THE HOME OF INNOVATION.

Eltako

THREE-PHASE AND SINGLE-PHASE ENERGY METERS

INTELLIGENTLY MEASURE AND VISUALISE POWER

PRODUCTS AND PRICES 2026

INTELLIGENTLY MEASURE AND VISUALISE POWER

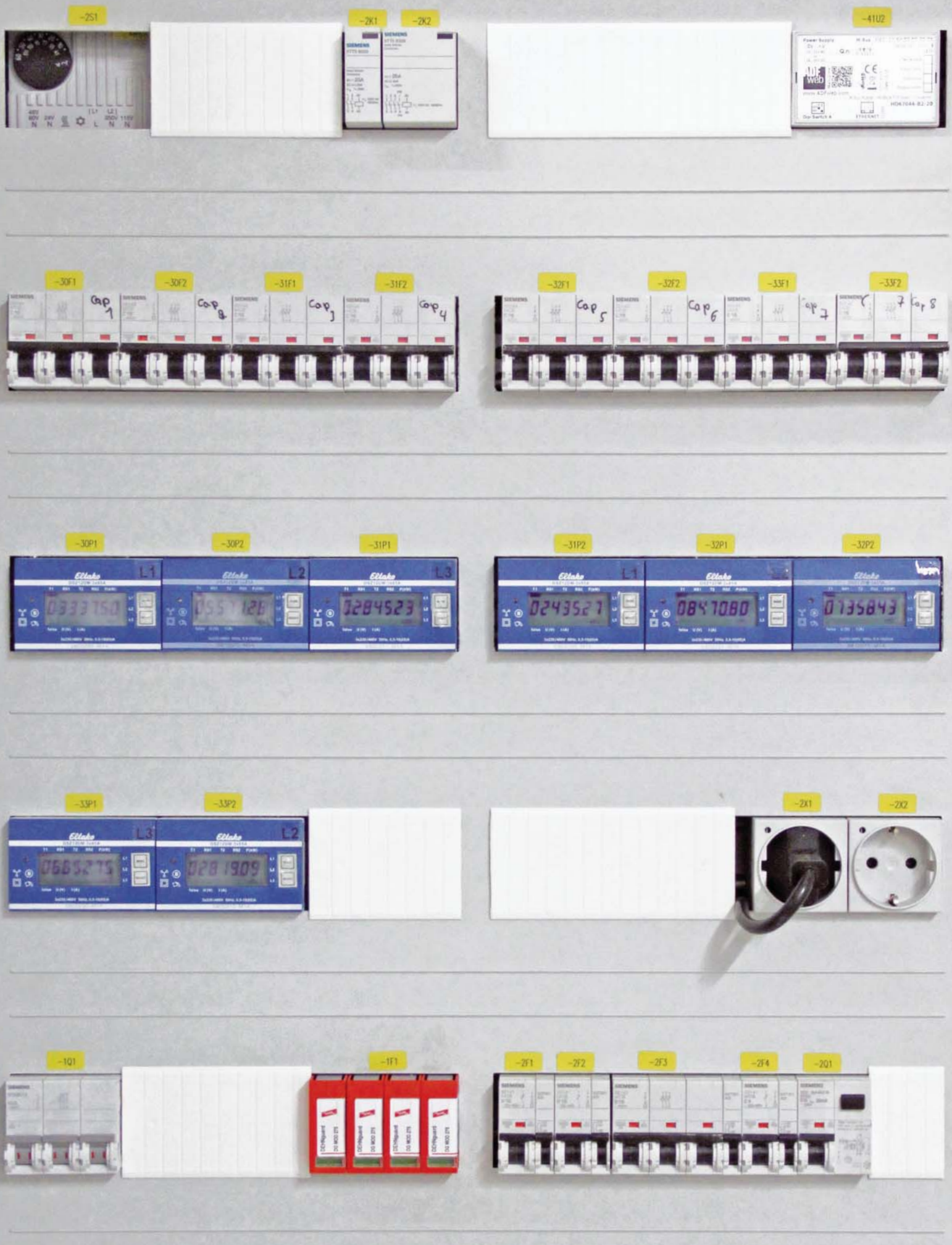
Our three-phase and single-phase meters as well as meter gateways offer a wide range of possible uses for electricity measurement and visualisation.

The modern devices meet the highest quality standards in accordance with European standards and thus ensure reliable and precise measurements.

We ensure the outstanding quality of our products through special care in production and structured quality management.

Whether you choose a MID certified device, prefer a cheaper, non-certified alternative or are considering our extensive range of meter accessories - you can always count on the reliability of our products.

Three-phase and single-phase energy meters


-2S1
-2K1
-2K2
-41U2
-30F1
-30F2
-31F1
-31F2
-32F1
-32F2
-33F1
-33F2
-30P1
-30P2
-31P1
-31P2
-32P1
-32P2
-33P1
-33P2
-2X1
-2X2
-1Q1
-1F1
-2F1
-2F2
-2F3
-2F4
-2Q1

CONTENT

The ELTAKO wireless system works with the reliable and worldwide standardised EnOcean wireless technology in 868 MHz.
It transmits ultra short and interference-proof signals with a range of up to 100 meters in halls.
ELTAKO wireless pushbuttons reduce the electrosmog load since they emit high-frequency waves that are 100 times weaker than conventional light switches. There is also a significant reduction in low-frequency alternating fields since fewer power cables need to be installed in the building.

THE SMART METERING CHAMPIONS

Depending on the customer's installation, only a conventional meter panel is required for billing with the electricity supply operator. On the other hand, dwellings and businesses can be billed using small three-phase meters installed in power distribution panels.
See the installation instructions for electricians on page 10-37.

It is then the task of the building management service to read the intermediate meter. This either takes place at the same time as heating consumption is read or centrally, e.g. when the meter interface is evaluated. All ELTAKO energy meters for rail mounting are therefore fitted as standard with an interface.

Page	8	9	10	11	12	12	13	14	15	16	17	18	18	19	20	21	22	23	23
	DSZ16D-3x100A MID	DSZ16DE-3x100A	DSZ16DZ-3x100A MID	DSZ16DZE-3x100A	DSZ15D-3x80A	DSZ15DE-3x80A	DSZ15DZ-3x80A	DSZ15DZE-3x80A	DSZ15WD-3x5A	DSZ15DM-3x80A	DSZ15WDM-3x5A	DSZ15DZMOD-3x80A	KNX RTU 886	ZGW16WL-IP	DSZ14DRS-3x80A	DSZ14DRSZ-3x80A	DSZ14WDRS-3x5A	DSZ18OCEE-16A	DSZ18OCEE-32A
Modular device for mounting on DIN rail EN 60715 TH35, number of modules 18 mm each	3	3	3	3	4	4	4	4	4	4	4	4	1	2	4	4	4		
mobil																		■	■
Single-phase energy meter																			
Three-phase energy meter	■	■			■	■			■	■	■	■			■		■	■	■
Bidirectional three-phase meter			■	■			■	■								■			
With MID approval	■		■		■		■		■	■	■	■			■	■	■	■	■
Reference current I_{ref} (Limiting current I_{max}) A	10(100) A	10(100) A	10(100) A	10(100) A	10(80)	10(80)	10(80)	10(80)	5(6)[1]	10(80)	5(6)[1]	5(6)[1]	-	-	10(80)	10(80)	5(6)[1]	10(80) Ib=16	10(80) Ib=32
Display LC display digits	5+2[2] 6+1	5+2[2] 6+1	5+2[2] 6+1	5+2[2] 6+1	5+2[2] 6+1	5+2[2] 6+1	5+2[2] 6+1	5+2[2] 6+1	6+1	5+2[2] 6+1	6+1	5+2[2] 6+1	-	-	5+2[2] 6+1	5+2[2] 6+1	6+1	5+2[2] 6+1	5+2[2] 6+1
Accuracy class MID, inaccuracy ±1%	B	B	B	B	B	B	B	B	B	B	B	B	-	-	B	B	B	B	B
With return stop	■	■			■	■			■	■	■	■			■		■	■	■
Display instantaneous values	■	■	■	■	■	■	■	■	■	■	■	■			■	■	■		
Indication of mis-connection					■	■	■	■	■	■	■	■			■	■	■		
Low standby loss	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
S0 interface potential	■	■	■	■	■	■	■	■	■										
M-bus interface										■	■								
Modbus interface	■	■	■	■								■	■	■					
Interface for ELTAKO RS485 bus															■	■	■		

[1] CT operated energy meter
[2] Switches over automatically from 5+2 to 6+1.

MID meters do not require subsequent calibration with a calibration mark, but correspond to calibrated meters due to MID conformity and an EC declaration of conformity from the manufacturer.

SELECTION TABLE THREE-PHASE AND SINGLE-PHASE ENERGY METERS

Page	24	25	27	28	28	29	30	31	32	33
	WSZ14DRS-32A	WSZ14DRSE-32A	MFSR12DX-230V	WSZ15D-32A	WSZ15DE-32A	WSZ15D-65A	WZR12-32A	WSZ155DSS-16A	WSZ155CEE-16A	WSZ155FBSS-16A
Modular device for mounting on DIN rail EN 60715 TH35, number of modules 18 mm each	1	1	3	1	1	1	1			
mobil								■	■	■
Single-phase energy meter	■	■		■	■	■	■	■	■	■
Three-phase energy meter										
Bidirectional three-phase meter										
With MID approval	■			■		■		■	■	■
Reference current I_{ref} (Limiting current I_{max}) A	5(32)	5(32)	16	5(32)	5(32)	10(65)	5(32)	5(32) Ib=16	5(32) Ib=16	5(32) Ib=16
Display LC display digits	5+2 [2] 6+1	5+2 [2] 6+1	-	5+2 [2] 6+1	5+2 [2] 6+1	5+2 [2] 6+1	2/4	5+2 [2] 6+1	5+2 [2] 6+1	5+2 [2] 6+1
Accuracy class MID, inaccuracy ±1%	B	B	-	B	B	B	B	B	B	B
With return stop	■	■		■	■	■	■	■	■	■
Display instantaneous values	■	■		■	■	■	■	■	■	■
Indication of mis-connection	■	■		■	■	■	■			
Low standby loss	■	■	■	■	■	■	■	■	■	■
S0 interface potential			■	■	■	■				
M-bus interface										
Modbus interface										
Interface for ELTAKO RS485 bus	■	■								

[1] CT operated energy meter
[2] Switches over automatically from 5+2 to 6+1.

MID meters do not require subsequent calibration with a calibration mark, but correspond to calibrated meters due to MID conformity and an EC declaration of conformity from the manufacturer.

DSZ16D-3x100A MID

Three-phase meter 3x100 A with Modbus and S0 interfaces. MID-compliant and therefore approved for use for billing purposes. Can be combined with various Modbus gateways, such as the ZGW16WL-IP, for data evaluation and forwarding via various protocols. Standby loss 0.8 W per path only.

Modular device for DIN-EN 60715 TH35 rail mounting.
3 modules (54 mm wide), 58 mm deep. Terminals cover is sealable. Accuracy class B (1%).
The inrush current is 40 mA per path.
Approved for billing purposes.

Measurement functions and measured values:

- Voltage, current, active power, apparent power, reactive power, power factor, frequency
- 4 tariff meter and total meter for active power
- Connection of 1, 2, or 3 external conductors possible
- Measurement value update every 100 ms
- Maximum current 100 A/Reference current 10 A

Display and operation:

- Meter reading
- Voltages: L1-N, L2-N, L3-N, L1-L2, L2-L3, L3-L1
- Currents: L1, L2, L3, N
- Active power per phase and total
- Frequency
- Total consumption and per phase
- Display of the current tariff (T1–T4)
- Resettable meter readings for total and tariff values
- Display also during power failure (twice within 14 days)
- LED display (100 pulses/kWh)
- PIN protection for settings
- Reset to factory settings possible (PIN, S0, Modbus)

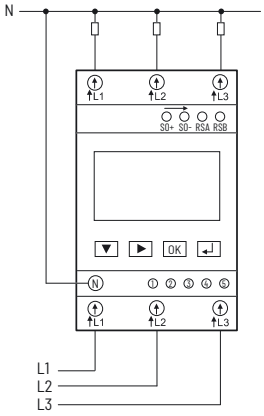
Communication:

- Modbus RTU (RS485):
  - Address 1–247 (Default: 1)
  - Baud rate: 300–115200 (Default: 9600)
  - Parity: None, Odd, Even (Default: None)
  - Stop bits: 1, 2 (Default: 1)
- Modbus register table available on the product pag

S0 output:

- Pulse rate: 0,01 to 10.000 pulses/kWh (Default: 1.000 pulses/kWh)
- Pulse width: 2–99 ms (Default: 30 ms)

Typical connection



Manuals and documents in further languages:
https://eltako.com/redirect/DSZ16D-3*100A_MID

Technical data page 38.

DSZ16D-3x100A MID	Three-phase meter, MID	**Art. No. 28380016**	**135,00 €/pc.**
accessory: ZGW16WL-IP	Modbus energy meter MQTT Gateway via WLAN and LAN; MQTT, REST-API, Modbus TCP	**Art. No. 22016001**	**128,50 €/pc.**

DSZ16DE-3x100A

Three-phase meter 3x100 A with Modbus and S0 interfaces. Can be combined with various Modbus gateways, such as the ZGW16WL-IP, for evaluation and forwarding of data via various protocols. Standby loss 0.8 W per path only.

Modular device for DIN-EN 60715 TH35 rail mounting.
3 modules (54 mm wide), 58 mm deep. Terminals cover is sealable. Accuracy class B (1%).
The inrush current is 40 mA per path.

Measurement functions and measured values:

- Voltage, current, active power, apparent power, reactive power, power factor, frequency
- 4 tariff meter and total meter for active power
- Connection of 1, 2, or 3 external conductors possible
- Measurement value update every 100 ms
- Maximum current 100 A/Reference current 10 A

Display and operation:

- Meter reading
- Voltages: L1-N, L2-N, L3-N, L1-L2, L2-L3, L3-L1
- Currents: L1, L2, L3, N
- Active power per phase and total
- Frequency
- Total consumption and per phase
- Display of the current tariff (T1–T4)
- Resettable meter readings for total and tariff values
- Display also during power failure (twice within 14 days)
- LED display (100 pulses/kWh)
- PIN protection for settings
- Reset to factory settings possible (PIN, S0, Modbus)

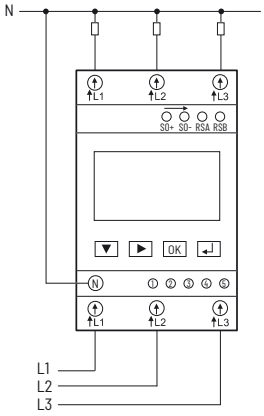
Communication:

- Modbus RTU (RS485):
  - Address 1–247 (Default: 1)
  - Baud rate: 300–115200 (Default: 9600)
  - Parity: None, Odd, Even (Default: None)
  - Stop bits: 1, 2 (Default: 1)
- Modbus register table available on the product page

S0 output:

- Pulse rate: 0,01 to 10.000 pulses/kWh (Default: 1.000 pulses/kWh)
- Pulse width: 2–99 ms (Default: 30 ms)

Typical connection



Manuals and documents in further languages:
https://eltako.com/redirect/DSZ16DE-3*100A

Technical data page 38.

DSZ16DE-3x100A	Three-phase meter	**Art. No. 28380616**	**110,00 €/pc.**
accessory: ZGW16WL-IP	Modbus energy meter MQTT Gateway via WLAN and LAN; MQTT, REST-API, Modbus TCP	**Art. No. 22016001**	**128,50 €/pc.**

DSZ16DZ-3x100A MID

Bidirectional three-phase meter 3x100 A with Modbus and S0 interfaces. MID-compliant and therefore approved for use for billing purposes. Can be combined with various Modbus gateways, such as the ZGW16WL-IP, for data evaluation and forwarding via various protocols. Standby loss 0.8 W per path only.

Modular device for DIN-EN 60715 TH35 rail mounting.
3 modules (54 mm wide), 58 mm deep. Terminals cover is sealable. Accuracy class B (1%).
The inrush current is 40 mA per path.
Approved for billing purposes.

Measurement functions and measured values:

- Voltage, current, active power, apparent power, reactive power, power factor, frequency
- 4 tariff meters and total meter for active power
- Connection of 1, 2, or 3 external conductors possible
- Measurement direction reversible (via display and Modbus)
- Summative energy measurement
- Measurement value update every 100 ms
- Maximum current 100 A/Reference current 10 A

Display and operation:

- Automatic display change every 5 seconds (consumption → / delivery ←)
- Voltages: L1-N, L2-N, L3-N, L1-L2, L2-L3, L3-L1
- Currents: L1, L2, L3, N
- Active power per phase and total
- Frequency
- Total consumption and delivery
- Display of the current tariff (T1–T4)
- Resettable meter readings for total and tariff values (consumption and delivery)
- Display also during power outage (twice within 14 days)
- LED display (100 pulses/kWh)
- PIN protection for settings
- Reset to factory settings possible (PIN, S0, Modbus)

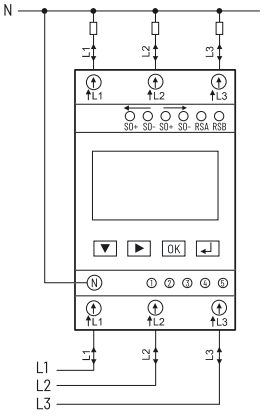
Communication:

- Modbus RTU (RS485):
  - Address 1–247 (Default: 1)
  - Baud rate: 300–115200 (Default: 9600)
  - Parity: None, Odd, Even (Default: None)
  - Stop bits: 1, 2 (Default: 1)
- Modbus register table available on the product page

S0 outputs (consumption → / delivery ←):

- Pulse rate: 0,01 to 10.000 pulses/kWh (Default: 1.000 pulses/kWh)
- Pulse width: 2–99 ms (Default: 30 ms)

Typical connection



Manuals and documents in further languages:
https://eltako.com/redirect/DSZ16DZ-3*100A_MID

Technical data page 38.

DSZ16DZ-3x100A MID	Bidirectional three-phase meter, MID	**Art. No. 28380316**	**170,00 €/pc.**
accessory: ZGW16WL-IP	Modbus energy meter MQTT Gateway via WLAN and LAN; MQTT, REST-API, Modbus TCP	**Art. No. 22016001**	**128,50 €/pc.**

DSZ16DZE-3x100A

Bidirectional three-phase meter 3x100 A with Modbus and S0 interfaces. Can be combined with various Modbus gateways, such as the ZGW16WL-IP, for data evaluation and forwarding via various protocols. Standby loss 0.8 W per path only.

Modular device for DIN-EN 60715 TH35 rail mounting.
3 modules (54 mm wide), 58 mm deep. Accuracy class B (1%). Terminals cover is sealable.
The inrush current is 40 mA per path.

Measurement functions and measured values:

- Voltage, current, active power, apparent power, reactive power, power factor, frequency
- 4 tariff meters and total meter for active power
- Connection of 1, 2, or 3 external conductors possible
- Measurement direction reversible (via display and Modbus)
- Summative energy measurement
- Measurement value update every 100 ms
- Maximum current 100 A/Reference current 10 A

Display and operation:

- Automatic display change every 5 seconds (consumption → / delivery ←)
- Voltages: L1-N, L2-N, L3-N, L1-L2, L2-L3, L3-L1
- Currents: L1, L2, L3, N
- Active power per phase and total
- Frequency
- Total consumption and delivery
- Display of the current tariff (T1–T4)
- Resettable meter readings for total and tariff values (consumption and delivery)
- Display also during power outage (twice within 14 days)
- LED display (100 pulses/kWh)
- PIN protection for settings
- Reset to factory settings possible (PIN, S0, Modbus)

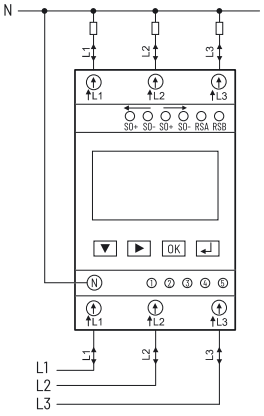
Communication:

- Modbus RTU (RS485):
  - Address 1–247 (Default: 1)
  - Baud rate: 300–115200 (Default: 9600)
  - Parity: None, Odd, Even (Default: None)
  - Stop bits: 1, 2 (Default: 1)
- Modbus register table available on the product page

S0 outputs (consumption → / delivery ←):

- Pulse rate: 0,01 to 10.000 pulses/kWh (Default: 1.000 pulses/kWh)
- Pulse width: 2–99 ms (Default: 30 ms)

Typical connection

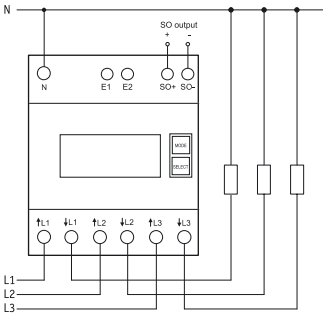


Manuals and documents in further languages:
https://eltako.com/redirect/DSZ16DZE-3*100A

Technical data page 38.

DSZ16DZE-3x100A	Bidirectional three-phase meter	**Art. No. 28380216**	**153,33 €/pc.**
accessory: ZGW16WL-IP	Modbus energy meter MQTT Gateway via WLAN and LAN; MQTT, REST-API, Modbus TCP	**Art. No. 22016001**	**128,50 €/pc.**

Typical connection
4-wire-connection 3x230/400 V



Manuals and documents in further languages:
https://eltako.com/redirect/
DSZ15D-3*80A_MID

Technical data page 38.

DSZ15D-3x80A MID

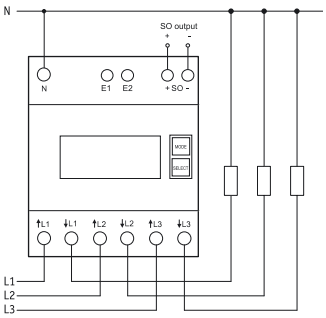
MID

MID-compliant and therefore approved for use for billing purposes.
Maximum current 3x80 A. Standby loss 0.5 watt per path only.

Modular device for DIN-EN 60715 TH35 rail mounting.
4 modules = 70 mm wide and 58 mm deep.
Accuracy class B (1%). With S0 interface.
It measures active energy by means of the current between input and output. The internal power consumption of 0.5 watt active power per path is neither metered nor indicated.
1, 2 or 3 phase conductors with max. currents up to 80 A can be connected.
The inrush current is 40 mA.
The N terminal must always be connected.
The 7 segment LC display is also legible twice within a period of 2 weeks without power supply.
Power consumption is shown by a bar flashing at a rate of 100 times per kWh.
Designed as standard for using as double-tariff meter: Switch over to a second tariff by applying 230 V to terminals E1/E2.
On the right next to the display are the keys MODE and SELECT. Press them to scroll through the menu according to the operation manual. First the **background lighting** switches on. The display then shows the total active energy per tariff, the active energy per resettable memory RS1 or RS2, and the instantaneous values of consumption, voltage and current per phase.
Error message (false)
When the phase conductor is missing or the current direction is wrong 'false' and the corresponding phase conductor are indicated on the display.

DSZ15D-3x80A MID	Three-phase energy meter, MID approval	**Art. No. 28380015**	**157,60 €/pc.**

Typical connection
4-wire-connection 3x230/400 V



Manuals and documents in further languages:
https://eltako.com/redirect/
DSZ15DE-3*80A

Technical data page 38.

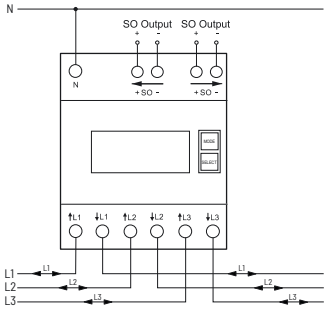
DSZ15DE-3x80A

Maximum current 3x80 A. Standby loss 0.5 watt per path only.

Modular device for DIN-EN 60715 TH35 rail mounting.
4 modules = 70 mm wide and 58 mm deep.
Accuracy class B (1%). With S0 interface.
It measures active energy by means of the current between input and output. The internal power consumption of 0.5 watt active power per path is neither metered nor indicated.
1, 2 or 3 phase conductors with max. currents up to 80 A can be connected.
The inrush current is 40 mA.
The N terminal must always be connected.
The 7 segment LC display is also legible twice within a period of 2 weeks without power supply.
Power consumption is shown by a bar flashing at a rate of 100 times per kWh.
Designed as standard for using as double-tariff meter: Switch over to a second tariff by applying 230 V to terminals E1/E2.
On the right next to the display are the keys MODE and SELECT. Press them to scroll through the menu according to the operation manual. First the **background lighting** switches on. The display then shows the total active energy per tariff, the active energy per resettable memory RS1 or RS2, and the instantaneous values of consumption, voltage and current per phase.
Error message (false)
When the phase conductor is missing or the current direction is wrong 'false' and the corresponding phase conductor are indicated on the display.

DSZ15DE-3x80A	Three-phase energy meter, without MID approval	**Art. No. 28380615**	**116,00 €/pc.**

Typical connection
4-wire-connection 3x230/400 V



Manuals and documents in further languages:
https://eltako.com/redirect/DSZ15DZ-3*80A_MID

Technical data page 38.

DSZ15DZ-3x80A MID

Bidirectional three-phase meter. MID-compliant and therefore approved for use for billing purposes. Maximum current 3x80 A. Standby loss 0.5 watt per path only.

Modulair device for DIN-EN 60715 TH35 rail mounting.
4 modules = 70 mm wide and 58 mm deep.
Accuracy class B (1%). With S0 interface as standard.
It measures active energy by means of the current between input and output. The internal power consumption of 0.5 watt active power per path is neither metered nor indicated.
The active energy is added depending on the sign. Positive power in the meter means energy consumption, negative power means energy delivery. The energy measurement is balanced.
If the energy consumption (P positive) is greater than the energy supply (P negative), the meter reading T → is increased. If the energy supply is greater than the energy consumption, the meter reading T ← is increased. Energy consumption is shown with a right arrow → and energy supply is shown with a left arrow ← above the active bar in the display.
1, 2 or 3 phase conductors with max. currents up to 80 A can be connected.
The inrush current is 40 mA.
The N terminal must always be connected.
Energy consumption and energy supply values are stored in non-volatile memory and are displayed again immediately after a power failure.
The 7 segment LC display is also legible twice within a period of 2 weeks without power supply.
The power consumption and the power supply are indicated by a bar flashing at a rate of 100 times per kWh.
On the right next to the display are the keys MODE and SELECT. Press them to scroll through the menu.
First the **background lighting** switches on. Then the total active energy per consumption and delivery, the active energy of the resettable memory consumption and delivery as well as the instantaneous power, voltage and current values for each phase conductor can be displayed.
Error message
If a phase connection is missing, the corresponding phase is shown on the display.

DSZ15DZ-3x80A MID	Bidirectional three-phase meter, MID approval	**Art. No. 28480315**	**210,90 €/pc.**

Manuals and documents in further languages:
https://eltako.com/redirect/MFSR12DX-230V

Further informations on page 10-23.

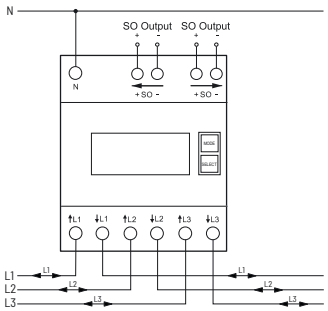
MFSR12DX-230V

Multifunction current relay for bidirectional three-phase meters with two S0 inputs and two S0 outputs or IR interface according to IEC 62056-21. 1 NO contact potential free 16 A/250 V AC, with DX technology, 230 V LED lamps up to 600 W, incandescant lamps 2000 W. Standby loss 0.6 watt only.

Modular device for DIN-EN 60715 TH35 rail mounting.
3 modules = 54 mm wide, 58 mm deep.
This current relay either evaluates the data of a balancing bidirectional three-phase meter, e.g. DSZ15DZ-3x80A with two S0 interfaces, or that of an electronic household meter (eHZ-EDL) with IR interface according to IEC 62056-21 and SML protocol version 1.
The data for the power consumed (→) and the power supplied (←) are recorded, evaluated and a relay contact is switched on or off according to the settings.
With the patented ELTAKO Duplex technology (DX) the normally potential-free contact can still switch in zero passage when switching 230 V AC 50 Hz and therefore drastically reduce wear. Simply connect the neutral conductor to the terminal (N) for this. This results in an standby consumption of only 0.1 watt. Supply voltage 230 V.

MFSR12DX-230V	Multifunction current relay for bidirectional three-phase meters MFSR12DX-230V	**Art. No. 22100530**	**83,33 €/pc.**

Typical connection
4-wire-connection 3x230/400 V



Manuals and documents in further languages:
https://eltako.com/redirect/DSZ15DZE-3*80A

Technical data page 38.

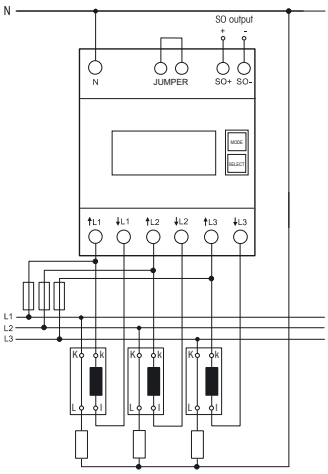
DSZ15DZE-3x80A

Bidirectional three-phase meter. Maximum current 3x80 A. Standby loss 0.5 watt per path only.

Modulair device for DIN-EN 60715 TH35 rail mounting.
4 modules = 70 mm wide and 58 mm deep.
Accuracy class B (1%). With S0 interface as standard.
It measures active energy by means of the current between input and output. The internal power consumption of 0.5 watt active power per path is neither metered nor indicated.
The active energy is added depending on the sign. Positive power in the meter means energy consumption, negative power means energy delivery. The energy measurement is balanced.
If the energy consumption (P positive) is greater than the energy supply (P negative), the meter reading T → is increased. If the energy supply is greater than the energy consumption, the meter reading T ← is increased. Energy consumption is shown with a right arrow → and energy supply is shown with a left arrow ← above the active bar in the display.
1, 2 or 3 phase conductors with max. currents up to 80 A can be connected.
The inrush current is 40 mA.
The N terminal must always be connected.
Energy consumption and energy supply values are stored in non-volatile memory and are displayed again immediately after a power failure.
The 7 segment LC display is also legible twice within a period of 2 weeks without power supply.
The power consumption and the power supply are indicated by a bar flashing at a rate of 100 times per kWh.
On the right next to the display are the keys MODE and SELECT. Press them to scroll through the menu. First the **background lighting** switches on. Then the total active energy per consumption and delivery, the active energy of the resettable memory consumption and delivery as well as the instantaneous power, voltage and current values for each phase conductor can be displayed.
Error message
If a phase connection is missing, the corresponding phase is shown on the display.

DSZ15DZE-3x80A	Bidirectional three-phase meter, without MID	**Art. No. 28380215**	**180,00 €/pc.**

Typical connection
4-wire-connection 3x230/400 V



Manuals and documents in further languages:
https://eltako.com/redirect/DSZ15WD-3*5A_MID

Technical data page 38.

DSZ15WD-3x5A MID

MID

CT operated three-phase energy meter with settable CT ratio and MID. MID-compliant and therefore approved for use for billing purposes. Maximum current 3x5 A. Standby loss 0.5 watt per path only.

Modular device for DIN-EN 60715 TH35 rail mounting.
4 modules = 70 mm wide and 58 mm deep.
Accuracy class B (1%). With S0 interface.
This three-phase energy meter measures active energy by means of the current between input and output. The internal power consumption of 0.5 watt active power per path is neither metered nor indicated.
1, 2 or 3 phase conductors with max. currents up to 5 A can be connected.
The inrush current is 10 mA.
The N terminal must always be connected.
The 7 segment LC display is also legible twice within a period of 2 weeks without power supply.
Power consumption is shown by a bar flashing at a rate of 10 times per kWh.
On the right next to the display are the keys MODE and SELECT. Press them to scroll through the menu according to the operation manual. First the **background lighting** switches on. The display then shows the total active energy, the active energy per resettable memory, and the instantaneous values of consumption, voltage and current per phase.
The CT ratio can also be set. It is set to 5:5 at the factory and blocked with a bridge over the terminals which are marked with 'JUMPER'. To adjust the CT ratio to the installed transformer remove the bridge and reset the energy meter according to the operation manual. Then block it again with the bridge. Adjustable current transformer ratios: 5:5, 50:5, 100:5, 150:5, 200:5, 250:5, 300:5, 400:5, 500:5, 600:5, 750:5, 1000:5, 1250:5 and 1500:5.
Error message (false)
When the phase conductor is missing or the current direction is wrong 'false' and the corresponding phase conductor are indicated on the display.
Important! Before working on the current transformers disconnect the voltage paths of the energy meters.

DSZ15WD-3x5A MID	CT operated three-phase energy meter, MID approval	**Art. No. 28305015**	**204,10 €/pc.**

DSZ15DM-3x80A MID

M-bus three-phase energy meter. MID-compliant and therefore approved for use for billing purposes. Maximum current 3x80 A. Standby loss 0.5 watt per path only.

Modular device for DIN-EN 60715 TH35 rail mounting.
4 modules = 70 mm wide and 58 mm deep.
Accuracy class B (1%). With M-bus interface.
It measures active energy by means of the current between input and output.
The internal power consumption of 0.5 watt active power per path is neither metered nor indicated.
1, 2 or 3 phase conductors with max. currents up to 80 A can be connected.
The inrush current is 40 mA.
The N terminal must always be connected.
The 7 segment LC display is also legible twice within a period of 2 weeks without power supply.
Power consumption is indicated by an LED flashing at a rate of 1000 times per KWh.
Designed as standard for using as double-tariff meter: Switch over to a second tariff by applying 230 V to terminals E1/E2.
On the right next to the display are the keys MODE and SELECT. Press them to scroll through the menu. First the **background lighting** switches on. The display then shows the total active energy per tariff, the active energy of the resettable memory RS1 or RS2 as well as the instantaneous values of consumption, voltage and current per phase.

Error message (false)
When the phase conductor is missing or the current direction is wrong 'false' and the corresponding phase conductor are indicated on the display. In addition, the display flashes if the current direction is incorrect.

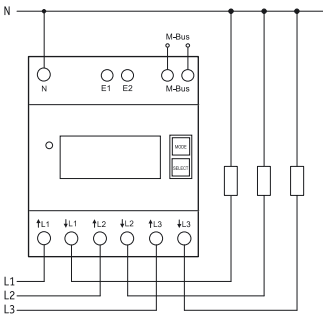
M-bus data transfer
- On read-out all values are transferred in a telegram.
- The following telegrams are supported:
  - Initialisation: SND_NKE — Reply: ACK
  - Read out meter: REQ_UD2 — Reply: RSP_UD
  - Change primary address: SND_UD — Reply: ACK
  - Reset RS1: SND_UD — Reply: ACK
  - Slave selection for the secondary address — Reply: ACK
- The device does not reply to unknown requests
- The transfer rate is detected automatically
- The device has a voltage monitor. In case of voltage loss, all registers are saved in the EEPROM.

Changing the M-bus primary address:
To change the M-bus primary address, hold down SELECT for 3 s. In the menu that appears, press MODE to increment the address by 10. Press SELECT to increment by 1. When the required primary address is set, wait until the main menu reappears.

Secondary address
- It is possible to communicate with the energy meters according to the standard EN13757 using the secondary address.
- The use of wild cards is possible.

For details refer to the operating instructions at www.eltako.com.

Typical connection
4-wire-connection 3x230/400 V



Manuals and documents in further languages:
https://eltako.com/redirect/DSZ15DM-3*80A_MID

Technical data page 38.

DSZ15DM-3x80A MID	M-bus three-phase energy meter, MID approval	**Art. No. 28380512**	**243,70 €/pc.**

DSZ15WDM-3x5A MID

M-bus CT operated three-phase energy meter with settable CT ratio and MID.
MID-compliant and therefore approved for use for billing purposes.
Maximum current 3x5 A. Standby loss 0.5 watt per path only.

Modular device for DIN-EN 60715 TH35 rail mounting.
4 modules = 70 mm wide and 58 mm deep.
Accuracy class B (1%). With M-bus interface.
This three-phase meter measures active energy by means of the currents flowing between inputs and outputs. The internal power consumption of 0.5 watt active power per path is neither metered nor indicated.
1, 2 or 3 converters with secondary currents of up to 5 A can be connected.
The inrush current is 10 mA.
The N terminal must always be connected.
The 7 segment LC display is also legible twice within a period of 2 weeks without power supply.
Power consumption is indicated by an LED flashing at a rate of 10 times per KWh.
On the right next to the display are the MODE and SELECT buttons to browse through the menu. First the **background lighting** switches on. Then the total active energy, the active energy of the resettable memory and the instantaneous values of power, voltage and current are displayed for each outer conductor.
The CT ratio can also be set. It is set to 5:5 at the factory and blocked with a bridge over the terminals which are marked with 'JUMPER'. To adjust the CT ratio to the installed transformer remove the bridge and reset the energy meter according to the operation manual. Then block it again with the bridge. Adjustable current transformer ratios: 5:5, 50:5, 100:5, 150:5, 200:5, 250:5, 300:5, 400:5, 500:5, 600:5, 750:5, 1000:5, 1250:5 and 1500:5.

Error message (false)
If there is no outer conductor of the current direction is incorrect, 'false' and the related outer conductor are indicated in the display.

M-bus data transfer
- On read-out all values are transferred in a telegram.
- The following telegrams are supported:
  - Initialisation: SND_NKE — Reply: ACK
  - Read out meter: REQ_UD2 — Reply: RSP_UD
  - Change primary address: SND_UD — Reply: ACK
  - Reset RS1: SND_UD — Reply: ACK
  - Slave selection for the secondary address — Reply: ACK
- The device does not reply to unknown requests
- The transfer rate is detected automatically
- The device has a voltage monitor. In case of voltage loss, all registers are saved in the EEPROM.

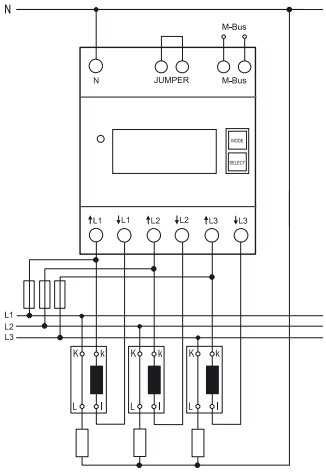
Changing the M-bus primary address:
To change the M-bus primary address, hold down SELECT for 3 s. In the menu that appears, press MODE to increment the address by 10. Press SELECT to increment by 1. When the required primary address is set, wait until the main menu reappears.

Secondary address
- It is possible to communicate with the energy meters according to the standard EN13757 using the secondary address.
- The use of wild cards is possible.

For details refer to the operating instructions at www.eltako.com.

Important!
Before working on the current transformers disconnect the voltage paths of the energy meters.

Typical connection
4-wire-connection 3x230/400 V



Manuals and documents in further languages:
https://eltako.com/redirect/DSZ15WDM-3*5A_MID

Technical data page 10-30.

DSZ15WDM-3x5A MID	CT operated three-phase energy meter, MID approval	**Art. No. 28305515**	**243,70 €/pc.**

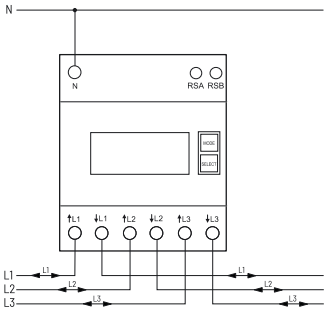
DSZ15DZMOD-3x80A MID

MID

Modbus bidirectional three-phase meter. MID-compliant and therefore approved for use for billing purposes. Maximum current 3x80 A, standby loss only 0.8 watts at L1 and 0.5 W each at L2 and L3.

Modular installation device for mounting on mounting rail DIN-EN 60715 TH35 in installation cabinets with protection class IP51.
4 modules = 70 mm wide and 58 mm deep.
Accuracy class B (1%). With Modbus/ RTU (RS485) interface.
It measures active energy by means of the current between input and output. The internal power consumption of 0.8 resp. 0.5 watt active power per path is neither metered nor indicated.
The active energy is added depending on the sign. Positive power in the meter means energy consumption, negative power means energy delivery. The energy measurement is balanced. If the energy consumption (P positive) is greater than the energy supply (P negative), the meter reading T → is increased. If the energy supply is greater than the energy consumption, the meter reading T ← is increased. Energy consumption is shown with a right arrow → and energy supply is shown with a left arrow ← above the active bar in the display.
1, 2 or 3 phase conductors with max. currents up to 80 A can be connected.
The inrush current is 40 mA.
L1 and N connections must be available.
Connection via RS485 Modbus data logger: Data transfer Modbus/RTU (RS485) and address assignment according to the operating instructions.
Energy consumption and energy supply values are stored in non-volatile memory and are displayed again immediately after a power failure.
The 7 segment LC display is also legible twice within a period of 2 weeks without power supply.
The power consumption and the power supply are indicated by an LED next to the display that flashes 1000 times per kWh.
On the right next to the display are the keys MODE and SELECT. Press them to scroll through the menu. First the **background lighting** switches on. Then the total active energy per consumption and delivery, the active energy of the resettable memory consumption and delivery as well as the instantaneous power, voltage and current values for each phase conductor can be displayed.
Error message
If a phase connection is missing, the corresponding phase is shown on the display.

Typical connection
4-wire-connection 3x230/400 V



Manuals and documents in further languages:
https://eltako.com/redirect/DSZ15DZMOD-3*80A_MID

Technical data page 38.

DSZ15DZMOD-3x80A MID	Modbus bidirectional three-phase meter, MID	**Art. No. 28380516**	**243,70 €/pc.**

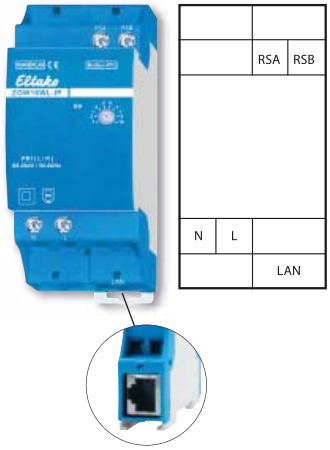
KNX MODBUS RTU-GATEWAY WEINZIERL 886

Compact gateway between KNX TP and Modbus RTU with 250 freely configurable channels. Protection class IP 20.

Modular device for DIN-EN 60715 TH35 rail mounting.
1 module = 18 mm wide, 58 mm deep.
The device allows easy integration of Modbus devices that support the RTU protocol over RS485 and can function as a Modbus master or slave. As a master, the device can address up to 25 slave devices. The association between KNX objects and Modbus registers can be configured via parameters in the ETS. No additional software is required. The KNX bus and Modbus are galvanically isolated from each other. Two buttons and three LEDs enable local operation and visualisation of the device status.

KNX modbus RTU-gateway Weinzierl 886	KNX Modbus RTU gateway	**Art. No. 30000945**	**266,00 €/pc.**

Manuals and documents in further languages:
https://eltako.com/redirect/KNX_RTU_886



ZGW16WL-IP

Gateway with IP interface via WLAN and LAN.
Only 0.9 watt standby loss.

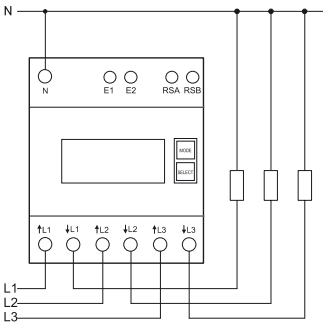
Modular devices for DIN-EN 60715 TH35 rail mounting.
2 modules = 36 mm wide, 58 mm deep. Supply voltage 88-264 V 50-60 Hz.
The WLAN connection uses the 2.4 GHz frequency band. The LAN connection is via RJ45 connector with 10/100Base-T.
The IP connection is via LAN and WLAN. The gateway transmits data from up to 16 ELTAKO Modbus electricity meters via the MQTT protocol, REST-API and Modbus TCP. The data is transferred from the ZGW16WL-IP to any external MQTT broker. For more details on MQTT see: www.mqtt.org.
Commissioning and viewing the current meter values and history are possible via both the ELTAKO Connect app and the web interface.
Configurations and updates are made via the web interface.
A REST API is available on the device's online product page.

ZGW16WL-IP	Modbus energy meter MQTT Gateway via WLAN and LAN; MQTT, REST-API,	**Art. No. 22016001**	**128,50 € / pc.**

ELTAKO Connect-App
https://eltako.com/redirect/eltako-connect

Manuals and documents in further languages:
https://eltako.com/redirect/ZGW16WL-IP

Typical connection
4-wire-connection 3x230/400 V



Further settings can be made using the PC Tool PCT14 (see page 1-5).

Manuals and documents in further languages:
https://eltako.com/redirect/DSZ14DRS-3*80A_MID

Housing for operating instructions GBA14 page 1-48 chapter 1, main catalogue 2025.
Technical data page 38.

DSZ14DRS-3x80A MID

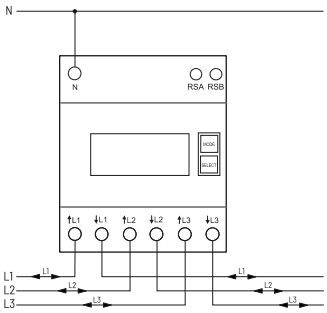
MID

RS485 bus three-phase energy meter. MID-compliant and therefore approved for use for billing purposes. Maximum current 3 x 80 A. Standby loss 0.8 W at L1 and only 0.5 W at L2 and L3 each.

Modulair device for DIN-EN 60715 TH35 rail mounting in distribution cabinets with IP51 protection class. 4 modules = 70 mm wide and 58 mm deep.
Accuracy class B (1%). With RS485 interface.
It measures active energy by means of the current between input and output. The internal power consumption of 0.8 W or 0.5 W active power per path is neither metered nor indicated.
1, 2 or 3 phase conductors with max. currents up to 80 A can be connected.
The inrush current is 40 mA.
The terminals ↑L1 and N must always be connected.
Connection to the ELTAKO RS485 bus via a FBA14 by means of a 2-wire screened bus line (e.g. telephone line). The meter reading and the momentary capacity are transferred to the bus – e.g. for transfer to an external computer or a controller – and is also transferred to the wireless network via the FAM14. For this it is necessary that a device address is assigned from the wireless antenna module FAM14, according to the operating instructions.
The 7 segment LC display is also legible twice within a period of 2 weeks without power supply.
The power consumption is displayed with a LED flashing 1000 times per kWh next to the display.
Designed as standard for using as double-tariff meter: Switch over to a second tariff by applying 230 V to terminals E1/E2.
On the right next to the display are the keys MODE and SELECT. Press them to scroll through the menu according to the operation manual. First the **background lighting** switches on. The display then shows the total active energy per tariff, the active energy per resettable memory RS1 or RS2, and the instantaneous values of power, voltage, current as well as the PcH value can be displayed.
Error message (false)
When the phase conductor is missing or the current direction is wrong 'false' and the corresponding phase conductor are indicated on the display. In addition, the display flashes if the current direction is incorrect.
Meter special operating modes:
In the meter operating modes, the focus is on the adjustable transmission speed of electricity meter data for external building energy managers. Data can be accessed and forwarded via gateways connected to the FAM14 (FGW14, FGW14-USB). **Additional setting options are available on the FAM14 for meters from production week 33/23.**

DSZ14DRS-3x80A	RS485 bus three-phase energy meter with display, MID	**Art. No. 28365715**	**190,00 €/pc.**

Typical connection
4-wire-connection 3x230/400 V



Further settings can be made using the PC Tool PCT14 (see page 1-5).

Manuals and documents in further languages:
https://eltako.com/redirect/DSZ14DRSZ-3*80A_MID

Housing for operating instructions GBA14 page 1-48 chapter 1, main catalogue 2025. Technical data page 38.

DSZ14DRSZ-3x80A MID

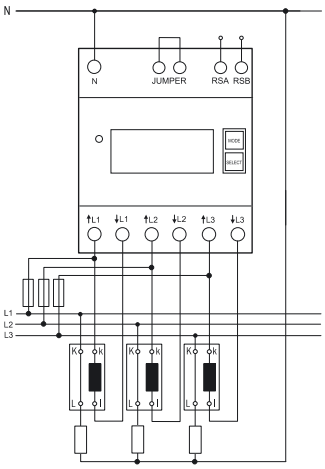
MID

RS485 bus bidirectional three-phase meter. MID-compliant and therefore approved for use for billing purposes. Maximum current 3x80 A. Standby loss 0,8 W at L1 and only 0,5 W at L2 and L3 each.

Modulair device for DIN-EN 60715 TH35 rail mounting in distribution cabinets with IP51 protection class. 4 modules = 70 mm wide and 58 mm deep.
Accuracy class B (1%). With RS485 interface.
It measures active energy by means of the current between input and output. The internal power consumption of 0,8 W or 0,5 W active power per path is neither metered nor indicated.
The active energy is added depending on the sign. Positive power in the meter means energy consumption, negative power means energy delivery. The energy measurement is balanced.
If the energy consumption (P positive) is greater than the energy supply (P negative), the meter reading T → is increased. If the energy supply is greater than the energy consumption, the meter reading T ← is increased. Energy consumption is shown with a right arrow → and energy supply is shown with a left arrow ← above the active bar in the display.
1, 2 or 3 phase conductors with max. currents up to 80 A can be connected.
The inrush current is 40 mA.
The terminals L1 and N must always be connected.
Connection via a FBA14 to the ELTAKO RS485 bus with a 2-wire shielded bus cable (telephone cable).
The meter reading and the momentary power are transferred to the bus – e.g. for transfer to an external computer or a controller – and is also transferred to the wireless network via the FAM14. For this it is necessary that a device address is assigned from the wireless antenna module FAM14, according to the operating instructions.
The 7 segment LC display is also legible twice within a period of 2 weeks without power supply.
The power consumption and the power supply are indicated using a LED next to the display flashing 1000 times per KWh.
On the right next to the display are the keys MODE and SELECT. Press them to scroll through the menu. First the **background lighting** switches on. Then the total active energy per consumption and delivery, the active energy of the resettable memory consumption and delivery and the instantaneous values of power, voltage, current as well as the PcH value can be displayed.
Error message
If a phase connection is missing, the corresponding phase is shown on the display.
Meter special operating modes:
In the meter operating modes, the focus is on the adjustable transmission speed of electricity meter data for external building energy managers. Data can be accessed and forwarded via gateways connected to the FAM14 (FGW14, FGW14-USB, FGW14W(L)-IP). **Additional setting options are available on the FAM14 for meters from production week 33/23.**

DSZ14DRSZ-3x80A	RS485 bus two-way three-phase meter with display, MID approval	**Art. No. 28465715**	**210,00 €/pc.**

Typical connection
4-wire-connection 3x230/400 V



Further settings can be made using the PC Tool PCT14 (see page 1-5).

Manuals and documents in further languages:
https://eltako.com/redirect/DSZ14WDRS-3*5A_MID

Housing for operating instructions GBA14 page 1-48 chapter 1, main catalogue 2025. Technical data page 38.

DSZ14WDRS-3x5A MID

MID

RS485 bus three-phase energy meter with settable CT ratio and MID. MID-compliant and therefore approved for use for billing purposes. Maximum current 3x5 A. Standby loss 0.8 W at L1 and only 0.5 W at L2 and L3 each.

Modulair device for DIN-EN 60715 TH35 rail mounting in distribution cabinets with IP51 protection class. 4 modules = 70 mm wide and 58 mm deep.
Accuracy class B (1%). With RS485 interface.
This three-phase energy meter measures active energy by means of the current between input and output. The internal power consumption of 0.8 W or 0.5 W active power per path is neither metered nor indicated.
1, 2 or 3 phase conductors with max. currents up to 5 A can be connected.
The inrush current is 10 mA.
The terminals ↑L1 and N must always be connected.
Connection to the ELTAKO RS485 bus via a FBA14 by means of a 2-wire screened bus line (e.g. telephone line). The meter reading and the momentary capacity are transferred to the bus – e.g. for transfer to an external computer or a controller – and is also transferred to the wireless network via the FAM14. For this it is necessary that a device address is assigned from the wireless antenna module FAM14, according to the operating instructions.
The 7 segment LC display is also legible twice within a period of 2 weeks without power supply.
The power consumption is displayed with a LED flashing 10 times per kWh next to the display.
On the right next to the display are the keys MODE and SELECT. Press them to scroll through the menu. First the **background lighting** switches on. The display then shows the total active energy, the active energy of the resettable memory and the instantaneous values of power, voltage, current as well as the PcH value can be displayed.
The CT ratio can also be set. It is set to 5:5 at the factory and blocked with a bridge over the terminals which are marked with 'JUMPER'. To adjust the CT ratio to the installed transformer remove the bridge and reset the energy meter according to the operation manual. Then block it again with the bridge. Adjustable current transformer ratios: 5:5, 50:5, 100:5, 150:5, 200:5, 250:5, 300:5, 400:5, 500:5, 600:5, 750:5, 1000:5, 1250:5 and 1500:5.
Error message (false)
When the phase conductor is missing or the current direction is wrong 'false' and the corresponding phase conductor are indicated on the display.
Important! Before working on the current transformers disconnect the voltage paths of the energy meters.
Meter special operating modes:
In the meter operating modes, the focus is on the adjustable transmission speed of electricity meter data for external building energy managers. Data can be accessed and forwarded via gateways connected to the FAM14 (FGW14, FGW14-USB). **Additional setting options are available on the FAM14 for meters from production week 33/23.**

DSZ14WDRS-3x5A	RS485 bus three-phase energy meter with settable CT ratio with display, MID approval	**Art. No. 28305712**	**209,10 €/pc.**

Manuals and documents in further languages:
https://eltako.com/redirect/DSZ180CEE-16A_MID

Technical data page 10-30.

DSZ180CEE-16A MID

MID

Portable three-phase energy meter with CEE plug 16 A and CEE coupling 16 A. Suitable for indoor and outdoor use. MID-compliant and therefore approved for use for billing purposes. Maximum current 16 A, standby loss 0.5 watt per path only. Protection class housing: IP68, protection class plug/coupling: IP44.

Housing dimensions 180 x 86 x 82 mm, connection cable 1.5 m (including plug and coupling).
Accuracy class B (1%).
This portable three-phase energy meter measures active energy by means of the current between input and output.
The internal power consumption of max. 0.5 watt active power per path is neither metered nor indicated.
The inrush current is 40 mA.
The display can only be read when the power supply is on. However, the consumption is saved to a non-volatile memory and is displayed immediately after a power failure.
The digital display has 7 digits. Two decimal places are indicated up to 99999.99 kWh.
Above 100000.0 kWh there is only one decimal place.
Power consumption is shown by a LED flashing at a rate of 100 times per kWh.

DSZ180CEE-16A MID	Portable three-phase energy meter, with MID	**Art. No. 28016128**	**213,70 €/pc.**

Manuals and documents in further languages:
https://eltako.com/redirect/DSZ180CEE-32A_MID

Technical data page 38.

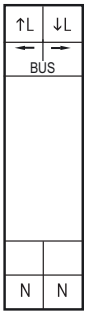
DSZ180CEE-32A MID

MID

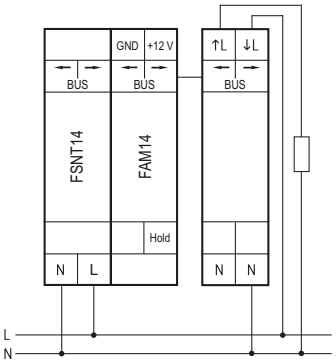
Portable three-phase energy meter with CEE plug 32 A and CEE coupling 32 A. Suitable for indoor and outdoor use. MID-compliant and therefore approved for use for billing purposes. Maximum current 32 A, standby loss 0.5 watt per path only. Protection class housing: IP68, protection class plug/coupling: IP44.

Housing dimensions 180 x 86 x 82 mm, connection cable 1.5 m (including plug and coupling).
Accuracy class B (1%).
This portable three-phase energy meter measures active energy by means of the current between input and output.
The internal power consumption of max. 0.5 watt active power per path is neither metered nor indicated.
The inrush current is 40 mA.
The display can only be read when the power supply is on. However, the consumption is saved to a non-volatile memory and is displayed immediately after a power failure.
The digital display has 7 digits. Two decimal places are indicated up to 99999.99 kWh.
Above 100000.0 kWh there is only one decimal place.
Power consumption is shown by a LED flashing at a rate of 100 times per kWh.

DSZ180CEE-32A MID	Mobile three-phase energy meter, with MID	**Art. No. 28032128**	**225,50 €/pc.**



Typical connection



Further settings can be made using the PC Tool PCT14 (see page 1-5).

Manuals and documents in further languages:
https://eltako.com/redirect/WSZ14DRS-32A

Housing for operating instructions GBA14 page 1-48 chapter 1, main catalogue 2025. Technical data page 38.

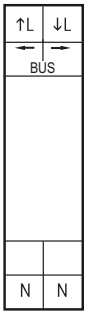
WSZ14DRS-32A MID

MID

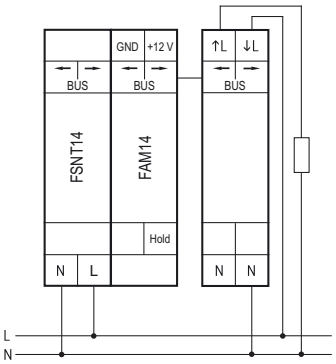
MID-compliant and therefore approved for use for billing purposes. Maximum current 32 A. Standby loss 0.4 watt only.

Modular device for DIN-EN 60715 TH35 rail mounting. 1 module = 18 mm wide and 58 mm deep.
Connection to the ELTAKO RS485 bus. Bus wiring and power supply with jumpers.
The meter reading, the instantaneous power and the serial number are transferred to the bus - e.g. B. for transfer to an external computer, to a controller - and also sent to the radio network via the FAM14. For this it is necessary that a device address is assigned by the radio antenna module FAM14 as described in the user manual. This single-phase energy meter measures active energy by means of the current between input and output. The internal power consumption of 0.4 watt active power is neither metered nor indicated. 1 phase conductor with a max. current up to 32 A can be connected.
The start current is 20 mA. Accuracy class B (1%).
If the anticipated load exceeds 50%, maintain an air gap of ½ pitch unit to the devices mounted adjacently. For this purpose, the scope of delivery includes 2 spacers DS14 and, in addition to the short jumper, two more long jumpers. Two N terminals for secure cross wiring of several counters.
The consumption value is stored in non-volatile memory and is displayed again immediately after a power failure. **The 7 segment LC display is also legible twice within a period of 2 weeks without power supply. Press the button.**
Below the display there is a button with which you can scroll through the menu according to the operating instructions. First the **background lighting** switches on. The display then shows the total active energy, the active energy of the resettable memory and the instantaneous values of power, voltage, current as well as the PcH value can be displayed. Power consumption is shown by a bar flashing at a rate of 1000 times per kWh and with a red LED flashing 2000 times per kWh..
Error message
In case of a connection error, the background lighting of the display flashes.
Meter special operating modes:
In the meter operating modes, the focus is on the adjustable transmission speed of electricity meter data for external building energy managers. Data can be accessed and forwarded via gateways connected to the FAM14 (FGW14, FGW14-USB). **Additional setting options are available on the FAM14 for meters from production week 33/23.**

WSZ14DRS-32A MID	Single phase energy meter, MID	**Art. No. 28032715**	**114,17 €/pc.**



Typical connection



Further settings can be made using the PC Tool PCT14 (see page 1-5).

Manuals and documents in further languages:
https://eltako.com/redirect/WSZ14DRSE-32A

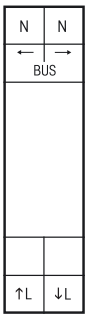
Technical data page 38.

WSZ14DRSE-32A

Maximum current 32 A. Standby loss 0.4 watt only.

Modular device for DIN-EN 60715 TH35 rail mounting. 1 module = 18 mm wide and 58 mm deep.
Connection to the Eltako RS485 bus. Bus wiring and power supply with jumpers.
The meter reading, the instantaneous power and the serial number are transferred to the bus - e.g. B. for transfer to an external computer, to a controller - and also sent to the radio network via the FAM14. For this it is necessary that a device address is assigned by the radio antenna module FAM14. This single-phase energy meter measures active energy by means of the current between input and output. The internal power consumption of 0.4 watt active power is neither metered nor indicated. 1 phase conductor with a max. current up to 32 A can be connected. The start current is 20 mA. Accuracy class B (1%).
If the anticipated load exceeds 50%, maintain an air gap of ½ pitch unit to the devices mounted adjacently. If necessary, use spacer DS12. Two N terminals for secure cross wiring of several counters. The meter value is saved non-volatile and is displayed again immediately after a power failure. **The 7 segment LC display is also legible twice within a period of 2 weeks without power supply. Press the button.** Below the display there is a button with which you can scroll through the menu in accordance with the operating instructions. First, the **backlight** turns on. Then the total active energy, the active energy of the resettable memory and the instantaneous values of active power, voltage, current and the PcH value can be displayed. The power consumption is shown on the display with a bar that flashes 1000 times per kWh and with a red LED that flashes 2000 times per kWh.
Error message
In case of a connection error, the background lighting of the display flashes.
Meter special operating modes
In the meter operating modes of the FAM14, the focus is on the adjustable transmission speed of electricity meter data for external building energy managers. Data can be accessed and forwarded via gateways connected to the FAM14 (FGW14, FGW14-USB). Additional setting options are available on the FAM14 **for meters from production week 33/23.**

WSZ14DRSE-32A	Single-phase energy meter	**Art. No. 28032716**	**83,00 €/pc.**



Further settings can be made using the PC Tool PCT14 (see page 1-5).

Manuals and documents in further languages:
https://eltako.com/redirect/FWZ14-65A

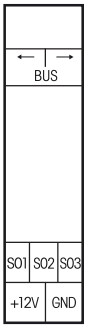
Housing for operating instructions GBA14 page 1-48 chapter 1, main catalogue 2025.

FWZ14-65A

RS485 bus single-phase energy meter transmitter module, maximum current 65 A. Only 0.5 watt standby loss.

Modular device for DIN-EN 60715 TH35 rail mounting. 1 module = 18 mm wide, 58 mm deep.
Accuracy class B (1%). With RS485 interface.
Connection to the ELTAKO RS485 bus. Bus cross wiring and power supply with jumper.
The meter reading, the current power and the serial number will be handed over to the bus – eg for forwarding to an external computer or Professional Smart Home controller – and also to the wireless network via FAM14. For this it is necessary that a device address is assigned from the wireless antenna module FAM14, according to the manual. It measures active energy by means of the current between input and output. The internal power consumption of 0.5 watt active power is not metered. 1 phase conductor with a max. current up to 65 A can be connected. The inrush current is 40 mA. In operation the rotary switch must be set to AUTO. Power consumption is indicated using a LED. If the L input and the L output were interchanged when hooked up, a normal rate (HT)/off-peak (NT) switchover telegram is transmitted to indicate the hook-up error. If the anticipated load exceeds 50%, maintain an air gap of ½ pitch unit to the devices mounted adjacently. Thereto included are 2 spacers DS14, a short jumper and two long jumpers.

FWZ14-65A	RS485 bus wireless single-phase energy meter transmitter module 65 A	**Art. No. 30014050**	**82,10 €/pc.**



Further settings can be made using the PC Tool PCT14.

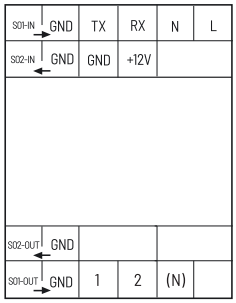
Manuals and documents in further languages:
https://eltako.com/redirect/F3Z14D

F3Z14D

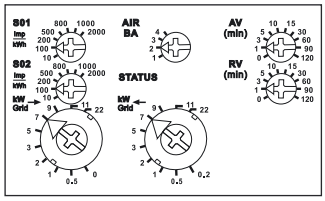
Wireless meter concentrator for electricity, gas and water meters.
For 3 S0 interfaces and/or 3 AFZ scanners, only 0.1 watt standby loss.

Modular device for DIN-EN 60715 TH35 rail mounting. 1 modul = 18 mm wide, 58 mm deep.
Connection to the ELTAKO RS485 bus. Bus cross wiring and power supply with jumper.
This meter concentrator concentrates the data of up to three electricity, data and water meters and supplies this data to the RS485 bus. Either for forwarding to an external computer or for sending over the Wireless Building System.
Hook-up is either by connection to the S0 interface of the meters or by use of an AFZ scanner on each Ferraris meter. The scanner is bonded above the rotary disc of the meter and connected by its connecting wire to one of the S01-S03/GND terminals. The F3Z14D detects automatically whether an S0 interface or an AFZ is connected.
The meter reading is entered into the display by two pushbuttons as well as the impulse rate (number of impulses or revolutions per kilowatt hour or cubic meter). The settings can be locked.
Meter readings can be entered and read out using the **PCT14 PC Tool.** In addition, impulse rates can be entered. The default display is selectable and operation of the device is interlocked.
The display is subdivided into 3 fields.
Field 1:
The default display is the unit of the meter reading currently displayed in Field 3, either in kilowatt hours kWh or megawatt hours MWh or cubic meter M3 or cubic decametre DM3
Field 2:
Momentary value of active power in watts and kilowatts or flow in centilitres and decilitres.
The arrow on the left in display field 1 indicates automatic switchover from 0-99 W or cl/s to 0.1 to 65 kW or dal/s. The display depends on the number of impulses of the meter.
The displayed minimum load is e.g. 10 watts at 2000 impulses per KWH and 2000 watts at 10 impulses per KWH.
Field 3:
The meter reading is the default display. Every 4 seconds, the display alternates between 3 integer numbers and 1 decimal point (from 0 to 999.9) and an additional 1 or to 3 integer numbers (from 0 to 999).
Select meter in display:
Press MODE and then press MODE again to select the **ANZ function.** Press SET to select the meter number to be displayed as default. Press MODE to confirm.
Issue device address in the bus and send teach-in telegrams as described in the operating instructions.
All ELTAKO energy meters are fitted with an S0 interface and can therefore be connected to the energy meter concentrator F3Z14D. Only devices FWZ14-65A, DSZ14DRS-3x80A and DSZ14WDRS-3x5A are directly connected to the bus.

F3Z14D	RS485 bus meter collector	**Art. No. 30014055**	**60,90 €/pc.**



Function rotary switches



Manuals and documents in further languages:
https://eltako.com/redirect/MFSR12DX-230V

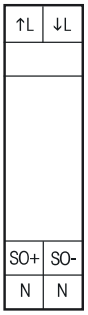
Housing for operating instructions GBA14 page 1-48 chapter 1.

MFSR12DX-230V

Multifunction current relay for bidirectional three-phase meters with two S0 inputs and two S0 outputs or IR interface according to IEC 62056-21. 1 NO contact potential free 16 A/250 V AC, with DX technology, 230 V LED lamps up to 600 W, incandescant lamps 2000 W. Standby loss 0.6 watt only.

Modular device for DIN-EN 60715 TH35 rail mounting. 3 modules = 54 mm wide, 58 mm deep.
This current relay either evaluates the data of a balancing bidirectional three-phase meter, e.g. DSZ15DZ-3x80A with two S0 interfaces, or that of an electronic household meter (eHZ-EDL) with IR interface according to IEC 62056-21 and SML protocol version 1.
The data for the power consumed (→) and the power supplied (←) are recorded, evaluated and a relay contact is switched on or off according to the settings.
With the patented ELTAKO Duplex technology (DX) the normally potential-free contact can still switch in zero passage when switching 230 V AC 50 Hz and therefore drastically reduce wear. Simply connect the neutral conductor to the terminal (N) for this. This results in an standby consumption of only 0.1 watt. Supply voltage 230 V.
If the supply voltage fails, the switching status is retained. When the supply voltage returns, it is defined switched off.
S0 inputs S01-IN (consumed power →) and S02-IN (delivered power ←).
The S0 pulses/kWh of the electricity meter used are set with the respective rotary switch.
Adjustable values are 10, 100, 200, 500, 800, 1000, 2000 Imp/kWh.
S0 outputs S01-OUT (consumed power →) and S02-OUT (delivered power ←)
Using these terminals, up to ten additional MFSR12DX-230V can be connected according to the connection example in order to be able to set several switching thresholds on a two-way three-phase meter. The maximum cable length between two MFSR12DX-230V is 10 meters.
AIR input (OBIS codes according to IEC 62056-61)
With the rotary switch AIR (BA) you can choose between the following operating modes:
1: Purchase totalizer (1.8.0) and reference power on channel 1, supply totalizer (2.8.0) and supply power on channel 2.
2: Purchase of tariff 1 (1.8.1) and tariff 2 (1.8.2) and reference power on channel 1, supply of tariff 1 (2.8.1) and tariff 2 (2.8.2) and supply of power on channel 2.
3: Import tariff 1 (1.8.1) and tariff 2 (1.8.2) and import power on channel 1, supply totalizer (2.8.0) and supply power on channel 2.
4: Purchase totalizer (1.8.0) and reference power on channel 1, supply tariff 1 (2.8.1) and tariff 2 (2.8.2) and supply power on channel 2.
If no **AIR** is used, the rotary switch must be set to the right stop.
The connection is made using an IR scanner AIR. The IR scanner is fixed with its fastening magnet over the IR output of the meter and connected with its connection cable to the Rx, GND and +12 V terminals.
Setting the switching threshold for the reference power (kW grid →)
The switching threshold at which the relay should switch off is set with the rotary switch (kW Grid →).
The adjustable values for the power are 0, 0.5, 1, 2, 3, 5, 7, 9, 11, 22 kW.
Setting the switching threshold for the delivery power (kW grid ←)
The switching threshold at which the relay should switch on is set with the rotary switch (kW Grid ←).
The adjustable values for the power are 0.2, 0.5, 1, 2, 3, 5, 7, 9, 11, 22 kW.
Functionality:
Turn on relay contact 1-2
When the set power for the energy supply (←) is reached, the **response delay time (AV)** begins, which can be set between 0, 1, 3, 5, 10, 15, 30, 60, 90, 120 minutes with the rotary switch (AV). The red LED behind the rotary switch (AV) flashes as long as the AV time is running. At the end of the AV time, the relay contact switches on if the power (kW) has not fallen below the set switching threshold again. The red **STATUS** LED lights up as long as the relay contact is closed.
Switching off relay contact 1-2
When the set power for the energy consumption (→) is reached, the **off-delay time (RV)** begins, which can be set between 0, 1, 3, 5, 10, 15, 30, 60, 90, 120 minutes with the rotary switch (RV). The red LED behind the rotary switch (RV) flashes as long as the RV time is running. At the end of the RV time, the relay contact switches off if the power (kW) has not fallen below the set switching threshold again. The red STATUS LED goes out when the relay contact is open.
Up to ten MFSR12DX-230V devices can be connected to a bidirectional meter using the terminals S01-OUT and S02-OUT.

MFSR12DX-230V	Multifunction current relay for bidirectional three-phase meters MFSR12DX-230V	**Art. No. 22100530**	**83,33 €/pc.**



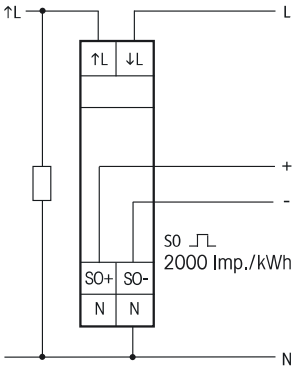
WSZ15D-32A MID

MID

MID-compliant and therefore approved for use for billing purposes.
Maximum current 32 A. Standby loss 0.4 watt only.

Modular device for DIN-EN 60715 TH35 rail mounting.
1 module = 18 mm wide and 58 mm deep.
Accuracy class B (1%). With S0 interface.
This single-phase energy meter measures active energy by means of the current between input and output. The internal power consumption of 0.4 watt active power is neither metered nor indicated.
1 phase conductor with a max. current of up to 32 A can be connected.
The start current is 20 mA.
If the anticipated load exceeds 50%, maintain an air gap of ½ pitch unit to the devices mounted adjacently.
If necessary, use spacer DS12.
Two N terminals for secure cross wiring of several counters.
The 7 segment LC display is also legible twice within a period of 2 weeks without power supply.
Press the button.
Below the displays is a button which you can use to browse through the menu as described in the User Manual. First the **background lighting** switches on. Then you can display the total active energy, active energy of the resettable memory and the instantaneous values for active power, voltage and current.
Power consumption is shown by a bar flashing at a rate of 1000 times per kWh.
Error message
In the event of a connection error the backlighting of the display flashes.

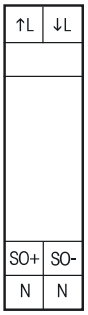
Typical connection



Manuals and documents in further languages:
https://eltako.com/redirect/WSZ15D-32A_MID

Technical data page 38.

WSZ15D-32A MID	Single-phase energy meter, MID approval	**Art. No. 28032015**	**67,00 €/pc.**

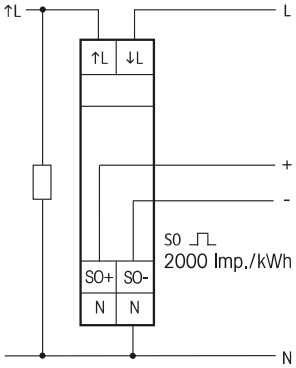


WSZ15DE-32A

Maximum current 32 A. Standby loss 0.4 watt only.

Modular device for DIN-EN 60715 TH35 rail mounting.
1 module = 18 mm wide and 58 mm deep.
Accuracy class B (1%). With S0 interface.
It measures active energy by means of the current between input and output. The internal power consumption of 0.4 watt active power is neither metered nor indicated.
Every 30 seconds, the display switches for 5 seconds from the accumulated active energy in kWh to the momentary consumption in watts.
1 phase conductor with a max. current up to 32 A can be connected. If the anticipated load exceeds 50%, maintain an air gap of ½ pitch unit to the devices mounted adjacently.
If necessary, use spacer DS12. The inrush current is 20 mA. The display can only be read when the power supply is on. However, the consumption is saved to a non-volatile memory and is displayed immediately after power restoration.
Two N terminals for secure cross wiring of several counters.
The digital display has 7 digits. Two decimal places are indicated up to 99999.99 kWh. Above 100000.0 kWh there is only one decimal place.
Power consumption is shown by a bar flashing at a rate of 1000 times per kWh.
Error message
In the event of a connection error a LED in the display flashes.

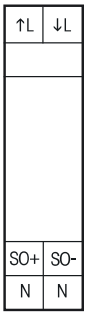
Typical connection



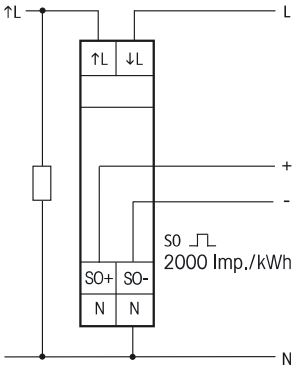
Manuals and documents in further languages:
https://eltako.com/redirect/WSZ15DE-32A

Technical data page 38.

WSZ15DE-32A	Single-phase energy meter, without MID	**Art. No. 28032615**	**59,00 €/pc.**



Typical connection



Manuals and documents in further languages:
https://eltako.com/redirect/WSZ15D-65A_MID

Technical data page 38.

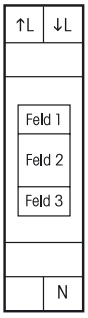
WSZ15D-65A MID

MID

MID-compliant and therefore approved for use for billing purposes.
Maximum current 65 A. Standby loss 0.4 watt only.

Modular device for DIN-EN 60715 TH35 rail mounting.
1 module = 18 mm wide and 58 mm deep.
Accuracy class B (1%). With S0 interface.
This single-phase energy meter measures active energy by means of the current between input and output. The internal power consumption of 0.4 watt active power is neither metered nor indicated.
1 phase conductor with a max. current up to 65 A can be connected.
The start current is 40 mA.
If the anticipated load exceeds 50%, maintain an air gap of ½ pitch unit to the devices mounted adjacently. If necessary, use spacer DS12.
Two N terminals for secure cross wiring of several counters.
The 7 segment LC display is also legible twice within a period of 2 weeks without power supply.
Press the button.
Below the displays is a button which you can use to browse through the menu as described in the User Manual. First the **background lighting** switches on. Then you can display the total active energy, active energy of the resettable memory and the instantaneous values for active power, voltage and current. Power consumption is shown by a bar flashing at a rate of 1000 times per kWh.
Error message
In the event of a connection error the backlighting of the display flashes.

WSZ15D-65A MID	Single-phase energy meter, MID approval	**Art. No. 28065615**	**71,50 €/pc.**



WZR12-32A

Maximum current 32 A, standby loss 0.5 watt only.

Modular device for DIN-EN 60715 TH35 rail mounting.
1 module = 18 mm wide, 58 mm deep.
This single-phase energy meter with reset function uses the current between input and output to measure active energy and saves the consumption parameter in a non-volatile memory.
Accuracy conforms to Class B MID (1%) like all ELTAKO single-phase energy meters, the inrush current is 20 mA.
The display is subdivided into 3 fields.

- **Field 1:**
  This display refers to the cumulative value in field 3.
  |||| moving slowly to the right = Field 3 shows the cumulative consumption since last reset. This is the display standard mode.
  H01 = Field 3 shows the consumption for the last hour up to H24 = 24 hours ago.
  D01 = Field 3 shows the consumption for the last day up to D95 = 95 days ago.
- **Field 2:**
  Instantaneous values of energy consumption (active power) in watt (W) or kilowatt (kW).
  The display arrows on the left and right show the automatic change W and kW.
- **Field 3:**
  Cumulative value up to 9999 kWh. Display up to 9.999 kWh with 3 decimal digits, from 10 kWh with 1 decimal digit and from 1000 kWh without decimal digit.

Press the left button MODE to scroll down the display options which are shown in field 1:
H01 and D01 as described above. Finally, press MODE to show the abbreviation of the set language, e.g. GB for English, D for German, F for French and ES for Spanish.
Press the right button SELECT once within the display options to increment the indicated figure by 1. The corresponding value is indicated in field 3. The last clock hour then becomes the hour before last, etc.
If the active language was selected with MODE, press SELECT to switch to a different language. Exit the new language setting by pressing MODE to activate the setting.
The program returns to the standard display mode automatically if MODE or SELECT are not operated for 20 seconds or if you press both buttons briefly simultaneously.

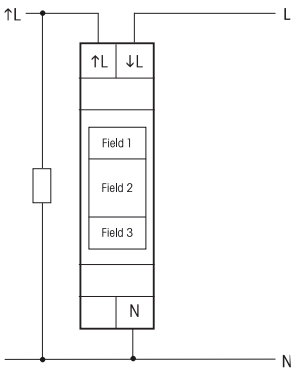
Reset

Hold down the buttons MODE and SELECT simultaneously for 3 seconds until RES appears in segment 1. Then press SELECT briefly to reset all memories. Afterwards the program returns automatically to standard display mode.

Error message

If the current direction is wrong, F01 is shown on the display.

Typical connection



Manuals and documents in further languages:
https://eltako.com/redirect/WZR12-32A

Technical data page 38.

WZR12-32A	Single-phase energy meter with reset, without MID	**Art. No. 28032410**	**74,50 €/pc.**

Manuals and documents in further languages:
https://eltako.com/redirect/WSZ155DSS-16A_MID

Technical data page 38.

WSZ155DSS-16A MID

MID

Portable single-phase energy meter with German type plug and coupling (Type F). Suitable for indoor and outdoor use. MID-compliant and therefore approved for use for billing purposes. Maximum current 16 A. Protection class IP54. Standby loss 0,4 watt only.Protection class housing: IP68, protection class plug/coupling: IP44.

Housing dimensions 155 x 60 x 82 mm, connection cable 1.5 m (including plug and coupling).
Accuracy class B (1%).
This portable single-phase energy meter measures active energy by means of the current between input and output. The internal power consumption of 0.4 watt active power is neither metered nor indicated.
The display changes cyclically every 10 seconds between the accumulated active energy in kWh and the instantaneous consumption in kWh.
The start current is 20 mA.
The display can only be read when the power supply is on. However, the consumption is saved to a non-volatile memory and is displayed immediately after a power failure.
The digital display has 7 digits. Two decimal places are indicated up to 99999.99 kWh.
Above 100000.0 kWh there is only one decimal place.
The mobile sinlge phase meter is equipped with a mounting bracket for easy installation. This can easily be removed if not necessary.
The power consumption is shown with a LED that flashes 2000 times per kWh.

WSZ155DSS-16A MID	Portable single-phase energy meter, MID	**Art. No. 28016115**	**119,80 €/pc.**

Manuals and documents in further languages:
https://eltako.com/redirect/WSZ155DSS-16A*PRCD_MID

Technical data page 38.

WSZ155DSS-16A+PRCD MID

MID

Portable single-phase energy meter with German type plug and coupling (Type F). With additional residual current circuit breaker PRCD 30 mA. Suitable for indoor and outdoor use. MID-compliant and therefore approved for use for billing purposes. Maximum current 16 A. Protection class IP54. Standby loss 0,4 watt only. Protection class housing: IP68, protection class plug/coupling: IP44, protection class PRCD: IP68.

Housing dimensions 155 x 60 x 82 mm, connection cable 1.5 m (including plug and coupling).
Accuracy class B (1%).
This portable single-phase energy meter measures active energy by means of the current between input and output. The internal power consumption of 0.4 watt active power is neither metered nor indicated.
The display changes cyclically every 10 seconds between the accumulated active energy in kWh and the instantaneous consumption in kWh.
The start current is 20 mA.
The display can only be read when the power supply is on. However, the consumption is saved to a non-volatile memory and is displayed immediately after a power failure.
The digital display has 7 digits.
Two decimal places are indicated up to 99999.99 kWh. Above 100000.0 kWh there is only one decimal place.
The mobile sinlge phase meter is equipped with a mounting bracket for easy installation. This can easily be removed if not necessary.
The power consumption is shown with a LED that flashes 2000 times per kWh.
The personal protection intermediate switch (PRCD) detects fault currents that occur, for example, when a faulty electrical device is touched, and interrupts the current so quickly that life-threatening accidents can be prevented. It also has an undervoltage release that switches off in the event of a mains voltage failure. With function indication and test button.

WSZ155DSS-16A+PRCD MID	Portable single-phase energy meter with additional residual current circuit breaker PRCD, MID	**Art. No. 28016116**	**248,90 €/pc.**

Manuals and documents in further languages:
https://eltako.com/redirect/WSZ155CEE-16A_MID

Technical data page 38.

WSZ155CEE-16A MID

MID

Portable single-phase energy meter with CEE plug and CEE coupling. Suitable for indoor and outdoor use. MID-compliant and therefore approved for use for billing purposes. Maximum current 16 A. Standby loss 0,4 watt only. Protection class housing: IP68, protection class plug/coupling: IP44.

Housing dimensions 155 x 60 x 82 mm, connection cable 1.5 m (including plug and coupling).
Accuracy class B (1%).
This portable single-phase energy meter measures active energy by means of the current between input and output. The internal power consumption of 0.4 watt active power is neither metered nor indicated.
The display changes cyclically every 10 seconds between the accumulated active energy in kWh and the instantaneous consumption in kWh.
The start current is 20 mA.
The display can only be read when the power supply is on. However, the consumption is saved to a non-volatile memory and is displayed immediately after a power failure.
The digital display has 7 digits.
Two decimal places are indicated up to 99999.99 kWh. Above 100000.0 kWh there is only one decimal place.
The mobile sinlge phase meter is equipped with a mounting bracket for easy installation. This can easily be removed if not necessary.
The power consumption is shown with a LED that flashes 2000 times per kWh.

WSZ155CEE-16A MID	Portable single-phase energy meter, MID	**Art. No. 28016117**	**124,60 €/pc.**

Manuals and documents in further languages:
https://eltako.com/redirect/WSZ155CEE-16A*PRCD_MID

Technical data page 38.

WSZ155CEE-16A+PRCD MID

MID

Portable single-phase energy meter with CEE plug and CEE coupling. With additional residual current circuit breaker PRCD 30 mA. Suitable for indoor and outdoor use. MID-compliant and therefore approved for use for billing purposes. Maximum current 16 A. Standby loss 0,4 watt only. Protection class housing: IP68, protection class plug/coupling: IP44, protection class PRCD: IP68.

Housing dimensions 155 x 60 x 82 mm, connection cable 1.5 m (including plug and coupling).
Accuracy class B (1%).
This portable single-phase energy meter measures active energy by means of the current between input and output. The internal power consumption of 0.4 watt active power is neither metered nor indicated.
The display changes cyclically every 10 seconds between the accumulated active energy in kWh and the instantaneous consumption in kWh.
The start current is 20 mA.
The display can only be read when the power supply is on. However, the consumption is saved to a non-volatile memory and is displayed immediately after a power failure.
The digital display has 7 digits.
Two decimal places are indicated up to 99999.99 kWh. Above 100000.0 kWh there is only one decimal place.
The mobile sinlge phase meter is equipped with a mounting bracket for easy installation. This can easily be removed if not necessary.
The power consumption is shown with a LED that flashes 2000 times per kWh.
The personal protection intermediate switch (PRCD) detects fault currents that occur, for example, when a faulty electrical device is touched, and interrupts the current so quickly that life-threatening accidents can be prevented. It also has an undervoltage release that switches off in the event of a mains voltage failure. With function indication and test button.

WSZ155CEE-16A+PRCD MID	Portable single-phase energy meter With additional residual current circuit breaker PRCD, MID	**Art. No. 28016118**	**254,60 €/pc.**

Manuals and documents in further languages:
https://eltako.com/redirect/WSZ155FBSS-16A_MID

Technical data page 38.

WSZ155FBSS-16A MID

MID

Portable single phase meter with a type E plug, for France and Belgium. Suitable for indoor and outdoor use. MID-compliant and therefore approved for use for billing purposes. Maximum current 16 A. Protection class IP54. Standby loss 0,4 watt only. Protection class housing: IP68, protection class plug/coupling: IP44.

Housing dimensions 155 x 60 x 82 mm, connection cable 1.5 m (including plug and coupling).
Accuracy class B (1%).
This portable single-phase energy meter measures active energy by means of the current between input and output. The internal power consumption of 0.4 watt active power is neither metered nor indicated.
The display changes cyclically every 10 seconds between the accumulated active energy in kWh and the instantaneous consumption in kWh.
The start current is 20 mA.
The display can only be read when the power supply is on. However, the consumption is saved to a non-volatile memory and is displayed immediately after a power failure.
The digital display has 7 digits.
Two decimal places are indicated up to 99999.99 kWh. Above 100000.0 kWh there is only one decimal place.
The mobile sinlge phase meter is equipped with a mounting bracket for easy installation. This can easily be removed if not necessary.
The power consumption is shown with a LED that flashes 2000 times per kWh.

WSZ155FBSS-16A MID	Portable single phase meter, MID	**Art. No. 28016119**	**119,80 €/pc.**

Manuals and documents in further languages:
https://eltako.com/redirect/WSZ155FBSS-16A*PRCD_MID

Technical data page 38.

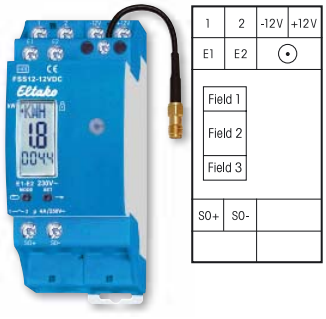
WSZ155FBSS-16A+PRCD MID

MID

Portable single phase meter with a type E plug, for France and Belgium. With additional residual current circuit breaker 30 mA. Suitable for indoor and outdoor use. MID-compliant and therefore approved for use for billing purposes. Maximum current 16 A. Protection class IP54. Standby loss 0,4 watt only. Protection class housing: IP68, protection class plug/coupling: IP44, protection class PRCD: IP68.

Housing dimensions 155 x 60 x 82 mm, connection cable 1.5 m (including plug and coupling).
Accuracy class B (1%).
This portable single-phase energy meter measures active energy by means of the current between input and output. The internal power consumption of 0.4 watt active power is neither metered nor indicated.
The display changes cyclically every 10 seconds between the accumulated active energy in kWh and the instantaneous consumption in kWh.
The start current is 20 mA.
The display can only be read when the power supply is on. However, the consumption is saved to a non-volatile memory and is displayed immediately after a power failure.
The digital display has 7 digits.
Two decimal places are indicated up to 99999.99 kWh. Above 100000.0 kWh there is only one decimal place.
The mobile sinlge phase meter is equipped with a mounting bracket for easy installation. This can easily be removed if not necessary.
The power consumption is shown with a LED that flashes 2000 times per kWh.
The personal protection intermediate switch (PRCD) detects fault currents that occur, for example, when a faulty electrical device is touched, and interrupts the current so quickly that life-threatening accidents can be prevented. It also has an undervoltage release that switches off in the event of a mains voltage failure. With function indication and test button.

WSZ155FBSS-16A+PRCD MID	Portable single phase meter with residual current circuit breaker PRCD, MID	**Art. No. 28016120**	**248,95 €/pc.**



The enclosed small antenna can be replaced with a wireless antenna FA250 or if need be FA200 and FAG55E- (see page 1-4).

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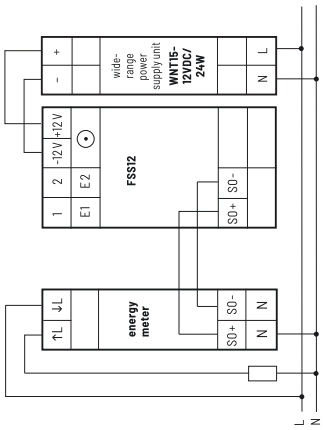
Typical connection



Manuals and documents in further languages:
https://eltako.com/redirect/FSS12-12V_DC

FSS12-12V DC

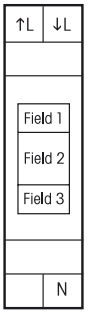
Wireless energy meter transmitter module for connection to S0 interface of many single-phase energy meters and three-phase energy meters. Only 0.5 watt standby loss. With load shedding relay 1 NO contact potential free 4 A/250 V and with exchangeable antenna. If required, a wireless antenna FA250 or FAG55E- can be connected.

Modular device for DIN-EN 60715 TH35 rail mounting.
2 modules = 36 mm wide, 58 mm deep.
The energy meter transmitter module FSS12 evaluates the signals of the S0 interface of an electricity meter and sends wireless telegrams with the consumption and the meter reading to the ELTAKO wireless building for evaluation with the controller. On three-phase energy meters, the data sent includes normal rate (HT) or off-peak (NT) energy tariff data, provided the E1/E2 terminals on the three-phase energy meter are connected to E1/E2 on the FSS12.
With adjustable pulse rate.
The 12 V DC supply voltage is powered at 12 W by a wide-range power supply unit WNT15-12VDC/24W that is only 1 pitch unit wide.
If the relay of the FSS12 is switched on, a power of 0.6 watts is required.
The setting and display screen is subdivided into 3 fields:

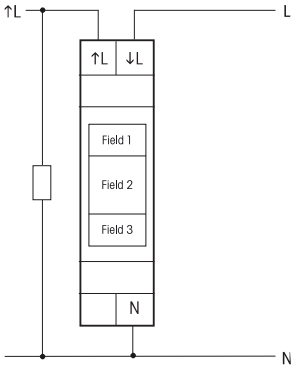
- **Field 1:** The normal display is the unit of the meter reading currently displayed in Field 3. This alternates every 4 seconds with either kilowatt hours kWh (KWH in display) or megawatt hours MWh (MWH in display). The display in Field 1 is supplemented by a + sign after the reading to indicate that the off-peak tariff rate is applied to E1/E2.
- **Field 2:** Instantaneous values of energy consumption (active power) in watt (W) or kilowatt (kW). The left-pointing arrow in Field 1 indicates an automatic switchover from 0 to 99 W to 0.1 to 65 kW.
- **Field 3:** The meter reading is the normal display. Every 4 seconds the display alternates between 3 whole numbers and 1 decimal point (from 0.1 to 999.9 kWh) and 1 or max 3 whole numbers (from 0 to 999 MWh). At freely chosen pulse rates whose last digit is not 0, the meter reading is displayed without decimal place in increments of 1 kWh.

Wireless telegrams: Maximum every 130 seconds a performance telegram will be sent and the display will be updated. Otherwise a telegram will be sent within 20 seconds if the power changed by at least 10%. A switchover from HT to NT is transmitted immediately in the same way as a meter reading change. A full telegram comprising meter reading HT, meter reading NT and power is transmitted 20 seconds after the power supply is switched on and then every 10 minutes. Settings with the MODE and SET buttons according to the operating instructions.

FSS12-12V DC	Wireless energy meter transmitter module	**Art. No. 30100600**	**112,10 €/pc.**



Typical connection



Manuals and documents in further languages:
https://eltako.com/redirect/EVA12-32A

Technical data page 38.

EVA12-32A

Maximum current 32 A, standby loss 0.5 watt only.

Modular device for DIN-EN 60715 TH35 rail mounting.
1 module = 18 mm wide, 58 mm deep.
The energy consumption indicator EVA12 uses the current between input and output to measure active energy in the same way as a single-phase energy meter. It saves the consumption parameter in a non-volatile memory.
Accuracy conforms to Class B MID (1%) like all ELTAKO single-phase energy meters.
The inrush current is 20 mA.
In this way the energy consumption indicator reproduces exactly the reading on the billing energy meter installed at a different location in the building.
The display is subdivided into 3 fields.

- **Field 1:**
  This display refers to the cumulative value in field 3.
  IIII moving slowly to the right = Field 3 shows the cumulative consumption since last reset. This is the display standard mode.
  H01 = Field 3 shows the consumption for the last hour up to H24 = 24 hours ago.
  D01 = Field 3 shows the consumption for the last day up to D31 = 31 days ago.
  M01 = Field 3 shows the consumption for the last month up to M12 = 12 months ago.
  Y01 = Field 3 shows the consumption for the last year up to Y24 = 24 years ago.
- **Field 2:**
  Instantaneous values of energy consumption (active power) in watt (W) or kilowatt (kW). The display arrows on the left and right show the automatic change W and kW.
- **Field 3:**
  Cumulative value in kWh. Display up to 9.999 kWh with 3 decimal digits, from 10 kWh with 1 deciaml digit and from 1000 kWh without decimal digit.

Press the left button MODE to scroll down the display options which are shown in field 1:
H01, D01, M01 and Y01 as described above. Finally, press MODE to show the abbreviation of the set language, e.g. GB for English, D for German and F for French.
Press the right button SELECT once within the display options to increment the indicated figure by 1. The corresponding value is indicated in field 3. The last clock hour then becomes the hour before last, etc.
If the active language was selected with MODE, press SELECT to switch to a different language. Exit the new language setting by pressing MODE to activate the setting.
The program returns to the standard display mode automatically if MODE or SELECT are not operated for 20 seconds or if you press both buttons briefly simultaneously.

Reset

To start saving the values to the nearest hour, we recommend performing a reset at an opportune moment after installation. Hold down the buttons MODE and SELECT simultaneously for a further 3 seconds until RES appears in field 1. Then press SELECT briefly to reset all memories. Afterwards the program returns automatically to standard display mode.

EVA12-32A	Single-phase energy meter with energy consumption indicator	**Art. No. 28032411**	**78,26 €/pc.**

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Manuals and documents in further languages:
https://eltako.com/redirect/FWZ12-65A

FWZ12-65A

Wireless single-phase energy meter, maximum current 65 A. Only 0.5 watt standby loss.

Modular device for DIN-EN 60715 TH35 rail mounting. 1 module = 18 mm wide, 58 mm deep.
This single-phase energy meter measures active energy by means of the current between input and output and transmits the current power and meter reading over the ELTAKO wireless network. Accuracy class B (1%).
Evaluation and smart link via controller.
The internal power consumption of max. 0.5 watt active power is not metered.
1 phase conductor with a max. current up to 65 A can be connected.
If the anticipated load exceeds 50%, maintain an air gap of ½ pitch unit to the devices mounted adjacently. If necessary, use spacer DS12.
The inrush current is 40 mA. The consumption is saved to a non-volatile memory and is immediately available again after a power failure.
Wireless telegrams: A telegram is transmitted within 60 seconds if the power status changes by min. 10 percent. A change in meter reading is transmitted immediately. A full telegram comprising meter reading and power status is transmitted every 10 minutes. When the power supply is switched on, a **teach-in telegram** is sent to teach in the associated energy consumption indicator.
If the L input and L output were interchanged during connection, an HT/NT switching telegram is sent every 20 seconds to indicate the connection error.

FWZ12-65A	Wireless single-phase energy meter	**Art. No. 30000308**	**95,50 €/pc.**

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Manuals and documents in further languages:
https://eltako.com/redirect/FASWZ-16A

FASWZ-16A

Wireless outdoor socket energy meter, maximum current 16 A. 116x56x46 mm (measurements without plug), black. Suitable for both indoors and outdoors, IP44 (splash-proof). Only 0.4 watt standby loss.

Adapter for German Socket (Type F). With increased shock protection.
This single-phase energy meter measures active energy by means of the current between input and output and transmits the consumption and meter reading over the ELTAKO wireless network.
Accuracy class B (1%).
Evaluation and smart connection via a controller.
The internal power consumption of max. 0.4 watt active power is not metered.
The inrush current is 20 mA.
The consumption is saved to a non-volatile memory and is immediately available again after a power failure.
Radio telegrams: A **telegram** is sent within **30 seconds** if the **power** has changed by at least **10%.** A **change in the meter reading** is **sent immediately.** A **total telegram** with the **meter readings** for **supply** and **consumption,** as well as the **instantaneous power,** is sent every **10 minutes.** After **plugging in** the meter and also when **pressing** the ***LRN*** button, a **teach-in telegram**, a **meter reading telegram** for the **consumption,** a **meter reading telegram** for **delivery** and an **instantaneous power telegram** are sent.

FASWZ-16A	Wireless outdoor socket meter bidirectional, maximum current 16 A	**Art. No. 30100015**	**114,90 €/pc.**

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Manuals and documents in further languages:
https://eltako.com/redirect/FSVA-230V-10A

FSVA-230V-10A

1 NO contact not potential free 10 A/250 V AC, incandescent lamps up to 2000 watts, LED and ESL up to 400 W. With integrated current measurement up to 10 A. Encrypted wireless, bidirectional wireless and repeater function are switchable. Only 0.8 watt standby loss.

Adapter for German fused safety socket. With increased shock protection. Supply and switching voltage 230 V. In case of failure of the supply voltage, the switching state is maintained. The recurrent supply voltage is disconnected in a definite sequence. After plugging wait for short automatic synchronization before the switched consumer is plugged.
This wireless actuator features state-of-the-art hybrid technology that we developed:
we combined the wear-free receiver and evaluation electronics and a bistable relay.
Apparent power is measured by the integrated current measurement from approx. 10 VA to 2300 VA when the contact is closed. A wireless telegram is transmitted into the ELTAKO wireless network within 30 seconds after switching on the load or after a change in power by min 5% and cyclically every 10 minutes.
Evaluation and linking of scenes and automations via controller.
You can teach in encrypted sensors. You can switch on **bidirectional wireless** and/or a **repeater** function. Every change in state and incoming central command telegrams are then confirmed by a wireless telegram.This wireless telegram can be taught into other actuators, Controllers and universal displays.
Up to 35 wireless pushbuttons are assigned **with the left button LRN,** either as a universal pushbutton, direction pushbutton or central pushbutton. For the control of extractor hoods or similar items up to 35 wireless window door contacts FTK or wireless window handle sensors FFG7B-rw can be taught-in. Several FTK or wireless window handle sensors FFG7B-rw are linked together. If a FTK or wireless window handle sensor FFG7B-rw is taught-in, control commands of eventually taught-in pushbuttons are no longer running. It can be switched on and off manually **with the right button. The LED** performs during the teach-in process according to the operation manual. It shows wireless control commands by short flickering during operation.

FSVA-230V-10A	Wireless actuator Socket switching actuator with current measurement	**Art. No. 30100003**	**121,50 €/pc.**

TECHNICAL DATA SINGLE-PHASE AND THREE-PHASE ENERGY METERS AND ENERGY CONSUMPTION INDICATOR

	EVA12-32A **WSZ14DRS-32A** MID **WSZ14DRSE-32A** **WSZ15D-32A** MID **WSZ15DE-32A** **WZR12-32A** **WSZ155** MID	**WSZ15D-65A** MID	**DSZ15D-3x80A** MID **DSZ15DE-3x80A** **DSZ15DM-3x80A** MID **DSZ15DZ-3x80A** MID **DSZ15DZE-3x80A** **DSZ15DZMOD-3x80A** MID **DSZ14DRS-3x80A** MID **DSZ14DRSZ-3x80A** MID **DSZ180CEE** MID	**DSZ15WD-3x5A** MID **DSZ15WDM-3x5A** MID **DSZ14WDRS-3x5A** MID
Rated voltage Extended range	230 V, 50 Hz -20%/+15%	230 V, 50 Hz -20%/+15%	3x230/400 V, 50 Hz -20%/+15%	3x230/400 V, 50 Hz -20%/+15%
Reference current I_{ref} (Limiting current I_{max})	5(32) A WSZ155: Rated current 16 A	10(65) A	3x10(80) A DSZ180CEE-32A: Rated current 32A DSZ180CEE-16A: Rated current 16A	3x5(6) A
Internal consumption active power	0.4 W EVA12, WZR12: 0.5 W	0.4 W	0.5 W per path DSZ14DRS: 0.8 W at L1	0.5 W per path DSZ14WDRS: 0.8 W at L1
Display	LC display 7 digits, therefrom 1 or 2 digits after the decimal point	LC display 7 digits, therefrom 1 or 2 digits after the decimal point	LC display 7 digits, therefrom 1 or 2 digits after the decimal point	LC display 7 digits, therefrom 1 digit after the decimal point
Display instantaneous values	WSZ15D: With a key you can select active power, voltage and current WSZ15DE, WSZ155: Active power displayed for 5 seconds every 30 seconds EVA12, WZR12: active power	With a key you can select active power, voltage and current	With a key you can select total active energy and active energy resettable, power, voltage and current per phase tariff 1 and tariff 2 (not DSZ180)	With a key you can select total active energy and active energy resettable, power, voltage and current per phase
Accuracy class ±1%	B	B	B	B
Inrush current according to accuracy class B	20 mA	40 mA	40 mA	10 mA
Operating temperature	-40/+70°C EVA12, WZR12: -10/+55°C	-40/+70°C	-40/+70°C	-40/+70°C
Interface (not DSZ180, EVA12, WZR12, WSZ155)	DSZ15DM and DSZ15WDM with M-Bus interface. DSZ15DZMOD with Modbus interface. DSZ14DRS, DSZ14DRSZ, DSZ14WDRS, WSZ-14DRS and WSZ14DRSE with interface for the ELTAKO RS485 bus. Otherwise pulse output S0 according to DIN EN 62053-31, potential-free through an optocoupler, max. 30 V DC/20 mA and min. 5 V DC. Impedance 100 ohms.			
	Pulse length 30 ms	Pulse length 30 ms	Pulse length 30 ms	Pulse length 30 ms
	2000 Imp./kWh	2000 Imp./kWh	1000 Imp./kWh	10 Imp./kWh
Terminal cover sealable			Terminal cover claps (not DSZ180)	Terminal cover claps
Protection degree	IP50 for mounting in distribution cabines with protection class IP51 WSZ155: housing: IP68, plug/coupling: IP44 (WSZ155FBSS IP54), PRCD IP66		IP50 for mounting in distribution cabines with protection class IP51 DSZ180: housing: IP68, plug/coupling: IP44	
Maximum conductor cross section	6 mm^2 WSZ15D, WSZ15DE: L terminals 16 mm^2 (not WSZ155)	L terminals 16 mm^2, N and S0 terminals 6 mm^2	N and L terminals 16 mm^2, S0, M-Bus, Modbus and RS485 bus terminals 6 mm^2 DSZ15D/DE/DM/DZ/DZE/DZMOD-3x80A, DSZ14DRS/DRSZ-3x80A: L terminals 25 mm^2 (not DSZ180)	

The N terminal of three-phase energy meters must be connected, if not the electronics might be destroyed.

According to DIN VDE 0100-443 and DIN VDE 0100-534, the installation of a surge arrester (SPD) is mandatory.
ELTAKO offers suitable, standard-compliant surge arresters of types 1, 2, and 3 – see Chapter 8, "Surge Arresters."

Compliance with: EN 50470

TECHNICAL DATA SINGLE-PHASE AND THREE-PHASE ENERGY METERS AND ENERGY CONSUMPTION INDICATOR

	MFSR12DX-230V	ZGW16WL-IP KNX RTU 886	DSZ16D-3x100A DSZ16DE-3x100A DSZ16DZ-3x100A DSZ16DZE-3x100A
Rated voltage Extended range	230 V, 50 Hz -20%/+15%	230 V, 50 Hz -20%/+15%	3x230/400V, 50Hz -20%/+15%
Reference current I_{ref} (Limiting current I_{max})	16 A	-	3x10(100)A
Internal consumption active power	0.6 W	ZGW16WL-IP: 0.9 W	0.8W per path
Display	-	-	LC display 7 digits, therefrom 1 or 2 digits after the decimal point
Display instantaneous values	-	-	With one button selection of total and resettable active energy, voltage, current and active power per phase conductor, frequency as well as tariff display T1-T4
Accuracy class ±1%	-	-	B
Inrush current according to accuracy class B	-	-	40mA
Operating temperature	-20/+50°C	ZGW16WL-IP: -20/+50°C KNX RTU 886: -5/+45°C	-40/+70°C
Interface (not DSZ180, EVA12, WZR12, WSZ155)	S0 or IR interface	ZGW16WL-IP: Modbus KNX RTU 886: KNX and Modbus interface	With Modbus RTU/RS485 and S0 interfaces. S0 interface according to DIN EN 62053-31, potential-free via an optocoupler, max. 30 V DC/20 mA and min. 5 V DC. Impedance 100 ohms.
	-	-	Pulse length 2-99 ms
	-	-	0,01 - 10.000 Imp./kWh
Terminal cover sealable	-	-	Terminal cover claps
Protection degree	IP20	ZGW16WL-IP: IP20 KNX RTU 886: IP20	IP50 for mounting in distribution cabines with protection class IP51
Maximum conductor cross section	6 mm^2	ZGW16WL-IP: 6 mm^2 KNX RTU 886: 2.5 mm^2	L terminals: 25mm^2 N terminals: 2,5mm^2 Modbus/S0/tariff terminals: 2.5 mm^2

The N terminal of three-phase energy meters must be connected, if not the electronics might be destroyed.

According to DIN VDE 0100-443 and DIN VDE 0100-534, the installation of a surge arrester (SPD) is mandatory.
ELTAKO offers suitable, standard-compliant surge arresters of types 1, 2, and 3 – see Chapter 8, "Surge Arresters."

Compliance with: EN 50470

MEASURING INSTRUMENTS DIRECTIVE MID

On 31.04.2004, the European Parliament and the Council adopted the European Measuring Instruments Directive (MID) 2004/22/EC. The MID came into force in all member states of the EU and in Switzerland on 30.10.2006. The 10 types of measuring instruments also include active electrical energy meters.
In the meantime, this has been replaced by directive 2014/32/EU of the European Parliament and of the Council of February 26, 2014 (new version).

The MID replaces previous regulations on national approval and subsequent calibration in the domestic, trade and light industry sectors.

A manufacturer's Declaration of Conformity was produced based on this new directive.
There is a type examination certificate or pattern examination certificate for each type.

The MID regulates the following:

- the technical requirements (standard series DIN EN 50470-1/-3)
- the conformity assessment procedure
- the putting into use of measuring instruments
- marking the measuring instruments
- market surveillance

National law continues to regulate the following:

- recalibration
- calibration validity
- charges

When an MID instrument is put into use, we declare conformity with the MID in the operating instructions. The number of the type examination certificate is also quoted there.

THE DEVICE BEARS THE MID CONFORMITY MARK THAT CONSISTS OF:

CE – M26 – 0598

Identification number of the notified body

Metrology mark M + year of putting into use

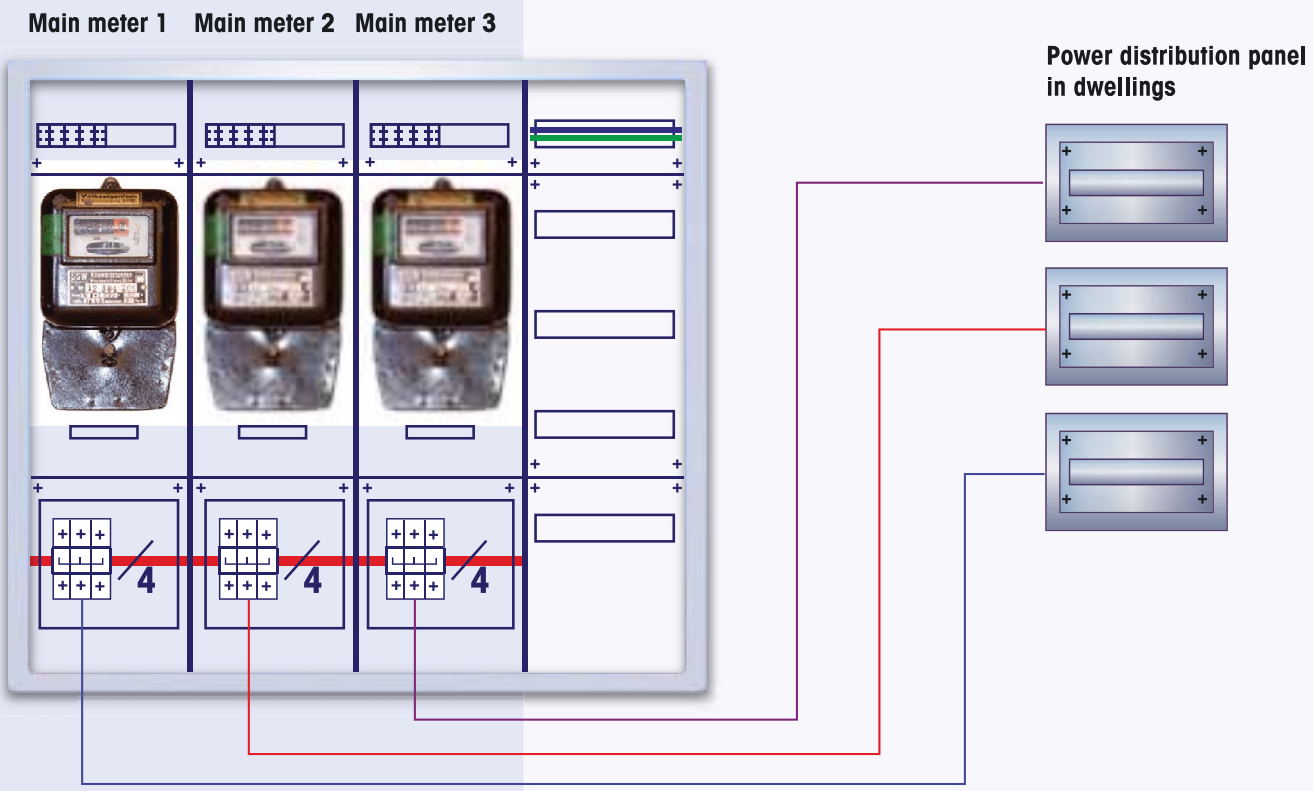
CE mark

The year after the year of putting into use defines the recalibration time.

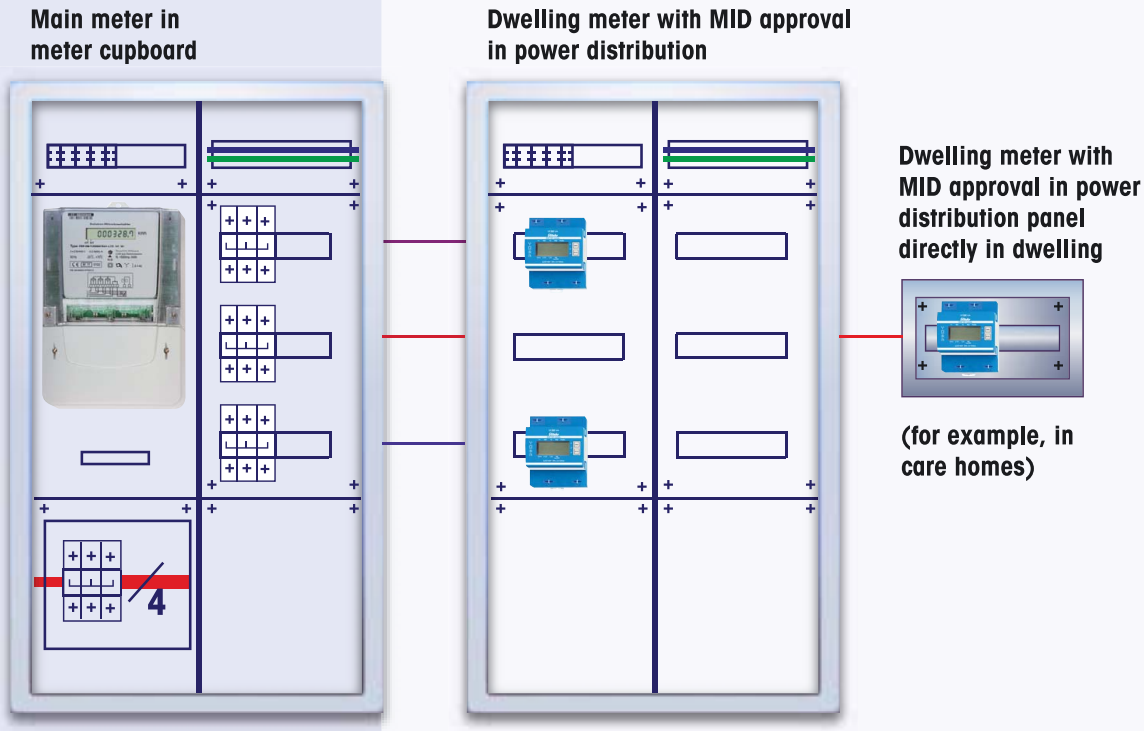
The period of calibration validity depends on the prevailing national law. In Germany, this is 8 years and can then be extended by a further 8 years by a state certified inspection body, i.e. not the manufacturer.

MID meters require no subsequent calibration with calibration mark. Instead, they are the equivalent of calibrated meters as a result of MID testing and an EU Declaration of Conformity from the manufacturer.

Conventional installation



Modern installation acc. to TAB 2007



TAB VDE

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