

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
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
Digital inputs	
Number of digital inputs	8
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
<b>Input current</b>	
• for signal "0", max. (permissible quiescent current)	0.35 to 1.2 mA
• for signal "1", typ.	2.1 to 7 mA
<b>Input delay (for rated value of input voltage)</b>	
for NAMUR inputs	
— at "0" to "1", max.	1.2 to 3 ms
— at "1" to "0", max.	1.2 to 3 ms
<b>Cable length</b>	
• shielded, max.	200 m
• unshielded, max.	100 m
<b>Interrupts/diagnostics/status information</b>	
<b>Alarms</b>	
• Diagnostic alarm	Yes; Parameterizable
<b>Diagnostics indication LED</b>	
• Fail-safe operation	Yes
• Group error SF (red)	Yes
<b>Ex(i) characteristics</b>	
Module for Ex(i) protection	Yes
<b>Maximum values of input circuits (per channel)</b>	
• 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
<b>Potential separation</b>	
<b>Potential separation digital inputs</b>	
• between the channels	Yes
• between the channels and backplane bus	Yes
• between the channels and the power supply of the electronics	Yes
<b>Isolation</b>	
<b>tested with</b>	
• Channels against backplane bus and load voltage L+	1500 V AC
• Channels among one another	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	
• acc. to EN 954	Cat. 4
• SIL acc. to IEC 61508	SIL 2 (single-channel), SIL 3 (two-channel)
Use in hazardous areas	
• Test number KEMA	99 ATEX 2671 X

## 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
<b>last modified:</b>	10/24/2018