



Figure similar

***** spare part ***** SIMATIC S7/PCS7, digital input SM 321, 16 DI; 24 V DC, 1 x 40-pole, diagnostics-capable, for contacts (wired/ not wired), NAMUR encoder, 3/4-wire BERO, with chatter monitoring; pulse stretching, open-circuit detection connection IM 153-2 HF or IM 153-4 HF possible

Supply voltage	
Load voltage L+	
<ul style="list-style-type: none"> Rated value (DC) 	24 V
<ul style="list-style-type: none"> Reverse polarity protection 	Yes
Input current	
from load voltage L+ (without load), max.	100 mA
from backplane bus 5 V DC, max.	100 mA
Encoder supply	
Number of outputs	4
Type of output voltage	1Vs1/2Vs1: 18 V, 1Vs2/2Vs2: 8.2 V
Short-circuit protection	Yes; Electronic
additional (redundant) feed	No
Output current	
<ul style="list-style-type: none"> Rated value 	190 mA; at 18V: 190mA, at 8.2V: 60mA
<ul style="list-style-type: none"> permissible range, upper limit 	Up to 60 degree: at 18V: 0 to 110mA, at 8.2V: 0 to 60mA; Up to 40 degree: at 18V: 0 to 190mA, at 8.2V: 0 to 60mA
Power loss	
Power loss, typ.	11 W
Digital inputs	
Number of digital inputs	16
Input characteristic curve in accordance with IEC 61131, type 1	No
Input characteristic curve in accordance with IEC 61131, type 2	Yes
Number of simultaneously controllable inputs	
horizontal installation	
— up to 60 °C, max.	16
vertical installation	
— up to 40 °C, max.	16
Input voltage	
<ul style="list-style-type: none"> Type of input voltage 	DC
<ul style="list-style-type: none"> Rated value (DC) 	8.2 V; 8.2V/18V
Input current	
<ul style="list-style-type: none"> for signal "0", min. 	0.35 mA
<ul style="list-style-type: none"> for signal "0", max. (permissible quiescent current) 	1.2 mA
<ul style="list-style-type: none"> for signal "1", typ. 	10 mA; for NAMUR: 2.1 to 7 mA, for 10k ohm/47k ohm contact: typical 10mA, for 4 wire BEROs: typical 10 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— at "0" to "1", min.	2.5 ms

— at "0" to "1", max.	3.5 ms	
— at "1" to "0", min.	2.5 ms	
— at "1" to "0", max.	3.5 ms	
Cable length		
• shielded, max.	400 m; max. 200m with 8.2 V sensor, max. 400m with 18 V sensor	
• unshielded, max.	Not permitted	
Interrupts/diagnostics/status information		
Alarms	Yes	
Diagnostics function	Yes	
Alarms		
• Diagnostic alarm	Yes	
• Hardware interrupt	Yes	
Diagnoses		
• Diagnostic information readable	Yes	
• Wire break	Yes	
Diagnostics indication LED		
• Group error SF (red)	Yes	
• Status indicator digital input (green)	Yes	
• Encoder supply Vs (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	600 V DC	
Ambient conditions		
Ambient temperature during operation		
• min.	0 °C	
• max.	60 °C	
Connection method		
required front connector	1x 40-pin	
Dimensions		
Width	40 mm	
Height	125 mm	
Depth	120 mm	
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	10	EC001419
ETIM	9	EC001419
ETIM	8	EC001419
ETIM	7	EC001419
IDEA	4	3566
UNSPSC	15	32-15-17-05
Approvals / Certificates		
General Product Approval		

[Miscellaneous](#)

[Manufacturer Declaration](#)



General Product Approval

For use in hazardous locations

[China RoHS](#)

[Manufacturer Declaration](#)

[Miscellaneous](#)



[EM](#)

For use in hazardous locations

Maritime application



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Maritime application



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