

Three-phase energy meter DSZ12WD-3x5A
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%.

CT operated energy meter with settable CT ratio and MID. Maximum current 3x5A. Standby loss 0.5 watt per path only.

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 SO interface as standard.

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 5A can be connected.
The inrush current is 10mA.

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. First the **background lighting** switches on. The display then shows the total active energy, the active energy of the resettable memory as well as 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)

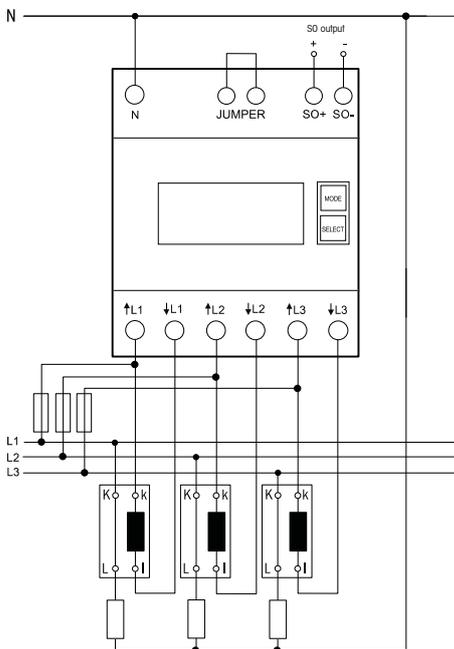
When the phase conductor is missing or the current direction is wrong 'false' and the corresponding phase conductor are indicated on the display.

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

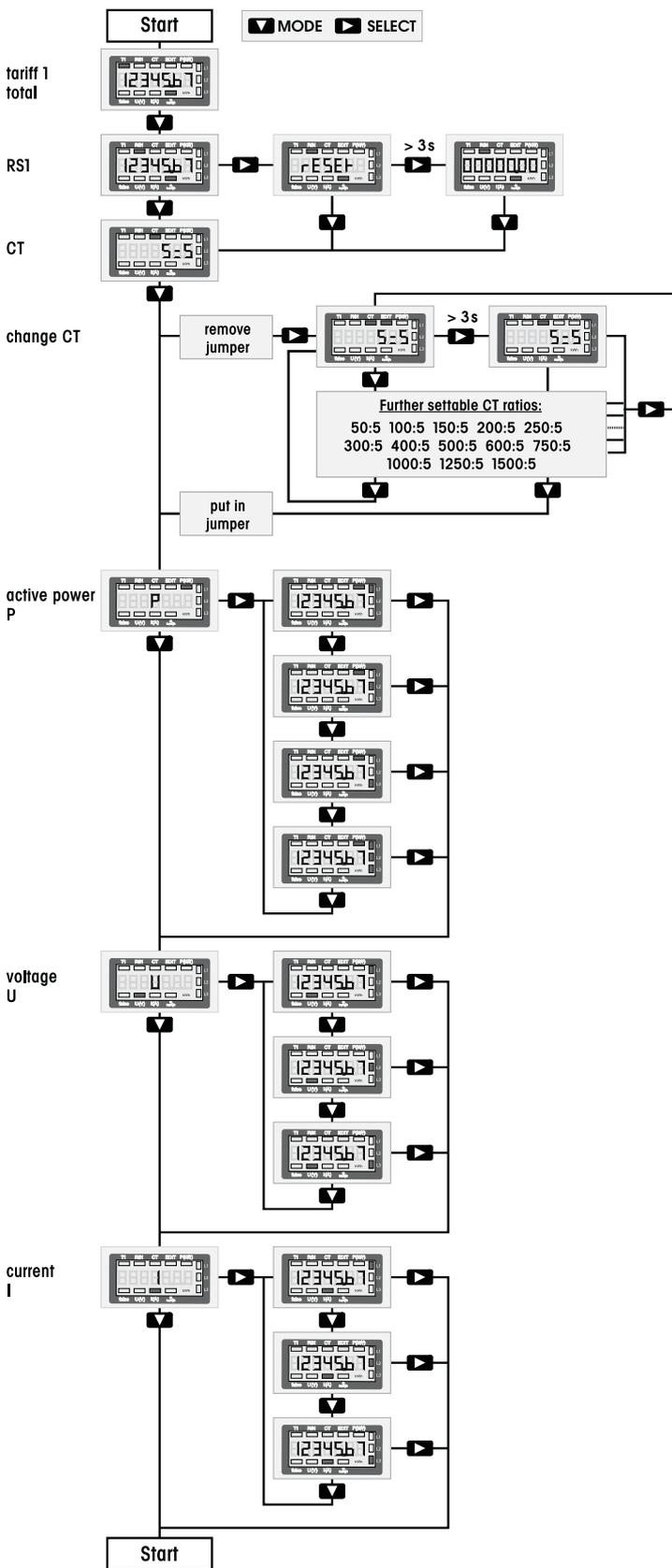
Typical connection:

4-wire-connection 3x230/400V

Connect the current transformer terminals on the secondary part to the phase conductors which are metered. These connections for the voltage supply of the energy meters must be secured according to the local installation regulations.



Menu guidance



Technical data

Rated voltage, extended range	3x230/400V, 50Hz, -20%/+15%
Reference current I_{ref} (Limiting current I_{max})	3x5(6)A
Internal consumption active power	0.5W 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	10mA
Operating temperature	-25/+55°C
Interface	Pulse interface SO according to DIN EN 62053-31, potential free by opto-coupler, max. 30V DC/20mA and min. 5V DC, impedance 100 ohms, pulse length 30ms, 10Imp./kWh
Terminal cover sealable	Terminal cover claps
Protection degree	IP50 for mounting in distribution cabins with protection class IP51
Maximum conductor cross section	N and L terminals 16mm ² , SO terminals 6mm ²
Type examination certificate	TCM221/14-5225
Mechanical environmental conditions	class M1
Electromagnetic environmental conditions	class E2

EC DECLARATION OF CONFORMITY

File name	FQKZ057
Product	Three-phase energy meter with MID approval CT operated energy meter with settable CT ratio
Type designation	DSZ12WD-3x5A
EC type examination certificate	TCM 221/14 - 5225
ELTAKO GmbH, D - 70736 Fellbach, herewith declares, on their own responsibility that the active electrical energy meters which this certificate refers to, is in accordance with the following harmonised standards or normative documents:	
EN 50470 parts 1 and 3 (electronic meters)	
as well as with the following Directives of the European Parliament and of the Council (relevant version):	
2004/22/EC	measuring instruments
2004/108/EC	electromagnetic compatibility (EMC Directive)
2011/65/EU	restriction of the use of certain hazardous substances (RoHS Directive)
Notified body	Conformity assessment body ČMI, Nr. 1383 Okružní 31, CZ – 638 00 Brno
Issuer	Eltako GmbH Hofener Straße 54, D-70736 Fellbach
Place, Date signed	Fellbach, 11. november 2012 Ulrich Ziegler, General Manager

This declaration proves the compliance with the above-mentioned EC Directive(s) 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 GBA12.

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