SIEMENS

Data sheet

6ES7136-6DC00-0CA0



SIMATIC DP, electronic module ET 200SP, F-DQ 8x24VDC/0.5A PP HF, 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	
FW update possible	Yes
usable BaseUnits	BU type A0
Color code for module-specific color identification plate	CC02
Product function	
● I&M data	Yes; I&M0 to I&M3
Engineering with	
 STEP 7 TIA Portal configurable/integrated from version 	V14 SP1 with HSP 202
 STEP 7 configurable/integrated from version 	V5.5 SP4 HF5
 PROFINET from GSD version/GSD revision 	V2.31
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
power supply according to NEC Class 2 required	No
Input current	
Current consumption (rated value)	75 mA; without load
Current consumption, max.	21 mA; From the backplane bus
output voltage / header	
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	
• Inputs	6 byte; 5 bytes non-RIOforFA; 6 bytes RIOforFA
 Outputs 	6 byte; 5 bytes non-RIOforFA; 6 bytes RIOforFA
Hardware configuration	
Automatic encoding	Yes
 Electronic coding element type F 	Yes
Digital outputs	
Type of digital output	Transistor
Number of digital outputs	8
Digital outputs, parameterizable	Yes
Short-circuit protection	Yes
 Response threshold, typ. 	Min. 0.7 A

Open-circuit detection	No
Limitation of inductive shutdown voltage to	Typ39 V
Controlling a digital input	Yes; digital output, according to IEC 61131-2, type 0.5
Switching capacity of the outputs	1 co, digital output, according to 120 of 101 2, type c.o
with resistive load, max.	0.5 A
on lamp load, max.	2 W
Load resistance range	Z VV
• lower limit	48 Ω
• upper limit	12 000 Ω
	12 000 12
Output voltage	24\\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\
• for signal "1", min.	24 V; L+ (-0.5 V)
Output current	
• for signal "1" rated value	0.5 A
for signal "0" residual current, max.	0.5 mA
Switching frequency	
with resistive load, max.	30 Hz; Symmetrical
 with inductive load, max. 	0.1 Hz; according to IEC 60947-5-1, DC-13, symmetrical
with capacitive load, max.	2 Hz; Symmetrical
• on lamp load, max.	10 Hz; Symmetrical
Total current of the outputs	
 Current per channel, max. 	0.5 A; note derating data in the manual
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	
• shielded, max.	100 m
• unshielded, max.	100 m
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Substitute values connectable	No
Alarms	
Diagnostic alarm	Yes
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
Potential separation	
Potential separation channels	
between the channels	No
·	No Yes
 between the channels between the channels and backplane bus between the channels and the power supply of the 	
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between the channels between the channels and backplane bus between the channels and the power supply of the electronics Isolation Isolation tested with Standards, approvals, certificates Suitable for safety functions Highest safety class achievable in safety mode Performance level according to ISO 13849-1	Yes No 707 V DC (type test) Yes PLe
between the channels between the channels and backplane bus between the channels and the power supply of the electronics Isolation Isolation tested with Standards, approvals, certificates Suitable for safety functions Highest safety class achievable in safety mode Performance level according to ISO 13849-1 Category according to ISO 13849-1	Yes No 707 V DC (type test) Yes PLe Cat. 4 SIL 3
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 High demand/continuous mode: PFH in accordance with SIL3 	< 2.00E-09 1/h
Ambient conditions	
Ambient temperature during operation	
 horizontal installation, min. 	0 °C
 horizontal installation, max. 	60 °C
 vertical installation, min. 	0 °C
vertical installation, max.	50 °C
Altitude during operation relating to sea level	
 Installation altitude above sea level, max. 	4 000 m; with derating
Dimensions	
Width	15 mm
Height	73 mm
Depth	58 mm
Weights	
Weight, approx.	48 g
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