

## MEASUREMENT & CONTROL

### RELAY MONITORING 3-PHASE SEQUENCE AND FAILURE

#### SPR-400, SPR-400N

- Monitors 3-phase mains, failures and sequence of phases
- Easy and fast installation
- LED indication of failure
- SPR-400N: Supply L1-N, it means that Relay also monitors breach of neutral point
- SPR-400: Supplied from all 3 phases
- Fixed delay T1 (500ms) and T2 (0.5-10s)
- Output contact: 1x changeover 16 A / 250 V AC1
- 1-MODULE, DIN rail mounting



Technical parameters	SPR-400N	SPR-400
Supply and measuring	SPR-400N	SPR-400
Monitoring terminals:	L1, L2, L3, N	L1, L2, L3
Supply terminals:	L1, N	L1, L2, L3
Voltage:	3x400/230 V	3x400 V
Consumption:	max. 2 VA	
Level Umin:	cca 180 V	
Hysteresis:	5%	
Time delay T1:	max. 500 ms	
Time delay T2:	adjustable 0.5-10 sec	
Output		
Number of contacts:	1x changeover, (AgNi)	
Rated current:	16 A / AC1	
Breaking capacity:	4000 VA / AC1, 384 W / DC	
Inrush current:	30 A / < 3 s	
Switching voltage:	250 V AC1 / 24 V DC	
Min. breaking capacity DC:	500 mW	
Output indication:	red / green LED	
Mechanical life:	3x10 <sup>7</sup>	
Electrical life (AC1):	0.7x10 <sup>5</sup>	
Other information		
Operating temperature:	-20 .. +55°C	
Storage temperature:	-30 .. +70°C	
Electrical strength:	4 kV (supply - output)	
Operating position:	any	
Mounting:	DIN rail EN 60715	
Protection degree:	IP 40	
Overvoltage cathegory:	///.	
Pollution degree:	2	
Max. cable size:	max. 2.5 mm2 / with crimped terminals 1.5 mm²	
Dimensions:	90x17.6x 64 mm, see Dimensions page	
Weight:	70 g	73 g
Standards:	EN 60255-6, EN 61010-1	

#### Functions

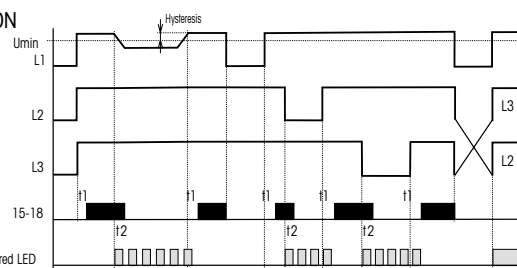
Relay in 3-phase main monitors correct sequence and failure of any phase. Green LED shines permanently and indicates the supply voltage. Red LED flashes when there is a phase failure and relay switches off.

Switchover into a failure state is delayed - the delay is set by a potentiometer on the panel of device. If the phase sequences are not correct red LED shines permanently and the relay is switched off. SPR-400N: Thanks to the supply from one phase (against N) the relay is capable of monitoring and break of neutral wire - it leads to supply failure and relay switches off.

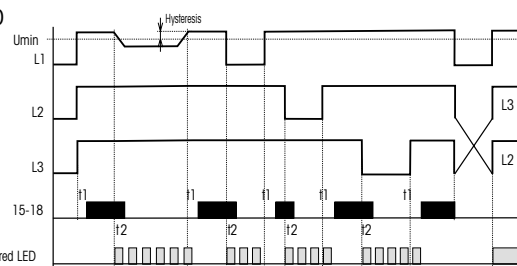
SPR-400: With supply from all three phases the relay is capable of operating even if one phase fails.

#### Functions

##### SPR-400N



##### SPR-400



#### Connection, Description

