



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                                       |

|                                                       |                   |
|-------------------------------------------------------|-------------------|
| <b>Alarms</b>                                         |                   |
| • Diagnostic alarm                                    | Yes               |
| <b>Diagnoses</b>                                      |                   |
| • Diagnostic information readable                     | Yes               |
| <b>Diagnostics indication LED</b>                     |                   |
| • Fail-safe operation                                 | Yes               |
| • Group error SF (red)                                | Yes               |
| <b>Potential separation</b>                           |                   |
| <b>Potential separation digital inputs</b>            |                   |
| • between the channels                                | Yes               |
| • between the channels, in groups of                  | 12                |
| • between the channels and backplane bus              | Yes               |
| <b>Isolation</b>                                      |                   |
| Isolation tested with                                 | 500 V DC/350 V AC |
| <b>Standards, approvals, certificates</b>             |                   |
| <b>Highest safety class achievable in safety mode</b> |                   |
| • 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             |
| <b>connection method</b>                              |                   |
| required front connector                              | 40-pin            |
| <b>Dimensions</b>                                     |                   |
| Width                                                 | 80 mm             |
| Height                                                | 125 mm            |
| Depth                                                 | 120 mm            |
| <b>Weights</b>                                        |                   |
| Weight, approx.                                       | 442 g             |
| <b>Classifications</b>                                |                   |

|        | 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   | 9       | EC001419       |
| ETIM   | 8       | EC001419       |
| ETIM   | 7       | EC001419       |
| IDEA   | 4       | 3566           |
| UNSPSC | 15      | 32-15-17-05    |

|                                 |       |
|---------------------------------|-------|
| <b>Approvals / Certificates</b> |       |
| General Product Approval        | other |



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