



Figure similar

SIMATIC S7-1500, digital output module DQ 16x230 V AC/1 A ST; TRIAC; 16 channels in groups of 2; 2 A per group; Substitute value: Front connector (screw terminals or push-in) to be ordered separately

General information	
Product type designation	DQ 16x230VAC/1A ST (Triac)
HW functional status	From FS01
Firmware version	V 1.2.0
• FW update possible	Yes
Product function	
• I&M data	Yes; I&M0 to I&M3
• Isochronous mode	No
• Prioritized startup	Yes
Engineering with	
• STEP 7 TIA Portal configurable/integrated from version	V13 SP1 / -
• STEP 7 configurable/integrated from version	V5.5 SP3 / -
• PROFIBUS from GSD version/GSD revision	V1.0 / V5.1
• PROFINET from GSD version/GSD revision	V2.3 / -
Operating mode	
• DQ	Yes
• DQ with energy-saving function	No
• PWM	No
• Oversampling	No
• MSO	Yes
• Integrated operating cycle counter	Yes; FW V1.2.0 or higher
output voltage / header	
Rated value (AC)	230 V; 120/230 V AC, 50/60 Hz
Power	
Power available from the backplane bus	1.2 W
Power loss	
Power loss, typ.	11.1 W
Digital outputs	
Type of digital output	Triac
Number of digital outputs	16
Current-sinking	Yes
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.	4
Switching capacity of the outputs	
• with resistive load, max.	1 A
• on lamp load, max.	50 W

<b>Output voltage</b>	
• for signal "1", min.	L1 (-1.5 V) at maximum output current; L1 (-8.5 V) at minimum output current
<b>Output current</b>	
• for signal "1" rated value	1 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
<b>Output delay with resistive load</b>	
• "0" to "1", max.	1 AC cycle
• "1" to "0", max.	1 AC cycle
<b>Parallel switching of two outputs</b>	
• for logic links	No
• for uprating	No
• for redundant control of a load	Yes
<b>Switching frequency</b>	
• with resistive load, max.	10 Hz
• with inductive load, max.	0.5 Hz
• on lamp load, max.	1 Hz
<b>Total current of the outputs</b>	
• Current per channel, max.	1 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
<b>Cable length</b>	
• shielded, max.	1 000 m
• unshielded, max.	600 m
<b>Interrupts/diagnostics/status information</b>	
Diagnostics function	No
Substitute values connectable	Yes
<b>Alarms</b>	
• Diagnostic alarm	No
• Maintenance interrupt	Yes; maintenance alarm for switching cycle counter
<b>Diagnoses</b>	
• Monitoring the supply voltage	No
• Wire-break	No
• Short-circuit	No
<b>Diagnostics indication LED</b>	
• 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
<b>Potential separation</b>	
<b>Potential separation channels</b>	
• between the channels	No
• between the channels, in groups of	2
• between the channels and backplane bus	Yes
<b>Permissible potential difference</b>	
between different circuits	250 V AC between the channels and the backplane bus; 500 V AC between the channels
<b>Isolation</b>	
Isolation tested with	3 100 V DC
<b>Standards, approvals, certificates</b>	
Suitable for safety functions	No
<b>product functions / security / header</b>	
data integrity	No
<b>Ambient conditions</b>	
<b>Ambient temperature during operation</b>	
• horizontal installation, min.	0 °C
• 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.	310 g
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last modified:

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