

SIMATIC S7, Digital input SM 326, F-DI 24x24 V DC, Fail-safe digital input for SIMATIC S7 F-systems with diagnostic alarm, up to Category 4 (EN 954-1)/ SIL3 (IEC61508)/PLE (ISO13849), 1x 40-pole



Figure similar

Supply voltage	
Rated value (DC)	24 V
Reverse polarity protection	Yes
Input current	
from load voltage L+ (without load), max.	450 mA
from backplane bus 5 V DC, max.	100 mA
Encoder supply	
Number of outputs	4; Isolated
Output current	
• Rated value	400 mA
Power loss	
Power loss, typ.	10 W
Digital inputs	
Number of digital inputs	24
Number of simultaneously controllable inputs	
all mounting positions	

— up to 40 °C, max.	24
— up to 60 °C, max.	24; (at 24 V) or 18 (at 28.8 V)
Input voltage	
• Type of input voltage	DC
• Rated value (DC)	24 V
• for signal "0"	-30 to +5 V
• for signal "1"	+11 to +30V
Input current	
• for signal "0", max. (permissible quiescent current)	2 mA
• for signal "1", typ.	10 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— at "0" to "1", max.	3.4 ms
— at "1" to "0", max.	3.4 ms
Cable length	
• shielded, max.	200 m
• unshielded, max.	100 m
Encoder	
Connectable encoders	
• 2-wire sensor	Yes; if short-circuit test is deactivated
— permissible quiescent current (2-wire sensor), max.	2 mA
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Alarms	
• Diagnostic alarm	Yes
Diagnostic messages	
• Diagnostic information readable	Yes
Diagnostics indication LED	
• Fail-safe operation	Yes
• Group error SF (red)	Yes
Ex(i) characteristics	
Maximum values of input circuits (per channel)	
• Ta (permissible ambient temperature), max.	60 °C
Potential separation	
Potential separation digital inputs	
• between the channels	Yes
• between the channels, in groups of	12
• between the channels and backplane bus	Yes

Isolation

Isolation tested with 500 V DC/350 V AC

Standards, approvals, certificates

Highest safety class achievable in safety mode

- | | |
|--|--------|
| • acc. to DIN VDE 0801 | AK 6 |
| • acc. to EN 954 | Cat. 4 |
| • Performance level according to ISO 13849-1 | e |
| • SIL acc. to IEC 61508 | SIL 3 |

Connection method

required front connector 40-pin

Dimensions

Width	80 mm
Height	125 mm
Depth	120 mm

Weights

Weight, approx. 442 g

last modified: 06/09/2020