



Figure similar

SIMATIC S7-300, Digital output SM 322, isolated, 8 DO, 120/230 V AC, 1 A, 1x 20-pole

| Supply voltage | |
|--|---------------------------------|
| Load voltage L1 | |
| <ul style="list-style-type: none"> Rated value (AC) | 230 V; 120/230 V AC |
| <ul style="list-style-type: none"> permissible range, lower limit (AC) | 93 V |
| <ul style="list-style-type: none"> permissible range, upper limit (AC) | 264 V |
| <ul style="list-style-type: none"> permissible frequency range, lower limit | 47 Hz |
| <ul style="list-style-type: none"> permissible frequency range, upper limit | 63 Hz |
| Input current | |
| from load voltage L1 (without load), max. | 2 mA |
| from backplane bus 5 V DC, max. | 100 mA |
| Power loss | |
| Power loss, typ. | 8.6 W |
| Digital outputs | |
| Number of digital outputs | 8 |
| Short-circuit protection | Yes; Fuse 8 A, 250 V; per group |
| <ul style="list-style-type: none"> required current for fuse shutdown, min. | 40 A |
| <ul style="list-style-type: none"> Response time, max. | 300 ms |
| Controlling a digital input | Yes |
| Size of motor starters according to NEMA, max. | 5 NEMA compliant |
| Spare fuses | 8 A / quick response |
| Zero-crossing switch | Yes; Max. 60 V |
| Switching capacity of the outputs | |
| <ul style="list-style-type: none"> on lamp load, max. | 50 W |
| Output voltage | |
| <ul style="list-style-type: none"> for signal "1", min. | L1 (-1.5 V) |
| <ul style="list-style-type: none"> for signal "1" (at max. current), min. | L1 (-1.5 V) |
| <ul style="list-style-type: none"> for signal "1" (at min. current), min. | L1 (-8.5 V) |
| Output current | |
| <ul style="list-style-type: none"> for signal "1" rated value | 2 A |
| <ul style="list-style-type: none"> for signal "1" permissible range for 0 to 40 °C, min. | 10 mA |
| <ul style="list-style-type: none"> for signal "1" permissible range for 0 to 40 °C, max. | 2 A |
| <ul style="list-style-type: none"> for signal "1" permissible range for 40 to 60 °C, min. | 10 mA |
| <ul style="list-style-type: none"> for signal "1" permissible range for 40 to 60 °C, max. | 1 A |
| <ul style="list-style-type: none"> for signal "1" minimum load current | 10 mA |
| <ul style="list-style-type: none"> for signal "1" permissible surge current, max. | 20 A; max. 1 AC cycle |
| <ul style="list-style-type: none"> for signal "0" residual current, max. | 2 mA |
| Output delay with resistive load | |
| <ul style="list-style-type: none"> "0" to "1", max. | 1 AC cycle |
| <ul style="list-style-type: none"> "1" to "0", max. | 1 AC cycle |

| | |
|---|---|
| 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, AC15), max. | 0.5 Hz |
| • on lamp load, max. | 1 Hz |
| Total current of the outputs (per group) | |
| horizontal installation | |
| — up to 40 °C, max. | 4 A |
| — up to 60 °C, max. | 2 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 | No |
| Diagnostics function | Yes; Fuse blown or load voltage missing |
| Alarms | |
| • Diagnostic alarm | No |
| Diagnoses | |
| • Wire-break | No |
| • Short-circuit | No |
| • Fuse blown | Yes |
| • missing load voltage | Yes |
| Diagnostics indication LED | |
| • Rated load voltage PWR (green) | Yes |
| • Fuse OK FSG (green) | Yes |
| • 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 | 4 |
| • 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. | 275 g |

last modified: 8/16/2023 