



EAN code
 HRN-55: 8595188137225
 HRN-55N: 8595188137232

Technical parameters	HRN-55	HRN-55N
Monitoring terminals:	L1, L2, L3	L1, L2, L3, N
Supply terminals:	L1, L2, L3	L1, L2, L3, N
Voltage:	3x 400 V (50-60 Hz)	3x 400 V/230 V (50-60 Hz)
Burden:	max. 2 VA/1 W	
Max. dissipated power (Un + terminals):	1 W	
Level Umax:	125 % Un	
Level Umin:	75 % Un	
Hysteresis:	2 %	
Max. permanent:	AC 3x 460 V	AC 3x 265 V
Peak overload <1ms:	AC 3x 500 V	AC 3x 288 V
Time delay t1:	max. 500 ms	
Time delay t2:	adjustable 0.1 - 10 s	
Time delay t3:	max. 1 s	
Output		
Number of contacts:	1x changeover/SPDT (AgNi/Silver Alloy)	
Current rating:	8 A/AC1; 1/3 HP 240 Vac, 1/4 HP 120 Vac; PD. B300	
Breaking capacity:	2000 VA/AC1, 240 W/DC	
Inrush current:	10 A	
Switching voltage:	250 V AC/24 V DC	
Output indication:	red LED	
Mechanical life:	60.000.000 ops.	
Electrical life (AC1):	150.000 ops.	
Other information		
Operating temperature:	-20 .. 55 °C (-4 .. 131 °F)	
Storage temperature:	-30 .. 70 °C (-22 .. 158 °F)	
Electrical strength:	4 kV (supply - output)	
Operating position:	any	
Mounting:	DIN rail EN 60715	
Protection degree:	IP40 from front panel/IP10 terminals	
Overvoltage category:	III.	
Pollution degree:	2	
Max. cable size (mm ²):	solid wire max. 2x 2.5 or 1x 4 with sleeve max. 1x 2.5 or 2x 1.5 (AWG 12)	
Dimensions:	90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")	
Weight:	61 g (2.15 oz.)	63 g (2.22 oz.)
Standards:	EN 60255-1, EN 60255-26, EN 60255-27	

Function description

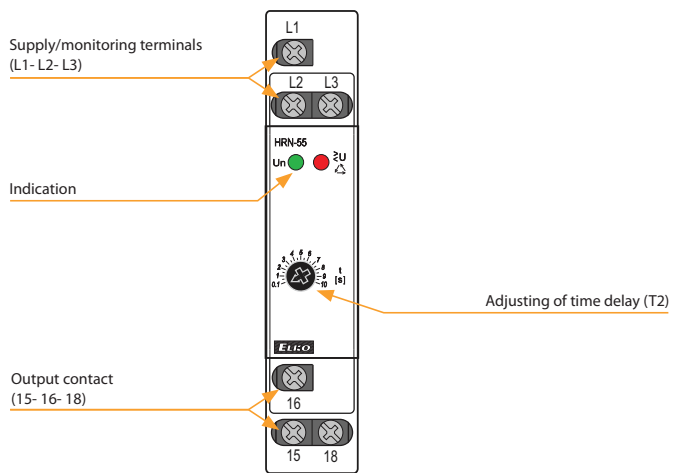
Relay in 3-phase main monitors correct phase sequence and failure of any phase. Green LED is permanently ON and indicates presence of power supply voltage. In case of phase failure or exceeding voltage level red LED flashes and relay breaks. When changing to faulty state, time delay applies. Time delay 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 phase is out.

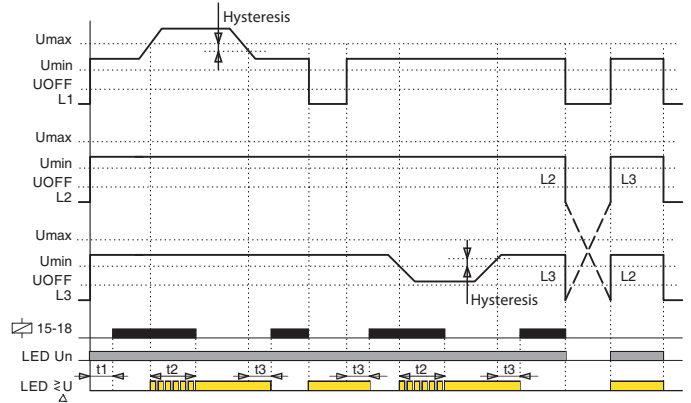
HRN-55N -supply L1, L2, L3-N, means that relay monitor also failure in neutral wire.

- 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 1-phase fails.
- **HRN-55N**: supply L1, L2, L3-N, it means that relay also monitors break of neutral point.
- Fixed delay t1 (500 ms), adjustable delay t2 (0.1 - 10 s) and fixed delay t3 (max. 1 s).

Description



Function



Connection

Symbol

