

DELTAsingle

DIN Rail Mounted electricity meters

2CMC481002D0010 November 2005



DELTAsingle

General Presentation

DELTAsingle is an electronic electricity meter for single phase metering. The meter has an internal clock for handling tariffs. The setting is done with push buttons. DELTAsingle is intended for mounting on a DIN rail and is designed in accordance with the ABB ProM standard.

General Features

DELTAsingle is an active energy, single phase meter for direct metering up to 80A. The LCD display has 6 digits, 6mm high to ensure easy reading.

DELTAsingle is made compact, only 4 modules (72 mm) to save space in the installation.

In case of power failure, the meter is equipped with a "Super Cap" power backup that will run the clock for 48 hours. A red LED at the front flashes proportionally to the energy consumed.

DELTAsingle has a temperature range from -40 to +55 (storage +70° C)

Communication

DELTAsingle has 3 ways to communicate depending on type.

- Display at front
- Pulse output
- IR interface for serial communication (together with serial communication adapter)

Programming

Selection of information to be shown on the display is easily achieved by using push buttons. The programming / push button can be sealed.

Tariffs

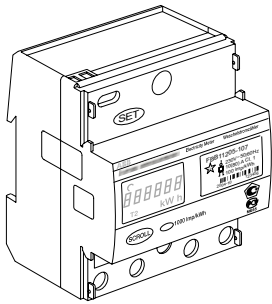
The DELTAsingle range includes 1, 2 and 4 tariffs meters.

Type Approval

All DELTAsingle meter types are tested and approved according to IEC 62052-11, 62053-21 and 62054-21. These standards cover all technical aspects of the meter like climate conditions, electromagnetic compatibility (EMC), electrical requirements, mechanical requirements and accuracy. DELTAsingle meters also carry a number of national approvals.

DELTAsingle

Ordering Details



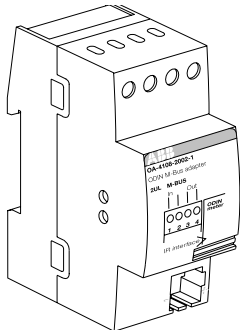
DELTAsingle, main technical data

Current	80A
Voltage	230V (- 23%, + 20%)
Frequency	50/60Hz (± 5%)
Accuracy class	1
Tariffs	1, 2 and 4
Communication	Display, serial (IR output) Pulse, see technical data

Article No.	ABB ID	Type	No of Tariffs	Pulse
09 808 91	2CMA180891R1000	FBU 11200	1	
09 808 92	2CMA180892R1000	FBB 11200	1	X
09 808 93	2CMA180893R1000	FBU 11205	2	
09 808 94	2CMA180894R1000	FBB 11205	2	X
09 808 95	2CMA180895R1000	FBU 11206	4	
09 808 96	2CMA180896R1000	FBB 11206	4	X

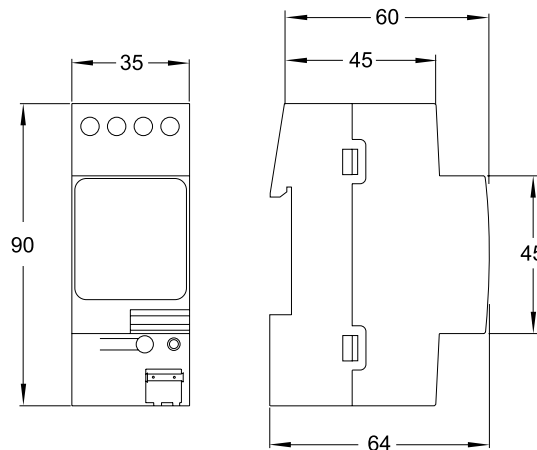
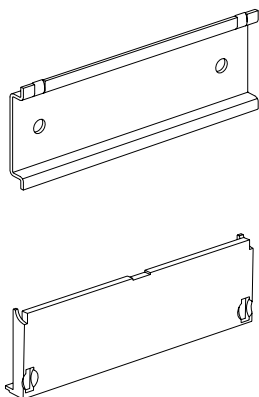
Accessories

The table below, figures, and drawing describe the DELTAsingle accessories.



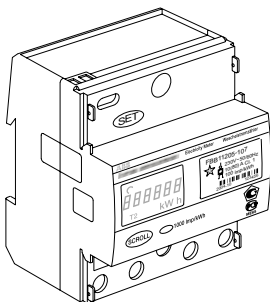
Article No.	ABB ID	Type	Application	Drawing
99 837 090	2CMA137090R1000	Serial Comm. Adapter	M-bus	1
99 837 091	2CMA137091R1000	Serial Comm. Adapter	RS232	1
99 837 092	2CMA137099R1000	Serial Comm. Adapter	TCP/IP	1
99 837 093	2CMA137100R1000	Serial Comm. Adapter	LON.PL	1
99 839 501	2CMA139501R1000	DIN-rail	Wall mounting	-
09 808 90	2CMA180890R1000	Short cover	Sealing terminals	-

Drawing 1



DELTAsingle

Technical Data



Technical Data

Voltage:	230 V AC
Voltage range	-23% to +20%
Base (Max) current	10 (80) A
Start current	25 mA
Power consumption of current circuit	1,8 VA
Frequency	50/60 Hz ($\pm 5\%$)
Accuracy of measurement	Class 1 ($\pm 1\%$)
Memory backup	EEPROM
Clock backup	Super Cap. 48h
Clock accuracy	IEC 62054-21
Standard	IEC 62052-11, IEC 62053-21, (IEC 61036)
Temperature range	-40 to +55°C
Material of front cover	Polycarbonate
Material of back cover	Polycarbonate/glass fibre
Resistance to heat and fire	IEC 60695-2-11
Protection against penetration of dust and water	IP 20 *)
Connection area in the current connecting terminals	4 – 25 mm ²
Weight	150 gr

Pulse output

Connection area in the connecting terminal	0.5 – 2.5 mm ²
External pulse voltage	5 – 40 V DC
Max. current	100 mA
Pulse length	100 ms
Pulse frequency	100 imp/kWh
Standard	IEC 62053-1 (S0)

LED

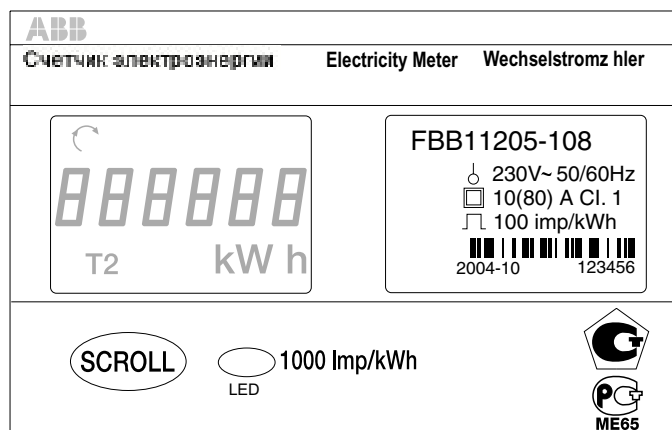
Pulse frequency	1000 imp/kWh
Pulse length	40 ms

Display

Type	LCD with 6 digits
Digits height	6 mm

Front view

Direct connection

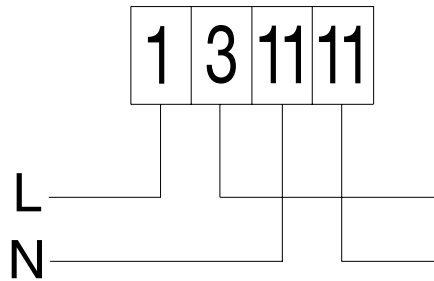


*) To comply with the protection requirements the meter must be mounted in a class IP 51 enclosure or better, according to IEC 60529.

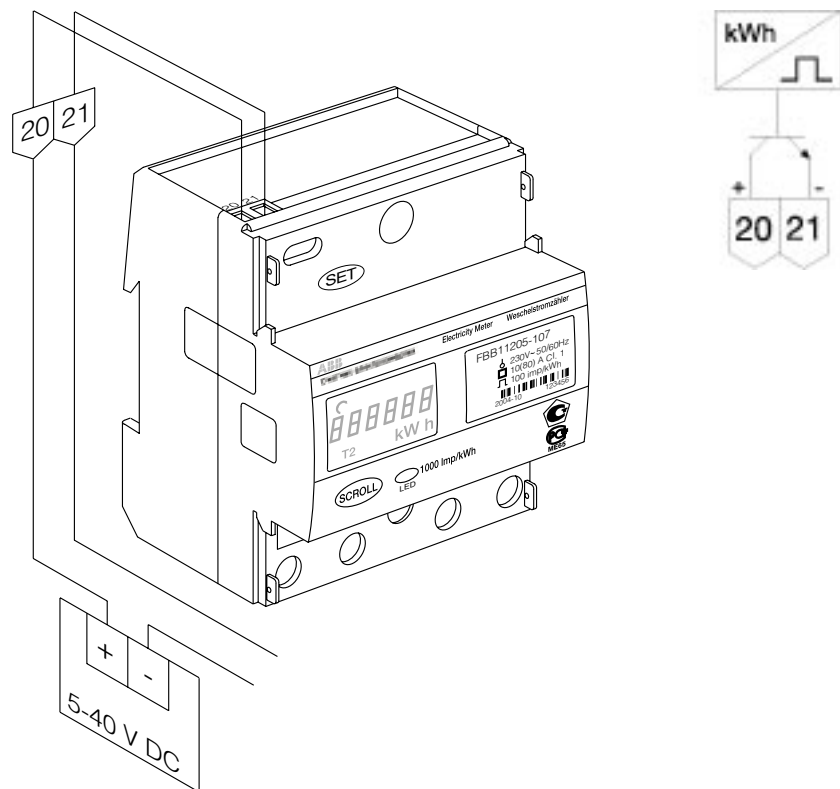
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Wiring Diagrams

Direct connection



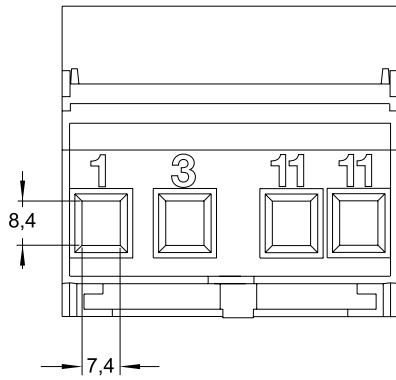
Pulse output



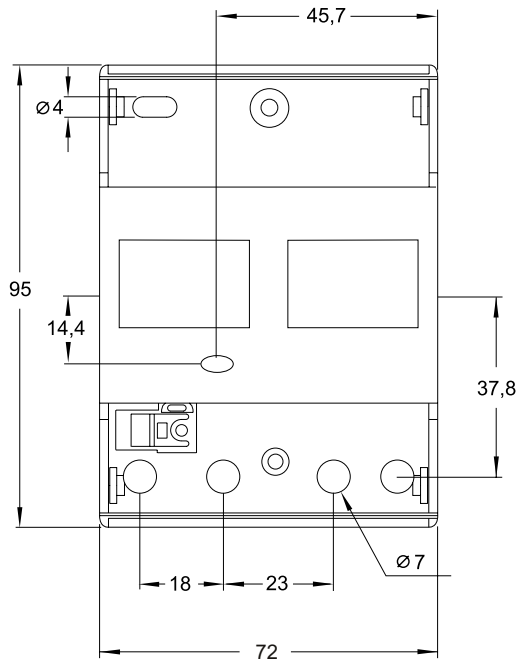
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Device Dimensions

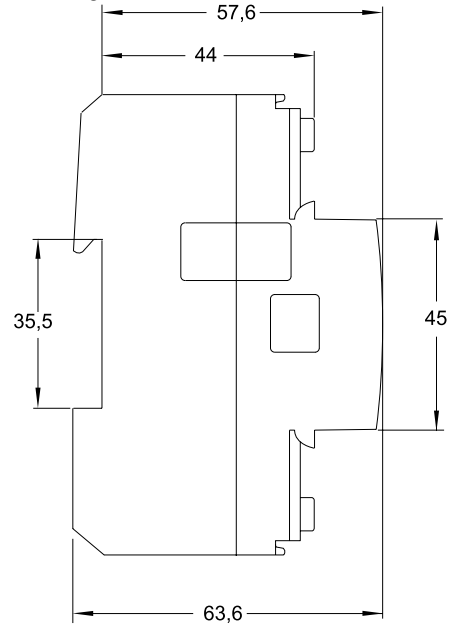
Drawing 2



Drawing 3



Drawing 4



Drawing 5

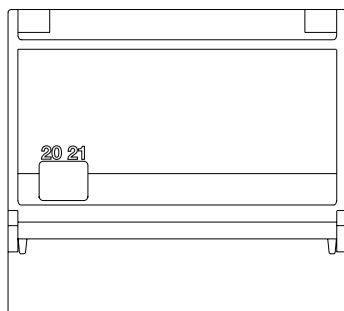




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