



EAN code  
 HRN-56 /120V: 8595188130745  
 HRN-56 /208V: 8595188130134  
 HRN-56 /240V: 8595188137119  
 HRN-56 /400V: 8595188137126  
 HRN-56 /480V: 8595188130189  
 HRN-56 /575V: 8595188130196

- Relay monitors phase sequence and failure (e.g. control of correct motor winding etc.).
- Relay is designated for monitoring of 3-phase networks.
- Supply from all phases which means that relay is functional also in case of one phase failure.
- Supply and monitored supply Un:
 

1-MODUL	3-MODUL
HRN-56/120 - 3x 120 V	HRN-56/480 - 3x 480 V
HRN-56/208 - 3x 208 V	HRN-56/575 - 3x 575 V
HRN-56/240 - 3x 240 V	
HRN-56/400 - 3x 400 V	
- Fixed time delay T1 (500 ms) and adjustable time delay T2 (0 -10s).
- Faulty state is indicated by LED and by opening of output relay contact.
- Output contact 1x changeover / SPDT 8 A / 250V AC1.
- 1-MODULE, 3-MODULE, DIN rail mounting.

Technical parameters	HRN-56					
	120	208	240	400	480	575
Monitoring terminals:	L1, L2, L3					
Supply terminals:	L1, L2, L3					
Supply / measured voltage:	3x120 V L-L (3x69.3V L-N)	3x 208 V L-L (3x120V L-N)	3x 240 V L-L (3x139V L-N)	3x 400 V L-L (3x230V L-N)	3x 480 V L-L (3x277V L-N)	3x 575 V L-L (3x332V L-N)
Level Umin:	adjustable 70 - 95 % Un					
Level Uoff:	60 % Un					
Burden:	max. 2 VA					
Hysteresis:	2 %					
Max. permanent overload:	AC 3x 160 V	AC 3x 276 V	AC 3x 460 V	AC 3x 550 V	AC 3x 660 V	AC 3x 660 V
Peak overload <1s:	AC 3x 180 V	AC 3x 300 V	AC 3x 500 V	AC 3x 600 V	AC 3x 700 V	AC 3x 700 V
Time delay T1:	max. 500 ms					
Time delay T2:	adjustable 0 - 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
Indication of state:	red LED
Mechanical life:	1x10 <sup>7</sup>   3x10 <sup>7</sup>
Electrical life (AC1):	1x10 <sup>5</sup>

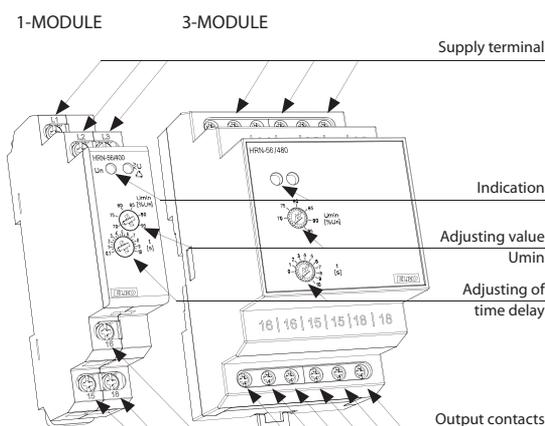
Other information	
Operating temperature:	-20 °C to +55 °C (-4 °F to 131 °F)
Storage temperature:	-30 °C to +70 °C (-22 °F to 158 °F)
Electrical strength:	4 kV (supply - output)
Operating position:	any
Mounting:	DIN rail EN 60715
Protection degree:	IP40 from front panel / IP10 terminals   IP40 from front panel / IP20 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)   max.1x 2.5, max. 2x 1.5 / with sleeve max. 1x 1.5 (AWG 12)
Dimensions:	90 x 17.6 x 64 mm (3.5 x 0.7 x 2.5")   90 x 52 x 65 mm (3.5 x 2 x 2.6")
Weight:	66 g (2.3 oz)   66 g (2.3 oz)   66 g (2.3 oz)   67 g (2.3 oz)   108 g (3.8 oz)   108 g (3.8 oz)
Standards:	EN 60255-6, EN 61010-1

### Function description

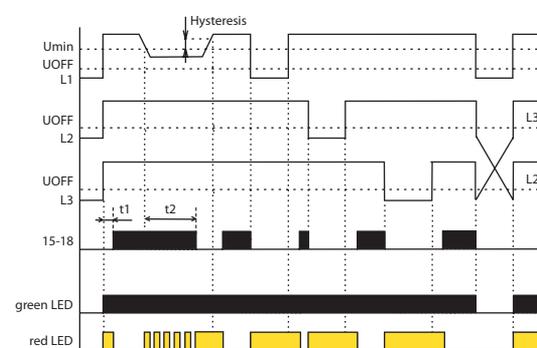
Relay in 3-phase main monitors correct phase sequence and phase failure. Green LED illuminates permanently and indicates energization. In case of phase failure red LED flashes and relay turns off. When changing to faulty state, time delay applies - delay setting is done by potentiometer on the front 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 (Uoff lower level) relay immediately opens with no delay and faulty state is indicate by red LED.

**HRN-56:** Thanks to supply from all phases, relay is functional also in case of one phase failure.

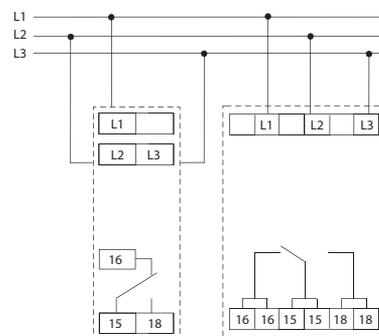
### Description



### Function



### Connection



### Symbol

