

*** SPARE PART*** SIMATIC DP, BASIC MODULE BM142 FOR ET200X, 4DO 24V DC/2A 5-PIN M12, PROTECTION IP 66/67, INTEGR. PROFIBUS DP IF, 12 MBIT/S, INTEGR. PS INTERFACE



Supply voltage

Load voltage 1L+

- | | |
|-------------------------------|-----------------|
| • Rated value (DC) | 24 V |
| • short-circuit protection | Yes; Electronic |
| • Reverse polarity protection | Yes |

Load voltage 2L+

- | | |
|-------------------------------|------|
| • Rated value (DC) | 24 V |
| • Reverse polarity protection | No |

Input current

- | | |
|--|--------|
| from supply voltage 1L+, max. | 180 mA |
| from load voltage 2L+ (without load), max. | 12 mA |

Power loss

- | | |
|------------------|-----|
| Power loss, typ. | 4 W |
|------------------|-----|

Hardware configuration

Expansion modules

- | | |
|--|---|
| • Number of expansion modules, max. | 7 |
| — of which motor starters/frequency converters, max. | 6 |

— of which pneumatic interfaces, max.

6

Digital inputs

Cable length

- unshielded, max. 30 m; Signal cables

Digital outputs

Number of digital outputs	4
Short-circuit protection	Yes; Electronic
<ul style="list-style-type: none"> • Response threshold, typ. 	3 A
Switching capacity of the outputs	
<ul style="list-style-type: none"> • on lamp load, max. 	10 W
Output current	
<ul style="list-style-type: none"> • for signal "1" rated value 	2 A; at 24 V DC
<ul style="list-style-type: none"> • for signal "0" residual current, max. 	0.5 mA
Switching frequency	
<ul style="list-style-type: none"> • with resistive load, max. 	100 Hz
<ul style="list-style-type: none"> • with inductive load (acc. to IEC 60947-5-1, DC13), max. 	0.5 Hz
<ul style="list-style-type: none"> • on lamp load, max. 	1 Hz
Total current of the outputs (per module)	
all mounting positions	
<ul style="list-style-type: none"> — up to 20 °C, max. 	6 A
<ul style="list-style-type: none"> — up to 55 °C, max. 	4 A
Cable length	
<ul style="list-style-type: none"> • unshielded, max. 	30 m

1. Interface

Functionality	
<ul style="list-style-type: none"> • PROFIBUS DP slave 	Yes
DP slave	
<ul style="list-style-type: none"> • Transmission rate, max. 	12 Mbit/s; 9,6 / 19,2 / 93,75 / 187,5 / 500 kbit/s; 1,5 / 3 / 6 / 12 Mbit/s
Services	
<ul style="list-style-type: none"> — Direct data exchange (slave-to-slave communication) 	Yes; Sender

Interrupts/diagnostics/status information

Diagnostic functions	Parameterizable
Alarms	
<ul style="list-style-type: none"> • Diagnostic alarm 	Yes
Diagnostics indication LED	
<ul style="list-style-type: none"> • Bus fault BF (red) 	Yes
<ul style="list-style-type: none"> • Group error SF (red) 	Yes
<ul style="list-style-type: none"> • Monitoring 24 V voltage supply ON (green) 	Yes

Potential separation

between PROFIBUS DP and all other circuit components	Yes
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Potential separation digital inputs

- | | |
|--|-----|
| • between the channels | No |
| • between the channels and backplane bus | Yes |
| • between the channels and the power supply of the electronics | Yes |

Potential separation digital outputs

- | | |
|--|-----|
| • between the channels | No |
| • between the channels and backplane bus | Yes |
| • between the channels and the power supply of the electronics | Yes |

Dimensions

Width	134 mm; Width module 107 mm
Height	110 mm
Depth	55 mm

Weights

Weight, approx.	500 g
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last modified:	03/11/2017
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