MED8I1V2D – Measure Eight Currents and the Voltage in Photovoltaic

Description and Applications

The MED8I1V2D measured intensities of eight branches and the voltage until 1000 VDC of a photovoltaic system, sending this information to control center via RS485 interface with Modbus-RTU protocol. This allows remote monitoring system operation.

The communication channel is RS-485, and through this you can connect to GSM or GPRS modems.

The current is measure with extern Hall sensors.

Has two digital inputs to send to master information added.

Functional Characteristics

Compact device to install inside an electrical equipment box or envelope.

Green led that indicates an auxiliary voltage 230 Vac.

Green led indicating the presence of voltage at the installation (> 50% Vn).

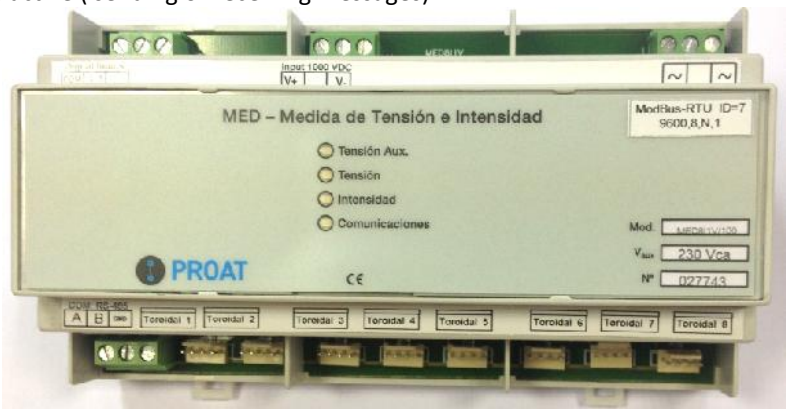
Green led lights if no current flow (> 50% In) in an entry.

Orange led is on when the RS-485 communication is active (sending or receiving messages).

Plastic housing for DIN rail installation.

Terminals faceplate.

RS-485 Interface



Technical Data

Protocol: MODBUS-RTU

- Parameters 9600,8, N, 1
- Functions 4 and / or 6.
- Identifier by command
- Commands adaptable to each application (running in slave mode) commands.

Auxiliary Voltage: 230 VAC.

Consumption <5W.

Provides adequate auxiliary voltage to the Hall Sensors for your operation. (Consumption 300mA max).

Voltage measurement: 0 ... 1000VDC

Galvanic isolation between inputs and outputs against auxiliary voltage.

Normative:

• insulation test voltage

•High frequency disturbances

• Fast Transients

• Surge

Models

MED8I1V2D /XXX/ YYY

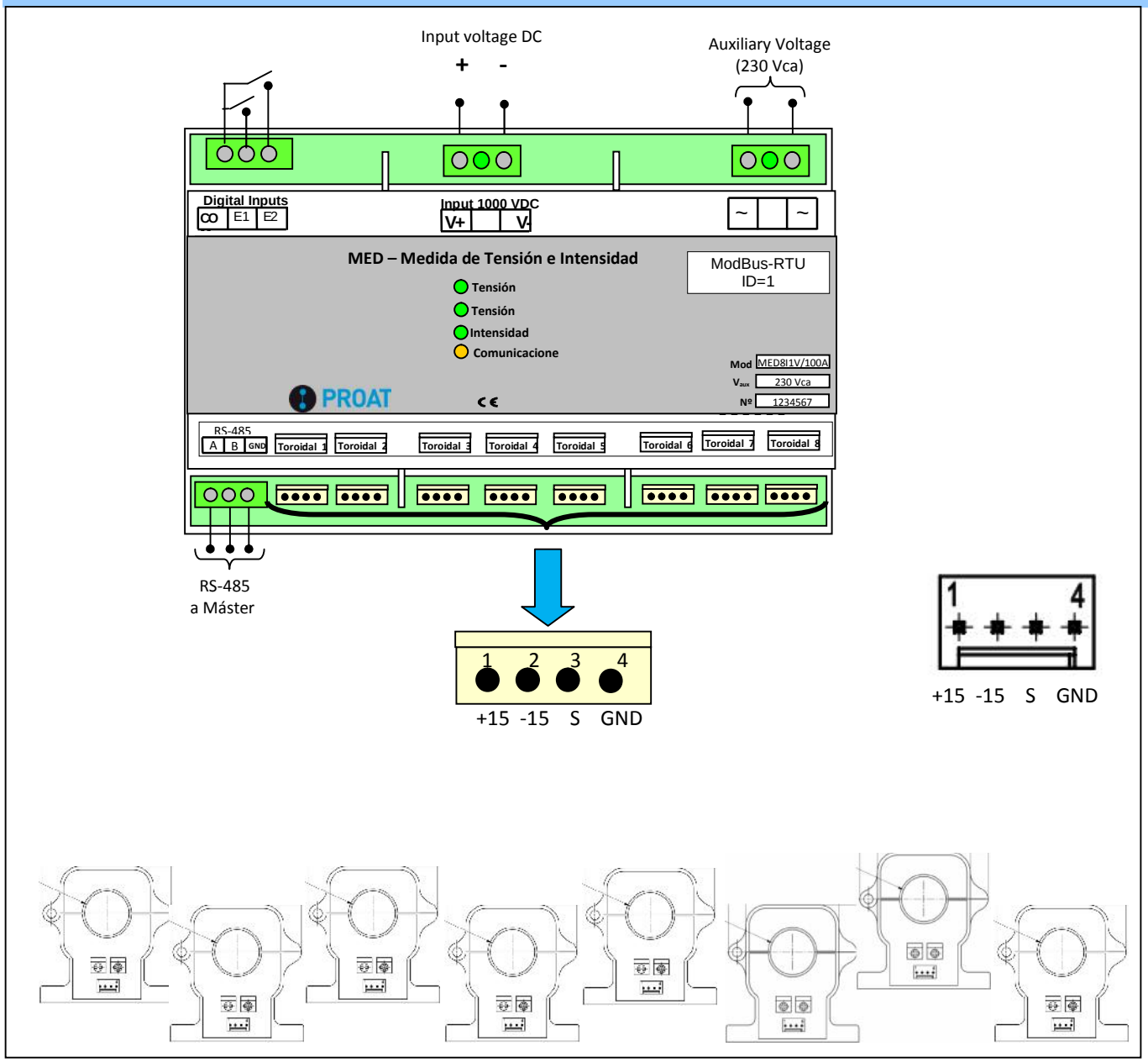
Nominal Voltage
400,600,800 ó 1000VDC

Nominal Currents
Continua: 25 a 600 A

Example: In a photovoltaic installation with open circuit voltage of 950 Vdc and eight strings with maximum current of 200 Amps by string, and will use Hall Sensor of 200A, the **MED8I1V2D/ 1000/200** would be the model to use**.**

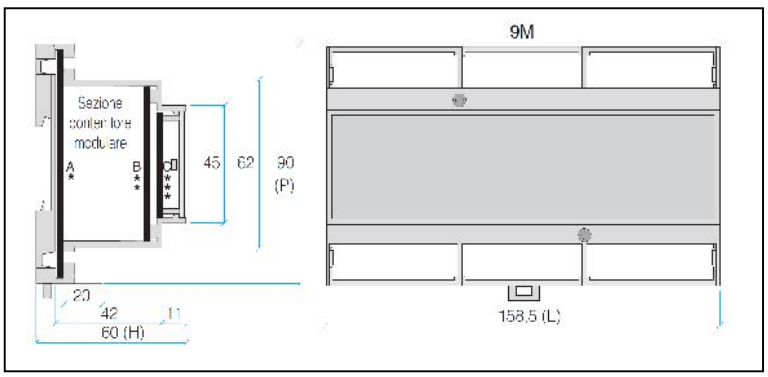
Note: The type of toroidal depend on the size of the cable and whether there needs to be open able or not.

ELECTROHMS has models with open able or not open able core (HKxxxT03, HExxT02, HLxxxT01, etc.) and a passage of cables up to diameter 40,64mm.



External dimensions (mm)

Box for OMEGA DIN EN 50022. Plastic Material VO self extinguishing class



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