

General description of energy meters

Application

The Müller + Ziegler energy meters are meters for direct current (EZG) or alternating three-phase current (EZD). The energy meters can be operated either for direct measurement or in connection with shunt resistors (EZG - direct current) or current transformers (EZD - alternating three-phase current). They are used, depending on the model, in photovoltaic systems, battery systems, charging stations, DC machines or industrial plants, workshops, machines and offices.

Special features

- S0 or Ethernet interface
- Analog output 20 mA in various types
- EZG types with wide-range power supply unit for auxiliary voltages from 21-265 VAC+DC
- EZD types can be operated without auxiliary voltage
- Adjustable ratio of shunt resistors and current transformers
- Direct connection possible
- Selectable value of pulses / kWh
- LEDs for function display
- Slim design with housing width 71 mm

Technical data

General data		
Operation temperature	-15 °C to +20 °C to +30 °C to + 55 °C	
Storage temperature	-25 °C to +85 °C	
Temperature influence	< 0,2 % at 10 K	
Ambient conditions	stationary application, indoor, rel. air humidity 5 .. 95%, no condensation, altitude up to 2000 m, water, rain, snow or hail excluded	
EMC	DIN EN 50470-1	
Electrical safety	DIN EN 61 010 part 1 housing insulated, protection class II, for rated voltages up to 1000V (phase to neutral), pollution degree 2, measuring category CAT III	
Fuse	The devices are equipped with short-circuit proofed transformers, an overcurrent protection device for the energy meter itself is not required.	
Test voltage EZG-S0	7,4 kV, 50 Hz input against auxiliary voltage and analog output and relay contact	
Test voltage EZG-TCP	7,4 kV, 50 Hz auxiliary voltage against input against Ethernet interface 4 kV, 50 Hz input against Ethernet interface	
Test voltage EZD-S0/-TCP	4 kV, 50 Hz input against analog output against pulse outputs against tariff control input	
IP code	DIN EN 60529, housing IP30, terminals IP20	
Installation	snap-on mounting on top hat rail 35 mm (DIN EN 60715) The equipment is suitable for tight on tight assembly, however with ambient temperatures of > 45 °C a distance apart of 10 mm is recommended. The assembly location should, if possible, free of vibration.	
Terminals	screw terminals max. 4 mm ² , tightening torque 0,5 Nm	
Housing material	PPO / Polyamid PA, self extinguishing acc. to UL 94 V-0	
Weight	220 g	