

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	FS01
Firmware version	V2.0.0
<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 	V12 / V12
<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

• DQ with energy-saving function	No
• PWM	No
• Oversampling	No
• MSO	Yes

Output voltage

Rated value (AC)	230 V; 120/230 V AC, 50/60 Hz
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Power

Power available from the backplane bus	0.9 W
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Power loss

Power loss, typ.	10.8 W
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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

• 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
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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

<ul style="list-style-type: none"> • Current per channel, max. 	2 A; see additional description in the manual
<ul style="list-style-type: none"> • Current per group, max. 	2 A; see additional description in the manual
<ul style="list-style-type: none"> • Current per module, max. 	10 A; see additional description in the manual
Cable length	
<ul style="list-style-type: none"> • shielded, max. 	1 000 m
<ul style="list-style-type: none"> • unshielded, max. 	600 m

Interrupts/diagnostics/status information

Diagnostics function	No
Substitute values connectable	Yes

Alarms

<ul style="list-style-type: none"> • Diagnostic alarm 	No
<ul style="list-style-type: none"> • Maintenance interrupt 	No

Diagnoses

<ul style="list-style-type: none"> • Monitoring the supply voltage 	No
<ul style="list-style-type: none"> • Wire-break 	No
<ul style="list-style-type: none"> • Short-circuit 	No

Diagnostics indication LED

<ul style="list-style-type: none"> • RUN LED 	Yes; green LED
<ul style="list-style-type: none"> • ERROR LED 	Yes; red LED
<ul style="list-style-type: none"> • Monitoring of the supply voltage (PWR-LED) 	No
<ul style="list-style-type: none"> • Channel status display 	Yes; green LED
<ul style="list-style-type: none"> • for channel diagnostics 	No
<ul style="list-style-type: none"> • for module diagnostics 	Yes; red LED

Potential separation

Potential separation channels	
<ul style="list-style-type: none"> • between the channels 	Yes
<ul style="list-style-type: none"> • between the channels, in groups of 	1
<ul style="list-style-type: none"> • between the channels and backplane bus 	Yes
<ul style="list-style-type: none"> • 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
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Isolation

Isolation tested with	3 100 V DC
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Standards, approvals, certificates

Suitable for safety functions	No
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Ambient conditions

Ambient temperature during operation	
<ul style="list-style-type: none"> • horizontal installation, min. 	0 °C
<ul style="list-style-type: none"> • horizontal installation, max. 	60 °C

- vertical installation, min. 0 °C
- vertical installation, max. 40 °C

Dimensions

Width	35 mm
Height	147 mm
Depth	129 mm

Weights

Weight, approx.	290 g
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last modified: 09/03/2020