6ES7141-6BF00-0AB0

Data sheet



SIMATIC DP, ET 200ECO PN, 8 DI 24 V DC; 4xM12, 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	4
24 V encoder supply	
 Short-circuit protection 	Yes; Electronic
 Output current, max. 	100 mA; per output
Power loss	
Power loss, typ.	5.5 W
Digital inputs	
Number of digital inputs	8
• 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.	8
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	4 : 11 0
— at "0" to "1", max.	typically 3 ms
— at "1" to "0", max.	typically 3 ms
Cable length	20
• unshielded, max.	30 m
Encoder	
Connectable encoders	

• 2-wire sensor	Yes
 permissible quiescent current (2-wire sensor), 	1.5 mA
max.	
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	. 555 1,7 10001 daily to 1222 002.0
IP degree of protection	IP65/67
	IF UUI UI
connection method / header	47 1 140 1
Design of electrical connection	4/5-pin M12 circular connectors
Dimensions	
Width	30 mm
	

Height	200 mm
Depth	49 mm
Weights	
Weight, approx.	550 g

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