




SIMATIC S7-400, digital output SM 422, isolated 32 DO; 24 V DC, 0.5 A

Figure similar

| Supply voltage | |
|------------------------------------------------------------------------------------------|------------------------------------------------|
| Load voltage L+ | |
| <ul style="list-style-type: none"> Rated value (DC) | 24 V |
| <ul style="list-style-type: none"> permissible range, lower limit (DC) | 20.4 V |
| <ul style="list-style-type: none"> permissible range, upper limit (DC) | 28.8 V |
| Input current | |
| from load voltage L+ (without load), max. | 30 mA |
| from backplane bus 5 V DC, max. | 200 mA |
| Power loss | |
| Power loss, typ. | 4 W |
| Digital outputs | |
| Number of digital outputs | 32 |
| Short-circuit protection | Yes; Clocked electronically |
| <ul style="list-style-type: none"> Response threshold, typ. | 0.7 to 1.5 A |
| Controlling a digital input | Yes; possible |
| Switching capacity of the outputs | |
| <ul style="list-style-type: none"> on lamp load, max. | 5 W |
| Load resistance range | |
| <ul style="list-style-type: none"> lower limit | 48 Ω |
| <ul style="list-style-type: none"> upper limit | 4 kΩ |
| Output voltage | |
| <ul style="list-style-type: none"> for signal "1", min. | L+ (-0.3 V) |
| Output current | |
| <ul style="list-style-type: none"> for signal "1" rated value | 0.5 A |
| <ul style="list-style-type: none"> for signal "1" permissible range, min. | 5 mA |
| <ul style="list-style-type: none"> for signal "1" permissible range, max. | 0.6 A |
| <ul style="list-style-type: none"> for signal "0" residual current, max. | 0.3 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 ms |
| Parallel switching of two outputs | |
| <ul style="list-style-type: none"> for uprating | Yes; possible (only outputs of the same group) |
| <ul style="list-style-type: none"> for redundant control of a load | Yes; possible (only outputs of the same group) |
| Switching frequency | |
| <ul style="list-style-type: none"> with resistive load, max. | 100 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, DC13), max. | 2 Hz; 2 Hz at 0.3 A; 0.5 Hz at 0.5 A |
| <ul style="list-style-type: none"> • on lamp load, max. | 10 Hz |
| Total current of the outputs (per group) | |
| all mounting positions | |
| — up to 40 °C, max. | 4 A |
| — up to 60 °C, max. | 2 A; 8 adjacent outputs each |
| 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 | No |
| Potential separation | |
| Potential separation digital outputs | |
| <ul style="list-style-type: none"> • between the channels | No |
| <ul style="list-style-type: none"> • between the channels, in groups of | 32 |
| <ul style="list-style-type: none"> • between the channels and backplane bus | Yes |
| Isolation | |
| Isolation tested with | 500 V DC |
| Dimensions | |
| Width | 25 mm |
| Height | 290 mm |
| Depth | 210 mm |
| Weights | |
| Weight, approx. | 600 g |
| last modified: | 1/16/2021  |