

SIPLUS S7-1500 DQ 8X230VAC/5A S -25 ... +60°C with conformal coating based on 6ES7522-5HF00-0AB0 . DIGITAL OUTPUT MODULE DQ 8 X "230VAC/5A,RELAY; 8 CHANNELS IN" "GROUPS OF 1, 5A PER GROUP;" "DIAGNOSIS; SUBSTITUTE VALUE"



Figure similar

General information	
Product type designation	DQ 8x230 V AC/5 A ST (relay)
Product function	
• I&M data	Yes; I&M0 to I&M3
• Isochronous mode	No
• Fast startup	Yes; 500 ms
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
Input current	
Current consumption, max.	80 mA
Power	
Power available from the backplane bus	0.8 W

Power loss

Power loss, typ.	3 W
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Digital outputs

Type of digital output	Relays
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Number of digital outputs	8
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Digital outputs, parameterizable	Yes
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Controlling a digital input	possible
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Size of motor starters according to NEMA, max.	5
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Switching capacity of the outputs

• on lamp load, max.	1 500 W; 10 000 operating cycles
• Low energy/fluorescent lamps with electronic control gear	10x 58 W (25 000 operating cycles)
• Fluorescent tubes, conventionally compensated	1x 58 W (25 000 operating cycles)
• Fluorescent tubes, uncompensated	10x 58 W (25 000 operating cycles)

Output current

• for signal "1" rated value	5 A
• for signal "1" permissible range, min.	5 mA; 10 V
• for signal "1" permissible range, max.	8 A; thermal continuous current
• for signal "0" residual current, max.	0 A

Parallel switching of two outputs

• for logic links	Yes
• for uprating	No
• for redundant control of a load	Yes

Switching frequency

• with resistive load, max.	2 Hz
• with inductive load, max.	0.5 Hz
• on lamp load, max.	2 Hz

Total current of the outputs

• Current per channel, max.	8 A; note derating data in the manual
• Current per group, max.	8 A; note derating data in the manual
• Current per module, max.	64 A; note derating data in the manual

Relay outputs

• Number of relay outputs	8
• Rated supply voltage of relay coil L+ (DC)	24 V
• 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: $\cos \varphi$ 1.0: 600 A $\cos \varphi$ 0.5 ... 0.7: 900 A with 8 A Diazed fuse: 1 000 A
• Contact connection (internal)	No
• 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

Switching capacity of contacts

— 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 |

Interrupts/diagnostics/status information

Diagnostics function	Yes
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Substitute values connectable	Yes
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Alarms

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| • Diagnostic alarm | Yes |
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Diagnostic messages

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| • Monitoring the supply voltage | Yes |
| • Wire-break | No |
| • Short-circuit | No |

Diagnostics indication LED

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|--|----------------|
| • 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 |

Potential separation

Potential separation channels

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| • between the channels | Yes; Switching of different phases permitted |
| • between the channels, in groups of | 1 |
| • between the channels and backplane bus | Yes |
| • Between the channels and 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
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Isolation

Isolation tested with	Between the channels: 2 500 V DC; between the channels and backplane bus: 2 500 V DC; between L+ backplane bus 707 V DC (type test)
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Standards, approvals, certificates

Suitable for safety functions	No
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Ambient conditions

Ambient temperature during operation	
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<ul style="list-style-type: none"> • horizontal installation, min. • horizontal installation, max. • vertical installation, min. • vertical installation, max. 	<p>-25 °C; = Tmin (incl. condensation/frost)</p> <p>60 °C; = Tmax</p> <p>-25 °C; = Tmin</p> <p>40 °C; = Tmax</p>
Altitude during operation relating to sea level	
<ul style="list-style-type: none"> • Installation altitude above sea level, max. • Ambient air temperature-barometric pressure-altitude 	<p>2 000 m</p> <p>Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m)</p>
Relative humidity	
<ul style="list-style-type: none"> • With condensation, tested in accordance with IEC 60068-2-38, max. 	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)
Resistance	
Coolants and lubricants	
— Resistant to commercially available coolants and lubricants	Yes; Incl. diesel and oil droplets in the air
Use in stationary industrial systems	
— to biologically active substances according to EN 60721-3-3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
— to chemically active substances according to EN 60721-3-3	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
— to mechanically active substances according to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust, *
Use on ships/at sea	
— to biologically active substances according to EN 60721-3-6	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request
— to chemically active substances according to EN 60721-3-6	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
— to mechanically active substances according to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust; *
Usage in industrial process technology	
— Against chemically active substances acc. to EN 60654-4	Yes; Class 3 (excluding trichlorethylene)
— Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)
Remark	
— Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04	* The supplied plug covers must remain in place over the unused interfaces during operation!
Conformal coating	
<ul style="list-style-type: none"> • Coatings for printed circuit board assemblies acc. to EN 61086 • Protection against fouling acc. to EN 60664-3 	<p>Yes; Class 2 for high reliability</p> <p>Yes; Type 1 protection</p>

- Military testing according to MIL-I-46058C, Amendment 7
- Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A

Yes; Discoloration of coating possible during service life

Yes; Conformal coating, Class A

Dimensions

Width	35 mm
Height	147 mm
Depth	129 mm

Weights

Weight, approx.	200 g
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last modified: 05/09/2020