

SIMATIC S7-1500, DIGITAL OUTPUT MODULE DQ16 X
24...48VUC/125VDC/0.5A; 16 CHANNELS IN GROUPS OF 1, 0.5A
PER GROUP; SUBSTITUTE VALUE; PLEASE NOTE DERATING



| General information | |
|---|-----------------------------------|
| Product type designation | DQ 16x24 ... 48VUC/125VDC/0.5A ST |
| HW functional status | FS01 |
| Firmware version | V1.0.0 |
| Product function | |
| • I&M data | Yes; I&M0 to I&M3 |
| Engineering with | |
| • STEP 7 TIA Portal configurable/integrated as of version | V13 SP1 / - |
| • STEP 7 configurable/integrated as of version | V5.5 SP3 / - |
| • PROFIBUS as of GSD version/GSD revision | V1.0 / V5.1 |
| • PROFINET as of GSD version/GSD revision | V2.3 / - |
| Operating mode | |
| • DQ | Yes |
| • MSO | Yes |
| Output voltage | |
| Rated value (DC) | 24 V; 48 V, 125 V |
| Rated value (AC) | 24 V; 48 V (50 - 60 Hz) |

| | |
|--|--|
| Power | |
| Power available from the backplane bus | 2 W |
| Power loss | |
| Power loss, typ. | 3.8 W |
| Digital outputs | |
| Number of digital outputs | 16 |
| Current-sinking | Yes |
| Current-sourcing | Yes |
| Limitation of inductive shutdown voltage to | 200 V (suppressor diode) |
| Controlling a digital input | Yes |
| Switching capacity of the outputs | |
| • with resistive load, max. | 0.5 A |
| • on lamp load, max. | 40 W; At 125 V DC, 10 W at 48 V UC, 5 W at 24 V UC |
| Output voltage | |
| • for signal "1", min. | L+ (-1.0 V) |
| Output current | |
| • for signal "1" rated value | 0.5 A |
| • for signal "1" permissible range, max. | 0.6 A |
| Output delay with resistive load | |
| • "0" to "1", max. | 5 ms |
| • "1" to "0", max. | 5 ms |
| Parallel switching of two outputs | |
| • for logic links | Yes |
| • for uprating | No |
| • for redundant control of a load | Yes |
| Switching frequency | |
| • with resistive load, max. | 25 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 group, max. | 0.5 A |
| • Current per module, max. | 8 A |
| Cable length | |
| • shielded, max. | 1 000 m |
| • unshielded, max. | 600 m |
| Interrupts/diagnostics/status information | |
| Substitute values connectable | Yes |
| Diagnostics indication LED | |
| • RUN LED | Yes; Green LED |
| • ERROR LED | Yes; Red LED |

- Channel status display Yes; Green LED
- for module diagnostics Yes; Red LED

Potential separation

Potential separation channels

- between the channels Yes
- between the channels, in groups of 1
- between the channels and backplane bus Yes

Permissible potential difference

between different circuits 125 V DC/48 V AC

Isolation

Isolation tested with 1 200V DC

Ambient conditions

Ambient temperature during operation

- horizontal installation, min. 0 °C
- horizontal installation, max. 60 °C
- vertical installation, min. 0 °C
- vertical installation, max. 40 °C

Decentralized operation

Prioritized startup Yes

Dimensions

Width 35 mm

Height 147 mm

Depth 129 mm

Weights

Weight, approx. 230 g

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