

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	ET 200SP, DQ 4x24 ... 230VAC/2A ST, VPE 1
Firmware version	V1.0
<ul style="list-style-type: none"> FW update possible 	Yes
usable BaseUnits	BU type B1
Color code for module-specific color identification plate	CC41
Product function	
<ul style="list-style-type: none"> I&M data 	Yes; I&M0 to I&M3
Engineering with	
<ul style="list-style-type: none"> STEP 7 TIA Portal configurable/integrated as of version 	V13 / V13
<ul style="list-style-type: none"> STEP 7 configurable/integrated as of version 	V5.5 SP3 / -
<ul style="list-style-type: none"> PROFIBUS as of GSD version/GSD revision 	GSD Revision 5
<ul style="list-style-type: none"> PROFINET as of GSD version/GSD revision 	GSDML V2.3
Operating mode	
<ul style="list-style-type: none"> DQ 	Yes
<ul style="list-style-type: none"> DQ with energy-saving function 	No
<ul style="list-style-type: none"> PWM 	No

- Oversampling
- MSO

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. 1 byte; + 1 byte for QI information
- Inputs 1 byte; With QI
- Outputs 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

Controlling a digital input Yes

Switching capacity of the outputs

- with resistive load, max. 2 A
- on lamp load, max. 100 W

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 μ A

Output delay with resistive load

- "0" to "1", max. 10 ms
- "1" to "0", max. 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
• 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	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

Weights

Weight, approx. 50 g

last modified: 20.05.2016