

# Mains monitoring relays

## monitoring the rotating field

### NR12-001-3x230V and

### NR12-002-3x230V



#### NR12-001:

1 CO contact potential free 10A/250V AC.  
Standby loss 0.8 watt only.


Modular device for DIN 50022 rail mounting.  
1 module = 18 mm wide, 58 mm deep.

#### NR12-002:

2 CO contacts potential free 10A/250V AC.  
Standby loss 0.8 watt only.

Modular device for DIN 50022 rail mounting.  
2 modules = 32 mm wide, 58 mm deep.

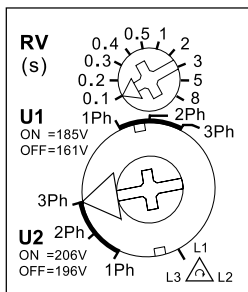
Designed to monitor 230V AC voltage between  
1 to 3 phase conductors and neutral and to  
monitor the rotating field (clockwise) in the switch  
positions 2 Ph und 3 Ph.

In the position  only the rotating field is  
monitored, independent from the mains voltage.

Supply voltage L1-N 180-250V/50-60Hz.

In case of failure of L1 the relay releases  
immediately without delay.

#### Function rotary switches NR12-001 and -002



With the lower rotary switch on the front two  
operate voltages resp. dropout voltages can be set  
and the number of monitored phase conductors  
must be selected.

**Position U1:** 161 V dropout voltage and  
185V operate voltage.

**Position U2:** 196V dropout voltage and  
206V operate voltage as per VDE 0100,  
part 718 (formerly: VDE 0108, part 1).

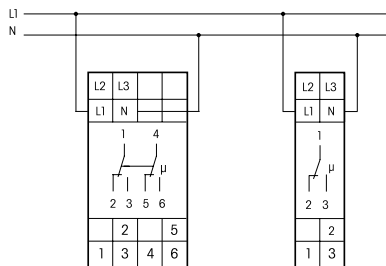
Voltage applied signalled by LED. At wrong  
polarity or in case of a missing phase conductor  
the LED flashes rapidly.

Release delay **RV** settable with the upper rotary  
switch from 0.1 to 8 sec. The LED flashes slowly  
during the release delay time period. Operate delay  
0.5 sec.

**Maximum fusing 16A.**

#### Typical connections

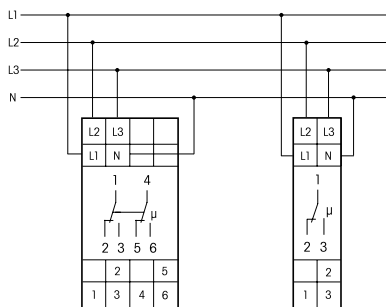
##### 1 phase monitoring



NR12-002-3x230V

NR12-001-3x230V

##### 3 phase monitoring



NR12-002-3x230V

NR12-001-3x230V

#### Technical data

Rated switching capacity	10A/250V AC
Time on	100%
Max./min. temperature at mounting location	+50°C/-20°C
Max. switching current	8A
DC1: 12V/24V DC	
Stand by loss (active power)	0,8W



The strain relief clamps of the terminals  
must be closed, that means the  
screws must be tightened for testing  
the function of the device. The terminals  
are open ex works.

## Important reminder!

**This electrical equipment may only be  
installed by skilled electricians otherwise fire  
hazard or danger of electric shock exists!**