



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
Hardware configuration	
Automatic encoding	Yes
• Mechanical coding element	Yes
• Type of mechanical coding element	type B
Digital outputs	
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
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	3 400 Ω
Output current	
• 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
Output delay with resistive load	
• "0" to "1", max.	300 µs
• "1" to "0", max.	600 µs
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.	0.5 Hz
• on lamp load, max.	10 Hz
Total current of the outputs	
• Current per channel, max.	0.5 A
• Current per module, max.	4 A
Total current of the outputs (per module)	
horizontal installation	
— up to 60 °C, max.	4 A
vertical installation	
— up to 50 °C, max.	4 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

<ul style="list-style-type: none">• for channel diagnostics• for module diagnostics	No																																													
	Yes; green/red DIAG LED																																													
Potential separation																																														
Potential separation channels																																														
<ul style="list-style-type: none">• between the channels	No																																													
<ul style="list-style-type: none">• between the channels and backplane bus	Yes																																													
Isolation																																														
Isolation tested with	707 V DC (type test)																																													
Standards, approvals, certificates																																														
Suitable for safety functions	No																																													
Ecological footprint																																														
<ul style="list-style-type: none">• environmental product declaration	Yes																																													
Global warming potential																																														
<ul style="list-style-type: none">— global warming potential, (total) [CO2 eq]	20.4 kg																																													
<ul style="list-style-type: none">— global warming potential, (during production) [CO2 eq]	3.16 kg																																													
<ul style="list-style-type: none">— global warming potential, (during operation) [CO2 eq]	17.5 kg																																													
<ul style="list-style-type: none">— global warming potential, (after end of life cycle) [CO2 eq]	-0.221 kg																																													
Ambient conditions																																														
Ambient temperature during operation																																														
<ul style="list-style-type: none">• horizontal installation, min.	-25 °C																																													
<ul style="list-style-type: none">• horizontal installation, max.	60 °C																																													
<ul style="list-style-type: none">• vertical installation, min.	-25 °C																																													
<ul style="list-style-type: none">• vertical installation, max.	50 °C																																													
Altitude during operation relating to sea level																																														
<ul style="list-style-type: none">• Installation altitude above sea level, max.	5 000 m; Restrictions for installation altitudes > 2 000 m, see manual																																													
Absolute humidity																																														
<ul style="list-style-type: none">• dew point, min.	-60 °C; suitable for dry room applications																																													
Dimensions																																														
Width	15 mm																																													
Height	73 mm																																													
Depth	58 mm																																													
Weights																																														
Weight, approx.	30 g																																													
Classifications																																														
	<table><tr><td></td><td>Version</td><td>Classification</td></tr><tr><td>eClass</td><td>16</td><td>27-24-26-04</td></tr><tr><td>eClass</td><td>14</td><td>27-24-26-04</td></tr><tr><td>eClass</td><td>12</td><td>27-24-26-04</td></tr><tr><td>eClass</td><td>9.1</td><td>27-24-26-04</td></tr><tr><td>eClass</td><td>9</td><td>27-24-26-04</td></tr><tr><td>eClass</td><td>8</td><td>27-24-26-04</td></tr><tr><td>eClass</td><td>7.1</td><td>27-24-26-04</td></tr><tr><td>eClass</td><td>6</td><td>27-24-26-04</td></tr><tr><td>ETIM</td><td>10</td><td>EC001599</td></tr><tr><td>ETIM</td><td>9</td><td>EC001599</td></tr><tr><td>ETIM</td><td>8</td><td>EC001599</td></tr><tr><td>ETIM</td><td>7</td><td>EC001599</td></tr><tr><td>IDEA</td><td>4</td><td>3566</td></tr><tr><td>UNSPSC</td><td>15</td><td>32-15-17-05</td></tr></table>		Version	Classification	eClass	16	27-24-26-04	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
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[Miscellaneous](#)



[Manufacturer Declaration](#)



General Product Approval

For use in hazardous locations



[China RoHS](#)



For use in hazardous locations

[CCC-Ex](#)

[FM](#)



[Type Examination Certificate](#)

[Miscellaneous](#)



For use in hazardous locations

Maritime application

[CCC-Ex](#)



[NK / Nippon Kaiji Kyokai](#)

Maritime application

Environment



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

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



last modified:

2/1/2026