

Spare part SIMATIC S7, Analog input SM 336, 6 AI; 14 bit; 40-pole, fail-safe analog inputs for SIMATIC S7F systems with diagnostic alarm



Figure similar

Supply voltage	
Rated value (DC)	24 V
Reverse polarity protection	Yes
Input current	
From power supply L+, typ.	160 mA
from backplane bus 5 V DC, max.	90 mA
Power loss	
Power loss, typ.	4.25 W
Analog inputs	
Number of analog inputs	6
• For voltage measurement	4
permissible input voltage for voltage input (destruction limit), max.	30 V
permissible input current for current input (destruction limit), max.	40 mA
Input ranges	

• Voltage	Yes
• Current	Yes
Input ranges (rated values), voltages	
• 0 to +10 V	Yes
• Input resistance (0 to 10 V)	59 k Ω
Input ranges (rated values), currents	
• 0 to 20 mA	Yes
• Input resistance (0 to 20 mA)	107 Ω
• 4 mA to 20 mA	Yes
• Input resistance (4 mA to 20 mA)	107 Ω
Cable length	
• shielded, max.	200 m
Analog value generation for the inputs	
Integration and conversion time/resolution per channel	
• Resolution with overrange (bit including sign), max.	14 bit
• Integration time (ms)	20 ms (at 50 Hz); 16.66 ms (at 60 Hz)
• Interference voltage suppression for interference frequency f1 in Hz	38 dB
Encoder	
Connection of signal encoders	
• for current measurement as 2-wire transducer	Yes
• for current measurement as 4-wire transducer	Yes
Errors/accuracies	
Operational error limit in overall temperature range	
• Voltage, relative to input range, (+/-)	0.48 %
• Current, relative to input range, (+/-)	0.48 %
Basic error limit (operational limit at 25 °C)	
• Voltage, relative to input range, (+/-)	0.4 %
• Current, relative to input range, (+/-)	0.4 %
Interrupts/diagnostics/status information	
Diagnostic functions	Yes
Alarms	
• Diagnostic alarm	Yes; Parameterizable
Diagnostic messages	
• Diagnostic information readable	Yes
Diagnostics indication LED	
• Fail-safe operation	Yes
• Group error SF (red)	Yes
• Encoder supply Vs (green)	Yes

Potential separation	
Potential separation analog inputs	
• between the channels	No
• between the channels and backplane bus	Yes
• between the channels and the power supply of the electronics	Yes; only if sensors are externally supplied
Isolation	
Isolation tested with	500 V DC/350 V AC
Standards, approvals, certificates	
Highest safety class achievable in safety mode	
• Requirement class according to DIN V 19250	AK 6
• acc. to EN 954	Cat. 4
• SIL acc. to IEC 61508	SIL 3
Connection method	
required front connector	40-pin
Dimensions	
Width	80 mm
Height	125 mm
Depth	120 mm
Weights	
Weight, approx.	480 g
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