



Figure similar

***** spare part ***** SIMATIC S7, digital input SM 321, isolated, 4 DI; 24 V DC, NAMUR/DIN 19234, for signals from the hazardous area, diagnostics-capable, PTB tested,

Supply voltage	
Load voltage L+	
• Rated value (DC)	24 V
• Reverse polarity protection	Yes
Input current	
from load voltage L+ (without load), max.	50 mA
from backplane bus 5 V DC, max.	80 mA
Encoder supply	
Type of output voltage	via the inputs
Power loss	
Power loss, typ.	1.1 W
Digital inputs	
Number of digital inputs	4
Number of NAMUR inputs	4
Input voltage	
• Type of input voltage	DC
• 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", min.	0.35 mA
— for signal "0", max.	1.2 mA
— for signal "1", min.	2.1 mA
— for signal "1", max.	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	
• unshielded, max.	200 m
Encoder	
Connectable encoders	
• NAMUR encoder	Yes; Two-wire connection
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Diagnoses	
• Diagnostic information readable	Yes

Diagnostics indication LED			
• Group error SF (red)		Yes	
• Status indicator digital input (green)		Yes	
• Channel fault indicator F (red)		Yes	
Ex(i) characteristics			
Module for Ex(i) protection		Yes	
maximum values for connecting terminals for gas group IIC			
• Uo (no-load voltage), max.		10 V	
• Io (short-circuit current), max.		14.1 mA	
• Po (power output), max.		33.7 mW	
• Co (permissible external capacity), max.		3 µF	
• Lo (permissible external inductivity), max.		100 mH	
Potential separation			
Potential separation digital inputs			
• between the channels		Yes; 60 V DC/30 V AC when used in the hazardous area; 400 V DC/250 V AC when used in NON-hazardous area	
• between the channels, in groups of		1	
• between the channels and backplane bus		Yes; 60 V DC/30 V AC when used in the hazardous area; 400 V DC/250 V AC when used in NON-hazardous area	
• Between the channels and load voltage L+		Yes; 60 V DC/30 V AC when used in the hazardous area; 400 V DC/250 V AC when used in NON-hazardous area	
Standards, approvals, certificates			
Use in hazardous areas			
• ATEX marking		ATEX II 3 G (2) GD Ex nA [ib Gb] [ib IIIC Db] IIC T4 Gc	
• FM marking		Class II, Division 2, Group A, B, C, D T4	
• Test number PTB		Ex-96.D.2094X	
Ambient conditions			
Ambient temperature during operation			
• max.		60 °C	
Connection method			
required front connector		20-pin	
Dimensions			
Width		40 mm	
Height		125 mm	
Depth		120 mm	
Weights			
Weight, approx.		230 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	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](#)

[China RoHS](#)



General Product Approval

For use in hazardous locations



[EM](#)



For use in hazardous locations

Maritime application



[NK / Nippon Kaiji Kyokai](#)



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