

SIMATIC DP, ET 200ECO PN, 4 AO U/I; 4xM12, 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
Input current	
Current consumption, typ.	280 mA
Actuator supply	
Number of outputs	4
Short-circuit protection	Yes; Electronic at 1.4 A
Output current	
• Rated value	1 A; Maximum
Power loss	
Power loss, typ.	5.5 W
Analog outputs	
Number of analog outputs	4

Voltage output, short-circuit protection	Yes
Voltage output, short-circuit current, max.	30 mA
Current output, no-load voltage, max.	20 V
Output ranges, voltage	
• 0 to 10 V	Yes
• 1 V to 5 V	Yes
• -10 V to +10 V	Yes
Output ranges, current	
• 0 to 20 mA	Yes
• -20 mA to +20 mA	Yes
• 4 mA to 20 mA	Yes
Connection of actuators	
• for voltage output two-wire connection	Yes
• for current output two-wire connection	Yes
Load impedance (in rated range of output)	
• with voltage outputs, min.	1 k Ω
• with voltage outputs, capacitive load, max.	1 μ F
• with current outputs, max.	600 Ω
• with current outputs, inductive load, max.	1 mH
Destruction limits against externally applied voltages and currents	
• Voltages at the outputs towards MANA	28.8 V permanent, 35 V for max. 500 ms
Cable length	
• shielded, max.	30 m
Analog value generation for the outputs	
Analog value display	SIMATIC S7 format
Conversion principle	Resistor network
Integration and conversion time/resolution per channel	
• Resolution (incl. overrange)	15 bit + sign
• Conversion time (per channel)	1 ms
Settling time	
• for resistive load	2 ms
• for capacitive load	1.8 ms
• for inductive load	2 ms
Errors/accuracies	
Output ripple (relative to output range, bandwidth 0 to 50 kHz), (+/-)	U: \pm 0.6 mVrms; I: \pm 0.4 nArms
Linearity error (relative to output range), (+/-)	0.02 %
Temperature error (relative to output range), (+/-)	U: 0.001%/ $^{\circ}$ C; I: 0.0025%/ $^{\circ}$ C
Crosstalk between the outputs, min.	70 dB
Repeat accuracy in steady state at 25 $^{\circ}$ C (relative to output range), (+/-)	0.008 %

Interfaces	
Transmission procedure	100BASE-TX
Number of PROFINET interfaces	1
1. Interface	
Interface types	
<ul style="list-style-type: none"> integrated switch 	Yes
<ul style="list-style-type: none"> M12 port 	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
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
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
Substitute values connectable	Yes
Alarms	
<ul style="list-style-type: none"> Diagnostic alarm 	Yes
Diagnostic messages	
<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 	Yes; Channel-by-channel with current output
<ul style="list-style-type: none"> Short-circuit 	Yes; Channel-by-channel with voltage output

- 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

Permissible potential difference

between M internally and the outputs 10 Vpp AC

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

Weight, approx. 930 g

last modified: 06/09/2020