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,	Yes
type 1	
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	
• for signal "1", typ.	3.7 mA
Input delay (for rated value of input voltage)	
for standard inputs	V
— parameterizable	Yes
— at "0" to "1", min.	0.4 ms
— at "0" to "1", max.	20 ms
— at "1" to "0", min.	0.4 ms 20 ms
— at "1" to "0", max.	20 1118
for technological functions	No
— parameterizable Cable length	INU
• shielded, max.	1 000 m
unshielded, max.	500 m
	500 III
Digital outputs	
Number of digital outputs	1
Short-circuit protection	Yes
Response threshold, typ.	> 14.8 A
Open-circuit detection	Yes
Response threshold, typ. Overland protection.	8 mA
Overload protection	Yes 8.8 A
 Response threshold, typ. Limitation of inductive shutdown voltage to 	0.0 A Max1.5 V
Switching capacity of the outputs	IVIAX 1.5 V
with resistive load, max.	8 A
on lamp load, max.	100 W
Load resistance range	100 44
lower limit	3 Ω
upper limit	2 000 Ω
Output voltage	2 000 12
• 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	
Diagnostic alarm	Yes
Hardware interrupt	No
Diagnostics indication LED	
• RUN LED	Yes; green LED
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for channel diagnostics for module diagnostics Yes; green/red DIAG LED 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 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, min. 0 °C vertical installation, min. 0 °C vertical installation, max. 50 °C Dimensions Width 20 mm Height 73 mm Depth 55 mm Weights Weight, approx. 70 g	ERROR LEDMonitoring of the supply voltage (PWR-LED)Channel status display	Yes; red LED Yes; green PWR LED Yes; green LED	
Potential separation Potential separation 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 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. • horizontal installation, min. • horizontal installation, min. • vertical installation, min. • vertical installation, max. • vertical installation, max.	 for channel diagnostics 	Yes; red LED	
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● vertical installation, max. 50 °C Dimensions Width 20 mm Height 73 mm Depth 55 mm Weights	 horizontal installation, max. 	60 °C	
Dimensions Width 20 mm Height 73 mm Depth 55 mm Weights	 vertical installation, min. 	0 °C	
Width 20 mm Height 73 mm Depth 55 mm Weights	 vertical installation, max. 	50 °C	
Height 73 mm Depth 55 mm Weights	Dimensions		
Depth 55 mm Weights	Width	20 mm	
Weights	Height	73 mm	
	Depth	55 mm	
Weight, approx. 70 g	Weights		
	Weight, approx.	70 g	

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last modified: