

CHARGING CONTROLLER 32A FOR CHARGING UNTIS IEC 61851, MODE 3 230/400V POWER SUPPLY 110/230V AC



Model	
product brandname	SIPLUS ECC1000
Product designation	CM-100
Design of the product	acc.to IEC61851
Operator element version / of the charging station	Charging mode 3 in accordance with IEC 61851
General technical data	
Protection against electrical shock	finger-safe
Voltage	
Insulation voltage / with degree of pollution 3 / rated value	230 V
Surge voltage resistance / rated value	4 kV
Supply voltage	
Type of voltage / of the supply voltage	AC
Consumed current / for rated value of supply voltage	100 mA
Symmetrical line frequency tolerance	
• at 50 Hz / minimum	47.5 Hz
• at 50 Hz / maximum	52.5 Hz
• at 60 Hz / minimum	57 Hz

- at 60 Hz / maximum

63 Hz

Protection class

Protection class IP / on the front

IP20

Electricity

Charging current

- maximum

32 A

Auxiliary circuit

Operating current / of auxiliary contacts

- at AC / at 110 V
- at AC / at 230 V
- at DC / at 24 V

0.75 A

0.75 A

1 A

Product details

Product description

Actuation and monitoring of power components in the charging station, used for communication with the electric vehicle in acc. with IEC61851

Product function

Product function

- removable terminal for auxiliary and control circuit
- Bus communication

Yes

No

Display and operation

Number of LEDs

1

Display version

- as status display of the inputs/outputs
- for fault signal
- for normal operation

orange, flashing (1 Hz), device waiting for enable

red, flashing / twinkling, fault

green, flashing / continuously illuminated, waiting for EF / charging active

Communication

Protocol / is supported

- EIB/KNX protocol
- Ethernet protocol
- Vehicle communication acc. to IEC 61851

No

No

Yes

Inputs Outputs

Input voltage

- minimum
- maximum

0 V

5 V

Number of digital outputs

0

Number of digital inputs

2

Number of interfaces / acc. to IEC 61851

1

Connections

Connectable conductor cross-section	
<ul style="list-style-type: none"> • solid <ul style="list-style-type: none"> — minimum 0.5 mm² — maximum 2.5 mm² • finely stranded <ul style="list-style-type: none"> — with core end processing / minimum 0.5 mm² — with core end processing / maximum 2.5 mm² — without core end processing / minimum 0.5 mm² — without core end processing / maximum 2.5 mm² 	
AWG number / as coded connectable conductor cross section	
<ul style="list-style-type: none"> • minimum 20 • maximum 14 	
Type of electrical connection	
<ul style="list-style-type: none"> • of the inputs and outputs combicon connection GMSTB 2.5 • for auxiliary and control current circuit combicon connection MSTB 2.5 	
Contact assignment	
<ul style="list-style-type: none"> • of socket 1 at PIN 1 L: 110/230 V AC connection • of socket 1 at PIN 2 N: 110/230 V AC connection • of socket 2 at PIN 1 FE: Functional ground (part of the vehicle interface, connection to plug in accordance with IEC61851) • of socket 2 at PIN 2 PX: Proximity (part of the vehicle interface, connection to plug in accordance with IEC61851) • of socket 2 at PIN 3 CP: Control Pilot (part of the vehicle interface, connection to plug in accordance with IEC61851) • of socket 3 at PIN 1 AV: Auxiliary voltage (readback voltage for device's own digital inputs) • of socket 3 at PIN 2 EN: Enable (digital input for module enable) • of socket 3 at PIN 3 HL: Hatch lock (digital input for status of connector lock) • of socket 4 at PIN 1 P1: "Power" relay contact for switching load contactor • of socket 4 at PIN 2 P2: "Power" relay contact for switching load contactor • of socket 4 at PIN 3 V1: Ventilation relay contact for switching fan • of socket 4 at PIN 4 V2: Ventilation relay contact for switching fan • of socket 4 at PIN 5 H1: Hatch relay contact for switching locking • of socket 4 at PIN 6 H2: Hatch relay contact for switching locking • of socket 4 at PIN 7 S1: signal relay contact for reporting faults • of socket 4 at PIN 8 S2: signal relay contact for reporting faults 	

Mechanical Design

Height	91 mm
Width	72 mm
Depth	71 mm

Mounting position	vertical, on horizontal standard mounting rail
Mounting type	snap-on mounting on 35 mm DIN rail according to DIN EN 60715
Required spacing / with side-by-side mounting	
• upwards	40 mm
• downwards	40 mm
• Backwards	0 mm
• at the side	0 mm
• forwards	5 mm
Required spacing / for grounded parts	
• upwards	20 mm
• downwards	20 mm
• Backwards	0 mm
• at the side	0 mm
• forwards	5 mm
Required spacing / for live parts	
• upwards	20 mm
• downwards	20 mm
• Backwards	0 mm
• at the side	0 mm
• forwards	5 mm
Material / of the enclosure	Wellamid 6600-PA66-GV 30 HWV0CP

Environmental conditions

Installation altitude / at height above sea level / maximum	2 000 m
Electrostatic discharge / acc. to IEC 61000-4-2	4 kV contact discharge / 8 kV air discharge, evaluation criterion B
EMC emitted interference / acc. to IEC 61000-6-3	Suitable for operation in residential, public and industrial environments
EMI immunity / acc. to IEC 61000-6-2	Suitable for operation in industrial and residential environments
Field-bound parasitic coupling / acc. to IEC 61000-4-3	80 MHz to 1 GHz 10 V/m, 1.4 GHz to 2 GHz 3 V/m, 2 GHz to 2.7 GHz 1 V/m, evaluation criterion A
Contact reliability	80000 operating cycles at 1 A, inductive load
Conducted interference / due to high-frequency radiation / acc. to IEC 61000-4-6	3 V rms in the frequency range 0.15 ... 80 MHz, modulation 80 % AM at 1 kHz, evaluation criterion A
Conducted interference / due to burst / acc. to IEC 61000-4-4	4 kV / 5 kHz AC supply lines and functional ground, 2 kV / 5 kHz control lines and relay outputs
Conducted interference / due to surge / acc. to IEC 61000-4-5	Asymmetrical: AC supply lines 4 kV / 12 ohms; control lines and functional ground 2 kV / 42 ohms; relay outputs 4kV / 12 ohms; evaluation criterion B. symmetrical: AC supply lines 2 kV / 2 ohms; relay outputs 2kV / 2 ohms; evaluation criterion
Relative humidity / during operation	
• minimum	0 %
• maximum	95 %
Shock resistance	

<ul style="list-style-type: none"> • acc. to IEC 60068-2-27 • during transport / acc. to IEC 60068-2-29 	<p>15g / 11 ms / 3 shocks per axis</p> <p>1000 shocks / axis, 25g, 6 ms semi-sinusoidal</p>
Vibration resistance <ul style="list-style-type: none"> • during operation / acc. to IEC 60068-2-6 • during transport / acc. to IEC 60068-2-6 	<p>5 to 8.4 Hz / 3.5 mm displacement, 8.4 to 150 Hz / 1g</p> <p>5 to 8.4 Hz / 3.5 mm displacement, 8.4 to 500 Hz / 1g</p>
Magnetic field immunity at power frequencies / acc. to EN 61000-4-8	<p>100 A/m at 50 Hz and 60 Hz, evaluation criterion A</p>
Ambient temperature <ul style="list-style-type: none"> • during operation / minimum • during operation / maximum • during storage / minimum • during storage / maximum • during transport / minimum • during transport / maximum 	<p>-25 °C</p> <p>60 °C</p> <p>-25 °C</p> <p>70 °C</p> <p>-25 °C</p> <p>70 °C</p>

Declaration of Conformity



Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

<http://www.siemens.com/lowvoltage/catalogs>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=5TT3200-4KK20>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/5TT3200-4KK20/all>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5TT3200-4KK20

CAX-Online-Generator

<http://www.siemens.com/cax>

Tender specifications

<http://www.siemens.com/specifications>

