



RKO-3

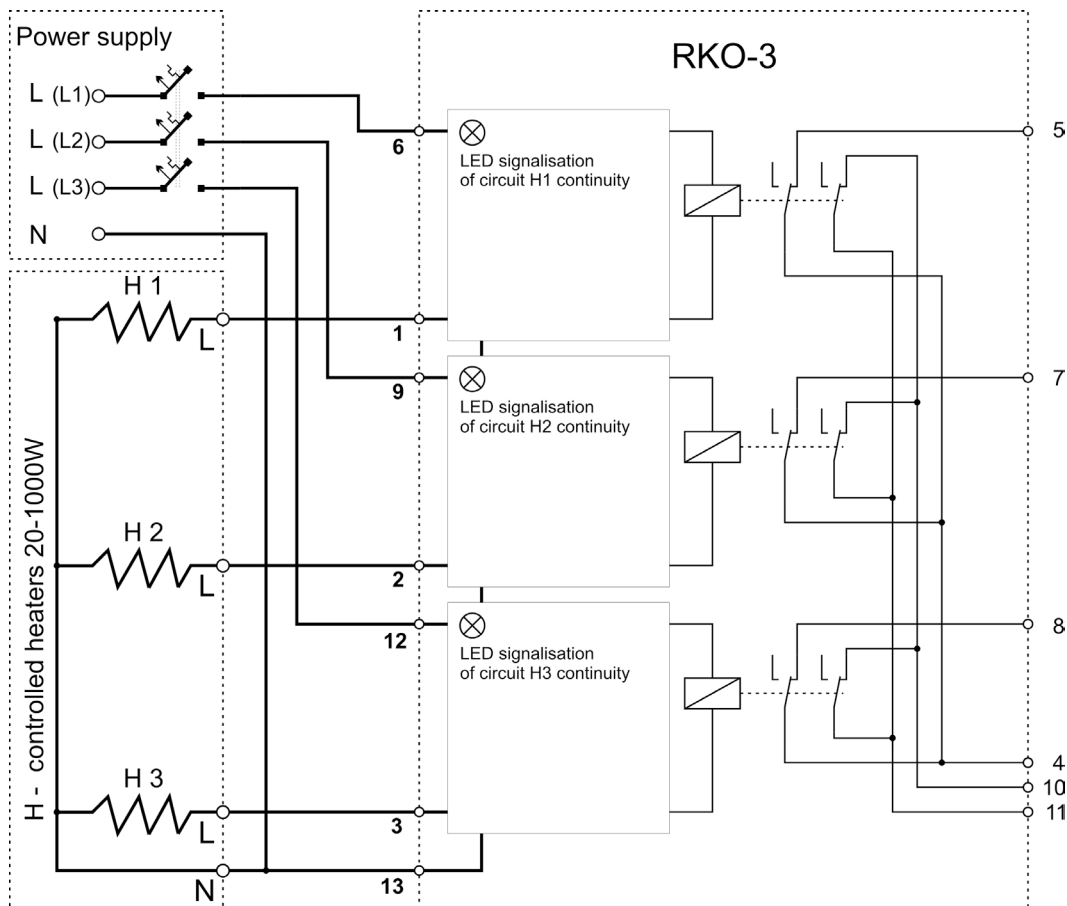
**MONITORING THE SUPPLY CIRCUIT
CONTINUITY**

APPLICATION

The RKO-3 relay is meant for use in power supply circuits of cable cases and cabinets with automation heaters. The relay may also be used in circuits of other devices, where control over power supply continuity is required. The RKO-3 relay is intended to monitor current flow through three supplying circuits. These can be a 3-phase circuit or three single-phase circuits. In case of loss of current flow signalling contacts of a set phase are made.

CONSTRUCTION

The relay is produced in a typical housing sizes 110 × 55 × 77 mm, with 14 terminations in a form of a plug, suitable to be mounted in a GZ-14 socket (plate-mounting), GZ-14U (bus-mounting) or GZ14Z - to be mounted in a relay chassis type R8614Z. The scheme of connections in the circuit of heaters and termination of the relay are presented on picture 1.



Picture 1. Functional scheme of RKO-3 relay

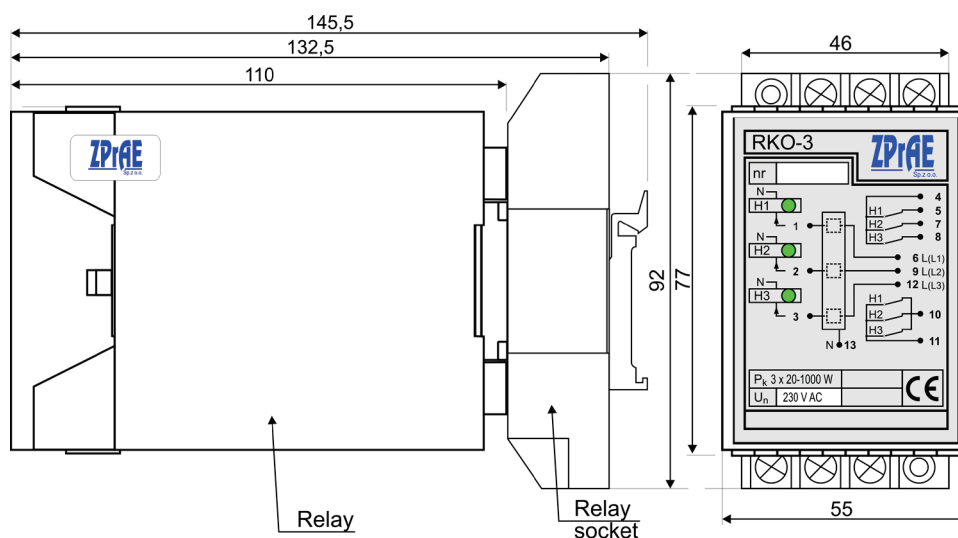
The relay is equipped with three LEDs indicating current flow in the controlled circuits. The dimensions of the relay are presented on Picture 2.

OPERATION

Three sets of transformers and measuring elements monitor the current flow. In case the current flow decreases below sensitivity level of RKO-3 the relay responsible for set circuit drops off and the signalling contacts are made. The system of signalling contacts enables obtaining bulk information on loss of current flow through a specified circuit, as well as individual information enabling identification of damaged circuit. Information on the current flow is indicated by three LEDs. Upon restoring current flow the relay of a specific circuit is activated again, and the corresponding LED diode lights up.

TECHNICAL INFORMATION (for $U_n = 220 \text{ V DC}$)

Power Supply	
Rated voltage	$U_N = 230 \text{ V AC}$
Operate range of the input voltage	$0,8 \dots 1,1 U_N$
Power consumption	$P \leq 2 \text{ W for DC}$
Controlled circuit	
No. of monitored circuits	3
Power range of receivers in the circuit	$3 \times 20 \text{ VA} \div 1000 \text{ VA}$
Contacts of the relay	
Maximal continuous current	3 A
Maximal breaking capacity	$0,1 \text{ A; L/R} = 40 \text{ ms}$
Insulation	
Rated insulation voltage	250 V
Rated impulse voltage (1,2/50 μs) between the coil and the contacts	4000 V
Overvoltage category	III
Proof voltage between the coil and the contacts	2 kV; 50 Hz; 1 min
General Data	
Enclosure protection degree	IP40
Ambient temperature	From $-5 \text{ }^\circ\text{C}$ to $+40 \text{ }^\circ\text{C}$
Terminations (socket / plug)	As for R15 4P
Signalisation of Operation	3 LED diodes
Dimensions	$77 \times 55 \times 110 \text{ mm (H}\times\text{W}\times\text{D)}$
Mounting	Mounting socket



Picture 2. Dimensions of RKO-3 relay

Attention:

We have prepared a vast offer of auxiliary equipment in order to support mounting of our relays (cases, sockets, plugs). The auxiliary equipment is designed based on our clients suggestions and many years of our own experience. More information can be found in catalogue: "GZ-14/GZ-14Z, R-8614/R8614Z, ZAS-55, ZAS-70, plugs, sockets and relay-chassis" available at www.zprae.pl

RKO-3



OFFER

REline[®]
ENERGETIC STANDARDS

RSH-3, RSH-3S - tripping

RS-6, RPD-2, RPP-4, RPP-6 - interposing

RMS-2 - signalling

RCW-3, RCDW-1 - circuit continuity monitoring

RKO-3 - power supply circuit
continuity monitoring

RB-1, RBS-1, RBS-2 - bistable

RT-22 - time

RUT-2, RUT-3 - time-voltage

RJT-1, RJT-3 - time-current

RKU-1, RKS-1 - final controlling

LZ-1, LZ-2 - operation counters

RPZ-1 - supply source switching

GPS-1 - time synchronisation

MDD-6, MDS-12 - Diode modules

PH-XX, PS-XX - Modules of switches,
pushbuttons and control lamps

Relay racks

Busbar protections and breaker failure
protections type TSL-9r, TSL-11

Auxiliary and signalization
relays

Reserve Central Signalling System
type MSA-9, MSA-12, MSA-24

Protection relays
type AZT-9, APP-9

Disturbance recorder RZS-9

Energy measurement system
and event recorder ZRZ-28

Load Resistors
for measuring transformers

DC and AC auxiliary
power supply switchgears

Cubicle-contained sets of control
and supervision protections

Modular power supplies, measuring suitcases,
measuring and registering system RFQ-8

PROFIL-L cubicles

Periodical and post-failure tests,
as well as repairs and overhauls
of busbar protections TSL

Servicing, strting-up
and post assembly tests

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ZAKŁAD PRODUKCYJNY APARATURY ELEKTRYCZNEJ

Sp. z o.o. 41-100 Siemianowice Śląskie, ul. Marii Konopnickiej 13
tel: (032) 2200120; fax: (032) 2200125; e-mail: biuro@zprae.pl