

SIPLUS S7-300 SM321 8DI/120/230 -25...+70°C with conformal coating based on 6ES7321-1FF10-0AA0 . Digital input isolated, 8 DI, 120 V/230 V AC, 1x 40-pole, with single rooting/channel



Figure similar

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	

<ul style="list-style-type: none"> • Type of input voltage • Rated value (AC) • for signal "0" • for signal "1" 	AC 120 V; 120/230 V AC (47 ... 63 Hz) 0 to 40V 79 to 264V
Input current	
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> — parameterizable — at "0" to "1", max. — at "1" to "0", max. 	No 25 ms 25 ms
Cable length	
<ul style="list-style-type: none"> • shielded, max. • unshielded, max. 	1 000 m 600 m
Encoder	
Connectable encoders	
<ul style="list-style-type: none"> • 2-wire sensor — permissible quiescent current (2-wire sensor), max. 	Yes 2 mA
Interrupts/diagnostics/status information	
Alarms	No
Diagnostics function	No
Alarms	
<ul style="list-style-type: none"> • Diagnostic alarm • Hardware interrupt 	No No
Diagnostics indication LED	
<ul style="list-style-type: none"> • Group error SF (red) • Status indicator digital input (green) 	No Yes
Potential separation	
Potential separation digital inputs	
<ul style="list-style-type: none"> • between the channels • between the channels, in groups of • between the channels and backplane bus 	Yes 1 Yes; Optocoupler
Isolation	
Isolation tested with	1 500 V AC
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
• 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	40-pin

Dimensions

Width	40 mm
Height	125 mm
Depth	120 mm

Weights

Weight, approx.	240 g
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last modified: 05/13/2020