SIEMENS

Data sheet

6ES7136-6PA00-0BC0



SIMATIC DP, POWER M. F-PM-E PPM PROFIsafe, for ET 200SP; 24 V DC safe shutdown of DQ and F-DQ up to PL D/SIL2 or PL E/SIL3 2 for safe dig. inputs 1 for safe dig. output PPM

General information	
Product type designation	F-PM-E 24 V DC/8 A PPM ST
usable BaseUnits	BU type C0
Color code for module-specific color identification plate	CC52
Product function	
● I&M data	Yes; I&M0 to I&M3
Engineering with	
 STEP 7 TIA Portal configurable/integrated from version 	V12
 STEP 7 configurable/integrated from version 	V5.5 SP3 / -
 PROFINET from GSD version/GSD revision 	V2.31
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 / header	
Rated value (DC)	24 V
Encoder supply	
Number of outputs	2
Short-circuit protection	Yes; Electronic (response threshold 0.7 A to 2.1 A)
Output current	
● up to 60 °C, max.	0.3 A
24 V encoder supply	
• 24 V	Yes; min. L+ (-1.5 V)
Short-circuit protection	Yes
Output current, max.	600 mA; Total current of all encoders
Power	
Power available from the backplane bus	70 mW
Power loss	
Power loss, typ.	5 W
Address area	
Address space per module	
• Inputs	7 byte
Outputs	5 byte
Hardware configuration	
Automatic encoding	Yes
Electronic coding element type F	Yes

Digital inputs	
Number of digital inputs	2
Source/sink input	Yes; P-reading
Input characteristic curve in accordance with IEC 61131, type 1	Yes
Input voltage	
Type of input voltage	DC
Rated value (DC)	24 V
• for signal "0"	-30 to +5 V
• for signal "1"	+15 to +30 V
Input current	10 10 10 10
• for signal "1", typ.	3.7 mA
Input delay (for rated value of input voltage)	V.T IIIA
for standard inputs	
— parameterizable	Yes
— at "0" to "1", min.	0.4 ms
— at 0 to 1, min. — at "0" to "1", max.	20 ms
	0.4 ms
— at "1" to "0", min.	
— at "1" to "0", max.	20 ms
for technological functions	Ne
— parameterizable	No
Cable length	4.000
• shielded, max.	1 000 m
• unshielded, max.	500 m
Digital outputs	
Number of digital outputs	1
Short-circuit protection	Yes
Response threshold, typ.	> 14.8 A
Open-circuit detection	Yes
Response threshold, typ.	8 mA
Overload protection	Yes
Response threshold, typ.	8.8 A
Limitation of inductive shutdown voltage to	Max1.5 V
Switching capacity of the outputs	
with resistive load, max.	8 A
● on lamp load, max.	100 W
Load resistance range	
• lower limit	3 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	8 A
 for signal "0" residual current, max. 	1.5 mA; PP-switching: max. 1.5 mA; PM-switching: max. 1 mA
Switching frequency	
with resistive load, max.	10 Hz; Symmetrical
with inductive load, max.	0.1 Hz; according to IEC 60947-5-1, DC-13, symmetrical
• on lamp load, max.	4 Hz; Symmetrical
Total current of the outputs	
Current per channel, max.	8 A; note derating data in the manual
Current per module, max.	8 A; note derating data in the manual
Cable length	,
• shielded, max.	1 000 m
unshielded, max.	500 m
Interrupts/diagnostics/status information	
Diagnostics function	Yes; See Chapter "Alarms/diagnostic messages" in the manual
Substitute values connectable	No
Alarms	Voc
Diagnostic alarm	Yes
Hardware interrupt	No
Diagnostics indication LED	

• ERROR LED • Monitoring of the supply voltage (PWR-LED) • Channel status display • for channel diagnostics • for module diagnostics • for module diagnostics Potential separation Potential separation the channels • between the channels and backplane bus • between the channels and the power supply of the electronics Isolation	• RUN LED	Yes; green LED	
Channel status display of cr channel diagnostics for module diagnostics Yes; green LED Yes; red LED Potential separation Polential separation channels obtween the channels and backplane bus obtween the channels and the power supply of the electronics Solation	• ERROR LED	Yes; red LED	
• for channel diagnostics • for module diagnostics • for module diagnostics Potential separation Potential separation channels • between the channels • between the channels and backplane bus • between the channels and the power supply of the electronics Isolation Isolation tested with 707 V DC (type test) Standards, approvals, certificates Suitable for safety functions Highest safety class achievable in safety mode • Performance level according to ISO 13849-1 • SIL acc. to IEC 61508 Ambient conditions Ambient temperature during operation • horizontal installation, min. • horizontal installation, min. • vertical installation, max. • vertical installation, max. Vertical installation, max. 50 °C Dimensions Width 20 mm Height 73 mm Depth Weights	 Monitoring of the supply voltage (PWR-LED) 	Yes; green PWR LED	
• for module diagnostics Potential separation Potential separation channels • between the channels • between the channels and backplane bus • between the channels and the power supply of the electronics Solation	Channel status display	Yes; green LED	
Potential separation Potential separation channels • between the channels and backplane bus • between the channels and backplane bus • between the channels and the power supply of the electronics Isolation Isolation tested with 707 V DC (type test) Standards, approvals, certificates Suitable for safety functions Yes Highest safety class achievable in safety mode • Performance level according to ISO 13849-1 PLe • SIL acc. to IEC 61508 SIL 3 Ambient conditions Ambient temperature during operation • horizontal installation, min. 0 °C • horizontal installation, min. 0 °C • vertical installation, max. 60 °C • vertical installation, max. 50 °C Dimensions Width 20 mm Height 73 mm Depth 58 mm Weights	 for channel diagnostics 	Yes; red LED	
Potential separation channels • between the channels and backplane bus • between the channels and the power supply of the electronics Isolation Isolation Usolation tested with 707 V DC (type test) Standards, approvals, certificates Suitable for safety functions Yes Highest safety class achievable in safety mode • Performance level according to ISO 13849-1 PLe • SIL acc. to IEC 61508 SIL 3 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 Dimensions Width 20 mm Height 73 mm Depth 58 mm Weights	 for module diagnostics 	Yes; green/red DIAG LED	
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● vertical installation, max. 50 °C Dimensions Width 20 mm Height 73 mm Depth 58 mm Weights	 horizontal installation, max. 	60 °C	
Dimensions Width 20 mm Height 73 mm Depth 58 mm Weights	 vertical installation, min. 	0 °C	
Width 20 mm Height 73 mm Depth 58 mm Weights	 vertical installation, max. 	50 °C	
Height 73 mm Depth 58 mm Weights	Dimensions		
Depth 58 mm Weights	Width	20 mm	
Weights	Height	73 mm	
	Depth	58 mm	
Weight approx	Weights		
Togin, approx.	Weight, approx.	70 g	

last modified:

5/22/2024