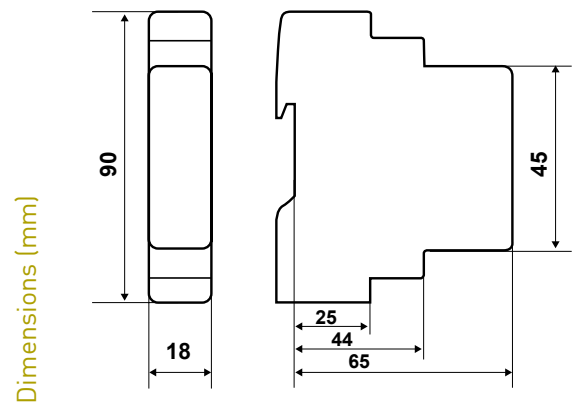


VM322

Energy meter, compact, single-phase, 32A, 2 wires

Compact-design active energy meter, single-phase with direct connection, 1 DIN module, 7-digit LCD display, intended for measuring electric energy both in housing units and in business and industrial units; it comes with MID certification and is therefore suitable for billing.



	Power Supply	I _{max}	I _{ref} (I _b)	I _{tr}	I _{min}	I _{st}	Options	Availability
VM322MA	230V 50Hz 2 wires	32A	5A	500mA	250mA	20mA	MID certification	in stock
VM322MA-K	230V 50Hz 2 wires	32A	5A	500mA	250mA	20mA	MBus MID certification	on request
VM322A	230V 50Hz 2 wires	32A	5A	500mA	250mA	20mA	-	in stock
VM322RA-K	230V 50Hz 2 wires	32A	5A	500mA	250mA	20mA	MBus and resettable total energy meter	on request

* Note: all partial meters models are resettable

ELECTRICAL FEATURES

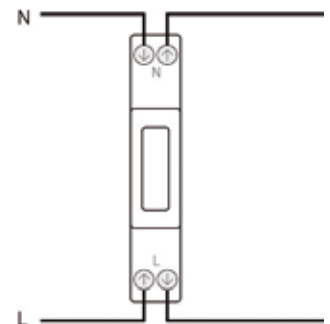
Power supply: 230V (±20%) 50Hz derived from metering circuit;
Consumption 0,8VA max.

Current:

- Max value I_{max}: 32A
- Value I_{ref} (I_b): 5A
- Value I_{tr}: 500mA
- Value I_{min}: 250mA
- Start current I_{st}: 20mA

Outputs and inputs:

- 1 pulse output (S0) opto-isolated (27VDC 27mA) according to DIN 43864, with 1000 pulse/KWh integrating constant.
- 1 metrological LED with 5000 pulse/KWh integrating constant.



HOMOLOGATION AND STANDARDS

EN50470-3-1 class B; MID Certification (models "VM322MA" and "VM322MA-K").
Accuracy: Active energy: class B according to EN50470-1-3

INSTALLATION

DIN rail, 1 module.

OPERATION

This meter, in addition to energy, reads also the main electric parameters, visualizes them on the 7-digit display and provides them to the optional MBus optical communication port. The 7-digit (6 + 1 decimal one) high resolution allows to appreciate even little consumption increments. The energy meter has been implemented in full compliance with European Norm EN50470-1-3. Active energy accuracy falls within the limits set out for Class B.

Versions "VM322xx-K" integrate the MBus communication interface allowing the connection to centralized monitoring and control systems. The M-Bus (Meter-Bus) is a European standard for remote reading of consumption meters. A dedicated software is provided for module configuration and for displaying the detected measurements.

- LCD display, backlit, 7-digits.
- Partial meter can be started, stopped or reset. Versions "VM322RA" and "VM322RA-K" allow to reset all meters (total and partial) individually or in block.
- Metrological LED on the front panel.
- S0 output for transmitting energy metering pulses to other devices.
- MBus port (VM322MA-K and VM322RA-K models) for communication with energy monitoring systems.
- Sealable terminal cover (MID version).

The analysis of the MTBF value (reliability coefficient), the accurate selection of components as well as the low internal working temperatures, together with rigid and severe manufacturing and control standards, ensure top-quality and excellent-reliability products.

MEASUREMENTS

INSTANTANEOUS VALUES	SYMBOL	UNIT	DISPLAY	MBUS	S0 OUTPUT
Voltage	VL-N	V	•	•	
Current	I	A	•	•	
Active power	P	W	•	•	
Power factor	PF		•	•	
Frequency	f	Hz	•	•	

STORED DATA	SYMBOL	UNIT	DISPLAY	MBUS	S0 OUTPUT
Total active energy (non resettable)		Wh	•	•	•
Partial active energy (resettable)		Wh	•	•	

APPLICATIONS

- Industrial energy logging for individual production lines or machines.
- Measurement of renewable energy from photovoltaic systems, wind power turbines, etc.
- Logging and billing of energy consumption at campsites, shopping centers, housing developments, wharfs, etc.
- Individual energy consumption logging for hotels, convention centers and trade fair facilities.
- Energy consumptions billing for business centers.
- Internal cost distribution for civil and/or industrial multi-owned and/or subleased buildings.
- Implementation of energy monitoring and control systems.
- Remote consumption metering and reading and cost calculation.

FEATURES

Operating temperature: -25 ÷ 55°C - Relative humidity: max 80% (non-condensing).

Protection level : IP51 (front panel), IP20 (terminal block compartment).