

SIPLUS S7-300 SM321 16DI -40 ... +70 DEGREES C WITH COMFORMAL COATING BASED ON 6ES7321-1FH00-0AA0 . DIGITAL INPUT GALVANICALLY ISOLATED 16 DI, AC120/230V, 1 X 20-POLE

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.	29 mA
Power loss	
Power loss, typ.	4.9 W
Digital inputs	
Number of digital inputs	16
Input characteristic curve in accordance with IEC 61131, type 1	Yes
Number of simultaneously controllable inputs	
horizontal installation	
up to 40 °C, max.	16
up to 60 °C, max.	16
vertical installation	
up to 40 °C, max.	16
Input voltage	
Type of input voltage	AC
Rated value, AC	230 V ; 120/230 V AC
for signal "0"	0 to 40 V
for signal "1"	79 to 264 V
Input current	
for signal "1", typ.	6.5 mA ; (120V, 60Hz), 16mA (230V, 50Hz)
Input delay (for rated value of input voltage)	
for standard inputs	
parameterizable	No
at "0" to "1", min.	25 ms
at "0" to "1", max.	25 ms
Cable length	

Cable length, shielded, max.	1000 m
Cable length unshielded, max.	600 m
Encoder	
Connectable encoders	
2-wire sensor	Yes
permissible quiescent current (2-wire sensor), max.	2 mA
Isochronous mode	
Isochronous mode (application synchronized up to terminal)	No
Interrupts/diagnostics/status information	
Alarms	
Alarms	No
Diagnostic alarm	No
Hardware interrupt	No
Diagnostic messages	
Diagnostic functions	No
Diagnostics indication LED	
Group error SF (red)	No
Status indicator digital input (green)	Yes
Galvanic isolation	
Galvanic isolation digital inputs	
between the channels	No
between the channels, in groups of	4
between the channels and the backplane bus	Yes ; Optocoupler
Isolation	
Isolation tested with	4000 VDC
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.	-40 °C ; = Tmin
max.	70 °C ; = Tmax; 60 °C @ UL/cUL, ATEX and FM use

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, 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 60721-3-3	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	120 mm
Weights	
Weight, approx.	240 g
Status	Jul 29, 2014