SIEMENS

Data sheet



SIMATIC ET 200SP, digital output module, DQ 16x 24VDC/0.5A Basic, Pack quantity: 1 unit, suitable for BU type A0, Color code CC00, Module diagnostics

Product type designation DQ 16x24VDC/0.5A BA HW functional status Firmware version • FW update possible usable BaseUnits Color code for module-specific color identification plate COB Product function • I&M data • Isochronous mode Engineering with • STEP 7 TIA Portal configurable/integrated from • PROFIBUS from GSD version/GSD revision • PROFIBUS from GSD version/GSD revision • PROFINET from GSD version/GSD revision • No • PROFINET from GSD version/GSD revision • PROFINET from GSD version/GSD revision • PROFINET from GSD version/GSD revision • No	General information	
Firmware version FV update possible usable BaseUnits Color code for module-specific color identification plate Product function I & & data I sochronous mode No Engineering with FYEP 7 TIA Portal configurable/integrated from version FYEP 7 V5.5 or higher One GSD file each, Revision 3 and 5 and higher FYEP 7 TIA PORTAL PORT	Product type designation	DQ 16x24VDC/0.5A BA
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Usable BaseUnits Color code for module-specific color identification plate Product function • I&M data • Isochronous mode Engineering with • STEP 7 TIA Portal configurable/integrated from version • PROFIBUS from GSD version/GSD revision • PROFINET from GSD version/GSD revision • DQ • DQ • DQ • DQ • DQ with energy-saving function • PWM No • Oversampling • MSO Supply voltage Rated value (DC) permissible range, lower limit (DC) permissible range, upper limit (DC) permissible range, upper limit (DC) Reverse polarity protection Input current Current consumption, max. output voltage / header Rated value (DC) Power loss Power loss Power loss Power loss Power loss Power loss, tp. 1 W Address area Address space per module • Outputs Late Value (DC) Late Value Late Value (DC) Late Value Late Value (DC) Late Value Late	Firmware version	V0.0
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Address space per module Outputs 2 byte Hardware configuration Automatic encoding Yes	Power loss, typ.	1 W
Outputs 2 byte Hardware configuration Automatic encoding Yes	Address area	
Hardware configuration Automatic encoding Yes	Address space per module	
Automatic encoding Yes	Outputs	2 byte
	Hardware configuration	
Mechanical coding element Yes		Yes
	 Mechanical coding element 	Yes

Type of mechanical coding element	Type A
Selection of BaseUnit for connection variants	
1-wire connection	BU type A0
2-wire connection	BU type A0 + Potential distributor module
3-wire connection	BU type A0 + Potential distributor module
4-wire connection	BU type A0 + Potential distributor module
Digital outputs	34.
Type of digital output	Source output (PNP, current-sourcing)
Number of digital outputs	16
Current-sinking	No No
Current-sourcing	Yes
Digital outputs, parameterizable	Yes
Short-circuit protection	Yes
Response threshold, typ.	1.4 A; 0.7 to 1.9 A
Open-circuit detection	No
Limitation of inductive shutdown voltage to	Typ. L+ (-53 V)
Controlling a digital input	Yes
Switching capacity of the outputs	
with resistive load, max.	0.5 A
• on lamp load, max.	5 W
Load resistance range	
• lower limit	48 Ω
• upper limit	100 kΩ
Output current	
for signal "1" rated value	0.5 A
 for signal "0" residual current, max. 	30 μΑ
Output delay with resistive load	
• "0" to "1", typ.	80 μs; at rated load
• "0" to "1", max.	150 μs; at rated load
• "1" to "0", typ.	100 µs; at rated load
• "1" to "0", max.	200 µs; at rated load
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. 	0.5 A
Current per module, max.	8 A
Total current of the outputs (per module)	
horizontal installation	
— up to 60 °C, max.	8 A
vertical installation	
— up to 50 °C, max.	8 A
Cable length	
• shielded, max.	1 000 m
• unshielded, max.	600 m
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Substitute values connectable	Yes
Alarms	
Diagnostic alarm	Yes
Diagnoses	
 Monitoring the supply voltage 	Yes
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 	No
 between the channels and backplane bus 	Yes
Isolation	
Isolation tested with	707 V DC (type test)
Standards, approvals, certificates	
Suitable for safety functions	No
Suitable for safety-related tripping of standard modules	No
Ambient conditions	
Ambient temperature during operation	
 horizontal installation, min. 	-30 °C
 horizontal installation, max. 	60 °C
 vertical installation, min. 	-30 °C
 vertical installation, max. 	50 °C
Altitude during operation relating to sea level	
 Installation altitude above sea level, max. 	5 000 m; Restrictions for installation altitudes > 2 000 m, see manual
Dimensions	
Width	15 mm
Height	73 mm
Depth	58 mm
Weights	
Weight, approx.	30 g

12/28/2021

last modified: