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Data sheet 6ES7334-0KE00-0AB0

SIMATIC S7-300, Analog module SM 334, isolated, 4 AI/2 AO, 12 bit, 0-10 V f. Pt100 (climatic range -120-155 degrees) and 10 kOhm measuring range, 1x 20-pole



Figure similar

Supply voltage	
Load voltage L+	
• Rated value (DC)	24 V
• Reverse polarity protection	Yes
Input current	
from supply and load voltage L+ (without load), max.	80 mA
from backplane bus 5 V DC, max.	60 mA
Power loss	
Power loss, typ.	2 W
Analog inputs	
Number of analog inputs	4
• For voltage measurement	2
• For resistance measurement	4
permissible input voltage for voltage input (destruction limit), max.	20 V; continuous; 75 V for max. 1 s (mark to space ratio 1:20)

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Constant measurement current for resistance-type transmitter, typ.	490 µA; at PT100 (490 µA), at 10 kOhm (105 µa)
Cycle time (all channels) max.	85 ms
Input ranges	
• Voltage	Yes
• Current	No
• Thermocouple	No
• Resistance thermometer	Yes
• Resistance	Yes
Input ranges (rated values), voltages	
• 0 to +10 V	Yes
— Input resistance (0 to 10 V)	100 kΩ
Input ranges (rated values), resistance thermometer	
• Pt 100	Yes; only climatic range
Input ranges (rated values), resistors	
• 0 to 10000 ohms	Yes
Characteristic linearization	
• parameterizable	Yes
— for resistance thermometer	Pt100 (climate)
Cable length	
• shielded, max.	100 m

Analog outputs	
Number of analog outputs	2
Voltage output, short-circuit protection	Yes
Voltage output, short-circuit current, max.	30 mA
Output ranges, voltage	
• 0 to 10 V	Yes
Load impedance (in rated range of output)	
• with voltage outputs, min.	2.5 kΩ
• with voltage outputs, capacitive load, max.	1 µF
Cable length	
• shielded, max.	100 m

Analog value generation for the inputs	
Integration and conversion time/resolution per channel	
• Resolution with overrange (bit including sign), max.	12 bit
• Integration time, parameterizable	Yes
• Integration time (ms)	16,67 / 20 ms
• Interference voltage suppression for interference frequency f1 in Hz	50 / 60 Hz

Analog value generation for the outputs

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Integration and conversion time/resolution per channel	
• Resolution with overrange (bit including sign), max.	12 bit
• Conversion time (per channel)	500 µs
Settling time	
• for resistive load	0.8 ms
• for capacitive load	0.8 ms

Encoder	
Connection of signal encoders	
• for voltage measurement	Yes
• for resistance measurement with two-wire connection	Yes
• for resistance measurement with three-wire connection	Yes
• for resistance measurement with four-wire connection	Yes

Errors/accuracies	
Operational error limit in overall temperature range	
• Voltage, relative to input range, (+/-)	0.7 %; 0 to 10V
• Resistance, relative to input range, (+/-)	3.5 %; 10 kOhm
• Resistance thermometer, relative to input range, (+/-)	1 %
• Voltage, relative to output range, (+/-)	1 %
Basic error limit (operational limit at 25 °C)	
• Voltage, relative to input range, (+/-)	0.5 %; 0 to 10V
• Resistance, relative to input range, (+/-)	2.8 %; 10 kOhm
• Resistance thermometer, relative to input range, (+/-)	0.8 %
• Voltage, relative to output range, (+/-)	0.85 %

Interrupts/diagnostics/status information	
Alarms	No
Diagnostics function	No

Potential separation	
Potential separation analog inputs	
• between the channels and backplane bus	Yes
Potential separation analog outputs	
• between the channels	No
• between the channels and backplane bus	Yes
• between the channels and the power supply of the electronics	Yes

Isolation

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Isolation tested with	500 V DC

Connection method	
required front connector	20-pin

Dimensions	
Width	40 mm
Height	125 mm
Depth	117 mm

Weights	
Weight, approx.	200 g

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