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Data sheet 6ES7148-6JD00-0AB0



spare part SIMATIC DP, ET 200eco PN, IO-Link master, 4IO-L, 4xM12, degree of protection IP67

General information	
Vendor identification (VendorID)	002AH
Device identifier (DeviceID)	0306H
Product function	
● Isochronous mode	No
● IRT	No
Operating mode	
● IO-Link	Yes
● DI	Yes
● DQ	Yes; max. 100 mA
Supply voltage	
Rated value (DC)	24 V
Reverse polarity protection	Yes
power supply according to NEC Class 2 required	Yes
Load voltage 2L+	
● Rated value (DC)	24 V
● Reverse polarity protection	Yes; against destruction; load increasing
Input current	
Current consumption, typ.	100 mA
from supply voltage 1L+, max.	4 A
from load voltage 2L+, max.	4 A
Encoder supply	
Number of outputs	4
24 V encoder supply	
● Short-circuit protection	Yes; per channel, electronic
● Output current, max.	500 mA; Per channel
Power loss	
Power loss, typ.	4.8 W
IO-Link	
Number of ports	4
● of which simultaneously controllable	4
IO-Link protocol 1.0	Yes
IO-Link protocol 1.1	Yes
Transmission rate	4.8 kBaud (COM1); 38.4 kBaud (COM2), 230 kBaud (COM3)
Size of process data, input per port	32 byte
Size of process data, input per module	128 bytes + 4 bytes PQI
Size of process data, output per port	32 byte
Size of process data, output per module	128 byte
Memory size for device parameter	2 kbyte; for each port

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Master backup	Possible with function block IO_LINK_MASTER
Configuration without S7-PCT	Possible; autostart/manual function
Cable length unshielded, max.	20 m
Operating modes	
● IO-Link	Yes
● DI	Yes
● DQ	Yes; max. 100 mA
Connection of IO-Link devices	
● Port type A	Yes; via 3-core cable
● Port type B	Yes; Additional device supply: max. 2 A per port, max. 4 A per module
Interfaces	
Transmission procedure	100BASE-TX
Number of PROFINET interfaces	1
1. Interface	
Interface types	
● M12 port	Yes
● integrated switch	Yes
PROFINET IO Device	
Services	
— IRT with the option "high flexibility"	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
EtherNet/IP	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
● Short-circuit	Yes; Device supply to M
● 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
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	

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IP degree of protection	IP65/67
Standards, approvals, certificates	
Suitable for safety-related tripping of standard modules	No
Use in hazardous areas	
● Explosion protection category for gas	ATEX II 3G Ex nA II T4
● Explosion protection category for dust	ATEX II 3D Ex tc IIIC T90°C Dc
Connection method	
Design of electrical connection	3/5-pin M12 round connectors
Dimensions	
Width	30 mm
Height	200 mm
Depth	49 mm
Weights	
Weight, approx.	550 g

Classifications

	Version	Classification
eClass	16	27-24-26-08
eClass	14	27-24-26-08
eClass	12	27-24-26-08
eClass	9.1	27-24-26-08
eClass	9	27-24-26-08
eClass	8	27-24-26-08
eClass	7.1	27-24-26-08
eClass	6	27-24-26-08
ETIM	10	EC001604
ETIM	9	EC001604
ETIM	8	EC001604
ETIM	7	EC001604
IDEA	4	3564
UNSPSC	15	32-15-17-05

Approvals / Certificates

General Product Approval

Miscellaneous | Manufacturer Declaration

General Product Approval

China RoHS

EMV

For use in hazardous locations

For use in hazardous locations

CCC-Ex | Miscellaneous

CCC-Ex

Maritime application

Maritime application

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DNV



LRS

NK / Nippon Kaiji Kyokai



CCS (China Classification Society)

KR (Korean Register of Shipping)

Industrial Communication

PROFINET

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