SIEMENS

Data sheet 5TT3200-1KK20

CHARGING CONTROLLER 13A 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	13 A

Auxiliary circuit

Operating current / of auxiliary contacts	
• at AC / at 110 V	0.75 A
• at AC / at 230 V	0.75 A
• at DC / at 24 V	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	Yes
• Bus communication	No

Display and operation

Number of LEDs	1
Display version	
• as status display of the inputs/outputs	orange, flashing (1 Hz), device waiting for enable
• for fault signal	red, flashing / twinkling, fault
• for normal operation	green, flashing / continuously illuminated, waiting for EF / charging active

Communication

Protocol / is supported	
• EIB/KNX protocol	No
• Ethernet protocol	No
• Vehicle communication acc. to IEC 61851	Yes

Inputs Outputs

Input voltage	
• minimum	0 V
• maximum	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	
• solid	
— minimum	0.5 mm²
— maximum	2.5 mm²
• finely stranded	
— 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	
• minimum	20
• maximum	14
Type of electrical connection	
• of the inputs and outputs	combicon connection GMSTB 2.5
• for auxiliary and control current circuit	combicon connection MSTB 2.5
Contact assignment	
• 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: Auxilary 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	

• acc. to IEC 60068-2-27	15g / 11 ms / 3 shocks per axis
• during transport / acc. to IEC 60068-2-29	1000 shocks / axis, 25g, 6 ms semi-sinusoidal
Vibration resistance	
• during operation / acc. to IEC 60068-2-6	5 to 8.4 Hz / 3.5 mm displacement, 8.4 to 150 Hz / 1g
• during transport / acc. to IEC 60068-2-6	5 to 8.4 Hz / 3.5 mm displacement, 8.4 to 500 Hz / 1g
Magnetic field immunity at power frequencies / acc. to EN 61000-4-8	100 A/m at 50 Hz and 60 Hz, evaluation criterion A
Ambient temperature	
• during operation / minimum	-25 °C
• during operation / maximum	60 °C
• during storage / minimum	-25 °C
• during storage / maximum	70 °C
• during transport / minimum	-25 °C
• during transport / maximum	70 °C

Declaration of Conformity

EG-Konf.

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=5TT3200-1KK20

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
http://support.automation.siemens.com/WW/view/en/5TT3200-1KK20/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5TT3200-1KK20

CAx-Online-Generator
http://www.siemens.com/cax

Tender specifications
http://www.siemens.com/specifications