

SIMATIC DP, Electronics module ET 200SP, F-DQ 8XDC 24V0.5A PP, 15 mm width, up to PL E (ISO 13849) up to SIL 3 (IEC 61508)



General information	
Product type designation	F-DQ 8x24 V DC/0.5 A PP HF
Firmware version	
<ul style="list-style-type: none"> FW update possible 	Yes
usable BaseUnits	BU type A0
Color code for module-specific color identification plate	CC02
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 TIA Portal configurable/integrated as of version 	V14 SP1 with HSP 202
Supply voltage	
Rated value (DC)	24 V
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
Reverse polarity protection	Yes
Input current	

Current consumption (rated value)	75 mA; without load
Current consumption, max.	21 mA; From the backplane bus
Output voltage	
Rated value (DC)	24 V
Power	
Power available from the backplane bus	70 mW
Power loss	
Power loss, typ.	3 W
Address area	
Address space per module	
<ul style="list-style-type: none"> Inputs Outputs 	6 byte; 5 bytes non-RIOforFA; 6 bytes RIOforFA 6 byte; 5 bytes non-RIOforFA; 6 bytes RIOforFA
Hardware configuration	
Automatic encoding	
<ul style="list-style-type: none"> Electronic coding element type F 	Yes
Digital outputs	
Number of digital outputs	8
Short-circuit protection	
<ul style="list-style-type: none"> Response threshold, typ. 	Min. 0.7 A
Open-circuit detection	No
Limitation of inductive shutdown voltage to	Typ. -39 V
Controlling a digital input	Yes
Switching capacity of the outputs	
<ul style="list-style-type: none"> with resistive load, max. on lamp load, max. 	0.5 A 2 W
Load resistance range	
<ul style="list-style-type: none"> lower limit upper limit 	48 Ω 12 000 Ω
Output voltage	
<ul style="list-style-type: none"> for signal "1", min. 	24 V; L+ (-0.5 V)
Output current	
<ul style="list-style-type: none"> for signal "1" rated value for signal "0" residual current, max. 	0.5 A 0.5 mA
Switching frequency	
<ul style="list-style-type: none"> with resistive load, max. with inductive load, max. with capacitive load, max. on lamp load, max. 	30 Hz; Symmetrical 0.1 Hz; according to IEC 60947-5-1, DC-13, symmetrical 2 Hz; Symmetrical 10 Hz; Symmetrical
Total current of the outputs	
<ul style="list-style-type: none"> Current per channel, max. 	0.5 A; Note derating data in the manual

<ul style="list-style-type: none"> • Current per module, max. 	3 A; Note derating data in the manual
Total current of the outputs (per module)	
horizontal installation	
— up to 40 °C, max.	3 A
— up to 50 °C, max.	2.5 A
— up to 60 °C, max.	2 A
vertical installation	
— up to 50 °C, max.	2 A
Cable length	
<ul style="list-style-type: none"> • shielded, max. 	100 m
<ul style="list-style-type: none"> • unshielded, max. 	100 m
Interrupts/diagnostics/status information	
Diagnostics function	Yes, "Alarms/diagnostic messages" section in the manual
Substitute values connectable	No
Alarms	
<ul style="list-style-type: none"> • Diagnostic alarm 	Yes
Diagnostics indication LED	
<ul style="list-style-type: none"> • RUN LED 	Yes; Green LED
<ul style="list-style-type: none"> • ERROR LED 	Yes; Red 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
<ul style="list-style-type: none"> • between the channels and the power supply of the electronics 	No
Isolation	
Isolation tested with	707 V DC (type test)
Ambient conditions	
Ambient temperature during operation	
<ul style="list-style-type: none"> • horizontal installation, min. 	0 °C
<ul style="list-style-type: none"> • horizontal installation, max. 	60 °C
<ul style="list-style-type: none"> • vertical installation, min. 	0 °C
<ul style="list-style-type: none"> • vertical installation, max. 	50 °C
Dimensions	
Width	15 mm
Weights	

Weight, approx.

48 g

last modified:

12/22/2017