




SIMATIC S7-400, digital output SM 422, isolated 16 DO; 120/230 V AC, 2 A

Figure similar

| 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) | 79 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 L+ (without load), max. | 1.5 mA |
| from backplane bus 5 V DC, max. | 400 mA |
| Power loss | |
| Power loss, typ. | 16 W |
| Digital outputs | |
| Number of digital outputs | 16 |
| Short-circuit protection | Yes; Fuse 8 A, 250 V; per group |
| <ul style="list-style-type: none"> required current for fuse shutdown, min. | 100 A |
| <ul style="list-style-type: none"> Response time, max. | 100 ms |
| Controlling a digital input | Yes; possible |
| Size of motor starters according to NEMA, max. | Size 5 according to NEMA |
| Spare fuses | Fuse 8 A, 250 V, quick response |
| Zero-crossing switch | No |
| 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 (-18.1 V) |
| <ul style="list-style-type: none"> for signal "1" (at max. current), min. | L1 (-1.3 Vrms) |
| <ul style="list-style-type: none"> for signal "1" (at min. current), min. | L1 (-18.1 Vrms) |
| 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, min. | 10 mA |
| <ul style="list-style-type: none"> for signal "1" permissible range, max. | 2 A |
| <ul style="list-style-type: none"> for signal "1" permissible surge current, max. | 50 A; per cycle |
| <ul style="list-style-type: none"> for signal "0" residual current, max. | 2.6 mA |
| Output delay with resistive load | |
| <ul style="list-style-type: none"> "0" to "1", max. | 1 ms |
| <ul style="list-style-type: none"> "1" to "0", max. | 1 AC cycle |

| | |
|---|---|
| Parallel switching of two outputs | |
| <ul style="list-style-type: none"> • for redundant control of a load | Yes; Possible (only outputs with the same load voltage) |
| Switching frequency | |
| <ul style="list-style-type: none"> • with resistive load, max. | 10 Hz |
| <ul style="list-style-type: none"> • with inductive load, max. | 0.5 Hz |
| <ul style="list-style-type: none"> • with inductive load (acc. to IEC 60947-5-1, AC15), max. | 0.5 Hz |
| <ul style="list-style-type: none"> • on lamp load, max. | 1 Hz |
| Total current of the outputs (per group) | |
| all mounting positions | |
| — up to 40 °C, max. | 4 A; 6 A with fan assembly |
| — up to 60 °C, max. | 2 A; 5 A with fan subassembly; per 4 adjacent outputs |
| Cable length | |
| <ul style="list-style-type: none"> • shielded, max. | 1 000 m |
| <ul style="list-style-type: none"> • unshielded, max. | 600 m |
| Interrupts/diagnostics/status information | |
| Diagnostics function | Not parameterizable |
| Diagnostics indication LED | |
| <ul style="list-style-type: none"> • internal fault INTF (red) | Yes; Fuse blown |
| <ul style="list-style-type: none"> • external fault EXTF (red) | Yes; Missing load voltage |
| Potential separation | |
| Potential separation digital outputs | |
| <ul style="list-style-type: none"> • between the channels | Yes |
| <ul style="list-style-type: none"> • between the channels, in groups of | 4 |
| <ul style="list-style-type: none"> • between the channels and backplane bus | Yes |
| Isolation | |
| Isolation tested with | 1 500 V AC |
| Dimensions | |
| Width | 25 mm |
| Height | 290 mm |
| Depth | 210 mm |
| Weights | |
| Weight, approx. | 800 g |
| last modified: | 1/16/2021  |