SIEMENS

## Data sheet 6ES7323-1BL00-0AA0



Figure similar

SIMATIC S7-300, Digital module SM 323, isolated, 16 DI and 16 DO, 24 V DC, 0.5 A, Total current 4A, 1x 40-pole

| | |
|---|---|
| **Supply voltage** | |
| Load voltage L+ | |
| ● Rated value (DC) | 24 V |
| ● permissible range, lower limit (DC) | 20.4 V |
| ● permissible range, upper limit (DC) | 28.8 V |
| **Input current** | |
| from load voltage L+ (without load), max. | 80 mA |
| from backplane bus 5 V DC, max. | 80 mA |
| **Power loss** | |
| Power loss, typ. | 6.5 W |
| **Digital inputs** | |
| Number of digital inputs | 16 |
| Input characteristic curve in accordance with IEC 61131, type 1 | Yes |
| Number of simultaneously controllable inputs | |
| horizontal installation | |
| — up to 40 °C, max. | 16 |
| — up to 60 °C, max. | 8 |
| vertical installation | |
| — up to 40 °C, max. | 16 |
| Input voltage | |
| ● Type of input voltage | DC |
| ● Rated value (DC) | 24 V |
| ● for signal "0" | -30 to +5 V |
| ● for signal "1" | 13 to 30V |
| Input current | |
| ● for signal "1", typ. | 7 mA |
| Input delay (for rated value of input voltage) | |
| for standard inputs | |
| — at "0" to "1", min. | 1.2 ms |
| — at "0" to "1", max. | 4.8 ms |
| — at "1" to "0", min. | 1.2 ms |
| — at "1" to "0", max. | 4.8 ms |
| Cable length | |
| ● shielded, max. | 1 000 m |
| ● unshielded, max. | 600 m |
| **Digital outputs** | |
| Number of digital outputs | 16 |
| Short-circuit protection | Yes |
| ● Response threshold, typ. | 1 A |


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| | |
|---|---|
| Limitation of inductive shutdown voltage to | L+ (-48 V) |
| Controlling a digital input | Yes |
| Switching capacity of the outputs | |
| ● on lamp load, max. | 5 W |
| Load resistance range | |
| ● lower limit | 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 |
| ● for signal "1" permissible range, min. | 5 mA |
| ● for signal "1" permissible range, max. | 0.6 A |
| ● for signal "1" minimum load current | 5 mA |
| ● 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 uprating | No |
| ● for redundant control of a load | Yes; only outputs of the same group |
| Switching frequency | |
| ● with resistive load, max. | 100 Hz |
| ● with inductive load, max. | 0.5 Hz |
| ● on lamp load, max. | 100 Hz |
| Total current of the outputs (per group) | |
| horizontal installation | |
| — up to 40 °C, max. | 4 A |
| — up to 60 °C, max. | 3 A |
| vertical installation | |
| — up to 40 °C, max. | 2 A |
| Cable length | |
| ● shielded, max. | 1 000 m |
| ● unshielded, max. | 600 m |
| **Encoder** | |
| Connectable encoders | |
| ● 2-wire sensor | Yes |
| — permissible quiescent current (2-wire sensor), max. | 1.5 mA |
| **Interrupts/diagnostics/status information** | |
| Alarms | No |
| Diagnostics function | No |
| Diagnostics indication LED | |
| ● Status indicator digital input (green) | Yes |
| ● Status indicator digital output (green) | Yes |
| **Potential separation** | |
| Potential separation digital inputs | |
| ● between the channels | Yes |
| ● between the channels, in groups of | 16 |
| ● between the channels and backplane bus | Yes; Optocoupler |
| Potential separation digital outputs | |
| ● between the channels | Yes |
| ● between the channels, in groups of | 8 |
| ● between the channels and backplane bus | Yes; Optocoupler |
| **Isolation** | |
| Isolation tested with | 500 V DC |
| **connection method** | |
| required front connector | 40-pin |
| **Dimensions** | |
| Width | 40 mm |
| Height | 125 mm |


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| | |
|---|---|
| Depth | 120 mm |

## Weights

| | |
|---|---|
| Weight, approx. | 260 g |

## Classifications

| | Version | Classification |
|---|---|---|
| eClass | 14 | 27-24-22-04 |
| eClass | 12 | 27-24-22-04 |
| eClass | 9.1 | 27-24-22-04 |
| eClass | 9 | 27-24-22-04 |
| eClass | 8 | 27-24-22-04 |
| eClass | 7.1 | 27-24-22-04 |
| eClass | 6 | 27-24-22-04 |
| ETIM | 9 | EC001419 |
| ETIM | 8 | EC001419 |
| ETIM | 7 | EC001419 |
| IDEA | 4 | 3566 |
| UNSPSC | 15 | 32-15-17-05 |

## Approvals / Certificates

### General Product Approval

Manufacturer Declaration

### EMV

### EMV

### For use in hazardous locations

FM

### For use in hazardous locations

Miscellaneous

CCC-Ex

### Marine / Shipping

### Marine / Shipping

NK / Nippon Kaiji Kyokai

CCS (China Classification Society)

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