

Mains monitoring relays
monitoring the rotating field
NR12-001-3x230V and
NR12-002-3x230V

**Only skilled electricians may install
this electrical equipment otherwise
there is the risk of fire or electric
shock!**

Temperature at mounting location:
-20°C up to +50°C.
Storage temperature: -25°C up to +70°C.
Relative humidity:
annual average value <75%.

Standby loss 0.8 watt only.

NR12-001:

1 CO contact potential free 10A/250V AC.
Modular device for DIN 50022 rail
mounting.
1 module = 18 mm wide, 58 mm deep.

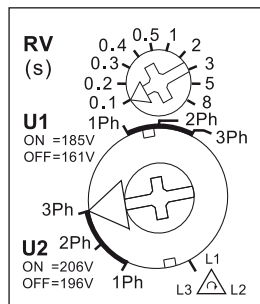
NR12-002:

2 CO contacts potential free 10A/250V AC.
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 \triangle only the rotating field
is monitored, independent from the
mains voltage.

Supply voltage L1-N 180-250V/50Hz.
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 voltag-
es can be set and the number of moni-
tored phase conductors must be selected.

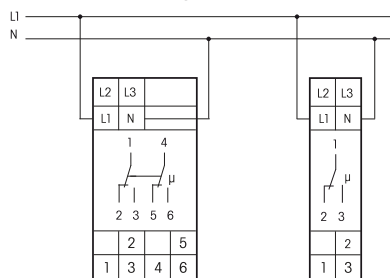
Position U1: 161 V dropout voltage and
185V operate voltage.

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 8sec. The LED
flashes slowly during the release delay
time period. Operate delay 0.5sec.

Maximum fusing 16A.

Typical connections

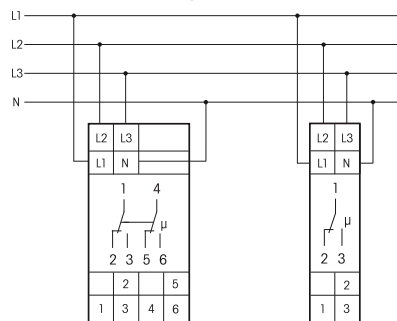
1 phase monitoring



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 DCI: 12V/24V DC	8A
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.

Must be kept for later use!

We recommend the housing for operating instructions GBA12.

Eltako GmbH

D-70736 Fellbach

+49 711 94350000

www.eltako.com