SIEMENS

Data sheet

6ES7522-5HF00-0AB0



SIMATIC S7-1500, DIGITAL OUTPUT MODULE DQ 8 X 230VAC/5A,RELAY; 8 CHANNELS IN GROUPS OF 1, 5A PER GROUP; DIAGNOSIS; SUBSTITUTE VALUE

Figure similar

Product type designation	
General information	
HW functional status	E01
Firmware version	V2.0.0
Product function	
• I&M data	Yes; I&M0 to I&M3
Engineering with	
 STEP 7 TIA Portal can be configured/integrated as of version 	V12 / V12
 STEP 7 can be configured/integrated as of version 	V5.5 SP3 / -
 PROFIBUS as of GSD version/GSD revision 	V1.0 / V5.1
 PROFINET as of GSD version/GSD revision 	V2.3 / -
Operating mode	
• MSO	Yes
Supply voltage	
Rated value (DC)	24 V
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
Reverse polarity protection	Yes
Input current	
Current consumption, max.	80 mA
Power	
Power available from the backplane bus	0.8 W

Power loss, typ. Digital outputs S	Power losses		
Number of digital outputs Current-sinking Current-sourcing Short-circuit protection Controlling a digital input • on lamp load, max. • Low energy/fluorescent lamps with electronic control gear • Fluorescent tubes, conventionally compensated • Fluorescent tubes, uncompensated • For signal "1" rated value • for signal "1" permissible range, min. • for signal "1" permissible range, max. • for for logic links • for logic links • for redundant control of a load Switching frequency • with resistive load, max. • with inductive load, max. • on lamp load, max. • Current per group, max. • Current per group, max. • Current per group, max. • Number of relay outputs • Rated input voltage of relay coil L+ (DC) 8 Ves • Rated input voltage of relay coil L+ (DC) 8 Ves • Rated input voltage of relay coil L+ (DC)	Power loss, typ.	5 W	
Number of digital outputs Current-sinking Current-sourcing Short-circuit protection Controlling a digital input Switching capacity of the outputs on lamp load, max. Low energy/fluorescent lamps with electronic control gear Fluorescent tubes, conventionally compensated Fluorescent tubes, uncompensated Fluorescent tubes, uncompensated Fluorescent tubes, uncompensated For signal "1" rated value for signal "1" permissible range, min. for signal "1" permissible range, max. for signal "0" residual current, max. Agregate Current of a load Switching frequency with resistive load, max. with inductive load, max. with inductive load, max. Current per channel, max. Current per group, max. Current per group, max. Current per group, max. Current per module, max. Relay outputs Rated input voltage of relay coil L+ (DC) 10 X 58 W (25,000 operating cycles) 10 X 58 W (25,000 o	Digital outputs		
Switching capacity of the outputs		8	
short-circuit protection Controlling a digital input Switching capacity of the outputs on lamp load, max. Low energy/fluorescent lamps with electronic control gear Fluorescent tubes, conventionally compensated Fluorescent tubes, uncompensated Fluorescent tubes,	Current-sinking	Yes	
Controlling a digital input Switching capacity of the outputs • on lamp load, max. • Low energy/fluorescent lamps with electronic control gear • Fluorescent tubes, conventionally compensated • Fluorescent tubes, uncompensated • Fluorescent tubes, uncompensated • Fluorescent tubes, uncompensated • For signal "1" rated value • for signal "1" permissible range, min. • for signal "1" permissible range, max. • for signal "0" residual current, max. • for logic links • for increased power • for redundant control of a load Switching frequency • with resistive load, max. • on lamp load, max. • on lamp load, max. • Current per channel, max. • Current per group, max. • Current per group, max. • Number of relay outputs • Number of relay outputs • Rated input voltage of relay coil L+ (DC) 1 X 58 W (25,000 operating cycles) 1 X 58 W	Current-sourcing	Yes	
Switching capacity of the outputs on lamp load, max. Low energy/fluorescent lamps with electronic control gear Fluorescent tubes, conventionally compensated Fluorescent tubes, uncompensated Fluorescent tubes, uncompensated Fluorescent tubes, uncompensated Fluorescent tubes, uncompensated of resignal "1" rated value for signal "1" permissible range, min. for signal "1" permissible range, max. for signal "0" residual current, max. of or logic links for increased power for redundant control of a load Switching frequency with resistive load, max. with inductive load, max. on lamp load, max. Current per channel, max. Current per group, max. Current per group, max. Current per module, max. Current per module, max. Current per module, max. Current per module, max. Current per module, max. Relay outputs Number of relay outputs Rated input voltage of relay coil L+ (DC) 1 X 58 W (25,000 operating cycles) 1 X 58 W (2	short-circuit protection	No	
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Low energy/fluorescent lamps with electronic control gear Fluorescent tubes, conventionally compensated Fluorescent tubes, uncompensated 10 X 58 W (25,000 operating cycles) Output current for signal "1" rated value for signal "1" permissible range, min. for signal "1" permissible range, max. for signal "0" residual current, max. For logic links for logic links for increased power for redundant control of a load Yes Switching frequency with resistive load, max. with inductive load, max. on lamp load, max. Current per channel, max. Current per group, max. Current per group, max. Current per module, max. Current per module, max. Current per module, max. Relay outputs Number of relay outputs Rated input voltage of relay coil L+ (DC) A X 58 W (25,000 operating cycles) 1 X 58 W (25,000 operating cycles) 10 X 58 W (25,000 operating cycles 10 X 58 W (25,000 operating cycles) 10 X 58 W (25,000 operating cycles 5 A A 6 A; thermal continuous current 9 A; thermal continuous current 9 A; thermal continuous current 9 A	Switching capacity of the outputs		
control gear • Fluorescent tubes, conventionally compensated • Fluorescent tubes, uncompensated • For signal "1" rated value • for signal "1" permissible range, min. • for signal "1" permissible range, max. • for signal "0" residual current, max. • for signal "0" residual current, max. • for logic links • for logic links • for increased power • for redundant control of a load Yes Switching frequency • with resistive load, max. • with inductive load, max. • on lamp load, max. • on lamp load, max. • Current per channel, max. • Current per group, max. • Current per group, max. • Current per module, max. • Current per module, max. • Current per module, max. • Number of relay outputs • Number of relay outputs • Rated input voltage of relay coil L+ (DC) 24 V	● on lamp load, max.	1 500 W; 10,000 operating cycles	
Fluorescent tubes, uncompensated Output current for signal "1" rated value for signal "1" permissible range, min. for signal "1" permissible range, min. for signal "0" residual current, max. for signal "0" residual current, max. Agraellel switching of 2 outputs for logic links for increased power for redundant control of a load Switching frequency with resistive load, max. with inductive load, max. fon lamp load, max. Current per channel, max. Current per group, max. Current per group, max. Current per module, max. Current per module, max. Relay outputs Rated input voltage of relay coil L+ (DC) SA SA SA SA SA SA SA S		10 X 58 W (25,000 operating cycles)	
Output current • for signal "1" rated value • for signal "1" permissible range, min. • for signal "1" permissible range, min. • for signal "1" permissible range, max. • for signal "0" residual current, max. • for signal "0" residual current, max. • for logic links • for logic links • for increased power • for redundant control of a load Yes Switching frequency • with resistive load, max. • with inductive load, max. • on lamp load, max. • on lamp load, max. • Current per channel, max. • Current per group, max. • Current per group, max. • Current per module, max. • Current per module, max. • Current per module, max. • Relay outputs • Number of relay outputs • Rated input voltage of relay coil L+ (DC) 24 V	• Fluorescent tubes, conventionally compensated	1 X 58 W (25,000 operating cycles)	
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• for signal "1" permissible range, min. • for signal "0" residual current, max. • for signal "0" residual current, max. • for logic links • for increased power • for redundant control of a load Switching frequency • with resistive load, max. • with inductive load, max. • on lamp load, max. • Current per channel, max. • Current per group, max. • Current per module, max. • Current per module, max. • Number of relay outputs • Rated input voltage of relay coil L+ (DC) • Rated input voltage of relay coil L+ (DC) • A Rated input voltage of relay coil L+ (DC)	Output current		
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for signal "0" residual current, max. Parallel switching of 2 outputs for logic links for increased power for redundant control of a load Yes Switching frequency with resistive load, max. with inductive load, max. on lamp load, max. on lamp load, max. Current per channel, max. Current per group, max. Current per module, max. Current per module, max. Relay outputs Rated input voltage of relay coil L+ (DC) Yes Yes Yes Yes No Yes As Yes As	• for signal "1" permissible range, min.	5 mA; 10 V	
Parallel switching of 2 outputs • for logic links • for increased power • for redundant control of a load Switching frequency • with resistive load, max. • with inductive load, max. • on lamp load, max. • on lamp load, max. • Current per channel, max. • Current per group, max. • Current per module, max. • Current per module, max.	• for signal "1" permissible range, max.	8 A; thermal continuous current	
 for logic links for increased power No for redundant control of a load Yes Switching frequency with resistive load, max. with inductive load, max. on lamp load, max. 2 Hz on lamp load, max. 2 Hz Aggregate current of the outputs Current per channel, max. Current per group, max. Current per group, max. Current per module, max. 64 A; see additional description in the manual Relay outputs Number of relay outputs Rated input voltage of relay coil L+ (DC) 24 V 	• for signal "0" residual current, max.	0 A	
for increased power for redundant control of a load Yes Switching frequency with resistive load, max. with inductive load, max. on lamp load, max.	Parallel switching of 2 outputs		
• for redundant control of a load Switching frequency • with resistive load, max. • with inductive load, max. • on lamp load, max. • Ourrent of the outputs • Current per channel, max. • Current per group, max. • Current per module, max. • Current per module, max. • Current per module, max. • Rated input voltage of relay coil L+ (DC) Yes Switching frequency 2 Hz 8 A; see additional description in the manual	• for logic links	Yes	
Switching frequency • with resistive load, max. • with inductive load, max. • on lamp load, max. • Current per channel, max. • Current per group, max. • Current per module, max. • Current per module, max. • Rated input voltage of relay coil L+ (DC) • With resistive load, max. 2 Hz 0.5 Hz 2 Hz 8 A; see additional description in the manual	• for increased power	No	
 with resistive load, max. with inductive load, max. on lamp load, max. Aggregate current of the outputs Current per channel, max. Current per group, max. Current per module, max. A; see additional description in the manual Current per module, max. A; see additional description in the manual A; see additional description in the manual Relay outputs Number of relay outputs Rated input voltage of relay coil L+ (DC) 24 V 	 for redundant control of a load 	Yes	
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Aggregate current of the outputs • Current per channel, max. • Current per group, max. • Current per module, max. 64 A; see additional description in the manual Relay outputs • Number of relay outputs • Rated input voltage of relay coil L+ (DC) 24 V	• with inductive load, max.	0.5 Hz	
 Current per channel, max. Current per group, max. Current per module, max. Current per module, max. Relay outputs Number of relay outputs Rated input voltage of relay coil L+ (DC) 8 A; see additional description in the manual 64 A; see additional description in the manual 8 8 24 V 	• on lamp load, max.	2 Hz	
 Current per group, max. Current per module, max. 64 A; see additional description in the manual Relay outputs Number of relay outputs Rated input voltage of relay coil L+ (DC) 8 24 V 	Aggregate current of the outputs		
 Current per module, max. Relay outputs Number of relay outputs Rated input voltage of relay coil L+ (DC) 64 A; see additional description in the manual 8 24 V 	Current per channel, max.	8 A; see additional description in the manual	
Relay outputs • Number of relay outputs • Rated input voltage of relay coil L+ (DC) 24 V	 Current per group, max. 	8 A; see additional description in the manual	
 Number of relay outputs Rated input voltage of relay coil L+ (DC) 24 V	Current per module, max.	64 A; see additional description in the manual	
• Rated input voltage of relay coil L+ (DC) 24 V	Relay outputs		
· · · · · · · · · · · · · · · · · · ·	Number of relay outputs	8	
• Current consumption of relays (coil current of 80 mA	 Rated input voltage of relay coil L+ (DC) 	24 V	
all relays), max.	 Current consumption of relays (coil current of all relays), max. 	80 mA	
 external protection for relay outputs With miniature circuit breaker with characteristic B for: cos φ 1.6 600 A cos φ 0.5 0.7: 900 A with 8 A Diazed fuse: 1000 A 	 external protection for relay outputs 	With miniature circuit breaker with characteristic B for: cos ϕ 1.0: 600 A cos ϕ 0.5 0.7: 900 A with 8 A Diazed fuse: 1000 A	
Contact connection (internal) No	 Contact connection (internal) 	No	
Size of motor starters according to NEMA, max. 5	• Size of motor starters according to NEMA, max.	5	
• Number of operating cycles, max. 4 000 000; see additional description in the manual	 Number of operating cycles, max. 	4 000 000; see additional description in the manual	
• Relay approved acc. to UL 508 Yes; 250 V AC/5 A g.p.; 120 V AC TV-4 tungsten; A300, R300	 Relay approved acc. to UL 508 	Yes; 250 V AC/5 A g.p.; 120 V AC TV-4 tungsten; A300, R300	

Outlabing and other of another to	
Switching capacity of contacts	100 11 10 10
— with inductive load, max.	see additional description in the manual
— with resistive load, max.	see additional description in the manual
Cable length	
• shielded, max.	1 000 m
Unshielded, max.	600 m
Isochronous mode	
Isochronous operation (application synchronized up	No
to terminal)	
Interrupts/diagnostics/status information	
Substitute values connectable	Yes
Alarms	
Diagnostic alarm	Yes
Diagnostic messages	
Diagnostics	Yes
 Monitoring the supply voltage 	Yes
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) 	Yes; Green LED
Channel status display	Yes; Green LED
• for channel diagnostics	No
• for module diagnostics	Yes; Red LED
Galvanic isolation	
Electrical isolation channels	
between the channels	Yes; Switching of different phases permitted
• between the channels, in groups of	1
• between the channels and the backplane bus	Yes
• between the channels and the load voltage L+	Yes
Permissible potential difference	
between different circuits	75 V DC/60 V AC (base isolation) between backplane bus and the
	supply voltage L+; 250 V AC between the channels and the
	supply voltage L+; 250 V AC between the channels and the
	backplane bus; 500 V AC between the channels
Isolation	
Isolation checked with	Between the channels: 2500 V DC; between the channels and
	backplane bus: 2500 V DC; between L+ backplane bus 707 V DC
	(type test)

Decentralized operation		
Prioritized startup	Yes	
Dimensions		
Width	35 mm	
Height	147 mm	
Depth	129 mm	
Weights		
Weight, approx.	350 g	
last modified:	12.03.2015	