

M-bus three-phase meter for use DSZ15DM-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: -25°C up to +55°C.
Storage temperature: -25°C up to +70°C.
Relative humidity: annual average value <75%.

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

Modular 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 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 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.

Power consumption is shown by a bar 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.

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.

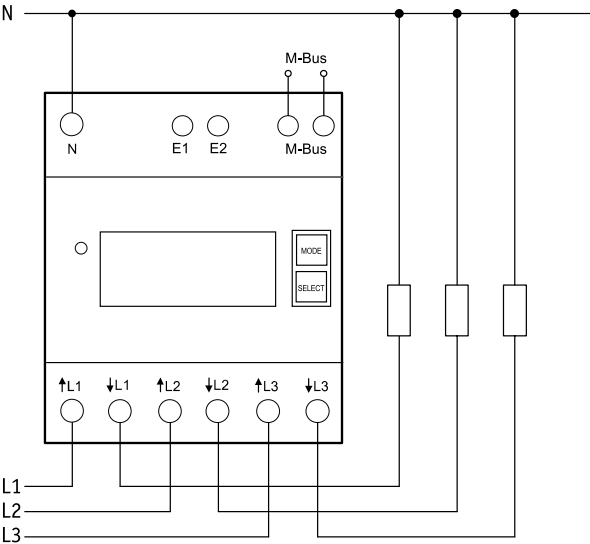
Secondary address:

- It is possible to communicate with the energy meter according to the standard EN13757 with help of the secondary address.
- The use of wildcards is possible.

Detailed information are available in the operating manuals at www.eltako.com.



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

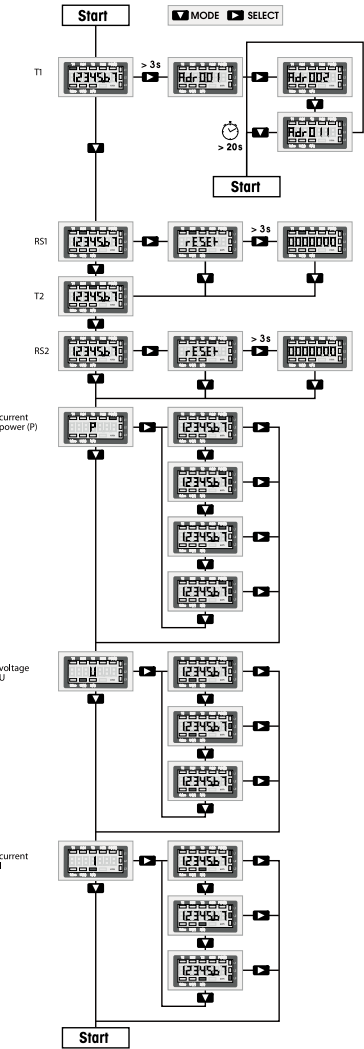


Technical data

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 digit after the decimal point
Accuracy class $\pm 1\%$	B
Inrush current according to accuracy class B	40 mA
Operating temperature	-25/+55°C
Bus system	M-Bus
Bus length	According to M-bus specifications
Transfer rates	300, 2400, 9600 baud
Response time (system response time)	Write up to 60 ms Read up to 60 ms
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 , M-bus terminals and tariff terminals 6 mm ²
Recommended torque ²⁾	L terminals 2,0 Nm (max. 2,5 Nm) N terminals 1,5 Nm (max. 2,0 Nm) M-bus terminals and tariff 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!

Menu guidance



Manuals and documents in further languages



http://eltako.com/redirect/DSZ15DM-3*80A_MID



EC DECLARATION OF CONFORMITY

Product	Calibrated electronic M-bus three-phase energy meter with MID approval
Type designation	DSZ15DM-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, 25 February 2021
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.	

Must be kept for later use!

We recommend the housing for operating instructions GBA14.

Eltako GmbH

D-70736 Fellbach

Technical Support English:

+49 711 94350025

technical-support@eltako.de

eltako.com