Eltako ELECTRONICS

Three-phase energy meter DSZ14WDRS-3x5A with display and MID approval

CE

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%.

Two-way three-phase energy meter with settable CT ratio and MID. Maximum current 3x5A. Standby loss 0.4 watt per path only.

Modulair device for DIN-EN 60715 TH35 rail mounting in distribution cabinets with IP51 protection class.
4 modules = 70mm wide and 58mm 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 0.4 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 terminals †L1 and N must always be connected.

Connection to the Eltako RS485 bus 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 of the GFVS 3.0 Software – and is also transferred to the wireless network via the FAM14. Display also using FEA55D and FEA55LED.

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 displa y 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

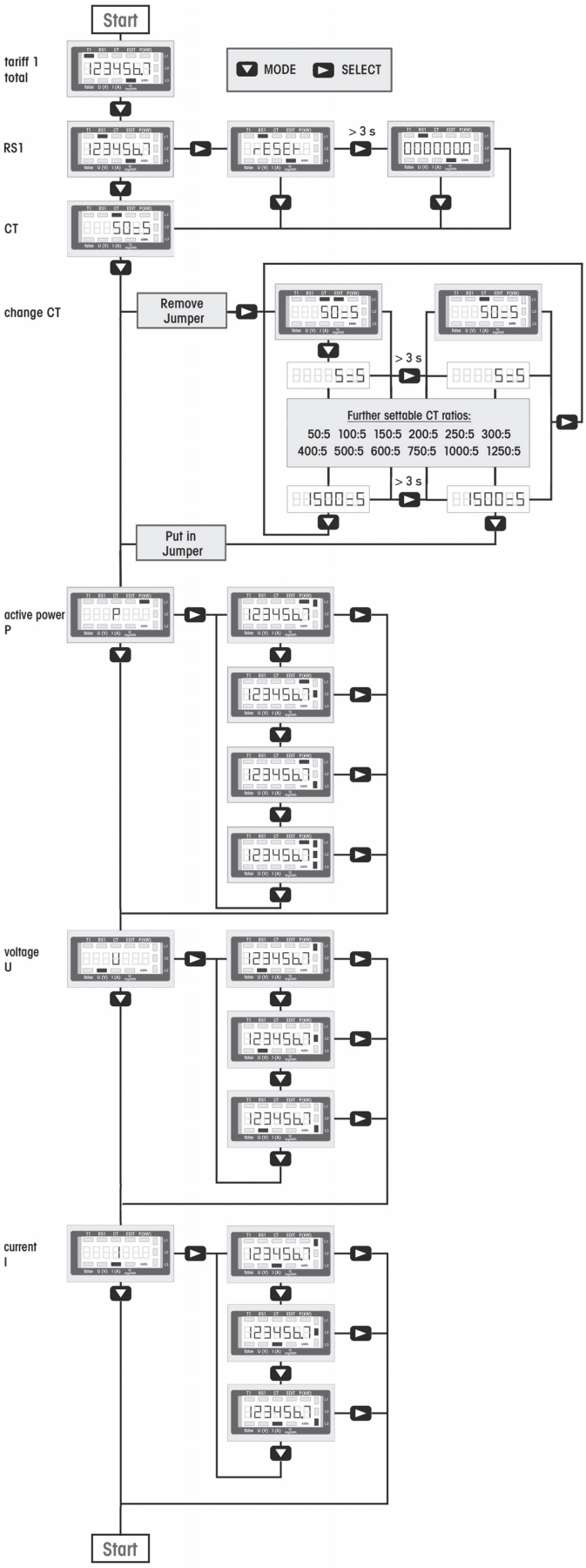
The CT ratio can also be set. It is set to 5:5 at the factory and blocked with a bridge over the terminals which are marked with 'JUMPER'. To adjust the CT ratio to the installed transformer remove the bridge and reset the energy meter according to the operation manual. Then block it again with the bridge. 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.

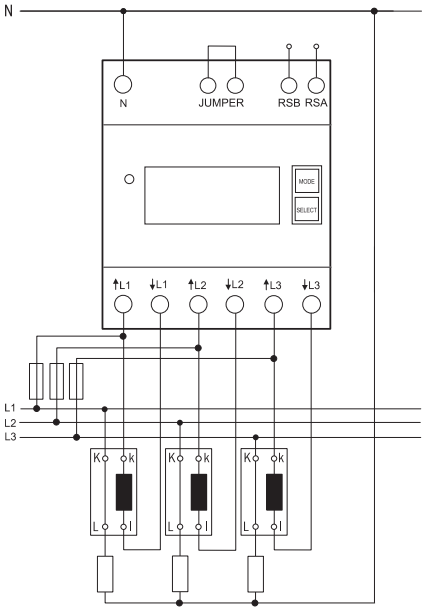
Assign device address for the DSZ14:
Normal display: If the SELECT button is pressed for more than 3 seconds, the device address is displayed. Now turn the rotary switch on the FAM14 within 60 seconds to position 1, its lower LED flashes red. Once the address of the FAM14 has been assigned, its lower LED flashes green for 5 seconds and the screen returns to normal display on the DSZ14.

Menu guidance



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

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



Technical data

Rated voltage, extended range	3x230/400 V, 50 Hz, -20%/+15%
Reference current I_{ref} (Limiting current I_{max})	3 x 5 (6) A
Internal consumption active power	0.4 W per path
Display	LC display 7 digits, therefrom 1 digit after the decimal point
Accuracy class ±1 %	B
Inrush current according to accuracy class B	10 mA
Operating temperature	- 25/+55°C
Interface	RS485 bus Series 14
Terminal cover sealable	Terminal cover claps
Protection degree	IP50 for mounting in distribution cabines with protection class IP51
Maximum conductor cross section	N and L terminals 16 mm², RSA/RSB terminals 6 mm²
EC type examination certificate	CH-MI003-08009

EC DECLARATION OF CONFORMITY

File name	FQKZ116
Product	**Calibrated electronic RS485 three-phase energy meter with display and MID approval** CT operated energy meter with settable CT ratio
Type designation	**DSZ14WDRS-3x5A**
EC type examination certificate	CH-MI003-08009

Eltako GmbH, D - 70736 Fellbach, herewith declares, on their own responsibility that the energy meter which this certificate refers to, is in accordance with the following standards:

EN 50470 parts 1 and 3: October 2006 (electronic meters)

Directive 2004/22/EG of the European parliament and of the Council on measuring instruments

- Annex I, essential requirements
- Annex MI-003, active electrical energy meters

Conformity assessment body	Certification body METAS-Cert, no. 1259 CH-3003 Bern-Wabern
Issuer	Eltako GmbH Hofener Straße 54, D-70736 Fellbach
Place, Date	Fellbach, 27. september 2012
signed	Ulrich Ziegler, General Manager

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

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