SIEMENS

Data sheet

6AG1321-1FF10-7AA0



SIPLUS S7-300 SM321 8DI/120/230VAC based on 6ES7321-1FF10-0AA0 with conformal coating, -25...+70 $^{\circ}$ C, digital input isolated, 8 DI, 120 V/230 V AC, 1x 40-pole, with single rooting/channel

Figure similar

General information	
based on	6ES7321-1FF10-0AA0
Supply voltage	
Load voltage L1	
 Rated value (AC) 	230 V; 120/230 V AC; all load voltages must have the same phase.
Input current	
from backplane bus 5 V DC, max.	100 mA
Power loss	
Power loss, typ.	4.9 W
Digital inputs	
Number of digital inputs	8
Input characteristic curve in accordance with IEC 61131, type 1	Yes
Number of simultaneously controllable inputs	
horizontal installation	
— up to 60 °C, max.	8; 8 @ > 60 °C
Input voltage	
 Type of input voltage 	AC
Rated value (AC)	120 V; 120/230 V AC (47 63 Hz)
● for signal "0"	0 to 40V
● for signal "1"	79 to 264V
Input current	
● for signal "1", typ.	7.5 mA; (120 V); 17.3 mA (230 V)
Input delay (for rated value of input voltage)	
for standard inputs	
— parameterizable	No
— at "0" to "1", max.	25 ms
— at "1" to "0", max.	25 ms
Cable length	
• shielded, max.	1 000 m
• unshielded, max.	600 m
Encoder	
Connectable encoders	
• 2-wire sensor	Yes
— permissible quiescent current (2-wire sensor), max.	2 mA
Interrupts/diagnostics/status information	
Alarms	No
Diagnostics function	No
Alarms	
Diagnostic alarm	No

Hardware interrupt	No
Diagnostics indication LED	110
Group error SF (red)	No
Status indicator digital input (green)	Yes
Potential separation	
Potential separation digital inputs	
 between the channels 	Yes
 between the channels, in groups of 	1
between the channels and backplane bus	Yes; Optocoupler
Isolation	
Isolation tested with	1 500 V AC
Standards, approvals, certificates	Van
CE mark	Yes Yes; File E239877
UL approval RCM (formerly C-TICK)	Yes
KC approval	Yes
EAC (formerly Gost-R)	Yes
Ambient conditions	
Ambient temperature during operation	
• min.	-25 °C
• 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	V 0 000 H 16 16 16 17 17 17 17 17 17 17 17 17 17 17 17 17
 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	V 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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	
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!
 Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and 	
 Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04 	
Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04 connection method	during operation!
Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04 connection method required front connector	during operation!
Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04 connection method required front connector Dimensions	during operation! 40-pin

Weight, approx.	240 g

last modified: