



SIMATIC DP, ET 200ECO PN, 8 DI 24 V DC; 4xM12, 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 | 4 |
| 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. | 5.5 W |
| Digital inputs | |
| Number of digital inputs | 8 |
| <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. | 8 |
| 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 | |

- 2-wire sensor
- permissible quiescent current (2-wire sensor), max.

Yes
1.5 mA

Interfaces

| | |
|-------------------------------|------------|
| Transmission procedure | 100BASE-TX |
| Number of PROFINET interfaces | 1 |

1. Interface

| | |
|---------------------|-----|
| Interface types | |
| • M12 port | Yes |
| • integrated switch | Yes |

Interface types

| | |
|---------------------------|------------|
| M12 port | |
| • Autonegotiation | Yes |
| • Autocrossing | Yes |
| • Transmission rate, max. | 100 Mbit/s |

Protocols

| | |
|-----------------------------------|-----|
| Supports protocol for PROFINET IO | Yes |
| PROFINET CBA | No |
| PROFIsafe | No |

PROFINET IO Device

| | |
|--|-----|
| Services | |
| — IRT with the option "high flexibility" | Yes |
| — Prioritized startup | Yes |

Redundancy mode

| | |
|------------------|-----|
| Media redundancy | |
| — MRP | Yes |

Open IE communication

| | |
|----------|-----|
| • TCP/IP | No |
| • SNMP | Yes |
| • DCP | Yes |
| • LLDP | Yes |
| • ping | Yes |
| • ARP | Yes |

Interrupts/diagnostics/status information

| | |
|----------------------|-----|
| Diagnostics function | Yes |
|----------------------|-----|

Alarms

| | |
|--------------------|-----|
| • Diagnostic alarm | Yes |
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Diagnoses

| | |
|--|-----------------------------|
| • Diagnostic information readable | Yes |
| • Monitoring the supply voltage | Yes; green "ON" LED |
| • Wire-break in signal transmitter cable | Yes |
| • Short-circuit encoder supply | Yes; Per channel group |
| • 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

| | |
|------------------------|----|
| • between the channels | No |
|------------------------|----|

Isolation

| | |
|--|----------------------------------|
| tested with | |
| • 24 V DC circuits | 707 V DC (type test) |
| • 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 |
|-------------------------|---------|

connection method / header

| | |
|---------------------------------|---------------------------------|
| Design of electrical connection | 4/5-pin M12 circular connectors |
|---------------------------------|---------------------------------|

Dimensions

| | |
|-------|-------|
| Width | 30 mm |
|-------|-------|

| | |
|-----------------------|--|
| Height | 200 mm |
| Depth | 49 mm |
| Weights | |
| Weight, approx. | 550 g |
| last modified: | 10/25/2021  |