SIEMENS

Data sheet

6ES7142-6BG00-0AB0

SIMATIC DP, ET 200ECO PN, 8 DO 24 V DC/1.3 A; 8xM12, Degree of protection IP67



Figure similar

General information	
	000411
Vendor identification (VendorID)	002AH
Device identifier (DeviceID)	0306H
Supply voltage	
Rated value (DC)	24 V
Reverse polarity protection	Yes
Load voltage 2L+	
Rated value (DC)	24 V
 Reverse polarity protection 	Yes
Input current	
Current consumption, typ.	100 mA
from supply voltage 1L+, max.	4 A
from load voltage 2L+, max.	4 A
Power loss	
Power loss, typ.	5.5 W
Digital outputs	

Normali and a finite line day day	
Number of digital outputs	8
• in groups of	
Short-circuit protection	Yes 1.8 A
Response threshold, typ.	
Limitation of inductive shutdown voltage to	Typ. (L1+, L2+) -47 V
Controlling a digital input	Yes
Switching capacity of the outputs	5.00
• on lamp load, max.	5 W
Output current	
 for signal "1" rated value 	1.3 A; Maximum
• for signal "0" residual current, max.	1.5 mA
Parallel switching of two outputs	
• for uprating	No
 for redundant control of a load 	Yes
Switching frequency	
 with resistive load, max. 	100 Hz
 with inductive load, max. 	0.5 Hz
• on lamp load, max.	1 Hz
Total current of the outputs (per group)	
all mounting positions	
— up to 60 °C, max.	3.9 A
Cable length	
● unshielded, max.	30 m
Interfaces	
Transmission procedure	100BASE-TX
Number of PROFINET interfaces	1
1. Interface	
Interface types	
 integrated switch 	Yes
Interface types	
M12 port	
Transmission procedure	100BASE-TX
 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
Open IE communication	
• TCP/IP	Νο
• SNMP	Yes
	Yes
• DCP	
• LLDP	Yes
• ping	Yes
• ARP	Yes
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Alarms	
Diagnostic alarm	Yes
Diagnostic messages	
 Diagnostic information readable 	Yes
 Monitoring the supply voltage 	Yes; Green "ON" LED
 Wire-break in actuator cable 	Yes
Short-circuit	Yes
Group error	Yes; Red/yellow "SF/MT" LED
Potential separation	
between the load voltages	Yes
between load voltage and all other switching	No
components	
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	
IP degree of protection	IP67
Standards, approvals, certificates	
Suitable for safety-related tripping of standard modules	Yes
Highest safety class achievable for safety-related trippin	ng of standard modules
 Performance level according to ISO 13849-1 	PL d
 Category according to ISO 13849-1 	Cat. 3
 SILCL according to IEC 62061 	SILCL 2
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.	910 g
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