

SIPLUS S7-400 SM 421 32DI -25...+60 °C based on 6ES7421-1BL01-0AA0



Input current

from backplane bus 5 V DC, max.	20 mA
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Power loss

Power loss, typ.	6 W
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Digital inputs

Number of digital inputs	32
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Number of simultaneously controllable inputs

• Number of simultaneously controllable inputs	32
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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)	
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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
Interrupts/diagnostics/status information	
Diagnostic functions	No
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
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 in bedewed state), horizontal installation
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; *

from supply voltage 1L+

— Note regarding classification of environmental conditions acc. to EN 60721

* The supplied plug covers must remain in place over the unused interfaces during operation!

Dimensions

Width	25 mm
Height	290 mm
Depth	210 mm

Weights

Weight, approx. 500 g

last modified: 05/16/2018