



Figure similar

SIMATIC ET 200SP, digital output module, DQ 4x 24...230V AC/2A  
Standard Pack quantity: 10 units, suitable for BU type B1, Color code  
CC41, Module diagnostics

General information	
Product type designation	DQ 4x24 ... 230 V AC/2 A ST
HW functional status	From FS05
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
• Isochronous mode	No
Engineering with	
• STEP 7 TIA Portal configurable/integrated from version	V13 / V13
• STEP 7 configurable/integrated from version	V5.5 SP3 / -
• PROFIBUS from GSD version/GSD revision	GSD Revision 5
• PROFINET from GSD version/GSD revision	GSDML V2.3
Operating mode	
• DQ	Yes
• DQ with energy-saving function	No
• PWM	No
• Oversampling	No
• MSO	No
Supply voltage	
Rated value (AC)	230 V
permissible range, lower limit (AC)	20.4 V
permissible range, upper limit (AC)	264 V
Input current	
Current consumption (rated value)	11.5 mA
output voltage / header	
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

Hardware configuration	
Automatic encoding	
<ul style="list-style-type: none"> <li>Type of mechanical coding element</li> </ul>	type C
Selection of BaseUnit for connection variants	
<ul style="list-style-type: none"> <li>1-wire connection</li> <li>2-wire connection</li> <li>3-wire connection</li> <li>4-wire connection</li> </ul>	BU type B1 BU type B1 BU type B1 BU type B1 + potential distributor module
Digital outputs	
Type of digital output	Triac with zero point detection
Number of digital outputs	4
Current-sinking	No
Current-sourcing	Yes
Digital outputs, parameterizable	No
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
Size of motor starters according to NEMA, max.	5
Switching capacity of the outputs	
<ul style="list-style-type: none"> <li>with resistive load, max.</li> <li>on lamp load, max.</li> </ul>	2 A 100 W
Output voltage	
<ul style="list-style-type: none"> <li>for signal "1", min.</li> </ul>	20.4 V
Output current	
<ul style="list-style-type: none"> <li>for signal "1" rated value</li> <li>for signal "1" permissible range, min.</li> <li>for signal "1" permissible range, max.</li> <li>for signal "0" residual current, max.</li> </ul>	2 A 10 mA 2 A 460 µA
Output delay with resistive load	
<ul style="list-style-type: none"> <li>"0" to "1", max.</li> <li>"1" to "0", max.</li> </ul>	10 ms 10 ms
Parallel switching of two outputs	
<ul style="list-style-type: none"> <li>for logic links</li> <li>for uprating</li> <li>for redundant control of a load</li> </ul>	No No Yes
Switching frequency	
<ul style="list-style-type: none"> <li>with resistive load, max.</li> <li>with inductive load, max.</li> <li>on lamp load, max.</li> </ul>	10 Hz 0.5 Hz; Higher frequencies are possible, see Equipment Manual / Product Information 1 Hz
Total current of the outputs	
<ul style="list-style-type: none"> <li>Current per channel, max.</li> <li>Current per module, max.</li> </ul>	2 A 8 A
Total current of the outputs (per module)	
horizontal installation	
<ul style="list-style-type: none"> <li>— up to 40 °C, max.</li> <li>— up to 50 °C, max.</li> <li>— up to 60 °C, max.</li> </ul>	8 A 6 A 4 A
vertical installation	
<ul style="list-style-type: none"> <li>— up to 30 °C, max.</li> <li>— up to 40 °C, max.</li> <li>— up to 50 °C, max.</li> </ul>	8 A 6 A 4 A
Cable length	
<ul style="list-style-type: none"> <li>shielded, max.</li> <li>unshielded, max.</li> </ul>	1 000 m 600 m
Interrupts/diagnostics/status information	
Diagnostics function	No
Substitute values connectable	Yes
Alarms	
<ul style="list-style-type: none"> <li>Diagnostic alarm</li> </ul>	No

Diagnoses	
• 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	No
• between the channels and backplane bus	Yes
• between the channels and the power supply of the electronics	No
Isolation	
Isolation tested with	2 545 V DC/2 s (routine test)
Standards, approvals, certificates	
Suitable for safety functions	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.	60 °C
Altitude during operation relating to sea level	
• Installation altitude above sea level, max.	2 000 m; On request: Installation altitudes greater than 2 000 m
Dimensions	
Width	20 mm
Height	73 mm
Depth	58 mm
Weights	
Weight, approx.	50 g

**last modified:** 12/28/2021 