RPBS-868   Radio transfer of command signals

■ Features

- **Wireless transfer up to four commands in unlicenced ISM 868MHz frequency range**
- **Isolated digital inputs 250Vac**
- **Relay outputs 250Vac/6A**
- **Connection OK relay output**
- **Range up to 2km with rod antenna and up to 16km with high gain antenna**
- **LED indications for power, inputs, outputs, connection and receive level**
- **Test modes for easy diagnostic**
- **Mounting on 35mm DIN rail**

■ Description

RPBS-868 is device intended for wireless transfer of commands in unlicenced radio frequency range. It has four galvanically isolated digital inputs, four relay outputs and additional relay for indication of valid connection. On front panel there are LED indications of power supply, inputs, outputs, receive level and rotating switches for device setting and testing. Range up to 2km is achieved with small rod antenna and up to 16km with high gain antenna. Power supply is 230Vac and it is intended for 35mm DIN rail mounting.

■ Operating principle

RPBS-868 is used in pair with one more same device. Devices need to be adjusted to have crossed address and same channel number for communication. Digital inputs on first device are transffered to relay outputs of second device and vice versa. Relay for indication of valid connection is turned on if communication is established, and it is turned off if communication fails in matter of one second. Rotating switch for testing provide various modes for easy device setting and testing.

■ Technical specifications

Frequency range	ISM 868MHz, according to EN 300 220
Channel range and number	25kHz, 10 channels
Transmit power	+13dBm, 20mW, tolerancy ±1dBm
Modulation	2FSK with Gaussian filtration
Radio signaling rate	9600bps
Receiver sensitivity	better than -115dBm for 10^{-3} BER
Channel occupation time	less than 1%
Range	up to 2km with rod antenna, 16km with high gain antenna
Power supply	230Vac, 3.2VA
Digital inputs	4 galvanically isolated inputs 250Vac
Relay outputs	4 relay outputs and connection OK relay, 250Vac/6A
Address, channel and test modes settings	adjustable with rotating switches on front panel
LED indications	power, inputs, outputs, connection, receive level
Temperature range	-20°C to +75°C, 0 to 95% RH (non condensing)
Protection	IP50
Dimensions	103 x 85 x 58 mm
Mounting	35mm DIN rail