

# Electronic three-phase energy meter with settable CT ratio

## EDZ12WS-5A



**Maximum current 3x5 A. With settable CT ratio.  
Standby loss 1 watt per path only.**

Modulair device for DIN-EN 50 022 rail mounting.  
6 modules = 108mm wide and 56mm deep.  
Accuracy class 1 or B (1%). With SO interface as standard.

**This CT operated three-phase energy meter can be blocked after setting the transducer ratio and then it can also be calibrated if requested. MID approval possible for an additional fee if set and blocked ex work.**

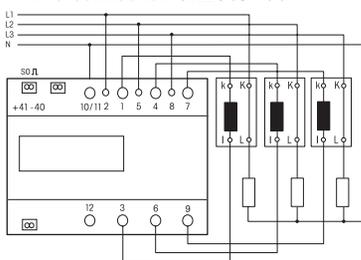
It measures active energy by means of the currents between inputs and outputs. The internal power consumption of 1 watt active power per path is neither metered nor indicated.

**2 or 3 current transducers with secondary currents up to 5 A can be connected.**

The inrush current is 2 mA only.

### Typical connection

#### 4-wire-connection 3x230/400 V



### Display of power consumption with a red LED, 10000 Imp./kWh.

If no power is consumed the red LED is permanently illuminated. Errors are indicated on the display: L1-L2-L3 blink, if phases or input/output are inverted.

With a push-button next to the display the instantaneous values total power as well as power, voltage and current per phase can be indicated.

With this push-button the transducer ratio and the SO impulse output can be set in the edit mode.

The N terminal **must** always be connected.

### Technical Data

Rated voltage	3x230/400V, 50Hz
Extended range	-20%/+15%
Rated current In (Limiting current I <sub>max</sub> )	(5)A
Internal consumption	1W per path
Active power	
Reading active power	LC display, 8 digits, up to 4 decimal digits settable
Accuracy class ±1%	1 if calibrated after blocking, B if blocked ex factory
Inrush current according to accuracy class 1 or B	2mA
Ambient temperature limits	-25/+55°C
Interface	Pulse interface SO according to DIN EN 62053-31, potential free by an OptoMOS unit, max. 230V UC, 100mA; Pulse constant in steps from 100 to 10000 and pulse length from 30 to 100ms settable with key
Terminal cover sealable	Terminal cover claps
Protection degree	IP50 for mounting in distribution cabinets with protection class IP51
Maximum conductor cross section	N and L terminals 6mm <sup>2</sup> , SO terminals 2.5mm <sup>2</sup>
Compliance with	EN 62053-21, EN 50470 (MID)

In the standard mode the meter is in the standard menu. On the display the energy value of tariff 1 is indicated. At a short push of the button (< 2 sec) it will be changed to the next menu item.

At the end of the standard menu the possibility is provided to change at a long push of the button (≥ 2 sec < 5 sec) to the edit mode.

AT I-ConSt the transducer ratio can be set here, e.g. 200/5 = 40 ± setting 040.

Through a longer push of the button (> 5 sec) the display switches from each item of the standard menu back to the standard display. This happens also if the button is not operated for more than 5 minutes.

[K] = short-time push of the button ( $t_{\text{operation}} < 2\text{ s}$ )

[L] = long-time ( $2\text{ s} \leq t_{\text{operation}} < 5\text{ s}$ )

### Standard menu

Menu item	Display	Button
standard display, active tariff	L1L2L3 T1 00023625 kWh t1 In	[K]
activation of edit mode	L1L2L3 T1 60 Ed: t	[K] to standard menu [L] enter edit mode

Edit mode	Display	Button
I-transducer constant (only for transducers)	L1L2L3 T1 001 I-ConSt	[L] edit value
edit 1st digit (digit blinks)	L1L2L3 T1 000 I-ConSt	[K] count up digit by 1 [L] edit next digit
edit 2nd digit (digit blinks)	L1L2L3 T1 000 I-ConSt	[K] count up digit by 1 [L] edit next digit
edit 2nd digit (digit blinks)	L1L2L3 T1 010 I-ConSt	[K] count up digit by 1 [L] edit next digit
edit 3rd digit (digit blinks)	L1L2L3 T1 010 I-ConSt	[K] count up digit by 1 [L] edit next digit
acceptance of values (all digits blink)	L1L2L3 T1 010 I-ConSt	[K] edit 1st digit [L] acceptance of edited value, to next menu item

leave edit mode	L1L2L3 T1 ESCAPE Ed: t	[K] to beginning of menu [L] edit value
-----------------	------------------------------	--

value blinks	L1L2L3 T1 ESCAPE Ed: t	[K] to display "CLOSE" [L] leave edit mode, change to standard display and acceptance of all values
--------------	------------------------------	---



**Warning:** If you leave the menu in this mode, settings can be changed anytime.

leave edit mode	L1L2L3 T1 CLOSE Ed: t	[K] back to display "ESCAPE" [L] leave edit mode and lock irrevocably, change to standard display and acceptance of all values
-----------------	-----------------------------	--



**Warning:** By long-term push of the button the edit mode is irrevocably locked, no data can be edited anymore.

## Warning

**Only a trained electrician may install this equipment, otherwise there is a risk of fire or electric shock.**