

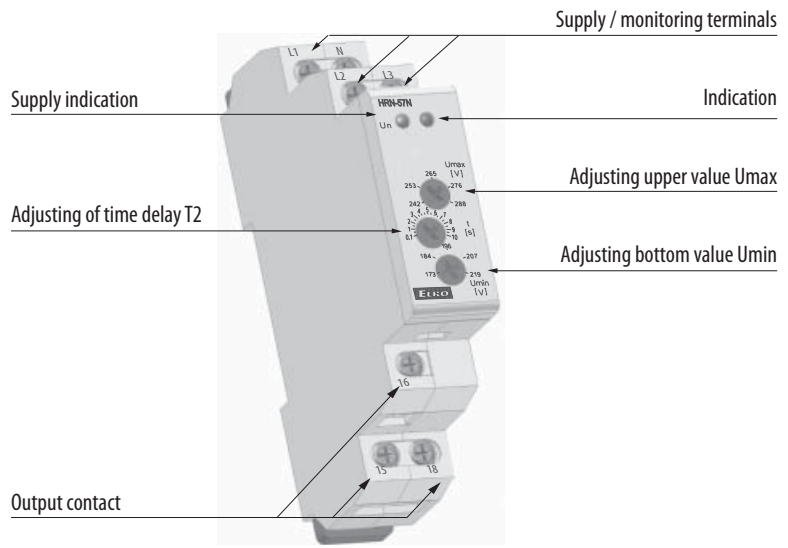


- Serves to monitor voltage in a switchboard, protection of devices in 3-phase main
- Monitors value of voltage in 3-phase main
- It is possible to set upper and lower level independently
- Adjustable time delay eliminated short voltage peaks and failures in the main
- The device is supplied from monitored 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, replacement for HRN-52
- 1-MODULE, DIN rail mounting

EAN code
 HRN-57 8595188137256
 HRN-57N 8595188137249

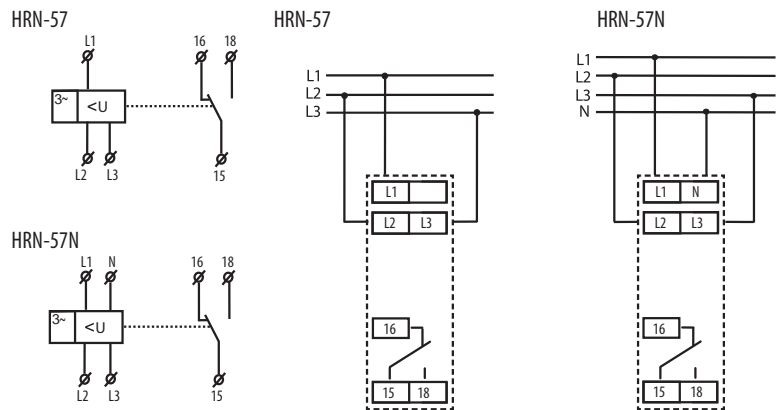
| Technical parameters | HRN-57 | HRN-57N |
|-------------------------------------|---|---------------------|
| Monitoring terminals: | L1, L2, L3 | L1, L2, L3, N |
| Supply terminals: | L1, L2, L3 | L1, N |
| Voltage: | 3x400 V / 50 Hz | 3x400V/230V / 50 Hz |
| Level Umax: | 105 - 125 % Un | |
| Level Umin: | 75 - 95 % Un | |
| Burden: | max. 2 VA | |
| Hysteresis: | 5 % | |
| Max. permanent overload: | AC 3x460V | AC 3x265V |
| Peak overload <1ms: | AC 3x500V | AC 3x288V |
| 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: | 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 ⁷ | |
| Electrical life (AC1): | 1x10 ⁵ | |
| 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 (mm ²): | solid wire max. 2x 2.5 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: | 68 g (2.4 oz.) | 66 g (2.3 oz.) |
| Standards: | EN 60255-6, EN 61010-1 | |

Description

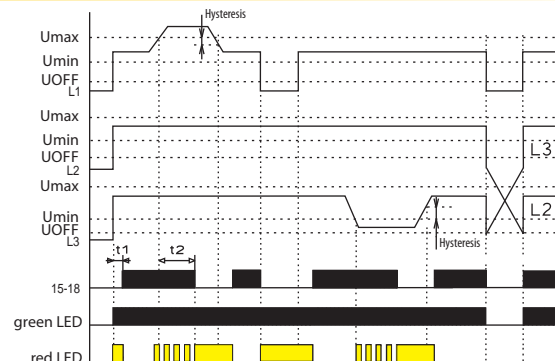


Symbol

Connection



Function



Function description

Relay in 3-phase main monitors size of phase voltage. It is possible to set two independant voltage levels and thus it is possible to set two independant voltage levels and monitor e.g. undervoltage and overvoltage independantly. In normal state when voltage is within set levels, output relay is closed and red LED shines. 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 supply voltage falls below 60 %Un (UOFF lower level) relay immediatly breaks without delay and faulty state is indicated by red LED.

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