



Figure similar

SIMATIC S7-300, Digital output SM 322, isolated, 16 DO (solid-state relay), 24-48 V AC/DC; 0.5 A with single rooting, 1x 40-pole

| Supply voltage                                            |                                    |
|-----------------------------------------------------------|------------------------------------|
| Mains buffering                                           |                                    |
| • Mains/voltage failure stored energy time                | 5 ms                               |
| Load voltage L+                                           |                                    |
| • Rated value (DC)                                        | 24 V; 24 / 48                      |
| • permissible range, lower limit (DC)                     | 20.4 V                             |
| • permissible range, upper limit (DC)                     | 57.6 V                             |
| • Reverse polarity protection                             | Yes                                |
| Input current                                             |                                    |
| from supply voltage L+, max.                              | 200 mA                             |
| from backplane bus 5 V DC, max.                           | 100 mA                             |
| Power loss                                                |                                    |
| Power loss, typ.                                          | 2.8 W                              |
| Digital outputs                                           |                                    |
| Number of digital outputs                                 | 16                                 |
| Short-circuit protection                                  | No; to be provided externally      |
| Controlling a digital input                               | Yes                                |
| Size of motor starters according to NEMA, max.            | Size 5 according to NEMA           |
| Switching capacity of the outputs                         |                                    |
| • on lamp load, max.                                      | 2.5 W                              |
| Output voltage                                            |                                    |
| • for signal "1", min.                                    | L+ (-0.25 V)                       |
| Output current                                            |                                    |
| • for signal "1" rated value                              | 0.5 A                              |
| • for signal "1" permissible range for 0 to 40 °C, max.   | 0.5 A                              |
| • for signal "1" permissible range for 40 to 60 °C, max.  | 0.5 A                              |
| • for signal "1" permissible surge current, max.          | 1.5 A; for 50 ms, 1 A 2 s one-time |
| • for signal "0" residual current, max.                   | 10 µA                              |
| Output delay with resistive load                          |                                    |
| • "0" to "1", max.                                        | 6 ms                               |
| • "1" to "0", max.                                        | 3 ms                               |
| Parallel switching of two outputs                         |                                    |
| • for uprating                                            | No                                 |
| • for redundant control of a load                         | Yes                                |
| Switching frequency                                       |                                    |
| • with resistive load, max.                               | 10 Hz                              |
| • with inductive load, max.                               | 0.5 Hz                             |
| • with inductive load (acc. to IEC 60947-5-1, DC13), max. | 0.5 Hz                             |
| • on lamp load, max.                                      | 0.5 Hz                             |

|                                                                |                       |
|----------------------------------------------------------------|-----------------------|
| Total current of the outputs (per group)                       |                       |
| horizontal installation                                        |                       |
| — up to 40 °C, max.                                            | 0.5 A; 8 A per module |
| — up to 60 °C, max.                                            | 0.5 A; 8 A per module |
| vertical installation                                          |                       |
| — up to 40 °C, max.                                            | 0.5 A; 8 A per module |
| Cable length                                                   |                       |
| • shielded, max.                                               | 1 000 m               |
| • unshielded, max.                                             | 600 m                 |
| Interrupts/diagnostics/status information                      |                       |
| Diagnostics function                                           | Yes; Parameterizable  |
| Alarms                                                         |                       |
| • Diagnostic alarm                                             | Yes; Parameterizable  |
| Diagnoses                                                      |                       |
| • Diagnostic information readable                              | Yes                   |
| Diagnostics indication LED                                     |                       |
| • Group error SF (red)                                         | Yes                   |
| • Status indicator digital output (green)                      | Yes                   |
| Potential separation                                           |                       |
| Potential separation digital outputs                           |                       |
| • between the channels                                         | Yes                   |
| • between the channels, in groups of                           | 1                     |
| • between the channels and backplane bus                       | Yes; Optocoupler      |
| • between the channels and the power supply of the electronics | Yes                   |
| Isolation                                                      |                       |
| Isolation tested with                                          | 1 500 V AC            |
| connection method                                              |                       |
| required front connector                                       | 40-pin                |
| Dimensions                                                     |                       |
| Width                                                          | 40 mm                 |
| Height                                                         | 125 mm                |
| Depth                                                          | 120 mm                |
| Weights                                                        |                       |
| Weight, approx.                                                | 260 g                 |

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