Relay for monitoring phase sequence and failure HRN-55, HRN-55N

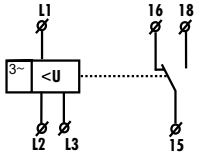
1M

- replacement for HRN-51 and HRN -51N
- relay monitors phase sequence and failure (e.g monitoring of correct motor winding etc.)in 3 phaze main
- HRN-55 - supply from all phases, which means that function of relay is applicable also if one phase fails
- HRN-55N - supply L1-N, it means that relay also monitors break of neutral point
- fixed delay T1 (500ms) and adjustable delay T2 (0.5-10s)
- faulty state is indicated by LED and output contact of relay is OFF.
- output contact: 1x changeover 16 A / 250 V AC1
- 1-MODULE, DIN rail mounting

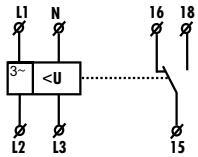
Technical parameters	HRN-55	HRN-55N
Monitoring terminals:	L1, L2, L3	L1, L2, L3, N
Supply terminals:	L1, L2, L3	L1, N
Voltage:	3x400	3x400 V/230 V
Level Umin:	75% Un	
Consumption:	max. 2 VA	
Hysteresis:	5%	
Max. permanent:	AC 3x460 V	AC 3x265 V
Peak overload <1ms:	AC 3x500 V	AC 3x288 V
Time delay T1:	max. 500 ms	
Time delay T2:	adjustable 0.1-10 s	
Output		
Number of contacts:	1x changeover (AgNi)	
Rated current:	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.. +55 °C	
Storage temperature:	-30.. +70 °C	
Electrical strength:	4 kV (supply - output)	
Operating position:	any	
Mounting:	DIN rail EN 60715	
Protection degree:	IP 40 from front panel	
Overvoltage cathegory:	III.	
Pollution degree:	2	
Max. cable size (mm^2):	solid wire max. 2x2.5 or 1x4 with sleeve max. 1x2.5 or 2x1.5	
Dimensions:	90 x 52 x 65 mm, see page 90-92	
Weight:	67 g	66 g
Standards:	ČSN EN 60255-6, ČSN EN 61010-1	

Symbol

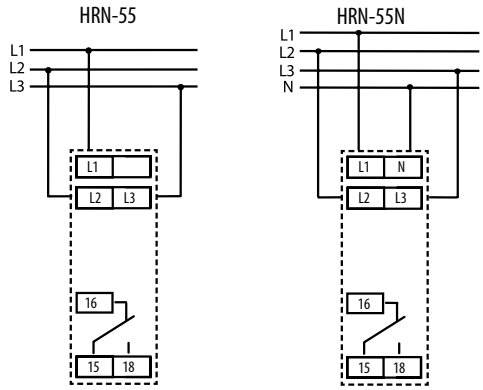
HRN-55



HRN-55N

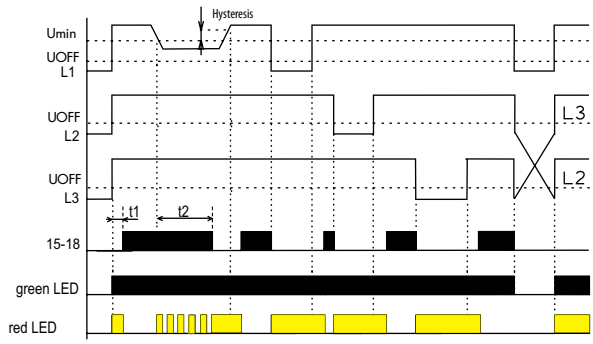


Connection

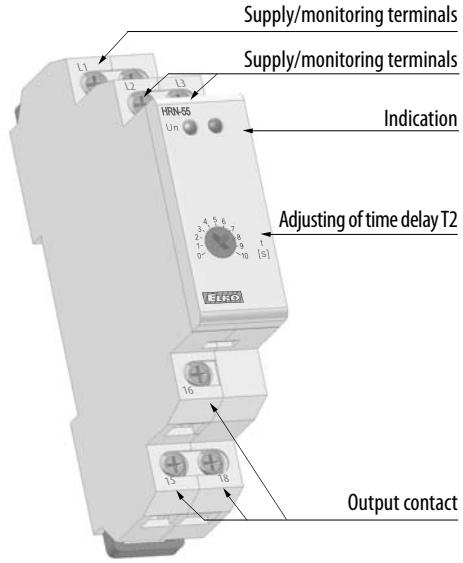


Function

HRN-55
HRN-55N



Description



Function description

Relay in 3-phase main monitors correct phase sequence and failure of any phase. Green LED is permanently ON and indicates presence of power supply voltage. In case of phase failure, red LED flashed and relay breaks. When changing to faulty state, time delay applies. Time delay setting is set by a potentiometer on 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 (OFF lower level)relay immediately opens with no delay and faulty state is indicated by red LED.
HRN-55: thanks to supply form all phases, this relay is able to stay operational also if one phase is out.
HRN-55N -supply L1-N, means that relay monitor also failure in neutral wire