

SIMATIC S7-1500, Digital output module DQ 8xAC 230V/2A ST; TRIAC; 8 channels in groups of 1; 2 A 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

- Oversampling
- MSO

No  
Yes

### Output voltage

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

Short-circuit protection No

#### Switching capacity of the outputs

- with resistive load, max. 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

- for signal "1" rated value 2 A
- for signal "1" permissible range, min. 10 mA
- for signal "1" permissible range, max. 15 A; max. 1 AC cycle
- for signal "0" residual current, max. 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
- for uprating No
- for redundant control of a load 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

#### Triac outputs

- Size of motor starters according to NEMA, max. 5

Cable length	
• shielded, max.	1 000 m
• unshielded, max.	600 m

  

Isochronous mode	
Isochronous operation (application synchronized up to terminal)	No

  

Interrupts/diagnostics/status information	
Diagnostics function	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	3 100 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
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## Dimensions

Width	35 mm
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Height	147 mm
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Depth	129 mm
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## Weights

Weight, approx.	290 g
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<b>last modified:</b>	01/29/2018
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