ZPrAE Sp.z o.o.

RE line®
ENERGETIC STANDARDS

RMS-2 SIGNALLING

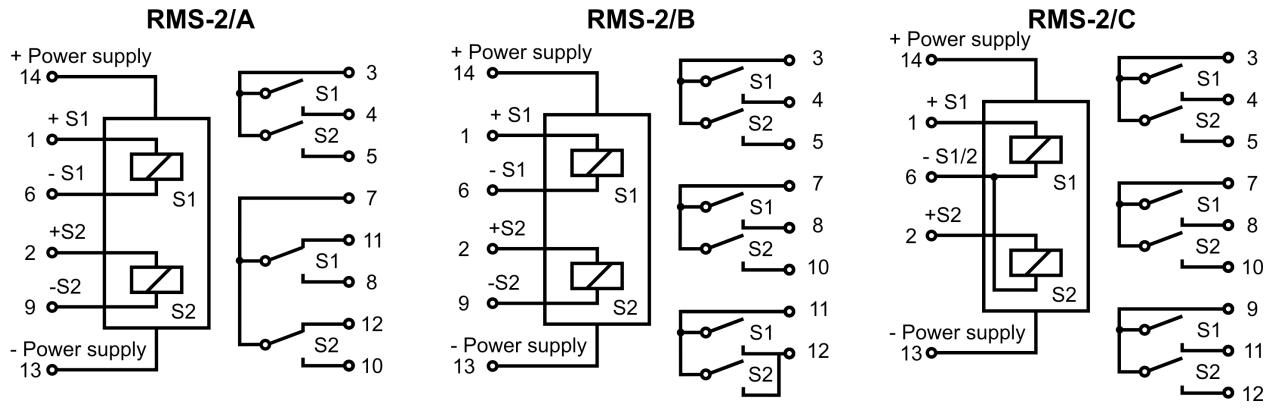
APPLICATION

The RMS-2 relay is a signalling relay designed for visualisation and multiplication of two signals in the protection systems.

CONSTRUCION

The relay has two isolated, independent signalling elements. Each element has an indicator of operation with magnetic memory (WSK), an auxiliary relay (PKW) and 3 switches for programing the work-mode ("D" – reaction for application or loss of voltage; "W" and "P" – operation of WSK and PKW with or without memory). The relay is also equipped with a LED signalling operation of the DZ relay and a manual reset button.

The relay may be produced in 3 versions of terminals. The scheme of connections (terminations) is described on picture 1.



Picture 1. Signalling relay RMS-2
Functional Scheme of connections of various versions

The relay is mounted 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. Dimensions of the relay are presented on picture 2.

OPERATION

When supply voltage is applied to the input terminal (13-14) of the relay a green LED diode DZ lights up.

Programme D=1 (reaction of the relay for application of steering voltage) – upon application of steering voltage the WSK changes colour to red, and the PKW relay operates.

Programme D=0 (reaction of the relay for loss of steering voltage) – upon steering voltage decay WSK changes colour to red, and the PKW relay is operates.

Programme W=1 (WSK operates with memory) – The operating status of WSK is stored until manual reset (red colour regardless changes of the steering voltage).

Programme W=0 (WSK operates without memory) – The colour of the WSK indicator changes with every change of the steering voltage.

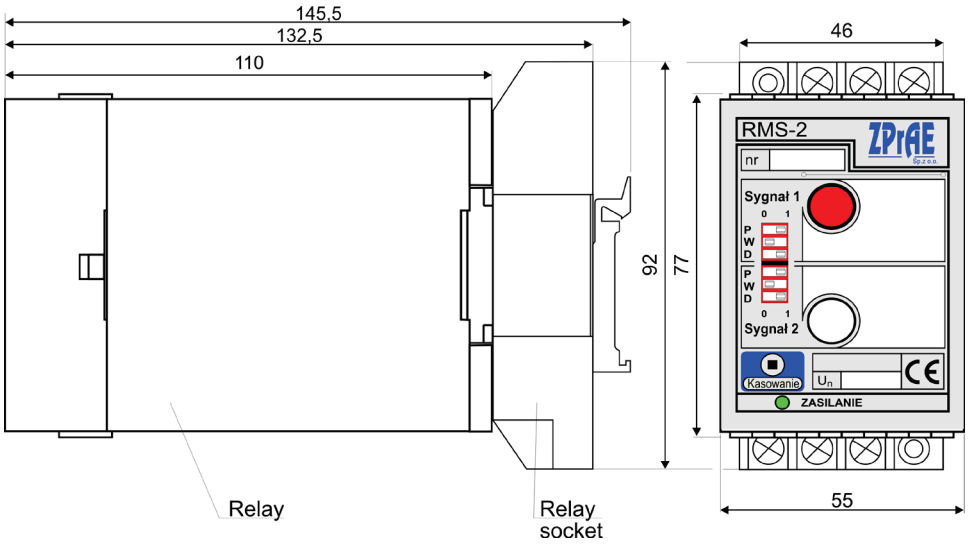
Programme P=1 (PKW operates with memory) – The operation of PKW relay is memorised (regardless changes of the steering voltage) and remains unchanged until manual reset.

Programme P=0 (PKW operates without memory) – The status of PKW rely changes with every change of the steering voltage.

In case of supply voltage decay, the WSK does not change its status, and PKW, if already has been activated, always drops off. After reapplication of the supply voltage, PKW returns to its status from before the supply voltage decay.

TECHNICAL INFORMATION (for U_n = 220 V DC)

Power Supply	
Rated voltage of the coil	U_N = 220 V DC, or other as ordered
Operate range of the input voltage	0,8 ... 1,1 U_N
Power consumption from the steering voltage	P ≤ 3 W for DC
Signalling elements	
Number of elements	2
Non-tripping voltage	154 V DC
Power consumption	≤ 0,5 W
Contacts of the relay	
Maximal breaking capacity	I = 0,1 A for U = 220 V; L/R = 40 ms
Maximal continuous current	I = 1 A
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
Proof voltage of the contact gap	1 kV 50 Hz 1 min
General Data	
Enclosure protection degree	IP40
Ambient temperature	From -5 °C to +40 °C
Ambient protection	RT II
Signalisation of Operation	LED diode
Terminations (socket / plug)	As for R15 4P
Dimensions	77 × 55 × 110 mm (H×W×D)
Mounting	Mounting socket as R154p



Picture 2. Dimensions of the RMS-2 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

RMS-2

OFFER

RE line® 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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