



SIMATIC S7-300, ANALOG MODULE SM 334, OPTICALLY ISOLATED, 4AE/2AA, 12 BIT, 0-10V F. PT100 (CLIMAT RANGE - 120 - 155 DEGR.) AND 10 KOHM MEASURING RANGE, 1 X 20 PIN

Figure similar

Supply voltage	
Load voltage L+	
• Rated value (DC)	24 V
Input current	
from load voltage L+ (without load), max.	80 mA
from backplane bus 5 V DC, max.	60 mA
Power losses	
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)
Cycle time (all channels) max.	85 ms
Input ranges	
• Voltage	Yes
• Current	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
Analog outputs	
Number of analog outputs	2
Voltage output, short-circuit protection	Yes
Voltage output, short-circuit current, max.	10 mA
Output ranges, voltage	
• 0 to 10 V	Yes
Load impedance (in rated range of output)	
• with voltage outputs, min.	2.5 k Ω
• with voltage outputs, capacitive load, max.	1 μ F
Cable length	
• shielded, max.	100 m
Analog value creation	
Integration and conversion time/resolution per channel	
• Resolution with overrange (bit including sign), max.	12 bit
• Integration time (ms)	16,67 / 20 ms
Settling time	
• for resistive load	0.8 ms
• for capacitive load	0.8 ms
Encoder	
Connection of signal encoders	
• 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 limit in overall temperature range	
• Voltage, relative to input area, (+/-)	0.7 %; 0 to 10 V
• Resistance, relative to input area, (+/-)	3.5 %; 10 kOhm
• Resistance thermometer, relative to input area, (+/-)	1 %
• Voltage, relative to output area, (+/-)	1 %
Basic error limit (operational limit at 25 °C)	
• Voltage, relative to input area, (+/-)	0.5 %; 0 to 10 V
• Resistance, relative to input area, (+/-)	2.8 %; 10 kOhm

- Resistance thermometer, relative to input area, (+/-) 0.8 %
- Voltage, relative to output area, (+/-) 0.85 %

Interrupts/diagnostics/status information

Alarms

- Alarms No

Diagnostic messages

- Diagnostic functions No

Galvanic isolation

Galvanic isolation analog inputs

- between the channels and the backplane bus Yes

Galvanic isolation analog outputs

- between the channels and the backplane bus Yes

Isolation

Isolation checked with 500 V DC

Connection method

required front connector 20-pin

Dimensions

Width 40 mm

Height 125 mm

Depth 120 mm

Weights

Weight, approx. 200 g

last modified: 12.03.2015