

SIPLUS S7-300 SM 334 4AI 2AO -25...+70 °C with conformal coating based on 6ES7334-0KE00-0ab0 . Analog module isolated, 4 AI/2 AO, 12 bit, 0-10 V for 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)
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
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 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 (ms)	16,67 / 20 ms
Analog value generation for the outputs	
Integration and conversion time/resolution per channel	
• Resolution with overrange (bit including sign), max.	12 bit
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
- for resistance measurement with four-wire connection

Yes

Yes

Errors/accuracies

Operational error limit in overall temperature range

- Voltage, relative to input range, (+/-) 0.8 %; 0 to 10V
- Resistance, relative to input range, (+/-) 3.7 %; 10 kOhm
- Resistance thermometer, relative to input range, (+/-) 1.1 %
- Voltage, relative to output range, (+/-) 1.1 %

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

Diagnostic functions No

Potential separation

Potential separation analog inputs

- between the channels and backplane bus Yes

Potential separation analog outputs

- between the channels and backplane bus Yes

Isolation

Isolation tested with 500 V DC

Standards, approvals, certificates

CE mark Yes

UL approval Yes; File E239877

FM approval Yes

RCM (formerly C-TICK) Yes

KC approval Yes

EAC (formerly Gost-R) Yes

Ambient conditions

Ambient temperature during operation

- min. -25 °C; = Tmin
- max. 70 °C; = Tmax; 60 °C @ UL/cUL, ATEX and FM use

Ambient temperature during storage/transportation

- min. -40 °C

• max.	70 °C
Altitude during operation relating to sea level	
• Installation altitude above sea level, max.	5 000 m
• Ambient air temperature-barometric pressure-altitude	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)
Relative humidity	
• With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)
Resistance	
Use in stationary industrial systems	
— to biologically active substances according to EN 60721-3-3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
— to chemically active substances according to EN 60721-3-3	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
— to mechanically active substances according to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust, *
Use on ships/at sea	
— to biologically active substances according to EN 60721-3-6	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request
— to chemically active substances according to EN 60721-3-6	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
— to mechanically active substances according to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust; *
from supply voltage 1L+	
— Note regarding classification of environmental conditions acc. to EN 60721	* The supplied plug covers must remain in place over the unused interfaces during operation!
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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