



SIMATIC ET 200SP, DIGITAL OUTPUT MODULE, DQ
4X24..230VAC/2A STANDARD FITS TO BU-TYPE B1, COLOR
CODE CC41, MODULE DIAGNOSIS

Product type designation	
General information	
Usable BaseUnits	BU type B1
Color code for module-specific color identification plate	CC41
Product function	
• I&M data	Yes; I&M0 to I&M3
Engineering with	
• STEP 7 TIA Portal can be configured/integrated as of version	V13 / V13
• STEP 7 can be configured/integrated as of version	V5.5 SP3 / -
• PROFIBUS as of GSD version/GSD revision	GSD as of Revision 5
• PROFINET as of GSD version/GSD revision	V2.3 / -
Operating mode	
Supply voltage	
Rated value (AC)	230 V
Input current	
Current consumption (rated value)	11.5 mA
Power losses	
Power loss, typ.	9 W; Active power, load voltage 230 V, all outputs loaded with 2 A, 50 Hz
Address area	
Address space per module	

• Address space per module, max.	1 byte; + 1 byte for QI information
• Output	1 byte
Digital outputs	
Number of digital outputs	4
Current-sinking	No
Current-sourcing	Yes
short-circuit protection	No; when using BU type B1, a fuse with 10 A tripping current must be provided
Open-circuit detection	No
Overload protection	No; when using BU type B1, a fuse with 10 A tripping current must be provided
Limitation of inductive shutdown voltage to	when using BU type B1, overvoltage protection must be provided
Controlling a digital input	Yes
Switching capacity of the outputs	
• with resistive load, max.	2 A
• on lamp load, max.	100 W
Load resistance range	
Output voltage	
• for signal "1", min.	20.4 V
Output current	
• for signal "1" rated value	2 A
• for signal "1" permissible range, min.	10 mA
• for signal "1" permissible range, max.	2 A
• for signal "0" residual current, max.	460 µA
Output delay with resistive load	
• "0" to "1", max.	10 ms
• "1" to "0", max.	10 ms
Parallel switching of 2 outputs	
• for logic links	No
• for increased power	No
• for redundant control of a load	Yes
Switching frequency	
• with resistive load, max.	10 Hz
• with inductive load, max.	0.5 Hz
• on lamp load, max.	1 Hz
Aggregate current of the outputs	
• Max. current per channel	2 A
• Max. current per module	8 A
Aggregate current of outputs (per group)	
horizontal installation	
vertical installation	
Total current of the outputs (per module)	

horizontal installation	
— up to 40 °C, max.	8 A
— up to 50 °C, max.	6 A
— up to 60 °C, max.	4 A
vertical installation	
— up to 30 °C, max.	8 A
— up to 40 °C, max.	6 A
— up to 50 °C, max.	4 A
Output current per channel	
horizontal installation	
— up to 60 °C, max.	2 A
vertical installation	
— up to 50 °C, max.	2 A
Relay outputs	
Switching capacity of contacts	
Triac outputs	
• Size of motor starters according to NEMA, max.	5
Cable length	
• Cable length, shielded, max.	1 000 m
• Cable length unshielded, max.	600 m
Isochronous mode	
Isochronous operation (application synchronized up to terminal)	No
Interrupts/diagnostics/status information	
Substitute values connectable	Yes
Alarms	
• Diagnostic alarm	No
Diagnostic messages	
Diagnostics indication LED	
• Channel status display	Yes; Green LED
• for channel diagnostics	No
• for module diagnostics	Yes; green/red DIAG LED
Galvanic isolation	
Electrical isolation channels	
• between the channels	No
• between the channels and the backplane bus	Yes
Isolation	
Isolation checked with	2545V DC 2s (routine test)
tested with	
Ambient conditions	

Operating temperature	
Extended ambient conditions	
Relative humidity	
Resistance	
Connection method	
ET-Connection	
Dimensions	
Width	20 mm
Weights	
Weight, approx.	50 g
last modified:	14.10.2014