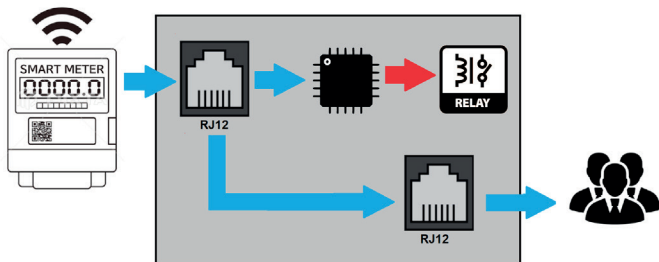


## OPERATION OF THE DEVICE

The RXD140 (Relay Extension Device) designed for transmission system operators (TSO) and distribution network operators (DSO), which is able to execute the consumer side interventions (Demand Side Management, DSM) with the internal 4 relays.

The relay unit is connected to a P1 point of a smart meter, which is able to forward the relay control commands from the energy management center through its P1 port to the RXD140 device.



## KEY FEATURES

- Two RS-485 ports: one for the smart meter communication is under the terminal block cover, and the other one is at the front of the device, for the user (HAN)
- The user RS-485 port has reinforced insulation
- RJ12 connectors for the RS-485 ports
- DLMS/COSEM – Data Notification protocol support
- 4 bistable relay with closing-contacts
- The status of the relays is indicated by green LEDs of the front panel
- Adjustable power backup time
- Spring 45° terminal block for the power supply and the relay outputs
- Standard 3 point screws and DIN-rail fixing
- IP21 device, Insulation class II.
- Sealable terminal block cover
- The customer does not have to set the parameters of the device at the site
- The device houses may be placed upon each other in a stable manner prior to being mounted

## OPERATION OF THE LEDES

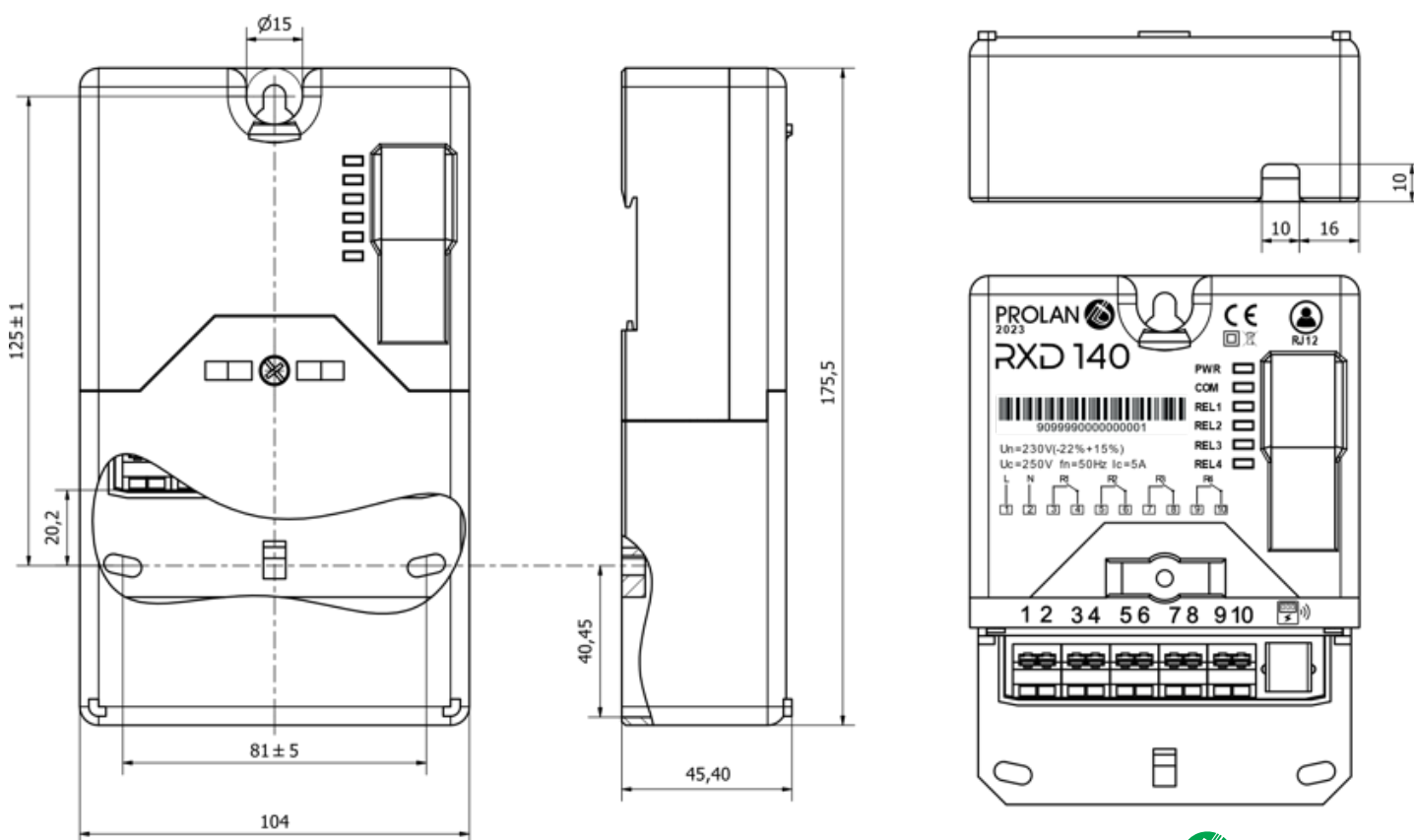
- All the 6 LEDs will flash once after the power supply connected. During supply voltage interruption the LEDs do not light up.
- **PWR LED:** This LED indicates the presence of power supply. If no relay setting message has arrived since switching on, then it flashes, if even only one telegram has arrived, it will be light up.
- **COM LED:** It flashes during the RS-485 communication.
- **REL1-4:** If the relay 1-4 is in ON status (closed contacts) the LED of the appropriate sequence number is light up. If the relay 1-4 is in OFF status (open contacts) the LED aren't light up.

# TECHNICAL DATA

Parameter	Values
Input voltage	230V -22% +15%
Power consumption	0.7 W
Frequency	50Hz -10% +5%
Fuse	Fuse resistor
Operation temperature	-40...70 °C
IP protection	IP21
Insulation class	II.
Insulation strength	4 kV (1.2/50µs)
Insulation strength user RS-485 port	2 kV (1.2/50µs)
Number of relays	4 (closing contact)
Maximum switched voltage	250VAC
Maximum switched current	5A

Parameter	Values
Relay switching time (including message processing)	10 ms
Relay re-switching period	5 minute
Relay mechanical durability	10 <sup>6</sup> switching
RS-485 baud rate	9600, 8N1
RS-485 protocol	DLMS/COSEM
Direction of the RS-485 communication	One-way
RJ12 port pin config	3rd (A data) and 4th (B data)
Power backup time	600 ms
Size of received wire	0.5 - 2.5 mm <sup>2</sup> (spring terminal block, 45°)
Seal screw size	M4, PZ/S2, Ø 2.5 mm
Dimensions	190x168x85 mm
Weight	0.3 Kg
Lifetime	>15 years

# DIMENSIONS



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