

Features

- The relay is designed to monitor phase loss, sequence and asymmetry in 3-phase network.
- Power supply from monitored circuit.
- Wide range of monitored voltage 208 – 480 V.
- Adjustable time delay (to eliminate short-term voltage drops).
- Measures true root mean square value of the voltage - TRUE RMS.
- Adjustable level of asymmetry with the option to turn it off.

RS PRO Family Name

0766924 RS PRO



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Product description

- The relay is designed to monitor undervoltage, phase loss, sequence and asymmetry in 3-phase network.
- Power supply from monitored circuit.
- Wide range of monitored voltage 208 – 480 V.
- Adjustable time delay (to eliminate short-term voltage drops).
- Measures true root mean square value of the voltage - TRUE RMS.
- Adjustable level of asymmetry with the option to turn it off.

Supply and measuring

Supply monitored terminals:	L1-L2-L3
Supply/monitored voltage:	AC 3× 208 – 480 V (50-60 Hz)
Consumption (max.):	2 VA/1 W
Range setting:	fixed
Lower level setting (Umin):	x
Asymmetry setting:	adjustable, 2 – 10 %Un + OFF
Max. permanent voltage:	AC 3× 550 V
Peak overload (1 s):	AC 3× 600 V
Time delay (t1):	2 s
Time delay (t2):	adjustable, 0.3 – 30 s

Accuracy

Setting accuracy (mech.):	5 %
Repeat accuracy:	< 1 %
Temperature dependency:	< 0.1 %/°C (°F)
Hysteresis (fault to OK):	5 %

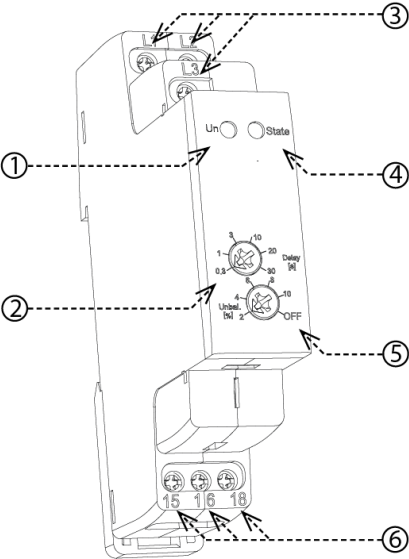
Output

Contact type:	1x changeover/SPDT (AgNi)
Current rating:	16 A/AC1; PD. B300
Breaking capacity:	4000 A/AC1, 384 W/DC1
Switching voltage:	250 V AC/24 V DC
Power dissipation (max.):	1.2 W
Mechanical life:	10.000.000. ops.
Electrical life (AC1):	100.000 ops.

Other information

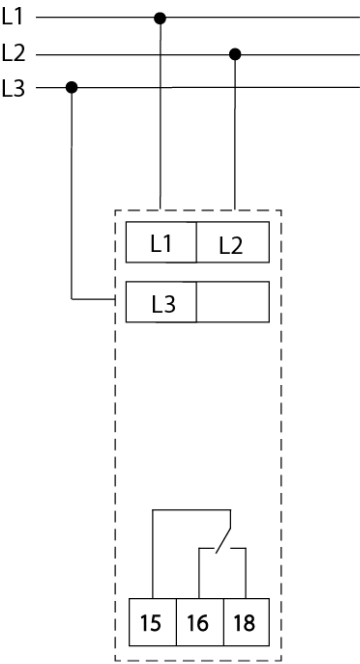
Operating temperature:	-20 .. +55 °C (-4 .. 131 °F)
Storage temperature:	-30 .. +70 °C (-22 .. 158 °F)
Dielectric strength:	AC 4 kV (supply – output)
Operating position:	any
Mounting:	DIN rail EN 60715
Protection degree:	IP40 front panel / IP20 terminals
Overvoltage category:	III.
Pollution degree:	2
Cross-wire section – solid/ stranded with ferrule (mm ²):	max. 1× 2.5, 2× 1.5 max. 1× 2.5 (AWG 14)
Dimensions:	90 × 52 × 66 mm
Weight:	64 g (2.26 oz)
Standards:	EN 60255-1, EN 60255-26, EN 60255-27

Description

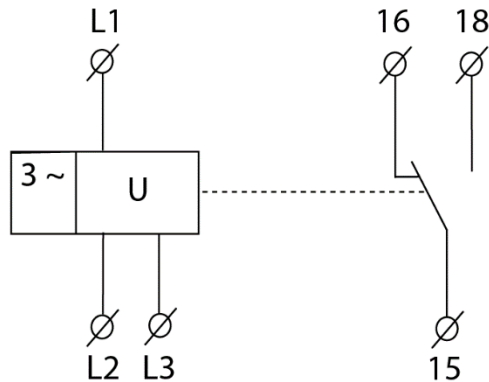


- 1. Supply voltage/time delay (t1) indication
- 2. Time delay (t2)
- 3. Supply/monitored voltage terminals (L1-L2-L3)
- 4. Indication of operating states
- 5. Lower level setting (Umin)
- 6. Output contact (15-16-18)

Connection

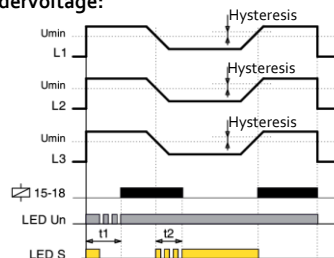


Symbol



Function

Undervoltage:

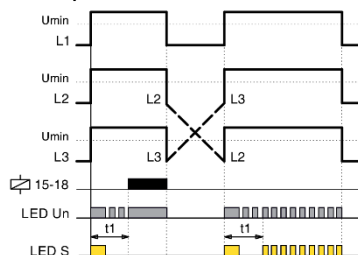


After connecting the device to the supply voltage, both LEDs on the panel will flash briefly.

If 3-phase voltage is connected to the monitoring relay and all conditions are met (correct voltage level, phase sequence and asymmetry), the output contact closes after the time delay t_1 elapsed.

During the time delay, the green „LED Un“ flashes, at the end of the delay „LED Un“ lights up continuously (OK state).

Phase sequence:



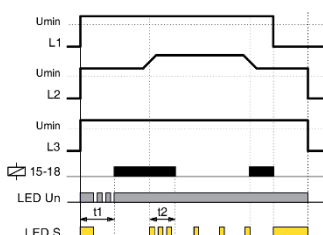
When the voltage drops below the lower level „Umin“ (HRN3-80 only), after the time delay t_2 has elapsed the green and red LEDs are lit. The output contact is open (fault state).

During the time delay t_2 , the red „LED S“ flashes quickly.

If the phase sequence is incorrect when the power supply is connected, after the time delay t_1 has elapsed the green and red LED flashes quickly. The output contact is open (fault state).

During the time delay t_1 , the green „LED Un“ flashes.

Phase asymmetry, failure:



When the set phase asymmetry is exceeded, after the time delay t_2 has elapsed the green LED is lit and the red LED flashes briefly. The output contact is open (fault state).

During the time delay t_2 , the red „LED S“ flashes quickly.

In the event of phase failure, the output contact opens without a time delay t_2 (fault state), the green and red LEDs are lit.