SIEMENS

## Data sheet 6ES7138-4DB03-0AB0



*** Spare part *** SIMATIC DP, Electronics module for ET 200S, 1 SSI 25 bit/1 MHz 15 mm width, Module for connection of absolute value encoders with SSI Synchronous Serial Interface with DI and comparison value with clock synchronization

| | |
|---|---|
| **Supply voltage** | |
| Load voltage L+ | |
| ● Rated value (DC) | 24 V |
| ● permissible range, lower limit (DC) | 20.4 V |
| ● permissible range, upper limit (DC) | 28.8 V |
| ● Reverse polarity protection | Yes |
| **Input current** | |
| from load voltage L+ (without load), max. | 40 mA |
| from backplane bus 3.3 V DC, max. | 10 mA |
| **Encoder supply** | |
| 24 V encoder supply | |
| ● 24 V | Yes |
| ● Short-circuit protection | Yes |
| ● Output current, max. | 500 mA |
| Absolute encoder (SSI) encoder supply | |
| ● Absolute encoder (SSI) | Yes |
| ● Type of output voltage | L+ (-0.8 V) |
| ● Short-circuit protection | Yes |
| ● Output current, max. | 500 mA |
| **Power loss** | |
| Power loss, typ. | 1 W |
| **Hardware configuration** | |
| Module exchange | |
| ● Module exchange during operation of the IM-DP | Yes |
| ● Module exchange under process voltage | Yes |
| **Digital inputs** | |
| Number of digital inputs | 1 |
| Input voltage | |
| ● for signal "0" | -30 to +5 V |
| ● for signal "1" | +11 to +30V |
| Input current | |
| ● for signal "0", max. (permissible quiescent current) | 2 mA |
| ● for signal "1", typ. | 9 mA |
| Input delay (for rated value of input voltage) | |
| for standard inputs | |
| — at "0" to "1", max. | 300 µs |
| — at "1" to "0", max. | 300 µs |
| Cable length | |
| ● shielded, max. | 50 m |


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| | |
|---|---|
| **Encoder** | |
| Number of connectable encoders, max. | 1 |
| Connectable encoders | |
| ● Absolute encoder (SSI) | Yes |
| ● 2-wire sensor | Yes; Type 2 |
| Encoder signals, absolute encoder (SSI) | |
| ● Input signal | to RS-422 |
| ● Telegram length, parameterizable | 13, 14, 16, 21, 24 & 25 bit |
| ● Binary code | Yes |
| ● Gray code | Yes |
| ● Cable length, shielded, max. | 320 m; At 125 kHz |
| ● Monoflop time | 16/32/48/64 µs |
| **Interrupts/diagnostics/status information** | |
| Diagnostics indication LED | |
| ● Group error SF (red) | Yes |
| ● Status indicator digital input (green) | Yes |
| ● Status indicator forward counting (green) | Yes |
| ● Status indicator backward counting (green) | Yes |
| **Potential separation** | |
| Potential separation digital inputs | |
| ● Potential separation digital inputs | No; same potential with L+ and SSI |
| Potential separation counter | |
| ● between the channels and backplane bus | Yes |
| ● Between the channels and load voltage L+ | No |
| **Dimensions** | |
| Width | 15 mm |
| Height | 81 mm |
| Depth | 52 mm |
| **Weights** | |
| Weight, approx. | 40 g |

**Classifications**

| | Version | Classification |
|---|---|---|
| eClass | 16 | 27-24-26-05 |
| eClass | 14 | 27-24-26-05 |
| eClass | 12 | 27-24-26-05 |
| eClass | 9.1 | 27-24-26-05 |
| eClass | 9 | 27-24-26-05 |
| eClass | 8 | 27-24-26-05 |
| eClass | 7.1 | 27-24-26-05 |
| eClass | 6 | 27-24-26-05 |
| ETIM | 10 | EC001601 |
| ETIM | 9 | EC001601 |
| ETIM | 8 | EC001601 |
| ETIM | 7 | EC001601 |
| IDEA | 4 | 3567 |
| UNSPSC | 15 | 32-15-17-05 |

**Approvals / Certificates**

| General Product Approval | EMV |
|---|---|

| Test Certificates | Maritime application | other | Environment |
|---|---|---|---|


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Type Test Certificates/Test Report

Confirmation

Environmental Confirmations

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