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RS485 to 4xRelay

№100860

The device is commonly used for relay control through RS485 communication interface, standard MODBUS RTU or simplified protocol.

The RS485 interface used allows connecting up to 32 controllers in a communication line up to 1200m.

It is applicable for control of industrial and domestic appliances such as: light fittings, electric lock control, garage doors control and etc.

RS485 to 4xRelay features
- 2-Wire connection by **RS485**
- Reverse-voltage protection
- 4 relay outputs: **10A 250V**
- LED indication for:
  • Power supply
  • Receiving data
  • Sending data
  • Relay state
- Communication protocol:
  • MODBUS RTU
  • Simplified
- Programming via **RS485 Relay Config** free software for Windows XP, 7, 8, 8.1 and 10
- Device supply voltage: **12VDC 200mA**
- Size: 83mm x 65mm
- Suitable for mounting in DIN rail box – **Z-108**

Description
- device for primary load control at distance up to 1200m through an **RS485** communication interface
- terminal **J1**
  • **VCC** – power supply **12V DC**
  • **GND** – ground
- terminal **J2**
  • **GND** – ground
  • **B** – **RS485** signal line **B**
  • **A** – **RS485** signal line **A**
- terminals **J3, J4, J5, J6** – NO, NC, COM relay contacts

Signalling:
- red LED **D4 (PWR)** – power supply is on
- yellow LED **D8 (RX)** – receiving data
- green LED **D7 (TX)** – sending data
- green LEDs for relay states: **D4 (RELAY1),D6 (RELAY2), D8 (RELAY3) and D10 (RELAY4)**

Communication parameters:
- 8 Data, 1 Stop, No Parity, Serial Speed: **9600kbps**

Communication protocol:
- MODBUS RTU
  • command for reading state – **0x01**
  • command for saving state – **0x05**
- Simplified protocol
  • enable output **XX** – 0xFF 0xXX 0x01 or 255 xx 1
  • disable output **XX** – 0xFF 0xXX 0x00 or 255 xx 0

Note: XX is the particular output address

Programming:
1. Push button PROG while device is turned off
2. Connect the device to a power supply
3. Green LED starts flashing at 1-second interval
4. Set device's address and communication protocol with **RS485 Relay Config** application
5. Successful programming is indicated by 10 green LED flashings at 0.1-sec interval

Example of Device Wiring Diagram