VARIMETER PRO

DOLD

Energy meter RL 9405 -
Efficient energy management

Energy management means the continuous monitoring, storage and evaluation of energy measurement data, thereby increasing the transparency of energy consumption and energy costs at all measurement levels. Only with a detailed overview of the energy consumers, the use of energy can be designed in a demand-oriented and efficient manner and thus, for example, offering optimisation potentials.

The **energy meter RL 9405** of the **VARIMETER PRO** series is used to measure electrical parameters and energy consumption in 3-phase mains with neutral conductor. Voltages and currents are measured and evaluated continuously. A separate auxiliary voltage is not required. The device provides up to 50 characteristic values of the energy supply and that with a compact width of only 35 mm. The RL 9405 determines all energy consumptions and enables a breakdown by cause. The energy meter RL 9405 is predestined for use in manufacturing processes and IT data centres, to detect energy saving potentials and is especially suitable for the fulfilment of energy audits (DIN EN 16247-1) or energy management (ISO 50001).

The galvanically separated Modbus RTU interface offers flexible options for processing information directly via a gateway or a higher-level control system (PLC) and passing it on via standardised interfaces.

Modbus MEMBER

Advantages and customer benefits

- Can also be used in cramped spaces as it is only 35 mm wide
- Wide operating voltage range of 3/N AC 80 - 276 V / 140 - 480 V
- Can be used without separate auxiliary voltage
- Continuous scanning of voltage and currents in 3-phase mains with earthed neutral conductor (TN, TT systems), can also be used in single-phase mains
- Up to 50 measured values can be recorded and evaluated
- Central parameterisation, evaluation and diagnosis via Modbus RTU

Our experience. Your safety.

Energy meter RL 9405

Technical features

- Continuous scanning of voltages and currents in 3-phase mains with earthed neutral conductor (TN, TT systems)
- Measurement of effective and peak values of phase voltage and phase current as well as mains frequency, power factor, active power, reactive power, apparent power, active energy, reactive energy and apparent energy
- Galvanically separated Modbus RTU interface
- Simple, intuitive setting of Modbus address and baud rate on the device
- No separate auxiliary voltage necessary (generated from the measured voltage of all three phases)
- Optional marketable current transformers can be connected
- Width 35 mm

Energy meter RL 9405

Current transformer ND 5013/024

Order information

Standard type: RL 9405 3/N AC 80 ... 230 V 50 Hz
Secondary rated current: 100 mA
Item number: 0069092

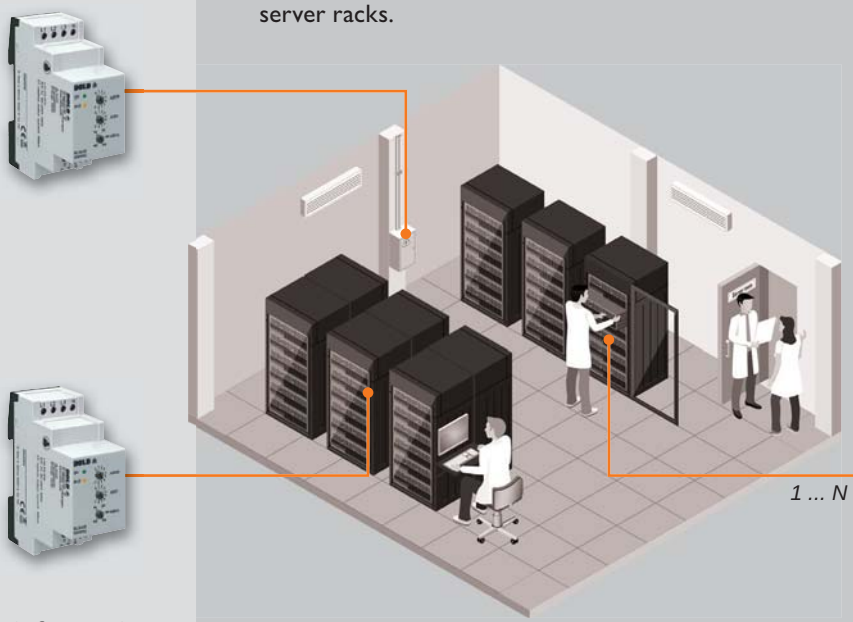
Standard type: ND 5013/024
Item number: 0069465

Fields of application

- Power distribution systems
- IT data centres
- Building automation
- Energy management monitoring
- Communication systems
- PV systems

Application example

The energy meter RL 9405 is installed at the consumption points of the server racks. The device provides information about the current operating grade of a rack and the total consumption. For this purpose, the data is passed on to a monitoring software, which stores it in a database with a history. Analysis and evaluation functions in the monitoring software enable targeted control of the server racks.



24/7

Further information

RL 9405 Start

www.dold.com

E. Dold & Söhne GmbH & Co. KG
Bregstraße 18 • D-78120 Furtwangen
T +49 7723 654-0 • F +49 7723 654-356
dold-relays@dold.com • www.dold.com

FE122 / 0225