

SIEMENS

Product data sheet

6ES7142-3BH00-0XA0



SIMATIC DP,
BASIC MOD. BM142 ET 200ECO: 16 DO DC 24 V/0.5
A,
8 X M12, DOUBLE-ASSIGNMENT, IP65/67,
CONN. BLOCK 6ES7194-3AA00-0.A0 MUST BE
ORDERED SEPARATELY

General information

Vendor identification (VendorID)	80FBh
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Supply voltage

Rated value (DC)	24 V
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Reverse polarity protection	Yes
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Load voltage 2L+

Rated value (DC)	24 V
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Reverse polarity protection	Yes
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Input current

from load voltage 2L+ (without load), max.	80 mA ; typ.
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from supply voltage 1L+, max.	70 mA ; typ.
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Power losses

Power loss, typ.	4 W
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Digital outputs

Number/binary outputs	16
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Functionality/short-circuit strength	Yes ; Electronic
Response threshold, typ.	1.4 A (per channel)
Limitation of inductive shutdown voltage to	2L+ (-47 V)
Lamp load, max.	5 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	0.5 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.	1 A
for signal "0" residual current, max.	0.1 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 ; Please 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