

SIPLUS S7-300 SM321 4DI NAMUR FOR MEDIAL STRESS
WITH CONFORMAL COATING BASED ON 6ES7321-
7RD00-0AB0 . DIGITAL INPUT OPTICALLY ISOLATE 4 DI,
24V DC, NAMUR/DIN 19234,
F. SIGNALS F HAZARDOUS AREAS,
CAPABLE OF DIAGNOST.,PTB-TESTED

Supply voltage	
Load voltage L+	
Rated value (DC)	24 V
Input current	
from load voltage L+ (without load), max.	50 mA
from backplane bus 5 V DC, max.	80 mA
Encoder supply	
Output voltage	via the inputs
Power loss	
Power loss, typ.	1.1 W
Digital inputs	
Number of NAMUR inputs	4
Input voltage	
Rated value, DC	8.2 V ; from internal power circuit supply
Input current	
on wire-break, max.	0.1 mA
on short-circuit, max.	8.5 mA
for NAMUR encoders	
for signal "0"	0.35 to 1.2 mA
for signal "1"	2.1 to 7 mA
Input delay (for rated value of input voltage)	
Input frequency (with a time delay of 0.1 ms), max.	2 kHz
for NAMUR inputs	
parameterizable	Yes ; 0.1 / 0.5 / 3 / 15 / 20 ms (plus 0.25 ms preparation time)
Cable length	
Cable length unshielded, max.	200 m
Encoder	
Connectable encoders	
NAMUR encoder	Yes ; Two-wire connection

Interrupts/diagnostics/status information	
Diagnostic messages	
Diagnostic information readable	Yes
Diagnostics indication LED	
Short-circuit per channel (red)	Yes
Short-circuit group error (red)	Yes
Ex(i) characteristics	
Module for Ex(i) protection	Yes
Maximum values of input circuits (per channel)	
Co (permissible external capacity), max.	3 µF
Io (short-circuit current), max.	14.1 mA
Lo (permissible external inductivity), max.	100 mH
Po (power of load), max.	33.7 mW
Uo (output no-load voltage), max.	10 V
Galvanic isolation	
Galvanic isolation digital inputs	
Galvanic isolation digital inputs	Yes
between the channels, in groups of	1
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
Use in hazardous areas	
Test number KEMA	10 ATEX 0062X
Ambient conditions	
Operating temperature	
min.	0 °C ; = Tmin
max.	60 °C ; = Tmax
Extended ambient conditions	
relative to ambient temperature-atmospheric pressure-installation altitude	Tmin ... Tmax at 1080 hPa ... 795 hPa (-1000 m ... +2000 m) // Tmin ... (Tmax - 10K) at 795 hPa ... 658 hPa (+2000 m ... +3500 m) // Tmin ... (Tmax - 20K) at 658 hPa ... 540 hPa (+3500 m ... +5000 m)
Relative humidity	
with condensation, tested in accordance with IEC 60068 -2-38, 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
Weights	
Weight, approx.	230 g
Status	Jul 28, 2014