

Siemens
EcoTech



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	V2.3.0
<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
<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 	No
<ul style="list-style-type: none"> MSO 	Yes
<ul style="list-style-type: none"> Integrated operating cycle counter 	Yes; FW V2.3.0 or higher
output voltage / header	
Rated value (AC)	230 V; 120/230 V AC, 50/60 Hz
Power	
Power consumption 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
<ul style="list-style-type: none"> 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 style="list-style-type: none"> with resistive load, max. on lamp load, max. 	<p>2 A</p> <p>50 W</p>
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. 	<p>2 A</p> <p>10 mA</p> <p>15 A; max. 1 AC cycle</p> <p>2 mA</p>
Output delay with resistive load	
<ul style="list-style-type: none"> "0" to "1", max. "1" to "0", max. 	<p>1 AC cycle</p> <p>1 AC cycle</p>
Parallel switching of two outputs	
<ul style="list-style-type: none"> for logic links for uprating for redundant control of a load 	<p>No</p> <p>No</p> <p>Yes</p>
Switching frequency	
<ul style="list-style-type: none"> with resistive load, max. with inductive load, max. on lamp load, max. 	<p>10 Hz</p> <p>0.5 Hz</p> <p>1 Hz</p>
Total current of the outputs	
<ul style="list-style-type: none"> Current per channel, max. Current per group, max. Current per module, max. 	<p>2 A; see additional description in the manual</p> <p>2 A; see additional description in the manual</p> <p>10 A; see additional description in the manual</p>
Cable length	
<ul style="list-style-type: none"> shielded, max. unshielded, max. 	<p>1 000 m</p> <p>600 m</p>
Interrupts/diagnostics/status information	
Diagnostics function	No
Substitute values connectable	Yes
Alarms	
<ul style="list-style-type: none"> Diagnostic alarm Maintenance interrupt 	<p>No</p> <p>Yes; maintenance alarm for switching cycle counter</p>
Diagnoses	
<ul style="list-style-type: none"> Monitoring the supply voltage Wire-break Short-circuit 	<p>No</p> <p>No</p> <p>No</p>
Diagnostics indication LED	
<ul style="list-style-type: none"> RUN LED ERROR LED Monitoring of the supply voltage (PWR-LED) Channel status display for channel diagnostics for module diagnostics 	<p>Yes; green LED</p> <p>Yes; red LED</p> <p>No</p> <p>Yes; green LED</p> <p>No</p> <p>Yes; red LED</p>
Potential separation	
Potential separation channels	
<ul style="list-style-type: none"> between the channels between the channels, in groups of between the channels and backplane bus Between the channels and load voltage L1 	<p>Yes</p> <p>1</p> <p>Yes</p> <p>Yes</p>
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
Standards, approvals, certificates	
Siemens Eco Profile (SEP)	Siemens EcoTech
Suitable for safety functions	No
Ecological footprint	
<ul style="list-style-type: none"> environmental product declaration 	Yes
Global warming potential	

— global warming potential, (total) [CO2 eq]	43.8 kg
— global warming potential, (during production) [CO2 eq]	9.5 kg
— global warming potential, (during operation) [CO2 eq]	34.5 kg
— global warming potential, (after end of life cycle) [CO2 eq]	-0.231 kg

product functions / security / header

signed firmware update	No
data integrity	No

Ambient conditions

Ambient temperature during operation	
• horizontal installation, min.	-25 °C; From FS05
• horizontal installation, max.	60 °C
• vertical installation, min.	-25 °C; From FS05
• vertical installation, max.	40 °C

Dimensions

Width	35 mm
Height	147 mm
Depth	129 mm

Weights

Weight, approx.	290 g
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Classifications

	Version	Classification
eClass	14	27-24-22-04
eClass	12	27-24-22-04
eClass	9.1	27-24-22-04
eClass	9	27-24-22-04
eClass	8	27-24-22-04
eClass	7.1	27-24-22-04
eClass	6	27-24-22-04
ETIM	10	EC001419
ETIM	9	EC001419
ETIM	8	EC001419
ETIM	7	EC001419
IDEA	4	3566
UNSPSC	15	32-15-17-05

Approvals / Certificates

General Product Approval	other
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[Miscellaneous](#)



[Confirmation](#)

other	Environment
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