



SIMATIC S7-300, Digital output SM 322, isolated, 32 DO, 24 V DC, 0.5A, 1x 40-pole, Total current 4 A/group (16 A/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 |
| Short-circuit protection | Yes; Electronic |
| • Response threshold, typ. | 1 A |
| Limitation of inductive shutdown voltage to | L+ (-53 V) |
| Controlling a digital input | Yes |
| Switching capacity of the outputs | |
| • on lamp load, max. | 5 W |
| Load resistance range | |
| • lower limit | 48 Ω |
| • 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" permissible range for 0 to 40 °C, min. | 5 mA |
| • for signal "1" permissible range for 0 to 40 °C, max. | 0.6 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. | 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 μs |
| • "1" to "0", max. | 500 μs |
| 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 |

| | |
|---|--|
| <ul style="list-style-type: none"> with inductive load (acc. to IEC 60947-5-1, DC13), max. on lamp load, max. | 0.5 Hz 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 | |
| <ul style="list-style-type: none"> shielded, max. unshielded, max. | 1 000 m 600 m |
| Interrupts/diagnostics/status information | |
| Alarms | No |
| Diagnostics function | No |
| Alarms | |
| <ul style="list-style-type: none"> Diagnostic alarm | No |
| Diagnoses | |
| <ul style="list-style-type: none"> Diagnostic information readable Wire-break Short-circuit missing load voltage | No No No No |
| Diagnostics indication LED | |
| <ul style="list-style-type: none"> Rated load voltage PWR (green) Fuse OK FSG (green) Group error SF (red) Status indicator digital output (green) Channel fault indicator F (red) | No No No Yes; per channel No |
| Potential separation | |
| Potential separation digital outputs | |
| <ul style="list-style-type: none"> between the channels between the channels, in groups of between the channels and backplane bus | Yes 8 Yes; Optocoupler |
| 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 |

last modified: 8/16/2023 