

C11 - Easy and compact EQ meters

The EQ meters C11 is a truly compact meter for single phase metering. The C11 is mounted on a DIN rail and is suitable for installation in distribution boards and small consumer units. The C11 is suitable for many applications.



General features

The C11 is a very compact meter for single phase applications. The meter has an LCD with large digits on a vertical line and small digits on a horizontal line below. The meter has a wide temperature range which makes it possible to install the meter in many locations. Navigating the meter is easily done via the push-button below the display. The power consumption of the meter is very low, less than 0.8 VA (0.2 W).

Communication

Data from the C11 meters can be collected via pulse output. The pulse output is a solid state relay that generates pulses proportionally to the measured energy.

Instrumentation

The C11 meters support reading of instrument values. A number of electrical properties can be read:

- Power factor
- Active power
- Current
- Voltage

Outputs

The C11 meter has an output that can be used as pulse output or alarm output. The alarm quantity and levels is easily configured on the meter with the push button. The output can be used for controlling external apparatus like a contactor or an alarm indicator (connected via an external relay).

Approvals

The C11 meters are type approved according to IEC as well as type approved and optionally verified according to MID. MID is the Measure Instruments Directive 2004/22/EC from European Commission. The type approval is according to standards that covers all relevant technical aspects of the meter. These include climate conditions, electromagnetic compatibility (EMC), electrical requirements, mechanical requirements and accuracy.

Ordering details

40A, 1 DIN
IEC approval

Direct connected electricity meter with pulse output

Voltage V	Accuracy Class	Type	Order code	Weight (1 pcs) kg
Steel				
Active energy, pulse output				
1 x 230 V AC	Class B (Cl.1)	C11 110 - 100 *)	2CMA100014R1000	0.07
	Class 1	C11 110 - 300	2CMA170550R1000	0.07

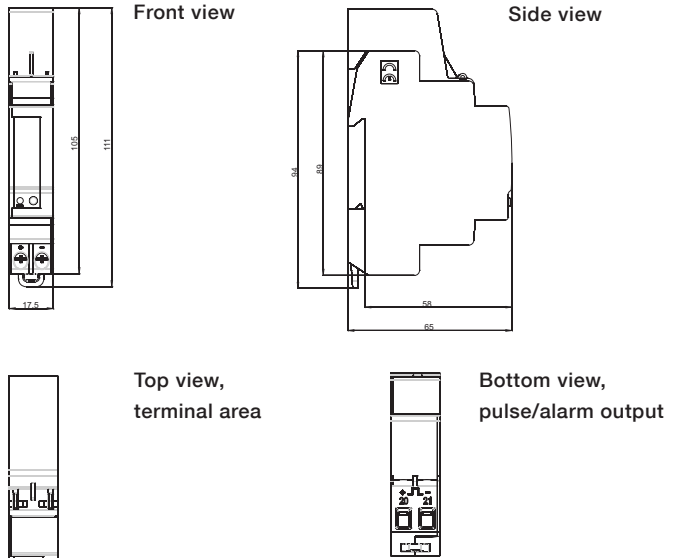
*)MID approval

C-series

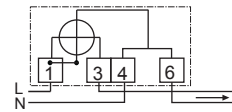
Technical data

Voltage/current inputs	
Nominal voltage	1 x 230 V AC
Voltage range	230 V (-20% - +15%)
Power dissipation voltage circuits	< 0.8 VA (0.2 W) total
Power dissipation current circuits	0.02 W at 230 V AC and I_b
Base current I_b	5 A
Reference current I_{ref}	5 A
Transitional current I_t	0.5 A
Maximum current I_{max}	40 A
Minimum current I_{min}	0.25 A
Starting current I_{st}	< 20 mA
Terminal wire area	0.5 - 10 mm ²
Recommended tightening torque	0.8 Nm
General data	
Frequency	50 or 60 Hz ± 5%
Accuracy Class	B (Cl.1)
Accuracy	1%
Display of energy	6 digits LCD
Mechanical	
Material	Polycarbonate in transparent front glass and terminal cover. Glass reinforced polycarbonate in terminal block
Environmental	
Operating temperature	- 25°C - +70°C
Storage temperature	- 25°C - +85°C
Humidity	75% yearly average, 95% on 30 days/year
Resistance to fire and heat	Terminal 960°C, cover 650°C (IEC 60695-2-1)
Resistance to water and dust	IP20 on terminal block without protective enclosure and IP51 in protective enclosure, according to IEC 60529.
Outputs	
Current	2 - 100 mA
Voltage	5 - 40 V DC
Pulse output frequency	100 (imp/kWh)
Pulse length	200 ms
Terminal wire area	0.5 - 6 mm ²
Recommended tightening torque	0.8 Nm
Pulse indicator (LED)	
Pulse frequency	1000 imp/kWh
Pulse length	40 ms
EMC compatibility	
Impulse voltage test	6 kV 1.2/50 µs (IEC 60060-1)
Surge voltage test	4 kV 1.2/50 µs (IEC 61000-4-5)
Fast transient burst test	4 kV (IEC 61000-4-4)
Immunity to electromagnetic HF-fields	80 MHz - 2 GHz at 10 V/m (IEC 61000-4-3)
Immunity to conducted disturbance	150 kHz - 80 MHz, (IEC 61000-4-6)
Radio frequency emission	EN 55022, class B (CISPR22)
Electrostatic discharge	15 kV (IEC 61000-4-2)
Standards	IEC 62052-11, IEC 62053-21 class 1, GB/T 17215.211-2006, GBT 17215.321-2008 class 1, GB 4208-2008, EN 50470-1, EN 50470-3 category B
Dimensions	
Width	17,5 mm
Height	111 mm
Depth	65 mm
DIN modules	1

Dimension



Wiring diagram



For more information please contact:

ABB AB
Meters
 Box 1005
 SE-611 29 NYKÖPING, Sweden
 Phone: +46 155 29 50 00
 Fax: +46 155 28 81 10
www.abb.com



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