

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



General information	
Product type designation	DQ 4x24 ... 230 V AC/2 A ST
HW functional status	from FS04
Firmware version	V1.0
• FW update possible	Yes
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 configurable/integrated as of version	V13 / V13
• STEP 7 configurable/integrated as of version	V5.5 SP3 / -
• PROFIBUS as of GSD version/GSD revision	GSD Revision 5
• PROFINET as of GSD version/GSD revision	GSDML V2.3
Operating mode	
• DQ	Yes
• DQ with energy-saving function	No

• PWM • Oversampling • MSO	No
	No
	No
Supply voltage	
Rated value (AC)	230 V
Input current	
Current consumption (rated value)	11.5 mA
Output voltage	
Rated value (AC)	230 V; 24V AC to 230V AC
Power loss	
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. • Inputs • Outputs	1 byte; + 1 byte for QI information 1 byte; With QI 1 byte
Digital outputs	
Type of digital output	Triac with zero point detection
Number of digital outputs	4
Current-sinking	No
Current-sourcing	Yes
Short-circuit protection	No; When using BU type B1, a miniature, quick-response fuse with 10 A tripping current must be provided
Controlling a digital input	Yes
Switching capacity of the outputs	
• with resistive load, max. • on lamp load, max.	2 A 100 W
Output voltage	
• for signal "1", min.	20.4 V
Output current	
• for signal "1" rated value • for signal "1" permissible range, min. • for signal "1" permissible range, max. • for signal "0" residual current, max.	2 A 10 mA 2 A 460 µA
Output delay with resistive load	
• "0" to "1", max. • "1" to "0", max.	10 ms 10 ms
Parallel switching of two outputs	
• for logic links	No

• for uprating	No
• for redundant control of a load	Yes
Switching frequency	
• with resistive load, max.	10 Hz
• with inductive load, max.	0.5 Hz; Higher frequencies are possible, see Equipment Manual / Product Information
• on lamp load, max.	1 Hz
Total current of the outputs	
• Current per channel, max.	2 A
• Current per module, max.	8 A
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
Triac outputs	
• Size of motor starters according to NEMA, max.	5
Cable length	
• shielded, max.	1 000 m
• unshielded, max.	600 m
Isochronous mode	
Isochronous operation (application synchronized up to terminal)	No
Interrupts/diagnostics/status information	
Diagnostics function	No
Substitute values connectable	Yes
Alarms	
• Diagnostic alarm	No
Diagnostic messages	
• Monitoring the supply voltage	No
• Wire-break	No
• Short-circuit	No
• Group error	Yes
Diagnostics indication LED	
• Monitoring of the supply voltage (PWR-LED)	Yes; green PWR LED
• Channel status display	Yes; Green LED
• for channel diagnostics	No

- for module diagnostics

Yes; green/red DIAG LED

Potential separation

Potential separation channels

- between the channels
- between the channels and backplane bus
- between the channels and the power supply of the electronics

No

Yes

No

Isolation

Isolation tested with

2 545 V DC/2 s (routine test)

Dimensions

Width

20 mm

Height

73 mm

Depth

58 mm

Weights

Weight, approx.

50 g

last modified:

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