SIEMENS

Product data sheet 6AG1331-7TF01-7AB0



SIPLUS SM332 AI 8 X 0/4...20MA -25 ... +70 DEGREES C WITH CONFORMAL COATING BASED ON 6ES7331-7TF01 -0AB0

Supply voltage Load voltage L+ Rated value (DC) 24 V Reverse polarity protection Yes Input current 20 mA from load voltage L+ (without load), max. from backplane bus 5 V DC, max. 120 mA Power loss Power loss, typ. 1.5 W **Analog inputs** Number of analog inputs 8 permissible input current for current input (destruction limit), max. 40 mA Input ranges Voltage No Current Yes No Thermocouple Resistance thermometer No Resistance No

Input ranges (rated values), currents		
0 to 20 mA	Yes	
Input resistance (0 to 20 mA)	240 Ω	
Input resistance (-20 to +20 mA)	240 Ω	
Input resistance (4 to 20 mA)	240 Ω	
Cable length		
Cable length, shielded, max.	800 m	
Analog value generation		
Measurement principle	Sigma Delta	
Integration and conversion time/resolution per channel		
Resolution with overrange (bit including sign), max.	16 bit	
Integration time, parameterizable	Yes	
Integration time, ms	20 ms@50 Hz/16.6 ms@60 Hz/100 ms@100 Hz	
Interference voltage suppression for interference frequency f1	60 / 50 / 10 Hz	
in Hz		
Encoder		
Connection of signal encoders	V	
for current measurement as 2-wire transducer	Yes	
for current measurement as 4-wire transducer	Yes	
Errors/accuracies		
Operational error limit in overall temperature range	0.45 % 0.055% @	
Current, relative to input area, (+/-)	0.15 % ; +/-0.25% @ <0 °C or >60 °C	
Basic error limit (operational limit at 25 °C)	0.1 %	
Current, relative to input area, (+/-)	0.1 %	
Isochronous mode	No	
Isochronous mode (application synchronized up to terminal)	No	
Interrupts/diagnostics/status information		
Alarms	Yes	
Diagnostic alarm Limit value alarm	Yes	
Diagnostic messages	165	
Diagnostic functions	Yes	
Diagnostic information readable	Yes	
Diagnostics	Yes	
Group error	Yes	
Diagnostics indication LED		
Group error SF (red)	Yes	
Galvanic isolation		

Only and the state of the state	
Galvanic isolation analog inputs	
between the channels	No -
between the channels, in groups of	8
between the channels and the backplane bus	Yes
Isolation	
Isolation tested with	500
Standards, approvals, certificates	
CE mark	Yes
KC approval	Yes
UL approval	Yes ; File E239877
RCM (former C-TICK)	Yes
FM approval	Yes ; CofC 3028431
EAC (former Gost-R)	Yes
EN 50155	No
EN 50121-4	No
Ambient conditions	
Operating temperature	
min.	-25 °C ; = Tmin
max.	70 °C ; = Tmax; 60 °C @ UL/cUL use
Extended ambient conditions	
relative to ambient temperature-atmospheric pressure-installation altitude	Tmin Tmax at 1080 hPa 795 hPa (-1000 m +2000 m) // Tmin (Tmax - 10K) at 795 hPa 658 hPa (+2000 m +3500 m) // Tmin (Tmax - 20K) at 658 hPa 540 hPa (+3500 m +5000 m)
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	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	117 mm

Weights

Weight, approx.

205 g

Status Jul 14, 2014