SIEMENS

Data sheet 6AG1522-5EH00-7AB0

Figure similar

SIPLUS S7-1500 DQ 16x48VUC/125V based on 6ES7522-5EH00-0AB0 with conformal coating, -40…+70 °C, digital output module, 16 channels in groups of 1; 0.5 A per group; substitute value; observe derating

General information	
Product type designation	DQ 16x24 ... 48 V UC/125 V DC/0.5 A ST
Firmware version	
● FW update possible	Yes
based on	6ES7522-5EH00-0AB0
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
● Cam control (switching at comparison values)	No
● Oversampling	No
● MSO	Yes
● Integrated operating cycle counter	Yes; FW V1.1.0 or higher
Output voltage	
Rated value (DC)	24 V; 48 V, 125 V
Rated value (AC)	24 V; 48 V (50 - 60 Hz)
Power	
Power consumption from the backplane bus	2 W
Power loss	
Power loss, typ.	3.8 W
Digital outputs	
Type of digital output	Transistor
Number of digital outputs	16
Current-sinking	Yes
Current-sourcing	Yes
Digital outputs, parameterizable	Yes
Limitation of inductive shutdown voltage to	200 V (suppressor diode)
Controlling a digital input	Yes
Switching capacity of the outputs	
● with resistive load, max.	0.5 A
● on lamp load, max.	40 W; At 125 V DC, 10 W at 48 V UC, 5 W at 24 V UC
Output voltage	

● for signal "1", min.	L+ (-1.0 V)
Output current	
● for signal "1" rated value	0.5 A
● for signal "1" permissible range, max.	0.6 A
Output delay with resistive load	
● "0" to "1", max.	5 ms
● "1" to "0", max.	5 ms
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.	25 Hz
● with inductive load, max.	0.5 Hz
● on lamp load, max.	10 Hz
Total current of the outputs	
● Current per channel, max.	0.5 A
● Current per group, max.	0.5 A
● Current per module, max.	8 A
Cable length	
● shielded, max.	1 000 m
● unshielded, max.	600 m
Interrupts/diagnostics/status information	
Diagnostics function	No
Substitute values connectable	Yes
Alarms	
● Diagnostic alarm	No
● Maintenance interrupt	Yes
Diagnoses	
● Monitoring the supply voltage	No
● 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)	No
● Channel status display	Yes; green LED
● for channel diagnostics	No
● for module diagnostics	Yes; red LED
Potential separation	
Potential separation channels	
● between the channels	Yes
● between the channels, in groups of	1
● between the channels and backplane bus	Yes
Permissible potential difference	
between different circuits	125 V DC/48 V AC
Isolation	
Isolation tested with	2 000 V DC
Standards, approvals, certificates	
Suitable for safety functions	No
Suitable for safety-related tripping of standard modules	Yes; From FS02
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

— global warming potential, (after end of life cycle) [CO2 eq]	-0.231 kg		
Highest safety class achievable for safety-related tripping of standard modules			
● Performance level according to ISO 13849-1	PL d		
● Category according to ISO 13849-1	Cat. 3		
● SILCL according to IEC 62061	SILCL 2		
Security			
signed firmware update	Yes		
data integrity	No		
Ambient conditions			
Ambient temperature during operation			
● horizontal installation, min.	-40 °C; = Tmin (incl. condensation/frost)		
● horizontal installation, max.	70 °C; = Tmax; > +60 °C max. 0.25 A per output		
Altitude during operation relating to sea level			
● Installation altitude above sea level, max.	2 000 m		
● Ambient air temperature-barometric pressure-altitude	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 in bedewed state), horizontal installation		
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	Yes; Class 2 for high reliability		
● Protection against fouling acc. to EN 60664-3	Yes; Type 1 protection		
● Military testing according to MIL-I-46058C, Amendment 7	Yes; Discoloration of coating possible during service life		
● Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A	Yes; Conformal coating, Class A		
Dimensions			
Width	35 mm		
Height	147 mm		
Depth	129 mm		
Weights			
Weight, approx.	230 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
CE EG-Konf.	Manufacturer Declaration	UKCA	China RoHS	UL	KC

EMV	Maritime application	Environment
RCM	DNV	EPD

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