

Three-phase energy meter DSZ15DZ-3x80A with display and MID approval

Only skilled electricians may install this electrical equipment otherwise there is the risk of fire or electric shock!

Temperature at mounting location: -40°C up to +70°C.
Storage temperature: -40°C up to +70°C.
Relative humidity: annual average value <75%.

Two-way three-phase meter. 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 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 $T \rightarrow$ is increased. If the energy supply is greater than the energy consumption, the meter reading $T \leftarrow$ is increased.

Energy consumption is shown with a right arrow $\rightarrow$ and energy supply is shown with a left arrow $\leftarrow$ 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.

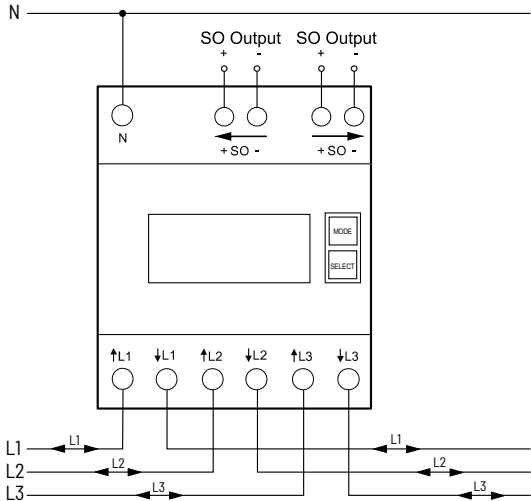
Energy consumption and energy supply values are stored in non-volatile memory and are displayed again immediately after a power failure. The 7 segment LC display is also legible twice within a period of 2 weeks without power supply.

The power consumption and the power supply are indicated by an LED next to the display that flashes 1000 times per kWh.

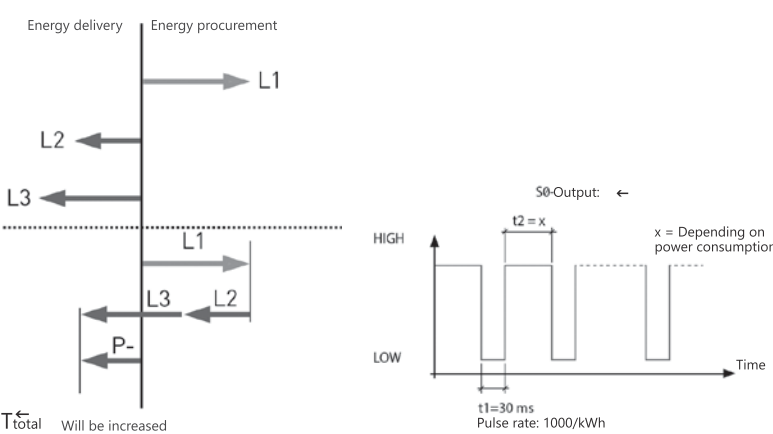
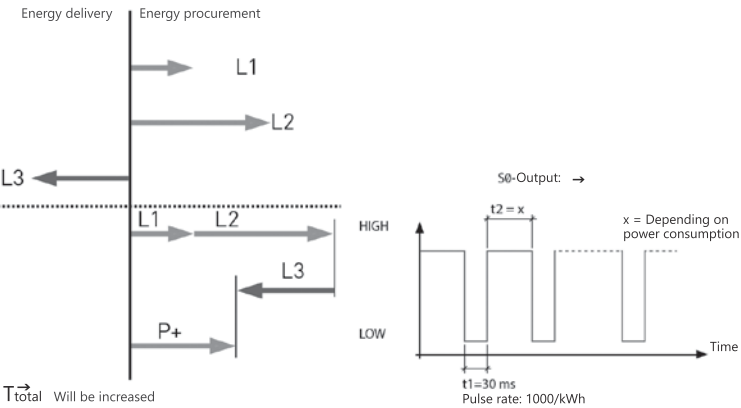
On the right next to the display are the keys MODE and SELECT. Press them to scroll through the menu. First the **background lighting** switches on. Then the total active energy per consumption and delivery, the active energy of the resettable memory consumption and delivery as well as the instantaneous 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.

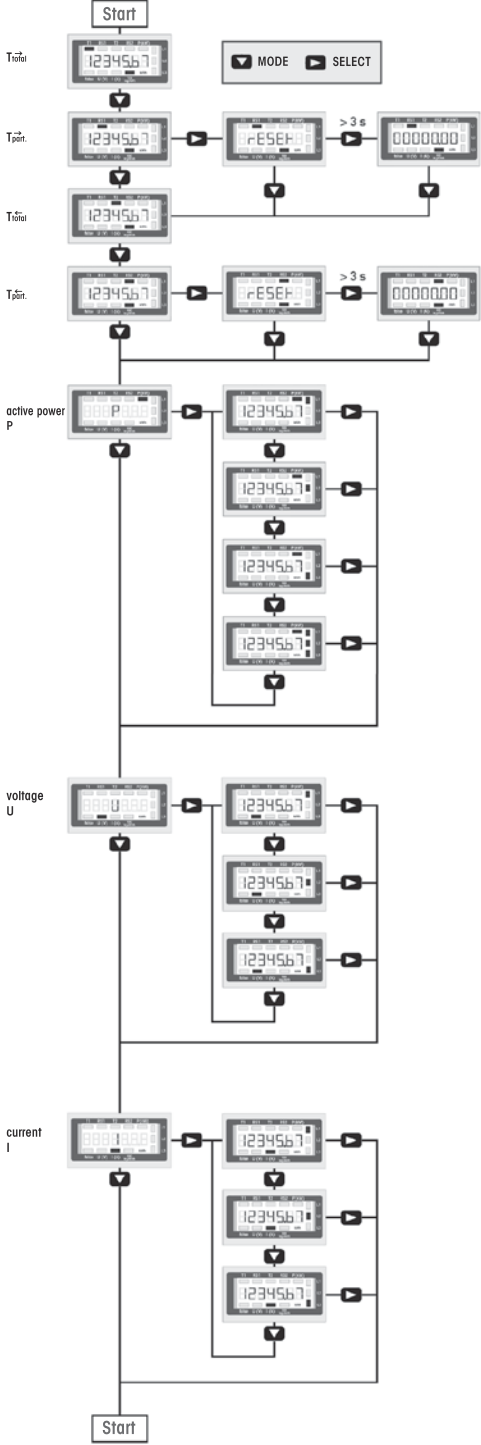
Typical connection:
4-wire-connection 3x230/400 V



How it works



Menu guidance



Technical data	
Rated voltage, extended range	3x230/400 V, 50 Hz, -20%/+15%
Reference current I_{ref} (Limiting current I_{max})	3x0.5 - 10 (80) A
Internal consumption active power	0.5 W per path
Display	LC display 7 digits, therefrom 1 or 2 digits after the decimal point
Accuracy class $\pm 1\%$	B
Inrush current according to accuracy class B	40 mA
Operating temperature	-40/+70°C
Interface	Pulse interface S0 according to DIN EN 62053-31, potential free by opto-coupler, max. 30 V DC/20 mA and min. 5 V DC, impedance 100 ohms, pulse length 30 ms, 1000 Imp./kWh
Terminal cover sealable	Terminal cover claps
Protection degree	IP50 for mounting in distribution cabins with protection class IP51
Maximum conductor cross section ¹⁾	L terminals 25 mm ² , N terminals 16 mm ² , S0 terminals 6 mm ²
Recommended torque ²⁾	L terminals 2,0N m (max. 2,5 Nm) N terminals 1,5 Nm (max. 2,0 Nm) S0 terminals 0,8 Nm (max. 1,2 Nm)
EC type examination certificate	0120/SGS0204
The energy meter is used indoors.	
Mechanical environmental conditions	class M1
Electromagnetic environmental conditions	class E2

¹⁾ The carrying capacity of cables and wires is defined in DIN VDE 0298-4.
²⁾ The torques for screw terminals are mentioned in DIN EN 60999-1.
To avoid damages at the energy meter, the recommended torque values for each terminal must not be exceeded!

EC DECLARATION OF CONFORMITY

Product

Two-way three-phase energy meter, MID approval

Type designation

DSZ15DZ-3x80A

EC-type examination certificate

0120/SGS0204

The manufacturer herewith declares, on his own responsibility that the designated products which this certificate refers to, are in accordance with the following harmonized standards or normative documents as well as with the following Directives of the European Parliament and of the Council (relevant version):

DIN EN 50470

part 1: 2019-08 and part 3: 2020-03 (electronic meters)

2014 / 32 / EU

measuring instruments

2014 / 30 / EU

electromagnetic compatibility

2011 / 65 / EU

restriction of the use of certain hazardous substances (RoHS Directive)

The designated products are placed on the market by ELTAKO GmbH ,
Hofener Straße 54 , 70736 Fellbach, Germany.

Notified body

SGS Fimko OY, No. 0598
Takomotie 8, FI-00380 Helsinki, Finland

Manufacturer

Shenzhen Chuangren Technology Co. Ltd.
Building 33, No.3 Industrial Area, Mashantou, Gongming Street,
New Guangming District, Shenzhen City, Guangdong Province, 518106, China

Place, Date

Shenzhen, 07 November 2022

Signature

This declaration proves the compliance with the above-mentioned EC Directives but it does not include any assurance of properties.
Security advices of the provided product information have to be noticed.

Manuals and documents in further languages:

https://eltako.com/redirect/DSZ15DZ-3*80A_MID

1. App

2.

3. www.

Must be kept for later use!
We recommend the housing for operating instructions GBA14.

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16/2025 Subject to change without notice.