

SIMATIC ET 200SP, DIGITAL OUTPUT MODULE, DQ 4x24VDC/2A STANDARD, FITS TO BU-TYPE A0, COLOR CODE CC02, MODULE DIAGNOSIS



General information	
Product type designation	ET 200SP, DQ 4x24VDC/2A ST, VPE 1
Firmware version	V1.1
<ul style="list-style-type: none"> FW update possible 	Yes
usable BaseUnits	BU type A0
Color code for module-specific color identification plate	CC02
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 	V11 SP2 / V13
<ul style="list-style-type: none"> STEP 7 configurable/integrated as of version 	V5.5 SP3 / -
<ul style="list-style-type: none"> PCS 7 configurable/integrated as of version 	V8.1 SP1
<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

• PWM	No
• Oversampling	No
• MSO	No

Supply voltage

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

Input current

Current consumption, max.	60 mA; without load
---------------------------	---------------------

Output voltage

Rated value (DC)	24 V
------------------	------

Power loss

Power loss, typ.	1 W
------------------	-----

Address area

Address space per module	
• Address space per module, max.	1 byte; + 1 byte for QI information

Digital outputs

Number of digital outputs	4
Current-sinking	No
Current-sourcing	Yes
Short-circuit protection	Yes
• Response threshold, typ.	2.8 to 5.2 A
Limitation of inductive shutdown voltage to	Typ. L+ (-50 V)
Controlling a digital input	Yes

Switching capacity of the outputs

• with resistive load, max.	2 A
• on lamp load, max.	10 W

Load resistance range

• lower limit	12 Ω
• upper limit	3 400 Ω

Output current

• for signal "1" rated value	2 A
• for signal "0" residual current, max.	0.1 mA

Output delay with resistive load

• "0" to "1", typ.	50 μ s
• "0" to "1", max.	50 μ s
• "1" to "0", typ.	100 μ s
• "1" to "0", max.	100 μ s

Parallel switching of two outputs

• for uprating	No
• for redundant control of a load	Yes
Switching frequency	
• with resistive load, max.	100 Hz
• with inductive load, max.	2 Hz
• on lamp load, max.	10 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 30 °C, max.	8 A
— 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
— up to 60 °C, max.	4 A
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	Yes
Substitute values connectable	Yes
Alarms	
• Diagnostic alarm	Yes
Diagnostic messages	
• Monitoring the supply voltage	Yes
• Wire-break	Yes; Module-wise
• Short-circuit	Yes; Module-wise
• 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 | No |
| • between the channels and backplane bus | Yes |

Permissible potential difference

between different circuits	75 V DC/60 V AC (base isolation)
----------------------------	----------------------------------

Isolation

Isolation tested with	707 V DC (type test)
-----------------------	----------------------

Dimensions

Width	15 mm
Height	73 mm
Depth	58 mm

Weights

Weight, approx.	30 g
-----------------	------

last modified:	14.05.2016
-----------------------	------------