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

Vendor identification (VendorID) Device identifier (DeviceID) Supply voltage Rated value (DC) Reverse polarity protection power supply according to NEC Class 2 required Load voltage 1L+ Rated value (DC) permissible range, lower limit (DC) permissible range, upper limit (DC) Reverse polarity protection Pes Rated value (DC) permissible range, upper limit (DC) Reverse polarity protection Yes Load voltage 2L+ Rated value (DC) permissible range, lower limit (DC) Reverse polarity protection Yes Load voltage 2L+ Rated value (DC) Permissible range, lower limit (DC) Reverse polarity protection Pes Load voltage 2L+ Reverse polarity protection Permissible range, lower limit (DC) Permissible range, lower limit (DC) Reverse polarity protection Pes Load voltage 1L+ (Load Voltage 1L+ (Load Voltage) A A From load voltage 1L+ (Load Voltage)	
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● Reverse polarity protection Yes Input current Current consumption, typ. 100 mA from supply voltage 1L+, max. 4 A	
Input current Current consumption, typ. from supply voltage 1L+, max. 100 mA 4 A	
Current consumption, typ. 100 mA from supply voltage 1L+, max. 4 A	
from supply voltage 1L+, max. 4 A	
from load voltage 1L+ (unswitched voltage) 4 A	
from load voltage 2L+, max. 4 A	
Power loss .	
Power loss, typ. 5.5 W	
Digital outputs	
Number of digital outputs 8	
• in groups of 4	
Short-circuit protection Yes	
• Response threshold, typ. 1.8 A	
Limitation of inductive shutdown voltage to Typ. (L1+, L2+) -47 V	
Controlling a digital input Yes	
Switching capacity of the outputs	
• 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	
 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	No
• TCP/IP	No You
SNMP DCP	Yes Yes
• DCP • LLDP	Yes
• LLDP • ping	Yes
• ARP	Yes
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Alarms	160
Diagnostic alarm	Yes
Diagnoses	
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 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		
IP degree of protection	IP65/67	
Standards, approvals, certificates		
Suitable for safety-related tripping of standard modules	Yes	
Highest safety class achievable for safety-related tripping of standard modules		
 Performance level according to ISO 13849-1 	PL d	
 Category according to ISO 13849-1 	Cat. 3	
 SIL acc. to IEC 62061 	SIL 2	
connection method / header		
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	