



Figure similar

\*\*\*spare part\*\*\* SIMATIC S7-300, digital output SM 322, isolated, 8 DO, 24 V DC, 2 A, 1x 20-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.                | 60 mA           |
| from backplane bus 5 V DC, max.                          | 40 mA           |
| Power loss                                               |                 |
| Power loss, typ.                                         | 6.8 W           |
| Digital outputs                                          |                 |
| Number of digital outputs                                | 8               |
| Short-circuit protection                                 | Yes; Electronic |
| • Response threshold, typ.                               | 3 A             |
| Limitation of inductive shutdown voltage to              | L+ (-48 V)      |
| Controlling a digital input                              | Yes             |
| Switching capacity of the outputs                        |                 |
| • on lamp load, max.                                     | 10 W            |
| Load resistance range                                    |                 |
| • lower limit                                            | 12 Ω            |
| • upper limit                                            | 4 kΩ            |
| Output voltage                                           |                 |
| • for signal "1", min.                                   | L+ (-0.8 V)     |
| Output current                                           |                 |
| • for signal "1" rated value                             | 2 A             |
| • for signal "1" permissible range for 0 to 40 °C, min.  | 5 mA            |
| • for signal "1" permissible range for 0 to 40 °C, max.  | 2.4 A           |
| • for signal "1" permissible range for 40 to 60 °C, min. | 5 mA            |
| • for signal "1" permissible range for 40 to 60 °C, max. | 2.4 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 μs          |
| • "1" to "0", max.                                       | 500 μs          |
| Parallel switching of two outputs                        |                 |
| • for uprating                                           | No              |
| • for redundant control of a load                        | Yes             |
| Switching frequency                                      |                 |

|                                                           |                  |
|-----------------------------------------------------------|------------------|
| • with resistive load, max.                               | 100 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.                                      | 10 Hz            |
| <b>Total current of the outputs (per group)</b>           |                  |
| horizontal installation                                   |                  |
| — up to 40 °C, max.                                       | 4 A              |
| — up to 60 °C, max.                                       | 4 A              |
| vertical installation                                     |                  |
| — up to 40 °C, max.                                       | 4 A              |
| <b>Cable length</b>                                       |                  |
| • shielded, max.                                          | 1 000 m          |
| • unshielded, max.                                        | 600 m            |
| <b>Interrupts/diagnostics/status information</b>          |                  |
| Alarms                                                    | No               |
| Diagnostics function                                      | No               |
| <b>Alarms</b>                                             |                  |
| • Diagnostic alarm                                        | No               |
| <b>Diagnoses</b>                                          |                  |
| • Wire-break                                              | No               |
| • Short-circuit                                           | No               |
| • Fuse blown                                              | No               |
| • missing load voltage                                    | No               |
| <b>Diagnostics indication LED</b>                         |                  |
| • Rated load voltage PWR (green)                          | No               |
| • Fuse OK FSG (green)                                     | No               |
| • Status indicator digital output (green)                 | Yes; per channel |
| <b>Potential separation</b>                               |                  |
| Potential separation digital outputs                      |                  |
| • between the channels                                    | Yes              |
| • between the channels, in groups of                      | 4                |
| • between the channels and backplane bus                  | Yes; Optocoupler |
| <b>Isolation</b>                                          |                  |
| Isolation tested with                                     | 500 V DC         |
| <b>Connection method</b>                                  |                  |
| required front connector                                  | 20-pin           |
| <b>Dimensions</b>                                         |                  |
| Width                                                     | 40 mm            |
| Height                                                    | 125 mm           |
| Depth                                                     | 120 mm           |
| <b>Weights</b>                                            |                  |
| Weight, approx.                                           | 190 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   | 10      | EC001419       |
| ETIM   | 9       | EC001419       |
| ETIM   | 8       | EC001419       |
| ETIM   | 7       | EC001419       |
| IDEA   | 4       | 3566           |

Approvals / Certificates

| General Product Approval | Test Certificates |
|--------------------------|-------------------|
|--------------------------|-------------------|



[Type Test Certificates/Test Report](#)

| other | Environment |
|-------|-------------|
|-------|-------------|



[Confirmation](#)



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