



Figure similar

SIPLUS S7-1500 DQ 8x230V AC/5A based on 6ES7522-5HF00-0AB0 with conformal coating, -25...+60 °C, digital output module, 8 channels in groups of 1; 5 A per group; diagnostics; substitute value

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)	19.2 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
Digital outputs	
Type of digital output	Relays
Number of digital outputs	8
Digital outputs, parameterizable	Yes
Short-circuit protection	No
Controlling a digital input	possible
Size of motor starters according to NEMA, max.	5
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	
<ul style="list-style-type: none"> with resistive load, max. with inductive load, max. on lamp load, max. 	<p>2 Hz</p> <p>0.5 Hz</p> <p>2 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>8 A; note derating data in the manual</p> <p>8 A; note derating data in the manual</p> <p>64 A; note derating data in the manual</p>
Relay outputs	
<ul style="list-style-type: none"> Number of relay outputs Rated supply voltage of relay coil L+ (DC) Current consumption of relays (coil current of all relays), max. external protection for relay outputs Contact connection (internal) Number of operating cycles, max. Relay approved acc. to UL 508 	<p>8</p> <p>24 V</p> <p>80 mA</p> <p>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</p> <p>No</p> <p>4 000 000; see additional description in the manual</p> <p>Yes; 250 V AC/5 A g.p.; 120 V AC TV-4 tungsten; A300, R300</p>
Switching capacity of contacts	
<ul style="list-style-type: none"> with inductive load, max. with resistive load, max. 	<p>see additional description in the manual</p> <p>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	Yes
Substitute values connectable	Yes
Alarms	
<ul style="list-style-type: none"> Diagnostic alarm 	Yes
Diagnoses	
<ul style="list-style-type: none"> Monitoring the supply voltage Wire-break Short-circuit 	<p>Yes</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>Yes; green LED</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 L+ 	<p>Yes; Switching of different phases permitted</p> <p>1</p> <p>Yes</p> <p>Yes</p>
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 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)
Standards, approvals, certificates	
Suitable for safety functions	No
Ambient conditions	
Ambient temperature during operation	
<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 • 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 	<p>Yes; Class 2 for high reliability</p> <p>Yes; Type 1 protection</p> <p>Yes; Discoloration of coating possible during service life</p> <p>Yes; Conformal coating, Class A</p>
Dimensions	
Width	35 mm
Height	147 mm
Depth	129 mm
Weights	
Weight, approx.	200 g
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