- Approved for installations according to DINVDE 0108
- Installation design
- Width 35mm
- Voltage monitoring in 3-phase mains
- Integrated test button
- 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, fixed hysteresis and integrated test key

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:	>85% of the supply 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 (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, 195V AC (U_N x 0.85)	
Hysteresis:	fixed, approx. 5%	

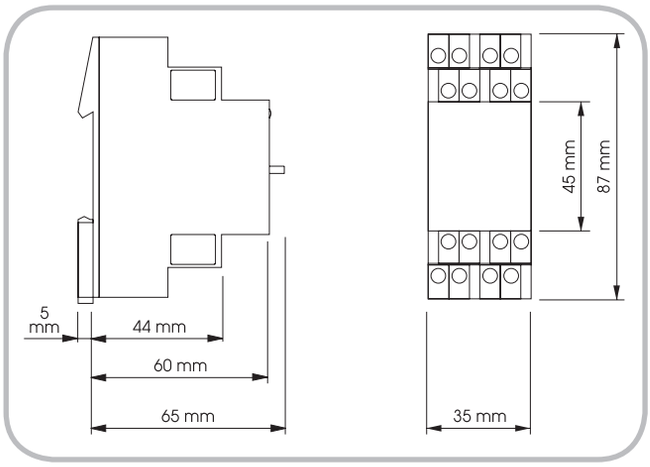
8. Accuracy

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

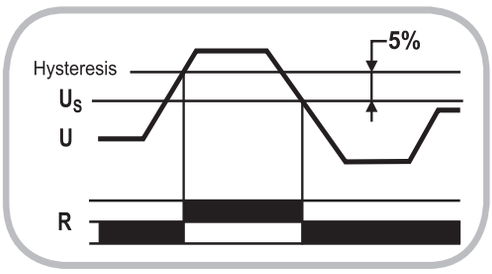


Functions

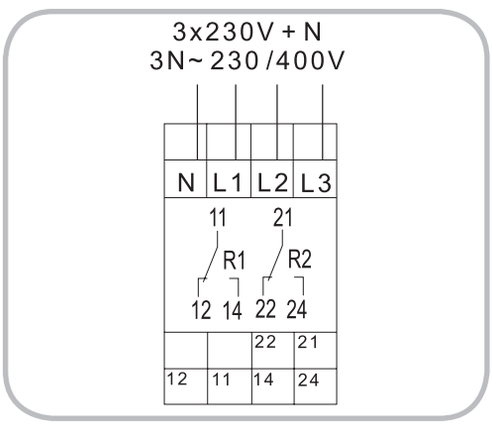
Undervoltage monitoring in 3-phase mains (each phase against the neutral wire) with fixed threshold, fixed hysteresis and integrated test key

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.
On pressing the test key the output relay R switches into off-position.

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 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



Automation Components