SIEMENS

Data sheet 6AG1134-4NB01-7AB0

Figure similar

SIPLUS ET 200S EM 2AI TC HF based on 6ES7134-4NB01-0AB0 with conformal coating, 0...+70 °C, 15 mm width, 15 bit+sign with internal temperature compensation

Supply voltage	
Load voltage L+	
● Rated value (DC)	24 V; From power module
● Reverse polarity protection	Yes
Input current	
from load voltage L+ (without load), max.	30 mA
from backplane bus 3.3 V DC, max.	10 mA
Power loss	
Power loss, typ.	0.6 W
Address area	
Address space per module	
● Address space per module, max.	4 byte
Analog inputs	
Number of analog inputs	2
permissible input voltage for voltage input (destruction limit), max.	20 V; ±20 V, continuous
Cycle time (all channels) max.	Number of active channels per module x basic conversion time
Technical unit for temperature measurement adjustable	Yes; Celsius / Fahrenheit
Input ranges (rated values), voltages	
● -80 mV to +80 mV	Yes
— Input resistance (-80 mV to +80 mV)	1 MΩ
Input ranges (rated values), thermocouples	
● Type B	Yes
— Input resistance (Type B)	1 MΩ
● Type C	Yes
— Input resistance (Type C)	1 MΩ
● Type E	Yes
— Input resistance (Type E)	1 MΩ
● Type J	Yes
— Input resistance (type J)	1 MΩ
● Type K	Yes
— Input resistance (Type K)	1 MΩ
● Type L	Yes
— Input resistance (Type L)	1 MΩ
● Type N	Yes
— Input resistance (Type N)	1 MΩ
● Type R	Yes
— Input resistance (Type R)	1 MΩ
● Type S	Yes

— Input resistance (Type S)	1 MΩ
● Type T	Yes
— Input resistance (Type T)	1 MΩ
Thermocouple (TC)	
Temperature compensation	
— internal temperature compensation	Yes; possible with TM-E15S24-AT, TM-E15C24-AT
— external temperature compensation with compensations socket	Yes; one external compensating box per channel
Characteristic linearization	
● parameterizable	Yes
— for thermocouples	Type B, C, E, J, K, L, N, R, S, T to IEC 584
Cable length	
● shielded, max.	50 m
Analog value generation for the inputs	
Measurement principle	integrating
Integration and conversion time/resolution per channel	
● Resolution with overrange (bit including sign), max.	16 bit
● Integration time (ms)	16,7 / 20 ms
● Interference voltage suppression for interference frequency f1 in Hz	50 / 60 Hz
● Conversion time (per channel)	66 ms; 66 / 80 ms; additional conversion time for diagnostic wire break test
Smoothing of measured values	
● parameterizable	Yes; In four stages by means of digital filtering
● Step: None	Yes; 1x cycle time
● Step: low	Yes; 4x cycle time
● Step: Medium	Yes; 32x cycle time
● Step: High	Yes; 64x cycle time
Errors/accuracies	
Operational error limit in overall temperature range	
● Voltage, relative to input range, (+/-)	0.1 %; ±1.5 K for thermocouples, ±7 K for thermocouples type C, ±2.5 K with static thermal state (ambient temperature change < 0.3 K/min)
Basic error limit (operational limit at 25 °C)	
● Voltage, relative to input range, (+/-)	0.05 %; ±1 K with thermocouples, ±5 K with thermocouples type C, ±1.5 K with static thermal state (ambient temperature change < 0.3 K/min)
Interrupts/diagnostics/status information	
Diagnoses	
● Wire-break	Yes; only thermocouples
● Group error	Yes
● Overflow/underflow	Yes
Diagnostics indication LED	
● Group error SF (red)	Yes
Parameter	
Remark	4 byte
Diagnostics wire break	Disable / enable (wire break is detected only in thermocouples)
Group diagnostics	Disable / enable
Overflow/underflow	Disable / enable
Comparison point	none / yes, internal
Potential separation	
Potential separation analog inputs	
● between the channels	No
● between the channels and backplane bus	Yes
● Between the channels and load voltage L+	Yes
Isolation	
Isolation tested with	500 V DC
Standards, approvals, certificates	
CE mark	Yes
Ambient conditions	
Ambient temperature during operation	
● min.	0 °C; = Tmin
● max.	70 °C; = Tmax
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 permitted (no commissioning in bedewed state)
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!
Dimensions	
Width	15 mm
Height	81 mm
Depth	52 mm
Weights	
Weight, approx.	40 g

last modified: 5/13/2024