SIEMENS

Data sheet

6ES7141-6BF00-0AB0



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	
— at "0" to "1", max.	typically 3 ms
— at "1" to "0", max.	typically 3 ms
Cable length	
unshielded, max.	30 m
Encoder	
Connectable encoders	
• 2-wire sensor	Yes
— permissible quiescent current (2-wire sensor), max.	1.5 mA

Interfaces	
Transmission procedure	100BASE-TX
Number of PROFINET interfaces	1
1. Interface	
Interface types	
• M12 port	Yes
• integrated switch	Yes
Interface types	165
M12 port • Autonegotiation	Yes
Autoregoliation Autocrossing	Yes
Transmission rate, max.	100 Mbit/s
Protocols	100 Mibius
Supports protocol for PROFINET IO	Yes
PROFINET CBA	No No
PROFISATE PROFISATE	No
PROFINET IO Device	NO
Services	
— IRT with the option "high flexibility"	Yes
Prioritized startup	Yes
— Prioritized startup Redundancy mode	100
Media redundancy	
— MRP	Yes
Open IE communication	1 00
TCP/IP	No
• SNMP	Yes
• DCP	Yes
• LLDP	Yes
• ping	Yes
• ARP	Yes
Interrupts/diagnostics/status information	165
Diagnostics function	Yes
Alarms	165
Diagnostic alarm	Yes
Diagnoses	165
Diagnostic information readable	Yes
	103
 Monitoring the supply voltage 	Yes; green "ON" LED
 Monitoring the supply voltage Wire-break in signal transmitter cable	Yes; green "ON" LED Yes
 Monitoring the supply voltage Wire-break in signal transmitter cable Short-circuit encoder supply	Yes; green "ON" LED Yes Yes; Per channel group
 Monitoring the supply voltage Wire-break in signal transmitter cable Short-circuit encoder supply Group error 	Yes; green "ON" LED Yes
 Monitoring the supply voltage Wire-break in signal transmitter cable Short-circuit encoder supply Group error Potential separation	Yes; green "ON" LED Yes Yes; Per channel group Yes; Red/yellow "SF/MT" LED
 Monitoring the supply voltage Wire-break in signal transmitter cable Short-circuit encoder supply Group error Potential separation between the load voltages 	Yes; green "ON" LED Yes Yes; Per channel group Yes; Red/yellow "SF/MT" LED Yes
Monitoring the supply voltage Wire-break in signal transmitter cable Short-circuit encoder supply Group error Potential separation between the load voltages between load voltage and all other switching components	Yes; green "ON" LED Yes Yes; Per channel group Yes; Red/yellow "SF/MT" LED Yes No
Monitoring the supply voltage Wire-break in signal transmitter cable Short-circuit encoder supply Group error Potential separation between the load voltages between load voltage and all other switching components between Ethernet and electronics	Yes; green "ON" LED Yes Yes; Per channel group Yes; Red/yellow "SF/MT" LED Yes
Monitoring the supply voltage Wire-break in signal transmitter cable Short-circuit encoder supply Group error Potential separation between the load voltages between load voltage and all other switching components between Ethernet and electronics Potential separation channels	Yes; green "ON" LED Yes Yes; Per channel group Yes; Red/yellow "SF/MT" LED Yes No Yes
Monitoring the supply voltage Wire-break in signal transmitter cable Short-circuit encoder supply Group error Potential separation between the load voltages between load voltage and all other switching components between Ethernet and electronics Potential separation channels between the channels	Yes; green "ON" LED Yes Yes; Per channel group Yes; Red/yellow "SF/MT" LED Yes No
Monitoring the supply voltage Wire-break in signal transmitter cable Short-circuit encoder supply Group error Potential separation between the load voltages between load voltage and all other switching components between Ethernet and electronics Potential separation channels between the channels Isolation	Yes; green "ON" LED Yes Yes; Per channel group Yes; Red/yellow "SF/MT" LED Yes No Yes
Monitoring the supply voltage Wire-break in signal transmitter cable Short-circuit encoder supply Group error Potential separation between the load voltages between load voltage and all other switching components between Ethernet and electronics Potential separation channels between the channels Isolation tested with	Yes; green "ON" LED Yes Yes; Per channel group Yes; Red/yellow "SF/MT" LED Yes No Yes No
Monitoring the supply voltage Wire-break in signal transmitter cable Short-circuit encoder supply Group error Potential separation between the load voltages between load voltage and all other switching components between Ethernet and electronics Potential separation channels between the channels between the channels between the channels 24 V DC circuits	Yes; green "ON" LED Yes Yes; Per channel group Yes; Red/yellow "SF/MT" LED Yes No Yes No Yes
Monitoring the supply voltage Wire-break in signal transmitter cable Short-circuit encoder supply Group error Potential separation between the load voltages between load voltage and all other switching components between Ethernet and electronics Potential separation channels between the channels Isolation tested with 24 V DC circuits Test voltage for interface, rms value [Vrms]	Yes; green "ON" LED Yes Yes; Per channel group Yes; Red/yellow "SF/MT" LED Yes No Yes No
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