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Data sheet 6ES7148-3FA00-0XB0

SIMATIC DP, Electronics module f. ET200ECO, 4/8 F-DI PROFIsafe 24 V DC up to Category 4 (EN 954-1)/ SIL3 (IEC61508)/PLE (ISO13849)



Figure similar

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	No
Input current	
from supply voltage 1L+, max.	100 mA
Encoder supply	
Number of outputs	2
Type of output voltage	min. L+ (-1.5 V)
Short-circuit protection	Yes
Output current	
• Rated value	300 mA
Power loss	
Power loss, typ.	3 W
Digital inputs	

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Number of digital inputs	8; 8 single channel, 4 two-channel
Input characteristic curve in accordance with IEC 61131, type 1	Yes
Number of simultaneously controllable inputs	
all mounting positions	
— up to 55 °C, max.	8
Input voltage	
• Type of input voltage	DC
• Rated value (DC)	24 V
• for signal "0"	-30 to +5V
• for signal "1"	+15 to +30V
Input current	
• for signal "1", typ.	3.7 mA
Cable length	
• unshielded, max.	30 m
Encoder	
Connectable encoders	
• 2-wire sensor	No
Interfaces	
PROFIBUS DP	
• Transmission rate, max.	12 Mbit/s
Protocols	
PROFIBUS DP	Yes
Interrupts/diagnostics/status information	
Diagnostic messages	
• Diagnostic information readable	Yes
Diagnostics indication LED	
• Group error SF (red)	Yes
• Status indicator digital input (green)	Yes
• Channel fault indicator F (red)	No
Potential separation	
between PROFIBUS DP and all other circuit components	Yes
Potential separation digital inputs	
• between the channels	No
Permissible potential difference	
between different circuits	75 V DC/60 V AC
Isolation	
Isolation tested with	500V AC for 1 minute

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Degree and class of protection	
IP degree of protection	IP65/67
Standards, approvals, certificates	
Suitable for safety functions	Yes
Highest safety class achievable in safety mode	
• acc. to EN 954	4
• Performance level according to ISO 13849-1	e
• SIL acc. to IEC 61508	SIL 2 (single-channel), SIL 3 (two-channel)
Connection method	
Design of electrical connection	4/5-pin M12 circular connectors
Dimensions	
Width	60 mm
Height	210 mm
Depth	28 mm
Weights	
Weight, approx.	220 g

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