



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"> <li>Rated value (DC)</li> </ul>	24 V
<ul style="list-style-type: none"> <li>Reverse polarity protection</li> </ul>	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"> <li>Type of input voltage</li> </ul>	DC
<ul style="list-style-type: none"> <li>Rated value (DC)</li> </ul>	8.2 V; from internal power circuit supply
Input current	
<ul style="list-style-type: none"> <li>on wire-break, max.</li> </ul>	0.1 mA
<ul style="list-style-type: none"> <li>on short-circuit, max.</li> </ul>	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"> <li>Input frequency (with a time delay of 0.1 ms), max.</li> </ul>	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"> <li>unshielded, max.</li> </ul>	200 m
Encoder	
Connectable encoders	
<ul style="list-style-type: none"> <li>NAMUR encoder</li> </ul>	Yes; Two-wire connection
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Diagnoses	
<ul style="list-style-type: none"> <li>Diagnostic information readable</li> </ul>	Yes

<b>Diagnostics indication LED</b>	
• Group error SF (red)	Yes
• Status indicator digital input (green)	Yes
• Channel fault indicator F (red)	Yes

<b>Ex(i) characteristics</b>	
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Module for Ex(i) protection	Yes
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<b>maximum values for connecting terminals for gas group IIC</b>	
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• 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

<b>Potential separation</b>	
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<b>Potential separation digital inputs</b>	
• 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

<b>Standards, approvals, certificates</b>	
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<b>Use in hazardous areas</b>	
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• 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

<b>Ambient conditions</b>	
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<b>Ambient temperature during operation</b>	
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• max.	60 °C
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<b>Connection method</b>	
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required front connector	20-pin
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<b>Dimensions</b>	
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Width	40 mm
Height	125 mm
Depth	120 mm

<b>Weights</b>	
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Weight, approx.	230 g
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<b>Classifications</b>			
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	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

<b>Approvals / Certificates</b>	
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<b>General Product Approval</b>	
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[Miscellaneous](#)



[China RoHS](#)

General Product Approval

For use in hazardous locations

[Manufacturer Declaration](#)

[Miscellaneous](#)



[EM](#)



For use in hazardous locations

Maritime application



[NK / Nippon Kaiji Kyokai](#)



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