

SIPLUS S7-400 SM421 32DE -25 ... +60 DEGREES C BASED ON
6ES7421-1BL01-0AA0



Input current	
from backplane bus 5 V DC, max.	20 mA
Power loss	
Power loss, typ.	6 W
Digital inputs	
Number of digital inputs	32
Number of simultaneously controllable inputs	
• Number of simultaneously controllable inputs	32
Input voltage	
• Type of input voltage	DC
• Rated value (DC)	24 V
• for signal "0"	-30 V DC to +5 V DC
• for signal "1"	13 V DC to 30 V DC
Input current	
• for signal "0", max. (permissible quiescent current)	1.3 mA
• for signal "1", typ.	7 mA
Input delay (for rated value of input voltage)	

for standard inputs	
— at "0" to "1", min.	1.2 ms
— at "0" to "1", max.	4.8 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.	1.5 mA
Potential separation	
Potential separation digital inputs	
• between the channels, in groups of	32
• between the channels and backplane bus	Yes
Isolation	
Isolation tested with	500 V DC
Ambient conditions	
Ambient temperature during operation	
• min.	-25 °C; = Tmin
• max.	60 °C; = Tmax
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) // 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, 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 in corrosive atmospheres!
— 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 in
corrosive atmospheres!

Dimensions

Width	25 mm
Height	290 mm
Depth	210 mm

Weights

Weight, approx.	500 g
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last modified: 03/11/2017