

Single- / Three-phase-meter DHZ+



Description

The DHZ + is a digital 1, 2 or 4-tariff meter to measure positive (reference) and negative (delivery) active and reactive energy in 2, 3 and 4-wire systems.

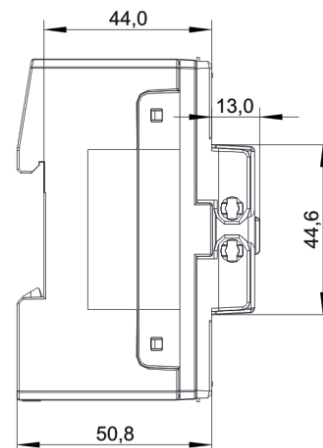
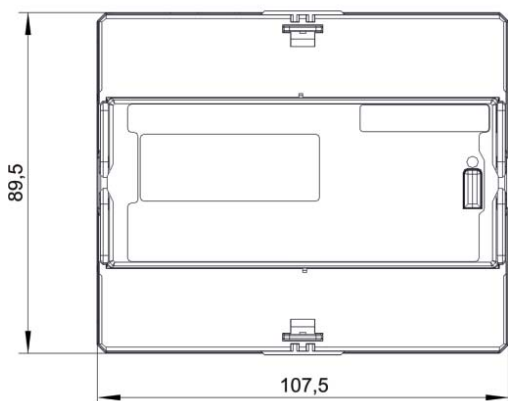
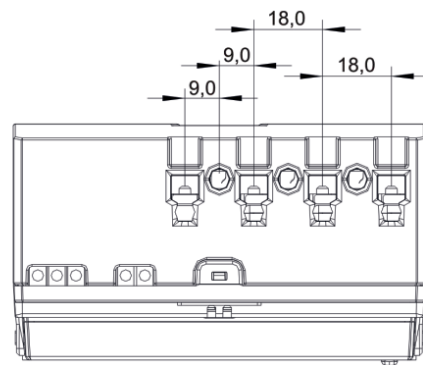
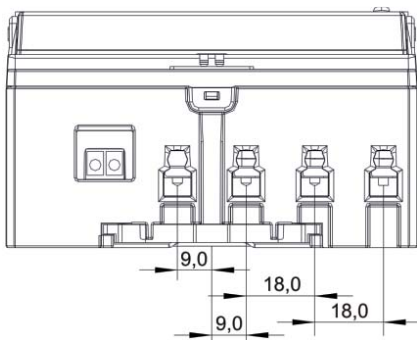
- Digital AC and three-phase meter for direct or transformer connection
- Display of: energy value, display test, transducer constants, constant pulse, pulse length, M-bus addresses, baud rate, power, voltage, current, power factor and frequency
- With load profile memory (only in conjunction with M-Bus interface), memory depth 12.000 entries (4 channels á 3,000 / channel)
- Control button to display switch and device configuration
- External tariff control for 2-rate design (58 ... 230 V)
- Installation error detection
- Pulse output in OptoMOSFET version max. 250 V AC / DC, 100mA (S0 satisfies specification)
- Pulse factor and pulse width adjustable
- Adjustable CT ratio
- Optional with M-Bus interface
- Optional with LON bus interface (on request)
- Optional RS 485 interface (on request)
- Optional internal battery to display activation-energized
- Installation on mounting rail acc. EN 50022 (DIN 35)
- Connection via 3-phase fork rail possible

PTB approval for reactive energy

EC type-examination certificate for active energy according to Directive 2004/22 / EC (MID = Measurement Instruments Directive)



Attention! Changes in pulse outputs and adjusting the transformer ratio is possible only once after installation on verified / MID conformity rated counters. The meter shall then be locked by the encoder user.



Metertype	Voltage V	Impulse length ms	Impulse value Imp./kWh (kvarh)
5(80) A	3 x 230/400	30 30, 50 30, 50, <u>100</u>	10, 50, 100, 500, 1.000 10, 50, 100, 500 10, 50, <u>100</u>
1(6) A	3 x 230/400	30 30, 50 30, 50, <u>100</u>	10, 50, 100, 500, 1.000, 5.000, 10.000 10, 50, 100, 500, 1.000, 5.000 10, 50, 100, 500, <u>1.000</u>
1(6) A	3 x 58/100	30 30, 50 30, 50, <u>100</u>	10, 50, 100, 500, 1.000, 5.000, 10.000, 50.000 10, 50, 100, 500, 1.000, 5.000, 10.000 10, 50, 100, 500, 1.000, 5.000, <u>10.000</u>

Impulse standard underlined.

// Interfaces

S0 pulse output

	DHZ+ 5(65)A	DHZ+ 5//1
Primary:	-	100 or 500 ms Pulse length
	-	1 ... 1.000 Imp./kWh Pulse value
Secondary:	30, 50 or 100 ms Pulse length	30, 50 or 100 ms Pulse length
	10 ... 1.000 Imp./kWh Pulse value	100 ... 100.000 Imp./kWh Pulse value

M-Bus interface EN 13757-2, -3

Addressing: Primary address = 0
(adjustable via button)
Secondary address = serial number
(adjustable via button)

Baud rates: max. 9.600 Baud
(adjustable via button)

Data transmission:

- Manufacturer ID
- Energy counter
- Media
- Status
- Instantaneous power

RS485 interface

Balanced two-wire interface (half duplex) in accordance to TIA/EIA-485 and ITU-T V.11. The M-bus data protocol is being used for data transmission.

Rate of data transmission: 300 ... 9.600 Baud

Signal in accordance to TIA/EIA-485 / ITU-T V.11:

logical „1“ – corresponds -0,3 V ... -6 V
logical „0“ – corresponds +0,3 V ... +6 V

V

Data transmission: manufacturer-ID, Media, bus address, energy values, instantaneous power, fault status

Technical Data	DHZ+		
Voltage (U)	3x230V/400V	3x230V/400V	3x58V/100V
Current (I)	1(6)A	5 (80)A	1(6)A
Frequency (f)	50 Hz		
Counter	2-lines; 8-digit LCD		
Precision (active)	B		
Self consumption (Ue)	< 2 VA per phase		
Self consumption (Ie)	< 0,5 VA per phase		
Temperature range (Tr)	-25 ... +55° C		
Humidity	90 % at 40° C non-condensated		
Protection class	IP 20		
Weight	ca. 0,45 kg		
Dimensions (W x H x D)	(6 TE) 107,5 x 90 x 64 mm		
Standard	Item No.		
DHZ+ S0 2Tarif MID	57320205	57320218	57320305
DHZ+ M-Bus 2Tarif MID	57320405	57320418	57320306
DHZ+ 485 2Tarif MID	57320245	57320248	57320345
For two energy directions (supply and purchase)			
DHZ+ 2Q S0 MID	47320205	47320218	47320305
DHZ+ 2Q M-Bus MID	47320405	47320418	47320406
DHZ+ 2Q 485 MID	47320245	47320248	47320345
For two energy directions (4 quadrant measurement)			
DHZ+ 4Q S0 MID	59320205	59320218	59320305
DHZ+ 4Q M-Bus MID	59320405	59320418	59320304
DHZ+ 4Q M-Bus LP MID	59320406	59320419	59320306
DHZ+ 4Q 485 MID	59320245	59320248	59320345
Special versions	Voltage	Current	Item No.
DHZ+ S0 2Tarif MID	3x100V	1(6)A	57320100
DHZ+ S0 2Tarif MID	1x230V	1(6)A	57320106
DHZ+ S0 2Tarif MID	3x230V	1(6)A	57320230
DHZ+ S0 2Tarif MID	3x400V	1(6)A	57320400
DHZ+ S0 2Tarif MID	3x500V	1(6)A	57320500
DHZ+ M-Bus 2Tarif MID	3x100V	1(6)A	57320104
DHZ+ M-Bus 2Tarif MID	3x230V	1(6)A	57320204
DHZ+ M-Bus 2Tarif MID	3x400V	1(6)A	57320404
DHZ+ M-Bus 2Tarif MID	3x500V	1(6)A	57320504
DHZ+ 2Q M-Bus MID	3x100V	1(6)A	47320104
DHZ+ 2Q M-Bus MID	3x230V	1(6)A	47320234
DHZ+ 2Q M-Bus MID	3x400V	1(6)A	47320404
DHZ+ 2Q M-Bus MID	3x500V	1(6)A	47320504
DHZ+ 4Q M-Bus LP MID	3x100V	1(6)A	59320104
DHZ+ 4Q M-Bus LP MID	3x230V	1(6)A	59320204
DHZ+ 4Q M-Bus LP MID	3x400V	1(6)A	59320404
DHZ+ 4Q M-Bus LP MID	3x500V	1(6)A	59320504
Special	Voltage	Current	Item No.
M-Bus Logger Starter-Set with DHZ+ (59320418)	3x230V/400V	5(80)A	8090
M-Bus Logger Starter-Set with DHZ+ (59320405)	3x230V/400V	1(6)A	8091