ADR-D 230 D22 Modbus

VE009700



Single-phase DIN-rail network analyser (3 modules), 230 Vac supply, direct connection 22.5 A or via CT. Designed for TRMS measurement of electrical parameters in single-phase systems: voltage, current, active power, power factor, frequency, active energy. Allows insertion via CT for higher currents and has isolated RS-485 output; using MODBUS protocol, it can connect the analyser to a Master device (PC/PLC) for data display and storage.

General features

- Terminal block for load connection
- Green LED to indicate mains connection
- Red LED to indicate activity on the serial line
- Key for page scrolling and basic settings
- RS-485 serial connection terminals
- Backlit display for visualisation of electrical quantities
- Measurement and display of single-phase system parameters: voltage, current, active power, power factor, frequency, active energy
- Power supply separate and independent from measurements
- Direct voltage conductor insertion
- Displaying via 5 + 7 digit LCD display
- Resettable partial energy meter
- Backlighting with timer or deactivation option
- RS-485 output with RTU protocol
- Out-of-scale indication for voltages above 315 V
- Connection error signal
- Selectable transformation ratios: 5/5, 10/5, 25/5, 50/5, 75/5, 100/5, 125/5, 150/5, 200/5, 250/5, 300/5, 400/5, 500/5, 600/5, 800/5, 1000/5

Technical specifications

Power supply	
Power supply	230 Vac (-15% ÷ +10%)
Frequency	50 / 60 Hz
Absorption	4 VA
Measure	
Voltage display resolution	0.1 V
Current display resolution	10 mA
Current measurement accuracy	± 0.3% ± 1 digit (f.s. 22.5 A)

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

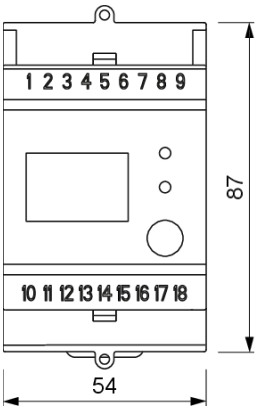
Measure	
Voltage measurement accuracy	± 0.5% of full scale ± 1 digit
Frequency measurement accuracy	± 0,1 Hz
Power factor measurement accuracy	± 1% ± 1 digit
Active power measurement accuracy	± 1% full scale ± 1 digit (f.s. 100 kW or 1000 kW)
AC current range	5 A 10 A 25 A 50 A 75 A 100 A 125 A 150 A 200 A 250 A 300 A 400 A 500 A 600 A 800 A 1000 A
AC voltage range	300 V
Type of insertion - current	Via external CT x/5
Type of insertion - voltage	Direct
Operating conditions	
Operating temperature range	-10 ÷ 45 °C
Relative humidity	20% ÷ 90% non-condensing RH
Storage temperature range	-25 ÷ 70 °C
Viewing	
Display	Backlit LCD
Digits number	5 + 7
Outputs	
Serial interface output	✓
Terminations	
Termination type	Terminal blocks
Maximum cable cross-section	(voltage input) 2.5 mm² (current input) 4 mm² 2.5 (RS485 output) mm²
Mechanical features	
Protection degree	IP20 IP51 (on the front)
Overall dimensions	
Height (A)	87 mm

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.

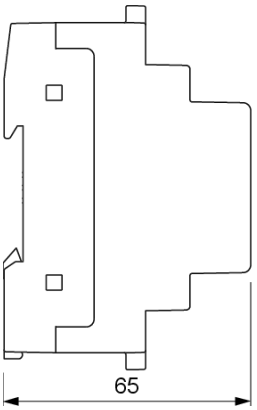
Overall dimensions	
Width (B)	54 mm
Depth (C)	65 mm

Dimensions

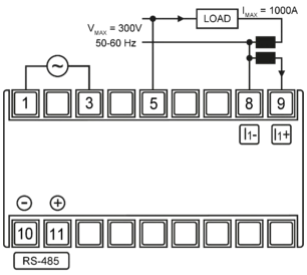
Front View



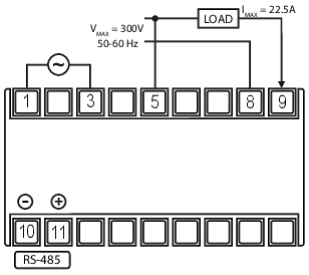
Side View



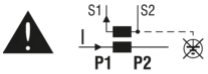
Wiring diagram



Connection via CT



Graphic details



Warning: the secondary circuits of current transformers MUST NOT be connected to earth.

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.

Product variants

ADR-D 230 D22 Spot

VE008900

3-module DIN-rail network analyser, direct connection up to 22.5 A, 230 Vac supply.

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 61010-1 • EN IEC 61000-6-2 • EN IEC 61000-6-3 • EN IEC 62052-11 • EN IEC 62053-21 • EN IEC 63000

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.