SIEMENS

Data sheet 6ES7142-3BF00-0XA0



SIMATIC DP, basic module BM 142 ET 200ECO: 8 DO 24 V DC/2A; 8xM12, single assignment, Degree of protection IP65/67; Connection block 6ES7194-3AA00-0.A0 separately order

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 supply voltage 1L+, max.	70 mA; Typical
from load voltage 2L+ (without load), max.	60 mA; Typical
Power loss	
Power loss, typ.	4 W
Digital outputs	
Number of digital outputs	8
Short-circuit protection	Yes
● Response threshold, typ.	4 A; Per channel
Limitation of inductive shutdown voltage to	2L+ (-44 V)
Controlling a digital input	Yes
Switching capacity of the outputs	
● on lamp load, max.	10 W
Load resistance range	
● lower limit	12 Ω
● upper limit	4 kΩ
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 two outputs	
● for uprating	No
● for redundant control of a load	Yes
Switching frequency	
● with resistive load, max.	100 Hz
● with inductive load, max.	0.5 Hz; According to IEC 60947-5-1, DC-13
● on lamp load, max.	1 Hz
Total current of the outputs (per group)	

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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	
● 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	Yes
Interrupts/diagnostics/status information	
Alarms	No
Diagnoses	
● Diagnostic information readable	Yes
Diagnostics indication LED	
● Group error SF (red)	Yes
● Status indicator digital output (green)	Yes
● Channel fault indicator F (red)	No
Potential separation	
between PROFIBUS DP and all other circuit components	Yes
Potential separation digital outputs	
● between the channels	No
Permissible potential difference	
between different circuits	75 V DC/60 V AC
Isolation	
Isolation tested with	500 V DC
Degree and class of protection	
IP degree of protection	IP65/67
Connection method	
Design of electrical connection	4/5-pin M12 circular connectors
Dimensions	
Width	60 mm
Height	210 mm
Depth	28 mm
Weights	
Weight, approx.	210 g

Classifications

	Version	Classification
eClass	16	27-24-26-04
eClass	14	27-24-26-04
eClass	12	27-24-26-04
eClass	9.1	27-24-26-04
eClass	9	27-24-26-04
eClass	8	27-24-26-04
eClass	7.1	27-24-26-04
eClass	6	27-24-26-04
ETIM	10	EC001599
ETIM	9	EC001599
ETIM	8	EC001599
ETIM	7	EC001599
IDEA	4	3566
UNSPSC	15	32-15-17-05

Approvals / Certificates

General Product Approval	EMV

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EMV	Test Certificates	other		Environment	
RCM	Type Test Certific-ates/Test Report	Confirmation	产品合格 QC PASS	Environmental Con-firmations	EPD

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