



Figure similar

*** spare part *** SIMATIC DP, ET 200eco PN, 16 DI 24 V DC; 8xM12, duplicate assignment; degree of protection IP67

| General information | |
|--|--------------------|
| Vendor identification (VendorID) | 002AH |
| Device identifier (DeviceID) | 0306H |
| Supply voltage | |
| Rated value (DC) | 24 V |
| Reverse polarity protection | Yes |
| power supply according to NEC Class 2 required | Yes |
| Input current | |
| Current consumption, typ. | 100 mA |
| from supply voltage 1L+, max. | 4 A |
| Encoder supply | |
| Number of outputs | 8 |
| 24 V encoder supply | |
| <ul style="list-style-type: none"> Short-circuit protection | Yes; Electronic |
| <ul style="list-style-type: none"> Output current, max. | 100 mA; per output |
| Power loss | |
| Power loss, typ. | 6.5 W |
| Digital inputs | |
| Number of digital inputs | 16 |
| <ul style="list-style-type: none"> in groups of | 2 |
| Input characteristic curve in accordance with IEC 61131, type 3 | Yes |
| Number of simultaneously controllable inputs | |
| all mounting positions | |
| — up to 60 °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" | -3 to +5V |
| <ul style="list-style-type: none"> for signal "1" | +11 to +30V |
| Input current | |
| <ul style="list-style-type: none"> for signal "1", typ. | 7 mA |
| Input delay (for rated value of input voltage) | |
| for standard inputs | |
| — at "0" to "1", max. | typically 3 ms |
| — at "1" to "0", max. | typically 3 ms |
| Cable length | |
| <ul style="list-style-type: none"> unshielded, max. | 30 m |
| Encoder | |
| Connectable encoders | |

| | |
|---|----------------------------------|
| <ul style="list-style-type: none"> • 2-wire sensor | Yes |
| <ul style="list-style-type: none"> — permissible quiescent current (2-wire sensor), max. | 1.5 mA |
| Interfaces | |
| Transmission procedure | 100BASE-TX |
| Number of PROFINET interfaces | 1 |
| 1. Interface | |
| Interface types | |
| <ul style="list-style-type: none"> • M12 port | Yes |
| <ul style="list-style-type: none"> • integrated switch | Yes |
| PROFINET IO Device | |
| Services | |
| <ul style="list-style-type: none"> — IRT with the option "high flexibility" | Yes |
| <ul style="list-style-type: none"> — Prioritized startup | Yes |
| Interface types | |
| M12 port | |
| <ul style="list-style-type: none"> • Autonegotiation | Yes |
| <ul style="list-style-type: none"> • Autocrossing | Yes |
| <ul style="list-style-type: none"> • Transmission rate, max. | 100 Mbit/s |
| Protocols | |
| Supports protocol for PROFINET IO | Yes |
| PROFINET CBA | No |
| PROFIsafe | No |
| Redundancy mode | |
| Media redundancy | |
| <ul style="list-style-type: none"> — MRP | Yes |
| Open IE communication | |
| <ul style="list-style-type: none"> • TCP/IP | No |
| <ul style="list-style-type: none"> • SNMP | Yes |
| <ul style="list-style-type: none"> • DCP | Yes |
| <ul style="list-style-type: none"> • LLDP | Yes |
| <ul style="list-style-type: none"> • ping | Yes |
| <ul style="list-style-type: none"> • ARP | Yes |
| Interrupts/diagnostics/status information | |
| Diagnostics function | Yes |
| Alarms | |
| <ul style="list-style-type: none"> • Diagnostic alarm | Yes |
| Diagnoses | |
| <ul style="list-style-type: none"> • Diagnostic information readable | Yes |
| <ul style="list-style-type: none"> • Monitoring the supply voltage | Yes; green "ON" LED |
| <ul style="list-style-type: none"> • Wire-break in signal transmitter cable | Yes |
| <ul style="list-style-type: none"> • Short-circuit encoder supply | Yes; Per channel group |
| <ul style="list-style-type: none"> • Group error | Yes; Red/yellow "SF/MT" LED |
| Potential separation | |
| between the load voltages | Yes |
| between load voltage and all other switching components | No |
| between Ethernet and electronics | Yes |
| Potential separation channels | |
| <ul style="list-style-type: none"> • between the channels | No |
| Isolation | |
| tested with | |
| <ul style="list-style-type: none"> • 24 V DC circuits | 707 V DC (type test) |
| <ul style="list-style-type: none"> • Test voltage for interface, rms value [Vrms] | 1 500 V; According to IEEE 802.3 |
| Degree and class of protection | |
| IP degree of protection | IP65/67 |
| Standards, approvals, certificates | |
| Use in hazardous areas | |
| <ul style="list-style-type: none"> • Explosion protection category for gas | ATEX II 3G Ex nA II T4 |
| <ul style="list-style-type: none"> • Explosion protection category for dust | ATEX II 3D Ex tc IIIC T90°C Dc |

| Connection method | |
|---------------------------------|---------------------------------|
| Design of electrical connection | 4/5-pin M12 circular connectors |
| Dimensions | |
| Width | 60 mm |
| Height | 175 mm |
| Depth | 49 mm |
| Weights | |
| Weight, approx. | 910 g |
| Classifications | |

| | Version | Classification |
|--------|---------|----------------|
| eClass | 14 | 27-24-26-04 |
| eClass | 12 | 27-24-26-04 |
| eClass | 9.1 | 27-24-26-04 |
| eClass | 9 | 27-24-26-04 |
| eClass | 8 | 27-24-26-04 |
| eClass | 7.1 | 27-24-26-04 |
| eClass | 6 | 27-24-26-04 |
| ETIM | 10 | EC001599 |
| ETIM | 9 | EC001599 |
| ETIM | 8 | EC001599 |
| ETIM | 7 | EC001599 |
| IDEA | 4 | 3566 |
| UNSPSC | 15 | 32-15-17-05 |

Approvals / Certificates

General Product Approval



[Miscellaneous](#)

[Manufacturer Declaration](#)



General Product Approval

EMV

For use in hazardous locations



[China RoHS](#)



For use in hazardous locations

Maritime application

[CCC-Ex](#)



[Miscellaneous](#)

[CCC-Ex](#)



Maritime application



[NK / Nippon Kaiji Kyokai](#)



[CCS \(China Classification Society\)](#)

[KR \(Korean Register of Shipping\)](#)

Industrial Communication

[PROFINET](#)

last modified:

10/23/2025 