

eCB1

Smart Controller



Intelligent
Energy management

www.echarge.de

eCB1 - Smart Controller

- Placement in meter cabinets, distribution cabinets, charging stations and at every measuring point
- Fully integrated smartmeter
- Interfaces: LAN + RS-485
- Visualization of total current consumption
- Power and energy metering per phase in kW (real time)
- Visualization via webinterface
- Storage of consumption data on device
- Top hat rail mounting
- Direct measuring up to 63 A
- Converter measurement up to 1000 A

Technical Specifications

Interface (standard)

LAN (10/100 Mbit)

RS-485

Product Standards

EN 61010, EN 50428, EN 60650

Voltage and current inputs

Rated voltage 230/400 VAC

Operating voltage 230 V $\pm 10\%$

Frequency 50 Hz $\pm 5\%$

Power consumption

Voltage path < 0,01 VA per phase

Current path < 2 VA per phase

Complete unit < 5 W

Start-up current < 25 mA

Current nominal current 5 A, current limit 63 A

Mounting

Connection cross-section: 10-25mm² *

Torque for screw terminals: 2.0 Nm

* mechanical: from 1.5 - 25 mm²

Measuring accuracy

Accuracy class according to IEC 61557-12

Referred to measured value, the energy manager

Voltage $\pm 0,5\%$

Current $\pm 0,5\%$

Apparent power $\pm 1,0\%$

Real power $\pm 1,0\%$

Reactive power $\pm 1,0\%$

Power factor $\pm 1,0\%$

With reference to IEC 62053-22 or -23 (typically)

Real energy	class 1
Reactive energy	class 1
Bei Einsatz von extremen Stromwandlern ist die	
When using external current transformers, their measuring accuracy must be taken into account.	
Power factor	$\pm 1,0\%$

Operating conditions

Ambient temperature -25° C ... +45° C

Storage temperature -25° C ... +70° C

Relative humidity up to 75 % annual average

up to 95 % on up to 30 days/year

Mechanical data

housing material glass reinforced polyamide

hot wire test: according to IEC 695-2-1

Protection class: II

Protection type: IP2X

Weight 0.3 kg

Size 88 x 70 x 65 mm

EMW

ESD (IEC 61000-4-2)

4 kV contact discharge, 8 kV air discharge

RF-irradiation (IEC 61000-4-3) 3 Vm

Burst (IEC 61000-4-4)

Mains: ± 4 kV, Ethernet: ± 2 kV

Surge (IEC 61000-4-5)

Phase-Phase: 1 kV, Phase-earth: 2 kV, Ethernet: ± 2 kV

conductive interference immunity (IEC 61000-4-6)

150 kHz-80 MHz, 3 V (rms value)

RF-transmission (EN 55022)

class B