



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
• 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	DC
• for signal "0"	<0.2 V (nom)
• for signal "1"	>0.6 V (nom)
• permissible voltage at input, min.	0 V
• permissible voltage at input, max.	30 V
Cable length	

• unshielded, max.	30 m
<b>Digital outputs</b>	
Type of digital output	Transistor
Number of digital outputs	2; 1 per channel
short-circuit proof	Yes
Short-circuit protection	Yes; electronic/thermal
<b>Digital output functions, parameterizable</b>	
• 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
<b>Switching capacity of the outputs</b>	
• with resistive load, max.	1.3 A
<b>Output voltage</b>	
• Type of output voltage	DC
• Rated value (DC)	24 V
<b>Cable length</b>	
• unshielded, max.	30 m; when using a PROFIBUS line
<b>Analog outputs</b>	
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
<b>Protocols</b>	
Bus communication	Yes
Vehicle communication according to IEC 61851	Yes; MODE 3
<b>Interrupts/diagnostics/status information</b>	
<b>Alarms</b>	
• Diagnostic alarm	Yes
<b>Diagnoses</b>	
• Monitoring the supply voltage	No
• Short-circuit	Yes
<b>Diagnostics indication LED</b>	
• 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
<b>Potential separation</b>	
<b>Potential separation channels</b>	
• between the channels	No
• between the channels and backplane bus	Yes
<b>Isolation</b>	
Isolation tested with	707 V DC
Degree of pollution	2
<b>EMC</b>	
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)
<b>Degree and class of protection</b>	
IP degree of protection	IP20
<b>Standards, approvals, certificates</b>	
Certificate of suitability	CE / RCM / EAC / UL / KC
<b>Ambient conditions</b>	
<b>Ambient temperature during operation</b>	
• 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
<b>Ambient temperature during storage/transportation</b>	
• Storage, min.	-40 °C
• Storage, max.	70 °C
• Transportation, min.	-40 °C
• Transportation, max.	70 °C
<b>Altitude during operation relating to sea level</b>	
• 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)
<b>Relative humidity</b>	
• Operation, min.	5 %
• Operation, max.	95 %; no condensation
<b>Vibrations</b>	
• Vibration resistance during operation acc. to IEC 60068-2-6	10 ... 58 Hz / 0.075 mm, 58 ... 150 Hz / 1 g
<b>Shock testing</b>	
• Shock resistance acc. to IEC 60068-2-27	15 g / 11 ms
<b>Decentralized operation</b>	
to SIMATIC S7-1500	Yes
<b>Dimensions</b>	
Width	20 mm
Height	73 mm
Depth	58 mm
<b>Weights</b>	
Weight, approx.	32 g

**last modified:** 3/12/2024 