

SIMATIC S7-1500, DIGITAL OUTPUT MODULE DQ 8 X  
230VAC,2A,TRIAC; 8 CHANNELS IN GROUPS OF 1, 2A PER  
GROUP; SUBSTITUTE VALUE



Figure similar

General information	
Product type designation	DQ 8x230 V AC/2A ST (triac)
HW functional status	FS01
Firmware version	V2.0.0
<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
Engineering with	
<ul style="list-style-type: none"> <li>STEP 7 TIA Portal configurable/integrated as of version</li> </ul>	V12 / V12
<ul style="list-style-type: none"> <li>STEP 7 configurable/integrated as of version</li> </ul>	V5.5 SP3 / -
<ul style="list-style-type: none"> <li>PROFIBUS as of GSD version/GSD revision</li> </ul>	V1.0 / V5.1
<ul style="list-style-type: none"> <li>PROFINET as of 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

Output voltage	
Rated value (AC)	120/230V AC, 50/60 Hz
Power	
Power available from the backplane bus	0.9 W
Power loss	
Power loss, typ.	10.8 W
Digital outputs	
Number of digital outputs	8
Current-sourcing	Yes
Short-circuit protection	No
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
Output current	
<ul style="list-style-type: none"> <li>for signal "1" rated value</li> </ul>	2 A
<ul style="list-style-type: none"> <li>for signal "1" permissible range, min.</li> </ul>	10 mA
<ul style="list-style-type: none"> <li>for signal "1" permissible range, max.</li> </ul>	15 A; max. 1 AC cycle
<ul style="list-style-type: none"> <li>for signal "0" residual current, max.</li> </ul>	2 mA
Output delay with resistive load	
<ul style="list-style-type: none"> <li>"0" to "1", max.</li> </ul>	1 AC cycle
<ul style="list-style-type: none"> <li>"1" to "0", max.</li> </ul>	1 AC cycle
Parallel switching of two outputs	
<ul style="list-style-type: none"> <li>for logic links</li> </ul>	No
<ul style="list-style-type: none"> <li>for uprating</li> </ul>	No
<ul style="list-style-type: none"> <li>for redundant control of a load</li> </ul>	Yes
Switching frequency	
<ul style="list-style-type: none"> <li>with resistive load, max.</li> </ul>	10 Hz
<ul style="list-style-type: none"> <li>with inductive load, max.</li> </ul>	0.5 Hz
<ul style="list-style-type: none"> <li>on lamp load, max.</li> </ul>	1 Hz
Total current of the outputs	
<ul style="list-style-type: none"> <li>Current per channel, max.</li> </ul>	2 A; see additional description in the manual
<ul style="list-style-type: none"> <li>Current per group, max.</li> </ul>	2 A; see additional description in the manual
<ul style="list-style-type: none"> <li>Current per module, max.</li> </ul>	10 A; see additional description in the manual
Triac outputs	
<ul style="list-style-type: none"> <li>Size of motor starters according to NEMA, max.</li> </ul>	5
Cable length	
<ul style="list-style-type: none"> <li>shielded, max.</li> </ul>	1 000 m
<ul style="list-style-type: none"> <li>unshielded, max.</li> </ul>	600 m

Isochronous mode	
Isochronous operation (application synchronized up to terminal)	No
Interrupts/diagnostics/status information	
Diagnostics	No
Substitute values connectable	Yes
Alarms	
• Diagnostic alarm	No
Diagnostic messages	
• Monitoring the supply voltage	No
• Wire-break	No
• Short-circuit	No
Diagnostics indication LED	
• RUN LED	Yes; Green LED
• ERROR LED	Yes; Red LED
• Monitoring of the supply voltage (PWR-LED)	No
• Channel status display	Yes; Green LED
• for channel diagnostics	No
• 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
• Between the channels and load voltage L1	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	2500 V 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.	290 g
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**last modified:** 09.04.2016