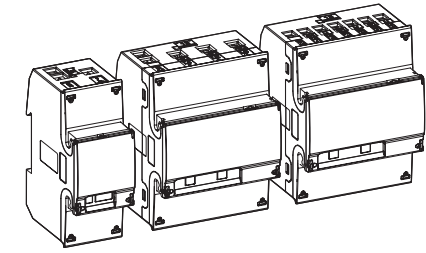


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Specification subject to change without notice.



B21/B23/B24 INSTALLATION MANUAL

2CMC485019M0201 September 2020 Rev E

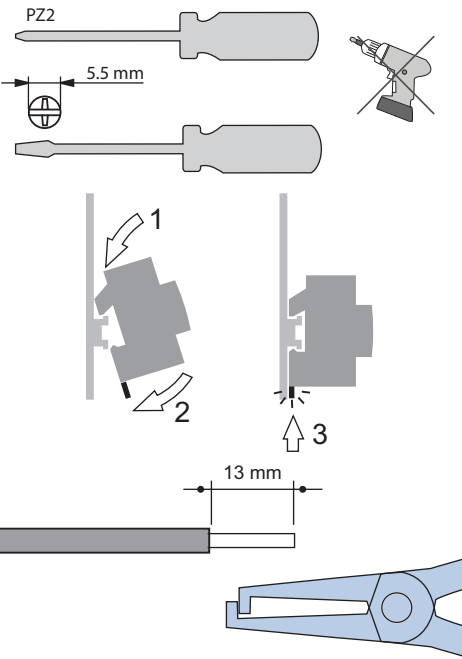


Warning! Installation by person with electrotechnical expertise only.
Warnung! Installation nur durch elektrotechnische Fachkraft.
Avvertenza! Fare installare solo da un elettricista qualificato.

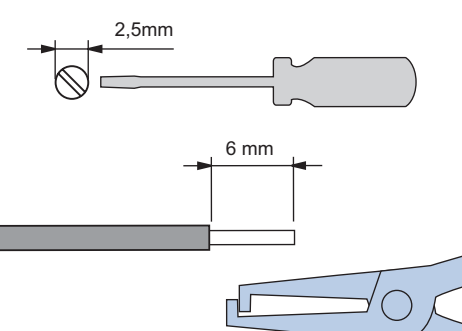
Avertissement! Installation uniquement par des personnes qualifiées en électrotechnique.
Advertencia! La instalación deberá ser realizada únicamente por electricistas especializados.

1 Mounting

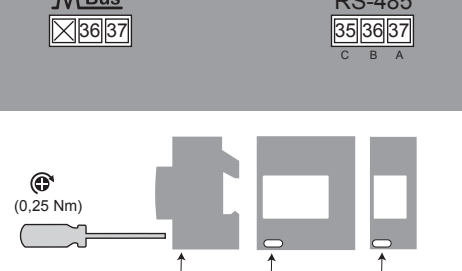
1.1 Mounting all model



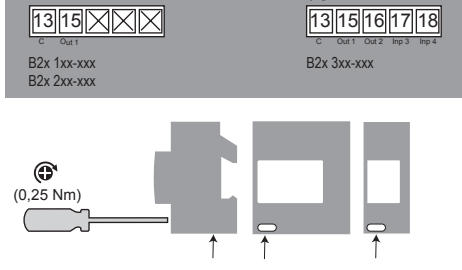
M-Bus RS-485 I/O



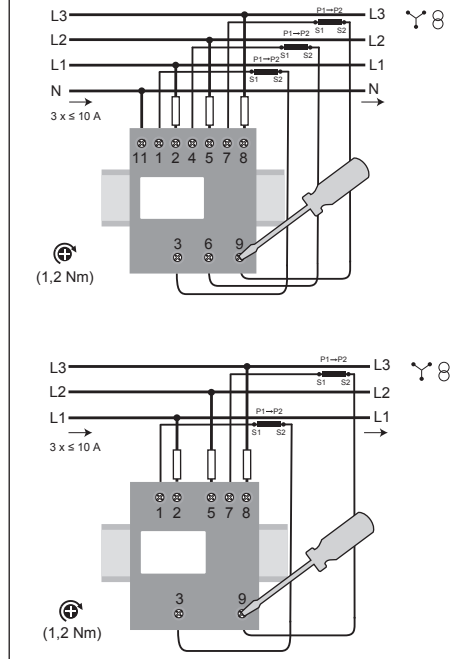
M-Bus RS-485



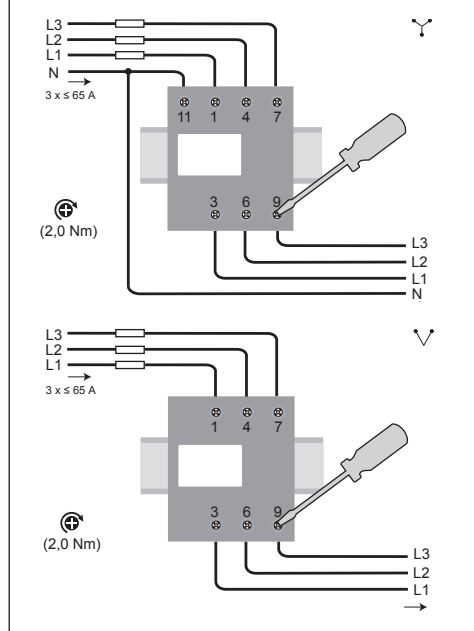
I/O



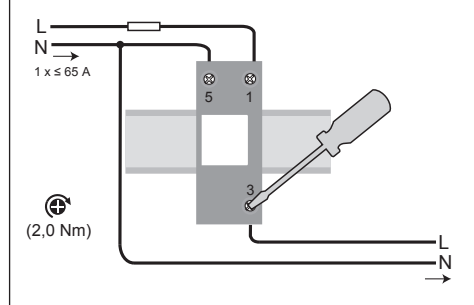
1.2 Connection -B24



1.3 Connection -B23



1.4 Connection -B21



2 Explanations

Table 1 Button instruction

Button	Function
	Down / Up
	OK / Exit
	Set

Table 2 Symbol instruction

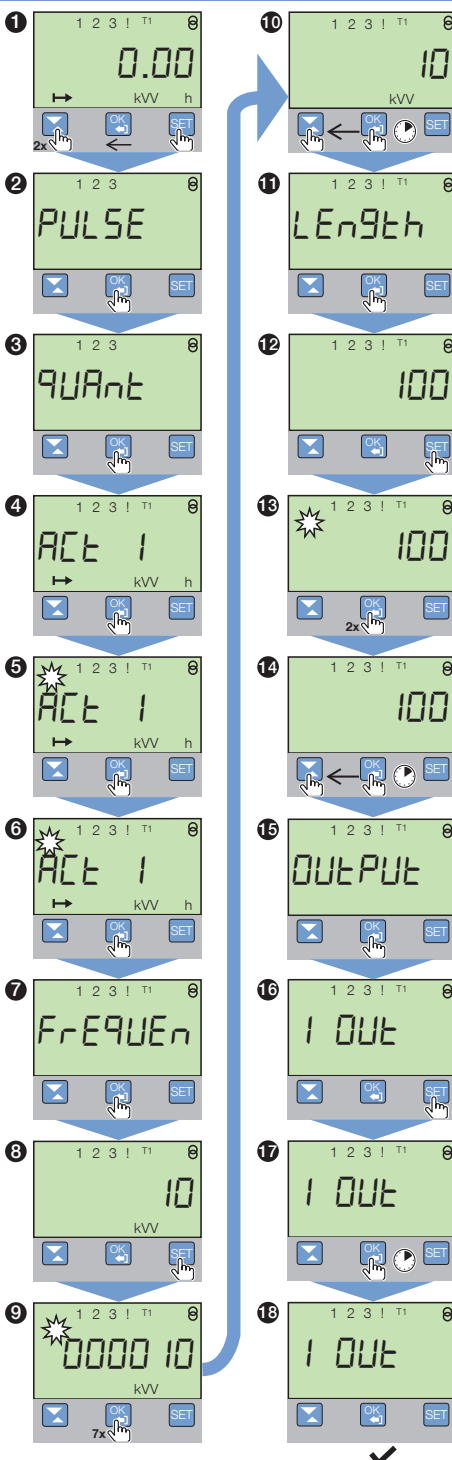
Symbol	Action
	Press this button
	Press and hold button
	Setting sequence
	Screen is flashing
	Number of keystrokes
	Setting finished

3 Basic settings

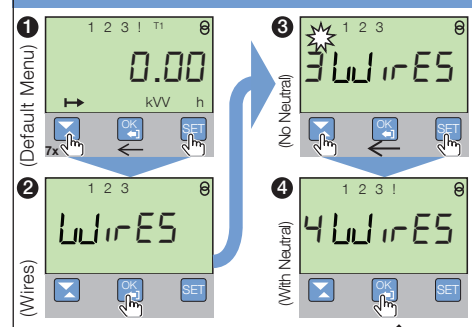
3.1 Default settings

B21/B23	B24
Pulse output Pulse 1 Quantity : Active Energy Import Frequency: 100 Imp/kWh Length: 100 ms Output: 1 Pulse 2 Quantity : Active Energy Export Frequency: 100 Imp/kWh Length: 100 ms Output: 2	Pulse output Pulse 1 Quantity : Active Energy Import Frequency: 10 Imp/kWh Length: 100 ms Output: 1 Pulse 2 Quantity : Active Energy Export Frequency: 10 Imp/kWh Length: 100 ms Output: 2
Wires Wires: 4 Wires (3 Phases & Neutral)	CT Ratios CT Ratios: 5/5

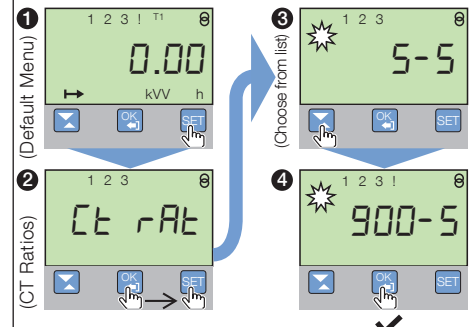
3.2 B21/B23/B24 - Pulse output



3.3 B23/B24 - Wires



3.4 B24 - CT Ratios



3.5 Change / Select values

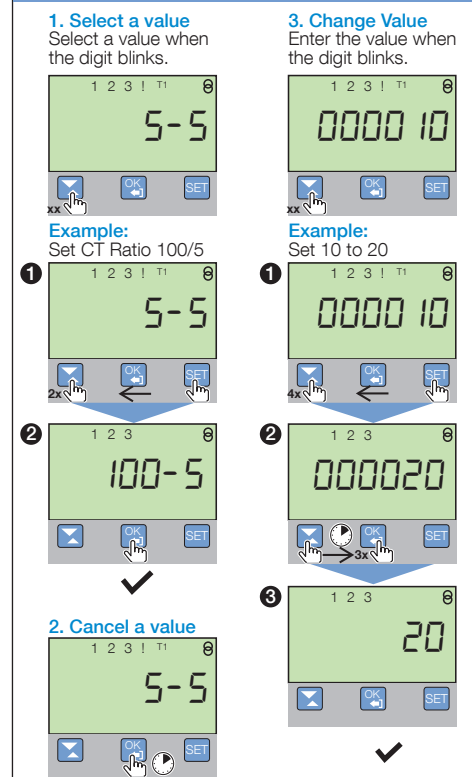


Table 3 Technical data

	B21	B23	B24
Nominal voltage	230 V AC	3x230/400 V AC	3x230/400 V AC
Voltage range	220-240 VAC (-20% to +15%)	220-240 VAC (-20% to +15%)	220-240 VAC (-20% to +15%)
Base current I _b	-	5 A	-
Rated current I _n	-	1 A	-
Reference current I _{ref}	-	5 A	-
Maximum current I _{max}	-	65 A	6 A
Terminal wire area	1.5 - 25 mm ²	50 or 60 Hz ± 5%	0.5 - 10 mm ²
Frequency	-	50 or 60 Hz ± 5%	-
Accuracy Class	B (Cl. 1) and Reactive Cl. 2	B (Cl. 1) and Reactive Cl. 2	B (Cl. 1) or C (Cl. 0.5 S) and Reactive Cl. 2
Active energy	-	1%	0.5%, 1%
Environmental	-	-	-
Operating temperature	-40 to +70°C	-	-
Storage temperature	-40°C to +85°C	-	-
Humidity	75% yearly average, 95% on 30 days/year	-	-
Resistance to water and dust	IP20 on terminal block without protective enclosure and IP51 in protective enclosure, according to IEC 60529.	-	-
Mechanical env.	Class M2 for MID meters	-	-
Electromagnetic env.	Class E2 for MID meters	-	-
LED pulse inductor	Frequency 1000 Imp/kWh	Length 40 ms	-
Outputs	-	-	-
Current	2 - 100 mA	-	-
Voltage	5 - 240 V AC/DC, 5 - 40 V DC. For meters with only 1 output.	-	-
Pulse output frequency	Programmable: 1 - 999999 Imp/kWh	-	-
Pulse length	Programmable: 10 - 990 ms	-	-
Terminal wire area	0.5 - 1 mm ²	-	-
Inputs	-	-	-
Voltage	0 - 240 V AC/DC	-	-
OFF	0 - 12 V AC/DC	-	-
ON	57 - 240 V AC/24 - 240 V DC	-	-
Min. pulse length	30 ms	-	-
Terminal wire area	0.5 - 1 mm ²	-	-
Standards	IEC 62052-11, IEC 62053-21 class 1 & 2, IEC 62053-22 class 0.5 S, IEC 62053-23 class 2, IEC 62054-21, GB/T 17215.211-2006, GB/T 17215.312-2008 class 1 & 2, GB/T 17215.322-2008 class 0.5 S, GB 4208-2008, EN 50470-1, EN 50470-3 category A, B & C		
Material	Polycarbonate in transparent front glass. Glass reinforced polycarbonate in bottom case and upper case. Polycarbonate in terminal cover.		

