



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
Firmware version	V1.04
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	
I&M data	Yes; I&M0 to I&M3
Isochronous mode	No
Engineering with	
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+	
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	
Freely usable digital input	No; Readback contact contactor / connector lock
Input voltage	
- Type of input voltage - for signal "0" - for signal "1" - permissible voltage at input, min.	DC <0.2 V (nom) >0.6 V (nom) 0 V

• permissible voltage at input, max.	30 V
Cable length	
• 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
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
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)
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
• 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
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