



SIMATIC S7-1500 Digital input module, DI 32x24 V DC BA, 32 channels in groups of 16, Input delay typ. 3.2 ms, Input type 3 (IEC 61131); Delivery incl. front connector Push-in

| General information   |                   |
|---|-------------------|
| Product type designation  | DI 32x24VDC BA    |
| HW functional status  | From FS01         |
| Firmware version  | V1.0.0            |
| • FW update possible  | Yes               |
| Product function  |                   |
| • I&M data  | Yes; I&M0 to I&M3 |
| • Isochronous mode  | No                |
| • Prioritized startup   | Yes               |
| Engineering with  |                   |
| • STEP 7 TIA Portal configurable/integrated from version        | V13 / V13         |
| • STEP 7 configurable/integrated from version                   | V5.5 SP3 / -      |
| • PROFIBUS from GSD version/GSD revision                        | V1.0 / V5.1       |
| • PROFINET from GSD version/GSD revision                        | V2.3 / -          |
| Operating mode  |                   |
| • DI  | Yes               |
| • Counter   | No                |
| • MSI   | Yes               |
| Supply voltage  |                   |
| Rated value (DC)  | 24 V              |
| permissible range, lower limit (DC)                             | 19.2 V            |
| permissible range, upper limit (DC)                             | 28.8 V            |
| Power   |                   |
| Power available from the backplane bus                          | 1.05 W            |
| Power loss  |                   |
| Power loss, typ.  | 3 W               |
| Digital inputs  |                   |
| Number of digital inputs  | 32                |
| Digital inputs, parameterizable                                 | No                |
| Source/sink input   | P-reading         |
| Input characteristic curve in accordance with IEC 61131, type 3 | Yes               |
| Input voltage   |                   |
| • Rated value (DC)  | 24 V              |
| • for signal "0"  | -30 to +5 V       |
| • for signal "1"  | +11 to +30V       |
| Input current   |                   |
| • for signal "1", typ.  | 2.7 mA            |
| Input delay (for rated value of input voltage)                  |                   |
| for standard inputs   |                   |
| — parameterizable   | No                |

|  |  |
|--|--|
| — at "0" to "1", min.  | 3 ms   |
| — at "0" to "1", max.  | 4 ms   |
| — at "1" to "0", min.  | 3 ms   |
| — at "1" to "0", max.  | 4 ms   |
| <b>for interrupt inputs</b>                                    |  |
| — parameterizable  | No   |
| <b>for technological functions</b>                             |  |
| — parameterizable  | No   |
| <b>Cable length</b>  |  |
| • shielded, max.   | 1 000 m  |
| • unshielded, max.   | 600 m  |
| <b>Encoder</b>   |  |
| <b>Connectable encoders</b>                                    |  |
| • 2-wire sensor  | Yes  |
| — permissible quiescent current (2-wire sensor), max.          | 1.5 mA   |
| <b>Interrupts/diagnostics/status information</b>               |  |
| Diagnostics function   | No   |
| <b>Alarms</b>  |  |
| • Diagnostic alarm   | No   |
| • Hardware interrupt   | No   |
| <b>Diagnoses</b>   |  |
| • Monitoring the supply voltage                                | No   |
| • Wire-break   | No   |
| • Short-circuit  | No   |
| <b>Diagnostics indication LED</b>                              |  |
| • RUN LED  | Yes; green LED   |
| • ERROR LED  | Yes; red LED   |
| • Monitoring of the supply voltage (PWR-LED)                   | No   |
| • Channel status display                                       | Yes; green LED   |
| • for channel diagnostics                                      | No   |
| • for module diagnostics                                       | No   |
| <b>Potential separation</b>                                    |  |
| <b>Potential separation channels</b>                           |  |
| • between the channels   | No   |
| • between the channels, in groups of                           | 16   |
| • between the channels and backplane bus                       | Yes  |
| • between the channels and the power supply of the electronics | No   |
| <b>Isolation</b>   |  |
| Isolation tested with  | 707 V DC (type test)   |
| <b>Standards, approvals, certificates</b>                      |  |
| Suitable for safety functions                                  | No   |
| <b>Ambient conditions</b>                                      |  |
| <b>Ambient temperature during operation</b>                    |  |
| • horizontal installation, min.                                | -30 °C; from FS04  |
| • horizontal installation, max.                                | 60 °C  |
| • vertical installation, min.                                  | -30 °C; from FS04  |
| • vertical installation, max.                                  | 40 °C  |
| <b>Altitude during operation relating to sea level</b>         |  |
| • Installation altitude above sea level, max.                  | 5 000 m; Restrictions for installation altitudes > 2 000 m, see manual |
| <b>Dimensions</b>  |  |
| Width  | 25 mm  |
| Height   | 147 mm   |
| Depth  | 129 mm   |
| <b>Weights</b>   |  |
| Weight, approx.  | 260 g  |
| <b>Other</b>   |  |
| Note:  | Supplied incl. 40-pole push-in front connectors                        |

last modified:

8/16/2023 