



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+	
<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.	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	
<ul style="list-style-type: none"> Type of input voltage 	DC
<ul style="list-style-type: none"> Rated value (DC) 	8.2 V; from internal power circuit supply
Input current	
<ul style="list-style-type: none"> on wire-break, max. 	0.1 mA
<ul style="list-style-type: none"> 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)	
<ul style="list-style-type: none"> 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	
<ul style="list-style-type: none"> unshielded, max. 	200 m
Encoder	
Connectable encoders	
<ul style="list-style-type: none"> NAMUR encoder 	Yes; Two-wire connection
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Diagnoses	
<ul style="list-style-type: none"> 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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