



SIMATIC ET 200AL, IO-Link, DI 16x 24 V DC, 8x M12, Degree of protection IP67

| General information | |
|---|---|
| Product type designation | IO-Link DI 16x24VDC |
| HW functional status | FS01 |
| Firmware version | V1.0.x |
| Vendor identification (VendorID) | 42 |
| Device identifier (DeviceID) | 229380 |
| Engineering with | |
| <ul style="list-style-type: none"> • IODD file | Yes |
| Supply voltage | |
| Load voltage 1L+ | |
| <ul style="list-style-type: none"> • Rated value (DC) | 24 V; Supply from 1Us+ of the IO-Link master |
| <ul style="list-style-type: none"> • permissible range, lower limit (DC) | 18 V |
| <ul style="list-style-type: none"> • permissible range, upper limit (DC) | 30 V |
| <ul style="list-style-type: none"> • Reverse polarity protection | Yes; Against destruction; encoder power supply outputs applied with reversed polarity |
| Input current | |
| Current consumption (rated value) | 20 mA; without load |
| Encoder supply | |
| Number of outputs | 8; Supply from 1Us+ of the IO-Link master |
| 24 V encoder supply | |
| <ul style="list-style-type: none"> • Short-circuit protection | Yes; per module, electronic |
| <ul style="list-style-type: none"> • Output current, max. | 0.7 A; Total current of all encoders (depending on IO-Link master supply via 1Us+) |
| Power loss | |
| Power loss, typ. | 2.4 W |
| Digital inputs | |
| Number of digital inputs | 16 |
| Input characteristic curve in accordance with IEC 61131, type 3 | Yes |
| Number of simultaneously controllable inputs | |
| all mounting positions | |
| — up to 55 °C, max. | 16 |
| Input voltage | |
| <ul style="list-style-type: none"> • Rated value (DC) | 24 V |
| <ul style="list-style-type: none"> • for signal "0" | -30 to +5 V |
| <ul style="list-style-type: none"> • for signal "1" | +11 to +30V |
| Input current | |
| <ul style="list-style-type: none"> • for signal "1", typ. | 3 mA |
| Input delay (for rated value of input voltage) | |
| for standard inputs | |
| — at "0" to "1", min. | 1.2 ms |

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| — 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 | |
| • unshielded, max. | 30 m |
| Encoder | |
| Connectable encoders | |
| • 2-wire sensor | Yes |
| — permissible quiescent current (2-wire sensor), max. | 1.5 mA |
| IO-Link | |
| IO-Link protocol 1.1 | Yes |
| Transmission rate | 38.4 kBd (COM2) |
| Cycle time, min. | 2.5 ms |
| Size of process data, input per module | 2 byte |
| Size of process data, output per module | 0 byte |
| Supported IO-Link profiles | common profile |
| Cable length unshielded, max. | 20 m |
| Connection of IO-Link devices | |
| • Port type A | Yes |
| Interrupts/diagnostics/status information | |
| Alarms | |
| • Diagnostic alarm | Yes; Parameterizable |
| Diagnoses | |
| • Short-circuit | Yes; Sensor supply to M; module by module |
| Diagnostics indication LED | |
| • Channel status display | Yes; green LED |
| • for module diagnostics | Yes; green/red LED |
| Potential separation | |
| Potential separation channels | |
| • between the channels | No |
| • between the channels and the power supply of the electronics | No |
| Isolation | |
| Isolation tested with | 707 V DC (type test) |
| Degree and class of protection | |
| IP degree of protection | IP65/67 |
| Ambient conditions | |
| Ambient temperature during operation | |
| • min. | -30 °C |
| • max. | 55 °C |
| connection method | |
| Design of electrical connection for the inputs and outputs | M12, 5-pin, A-coded |
| Type of electrical connection for IO-Link | M12, 5-pin, A-coded |
| Dimensions | |
| Width | 45 mm |
| Height | 159 mm |
| Depth | 40 mm |
| Weights | |
| Weight, approx. | 155 g |

last modified: 8/16/2023 