

Single- / Three-phase-meter DHZ+



Description

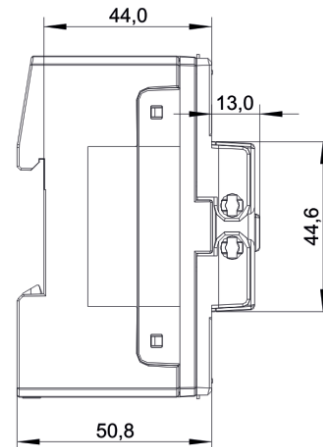
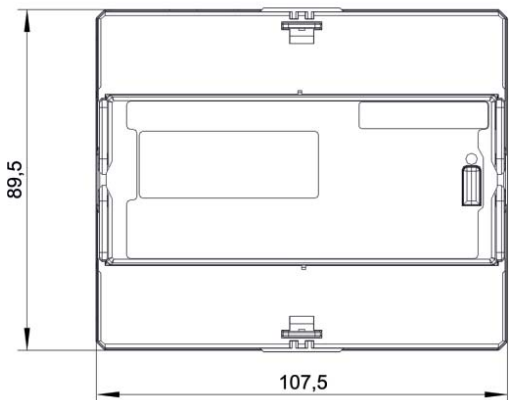
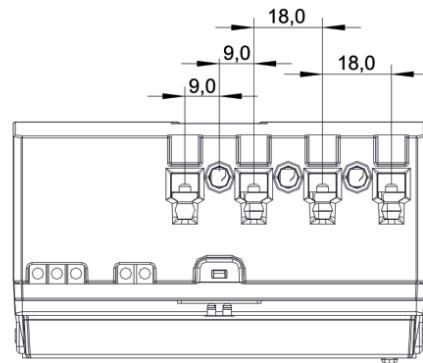
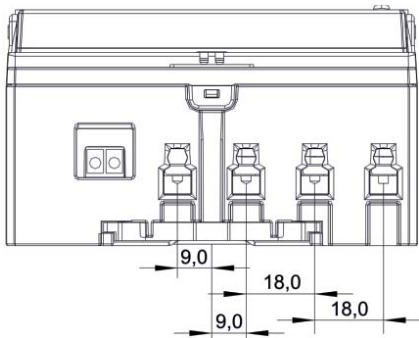
The DHZ + is a digital 1, 2 or 4-tariff meter to measure positive (reference) and negative (delivery) active and reactive energy in 2, 3 and 4-wire systems.

- 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.



Changes, errors and missprints excepted. Products on pictures could include optional parts and modules which are not separately mentioned.

Metertype	Voltage V	Impulse length ms	Impulse value Imp./kWh (kvarh)
Direktanschluss 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>
Messwandler 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>
Messwandler 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>

Impuls Standard-Einstellungen unterstrichen.

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	30, 50 or 100 ms
	Pulse length	Pulse length
	10 ... 1.000 Imp./kWh	100 ... 100.000 Imp./kWh
	Pulse value	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