

SIEMENS

Product data sheet

6ES7142-3BF00-0XA0


SIMATIC DP,
BASIC MODULE BM142 ET 200ECO: 8 DO DC 24 V/2
A;
8 X M12, SINGLE-ASSIGNMENT,
DEGREE OF PROTECTION IP65/67;
CONNECTING BLOCK 6ES7194-3AA00-0.A0 MUST
BE ORDERED SEPARATELY

General information

Vendor identification (VendorID) 80DDh

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

from load voltage 2L+ (without load), max. 60 mA ; typ.

from supply voltage 1L+, max. 70 mA ; typ.

Power losses

Power loss, typ. 4 W

Digital outputs

Number/binary outputs 8

Functionality/short-circuit strength	Yes ; Electronic
Response threshold, typ.	4 A per channel
Limitation of inductive shutdown voltage to	2L+ (-44 V)
Lamp load, max.	10 W
Controlling a digital input	Yes
Load resistance range	
lower limit	12 Ω
upper limit	4 k Ω
Output voltage	
for signal "1", min.	2L+ (-0.8 V)
Output current	
for signal "1" rated value	2 A
for signal "1" permissible range for 0 to 55 °C, min.	5 mA
for signal "1" permissible range for 0 to 55 °C, max.	2.4 A
for signal "0" residual current, max.	0.5 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 ; to IEC 947-5-1, DC13
on lamp load, max.	1 Hz
Aggregate current of outputs (per group)	
all mounting positions	
up to 55 °C, max.	4 A ; 4 A each for sockets X1, X3, X5, X7 and 4 A each for sockets X2, X4, X6, X8; note the current carrying capacity of the cable
Cable length	
Cable length unshielded, max.	30 m
Interfaces	
PROFIBUS DP	
Transmission rate, max.	12 Mbit/s ; 9.6 / 19.2 / 45.45 / 93.75 / 187.5 / 500 Kbit/s; 1.5 / 3 / 6 / 12 Mbit/s

Protocols	
PROFIBUS DP protocol	Yes
Interrupts/diagnostics/status information	
Status indicator	Yes
Alarms	
Alarms	No
Diagnostic messages	
Diagnostics	Yes ; Diagnostic information readable
Diagnostics indication LED	
Group error SF (red)	Yes
Status indicator digital output (green)	Yes
Channel error indicator F (red)	No
Galvanic isolation	
between PROFIBUS DP and all other circuit components	Yes
Galvanic isolation digital outputs	
between the channels	No
Permissible potential difference	
between different circuits	75 VDC / 60 VAC
Isolation	
Isolation checked with	500 V DC
Dimensions	
Width	60 mm
Height	210 mm
Depth	28 mm
Weight	
Weight, approx.	210 g
Status	Jul 17, 2012