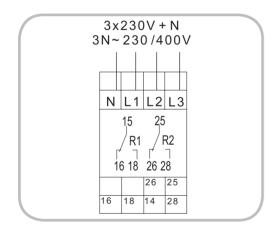
All the unassigned terminals must be linked with a connected phase, lest the missing voltage is displayed according to the function of the device.

If on account of a consumer there is a reverse voltage, which exceeds the fixed threshold, no fault is displayed.

Undervoltage monitoring The output relay R switches into on-position (yellow LED illumi-nated), when the measured voltage of all the connected phases exceeds the fixed threshold by more than the fixed hysteresis. When the voltage of one of the connected phases falls below (TIME) begins. After the interval has expired, the output relay switches into off-position again (yellow LED not illuminated).



Connections



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