



SIMATIC S7-400, digital input SM 421, isolated 32 DI; 120 V DC/AC

Input current	
from backplane bus 5 V DC, max.	200 mA
Power loss	
Power loss, typ.	6.5 W
Digital inputs	
Number of digital inputs	32
Input characteristic according to IEC 61131	Type 1
Number of simultaneously controllable inputs	
• Number of simultaneously controllable inputs	32
Input voltage	
• Type of input voltage	AC/DC
• Rated value (UC)	120 V; 47 ... 63 Hz
• for signal "0"	0 to 20 V UC
• for signal "1"	79 to 132 V AC; 80 to 132 V DC
Input current	
• for signal "0", min.	0 mA
• for signal "0", max. (permissible quiescent current)	1 mA
• for signal "1", typ.	2 mA; 2 to 5 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— at "0" to "1", min.	5 ms
— at "0" to "1", max.	25 ms; 10 / 20 ms
— at "1" to "0", min.	5 ms
— at "1" to "0", max.	25 μs
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 mA
Interrupts/diagnostics/status information	
Diagnostics indication LED	
• Status indicator digital input (green)	Yes
Potential separation	
Potential separation digital inputs	
• between the channels	Yes
• between the channels, in groups of	8
• between the channels and backplane bus	Yes
Isolation	

Isolation tested with	1 500 V AC
Dimensions	
Width	25 mm
Height	290 mm
Depth	210 mm
Weights	
Weight, approx.	600 g
Classifications	

		Version	Classification
	eClass	14	27-24-22-04
	eClass	12	27-24-22-04
	eClass	9.1	27-24-22-04
	eClass	9	27-24-22-04
	eClass	8	27-24-22-04
	eClass	7.1	27-24-22-04
	eClass	6	27-24-22-04
	ETIM	9	EC001419
	ETIM	8	EC001419
	ETIM	7	EC001419
	IDEA	4	3566
	UNSPSC	15	32-15-17-05

Approvals / Certificates
General Product Approval



[Miscellaneous](#)



[KC](#)



EMV	For use in hazardous locations	Marine / Shipping
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[FM](#)



Marine / Shipping



[NK / Nippon Kaiji Kyokai](#)



Marine / Shipping

[CCS \(China Classification Society\)](#)

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