



Figure similar

*** spare part *** SIMATIC DP, ET 200eco PN, 8 AI RTD/TC; 8x M12, 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; against destruction
power supply according to NEC Class 2 required	Yes
Input current	
Current consumption, typ.	110 mA
Power loss	
Power loss, typ.	2.8 W
Analog inputs	
Number of analog inputs	8
• For resistance/resistance thermometer measurement	8
• For thermocouple measurement	8
Input ranges (rated values), voltages	
• -80 mV to +80 mV	Yes
Input ranges (rated values), thermocouples	
• Type E	Yes
• Type J	Yes
• Type K	Yes
• Type N	Yes
Input ranges (rated values), resistance thermometer	
• Ni 100	Yes
• Ni 1000	Yes
• Ni 120	Yes
• Ni 200	Yes
• Ni 500	Yes
• Pt 100	Yes
• Pt 1000	Yes
• Pt 200	Yes
• Pt 500	Yes
Input ranges (rated values), resistors	
• 0 to 150 ohms	Yes
• 0 to 300 ohms	Yes
• 0 to 600 ohms	Yes
• 0 to 3000 ohms	Yes
Thermocouple (TC)	

Temperature compensation	
— parameterizable	Yes
— internal temperature compensation	Yes
— external temperature compensation with Pt100	Yes
— external temperature compensation with compensations socket	Yes
— dynamic reference temperature value	Yes
— for definable comparison point temperature	Yes
Cable length	
• shielded, max.	30 m
Analog value generation for the inputs	
Analog value display	SIMATIC S7 format
Measurement principle	integrating
Integration and conversion time/resolution per channel	
• Resolution with overrange (bit including sign), max.	16 bit
• Integration time, parameterizable	Yes
• Integration time (ms)	2/16.67/20/100 ms
• Interference voltage suppression for interference frequency f1 in Hz	500 / 60 / 50 / 10 Hz
• Conversion time (per channel)	4 / 19 / 22 / 102 ms
Smoothing of measured values	
• parameterizable	Yes
• Step: None	Yes; 1x cycle time
• Step: low	Yes; 4x cycle time
• Step: Medium	Yes; 16x cycle time
• Step: High	Yes; 64x cycle time
Encoder	
Number of connectable encoders, max.	8
Connection of signal encoders	
• for resistance measurement with two-wire connection	Yes
• for resistance measurement with three-wire connection	Yes
• for resistance measurement with four-wire connection	Yes
Errors/accuracies	
Linearity error (relative to input range), (+/-)	0.01 %
Temperature error (relative to input range), (+/-)	RTD: 0.0005%/°C; TC: 0.0035%/°C
Crosstalk between the inputs, min.	-85 dB
Repeat accuracy in steady state at 25 °C (relative to input range), (+/-)	0.008 %
Interference voltage suppression for $f = n \times (f1 \pm 1 \%)$, f1 = interference frequency	
• Series mode interference (peak value of interference < rated value of input range), min.	46 dB
• Common mode interference, min.	70 dB
Interfaces	
Transmission procedure	100BASE-TX
Number of PROFINET interfaces	1
1. Interface	
Interface types	
• integrated switch	Yes
PROFINET IO Device	
Services	
— Prioritized startup	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

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		
• Group error	Yes; Red/yellow "SF/MT" LED		
• Overflow/underflow	Yes		
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 the inputs and MANA (UCM)	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		
Standards, approvals, certificates			
Suitable for applications according to AMS 2750	Yes; Declaration of Conformity, see online support entry 109757262		
Suitable for applications according to CQI-9	Yes; Based on AMS 2750 E		
Use in hazardous areas			
• Explosion protection category for gas	ATEX gas explosion protection, Zone 2		
• Explosion protection category for dust	ATEX dust explosion protection, Zone 22		
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		
Classifications			
		Version	Classification
	eClass	14	27-24-26-01
	eClass	12	27-24-26-01
	eClass	9.1	27-24-26-01
	eClass	9	27-24-26-01
	eClass	8	27-24-26-01
	eClass	7.1	27-24-26-01
	eClass	6	27-24-26-01
	ETIM	10	EC001596

ETIM	9	EC001596
ETIM	8	EC001596
ETIM	7	EC001596
IDEA	4	3562
UNSPSC	15	32-15-17-05

Approvals / Certificates

General Product Approval

[Miscellaneous](#)
[China RoHS](#)
[Manufacturer Declaration](#)
[Declaration of Conformity](#)



General Product Approval
EMV
For use in hazardous locations


[KC](#)
[Metrological Approval](#)




For use in hazardous locations
Maritime application


[CCC-Ex](#)

[Miscellaneous](#)



Maritime application



[NK / Nippon Kaiji Kyokai](#)

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


Industrial Communication

[PROFINET](#)

last modified:
10/23/2025