

- 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 adjustable 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:	3(N)~ 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:	-	

► 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 10⁶ operations
 Electrical life: 2 x 10⁵ 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

Measuring voltage:	3(N)~ 400/230V	terminals N-L1-L2-L3 (= supply voltage)
Overload capacity:	3N~ 459/265V	
Input resistance:	-	
Switching threshold U _s :	160 to 240V AC	
Hysteresis:	fixed, approx. 5%	

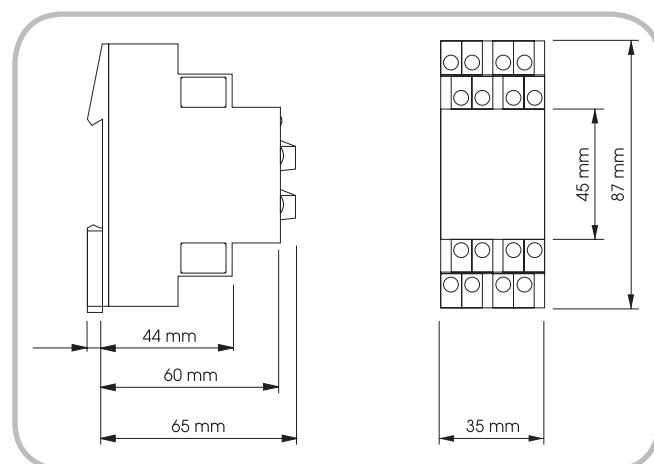
► 8. Accuracy

Base accuracy:	±4% (of maximum scale value)
Adjustment accuracy:	≤5% (of maximum scale value)
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

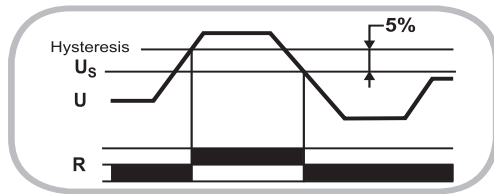
Undervoltage monitoring in 3-phase mains (each phase against the neutral wire) with adjustable threshold and fixed hysteresis

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 value of the threshold set at the U_s -regulator, 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 threshold set at the U_s -regulator by more than the fixed hysteresis. When the voltage of one of the connected phases falls below the set value, the output relay switches into off-position again (yellow LED not illuminated).



Connections

