

SIEMENS

Product data sheet**6ES7142-6BF50-0AB0**

SIMATIC DP, ET 200ECO PN,
8 DO 24V DC/0,5A;
4 X M12, DOUBLE-ASSIGNMENT,
1 LOAD VOLTAGE SUPPLY DO DEGREE OF
PROTECTION IP67

General information

Vendor identification (VendorID)	002AH
Device identifier (DeviceID)	0306H

Supply voltage**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

from load voltage 1L+ (unswitched voltage)	100 mA
from load voltage 2L+, max.	4 A
Power losses	
Power loss, typ.	3 W
Digital outputs	
Number/binary outputs	8
In groups of	8
Functionality/short-circuit strength	Yes ; Electronic
Response threshold, typ.	0.7 A
Limitation of inductive shutdown voltage to	Typ. (L1+, L2+) -47 V
Switching capacity of the outputs	
on lamp load, max.	5 W
Controlling a digital input	Yes
Output current	
for signal "1" rated value	0.5 A
for signal "0" residual current, max.	1.5 mA
Parallel switching of 2 outputs	
for increased power	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
Aggregate current of outputs (per group)	
all mounting positions	
up to 60 °C, max.	4 A
Cable length	
Cable length unshielded, max.	30 m
Interfaces	
Transmission procedure	100BASE-TX
Transmission rate, max.	100 Mbit/s
Supports protocol for PROFINET IO	
Number of PROFINET interfaces	2

Autocrossing	Yes
Automatic detection of transmission speed	Yes
Integrated switch	Yes
PROFINET IO Device	
IRT with the option "high flexibility" supported	Yes
Prioritized startup supported	Yes
Protocols	
Supports protocol for PROFINET IO	Yes
Protocols (Ethernet)	
SNMP	Yes
DCP	Yes
LLDP	Yes
ping	Yes
arp	Yes
Interrupts/diagnostics/status information	
Status indicator	Yes ; Green LED
Alarms	
Diagnostic alarm	Yes
Diagnostic messages	
Diagnostic functions	Yes
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
Galvanic isolation	
between the load voltages	Yes
between load voltage and all other switching components	No
between Ethernet and electronics	Yes
Galvanic isolation digital outputs	
between the channels	No
Permissible potential difference	
between different circuits	75 VDC / 60 VAC

Isolation	
tested with	
24 V DC circuits	500 V
Interface	1500 V ; According to IEEE 802.3
Degree and class of protection	
IP65	Yes
IP66	Yes
IP67	Yes
Connection method	
M12	Yes
Dimensions	
Width	30 mm
Height	200 mm
Depth	49 mm
Weight	
Weight	550 g
Status	Jul 17, 2012