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## Data sheet 6ES7223-1PL22-0XA0




Figure similar

***Spare part*** SIMATIC S7-200, Digital I/O EM 223, only for S7-22X CPU, 16 DI 24 V DC, Sink/Source, 16 DO relay, 2 A/channel

| | |
|---|---|
| **Supply voltage** | |
| Load voltage L+ | |
| ● Rated value (DC) | 24 V |
| ● permissible range, lower limit (DC) | 5 V |
| ● permissible range, upper limit (DC) | 30 V |
| Load voltage L1 | |
| ● Rated value (AC) | 230 V; 24V AC to 230V AC |
| ● permissible range, lower limit (AC) | 5 V |
| ● permissible range, upper limit (AC) | 250 V |
| **Input current** | |
| from external supply (24 V DC), max. | 72 mA |
| from backplane bus 5 V DC, max. | 150 mA |
| from coil current, max. | 9 mA; for each output on signal "1" |
| **Power loss** | |
| Power loss, typ. | 6 W |
| **Digital inputs** | |
| Number of digital inputs | 16 |
| Input voltage | |
| ● Type of input voltage | DC |
| ● Rated value (DC) | 24 V |
| ● for signal "0" | 0 to 5 V |
| ● for signal "1" | 15 V DC to 30 V DC |
| Input current | |
| ● for signal "1", typ. | 4 mA |
| Input delay (for rated value of input voltage) | |
| for standard inputs | |
| — at "0" to "1", max. | 4.5 ms |
| **Digital outputs** | |
| Number of digital outputs | 16; Relays |
| Short-circuit protection | No |
| Output voltage | |
| ● for signal "0", max. | 0.1 V; with 10 kOhm load |
| ● for signal "1", min. | L+/L1 |
| Output current | |
| ● for signal "1" rated value | 2 000 mA |
| Total current of the outputs (per group) | |


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| | |
|---|---|
| all mounting positions | |
| — Current per conductor/group, max. | 8 A |
| Relay outputs | |
| ● Number of operating cycles, max. | 10 000 000; mechanically 10 million, at rated load voltage 100 000 |
| Switching capacity of contacts | |
| — with inductive load, max. | 0.75 A; each output |
| — on lamp load, max. | 200 W; 30 W with DC, 200 W with AC |
| — with resistive load, max. | 0.75 A; each output |
| Cable length | |
| ● shielded, max. | 500 m |
| ● unshielded, max. | 150 m |
| **Encoder** | |
| Connectable encoders | |
| ● 2-wire sensor | Yes |
| — permissible quiescent current (2-wire sensor), max. | 1 mA |
| **Potential separation** | |
| Potential separation digital inputs | |
| ● Potential separation digital inputs | Yes; Optocoupler |
| ● between the channels, in groups of | 8 |
| Potential separation digital outputs | |
| ● Potential separation digital outputs | Yes; Relays |
| ● between the channels, in groups of | 4 |
| **Isolation** | |
| Isolation tested with | 500 V AC |
| **Connection method** | |
| Plug-in I/O terminals | Yes |
| **Dimensions** | |
| Width | 137.5 mm |
| Height | 80 mm |
| Depth | 62 mm |
| **Weights** | |
| Weight, approx. | 400 g |

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