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# **Energy meters**

for monitoring your power consumption





## **Energy meters**

Our ROCO and MIXO energy meters are portable and are used to **record the amount of energy that is consumed**. If the consumer does not have an installed measuring device to determine the amount of energy consumed, **the calibration authority specifies that an external measuring device may be** connected via a plug connector. Our energy meters guarantee the manipulation-proof recording of measured values.

The energy meters feature either a **shock-proof plug or CEE plug** and the corresponding coupling, and are suitable for various indoor and outdoor applications.

### Analogue display: MID-compliant

ROCO and MIXO energy meters are fitted only with analogue displays complying with the specifications of the Measuring Instruments Directive (MID) 2014/32/EU.

### Simple commissioning

To correctly record the measured values, connect the energy meter between power source and consumer. The energy measurement starts as soon as the consumer is switched on.



### Power consumption and billing in the event of damage

Repairing water damage involves not only the renovation work on the building. In most cases, technical drying is also necessary in the tenant's or owner's property. This results in electricity costs due to the operation of the drying equipment used that must later

be settled with the insurance company. Only energy meters that comply with calibration regulations may be used for the settlement with the insurance company.



### Power consumption on the campsite

Avoid unpleasant surprises with the electricity bill at the end of your camping holiday by keeping a check on your power consumption at all times with the ROCO energy meter. Just connect the energy meter between energy column and motorhome to be able to check the meter reading at any time.



### Electricity billing? It's easy with ROCO and MIXO energy meters!

In accordance with § 31 of the German Measurement and Calibration Act (MessEG), only energy meters complying with the calibration regulations may be used for electricity billing. ROCO and MIXO energy meters comply with the directives of the European Measuring Instruments Directive (MID) and are approved for electricity billing. The use of non-compliant energy meters for billing constitutes an offence punishable by a fine of up to EUR 50,000 (§ 60).



# ROCO energy meter, 1-phase

- 230 V, 16 A, max. 3.5 kW, 50 Hz
- Rated current 0.25-5 A (max. 45 A)
- Analogue display: 5+1 digits, readable at any time
- Display for max. 99,999.9 kWh
- Non-resettable analogue display
- MID-compliant and suitable for billing purposes
- Accuracy class B
- Operating temperature from -25°C to +55°C

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### Sturdy, practical and safe.

For hanging up the energy meter in very wet rooms during the drying time.

Solution Energy meter housing IP68: dust-tight and water pressure tight

### **Over the set of the s**

### in blue safety colour

Cable with polyurethane outer sheath suitable for maximum mechanical stress, extremely weather-resistant; tear, cut and abrasion-resistant





### **ROCO** energy meter, 1-phase



- Approved for insurance claims, campsites, construction sites and agricultural applications
- Integrated energy meter in a compact housing made of shatter-proof special plastic with a window for reading the analogue display
- MID-compliant and suitable for billing purposes
- AC meter, 1-phase
- Accuracy class B
- Analogue display: 5+1 digits, readable at any time
- Display for max. 99,999.9 kWh
- Non-resettable analogue display
- 230 V, 16 A, max. 3.5 kW, 50 Hz



- Rated current 0.25-5 A (max. 45 A)
- Operating temperature from -25°C to +55°C
- SDM 120 A, 230 V, 50 Hz
- S0: 1000 pulses/kWh
- Tested in accordance with DIN EN 50525-2, DIN VDE 0620-2-1, IEC 60309, IEC EN 50470-1
- IP44: protected against foreign bodies and splash-proof





### ROCO 1 energy meter, 1-phase

- 1.5 m H07BQ-F 3G2.5 blue polyurethane cable
- with shock-proof plug and shock-proof connector with protective cap
- Including sturdy strap for hanging

• 230 V, 16 A, max. 3.5 kW

Input	Output	EAN	Art. no.
Shock-proof plug	Shock-proof connector	4011160617577	61757



### ROCO 2 energy meter, 1-phase, with PRCD

- 1.5 m H07BQ-F 3G2.5 blue polyurethane cable with shock-proof plug and 30 mA RCD (approx. 30 cm from the plug)
- RCD: 30 mA rated residual current, undervoltage release, trigger time less than 30 ms, with function display
- 1.5 m H07BQ-F 3G2.5 blue polyurethane cable with shock-proof connector and protective cap
- Including sturdy strap for hanging
- 230 V, 16 A, max. 3.5 kW

Input	Output	EAN	Art. no.
Shock-proof plug and RCD	Shock-proof connector	4011160617546	61754



### ROCO 3

### energy meter, 1-phase, with voltage indicator

- 1.5 m H07BQ-F 3G2.5 blue polyurethane cable
- with 230 V, 16 A, 3-pole CEE plug with 'powerlight' voltage indicator, and 230 V, 16 A, 3-pole CEE connector with flap lid and 'powerlight' voltage indicator
- If the red LED on plug and connector lights up, the cable is live.
- Including sturdy strap for hanging
- 230 V, 16 A, max. 3.5 kW

Input	Output	EAN	Art. no.
CEE plugs	CEE connector	4011160617584	61758



### Energy meter, 3-phase

- · Approved for insurance claims, construction sites and agricultural applications
- Tested in accordance with DIN EN 50525-2, IEC 60309, IEC EN 50470-1
- IP44: protected against foreign bodies and splash-proof



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### MIXO energy meter 400 V, 16 A or 32 A, 3-phase

- Integrated energy meter in housing made of shatter-proof special plastic with a window for reading the analogue display
- MID-compliant and suitable for billing purposes
- AC meter, 3-phase
- Accuracy class B
- Analogue display: 6+1 digits, readable at any time
- Display for max. 999999.9 kWh
- Non-resettable analogue display
- Rated current 0.25-5 A (max. 80 A)
- Operating temperature from -25°C to +55°C
- 1.5 m H07RN-F heavy-duty rubber cable
- With CEE plug and CEE connector with flad lid

Input / output	Cable	EAN	Art. no.
400 V / 16 A / 5-pole / max. 11 kW	H07RN-F 5G2.5	4011160617454	61745
400 V / <b>32 A</b> / 5-pole / max. 22 kW	H07RN-F 5G6	4011160617461	61746



### Solid rubber multi socket outlet with 400 V, 63 A energy meter, 3-phase

- Multi socket outlet with built-in MID-compliant energy meter (3-phase)
- Suitable for billing purposes
- 3x 230/400 V AC; 5 (80) A
- Analogue display 6+1 digits, readable at any time
- Display for max. 999999.9 kWh
- Non-resettable analogue display
- With CEE socket 400 V / 63 A / 5-pole
- 400 V, 63 A, approx. 43 kW

Input 400 V / 63 A	Output	EAN	Art. no.
2 m H07RN-F 5G16 with CEE plug	CEE socket	4011160608742	60874



### Charging cable for electric cars with energy meter

- · Charging cables with MID-compliant energy meters in a compact housing made of shatter-proof special plastic with a window for reading the analogue display
- Suitable for billing purposes and for checking charging operations
- Tested in accordance with IEC 62196-2, IEC 61851-1
- · IP44: protected against foreign bodies and splash-proof







### 5 m charging cable for electric cars MODE 3 with 230 V, 16 A, 1-phase ROCO energy meter

- 5 m blue electric car charging cable with particularly weather-resistant and durable outer sheath, suitable for regular use on the vehicle.
- With Type 2 plugs (vehicle-side / charging station-side), each with protective cap
- 230 V, 16 A, 1-phase, max. 3.6 kW

Input

Type 2 plug

- With ROCO energy meter: MID-compliant and suitable for billing purposes Accuracy class B Analogue display: 5+1 digits, readable at any time Display for max. 99999.9 kWh Non-resettable analogue display Rated current 0.25-5 A (max. 45 A)
- Operating temperature from -30°C to +50°C

Output

• Including cable pouch for storing the charging cable

Type 2 connector



Art. no.

65108

EAN

4011160651083

### 5 m charging cable for electric cars MODE 3 with 400 V, 16 A, 3-phase MIXO energy meter

- 5 m blue electric car charging cable with particularly weather-resistant and durable outer sheath, suitable for regular use on the vehicle
- With Type 2 plugs (vehicle-side / charging station-side), each with protective cap
- 400 V, 16 A, 3-phase, max. 11 kW
- With MIXO energy meter: MID-compliant and suitable for billing purposes Accuracy class B

Analogue display: 6+1 digits, readable at any time Display for max. 999999.9 kWh Non-resettable analogue display Rated current 0.25-5 A (max. 80 A)

Operating temperature from -30°C to +50°C • I ncluding cable pouch for storing the charging cable



Input	Output	EAN	Art. no.
Type 2 plug	Type 2 connector	4011160651090	65109





# Measure power consumption, keep a check, reduce costs.

Keep a check on your power consumption – with as - Schwabe energy meters:



During charging of your electric car



During energy-intensive building refurbishment



In the event of damage for settlement with the insurance company



For monitoring the power consumption during your camping holiday

All as - Schwabe energy meters are portable and are used to **record the amount of energy that is consumed**. If the consumer does not have an installed measuring device to determine the amount of energy consumed, **the calibration authority specifies that an external measuring device may be** connected via a plug connector.

Our energy meters guarantee the manipulation-proof recording of measured values.

### Your partner for light and power



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