Energy-400 PAR

VN971800



Static energy meter for displaying active and reactive energy consumption in three-phase 400 Vac systems. 4-module 400 Vac power supply for DIN-rail mounted, current input up to 1000 A via x/5 CTs, with electromechanical counters and pulse output.

General features

- Green LED: power presence
- Two red LEDs: indicate energy count (each flash = 1/4 kWh or 1/4 kvarh)
- Yellow LED: identifies connection error
- Selector for transformation ratio: CT selection via dip-switches located under the front cover
- Two 7-digit electromechanical counters for active and reactive energy measurement
- Amperometric connection via external x/5 A CTs
- Selectable CT ratios (for CT x/5 A): 5 – 10 – 25 – 50 – 75 – 100 – 125 – 150 – 200 – 250 – 300 – 400 – 500 – 600 – 800 – 1000/5 A
- Two opto-isolated pulse outputs for active and reactive energy, for PC display of consumed energy via dedicated software (Energy-view) and concentrator module (CLIP-485)
- Galvanically isolated current inputs (TA secondary can be earthed)
- Possible connection in three-phase systems with or without neutral, with balanced or unbalanced load
- Note: when connecting the device, the CT transformation ratio must exactly match the ratio described above, selectable on the device

Technical specifications

Power supply	
Power supply	3x230 (400) Vac (-15% ÷ +10%)
Frequency	50 / 60 Hz
Measure	
Energy display resolution	1 (1 kvarh) kWh
Active energy measurement accuracy	Class A (EN 50470)
Reactive energy measurement accuracy	Class 3 (EN IEC 62053-23)
Voltage circuit absorption	<2,5 VA
Current circuit absorption	< 2,5 VA

Vemer S.p.A. declines all responsibility for the use of the products for purposes other than those for which they are intended, as indicated in the technical documentation. Vemer S.p.A. reserves the right to make, without prior notice, such changes as may, in its sole discretion, improve the technical and functional characteristics of the products and the related production logic. The technical characteristics and images of the products indicated are given for information only and are not binding in any way, since they may be modified without prior notice.

Revision date: 2026-02-02

Measure	
AC current range	5 A 10 A 25 A 50 A 75 A 100 A 125 A 150 A 200 A 250 A 300 A 400 A 500 A 600 A 800 A 1000 A
Starting current	< 15 mA
Nominal - rated current	5 A
Maximum current	6 A
Operating conditions	
Operating temperature range	-10 ÷ 45 °C
Relative humidity	10% ÷ 90% non-condensing RH
Storage temperature range	-25 ÷ 70 °C
Viewing	
Features of electromechanical counter	2 by 7 digits
Viewing	Electromechanical counter
Outputs	
Optoisolated pulse output	✓
Pulse weight	1 (1) kWh (kvarh)
Pulse duration	100 ms
Pulse output current	< 20 mA
Output pulse voltage	9 ÷ 24 Vdc
Mechanical features	
Protection degree	IP20
Overall dimensions	
Height (A)	87 mm
Width (B)	72 mm
Depth (C)	65 mm

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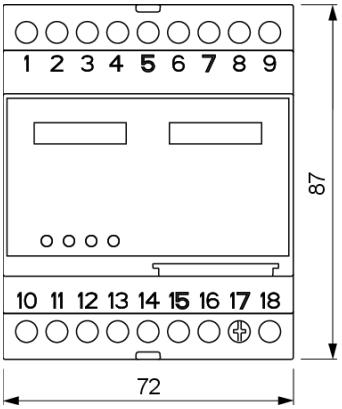
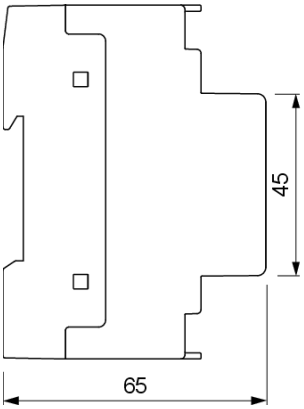
Dimensions

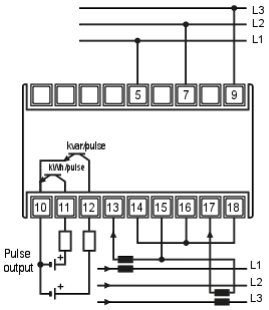
Front View



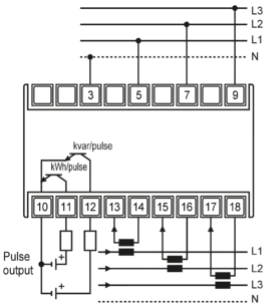
Side View



Wiring diagram

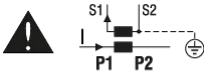


Connection with 2 CTs WITHOUT neutral (3 wires)



Connection with 3 CTs WITH or WITHOUT neutral (3 or 4 wires)

Graphic details



Warning: the secondary circuits of current transformers can be connected to earth.

Accessories compatible with the product

CLIP-485

VN905600

Energy series concentrator module for meters

LAN-485

VE304200

LAN/RS-485 interface + software (on request)

Energy-View

VN970000

System consisting of a USB/RS-485 interface and software for energy meters

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Reference standards

Compliance with Community Directives:

• 2014/35/UE (LVD) • 2014/30/UE (EMCD) • 2011/65/UE e 2015/863/UE (ROHS)

is declared with reference to the following Standards:

• EN 50470-1 • EN 50470-3 • EN IEC 62053-23 • EN IEC 63000

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