



SIMATIC ET 200SP, Digital output module, DQ 8x 24V DC/0,5A Sink Basic, Sink output (NPN, M-switching), Packing unit: 1 piece, fits to BU-type A0, Colour Code CC01, substitute value output, module diagnostics for: supply voltage

General information	
Product type designation	DQ 8x24VDC/0,5A SNK BA
HW functional status	From FS02
Firmware version	V0.0
• FW update possible	No
usable BaseUnits	BU type A0
Color code for module-specific color-coded label	CC01
Product function	
• I&M data	Yes; I&M0 to I&M3
• Isochronous mode	No
Engineering with	
• STEP 7 TIA Portal configurable/integrated from version	V14
• STEP 7 configurable/integrated from version	V5.5 SP3
• PROFIBUS from GSD version/GSD revision	One GSD file each, Revision 3 and 5 and higher
• 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
Redundancy	
• Redundancy capability	Yes
Supply voltage	
Rated value (DC)	24 V
permissible range, lower limit (DC)	19.2 V
permissible range, upper limit (DC)	28.8 V
Input current	
Current consumption (rated value)	30 mA
Current consumption, max.	30 mA
Output voltage	
Rated value (DC)	24 V
Power loss	
Power loss, typ.	1.5 W
Address area	
Address space per module	

• Outputs	1 byte
<b>Hardware configuration</b>	
Automatic encoding	Yes
• Mechanical coding element	Yes
• Type of mechanical coding element	type B
<b>Digital outputs</b>	
Type of digital output	Sink output (NPN)
Number of digital outputs	8
Current-sinking	Yes
Current-sourcing	No
Digital outputs, parameterizable	Yes
Short-circuit protection	Yes
• Response threshold, typ.	1.5 A
Limitation of inductive shutdown voltage to	Typ. 47 V
Controlling a digital input	Yes
<b>Switching capacity of the outputs</b>	
• with resistive load, max.	0.5 A
• on lamp load, max.	5 W
<b>Load resistance range</b>	
• lower limit	48 Ω
• upper limit	3 400 Ω
<b>Output current</b>	
• for signal "1" rated value	0.5 A
• for signal "1" permissible range, max.	0.5 A
• for signal "0" residual current, max.	5 μA
<b>Output delay with resistive load</b>	
• "0" to "1", max.	300 μs
• "1" to "0", max.	600 μs
<b>Parallel switching of two outputs</b>	
• for uprating	No
• for redundant control of a load	Yes
<b>Switching frequency</b>	
• with resistive load, max.	100 Hz
• with inductive load, max.	0.5 Hz
• on lamp load, max.	10 Hz
<b>Total current of the outputs</b>	
• Current per channel, max.	0.5 A
• Current per module, max.	4 A
<b>Total current of the outputs (per module)</b>	
horizontal installation	
— up to 60 °C, max.	4 A
vertical installation	
— up to 50 °C, max.	4 A
<b>Cable length</b>	
• shielded, max.	1 000 m
• unshielded, max.	600 m
<b>Interrupts/diagnostics/status information</b>	
Diagnostics function	Yes
Substitute values connectable	Yes
<b>Alarms</b>	
• Diagnostic alarm	Yes
<b>Diagnoses</b>	
• Monitoring the supply voltage	Yes
• Wire break	No
• Short-circuit	No
• Group error	Yes
<b>Diagnostics indication LED</b>	
• Monitoring of the supply voltage (PWR-LED)	Yes; green PWR LED
• Channel status display	Yes; green LED

<ul style="list-style-type: none"> <li>• for channel diagnostics</li> <li>• for module diagnostics</li> </ul>	No Yes; green/red DIAG LED		
<b>Potential separation</b>			
Potential separation channels			
<ul style="list-style-type: none"> <li>• between the channels</li> <li>• between the channels and backplane bus</li> </ul>	No Yes		
<b>Isolation</b>			
Isolation tested with	707 V DC (type test)		
<b>Standards, approvals, certificates</b>			
Suitable for safety functions	No		
<b>Ecological footprint</b>			
<ul style="list-style-type: none"> <li>• environmental product declaration</li> </ul>	Yes		
<b>Global warming potential</b>			
— global warming potential, (total) [CO2 eq]	20.4 kg		
— global warming potential, (during production) [CO2 eq]	3.16 kg		
— global warming potential, (during operation) [CO2 eq]	17.5 kg		
— global warming potential, (after end of life cycle) [CO2 eq]	-0.221 kg		
<b>Ambient conditions</b>			
Ambient temperature during operation			
<ul style="list-style-type: none"> <li>• horizontal installation, min.</li> <li>• horizontal installation, max.</li> <li>• vertical installation, min.</li> <li>• vertical installation, max.</li> </ul>	-25 °C 60 °C -25 °C 50 °C		
Altitude during operation relating to sea level			
<ul style="list-style-type: none"> <li>• Installation altitude above sea level, max.</li> </ul>	5 000 m; Restrictions for installation altitudes > 2 000 m, see manual		
Absolute humidity			
<ul style="list-style-type: none"> <li>• dew point, min.</li> </ul>	-60 °C; suitable for dry room applications		
<b>Dimensions</b>			
Width	15 mm		
Height	73 mm		
Depth	58 mm		
<b>Weights</b>			
Weight, approx.	30 g		
<b>Classifications</b>			
		<b>Version</b>	<b>Classification</b>
	eClass	14	27-24-26-04
	eClass	12	27-24-26-04
	eClass	9.1	27-24-26-04
	eClass	9	27-24-26-04
	eClass	8	27-24-26-04
	eClass	7.1	27-24-26-04
	eClass	6	27-24-26-04
	ETIM	10	EC001599
	ETIM	9	EC001599
	ETIM	8	EC001599
	ETIM	7	EC001599
	IDEA	4	3566
	UNSPSC	15	32-15-17-05
<b>Approvals / Certificates</b>			
<b>General Product Approval</b>			

Miscellaneous



[Manufacturer Declaration](#)



General Product Approval

For use in hazardous locations



[CCC-Ex](#)

[EM](#)



For use in hazardous locations

Maritime application

[Type Examination Certificate](#)

Miscellaneous



IECEX

[CCC-Ex](#)



ABS



BUREAU VERITAS

Maritime application



DNV



LRS

[NK / Nippon Kaiji Kyokai](#)



RINA



RMRS

[CCS \(China Classification Society\)](#)

Maritime application

Environment

[KR \(Korean Register of Shipping\)](#)



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