



SIMATIC DP, ELECTRON. MODULE F. ET 200SP, F-DQ 4XDC
24V/2A, 15 MM WIDTH, UP TO PL E (ISO 13849) UP TO SIL 3 (IEC 61508)

Product type designation	
General information	
Product function	
• I&M data	Yes; I&M0 to I&M3
Engineering with	
• STEP 7 TIA Portal can be configured/integrated as of version	V12
• STEP 7 can be configured/integrated as of version	V5.5 SP3 / -
• PROFINET as of GSD version/GSD revision	V2.31
Operating mode	
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 losses	
Power loss, typ.	4 W
Address area	
Address space per module	
• Input	5 byte
• Output	5 byte
Digital outputs	
Number of digital outputs	4
short-circuit protection	Yes
• Response threshold, typ.	> 3.3 A
Open-circuit detection	Yes
• Response threshold, typ.	8 mA
Overload protection	Yes
• Response threshold, typ.	2.9 A
Limitation of inductive shutdown voltage to	typ. 2*47V
Switching capacity of the outputs	
• with resistive load, max.	2 A
• on lamp load, max.	10 W
Load resistance range	
• lower limit	12 Ω
• upper limit	2 000 Ω
Output voltage	
• for signal "1", min.	24 V; L+ (-0.5 V)
Output current	
• for signal "1" rated value	2 A
• for signal "0" residual current, max.	0.5 mA
Output delay with resistive load	
Parallel switching of 2 outputs	
Switching frequency	
• with resistive load, max.	30 Hz; Symmetrical
• with inductive load, max.	0.1 Hz; according to IEC 947-5-1, DC-13, symmetrical
• on lamp load, max.	10 Hz; Symmetrical
Aggregate current of the outputs	
• Max. current per channel	2 A; Note derating data in the manual
• Max. current per module	6 A; Note derating data in the manual
Aggregate current of outputs (per group)	
horizontal installation	
vertical installation	
Total current of the outputs (per module)	
horizontal installation	
vertical installation	

Output current per channel	
horizontal installation	
vertical installation	
Relay outputs	
Switching capacity of contacts	
Triac outputs	
Cable length	
• Cable length, shielded, max.	1 000 m
• Cable length unshielded, max.	500 m
Interrupts/diagnostics/status information	
Substitute values connectable	No
Alarms	
• Diagnostic alarm	Yes
Diagnostic messages	
Diagnostics indication LED	
• RUN LED	Yes; Green LED
• ERROR LED	Yes; Red LED
• Monitoring of the supply voltage (PWR-LED)	Yes; green PWR LED
• Channel status display	Yes; Green LED
• for channel diagnostics	Yes; Red LED
• for module diagnostics	Yes; green/red DIAG LED
Galvanic isolation	
Electrical isolation channels	
• between the channels	No
• between the channels and the backplane bus	Yes
• between the channels and the supply voltage of the electronics	No
Permissible potential difference	
between different circuits	75 VDC / 60 VAC
Isolation	
Isolation checked with	707 V DC (type test)
tested with	
Ambient conditions	
Operating temperature	
• horizontal installation, min.	0 °C
• horizontal installation, max.	60 °C
• vertical installation, min.	0 °C
• vertical installation, max.	50 °C
Extended ambient conditions	
Relative humidity	

Resistance	
Connection method	
ET-Connection	
Dimensions	
Width	15 mm
Weights	
Weight, approx.	57 g
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