# SIEMENS

**Data sheet**                                                                 **6ES7522-1BL10-0AA0**



SIMATIC S7-1500, digital output module, DQ32xDC 24V/0.5A BA, 32 channels in groups of 8, 4 A per group; the module supports the safety-oriented shutdown of load groups up to SIL2 according to EN IEC 62061:2021 and Category 3 / PL d according to EN ISO 13849-1:2015. delivery incl. front connector push-in

| General information | |
|---|---|
| Product type designation | DQ 32x24VDC/0.5A BA |
| HW functional status | From FS01 |
| Firmware version | V1.0.0 |
| ● FW update possible | Yes |
| Product function | |
| ● I&M data | Yes; I&M0 to I&M3 |
| ● Isochronous mode | No |
| ● Prioritized startup | Yes |
| Engineering with | |
| ● STEP 7 TIA Portal configurable/integrated from version | V13 / V13 |
| ● STEP 7 configurable/integrated from version | V5.5 SP3 / - |
| ● PROFIBUS from GSD version/GSD revision | V1.0 / V5.1 |
| ● PROFINET from GSD version/GSD revision | V2.3 / - |
| Operating mode | |
| ● DQ | Yes |
| ● DQ with energy-saving function | No |
| ● PWM | No |
| ● Oversampling | No |
| ● MSO | Yes |
| **Supply voltage** | |
| Rated value (DC) | 24 V |
| permissible range, lower limit (DC) | 19.2 V |
| permissible range, upper limit (DC) | 28.8 V |
| Reverse polarity protection | Yes; through internal protection with 7 A per group |
| **Input current** | |
| Current consumption, max. | 60 mA |
| **output voltage / header** | |
| Rated value (DC) | 24 V |
| **Power** | |
| Power available from the backplane bus | 1.15 W |
| **Power loss** | |
| Power loss, typ. | 3.8 W |
| **Digital outputs** | |
| Type of digital output | Transistor |
| Number of digital outputs | 32 |
| Current-sourcing | Yes |
| Digital outputs, parameterizable | No |
| Short-circuit protection | Yes |

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| | |
|---|---|
| ● Response threshold, typ. | 1 A |
| Limitation of inductive shutdown voltage to | L+ (-53 V) |
| Controlling a digital input | Yes |
| **Switching capacity of the outputs** | |
| ● with resistive load, max. | 0.5 A |
| ● on lamp load, max. | 5 W |
| **Load resistance range** | |
| ● lower limit | 48 Ω |
| ● upper limit | 12 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, max. | 0.5 A |
| ● 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 logic links | Yes |
| ● for uprating | No |
| ● for redundant control of a load | Yes |
| **Switching frequency** | |
| ● with resistive load, max. | 100 Hz |
| ● with inductive load, max. | 0.5 Hz; According to IEC 60947-5-1, DC-13 |
| ● on lamp load, max. | 10 Hz |
| **Total current of the outputs** | |
| ● Current per channel, max. | 0.5 A; see additional description in the manual |
| ● Current per group, max. | 4 A; see additional description in the manual |
| ● Current per module, max. | 16 A; see additional description in the manual |
| **Cable length** | |
| ● shielded, max. | 1 000 m |
| ● unshielded, max. | 600 m |
| **Interrupts/diagnostics/status information** | |
| Diagnostics function | No |
| Substitute values connectable | No |
| **Alarms** | |
| ● Diagnostic alarm | No |
| ● Maintenance interrupt | No |
| **Diagnoses** | |
| ● Monitoring the supply voltage | No |
| ● Wire-break | No |
| ● Short-circuit | No |
| ● Group error | No |
| **Diagnostics indication LED** | |
| ● RUN LED | Yes; green LED |
| ● ERROR LED | Yes; red LED |
| ● Monitoring of the supply voltage (PWR-LED) | Yes; green LED |
| ● Channel status display | Yes; green LED |
| ● for channel diagnostics | No |
| ● for module diagnostics | No |
| **Potential separation** | |
| **Potential separation channels** | |
| ● between the channels | No |
| ● between the channels, in groups of | 8 |
| ● between the channels and backplane bus | Yes |
| **Isolation** | |
| Isolation tested with | 707 V DC (type test) |
| **Standards, approvals, certificates** | |
| Suitable for safety functions | No |
| Suitable for safety-related tripping of standard modules | Yes; From FS02 |
| **Highest safety class achievable for safety-related tripping of standard modules** | |
| ● Performance level according to ISO 13849-1 | PL d |

| | |
|---|---|
| ● Category according to ISO 13849-1 | Cat. 3 |
| ● SIL acc. to IEC 62061 | SIL 2 |
| ● remark on safety-oriented shutdown | https://support.industry.siemens.com/cs/de/de/view/39198632 |
| **Ambient conditions** | |
| Ambient temperature during operation | |
| ● horizontal installation, min. | -30 °C; from FS04 |
| ● horizontal installation, max. | 60 °C |
| ● vertical installation, min. | -30 °C; from FS04 |
| ● vertical installation, max. | 40 °C |
| Altitude during operation relating to sea level | |
| ● Installation altitude above sea level, max. | 5 000 m; Restrictions for installation altitudes > 2 000 m, see manual |
| **Dimensions** | |
| Width | 25 mm |
| Height | 147 mm |
| Depth | 129 mm |
| **Weights** | |
| Weight, approx. | 280 g |
| **Other** | |
| Note: | Supplied incl. 40-pole push-in front connectors |
| **last modified:** | 5/6/2022 ↗ |