

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"> FW update possible 	Yes
Product function	
<ul style="list-style-type: none"> I&M data 	Yes; I&M0 to I&M3
Engineering with	
<ul style="list-style-type: none"> STEP 7 TIA Portal configurable/integrated as of version 	V12 / V12
<ul style="list-style-type: none"> STEP 7 configurable/integrated as of version 	V5.5 SP3 / -
<ul style="list-style-type: none"> PROFIBUS as of GSD version/GSD revision 	V1.0 / V5.1
<ul style="list-style-type: none"> PROFINET as of GSD version/GSD revision 	V2.3 / -
Operating mode	
<ul style="list-style-type: none"> DQ 	Yes
<ul style="list-style-type: none"> DQ with energy-saving function 	No
<ul style="list-style-type: none"> PWM 	No

<ul style="list-style-type: none"> • 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
<ul style="list-style-type: none"> • built-in fuse 	6.3 A melting fuse, slow-blow
Switching capacity of the outputs	
<ul style="list-style-type: none"> • with resistive load, max. • on lamp load, max. 	2 A 50 W
Output voltage	
<ul style="list-style-type: none"> • for signal "1", min. 	L1 (-1.5 V) at maximum output current; L1 (-8.5 V) at minimum output current
Output current	
<ul style="list-style-type: none"> • for signal "1" rated value • for signal "1" permissible range, min. • for signal "1" permissible range, max. • for signal "0" residual current, max. 	2 A 10 mA 15 A; max. 1 AC cycle 2 mA
Output delay with resistive load	
<ul style="list-style-type: none"> • "0" to "1", max. • "1" to "0", max. 	1 AC cycle 1 AC cycle
Parallel switching of two outputs	
<ul style="list-style-type: none"> • for logic links • for uprating • for redundant control of a load 	No No Yes
Switching frequency	
<ul style="list-style-type: none"> • with resistive load, max. • with inductive load, max. • on lamp load, max. 	10 Hz 0.5 Hz 1 Hz
Total current of the outputs	
<ul style="list-style-type: none"> • Current per channel, max. • Current per group, max. • Current per module, max. 	2 A; see additional description in the manual 2 A; see additional description in the manual 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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last modified:	08/16/2018
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