



Figure similar

SIMATIC S7-1500, digital output module DQ 8x230 V AC/2 A ST; TRIAC; 8 channels in groups of 1; 2 A per group; Substitute value: Front connector (screw terminals or push-in) to be ordered separately

| General information  |                               |
|--|-------------------------------|
| Product type designation   | DQ 8x230 V AC/2A ST (triac)   |
| HW functional status   | From FS01                     |
| Firmware version   | V2.2.0                        |
| <ul style="list-style-type: none"> <li>FW update possible</li> </ul>                                     | Yes                           |
| Product function   |                               |
| <ul style="list-style-type: none"> <li>I&amp;M data</li> </ul>   | Yes; I&M0 to I&M3             |
| <ul style="list-style-type: none"> <li>Isochronous mode</li> </ul>                                       | No                            |
| <ul style="list-style-type: none"> <li>Prioritized startup</li> </ul>                                    | Yes                           |
| Engineering with   |                               |
| <ul style="list-style-type: none"> <li>STEP 7 TIA Portal configurable/integrated from version</li> </ul> | V12 / V12                     |
| <ul style="list-style-type: none"> <li>STEP 7 configurable/integrated from version</li> </ul>            | V5.5 SP3 / -                  |
| <ul style="list-style-type: none"> <li>PROFIBUS from GSD version/GSD revision</li> </ul>                 | V1.0 / V5.1                   |
| <ul style="list-style-type: none"> <li>PROFINET from GSD version/GSD revision</li> </ul>                 | V2.3 / -                      |
| Operating mode   |                               |
| <ul style="list-style-type: none"> <li>DQ</li> </ul>   | Yes                           |
| <ul style="list-style-type: none"> <li>DQ with energy-saving function</li> </ul>                         | No                            |
| <ul style="list-style-type: none"> <li>PWM</li> </ul>  | No                            |
| <ul style="list-style-type: none"> <li>Oversampling</li> </ul>   | No                            |
| <ul style="list-style-type: none"> <li>MSO</li> </ul>  | Yes                           |
| <ul style="list-style-type: none"> <li>Integrated operating cycle counter</li> </ul>                     | Yes; FW V2.2.0 or higher      |
| output voltage / header  |                               |
| Rated value (AC)   | 230 V; 120/230 V AC, 50/60 Hz |
| Power  |                               |
| Power available from the backplane bus   | 0.9 W                         |
| Power loss   |                               |
| Power loss, typ.   | 10.8 W                        |
| Digital outputs  |                               |
| Type of digital output   | Triac                         |
| Number of digital outputs  | 8                             |
| Current-sourcing   | Yes                           |
| Digital outputs, parameterizable   | Yes                           |
| Short-circuit protection   | No                            |
| <ul style="list-style-type: none"> <li>built-in fuse</li> </ul>  | 6.3 A melting fuse, slow-blow |
| Size of motor starters according to NEMA, max.   | 5                             |
| Switching capacity of the outputs  |                               |
| <ul style="list-style-type: none"> <li>with resistive load, max.</li> </ul>                              | 2 A                           |
| <ul style="list-style-type: none"> <li>on lamp load, max.</li> </ul>                                     | 50 W                          |
| Output voltage   |                               |

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

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

#### Weights

|                 |       |
|-----------------|-------|
| Weight, approx. | 290 g |
|-----------------|-------|