




Figure similar

SIMATIC S7-300, Digital module SM 323, isolated, 16 DI and 16 DO, 24 V DC, 0.5 A, Total current 4A, 1x 40-pole

| Supply voltage  |             |
|---|-------------|
| Load voltage L+   |             |
| • Rated value (DC)  | 24 V        |
| • permissible range, lower limit (DC)                           | 20.4 V      |
| • permissible range, upper limit (DC)                           | 28.8 V      |
| Input current   |             |
| from load voltage L+ (without load), max.                       | 80 mA       |
| from backplane bus 5 V DC, max.                                 | 80 mA       |
| Power loss  |             |
| Power loss, typ.  | 6.5 W       |
| Digital inputs  |             |
| Number of digital inputs  | 16          |
| Input characteristic curve in accordance with IEC 61131, type 1 | Yes         |
| Number of simultaneously controllable inputs                    |             |
| horizontal installation   |             |
| — up to 40 °C, max.   | 16          |
| — up to 60 °C, max.   | 8           |
| vertical installation   |             |
| — up to 40 °C, max.   | 16          |
| Input voltage   |             |
| • Type of input voltage   | DC          |
| • Rated value (DC)  | 24 V        |
| • for signal "0"  | -30 to +5 V |
| • for signal "1"  | 13 to 30V   |
| Input current   |             |
| • for signal "1", typ.  | 7 mA        |
| Input delay (for rated value of input voltage)                  |             |
| for standard inputs   |             |
| — at "0" to "1", min.   | 1.2 ms      |
| — at "0" to "1", max.   | 4.8 ms      |
| — at "1" to "0", min.   | 1.2 ms      |
| — at "1" to "0", max.   | 4.8 ms      |
| Cable length  |             |
| • shielded, max.  | 1 000 m     |
| • unshielded, max.  | 600 m       |

|   |                                     |
|---|-------------------------------------|
| <b>Digital outputs</b>                                |                                     |
| Number of digital outputs                             | 16                                  |
| Short-circuit protection                              | Yes                                 |
| • Response threshold, typ.                            | 1 A                                 |
| Limitation of inductive shutdown voltage to           | L+ (-48 V)                          |
| Controlling a digital input                           | Yes                                 |
| Switching capacity of the outputs                     |                                     |
| • on lamp load, max.                                  | 5 W                                 |
| Load resistance range                                 |                                     |
| • lower limit   | 48 $\Omega$                         |
| • upper limit   | 4 k $\Omega$                        |
| Output voltage  |                                     |
| • for signal "1", min.                                | L+ (-0.8 V)                         |
| Output current  |                                     |
| • for signal "1" rated value                          | 0.5 A                               |
| • for signal "1" permissible range, min.              | 5 mA                                |
| • for signal "1" permissible range, max.              | 0.6 A                               |
| • for signal "1" minimum load current                 | 5 mA                                |
| • for signal "0" residual current, max.               | 0.5 mA                              |
| Output delay with resistive load                      |                                     |
| • "0" to "1", max.                                    | 100 $\mu$ s                         |
| • "1" to "0", max.                                    | 500 $\mu$ s                         |
| Parallel switching of two outputs                     |                                     |
| • for uprating  | No                                  |
| • for redundant control of a load                     | Yes; only outputs of the same group |
| Switching frequency                                   |                                     |
| • with resistive load, max.                           | 100 Hz                              |
| • with inductive load, max.                           | 0.5 Hz                              |
| • on lamp load, max.                                  | 100 Hz                              |
| Total current of the outputs (per group)              |                                     |
| horizontal installation                               |                                     |
| — up to 40 °C, max.                                   | 4 A                                 |
| — up to 60 °C, max.                                   | 3 A                                 |
| vertical installation                                 |                                     |
| — up to 40 °C, max.                                   | 2 A                                 |
| Cable length  |                                     |
| • shielded, max.                                      | 1 000 m                             |
| • unshielded, max.                                    | 600 m                               |
| <b>Encoder</b>  |                                     |
| Connectable encoders                                  |                                     |
| • 2-wire sensor                                       | Yes                                 |
| — permissible quiescent current (2-wire sensor), max. | 1.5 mA                              |
| <b>Interrupts/diagnostics/status information</b>      |                                     |
| Alarms  | No                                  |
| Diagnostics function                                  | No                                  |
| Diagnostics indication LED                            |                                     |
| • Status indicator digital input (green)              | Yes                                 |
| • Status indicator digital output (green)             | Yes                                 |
| <b>Potential separation</b>                           |                                     |
| Potential separation digital inputs                   |                                     |
| • between the channels                                | Yes                                 |
| • between the channels, in groups of                  | 16                                  |
| • between the channels and backplane bus              | Yes; Optocoupler                    |
| Potential separation digital outputs                  |                                     |
| • between the channels                                | Yes                                 |
| • between the channels, in groups of                  | 8                                   |
| • between the channels and backplane bus              | Yes; Optocoupler                    |

|                          |   |
|--------------------------|---|
| <b>Isolation</b>         |   |
| Isolation tested with    | 500 V DC  |
| <b>Connection method</b> |   |
| required front connector | 40-pin  |
| <b>Dimensions</b>        |   |
| Width                    | 40 mm   |
| Height                   | 125 mm  |
| Depth                    | 120 mm  |
| <b>Weights</b>           |   |
| Weight, approx.          | 260 g   |
| <b>last modified:</b>    | 1/16/2021  |