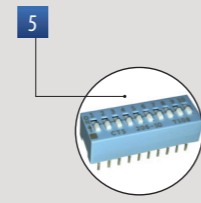


Accessories

Concentrator module that coupled with software Energy-View for the remote monitoring of energy consumption recorded by several energy meters through the PC. It is possible to connect 8 different energy meters with pulse output (single phase, three-phase, etc.) to each Clip-485. The connection between device and PC occurs via RS-485 serial line with Modbus communication protocol in selectable RTU or ASCII format. Clip-485 allows the management of a dual charge band system, thanks to a dedicated input that can be connected to a clean contact, such as an external timer. This feature allows to split costs into two different time bands, offering efficient resource management.



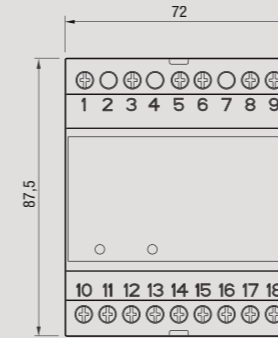
- 1 Green LED: power ON
- 2 Red LED: data transit on serial line RS-485
- 3 Entrance for time slot management (double rate)
- 4 Dip-Switch door
- 5 10-position Dip-Switches for setting the instrument address



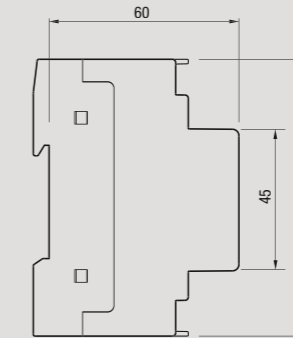
CLIP-485

DIMENSIONS (mm)

Front view

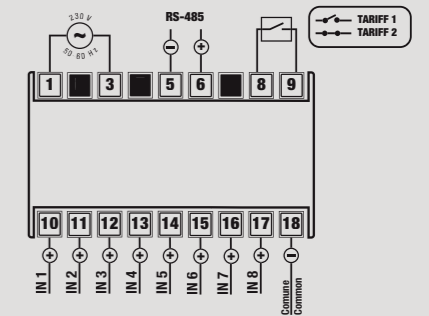


Side view



CONNECTION DIAGRAM

Diagram



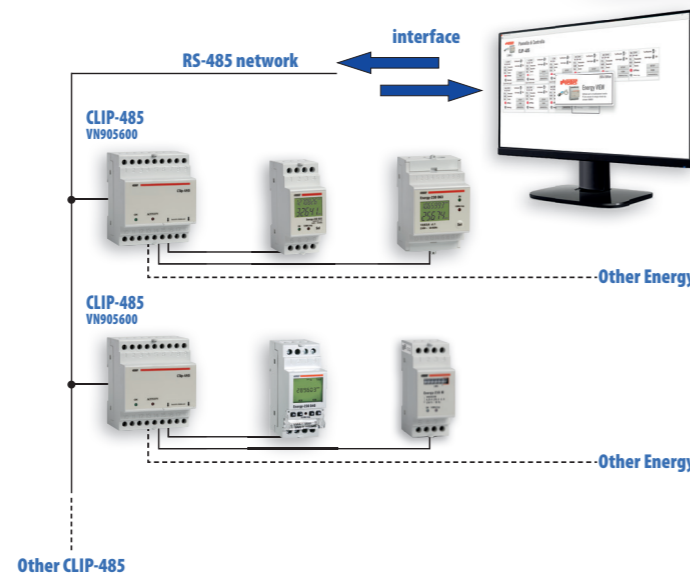
MEASUREMENT AND CONTROL

TECHNICAL INFORMATION

CONCENTRATOR MODULE

- Up to 8 ENERGY series energy meters can be connected to each concentrator module, placed at a maximum distance of 25 m
- The connection to the PC is via serial line RS-485 operating according to the "MODBUS", RTU or ASCII protocol
- Each serial line RS-485 can be connected (shielded and twisted cable minimum section 0.75 mm²):
 - up to 31 concentrator modules without using signal amplifiers, provided these are located at a distance not exceeding 1000 m
 - up to 247 concentrators modules in groups of 30 separated by suitable signal amplifiers
- Minimum pulse duration: 30 ms, maximum: 240/800 ms
- Maximum pulse frequency: 3600 imp/kWh
- Double tariff management to differentiate costs based on 2 time slots

Note: the data update in the concentrator module occurs also when the PC is disconnected



GENERAL CHARACTERISTICS

Power supply	Vac	230 (-15% +10%)
Frequency	Hz	50 / 60
Absorption	VA	2
Pulse duration	ms	30-240/800
PC connection		"multidrop" via serial line RS-485 operating according to the MODBUS protocol
No. of connectable meters		8
Max distance Clip-485 - meters	m	25

MODBUS protocol characteristics:	
Transmission method	RTU/ASCII
Transmission speed (Baud Rate)	9600/19200/38400
Format of the byte transmitted	1 Start Bit 7 (ASCII)/8 (RTU) Data Bit None/ODD/Even Parity Bit 2 (ASCII)/1 (RTU) Stop Bit
Error detection method	LRC (ASCII)/CRC (RTU)
Operating temperature	°C -10 ÷ +45
Storage temperature	°C -25 ÷ +70
Humidity	20-90% non condensing
Protection	IP40
Container	4 DIN modules

Code	Model	Description	Dimensions
VN905600	CLIP-485	Concentrator module counters series ENERGY	4 DIN modules

REFERENCE STANDARDS

Compliance with Community Directives: 2014/35/EU (LVD) and 2014/30/EU (EMCD) is declared with reference to the following Standards: EN 61010-1 • EN 61000-6-2 / EN 61000-6-4