



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

Ex(i) characteristics

Max. values of input circuits for gas group IIC (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

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