## **SIEMENS**

## **Data sheet**

## 6ES7422-7BL00-0AB0



SIMATIC S7-400, digital output SM 422, isolated 32 DO; 24 V DC, 0.5 A with 0.15 ms output delay, diagnostics

Figure similar

| Supply voltage  |  |  |
|---|--|--|
| Load voltage L+   |  |  |
| Rated value (DC)  | 24 V   |  |
| <ul> <li>permissible range, lower limit (DC)</li> </ul>                         | 20.4 V   |  |
| <ul> <li>permissible range, upper limit (DC)</li> </ul>                         | 28.8 V   |  |
| Input current   |  |  |
| from load voltage L+ (without load), max.                                       | 120 mA   |  |
| from backplane bus 5 V DC, max.   | 200 mA   |  |
| Power loss  |  |  |
| Power loss, typ.  | 8 W  |  |
| Digital outputs   |  |  |
| Number of digital outputs   | 32   |  |
| Short-circuit protection  | Yes; Clocked electronically                    |  |
| Response threshold, typ.  | 0.75 to 1.5 A                                  |  |
| Limitation of inductive shutdown voltage to                                     | L+ (-45 V)                                     |  |
| Controlling a digital input   | Yes; possible                                  |  |
| Switching capacity of the outputs   |  |  |
| • on lamp load, max.  | 5 W  |  |
| Load resistance range   |  |  |
| <ul> <li>lower limit</li> </ul>   | 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  |  |
| <ul><li>for signal "1" permissible range, min.</li></ul>                        | 5 mA   |  |
| <ul><li>for signal "1" permissible range, max.</li></ul>                        | 600 A  |  |
| ■ for signal "0" residual current, max.   | 0.5 mA   |  |
| Parallel switching of two outputs   |  |  |
| <ul><li>for uprating</li></ul>  | Yes; possible (only outputs of the same group) |  |
| for redundant control of a load   | Yes; possible (only outputs of the same group) |  |
| Switching frequency   |  |  |
| <ul><li>with resistive load, max.</li></ul>                                     | 100 Hz   |  |
| <ul><li>with inductive load, max.</li></ul>                                     | 2 Hz   |  |
| <ul> <li>with inductive load (acc. to IEC 60947-5-1, DC13),<br/>max.</li> </ul> | 2 Hz   |  |
| on lamp load, max.  | 2 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                  |
| Cable length  |                      |
| <ul><li>shielded, max.</li></ul>                            | 1 000 m              |
| <ul><li>unshielded, max.</li></ul>                          | 600 m                |
| Interrupts/diagnostics/status information                   |                      |
| Diagnostics function  | Yes; Parameterizable |
| Alarms  |                      |
| <ul> <li>Diagnostic alarm</li> </ul>                        | Yes; Parameterizable |
| <ul> <li>Hardware interrupt</li> </ul>                      | Yes; Parameterizable |
| Diagnoses   |                      |
| <ul> <li>Diagnostic information readable</li> </ul>         | Yes                  |
| <ul><li>Wire-break</li></ul>                                | Yes; <0.15 mA        |
| Short-circuit   | Yes; > 1 A (typ.)    |
| Diagnostics indication LED                                  |                      |
| <ul><li>internal fault INTF (red)</li></ul>                 | Yes                  |
| <ul> <li>external fault EXTF (red)</li> </ul>               | Yes                  |
| <ul> <li>Status indicator digital output (green)</li> </ul> | Yes                  |
| Potential separation  |                      |
| Potential separation digital outputs                        |                      |
| <ul> <li>between the channels</li> </ul>                    | Yes                  |
| <ul> <li>between the channels, in groups of</li> </ul>      | 8                    |
| <ul> <li>between the channels and backplane bus</li> </ul>  | Yes                  |
| Isolation   |                      |
| Isolation tested with                                       | 500 V DC             |
| Dimensions  |                      |
| Width   | 25 mm                |
| Height  | 290 mm               |
| Depth   | 210 mm               |
| Weights   |                      |
| Weight, approx.   | 600 g                |
|   |                      |

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last modified: