



SIMATIC ET 200SP HA, digital output module, DQ 8x24 V DC/2 A suitable for terminal block, K0, color code CC01, channel diagnostics

General information	
Product type designation	DQ 8x24VDC/2A HA
Firmware version	V1.0.0
<ul style="list-style-type: none"> FW update possible 	Yes
Usable terminal block	type K0 (see system manual for details)
Color code for module-specific color-coded label	CC42
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 configurable/integrated from version 	V5.6.2.10 or higher
<ul style="list-style-type: none"> PCS 7 configurable/integrated from version 	PCS 7 V10.0.1
Operating mode	
<ul style="list-style-type: none"> DQ 	Yes
Redundancy	
<ul style="list-style-type: none"> Redundancy capability 	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.	40 mA; without load
Output voltage	
Rated value (DC)	24 V
Address area	
Address space per module	
<ul style="list-style-type: none"> Inputs 	1 byte; QI of the outputs
<ul style="list-style-type: none"> Outputs 	1 byte
Digital outputs	
Number of digital outputs	8
Current-sinking	No
Current-sourcing	Yes
Short-circuit protection	Yes; Clocked electronically
<ul style="list-style-type: none"> Response threshold, typ. 	3.4 A; Overload / short circuit
Open-circuit detection	No
Overload protection	Yes
Limitation of inductive shutdown voltage to	-27 V
Controlling a digital input	Yes
Switching capacity of the outputs	

<ul style="list-style-type: none"> • with resistive load, max. 	2 A
<ul style="list-style-type: none"> • with inductive load, max. 	2 A
<ul style="list-style-type: none"> • on lamp load, max. 	10 W
Load resistance range	
<ul style="list-style-type: none"> • lower limit 	12 Ω
<ul style="list-style-type: none"> • upper limit 	4 kΩ
Output current	
<ul style="list-style-type: none"> • for signal "1" rated value 	2 A
<ul style="list-style-type: none"> • for signal "0" residual current, max. 	0.1 mA
Output delay with resistive load	
<ul style="list-style-type: none"> • "0" to "1", typ. 	80 μs
<ul style="list-style-type: none"> • "1" to "0", typ. 	300 μs
Parallel switching of two outputs	
<ul style="list-style-type: none"> • for uprating 	No
<ul style="list-style-type: none"> • for redundant control of a load 	No
Switching frequency	
<ul style="list-style-type: none"> • with resistive load, max. 	100 Hz
<ul style="list-style-type: none"> • with inductive load (acc. to IEC 60947-5-1, DC13), max. 	0.2 Hz
<ul style="list-style-type: none"> • on lamp load, max. 	10 Hz
Total current of the outputs	
<ul style="list-style-type: none"> • Current per channel, max. 	2 A
<ul style="list-style-type: none"> • Current per module, max. 	10 A
Total current of the outputs (per module)	
horizontal installation	
<ul style="list-style-type: none"> — up to 70 °C, max. 	10 A
vertical installation	
<ul style="list-style-type: none"> — up to 60 °C, max. 	10 A
Cable length	
<ul style="list-style-type: none"> • shielded, max. 	1 000 m
<ul style="list-style-type: none"> • unshielded, max. 	600 m
Interrupts/diagnostics/status information	
Substitute values connectable	Yes
Alarms	
<ul style="list-style-type: none"> • Diagnostic alarm 	Yes
Diagnoses	
<ul style="list-style-type: none"> • Monitoring the supply voltage <ul style="list-style-type: none"> — Parameterizable 	Yes Yes
<ul style="list-style-type: none"> • Wire break 	No
<ul style="list-style-type: none"> • Short-circuit to ground 	Yes; channel by channel; valid for clocked operation < 1 Hz
<ul style="list-style-type: none"> • Short-circuit to L+ 	No
Diagnostics indication LED	
<ul style="list-style-type: none"> • MAINT LED 	Yes; Yellow LED
<ul style="list-style-type: none"> • Monitoring of the supply voltage (PWR-LED) 	Yes; green PWR LED
<ul style="list-style-type: none"> • Channel status display 	Yes; green LED
<ul style="list-style-type: none"> • for channel diagnostics 	Yes; red LED
<ul style="list-style-type: none"> • for module diagnostics 	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	1 500 V DC/1 min, type test
Ambient conditions	
Ambient temperature during operation	
<ul style="list-style-type: none"> • horizontal installation, min. 	-40 °C
<ul style="list-style-type: none"> • horizontal installation, max. 	70 °C
<ul style="list-style-type: none"> • vertical installation, min. 	-40 °C
<ul style="list-style-type: none"> • vertical installation, max. 	60 °C
Dimensions	

Width	22.5 mm
Height	115 mm
Depth	138 mm
Weights	
Weight, approx.	142 g

Classifications			
		Version	Classification
	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

Approvals / Certificates

General Product Approval



General Product Approval | **For use in hazardous locations**



[Declaration of Conformity](#)



[Miscellaneous](#)

For use in hazardous locations



last modified:

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