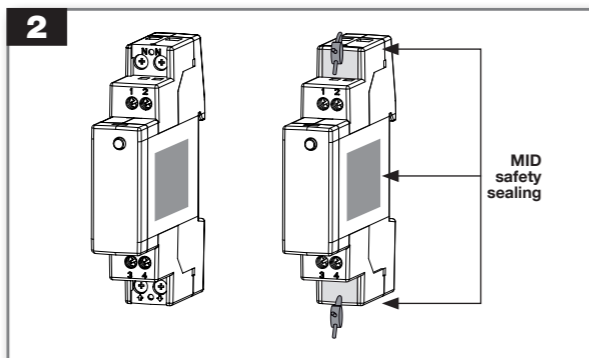
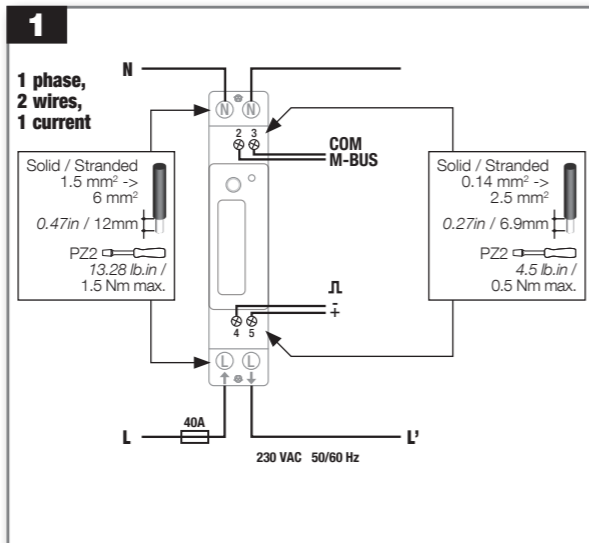


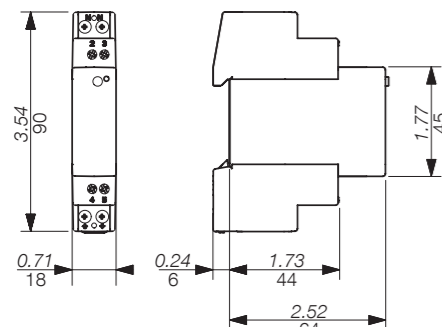
Measurements

The parameters are available according to the device model.

Instantaneous values	Symbol	Measure unit	Display	Com
Phase to Neutral voltages	V	V	●	●
Current	I	A	●	●
Power factor	PF		●	●
Apparent power	S	kVA	●	●
Active power	P	kW	●	●
Reactive power	Q	kvar	●	●
Frequency	f	Hz	●	●
Power direction	↔		●	●
Recorded data				
Total energy counters	Ea, Er	kWh, kvarh	●	●
T1/T2 tariff energy counters	Ea, Er	kWh, kvarh	●	●
Resettable partial energy counters	Ea, Er	kWh, kvarh	●	●
Other information	Symbol	Value/status	Display	Com
Present tariff	T	T1/T2	●	●
Partial counters	P	START/STOP	●	●
S0 output status	●	Active/Not active	●	●



Dual dimensions : in/mm



Partial Ea+ (kWh)

→ 0000085 kWh >3s

→ 0000085 kWh x1

Partial Er+ (kVarh)

→ 0000085 kvarh >3s

→ 0000085 kvarh x1

M-Bus parameters selection

SEtUP ? >3s

Pr1 000 >3s

Pr1 000 x2

Pr1 200 >3s

Pr1 200 x4

Pr1 240 >3s

Pr1 240 x3

Pr1 243 >3s

Pr1 243 x1

Mbus secondary address

Baudrate

All partial counters reset

SAVE? >3s

Y=Save setting and exit.
C=Continue without saving
N=Exit without saving

>3s Confirm

4

Device switch ON

Ea+ (kWh) Tariff T1 → 0000005 kWh x1

Er+ (kVarh) Tariff T1 → 0000086 kvarh x1

Ea+ (kWh) Tariff T2 → 0000005 kWh x1

Er+ (kVarh) Tariff T2 → 0000086 kvarh x1

Ea+ (kWh) → 0000085 kWh x1

Ea- (kWh) → 0000085 kWh x1

Er+ (kVarh) → 0000085 kvarh x1

Active power (kW) → 0085 kW x1

Reactive power (kVar) → 0085 kvar x1

System voltage (V) → 2276 V x1

System current (I) → 1476 A x1

System power factor (PF) → PF 0895 x1

Frequency (f) → 495 Hz x1

M-Bus parameters selection → SEtUP ? x1

Metrological Fw release (Fw Rel1) → FrEL 100 x1

FW CRC info → CS 8d0E x1

Installed communication port → r70dbu5 x1

Technical characteristics

Data in compliance with EN 50470-1, EN 50470-3

General	
Housing	1 module DIN 43880
Mounting	DIN rail EN 60715
Operating features	
Connectivity	2 wires 230V
Storage of energy values and configuration	yes EEPROM
Display tariffs identifier	T1 and T2
Supply	
Autosupplied	
Operating voltage range	184 ... 276 VAC
Operating frequency range	45 ... 65 Hz
Rated power dissipation (max.) Pv	1.5VA - 1W
Overload capability	
Voltage Un continuous	276 VAC
Voltage Un momentary (1 s)	300 VAC
Current Imax continuous	40 A
Current Imax momentary	30 Imax for 1/2c
Display	
Display type	LCD 7 digits with backlight
Active energy: 1 display, 7-digit	000000.0 ... 999999.9 kWh
Reactive energy: 1 display, 7-digit	000000.0 ... 999999.9 kvarh
Instantaneous active power: 1 display, 4-digit	00.00 ... 99.99 kW
Instantaneous reactive power: 1 display, 4-digit	00.00 ... 99.99 kvar
Instantaneous voltage: 1 display, 4-digit	000.0 ... 999.9 V
Instantaneous current: 1 display, 4-digit	00.00 ... 99.99 A
Power Factor: 1 display, 4-digit	0.001 ... 1.000
Frequency: 1 display, 3-digit	45.0 ... 65.0 Hz
Display period refresh	0.5 s
Measuring accuracy	
Active energy	class B acc. to EN 50470-3
Active energy	class 1 acc. to EN 62053-21
Reactive energy	class 2 acc. to EN 62053-23
Measuring input	
Type of connection	direct phase/N
Certified voltage Un	230 VAC
Current Iref	5 A
Current Imin	0.25 A
Operating range current (Ist ... Imax)	0.020 ... 40 A
Certified frequency fn	50/60 Hz ± 1 Hz
Starting current for energy measurement (Ist)	20 mA
Optical interfaces (LED)	
Meter constant	0.2 Wh/imp
S0 Output	
Type	Optoisolated - 27VDC 27mA acc. to EN 62053-31
Pulse weight	100Wh
Safety	
Indoor meter	yes
Degree of pollution	2
Operational voltage	300 VAC
AC voltage test (EN 50470-3, 7.2)	4 kV
Impulse voltage test	6 kV 1.2/50µs
Protection class (EN 50470)	class II
Housing material flame resistance	UL 94 class V0
Embedded communication	
M-BUS	300, 2400, 9600 bps
Isolation class	SELV Circuit
Environmental conditions	
Mechanical environment	M1
Electromagnetic environment	E2
Operating temperature	-25 ... +55 °C
Limit temperature of transportation and storage	-40 ... +75 °C
Relative humidity (not condensation)	≤80 %
Vibrations	±0.075 mm
Degree protection	IP51(*)/IP20

(*) For the installation in a cabinet at least with IP51 protection.