



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, 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<br>(Un + terminals): | 2 W                 |                           |
| Level Umax:                                | 105 - 125 % Un      |                           |
| Level Umin:                                | 75 - 95 % Un        |                           |
| 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 |                           |
| Time delay t3:                             | max. 1 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 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 °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 (mm²): | solid wire max. 2x 2.5 or 1x 4/<br>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:                | 62 g (2.19 oz.)                                                               |
| Standards:             | EN 60255-1, EN 60255-26, EN 60255-27                                          |

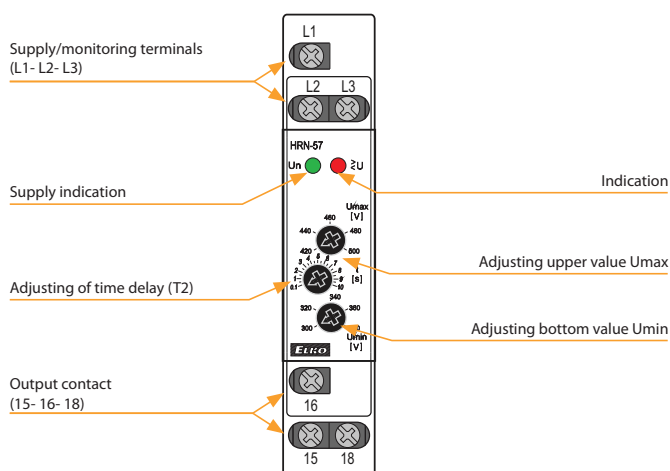
#### Function description

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).

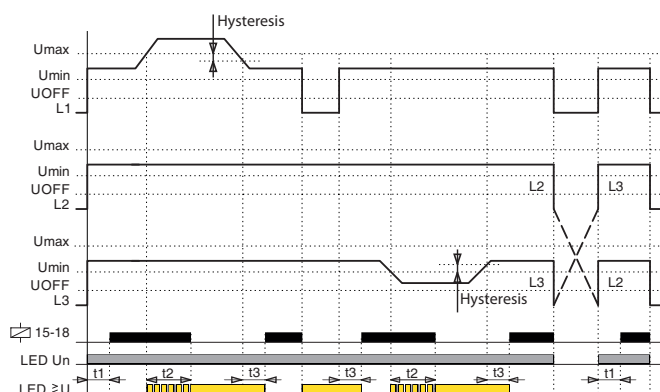
In case timing is in progress and faulty state is indicated, timing is immediately stopped.

- 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.
- 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, L2, L3-N, means that relay monitors also failure of neutral wire.

#### Description



#### Function



#### Connection

#### Symbol

