



Figure similar

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

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

#### Diagnoses

- Diagnostic information readable Yes

#### Diagnostics indication LED

- Fail-safe operation Yes
- Group error SF (red) Yes

### 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:** 1/16/2021 