

\*\*\* SPARE PART\*\*\* SIMATIC DP, DISTRIBUTED I/O  
ET200X:EXT.MODULE BM143/DESINA 8DI/DO CONFIGURABLE,  
ADDITIONAL DIAGNOSTICS INPUTS, IP67



| Input current                                                   |                                                                         |
|-----------------------------------------------------------------|-------------------------------------------------------------------------|
| from backplane bus 5 V DC, max.                                 | 40 mA                                                                   |
| Encoder supply                                                  |                                                                         |
| Number of outputs                                               | 8                                                                       |
| Short-circuit protection                                        | Yes; Electronic                                                         |
| Output current                                                  |                                                                         |
| • up to 40 °C, max.                                             | 1 A                                                                     |
| • up to 55 °C, max.                                             | 0.8 A                                                                   |
| Power loss                                                      |                                                                         |
| Power loss, typ.                                                | 1.5 W                                                                   |
| Digital inputs                                                  |                                                                         |
| Number of digital inputs                                        | 8; 8 function inputs (diagnostic inputs or inputs with opener function) |
| Input characteristic curve in accordance with IEC 61131, type 2 | Yes                                                                     |
| Number of simultaneously controllable inputs                    |                                                                         |
| all mounting positions                                          |                                                                         |
| — up to 55 °C, max.                                             | 8                                                                       |

|                                                           |                                                                                                                     |
|-----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| Input voltage                                             |                                                                                                                     |
| • Rated value (DC)                                        | 24 V; Input voltage for parameterized DI (Pin 4) / Input voltage for function input (Pin 2)                         |
| • for signal "0"                                          | -30 to +5V                                                                                                          |
| • for signal "1"                                          | 13 to 30V                                                                                                           |
| Input current                                             |                                                                                                                     |
| • for signal "1", typ.                                    | 5 mA                                                                                                                |
| Input delay (for rated value of input voltage)            |                                                                                                                     |
| for standard inputs                                       |                                                                                                                     |
| — at "0" to "1", min.                                     | 1.2 ms                                                                                                              |
| — at "0" to "1", max.                                     | 4.8 ms                                                                                                              |
| — at "1" to "0", min.                                     | 1.2 ms                                                                                                              |
| — at "1" to "0", max.                                     | 4.8 $\mu$ s                                                                                                         |
| Cable length                                              |                                                                                                                     |
| • unshielded, max.                                        | 30 m; for signal lines                                                                                              |
| Digital outputs                                           |                                                                                                                     |
| Number of digital outputs                                 | 8; 8 process channels, parameterization as DI/DO; 8 function channels, parameter assignment as diagnostics/NC input |
| Short-circuit protection                                  | Yes; Electronic                                                                                                     |
| • Response threshold, typ.                                | 1.8 A                                                                                                               |
| Switching capacity of the outputs                         |                                                                                                                     |
| • on lamp load, max.                                      | 10 W                                                                                                                |
| Output current                                            |                                                                                                                     |
| • for signal "1" rated value                              | 1.2 A                                                                                                               |
| • 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. | 2 Hz                                                                                                                |
| • on lamp load, max.                                      | 1 Hz                                                                                                                |
| Total current of the outputs (per module)                 |                                                                                                                     |
| all mounting positions                                    |                                                                                                                     |
| — up to 20 °C, max.                                       | 10 A                                                                                                                |
| Cable length                                              |                                                                                                                     |
| • unshielded, max.                                        | 30 m; for signal lines                                                                                              |
| Encoder                                                   |                                                                                                                     |
| Connectable encoders                                      |                                                                                                                     |
| • 2-wire sensor                                           | Yes                                                                                                                 |
| — permissible quiescent current (2-wire sensor), max.     | 1.5 mA                                                                                                              |
| Interrupts/diagnostics/status information                 |                                                                                                                     |

|                                                     |                           |
|-----------------------------------------------------|---------------------------|
| Diagnostic functions                                | Yes; Parameterizable      |
| Diagnostics indication LED                          |                           |
| • Status indicator per channel (yellow)             | Yes                       |
| • Indicator function input per channel (yellow/red) | Yes                       |
| Potential separation                                |                           |
| Potential separation digital inputs                 |                           |
| • between the channels                              | No                        |
| • between the channels and backplane bus            | No                        |
| Potential separation digital outputs                |                           |
| • between the channels                              | No                        |
| • between the channels and backplane bus            | No                        |
| Dimensions                                          |                           |
| Width                                               | 87 mm; Width module 60 mm |
| Height                                              | 180 mm                    |
| Depth                                               | 55 mm                     |
| Weights                                             |                           |
| Weight, approx.                                     | 350 g                     |
| <b>last modified:</b>                               | 08/29/2017                |