



SIMATIC ET 200SP TM ECC 2xPWM ST Chargecontroller f. conductive charging of electric vehicles according IEC61851 mode 3 for 2 Charging points -30°C...60°C
 2x Control Pilot 2x Plug Present 2x DQ switch contact for contactor; 2x DI read contact for contactor or connector locking; 2x ACT for connector locking suitable for BU Typ BU20-P12+A0+4B and BU20-P12+A4+0B

| General information | |
|--|---|
| Product type designation | ECC 2x PWM ST |
| HW functional status | 1 |
| Firmware version | V1.04 |
| <ul style="list-style-type: none"> FW update possible | Yes |
| Product description | Technology modules for the conductive AC charging of electric vehicles according to IEC 61851 |
| usable BaseUnits | BU type B0, B1 |
| Number of channels | 2; Acc. to IEC 61851-1 Mode 3 and/or SAE J1772 |
| Product function | |
| <ul style="list-style-type: none"> I&M data | Yes; I&M0 to I&M3 |
| <ul style="list-style-type: none"> Isochronous mode | No |
| Engineering with | |
| <ul style="list-style-type: none"> STEP 7 TIA Portal configurable/integrated from version | V14 SP1 |
| Installation type/mounting | |
| Mounting type | standard rail |
| Mounting position | Horizontal |
| Supply voltage | |
| Type of supply voltage | DC |
| Rated value (DC) | 24 V |
| permissible range, lower limit (DC) | 19.2 V |
| permissible range, upper limit (DC) | 28.8 V |
| Reverse polarity protection | Yes; against destruction |
| Load voltage L+ | |
| <ul style="list-style-type: none"> Rated value (DC) | 24 V |
| Input current | |
| Current consumption, typ. | 40 mA |
| Current consumption, max. | 90 mA |
| Digital inputs | |
| Number of digital inputs | 2; 1 per channel |
| Digital inputs, parameterizable | Yes; 12 V / 24 V |
| Digital input functions, parameterizable | |
| <ul style="list-style-type: none"> Freely usable digital input | No; Readback contact contactor / connector lock |
| Input voltage | |
| <ul style="list-style-type: none"> Type of input voltage | DC |
| <ul style="list-style-type: none"> for signal "0" | <0.2 V (nom) |
| <ul style="list-style-type: none"> for signal "1" | >0.6 V (nom) |
| <ul style="list-style-type: none"> permissible voltage at input, min. | 0 V |
| <ul style="list-style-type: none"> permissible voltage at input, max. | 30 V |
| Cable length | |

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| • unshielded, max. | 30 m |
| Digital outputs | |
| Type of digital output | Transistor |
| Number of digital outputs | 2; 1 per channel |
| short-circuit proof | Yes |
| Short-circuit protection | Yes; electronic/thermal |
| Digital output functions, parameterizable | |
| • PWM output | Yes; According to IEC 61851 |
| — Number, max. | 2; 1 per channel |
| — Cycle duration, parameterizable | No; 1 kHz |
| • Connection of a DC motor | Yes; ACT p/n connector locking |
| Switching capacity of the outputs | |
| • with resistive load, max. | 1.3 A |
| Output voltage | |
| • Type of output voltage | DC |
| • Rated value (DC) | 24 V |
| Cable length | |
| • unshielded, max. | 30 m; when using a PROFIBUS line |
| Analog outputs | |
| Number of analog outputs | 2; Control pilot acc. to IEC 61851-1 and/or SAE J1772 |
| Connection of a DC motor | Yes; Motor for connector lock |
| Protocols | |
| Bus communication | Yes |
| Vehicle communication according to IEC 61851 | Yes; MODE 3 |
| Interrupts/diagnostics/status information | |
| Alarms | |
| • Diagnostic alarm | Yes |
| Diagnoses | |
| • Monitoring the supply voltage | No |
| • Short-circuit | Yes |
| Diagnostics indication LED | |
| • ERROR LED | Yes; red LED |
| • Monitoring of the supply voltage (PWR-LED) | Yes; green PWR LED |
| • Channel status display | Yes; green LED |
| • for module diagnostics | Yes; green/red DIAG LED |
| Potential separation | |
| Potential separation channels | |
| • between the channels | No |
| • between the channels and backplane bus | Yes |
| Isolation | |
| Isolation tested with | 707 V DC |
| Degree of pollution | 2 |
| EMC | |
| Electrostatic discharge acc. to IEC 61000-4-2 | 4 kV contact discharge / 8 kV air discharge |
| Field-related interference acc. to IEC 61000-4-3 | 10 V/m (80 ... 1 000 MHz), 3 V/m (1.4 ... 2.0 GHz), 1 V/m (2.0 ... 2.7 GHz) |
| Conducted interference due to burst acc. to IEC 61000-4-4 | 2 kV signal lines |
| Conducted interference due to surge acc. to IEC 61000-4-5 | On DC supply lines: 0.5 kV symmetrical and asymmetrical |
| Conducted interference due to high-frequency radiation acc. to IEC 61000-4-6 | 10 V (0.15 ... 80 MHz) |
| Degree and class of protection | |
| IP degree of protection | IP20 |
| Standards, approvals, certificates | |
| Certificate of suitability | CE / RCM / EAC / UL / KC |
| Ambient conditions | |
| Ambient temperature during operation | |
| • min. | -30 °C |
| • max. | 60 °C |
| • horizontal installation, min. | -30 °C |
| • horizontal installation, max. | 60 °C |
| • vertical installation, min. | -30 °C |

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| • vertical installation, max. | 50 °C |
| Ambient temperature during storage/transportation | |
| • Storage, min. | -40 °C |
| • Storage, max. | 70 °C |
| • Transportation, min. | -40 °C |
| • Transportation, max. | 70 °C |
| Altitude during operation relating to sea level | |
| • Installation altitude above sea level, max. | 2 000 m |
| • Ambient air temperature-barometric pressure-altitude | Tmin ... Tmax at 1 080 hPa ... 795 hPa (-1 000 m ... +2 000 m) |
| Relative humidity | |
| • Operation, min. | 5 % |
| • Operation, max. | 95 %; no condensation |
| Vibrations | |
| • Vibration resistance during operation acc. to IEC 60068-2-6 | 10 ... 58 Hz / 0.075 mm, 58 ... 150 Hz / 1 g |
| Shock testing | |
| • Shock resistance acc. to IEC 60068-2-27 | 15 g / 11 ms |
| Decentralized operation | |
| to SIMATIC S7-1500 | Yes |
| Dimensions | |
| Width | 20 mm |
| Height | 73 mm |
| Depth | 58 mm |
| Weights | |
| Weight, approx. | 32 g |
| Classifications | |

| | Version | Classification |
|--------|---------|----------------|
| eClass | 14 | 27-14-47-03 |
| eClass | 12 | 27-14-47-03 |
| eClass | 9.1 | 27-14-47-03 |
| eClass | 9 | 27-14-47-03 |
| ETIM | 9 | EC002889 |
| ETIM | 8 | EC002889 |
| ETIM | 7 | EC002889 |
| IDEA | 4 | 1554 |
| UNSPSC | 15 | 26-11-17-29 |

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| Approvals / Certificates | |
| General Product Approval | EMV |



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