



EAN code  
 HRN-57: 8595188137256  
 HRN-57N: 8595188137249

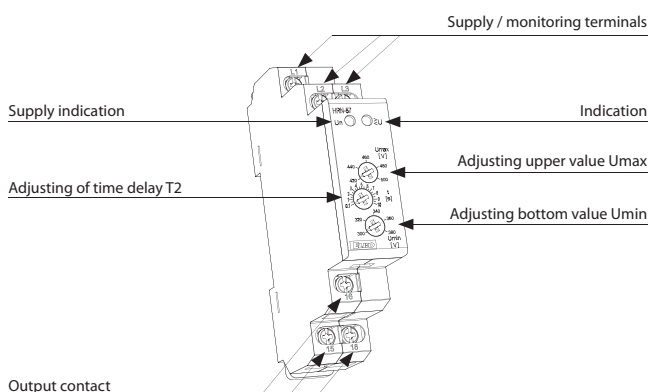
Technical parameters	HRN-57	HRN-57N
Monitoring terminals:	L1, L2, L3	L1, L2, L3, N
Supply terminals:	L1, L2, L3	L1, N
Voltage:	3x 400 V / 50 Hz	3x 400 V / 230 V / 50 Hz
Level Umax:	105 - 125 % Un	
Level Umin:	75 - 95 % Un	
Burden:	max. 2 VA	
Hysteresis:	2 %	
Max. permanent overload:	AC 3x 460 V	AC 3x 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	

Output	
Number of contacts:	1x changeover / SPDT (AgNi / Silver Alloy)
Current rating:	8 A / AC1
Breaking capacity:	2000 VA / AC1, 240 W / DC
Inrush current:	10 A
Switching voltage:	250 V AC1 / 24 V DC
Output indication:	red LED
Mechanical life:	1x10 <sup>7</sup>
Electrical life (AC1):	1x10 <sup>5</sup>

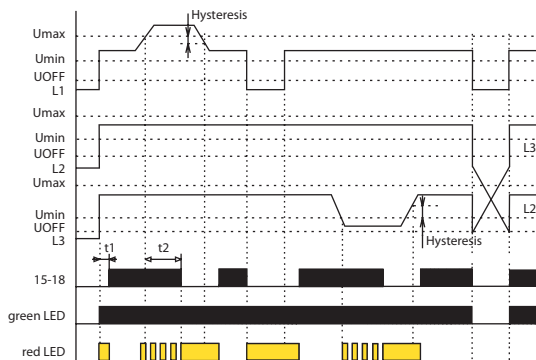
Other information	
Operating temperature:	-20 °C to 55 °C (-4 °F to 131 °F)
Storage temperature:	-30 °C to 70 °C (-22 °F to 158 °F)
Electrical strength:	4 kV (supply - output)
Operating position:	any
Mounting:	DIN rail EN 60715
Protection degree:	IP40 from front panel / IP10 terminals
Overvoltage category:	III.
Pollution degree:	2
Max. cable size (mm <sup>2</sup> ):	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:	68 g (2.4 oz.)   66 g (2.3 oz.)
Standards:	EN 60255-6, EN 61010-1

- It serves to monitor voltage in a switchboard, protection of devices in 3-phase main.
- It monitors value of voltage in 3-phase main.
- It is possible to set upper and lower level independently.
- Adjustable time delay eliminated short voltage peaks and failures in the main.
- The device is supplied from monitored voltage.
- Faulty state is indicated by red LED and by breaking output relay contact.
- Output contact 1x changeover / SPDT 8 A / 250 V AC1.
- Relay doesn't monitor phase sequence.
- **HRN-57** - supply from all phases, means that relay is functional also in case of failure in one phase.
- **HRN-57N** - supply L1-N, means that relay monitors also failure of neutral wire.
- 1-MODULE, DIN rail mounting.

**Description**

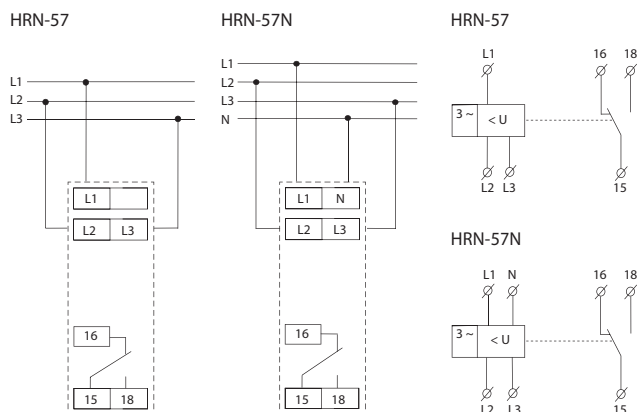


**Function**



**Connection**

**Symbol**



**Function description**

Relay in 3-phase main monitors size of phase voltage. It is possible to set two independent voltage levels and thus it is possible to set two independent voltage levels and monitor e.g. undervoltage and overvoltage independently. In normal state when voltage is within set levels, output relay is closed and red LED shines. In case supply voltage falls below 60 % Un (U<sub>OFF</sub> lower level) relay immediately breaks without delay and faulty state is indicated by red LED. In case voltage exceeds or falls below the set levels, output relay breaks and red LED shines (LED indicates faulty state - flashes when timing). In case timing is in progress and faulty state is indicated, timing is immediately stopped.