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Data sheet 6ES7144-1GB31-0XB0

*** SPARE PART*** SIMATIC DP, EXPANSION MODULE EM 144 FOR ET 200X, IP66/67 2AI, +/- 20 MA, 12 BIT + SIGN, WITH CHANNEL DIAGNOSIS FOR 4-WIRE-TRANSDUCER



Figure similar

Input current	
from supply voltage L+, max.	40 mA
Encoder supply	
Number of outputs	2
Short-circuit protection	Yes; Electronic
Output current	
• up to 40 °C, max.	0.9 A
• up to 55 °C, max.	0.7 A
Power loss	
Power loss, typ.	0.9 W
Analog inputs	
Number of analog inputs	2
permissible input current for current input (destruction limit), max.	40 mA
Input ranges	
• Current	Yes

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Input ranges (rated values), currents	
• -20 mA to +20 mA	Yes
• Input resistance (-20 mA to +20 mA)	25 Ω
• 4 mA to 20 mA	Yes
• Input resistance (4 mA to 20 mA)	25 Ω
Cable length	
• shielded, max.	30 m

Analog value generation for the inputs	
Analog value display	S7 Format / S5 Format
Measurement principle	integrating
Integration and conversion time/resolution per channel	
• Resolution with overrange (bit including sign), max.	12 bit; + sign; overrange 17.5%
• Integration time, parameterizable	Yes
• Integration time (ms)	16,7 / 20 ms
• Interference voltage suppression for interference frequency f1 in Hz	50 / 60 Hz

Encoder	
Connection of signal encoders	
• for current measurement as 2-wire transducer	No
• for current measurement as 4-wire transducer	Yes

Errors/accuracies	
Operational error limit in overall temperature range	
• Voltage, relative to input range, (+/-)	1.2 %
• Current, relative to input range, (+/-)	1.2 %

Interrupts/diagnostics/status information	
Diagnostic functions	Yes; Parameterizable
Alarms	
• Diagnostic alarm	Yes
• Limit value alarm	Yes; upper limit, channel by channel/ lower limit channel by channel
• Hardware interrupt	Yes
Diagnostic messages	
• Wire-break	Yes; channel by channel
• Short-circuit	Yes; channel by channel
• Overflow/underflow	Yes; channel by channel
Diagnostics indication LED	
• Group error SF (red)	Yes

Potential separation	
Potential separation analog inputs	
• Potential separation analog inputs	No

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Connection method	
Design of electrical connection for the inputs and outputs	4/5-pin M12 circular connectors

Dimensions	
Width	87 mm; Width module 60 mm
Height	110 mm
Depth	55 mm

Weights	
Weight, approx.	250 g

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