## **SIEMENS**

## Data sheet

## 6ES7142-6BF50-0AB0

SIMATIC DP, ET 200ECO PN, 8 DO 24 V DC/0.5 A; 4xM12, Duplicate assignment, 1 load voltage supply DO; Degree of protection IP67



Figure similar

General information	
Vendor identification (VendorID)	002AH
	0306H
Device identifier (DeviceID)	03000
Supply voltage	
Rated value (DC)	24 V
Reverse polarity protection	Yes
Load voltage 2L+	
<ul> <li>Rated value (DC)</li> </ul>	24 V
<ul> <li>Reverse polarity protection</li> </ul>	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.	3 W
Digital outputs	

Number of digital outputs	8
• in groups of	8
Short-circuit protection	Yes
	0.7 A
Response threshold, typ.	
Limitation of inductive shutdown voltage to	Typ. (L1+, L2+) -47 V Yes
Controlling a digital input	res
Switching capacity of the outputs	E 101
• on lamp load, max.	5 W
Output current	
<ul> <li>for signal "1" rated value</li> </ul>	0.5 A
<ul> <li>for signal "0" residual current, max.</li> </ul>	1.5 mA
Parallel switching of two outputs	
• for uprating	No
<ul> <li>for redundant control of a load</li> </ul>	Yes
Switching frequency	
<ul> <li>with resistive load, max.</li> </ul>	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.	4 A
Cable length	
• unshielded, max.	30 m
later for a set	
Interfaces Transmission procedure	100BASE-TX
Number of PROFINET interfaces	
1. Interface	
Interface types	
<ul> <li>integrated switch</li> </ul>	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
PROFINET CBA	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	
<ul> <li>Diagnostic information readable</li> </ul>	Yes
<ul> <li>Monitoring the supply voltage</li> </ul>	Yes; Green "ON" LED
<ul> <li>Wire-break in actuator cable</li> </ul>	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	
<ul> <li>between the channels</li> </ul>	No
Isolation	
tested with	
• 24 V DC circuits	707 V DC (type test)
<ul> <li>Test voltage for interface, rms value [Vrms]</li> </ul>	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
<ul> <li>Performance level according to ISO 13849-1</li> </ul>	PL d
<ul> <li>Category according to ISO 13849-1</li> </ul>	Cat. 3
<ul> <li>SILCL according to IEC 62061</li> </ul>	SILCL 2
Connection method	

Design of electrical connection	4/5-pin M12 circular connectors
Dimensions	
Width	30 mm
Height	200 mm
Depth	49 mm
Weights	
Weight, approx.	550 g

last modified:

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