- Approved for installations according to DINVDE 0108
- 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 and fixed hysteresis

2. Time ranges

	Adjustment range
Start-up suppression time:	-
Tripping delay:	fixed, approx. 100ms

3. Indicators

Green LED ON:	indication of supply voltage
Yellow LED ON/OFF:	indication of relay output

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

Supply voltage:	3N~ 400/230V	terminals N-L1-L2-L3 (= measuring voltage)
Tolerance:	-30% to +10%	
Rated frequency:	48 to 63Hz	
Rated consumption:	16VA (1.7W)	
Duration of operation:	100%	
Reset time:	<300ms	
Residual ripple for DC:	-	
Drop-out voltage:	>70% of supply voltage	(OPL3 0.7)
	>85% of supply voltage	(OPL3 0.85)

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 (according to IEC 664-1)

7. Measuring circuit

Input:	3N~ 400/230V	terminals N-L1-L2-L3 (= supply voltage)
Overload capacity:	3N~ 459/265V	
Input resistance:	-	
Switching threshold U_S:	fixed, 161V AC (U_N x 0.7)	(OPL3 0.7)
	fixed, 195V AC (U_N x 0.85)	(OPL3 0.85)
Hysteresis:	fixed, approx. 5%	

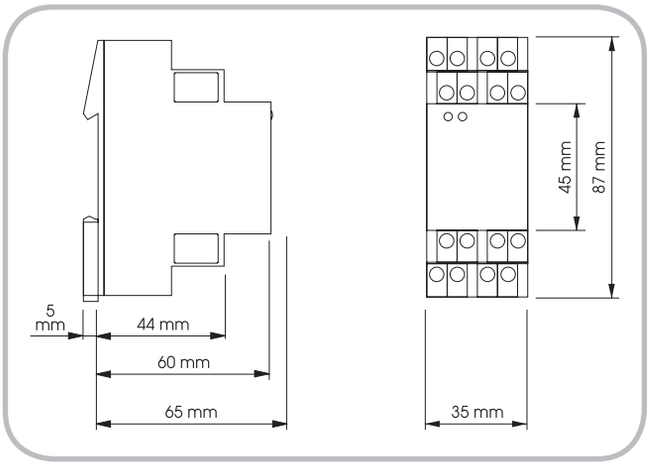
8. Accuracy

Base accuracy:	±4% (of maximum scale value)
Adjustment accuracy:	-
Repetition accuracy:	±1%
Voltage influence:	-
Temperature influence:	≤0.1% / °C

9. Ambient conditions

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

10. Dimensions

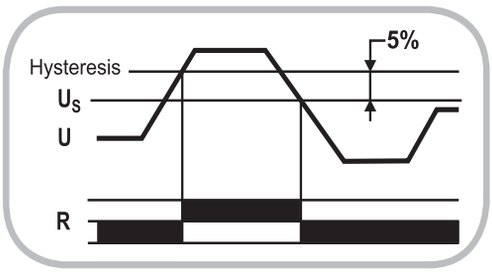


Functions

Undervoltage monitoring in 3-phase mains (each phase against the neutral wire) with fixed threshold 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 illuminated), when the measured voltage of all the connected phases exceeds the fixed threshold (U_N x 0.7 for OPL3 0.7 resp. U_N x 0.85 for OPL3 0.85) by more than the fixed hysteresis. When the voltage of one of the connected phases falls below the fixed threshold, the output relay switches into off-position again (yellow LED not illuminated).



Connections