

- Installation design
- Width 35mm
- Voltage monitoring in 3-phase mains
- 1 change over contact



## ► Technical data

### ► 1. Functions

Monitoring of phase sequence, phase failure and asymmetry with adjustable asymmetry, connection of the neutral wire optional

### ► 2. Time ranges

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

### ► 3. Indicators

Green LED ON:	indication of supply voltage
Red LED ON/OFF:	indication of fault

### ► 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 2.5mm<sup>2</sup> with/without multicore cable end  
 1 x 4mm<sup>2</sup> without multicore cable end  
 2 x 0.5 to 1.5mm<sup>2</sup> with/without multicore cable end  
 2 x 2.5mm<sup>2</sup> flexible without multicore cable end

### ► 5. Input circuit

Supply voltage:	3(N)~ 400/230V	terminals (N)-L1-L2-L3 (= measuring voltage)
Tolerance:	-30% to +35%	
Rated frequency:	48 to 63Hz	
Rated consumption:	8VA (1.2W)	
Duration of operation:	100%	
Reset time:	<1s	
Residual ripple for DC:	-	
Drop-out voltage:	>20% of the supply voltage	

### ► 6. Output circuit

1 potential free change over contact  
 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<sup>6</sup> operations  
 Electrical life: 2 x 10<sup>5</sup> operations at 1000VA resistive load  
 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:	3(N)~ 400/230V	terminals (N)-L1-L2-L3 (= supply voltage)
Overload capacity:	3(N)~ 550/317V	
Input resistance:	-	
Asymmetry:	5% to 20%	

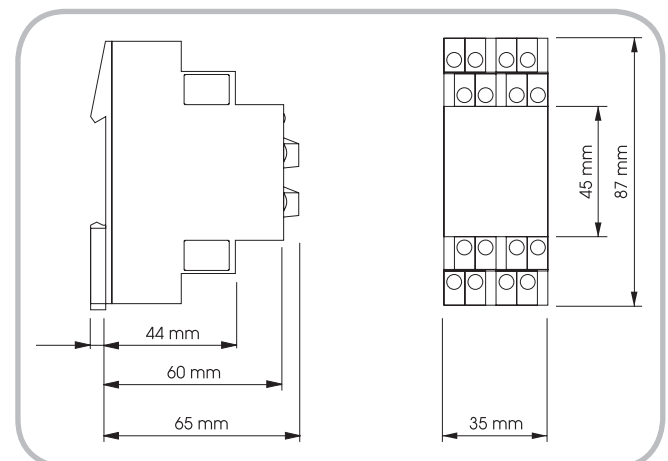
### ► 8. Accuracy

Base accuracy:	±5% (of maximum scale value)
Adjustment accuracy:	≤10% (of maximum scale value)
Repetition accuracy:	±10%
Voltage influence:	-
Temperature influence:	≤0.05% / °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

Monitoring of phase sequence, phase failure and asymmetry with adjustable asymmetry, connection of the neutral wire optional

### Phase sequence monitoring

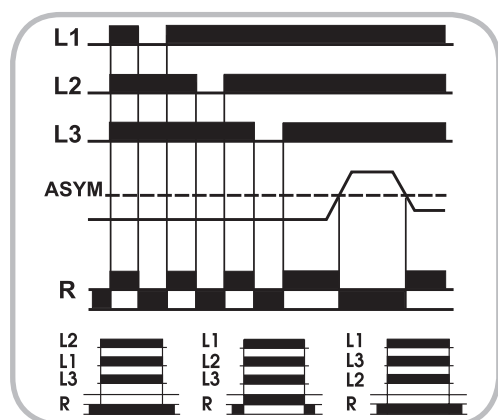
When all the phases are connected in the correct sequence and the measured asymmetry is less than the value set at the ASYM-regulator the output relay switches into on-position (red LED not illuminated). When the phase sequence changes, the output relay switches into off-position (red LED illuminated)

### Phase failure monitoring

The output relay R switches into off-position (red LED illuminated), when one of the three phases fails. Reverse voltages of a consumer (e.g. a motor which continues to run on two phases only) do not effect the disconnection.

### Asymmetry monitoring

The output relay R switches into off-position (red LED illuminated) when one of the phase voltages deviates from the mean value of all the three phase voltages more than the value set at the ASYM-regulator.



## Connections

