SIEMENS

Data sheet   **6ES7142-6BR00-0AB0**

Figure similar

SIMATIC DP, ET 200ECO PN, 8 DO 24 V DC/2 A; 8xM12, 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
Load voltage 1L+	
● Rated value (DC)	24 V
● permissible range, lower limit (DC)	20.4 V
● permissible range, upper limit (DC)	28.8 V
● Reverse polarity protection	Yes
Load voltage 2L+	
● Rated value (DC)	24 V
● permissible range, lower limit (DC)	20.4 V
● permissible range, upper limit (DC)	28.8 V
● Reverse polarity protection	Yes
Input current	
Current consumption, typ.	100 mA
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 W
Digital outputs	
Number of digital outputs	8
● in groups of	4
Short-circuit protection	Yes
● Response threshold, typ.	2.8 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.	10 W
Output current	
● for signal "1" rated value	2 A
● for signal "0" residual current, max.	1.5 mA
Parallel switching of two outputs	
● for uprating	No
● for redundant control of a load	Yes

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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		
• 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 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
● remark on safety-oriented shutdown	https://support.industry.siemens.com/cs/de/en/view/39198632
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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