# SIEMENS

*** 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 |

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| | |
|---|---|
| — 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 |
| • Response threshold, typ. | 3 A |

### Switching capacity of the outputs

| | |
|---|---|
| • on lamp load, max. | 10 W |

### Output current

| | |
|---|---|
| • for signal "1" rated value | 2 A; at 24 V DC |
| • for signal "0" residual current, max. | 0.5 mA |

### Switching frequency

| | |
|---|---|
| • with resistive load, max. | 100 Hz |
| • with inductive load (acc. to IEC 60947-5-1, DC13), max. | 0.5 Hz |
| • on lamp load, max. | 1 Hz |

### Total current of the outputs (per module)

### all mounting positions

| | |
|---|---|
| — up to 20 °C, max. | 6 A |
| — up to 55 °C, max. | 4 A |

### Cable length

| | |
|---|---|
| • unshielded, max. | 30 m |

## 1. Interface

### Functionality

| | |
|---|---|
| • PROFIBUS DP slave | Yes |

### DP slave

| | |
|---|---|
| • 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

| | |
|---|---|
| — Direct data exchange (slave-to-slave communication) | Yes; Sender |

## Interrupts/diagnostics/status information

| | |
|---|---|
| Diagnostic functions | Parameterizable |

### Alarms

| | |
|---|---|
| • Diagnostic alarm | Yes |

### Diagnostics indication LED

| | |
|---|---|
| • Bus fault BF (red) | Yes |
| • Group error SF (red) | Yes |
| • Monitoring 24 V voltage supply ON (green) | Yes |

| Potential separation | |
|---|---|
| between PROFIBUS DP and all other circuit components | Yes |

| 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 |

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|---|---|
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| Dimensions | |
|---|---|
| Width | 134 mm; Width module 107 mm |
| Height | 110 mm |
| Depth | 55 mm |

| Weights | |
|---|---|
| Weight, approx. | 500 g |
| **last modified:** | 08/12/2017 |