

Three-phase energy meter DSZ12DE-3x80A
with display, without 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 3x80A. Standby loss 0.5 watt per path only.

Modulair device for DIN-EN 60715 TH35 rail mounting in distribution cabinets with IP 51 protection class.

4 modules = 70 mm wide and 58 mm deep.

Accuracy class B (1%). With SO 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.

1, 2 or 3 phase conductors with max. currents up to 80A can be connected. The inrush current is 40mA.

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 230V to terminals E1/E2.

On the right next to the display are the keys MODE and SELECT.

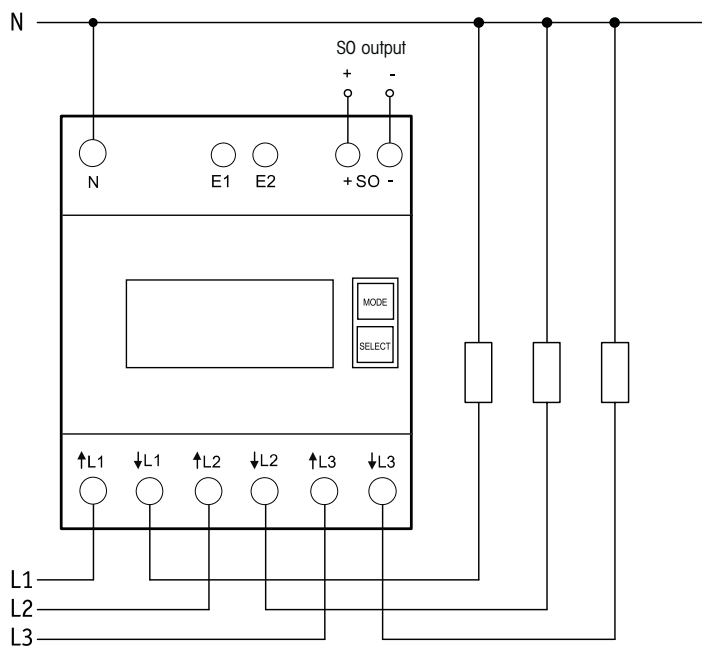
Press them to scroll through the menu. First the **background lighting** switches on. The display then shows the total active energy per tariff, the active energy of the resettable memory RS1 or RS2 as well as the instantaneous values of consumption, voltage and current per phase.

Error message (false)

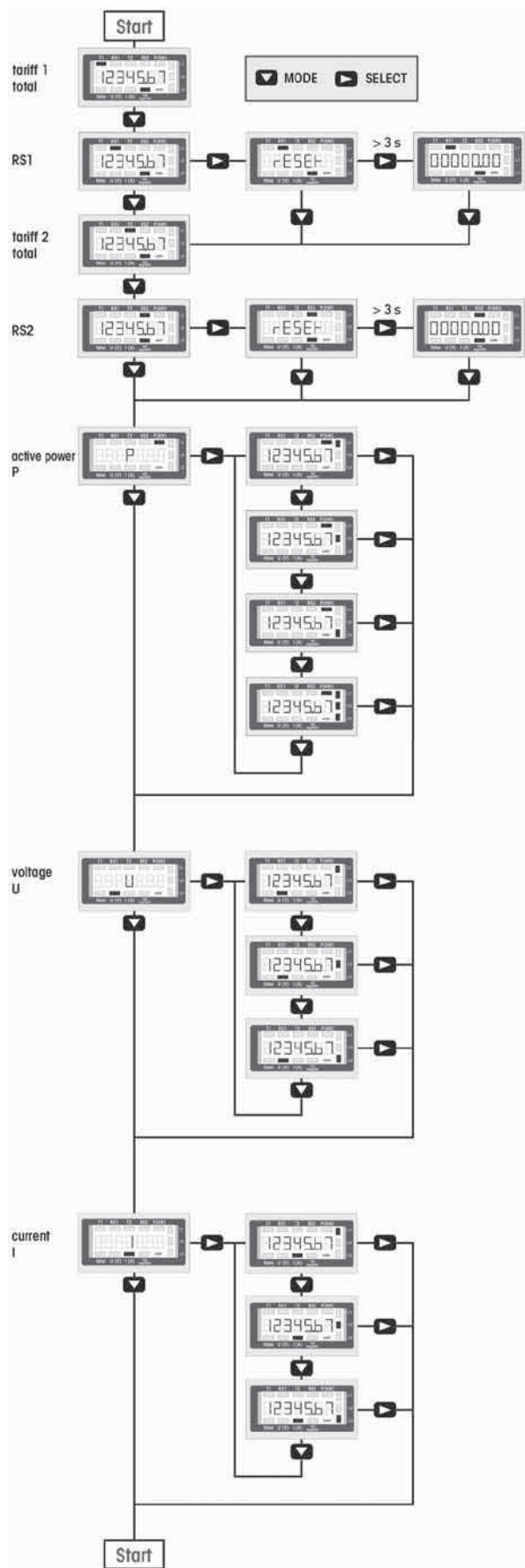
When the phase conductor is missing or the current direction is wrong 'false' and the corresponding phase conductor are indicated on the display.

Typical connection:

4-wire-connection 3x230/400V



Menu guidance



Technical data

Rated voltage, extended range	3x230/400V, 50Hz, -20%/+15%
Reference current I_{ref} (Limiting current I_{max})	3x10(80)A
Internal consumption active power	0.5 W per path
Reading	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	-25/+55°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 clap
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 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) S0 terminals and tariff terminals 0,8 Nm (max. 1,2 Nm)
CE	EN 50470
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!

Must be kept for later use!

We recommend the housing for operating instructions GBA12.

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