



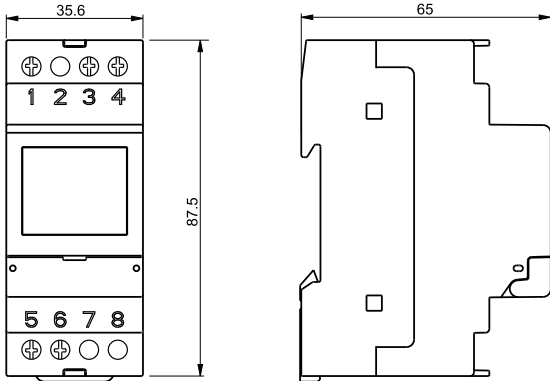
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Mod. Energy-230 D40

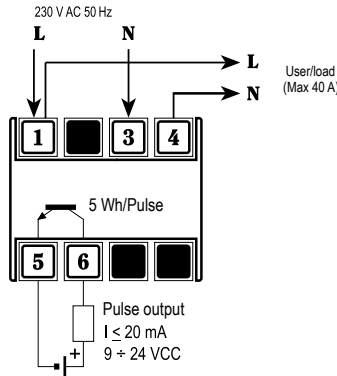
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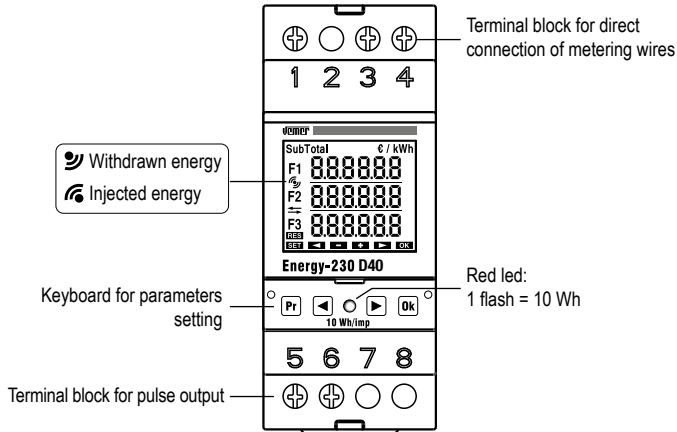
DIMENSIONS



CONNECTION DIAGRAM



DESCRIPTION



Information to users pursuant to art. 14 of the directive 2012/19 / EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE)



If the crossed-out bin symbol appears on the equipment or packaging, this means the product must not be included with other general waste at the end of its working life.

The user must take the worn product to a sorted waste center, or return it to the retailer when purchasing a new one.

Products for disposal can be consigned free of charge (without any new purchase obligation) to retailers with a sales area of at least 400 m², if they measure less than 25 cm.

An efficient sorted waste collection for the environmentally friendly disposal of the used device, or its subsequent recycling, helps avoid the potential negative effects on the environment and people's health, and encourages the re-use and/or recycling of the construction materials.

02-2023

REFERENCE STANDARDS

Conformity to European Community directives: 2014/35/UE (LVD); 2014/30/UE (EMCD)
 is declared according to the following standards: • EN 61010-1 • EN 50470-1 • EN 50470-3

User Manual

SINGLE-PHASE ACTIVE ENERGY METER
 Read all the instructions carefully

- The **Energy-230 D40** static energy meter is an appliance to read active energy both withdrawn and injected in single-phase 230 V AC systems. It is designed to operate in environments with category of overvoltage III and pollution level 2 according to EN 61010-1 standard. The energy meter Energy-230 D40 is in compliance with MID (2004/22/CE) and it's suitable for use in mechanical environment of type M1 and in electromagnetic one of type E2.

SAFETY WARNINGS

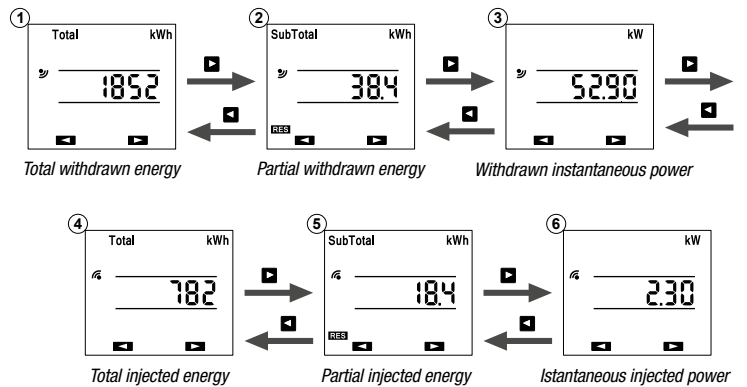
To guarantee correct installation, proceed as follows:

- The appliance should be installed by a qualified operator
- The appliance should be installed in a panel in such a way as to guarantee that the terminals are inaccessible after fitting
- A protection device against over-currents should be installed in the electrical system, upstream of the energy meter
- Connect the instrument as shown in the alongside diagrams
- Before touching the connector terminals make sure that the wires to be connected or already connected to the instrument are not live
- Do not power or connect the instrument if any part of it is damaged
- The instrument must be installed and activated in compliance with current electric systems standards.

Code	Model	Description
VE429710	Energy-230 D40	Single-phase active withdrawn and injected energy meter

TECHNICAL SPECIFICATIONS

- Rated voltage: 230 V AC (-15%/+10%), 50/60 Hz
- Maximum power consumption: 5 VA
- Starting current: I_{st} = 20 mA
- Minimum current I_{min} = 0.25 A
- Reference current: I_{ref} = 5 A
- Maximum current: I_{max} = 40 A
- Current circuit consumption: < 4 VA
- Connection type: direct
- Pulse output for remote reading of the withdrawn energy counting:
 - 5 Wh / pulse
 - voltage: 9 ÷ 24 V DC (± 10%)
 - duration: 100 ms ± 15%
 - maximum output current: 20 mA
- Terminal block for maximum cables section of 6 mm²
- Backlit LCD with powered device
- Red signaling led = flashing at frequency 10 Wh
- Class index: B
- Partial energy resolution: 0.1 kWh (full scale: 99999.9)
- Total energy resolution: 1 kWh (full scale: 999999)
- Operating temperature: -10 ÷ +45 °C
- Storage temperature: -20 ÷ +70 °C
- Relative humidity: 10% ÷ 90% non-condensing
- Container: 2 DIN modules
- Protection degree: IP20/IP51 on the front
- Insulation: reinforced between accessible parts (front) and all other terminal blocks



OPERATION

The circular structure menu of Energy-230 D40 consists of six pages:

Pages 1, 4: **total withdrawn energy, total injected energy**
 - Resolution: 1 kWh, maximum count 999999. The counter can not be reset.

Pages 2, 5: **partial withdrawn energy, partial injected energy**
 - Resolution: 0.1 kWh, maximum count 99999.9 counting. The counter can be reset by pressing the key [Pr] (2 seconds at least).

Pages 3, 6: **instantaneous withdrawn power, instantaneous injected power**
 - Resolution: 0.01 kW, maximum measure 10 kW (for higher values the display shows HH.HH).

Energy-230 D40 automatically displays the page of the selected size (total energy, partial energy, instantaneous power) actually counted at that time. For example, it shows the total withdrawn or injected energy depending on what is the direction of the current actually detected at that time. The user can at any time change the page displayed with the keys [▶] and [◀]; if a page that contrasts with the direction of the current detected is selected, this will be displayed for a maximum time of 1 minute, after which the counter will show the page of the selected size but with the correct direction.