



Figure similar

spare part 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 |
| Classifications | |

| | Version | Classification |
|--------|---------|----------------|
| eClass | 14 | 27-24-22-04 |
| eClass | 12 | 27-24-22-04 |
| eClass | 9.1 | 27-24-22-04 |
| eClass | 9 | 27-24-22-04 |
| eClass | 8 | 27-24-22-04 |
| eClass | 7.1 | 27-24-22-04 |
| eClass | 6 | 27-24-22-04 |
| ETIM | 10 | EC001419 |
| ETIM | 9 | EC001419 |
| ETIM | 8 | EC001419 |
| ETIM | 7 | EC001419 |
| IDEA | 4 | 3566 |
| UNSPSC | 15 | 32-15-17-05 |

| | |
|---------------------------------|-----|
| Approvals / Certificates | |
| General Product Approval | EMV |

[Miscellaneous](#)



| | |
|---------------------------------------|--|
| For use in hazardous locations | |
|---------------------------------------|--|



[FM](#)



[Miscellaneous](#)

| For use in hazardous locations | Functional Safety | Maritime application | | | |
|--------------------------------|-------------------|----------------------|--|--|--|
|--------------------------------|-------------------|----------------------|--|--|--|

[CCC-Ex](#)

[TUEV](#)

[Type Examination Certificate](#)



| Maritime application | | | | | |
|----------------------|--|--|--|--|--|
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LRS

[NK / Nippon Kaiji Kyokai](#)



PRS



RINA

[CCS \(China Classification Society\)](#)

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4/7/2025