



Figure similar

SIPLUS S7-1500 DQ 8x230V AC/2A based on 6ES7522-5FF00-0AB0 with conformal coating, -40...+70 °C, digital output module, 8 channels in groups of 1; 2 A per group; substitute value

General information	
Product type designation	DQ 8x230 V AC/2A ST (triac)
Firmware version	
• FW update possible	Yes
based on	6ES7522-5FF00-0AB0
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	see entry ID: 109746275
Operating mode	
• DQ	Yes
• DQ with energy-saving function	No
• PWM	No
• Oversampling	No
• MSO	Yes
• 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; > +60 °C number of simultaneously controllable outputs max. 8x 0.25 A, max. total current 2 A
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.	5
Switching capacity of the outputs	
• with resistive load, max.	2 A
• on lamp load, max.	50 W
Output voltage	
• for signal "1", min.	L1 (-1.5 V) at maximum output current; L1 (-8.5 V) at minimum output current
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.	2 A 10 mA 15 A; max. 1 AC cycle 2 mA
Output delay with resistive load	
• "0" to "1", max. • "1" to "0", max.	1 AC cycle 1 AC cycle
Parallel switching of two outputs	
• for logic links • for uprating • for redundant control of a load	No No Yes
Switching frequency	
• with resistive load, max. • with inductive load, max. • on lamp load, max.	10 Hz 0.5 Hz 1 Hz
Total current of the outputs	
• Current per channel, max. • Current per group, max. • Current per module, max.	2 A; = Tmax; > +60 °C number of simultaneously controllable outputs max. 8x 0.25 A, max. total current per group 2 A 2 A; = Tmax; > +60 °C number of simultaneously controllable outputs max. 8x 0.25 A, max. total current per group 2 A 10 A; = Tmax; > +60 °C number of simultaneously controllable outputs max. 8x 0.25 A, max. total current per group 2 A
Cable length	
• shielded, max. • unshielded, max.	1 000 m 600 m
Interrupts/diagnostics/status information	
Diagnostics function	No
Substitute values connectable	Yes
Alarms	
• Diagnostic alarm • Maintenance interrupt	No Yes; maintenance alarm for switching cycle counter
Diagnoses	
• Monitoring the supply voltage • Wire-break • Short-circuit	No No No
Diagnostics indication LED	
• RUN LED • ERROR LED • Monitoring of the supply voltage (PWR-LED) • Channel status display • for channel diagnostics • for module diagnostics	Yes; green LED Yes; red LED No Yes; green LED No Yes; red LED
Potential separation	
Potential separation channels	
• between the channels • between the channels, in groups of • between the channels and backplane bus • Between the channels and load voltage L1	Yes 1 Yes Yes
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	
Suitable for safety functions	No
Ecological footprint	
• 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

eq]			
— 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. - horizontal installation, max.	-40 °C; = Tmin (incl. condensation/frost) 70 °C; = Tmax; > +60 °C number of simultaneously controllable outputs max. 8x 0.25 A, max. total current 2 A		
- vertical installation, min. - vertical installation, max.	-40 °C; = Tmin 40 °C; = Tmax		
Altitude during operation relating to sea level			
- Installation altitude above sea level, max. - Ambient air temperature-barometric pressure-altitude	2 000 m Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m)		
Relative humidity			
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			
- 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	Yes; Class 2 for high reliability Yes; Type 1 protection 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.	290 g		
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	EMV
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[Miscellaneous](#)

[Manufacturer Declaration](#)



[KC](#)

EMV	Maritime application	Environment
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last modified: 6/18/2025