



Figure similar

SIMATIC S7-1500, digital output module DQ 16x230 V AC/1 A ST; TRIAC; 16 channels in groups of 2; 2 A per group; Substitute value: Front connector (screw terminals or push-in) to be ordered separately

| General information | |
|--|-------------------------------|
| Product type designation | DQ 16x230VAC/1A ST (Triac) |
| HW functional status | From FS01 |
| Firmware version | V 1.2.0 |
| <ul style="list-style-type: none"> FW update possible | Yes |
| Product function | |
| <ul style="list-style-type: none"> I&M data | Yes; I&M0 to I&M3 |
| <ul style="list-style-type: none"> Isochronous mode | No |
| <ul style="list-style-type: none"> Prioritized startup | Yes |
| Engineering with | |
| <ul style="list-style-type: none"> STEP 7 TIA Portal configurable/integrated from version | V13 SP1 / - |
| <ul style="list-style-type: none"> STEP 7 configurable/integrated from version | V5.5 SP3 / - |
| <ul style="list-style-type: none"> PROFIBUS from GSD version/GSD revision | V1.0 / V5.1 |
| <ul style="list-style-type: none"> PROFINET from GSD version/GSD revision | 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 |
| <ul style="list-style-type: none"> Oversampling | No |
| <ul style="list-style-type: none"> MSO | Yes |
| <ul style="list-style-type: none"> Integrated operating cycle counter | Yes; FW V1.2.0 or higher |
| output voltage / header | |
| Rated value (AC) | 230 V; 120/230 V AC, 50/60 Hz |
| Power | |
| Power available from the backplane bus | 1.2 W |
| Power loss | |
| Power loss, typ. | 11.1 W |
| Digital outputs | |
| Type of digital output | Triac |
| Number of digital outputs | 16 |
| Current-sinking | Yes |
| Current-sourcing | Yes |
| Digital outputs, parameterizable | Yes |
| Short-circuit protection | No |
| <ul style="list-style-type: none"> built-in fuse | 6.3 A melting fuse, slow-blow |
| Size of motor starters according to NEMA, max. | 4 |
| Switching capacity of the outputs | |
| <ul style="list-style-type: none"> with resistive load, max. | 1 A |
| <ul style="list-style-type: none"> on lamp load, max. | 50 W |

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| Output voltage | |
| <ul style="list-style-type: none"> for signal "1", min. | L1 (-1.5 V) at maximum output current; L1 (-8.5 V) at minimum output current |
| Output current | |
| <ul style="list-style-type: none"> for signal "1" rated value for signal "1" permissible range, min. for signal "1" permissible range, max. for signal "0" residual current, max. | 1 A 10 mA 15 A; max. 1 AC cycle 2 mA |
| Output delay with resistive load | |
| <ul style="list-style-type: none"> "0" to "1", max. "1" to "0", max. | 1 AC cycle 1 AC cycle |
| Parallel switching of two outputs | |
| <ul style="list-style-type: none"> for logic links for uprating for redundant control of a load | No No Yes |
| Switching frequency | |
| <ul style="list-style-type: none"> with resistive load, max. with inductive load, max. on lamp load, max. | 10 Hz 0.5 Hz 1 Hz |
| Total current of the outputs | |
| <ul style="list-style-type: none"> Current per channel, max. Current per group, max. Current per module, max. | 1 A; see additional description in the manual 2 A; see additional description in the manual 10 A; see additional description in the manual |
| Cable length | |
| <ul style="list-style-type: none"> shielded, max. unshielded, max. | 1 000 m 600 m |
| Interrupts/diagnostics/status information | |
| Diagnostics function | No |
| Substitute values connectable | Yes |
| Alarms | |
| <ul style="list-style-type: none"> Diagnostic alarm Maintenance interrupt | No Yes; maintenance alarm for switching cycle counter |
| Diagnoses | |
| <ul style="list-style-type: none"> Monitoring the supply voltage Wire-break Short-circuit | No No No |
| Diagnostics indication LED | |
| <ul style="list-style-type: none"> RUN LED ERROR LED Monitoring of the supply voltage (PWR-LED) Channel status display for channel diagnostics for module diagnostics | Yes; green LED Yes; red LED No Yes; green LED No Yes; red LED |
| Potential separation | |
| Potential separation channels | |
| <ul style="list-style-type: none"> between the channels between the channels, in groups of between the channels and backplane bus | No 2 Yes |
| Permissible potential difference | |
| between different circuits | 250 V AC between the channels and the backplane bus; 500 V AC between the channels |
| Isolation | |
| Isolation tested with | 3 100 V DC |
| Standards, approvals, certificates | |
| Suitable for safety functions | No |
| Ambient conditions | |
| Ambient temperature during operation | |
| <ul style="list-style-type: none"> horizontal installation, min. horizontal installation, max. vertical installation, min. vertical installation, max. | 0 °C 60 °C 0 °C 40 °C |
| Dimensions | |

| | |
|--------|--------|
| Width | 35 mm |
| Height | 147 mm |
| Depth | 129 mm |

Weights

| | |
|-----------------|-------|
| Weight, approx. | 310 g |
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last modified: 2/10/2022 