



SIMATIC DP, ET 200ECO PN, 4 AO U/I; 4 X M12, DEGREE OF PROTECTION IP67

General information	
Vendor identification (VendorID)	002AH
Device identifier (DeviceID)	0306H
Supply voltage	
Rated value (DC)	Yes
• 24 V DC	Yes
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.	280 mA
Encoder supply	
Number of outputs	4
24 V encoder supply	
• short-circuit protection	Yes; Electronic at 1.4 A
• Output current, max.	1 A
Power losses	
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

<b>Output ranges, voltage</b>	
• 0 to 10 V	Yes
• 1 V to 5 V	Yes
• -10 V to +10 V	Yes
<b>Output ranges, current</b>	
• 0 to 20 mA	Yes
• -20 mA to +20 mA	Yes
• 4 mA to 20 mA	Yes
<b>Connection of actuators</b>	
• for voltage output two-wire connection	Yes
• for current output two-wire connection	Yes
<b>Load impedance (in rated range of output)</b>	
• with voltage outputs, min.	1 k $\Omega$
• with voltage outputs, capacitive load, max.	1 $\mu$ F
• with current outputs, max.	600 $\Omega$
• with current outputs, inductive load, max.	1 mH
<b>Destruction limits against externally applied voltages and currents</b>	
• Voltages at the outputs towards MANA	28.8 V permanent, 35 V for max. 500 ms
<b>Cable length</b>	
• shielded, max.	30 m
<b>Analog value creation</b>	
Analog value display	SIMATIC S7 format
Measurement principle	Resistor network
<b>Integration and conversion time/resolution per channel</b>	
• Resolution (incl. overrange)	15 bits + sign
• Conversion time (per channel)	1 ms
<b>Settling time</b>	
• for resistive load	2 ms
• for capacitive load	1.8 ms
• for inductive load	2 ms
<b>Errors/accuracies</b>	
Output ripple (based on output area, 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%/°C; I: 0.0025%/°C
Crosstalk between the outputs, min.	70 dB
Repeat accuracy in steady state at 25 °C (relative to output area), (+/-)	0.008 %
<b>Interfaces</b>	
Transmission procedure	100BASE-TX
Transmission rate, max.	100 Mbit/s

PROFINET IO	
• Number of PROFINET interfaces	1
• Autocrossing	Yes
• Automatic detection of transmission speed	Yes
• Integrated switch	Yes
PROFINET IO Device	
— IRT with the option "high flexibility" supported	Yes
— Prioritized startup	Yes
Protocols	
PROFINET IO	Yes
PROFINET CBA	No
Supports protocol for PROFI-safe	No
Protocols (Ethernet)	
• SNMP	Yes
• DCP	Yes
• LLDP	Yes
• ping	Yes
• ARP	Yes
Interrupts/diagnostics/status information	
Status indicator	Yes
Substitute values connectable	Yes
Alarms	
• Diagnostic alarm	Yes
Diagnostic messages	
• Diagnostic functions	Yes
• Diagnostic information readable	Yes
• Monitoring the supply voltage	Yes; Green "ON" LED
• Wire break	Yes; Channel-by-channel with current output
• Short circuit	Yes; Channel-by-channel with voltage output
• Group error	Yes; Red/yellow "SF/MT" LED
Galvanic isolation	
between the load voltages	Yes
between load voltage and all other switching components	No
between Ethernet and electronics	Yes
Galvanic isolation analog outputs	
• between the channels	No
Permissible potential difference	
between M internally and the outputs	10 Vpp AC

## Degree and class of protection

Degree of protection to EN 60529

- IP65
- IP66
- IP67

Yes

Yes

Yes

## Connection method

M12

Yes

## Dimensions

Width

60 mm

Height

175 mm

Depth

49 mm

## Weights

Weight (without packaging)

930 g

**last modified:**

12.03.2015