

SIMATIC S7-300, DIGITAL OUTPUT SM 322, OPTICALLY ISOLATED, 32DO, 24V DC, 0.5A, 1 X 40 PIN, SUM OF OUTPUT CURRENTS 4A/GROUP (16A/MODULE)



| 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.   | 160 mA      |
| from backplane bus 5 V DC, max.             | 110 mA      |
| Power loss                                  |             |
| Power loss, typ.                            | 6.6 W       |
| Digital outputs                             |             |
| Number of digital outputs                   | 32          |
| Limitation of inductive shutdown voltage to | L+ (-53 V)  |
| Switching capacity of the outputs           |             |
| • on lamp load, max.                        | 5 W         |
| Load resistance range                       |             |
| • lower limit                               | 48 $\Omega$ |

|                                           |                  |
|-------------------------------------------|------------------|
| • upper limit                             | 4 kΩ             |
| Output voltage                            |                  |
| • for signal "1", min.                    | L+ (-0.8 V)      |
| Output current                            |                  |
| • for signal "1" rated value              | 0.5 A            |
| • for signal "1" minimum load current     | 5 mA             |
| • for signal "0" residual current, max.   | 0.5 mA           |
| Switching frequency                       |                  |
| • with resistive load, max.               | 100 Hz           |
| • with inductive load, max.               | 0.5 Hz           |
| • on lamp load, max.                      | 10 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            |
| Interrupts/diagnostics/status information |                  |
| Alarms                                    |                  |
| • Diagnostic alarm                        | No               |
| Diagnostic messages                       |                  |
| • Diagnostic functions                    | No               |
| • Wire-break                              | No               |
| • Short-circuit                           | No               |
| • missing load voltage                    | No               |
| Diagnostics indication LED                |                  |
| • Rated load voltage PWR (green)          | No               |
| • Fuse OK FSG (green)                     | No               |
| • Group error SF (red)                    | No               |
| • Status indicator digital output (green) | Yes; per channel |
| • Channel fault indicator F (red)         | No               |
| 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 |
| Permissible potential difference          |                  |

|                            |               |
|----------------------------|---------------|
| between different circuits | 75V DC/60V AC |
| Isolation                  |               |
| Isolation tested with      | 500 V DC      |
| Connection method          |               |
| required front connector   | 40-pin        |
| Dimensions                 |               |
| Width                      | 40 mm         |
| Height                     | 125 mm        |
| Depth                      | 120 mm        |
| Weights                    |               |
| Weight, approx.            | 260 g         |
| <b>last modified:</b>      | 09.10.2015    |