

SIMATIC S7, Digital input SM 326, 8 DI; 24 V DC, NAMUR, fail-safe NAMUR input for SIMATIC S7 F-systems, up to Category 4 (EN 954-1)/ SIL3 (IEC61508)/PLE (ISO13849), 1x 40-pole



Supply voltage

Reverse polarity protection	Yes
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Input current

from load voltage L+ (without load), max.	160 mA
from backplane bus 5 V DC, max.	90 mA

Encoder supply

Number of outputs	8
Type of output voltage	8.2 V DC

Power loss

Power loss, typ.	4.5 W
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Digital inputs

Number of digital inputs	8
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Number of simultaneously controllable inputs

all mounting positions

— up to 40 °C, max.	8
— up to 60 °C, max.	8

Input voltage

• Type of input voltage	DC
Input current	
• for signal "0", max. (permissible quiescent current)	0.35 to 1.2 mA
• for signal "1", typ.	2.1 to 7 mA
Input delay (for rated value of input voltage)	
for NAMUR inputs	
— at "0" to "1", max.	1.2 to 3 ms
— at "1" to "0", max.	1.2 to 3 ms
Cable length	
• shielded, max.	200 m
• unshielded, max.	100 m
Interrupts/diagnostics/status information	
Alarms	
• Diagnostic alarm	Yes; Parameterizable
Diagnostics indication LED	
• Fail-safe operation	Yes
• Group error SF (red)	Yes
Ex(i) characteristics	
Module for Ex(i) protection	Yes
Maximum values of input circuits (per channel)	
• Co (permissible external capacity), max.	3 µF
• Io (short-circuit current), max.	13.9 mA
• Lo (permissible external inductivity), max.	80 mH
• Po (power of load), max.	33.1 mW
• Uo (output no-load voltage), max.	10 V
• Um (fault voltage), max.	60 V DC/30 V AC
• Ta (permissible ambient temperature), max.	60 °C
Potential separation	
Potential separation digital inputs	
• between the channels	Yes
• between the channels and backplane bus	Yes
• between the channels and the power supply of the electronics	Yes
Isolation	
tested with	
• Channels against backplane bus and load voltage L+	1500 V AC
• Between channels	1500 V AC
• Load voltage L+ against backplane bus	500 V DC/350 V AC

Standards, approvals, certificates

Highest safety class achievable in safety mode

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|-------------------------|---|
| • acc. to EN 954 | Cat. 4 |
| • SIL acc. to IEC 61508 | SIL 2 (single-channel), SIL 3 (two-channel) |

Use in hazardous areas

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| • Test number KEMA | 99 ATEX 2671 X |
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Connection method

required front connector	1x 40-pin
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Dimensions

Width	80 mm
Height	125 mm
Depth	120 mm

Weights

Weight, approx.	482 g
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last modified:	08/30/2019
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