

EAN code HRN-55

HRN-55N



- Replacement for HRN-51 and HRN -51N
- Relay monitors phase sequence and failure, exceeding of monitored voltage in 3 phase main
- HRN-55 supply from all phases, which means that function of relay is applicable also if one phase fails
- HRN-55N supply L1-N, it means that relay also monitors break of neutral point
- Fixed delay T1 (500ms) and adjustable delay T2 (0.1-10s)
- Faulty state is indicated by LED and output contact of relay is OFF.
- Output contact: 1x changeover / SPDT 16 A / 250 V AC1
- 1-MODULE, DIN rail mounting

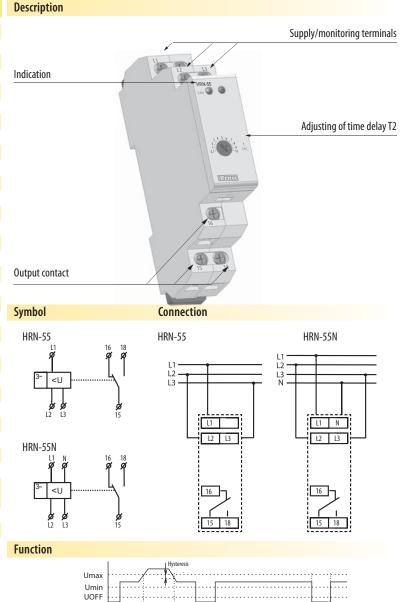
Technical parameters	HRN-55	HRN-55N
Monitoring terminals:	L1, L2, L3	L1, L2, L3,N
Supply terminals:	L1, L2, L3	L1, N
Voltage:	3x400 V / 50 Hz	3x400V/230V / 50 Hz
Level Umax:	125 % Un	
Level Umin:	75% Un	
Burden:	max. 2 VA	
Hysteresis:	5%	
Max. permanent:	AC 3x460 V	AC 3x265 V
Peak overload <1ms:	AC 3x500 V	AC 3x288 V
Time delay T1:	max. 500 ms	
Time delay T2:	adjustable 0.1-10 s	
<u>Output</u>		
Number of contacts:	1x changeover/ SPDT (AgNi / Silver Alloy)	
Current rating:	8 A / AC1	
Breaking capacity:	2500 VA / AC1, 240 W / DC	
Inrush current:	10 A	
Switching voltage:	250 V AC1 / 24 V DC	
Min. breaking capacity DC:	500 mW	
Output indication:	red LED	
Mechanical life:	1x10 <sup>7</sup>	
Electrical life (AC1):	1x10 <sup>5</sup>	
Other information		
Operating temperature:	-20 °C to +55 °C (-4 °F to 131 °F)	
Storage temperature:	$-30$ °C to $^+70$ °C ( $-22$ °F to $158$ °F)	
Electrical strength:	4 kV (supply - output)	
Operating position:	any	
Mounting:	DIN rail EN 60715	
Protection degree:	IP 40 from front panel / IP 10 terminals	
Overvoltage category:	III.	
Pollution degree:	2	
Max. cable size (mm²):	solid wire max. 2x2.5 or 1x4	
	with sleeve max. 1x2.5 or 2x1.5 (AWG 12)	
Dimensions:	90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")	
Weight:	67 g (2.36 oz.)	66 g (2.3 oz.)
Standards:	EN 60255-6, EN 61010-1	

## **Function description**

Relay in 3-phase main monitors correct phase sequence and failure of any phase. Green LED is permanently ON and indicates presence of power supply voltage. In case of phase failure or exceeding voltage level red LED flashes and relay breaks. When changing to faulty state, time delay applies. Time delay setting is set by a potentiometer on front panel of the device. In case of incorrect phase sequence red LED shines permanently and relay is open. In case supply voltage falls below 60% Un (OFF lower level) relay immediately opens with no delay and faulty state is indicated by red LED.

HRN-55: thanks to supply form all phases, this relay is able to stay operational also if one

. HRN-55N -supply L1-N, means that relay monitor also failure in neutral wire.



<u>L</u>3

L2

Umax

Umin

Umax

Umin UOFF

green LED

red LED