



*** spare part *** SIMATIC DP, ET 200eco PN, 16 DO 24 V DC/1.3 A; 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
Load voltage 1L+	
• Rated value (DC)	24 V
• permissible range, lower limit (DC)	20.4 V
• permissible range, upper limit (DC)	28.8 V
• Reverse polarity protection	Yes
Load voltage 2L+	
• Rated value (DC)	24 V
• permissible range, lower limit (DC)	20.4 V
• permissible range, upper limit (DC)	28.8 V
• Reverse polarity protection	Yes
Input current	
Current consumption, typ.	100 mA
from supply voltage 1L+, max.	4 A
from load voltage 1L+ (unswitched voltage)	4 A
from load voltage 2L+, max.	4 A
Power loss	
Power loss, typ.	5.5 W
Digital outputs	
Number of digital outputs	16
• in groups of	8
Short-circuit protection	Yes
• Response threshold, typ.	1.8 A
Limitation of inductive shutdown voltage to	Typ. (L1+, L2+) -47 V
Controlling a digital input	Yes
Switching capacity of the outputs	
• on lamp load, max.	5 W
Output current	
• for signal "1" rated value	1.3 A; Maximum
• for signal "0" residual current, max.	1.5 mA
Parallel switching of two outputs	
• for uprating	No
• for redundant control of a load	Yes
Switching frequency	

<ul style="list-style-type: none"> • with resistive load, max. 	100 Hz
<ul style="list-style-type: none"> • with inductive load, max. 	0.5 Hz
<ul style="list-style-type: none"> • on lamp load, max. 	1 Hz
Total current of the outputs (per group)	
all mounting positions	
— up to 60 °C, max.	3.9 A
Cable length	
<ul style="list-style-type: none"> • unshielded, max. 	30 m
Interfaces	
Transmission procedure	100BASE-TX
Number of PROFINET interfaces	1
1. Interface	
Interface types	
<ul style="list-style-type: none"> • integrated switch 	Yes
PROFINET IO Device	
Services	
— IRT with the option "high flexibility"	Yes
— 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	
— 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 actuator cable 	Yes
<ul style="list-style-type: none"> • Short-circuit 	Yes
<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	

Suitable for safety-related tripping of standard modules	Yes
Highest safety class achievable for safety-related tripping of standard modules	
<ul style="list-style-type: none"> Performance level according to ISO 13849-1 Category according to ISO 13849-1 SIL acc. to IEC 62061 remark on safety-oriented shutdown 	PL d Cat. 3 SIL 2 https://support.industry.siemens.com/cs/de/en/view/39198632
Use in hazardous areas	
<ul style="list-style-type: none"> Explosion protection category for gas Explosion protection category for dust 	ATEX II 3G Ex nA II T4 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

	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](#)



[KC](#)

General Product Approval **EMV** **For use in hazardous locations**



[CCC-Ex](#)



For use in hazardous locations **Maritime application**

[Miscellaneous](#)



[NK / Nippon Kaiji Kyokai](#)

Maritime application **Industrial Communication**



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



[PROFINET](#)

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