Data sheet



SIPLUS S7-300 SM336 F 6AI 15 bit -25...+60 °C (70 °C with forced convection) With conformal coating Based on 6ES7336-4GE00-0AB0 . Fail-safe analog inputs For SIMATIC Safety, with HART support, up to Category 4 (EN 954-1) /SIL3 (IEC 61508)/ PLE (ISO 13849), 1x 20-pole

Figure similar

0			
Supply voltage			
Rated value (DC)	24 V; ±5 %		
Reverse polarity protection	Yes		
Input current			
From power supply L+, typ.	150 mA		
from backplane bus 5 V DC, max.	90 mA		
Power loss			
Power loss, typ.	4.5 W		
Analog inputs			
Number of analog inputs	6		
permissible input current for current input (destruction	40 mA		
limit), max.			
Input ranges			
• Voltage	No		
Current	Yes		
Thermocouple	No		

Resistance thermometer	No		
Resistance	No		
nput ranges (rated values), currents			
• 0 to 20 mA	Yes		
— Input resistance (0 to 20 mA)	150 Ω ; typ. 150 ohms max. 175 ohms		
• 4 mA to 20 mA	Yes		
— Input resistance (4 mA to 20 mA)	150 Ω ; typ. 150 ohms max. 175 ohms		
Cable length			
• shielded, max.	1 000 m		
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	Analog value generation for the inputs
Integration and conversion time/resolution per channel	

 Resolution with overrange (bit including sign), max.

16 bit; 15 bit + sign

• Integration time (ms)

20 ms @ 50 Hz, 16.7 ms @ 60 Hz

• Interference voltage suppression for interference frequency f1 in Hz

f=n x (f1 ±0.5 %)

Connection of signal encoders

Yes • for current measurement as 2-wire transducer • for current measurement as 4-wire transducer

Yes

Operational error limit in overall temperature range

0.3%; $60 \mu A$ • Current, relative to input range, (+/-)

Basic error limit (operational limit at 25 °C)

• Current, relative to input range, (+/-) 0.1%; $20 \mu A$

Interrupts/diagnostics/status information

Diagnostics function Yes Alarms

Yes • Diagnostic alarm

Diagnoses

Yes • Diagnostic information readable

Diagnostics indication LED

• Fail-safe operation Yes

• Group error SF (red) Yes

• Encoder supply Vs (green) No

Potential separation

Potential separation analog inputs

Yes • between the channels Yes

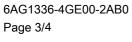
• between the channels and backplane bus



• between the channels	and the	power	supply of
the electronics			

Yes

the electronics		
Isolation		
Isolation tested with	370V for 1 min	
Standards, approvals, certificates		
CE mark	Yes	
Highest safety class achievable in safety mode		
● acc. to EN 954	4	
 Performance level according to ISO 13849-1 	е	
• SIL acc. to IEC 61508	SIL 3	
Ambient conditions		
Ambient temperature during operation		
• min.	-25 °C; = Tmin; Startup @ -25 °C	
• max.	60 °C; = T max; *+70 °C when forced convection at a minimum air speed of 0.3 m/s through the modules is ensured. If in the course of maintenance or automatic diagnosis it is determined that the admissible specified parameters have been exceeded, the modules should be subjected to a proof test (function check) by the manufacturer.	
Ambient temperature during storage/transportation		
• min.	-40 °C	
• max.	70 °C	
Altitude during operation relating to sea level		
 Installation altitude above sea level, max. 	2 000 m	
 Ambient air temperature-barometric pressure- altitude 	Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 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	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-	



to EN 60721-3-6

52 (severity degree 3); *

— to mechanically active substances	Yes; Class 6S3 incl. sand, dust; *			
according to EN 60721-3-6				
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	120 mm			
Weights				
Weight, approx.	350 g			

10/13/2020



last modified: