



SIPLUS S7-300 SM334 4AI 2AO -25 ... +70 DEGREES C
WITH CONFORMAL COATING BASED ON 6ES7334-
0KE00-0AB0

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
Number of analog inputs for voltage measurement	2
Number of analog inputs 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 thermometers	
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	
Cable length, shielded, max.	100 m
Analog value creation	
Integrations 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, (+/-)	0.8 % ; 0 to 10 V
Resistance, relative to input area, (+/-)	3.7 % ; 10 kOhm
Resistance thermometer, relative to input area, (+/-)	1.1 %
Voltage, relative to output area, (+/-)	1.1 %
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
Standards, approvals, certificates	
CE mark	Yes
KC approval	Yes
UL approval	Yes ; File E239877
RCM (former C-TICK)	Yes
FM approval	Yes
EAC (former Gost-R)	Yes
Ambient conditions	
Operating temperature	
Min.	-25 °C ; = Tmin
max.	70 °C ; = Tmax; 60 °C @ UL/cUL, ATEX and FM use
Extended ambient conditions	
Relative humidity	
With condensation, tested in accordance with IEC 60068-2-38, maximum	100 % ; RH incl. condensation/frost (no commissioning under condensation conditions)
Resistance	
to biologically active substances/conformity with EN 60721-3-3	Yes ; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation!
to chemically active substances/conformity with EN 60721-3-3	Yes ; Class 3C4 (RH < 75%) incl. salt spray according to EN 60068-2-52 (degree of severity 3). The supplied connector covers must remain on the unused interfaces during operation!
to mechanically active substances/conformity with EN 60721-3-3	Yes ; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!
Connection method	

required front connector	20-pin
Dimensions	
Width	40 mm
Height	125 mm
Depth	120 mm
Weights	
Weight, approx.	200 g
Status	Jun 16, 2014