## **SIEMENS**

## **Data sheet**



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

Figure similar

General information		
Product type designation	DQ 8x230 V AC/2A ST (triac)	
HW functional status	From FS01	
Firmware version	V2.2.0	
<ul> <li>FW update possible</li> </ul>	Yes	
Product function		
<ul> <li>I&amp;M data</li> </ul>	Yes; I&M0 to I&M3	
<ul> <li>Isochronous mode</li> </ul>	No	
Prioritized startup	Yes	
Engineering with		
<ul> <li>STEP 7 TIA Portal configurable/integrated from version</li> </ul>	V12 / V12	
<ul> <li>STEP 7 configurable/integrated from version</li> </ul>	V5.5 SP3 / -	
<ul> <li>PROFIBUS from GSD version/GSD revision</li> </ul>	V1.0 / V5.1	
<ul> <li>PROFINET from GSD version/GSD revision</li> </ul>	V2.3 / -	
Operating mode		
• DQ	Yes	
<ul> <li>DQ with energy-saving function</li> </ul>	No	
• PWM	No	
<ul> <li>Oversampling</li> </ul>	No	
• MSO	Yes	
Integrated operating cycle counter	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	
• built-in fuse	6.3 A melting fuse, slow-blow	
Size of motor starters according to NEMA, max.	5	
Switching capacity of the outputs		
<ul><li>with resistive load, max.</li></ul>	2 A	
on lamp load, max.	50 W	
Output voltage		

• for signal "1", min.	L1 (-1.5 V) at maximum output current; L1 (-8.5 V) at minimum output current
Output current	
<ul><li>for signal "1" rated value</li></ul>	2 A
<ul><li>for signal "1" permissible range, min.</li></ul>	10 mA
<ul><li>for signal "1" permissible range, max.</li></ul>	15 A; max. 1 AC cycle
<ul><li>for signal "0" residual current, max.</li></ul>	2 mA
Output delay with resistive load	
• "0" to "1", max.	1 AC cycle
• "1" to "0", max.	1 AC cycle
Parallel switching of two outputs	
for logic links	No
<ul><li>for uprating</li></ul>	No
<ul> <li>for redundant control of a load</li> </ul>	Yes
Switching frequency	
with resistive load, max.	10 Hz
with inductive load, max.	0.5 Hz
on lamp load, max.	1 Hz
Total current of the outputs	
Current per channel, max.	2 A; see additional description in the manual
• Current per group, max.	2 A; see additional description in the manual
Current per module, max.	10 A; see additional description in the manual
Cable length	
• shielded, max.	1 000 m
• unshielded, max.	600 m
Interrupts/diagnostics/status information	
	No
Diagnostics function	No Var
Substitute values connectable	Yes
Alarms	N-
Diagnostic alarm	No
Maintenance interrupt	Yes; maintenance alarm for switching cycle counter
Diagnoses	N
Monitoring the supply voltage	No
Wire-break	No
Short-circuit	No
Diagnostics indication LED	V 150
• 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	
<ul> <li>between the channels</li> </ul>	Yes
<ul> <li>between the channels, in groups of</li> </ul>	1
<ul> <li>between the channels and backplane bus</li> </ul>	Yes
<ul> <li>Between the channels and load voltage L1</li> </ul>	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
	0 100 V DO
Standards, approvals, certificates	
Suitable for safety functions	No
Ambient conditions	
Ambient temperature during operation	
horizontal installation, min.	0°C
<ul> <li>horizontal installation, max.</li> </ul>	0°C
<ul> <li>vertical installation, min.</li> </ul>	0°C
<ul> <li>vertical installation, max.</li> </ul>	40 °C
Dimensions	

 Width
 35 mm

 Height
 147 mm

 Depth
 129 mm

 Weights

 Weight, approx.
 290 g

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