SIEMENS

Data sheet

6ES7334-0KE00-0AB0



SIMATIC S7-300, Analog module SM 334, isolated, 4 Al/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)
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 vallege	
Output ranges, voltage • 0 to 10 V	Vac
U to 10 V Load impedance (in rated range of output)	Yes
with voltage outputs, min.	2.5 kΩ
 with voltage outputs, min. with voltage outputs, capacitive load, max. 	2.5 KΩ 1 μF
Cable length	, p.
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	50 / 60 Hz
frequency f1 in Hz	
Analog value generation for the outputs	
Integration and conversion time/resolution per channel	40 kii
Resolution with overrange (bit including sign), max. Conversion time (per channel).	12 bit
Conversion time (per channel) Settling time	500 μs
• 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)	0.507.01.407
Voltage, relative to input range, (+/-) Designation of relative to input range, (+/-)	0.5 %; 0 to 10V
Resistance, relative to input range, (+/-) Resistance thermometer, relative to input range, (+/-)	2.8 %; 10 kOhm
 Resistance thermometer, relative to input range, (+/-) Voltage, relative to output range, (+/-) 	0.8 % 0.85 %
• voltage, relative to output range, (+/-) Interrupts/diagnostics/status information	0.00 /0
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	Yes
electronics	
Isolation	FOUNDO
Isolation tested with	500 V DC
connection method	20 pin
required front connector	20-pin
Dimensions Width	40 mm
Width Height	40 mm 125 mm
Depth	117 mm
Weights	
	200 g
Weight, approx. last modified:	200 g 8/16/2023 ♂

