SIEMENS

Data sheet 6AG1334-0KE00-7AB0

Figure similar

SIPLUS S7-300 SM 334 4AI 2AQ based on 6ES7334-0KE00-0AB0 with conformal coating, -25…+70 °C, analog module isolated, 4 AI/2 AQ, 12 bit, 0-10 V for Pt100 (climatic range -120-155 degrees) and 10 kOhm measuring range, 1x 20-pole

General information	
based on	6ES7334-0KE00-0AB0
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.	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, 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	
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, (+/-)	0.8 %; 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
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	
Isolation tested with	500 V DC
Standards, approvals, certificates	
CE mark	Yes
UL approval	Yes; File E239877
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; *
Usage in industrial process technology	
— Against chemically active substances acc. to EN 60654-4	Yes; Class 3 (excluding trichlorethylene)
— Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)
Remark	
— Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04	* 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

Classifications

	Version	Classification
eClass	14	27-24-22-01
eClass	12	27-24-22-01
eClass	9.1	27-24-22-01
eClass	9	27-24-22-01
eClass	8	27-24-22-01
eClass	7.1	27-24-22-01
eClass	6	27-24-22-01
ETIM	9	EC001420
ETIM	8	EC001420
ETIM	7	EC001420
IDEA	4	3562
UNSPSC	15	32-15-17-05

Approvals / Certificates

General Product Approval					EMV
Miscellaneous	EG-Konf.	Manufacturer Declaration	UKCA	UL	KC

EMV	For use in hazardous locations		
RCM	IECEx	ATEX	CCC-Ex

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