



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

1-MODULE	3-MODULE
HRN-56/208 - 3x120V	HRN-56/480 - 3x480V
HRN-56/208 - 3x208V	HRN-56/575 - 3x575V
HRN-56/240 - 3x240V	
HRN-56/400 - 3x400V	

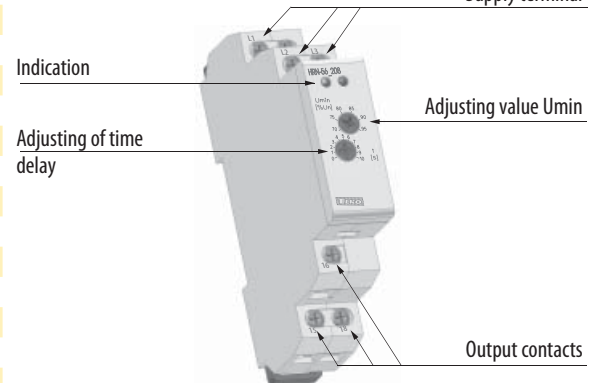
- Fixed time delay T1 (500ms) and adjustable time delay T2 (0 - 10s)
- Faulty state is indicated by LED and by opening of output relay contact
- Output contact 1x changeover/SPDT 8 A /250V AC1
- 1-MODULE, 3-MODULE, DIN rail mounting

EAN code	
HRN-56 /120V	8595188130745
HRN-56 /208V	8595188130134
HRN-56 /240V	8595188130141
HRN-56 /400V	8595188130158
HRN-56 /480V	8595188130189
HRN-56 /575V	8595188130196

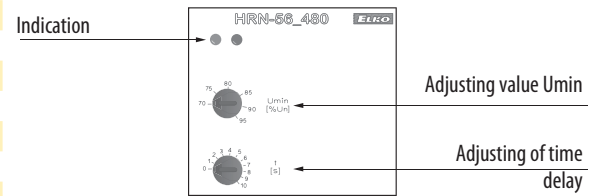
Technical parameters	HRN-56					
	120	208	240	400	480	575
Monitoring terminals:	L1, L2, L3					
Supply terminals:	L1, L2, L3					
Supply/measured voltage:	3 x 120V/50Hz	3 x 208V/50Hz	3 x 240V/50Hz	3 x 400V/50Hz	3 x 480V/50Hz	3 x 575V/50Hz
Level U_{min} :	adjustable 70 - 95 % U_n					
Level U_{off} :	60 % U_n					
Burden:	max. 2 VA					
Hysteresis:	5%					
Max. permanent overload:	AC 3 x 160V	AC 3 x 276V	AC 3 x 460V	AC 3 x 550V	AC 3 x 660V	AC 3 x 660V
Peak overload <1s:	AC 3 x 180V	AC 3 x 300V	AC 3 x 500V	AC 3 x 600V	AC 3 x 700V	AC 3 x 700V
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:	2500 VA / AC1, 240 W / DC					
Inrush current:	10 A					
Switching voltage:	250 V AC1 / 24 V DC					
Indication of state:	red LED					
Mechanical life:	1×10^7					
Electrical life (AC1):	1×10^5					
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			IP 40 from front panel / IP 20 terminals		
Overvoltage category:	III.					
Pollution degree:	2					
Max. cable size (mm ²):	solid wire max. 2x2.5 or 1x4, with sleeve max. 1x2.5 or 2x1.5			max. 1x 2.5, max. 2x1.5 with sleeve max. 1x1.5		
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	66 g	66 g	67 g	108 g	108 g
Standards:	EN 60255-6, EN 61010-1					

Description

1-MODULE Supply terminal

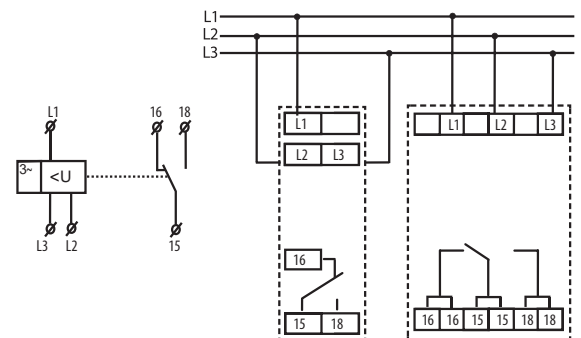


3-MODULE front panel

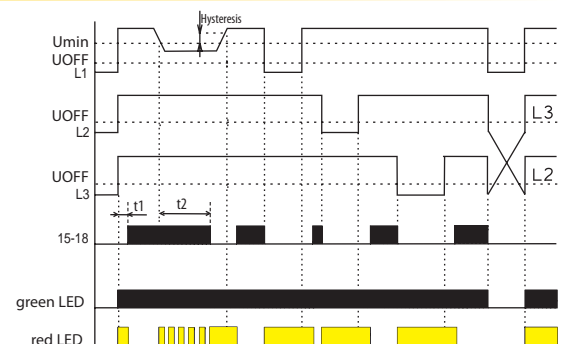


Symbol

Connection



Function



Function description

Relay in 3-phase main monitors correct phase sequence and phase failure. Green LED shines 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% U_n (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.