



Figure similar

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	
• Short-circuit protection	Yes; Electronic
• Output current, max.	100 mA; per output
Power loss	
Power loss, typ.	6.5 W
Digital inputs	
Number of digital inputs	16
• 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	
• Rated value (DC)	24 V
• for signal "0"	-3 to +5V
• for signal "1"	+11 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", max.	typically 3 ms
— at "1" to "0", max.	typically 3 ms
Cable length	
• unshielded, max.	30 m
Encoder	
Connectable encoders	
• 2-wire sensor	Yes

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

### 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

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

## Dimensions

- |        |        |
|--------|--------|
| Width  | 60 mm  |
| Height | 175 mm |
| Depth  | 49 mm  |

## Weights

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Weight, approx.

910 g

**last modified:**

10/25/2021 