

SIMATIC ET 200SP, Digital output module, DQ 8x 24V DC/0,5A Sink Basic, Sink output (NPN, M-switching), Packing unit: 1 piece, fits to BU-type A0, Colour Code CC01, substitute value output, module diagnostics for: supply voltage



| General information | |
|---|--|
| Product type designation | DQ 8x 24 V DC/0.5 A SNK BA, PU 1 |
| Firmware version | V0.0 |
| <ul style="list-style-type: none"> FW update possible | No |
| usable BaseUnits | BU type A0 |
| Color code for module-specific color identification plate | CC01 |
| Product function | |
| <ul style="list-style-type: none"> I&M data | Yes; I&M0 to I&M3 |
| Engineering with | |
| <ul style="list-style-type: none"> STEP 7 TIA Portal configurable/integrated as of version | V14 |
| <ul style="list-style-type: none"> STEP 7 configurable/integrated as of version | V5.5 SP3 |
| <ul style="list-style-type: none"> PROFIBUS as of GSD version/GSD revision | One GSD file each, Revision 3 and 5 and higher |
| <ul style="list-style-type: none"> PROFINET as of GSD version/GSD revision | GSDML V2.3 |
| Operating mode | |
| <ul style="list-style-type: none"> DQ | Yes |
| <ul style="list-style-type: none"> DQ with energy-saving function | No |
| <ul style="list-style-type: none"> PWM | No |

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| • Oversampling | No |
| • MSO | No |
| Redundancy | |
| • Redundancy capability | Yes |
| Supply voltage | |
| Rated value (DC) | 24 V |
| permissible range, lower limit (DC) | 19.2 V |
| permissible range, upper limit (DC) | 28.8 V |
| Output voltage | |
| Rated value (DC) | 24 V |
| Power loss | |
| Power loss, typ. | 1.5 W |
| Address area | |
| Address space per module | |
| • Outputs | 1 byte |
| Hardware configuration | |
| Automatic encoding | Yes |
| • Mechanical coding element | Yes |
| Digital outputs | |
| Type of digital output | Sink output (NPN, M switching) |
| Number of digital outputs | 8 |
| Current-sinking | Yes |
| Short-circuit protection | Yes |
| • Response threshold, typ. | 1.5 A |
| Limitation of inductive shutdown voltage to | Typ. 47 V |
| Controlling a digital input | Yes |
| Switching capacity of the outputs | |
| • with resistive load, max. | 0.5 A |
| • on lamp load, max. | 5 W |
| Load resistance range | |
| • lower limit | 48 Ω |
| • upper limit | 3 400 Ω |
| Output current | |
| • for signal "1" rated value | 0.5 A |
| • for signal "1" permissible range, max. | 0.5 A |
| • for signal "0" residual current, max. | 5 μA |
| Output delay with resistive load | |
| • "0" to "1", max. | 300 μs |
| • "1" to "0", max. | 600 μs |
| Parallel switching of two outputs | |

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| • for uprating | No |
| • for redundant control of a load | Yes |
| Switching frequency | |
| • with resistive load, max. | 100 Hz |
| • with inductive load, max. | 0.5 Hz |
| • on lamp load, max. | 10 Hz |
| Total current of the outputs | |
| • Current per channel, max. | 0.5 A |
| • Current per module, max. | 4 A |
| Total current of the outputs (per module) | |
| horizontal installation | |
| — up to 60 °C, max. | 4 A |
| vertical installation | |
| — up to 50 °C, max. | 4 A; in all other mounting positions |
| Cable length | |
| • shielded, max. | 1 000 m |
| • unshielded, max. | 600 m |
| Isochronous mode | |
| Isochronous operation (application synchronized up to terminal) | No |
| Interrupts/diagnostics/status information | |
| Diagnostics function | Yes |
| Substitute values connectable | Yes |
| Alarms | |
| • Diagnostic alarm | Yes |
| Diagnostic messages | |
| • Monitoring the supply voltage | Yes |
| • Wire-break | No |
| • Short-circuit | No |
| • Group error | Yes |
| Diagnostics indication LED | |
| • Monitoring of the supply voltage (PWR-LED) | Yes; green PWR LED |
| • Channel status display | Yes; Green LED |
| • for channel diagnostics | No |
| • for module diagnostics | Yes; green/red DIAG LED |
| Potential separation | |
| Potential separation channels | |
| • between the channels | No |
| • between the channels and backplane bus | Yes |
| Isolation | |

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| Isolation tested with | 707 V DC (type test) |
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Ambient conditions

Ambient temperature during operation

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|---------------------------------|--|
| • horizontal installation, min. | 0 °C |
| • horizontal installation, max. | 60 °C |
| • vertical installation, min. | 0 °C; in all other mounting positions |
| • vertical installation, max. | 50 °C; in all other mounting positions |

Altitude during operation relating to sea level

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| • Ambient air temperature-barometric pressure-altitude | On request: Ambient temperatures lower than 0 °C (without condensation) and/or installation altitudes greater than 2 000 m |
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Dimensions

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| Width | 15 mm |
| Height | 73 mm |
| Depth | 58 mm |

Weights

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| Weight, approx. | 30 g |
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last modified: 02/20/2018