



Figure similar

\*\*\*spare part\*\*\* SIMATIC S7-300, digital output SM 322, isolated 16 DO, relay contacts, 1x 20-pole

| Supply voltage                                            |                                                                               |
|-----------------------------------------------------------|-------------------------------------------------------------------------------|
| Load voltage L+                                           |                                                                               |
| • Rated value (DC)                                        | 120 V                                                                         |
| Load voltage L1                                           |                                                                               |
| • Rated value (AC)                                        | 230 V                                                                         |
| Input current                                             |                                                                               |
| from supply voltage L+, max.                              | 250 mA                                                                        |
| from backplane bus 5 V DC, max.                           | 100 mA                                                                        |
| Power loss                                                |                                                                               |
| Power loss, typ.                                          | 4.5 W                                                                         |
| Digital outputs                                           |                                                                               |
| Number of digital outputs                                 | 16; Relays                                                                    |
| Short-circuit protection                                  | No                                                                            |
| 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.                                      | 50 W; 230 V AC                                                                |
| Output current                                            |                                                                               |
| • for signal "1" rated value                              | 2 A                                                                           |
| • for signal "1" minimum load current                     | 10 mA                                                                         |
| Parallel switching of two outputs                         |                                                                               |
| • for uprating                                            | No                                                                            |
| • for redundant control of a load                         | Yes                                                                           |
| Switching frequency                                       |                                                                               |
| • with resistive load, max.                               | 1 Hz                                                                          |
| • with inductive load, max.                               | 0.5 Hz                                                                        |
| • With inductive load (to IEC 60947-5-1, DC13/AC15), max. | 0.5 Hz                                                                        |
| • on lamp load, max.                                      | 1 Hz                                                                          |
| • mechanical, max.                                        | 10 Hz                                                                         |
| Total current of the outputs (per group)                  |                                                                               |
| horizontal installation                                   |                                                                               |
| — up to 60 °C, max.                                       | 8 A                                                                           |
| vertical installation                                     |                                                                               |
| — up to 40 °C, max.                                       | 8 A                                                                           |
| Relay outputs                                             |                                                                               |
| • Rated supply voltage of relay coil L+ (DC)              | 24 V                                                                          |
| • Contact connection (internal)                           | No                                                                            |
| • Number of operating cycles, max.                        | 100 000; 50 000 (24 V DC, at 2 A); 700 000 (120 V AC, at 2 A); 100 000 (230 V |

|                                           |                                    |         |                |
|-------------------------------------------|------------------------------------|---------|----------------|
|                                           | AC, at 2 A)                        |         |                |
| Switching capacity of contacts            |                                    |         |                |
| — with inductive load, max.               | 2 A; 2 A (230 V AC), 2 A (24 V DC) |         |                |
| — with resistive load, max.               | 2 A; 2 A (230 V AC), 2 A (24 V DC) |         |                |
| — Thermal continuous current, max.        | 2 A                                |         |                |
| Cable length                              |                                    |         |                |
| • shielded, max.                          | 1 000 m                            |         |                |
| • unshielded, max.                        | 600 m                              |         |                |
| Interrupts/diagnostics/status information |                                    |         |                |
| Alarms                                    | No                                 |         |                |
| Diagnostics function                      | No                                 |         |                |
| Alarms                                    |                                    |         |                |
| • Diagnostic alarm                        | No                                 |         |                |
| Diagnoses                                 |                                    |         |                |
| • Wire break                              | No                                 |         |                |
| • Short-circuit                           | No                                 |         |                |
| • Fuse blown                              | No                                 |         |                |
| • Missing load voltage                    | No                                 |         |                |
| Diagnostics indication LED                |                                    |         |                |
| • Rated load voltage PWR (green)          | No                                 |         |                |
| • Fuse OK FSG (green)                     | No                                 |         |                |
| • Status indicator digital output (green) | Yes                                |         |                |
| Potential separation                      |                                    |         |                |
| Potential separation digital outputs      |                                    |         |                |
| • between the channels                    | Yes                                |         |                |
| • between the channels, in groups of      | 8                                  |         |                |
| • between the channels and backplane bus  | Yes; Optocoupler                   |         |                |
| Isolation                                 |                                    |         |                |
| Isolation tested with                     | 1 500 V AC                         |         |                |
| Connection method                         |                                    |         |                |
| required front connector                  | 20-pin                             |         |                |
| Dimensions                                |                                    |         |                |
| Width                                     | 40 mm                              |         |                |
| Height                                    | 125 mm                             |         |                |
| Depth                                     | 120 mm                             |         |                |
| Weights                                   |                                    |         |                |
| Weight, approx.                           | 250 g                              |         |                |
| Classifications                           |                                    |         |                |
|                                           |                                    | Version | Classification |
|                                           | eClass                             | 16      | 27-24-22-04    |
|                                           | 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                  |                                    |         |                |



[Miscellaneous](#)

[Manufacturer Declaration](#)



General Product Approval

EMV



[Manufacturer Declaration](#)

[China RoHS](#)



For use in hazardous locations

Maritime application

[FM](#)



[NK / Nippon Kaiji Kyokai](#)

Maritime application



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

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