

HRN-56 | Voltage monitoring relays in 3P with adjustable level Umin

RU

UL US
LISTED
E308550

5 YEAR
WARRANTY

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



Technical parameters

HRN-56

	208	240	400	480	575
Supply/monitoring terminals:	L1, L2, L3				
Supply/measured voltage:	3x 208 V L-L (3x120 V L-N) (50-60 Hz)	3x 240 V L-L (3x139 V L-N) (50-60 Hz)	3x 400 V L-L (3x230 V L-N) (50-60 Hz)	3x 480 V L-L (3x277 V L-N) (50-60 Hz)	3x 575 V L-L (3x332 V L-N) (50-60 Hz)
Burden:	max. 2 VA/1 W				
Max. dissipated power (Un + terminals):	2 W				
Level Umin:	adjustable 70 - 95 % Un				
Level Uoff:	60 % Un				
Hysteresis:	2 %				
Max. permanent overload:	AC 3x 276 V	AC 3x 460 V	AC 3x 550 V	AC 3x 660 V	AC 3x 700 V
Peak overload <1s:	AC 3x 300 V	AC 3x 500 V	AC 3x 600 V	AC 3x 700 V	
Time delay t1:	max. 500 ms				
Time delay t2:	adjustable 0 - 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			
Indication of state:	red LED			
Mechanical life:	60.000.000 ops.		30.000.000 ops.	
Electrical life (AC1):	150.000 ops.		200.000 ops.	

Other information

Operating temperature:	-20 .. +55 °C (-4 .. 131 °F)			
Storage temperature:	-30 .. +70 °C (-22 .. 158 °F)			
Dielectrical 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 (mm²):	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")		90x 52 x 65 mm (3.5" x 2" x 2.6")	
Weight:	65 g (2.3 oz.)	65 g (2.3 oz.)	66 g (2.3 oz.)	110 g (3.9 oz.) 110 g (3.9 oz.)
Standards:	EN 60255-1, EN 60255-26, EN 60255-27			

Function description

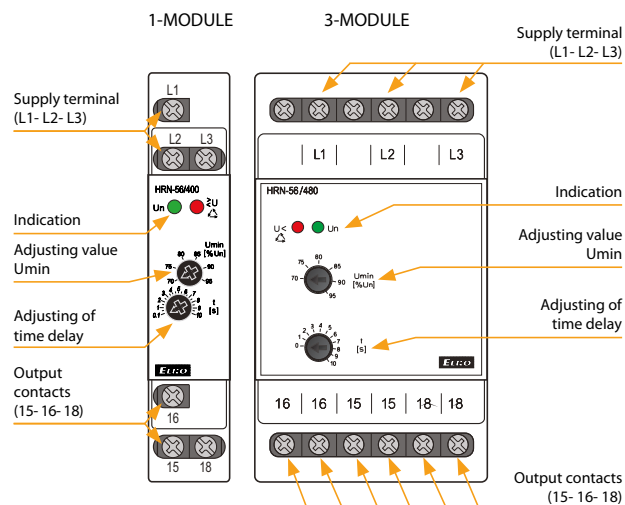
Relay in 3-phase main monitors correct phase sequence and phase failure. Green LED illuminates permanently and indicates energization. In case of phase failure red LED flashes and relay turns off. When changing to faulty state, time delay applies - delay setting is done by potentiometer on the front 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 (U_{off} - 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.

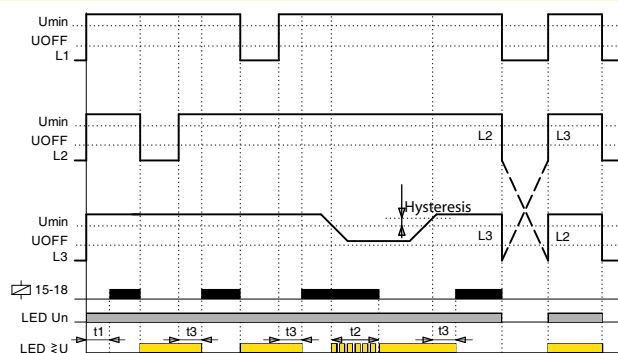
- Relay monitors phase sequence and failure (e.g. control of correct motor winding etc.).
- Relay is designated for monitoring of 3-phase networks.
- Supply from all phases which means that relay is functional also in case of one phase failure.
- Supply and monitored supply Un:

1-MODULE	3-MODULE
HRN-56/208 - 3x 208 V	HRN-56/480 - 3x 480 V
HRN-56/240 - 3x 240 V	HRN-56/575 - 3x 575 V
HRN-56/400 - 3x 400 V	
- Fixed delay t1 (500 ms), adjustable delay t2 (0.1 - 10 s) and fixed delay t3 (max. 1 s).

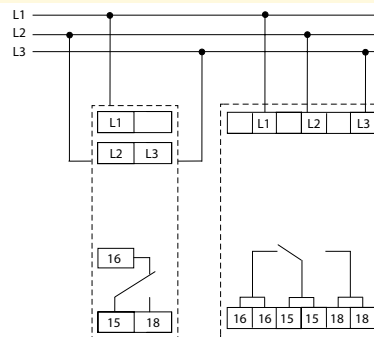
Description



Function



Connection



Symbol

