M160RWD

General Overview

The **M160RWD** is a single phase, electricity meter with two-way Power Line Communication (PLC).

The **M160RWD** measures electric energy consumption and transmits data over the power lines, using two way Power Line Communication (PLC), to a central unit – a concentrator – from which data is transmitted to the control center by cellular communication – GSM/GPRS.

The **M160RWD** is capable of receiving data from the concentrator such as: Time Of Use (TOU) tariff tables, power limit, real time clock, disconnection commands and prepaid energy (in prepayment mode).

The **M160RWD** is capable of transmitting data to the concentrator such as: energy reading, status, TOU reading and prepaid balance (in prepayment mode).

The **M160RWD** meter can also communicate with a split Display unit , using PLC over the power lines. The split Display unit is a compact device with a large display that can be placed in any convenient location within customer's premises.

The split configuration of the electricity meter and separate customer Display unit provides the customer access to metering information and allows to manage energy consumption, while maintaining the option to install the meter in a location that is inaccessible by the customer.

M160RWD meter contains load control switch enabling to remotely disconnect and reconnect power to customer by command received from the concentrator.

M160RWD meter is designed to be mounted on DIN standard rail in distribution boards or locked standard cabinets with protection of at least class IP51 according to IEC 60259.

Features:

- 15(60) A, Class 2, direct measurement static watt-hour meter.
- Real two-way "A" band Power Line Communication.
- Automatic calibration (NO physical adjustment).
- Non volatile backup memory.
- Calculates locally Time of Use (TOU) consumption at multiple tariffs.
- Repeats and amplifies signals transmitted by other distant units towards the concentrator over the power network – No distance limitation.
- Internal 60A load switching element (latching relay).
- Remote disconnection/reconnection.
- Remotely limits customer maximum power demand.
- Measures and reports line voltage.
- Directly energized by power lines.
- Small size – 2 DIN - rail mounted.
- (Simple and fast installation.
- Has a light detection sensor (optional) indicating the cabinet is being opened.

Technical Specifications

General	
Nominal Voltage (Un)	230V
Supply Voltage range	80% - 115% Un
Nominal Frequency (fn)	50Hz
Meter Consumption at Un	1.2W-8Var
System connections	1 phase 2 wire
Measurement	
Class Index according to IEC62053-21	Class 2
Basic Current (Ib)	15A
Maximum continuous current (Imax)	60A
Environmental	
Temperature range	
operation	-10°C to 55°C
storage	-25°C to 70°C
Relative humidity (R.H.) for annual mean	< 75%
R.H. occasionally on some days	85%
Insulation Strength	
Protective Class acc. to IEC62052-11	Class I I
LED Indicator	
Flash rate	1000 imp/kWh
Communication Interfaces	
PLC Frequency range	"A"-band
PLC Method	Spread FSK
IrDA communication port (read only)	9600 bps
Disconnection Device	
Type	Single pole latching contactor
Maximum switching current	60A
Maximum switching voltage	250 VAC
Mechanical life	100 000 operation minimum

Technical Specifications

Weight and Dimensions/ Case protection	
Weight	195 g
Width	36 mm
Height	93 mm
Depth	63mm
Enclosure protection (IEC60529)	IP51
Protection for connection terminals	IP20

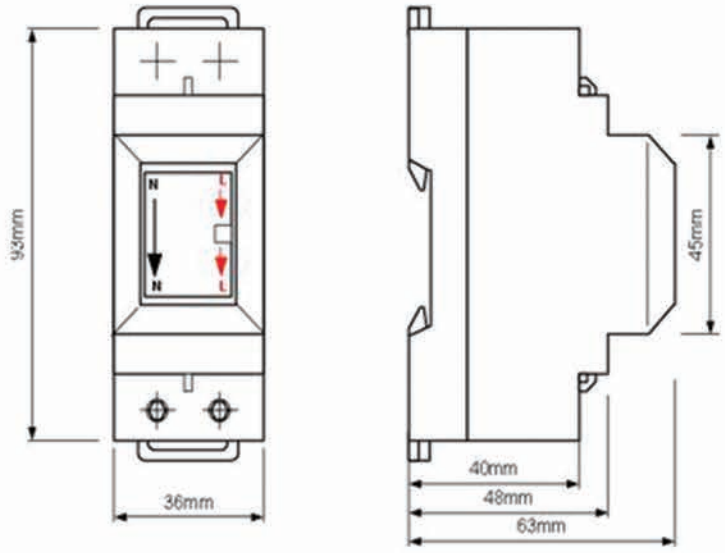

Fig. 2.Meter Dimensiions