

SIPLUS S7-300 SM321 - 20-POLE -40 ... +70 DGR C WITH CONFORMAL COATING CONFORMITY TO EN50155 T1 CAT 1 CL A/B BASED ON 6ES7321-1FF01-0AA0 . DIGITAL INPUT OPTICALLY ISOLATE 8 DI, 120V/230V AC, 1 X 20 PIN



Figure similar

Supply voltage	
Load voltage L1	
• Rated value (AC)	230 V; 120/230V AC
Input current	
from backplane bus 5 V DC, max.	29 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; up to 70 °C
vertical installation	
— up to 40 °C, max.	8
Input voltage	
• Type of input voltage	AC

• Rated value (AC) • for signal "0" • for signal "1" • Frequency range	230 V; 120/230V AC 0 to 40V 79 to 264V 47 ... 63 Hz
Input current	
• for signal "1", typ.	6.5 mA; (120 V); 11 mA (230 V)
Input delay (for rated value of input voltage)	
for standard inputs	
— parameterizable	No
— at "0" to "1", max.	25 ms
Cable length	
• shielded, max. • unshielded, max.	1 000 m 600 m
Encoder	
Connectable encoders	
• 2-wire sensor — permissible quiescent current (2-wire sensor), max.	Yes 2 mA
Isochronous mode	
Isochronous operation (application synchronized up to terminal)	No
Interrupts/diagnostics/status information	
Diagnostic functions	No
Alarms	
• Diagnostic alarm • Hardware interrupt	No No
Diagnostics indication LED	
• Group error SF (red) • Status indicator digital input (green)	No Yes
Potential separation	
Potential separation digital inputs	
• between the channels • between the channels, in groups of • between the channels and backplane bus	No 2 Yes; Optocoupler
Isolation	
Isolation tested with	4 000 V DC
Standards, approvals, certificates	
CE mark	Yes
UL approval	Yes; File E239877
FM approval	No

RCM (formerly C-TICK)	Yes
KC approval	Yes
EAC (formerly Gost-R)	Yes
EN 50155	Yes; T1 Cat. 1 Cl. A/B horizontal mounting position
Use in hazardous areas	
• ATEX	No

Ambient conditions

Ambient temperature during operation

- min. -40 °C; = Tmin
- max. 70 °C; = Tmax; for use on railway vehicles according to EN50155, the rated temperature range -25 ... +55 °C (T1) or 60 °C @ UL/ULhaz/ATEX/FM use applies

Ambient temperature during storage/transportation

- min. -40 °C
- max. 70 °C

Extended ambient conditions

- relative to ambient temperature-atmospheric pressure-installation altitude Tmin ... Tmax at 1080 hPa ... 795 hPa (-1000 m ... +2000 m)

Relative humidity

- With condensation, tested in accordance with IEC 60068-2-38, max. 100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation

Resistance

- against 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!
- against chemically active substances / conformity with EN 60721-3-3 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!
- against 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 120 mm

Weights

- Weight, approx. 240 g

last modified: 24.02.2016