



Figure similar

SIPLUS ET 200SP DQ 4x24VDC/2A Standard based on 6ES7132-6BD20-0BA0 with conformal coating, -40...+70 °C, digital output module, suitable for BU type A0, color code CC02, channel diagnostics,

General information	
Product type designation	DQ 4x24 V DC/2 A ST
based on	6ES7132-6BD20-0BA0
usable BaseUnits	BU type A0
Engineering with	
• STEP 7 TIA Portal configurable/integrated from version	see entry ID: 109746275
Supply voltage	
Rated value (DC)	24 V
permissible range, lower limit (DC)	19.2 V
permissible range, upper limit (DC)	28.8 V
Power loss	
Power loss, typ.	1 W
Address area	
Address space per module	
• Address space per module, max.	32 byte
Digital outputs	
Type of digital output	Source output (PNP, current-sourcing)
Number of digital outputs	4; > +60 °C number of simultaneously controllable outputs max. 2x 0.25 A or max. 4x 0.125 A, max. total current 0.5 A
Short-circuit protection	Yes
• Response threshold, typ.	2.8 to 5.2 A
Limitation of inductive shutdown voltage to	Typ. L+ (-50 V)
Controlling a digital input	Yes
Switching capacity of the outputs	
• with resistive load, max.	2 A
• on lamp load, max.	10 W
Load resistance range	
• lower limit	12 Ω
• upper limit	3 400 Ω
Output current	
• for signal "1" rated value	2 A
Output delay with resistive load	
• "0" to "1", max.	50 μs
• "1" to "0", max.	100 μs
Parallel switching of two outputs	
• for uprating	No
• for redundant control of a load	Yes
Switching frequency	
• with resistive load, max.	100 Hz

• with inductive load, max.	2 Hz
• on lamp load, max.	10 Hz
Cable length	
• shielded, max.	1 000 m
• unshielded, max.	200 m
Interrupts/diagnostics/status information	
Diagnoses	
• Monitoring the supply voltage	Yes
• Wire-break	Yes
• Short-circuit	Yes
• Group error	Yes
Permissible potential difference	
between different circuits	75 V DC/60 V AC
Isolation	
Isolation tested with	707 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]	29.3 kg
— global warming potential, (during production) [CO2 eq]	3.98 kg
— global warming potential, (during operation) [CO2 eq]	25.6 kg
— global warming potential, (after end of life cycle) [CO2 eq]	-0.245 kg
Ambient conditions	
Ambient temperature during operation	
• horizontal installation, min.	-40 °C; = Tmin (incl. condensation/frost)
• horizontal installation, max.	70 °C; = Tmax; > +60 °C number of simultaneously controllable outputs max. 2x 0.25 A or max. 4x 0.125 A, max. total current 0.5 A
• vertical installation, min.	-40 °C; = Tmin
• vertical installation, max.	50 °C; = Tmax
Altitude during operation relating to sea level	
• Installation altitude above sea level, max.	5 000 m
• Ambient air temperature-barometric pressure-altitude	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 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, *
— Against mechanical environmental conditions acc. to EN 60721-3-3	Yes; Class 3M8 using the SIPLUS Mounting Kit ET 200SP (6AG1193-6AA00-0AA0)
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; *
— Against mechanical environmental conditions acc. to EN 60721-3-6	Yes; Class 6M4 using the SIPLUS Mounting Kit ET 200SP (6AG1193-6AA00-0AA0)
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		15 mm		
Height		73 mm		
Depth		58 mm		
Weights				
Weight, approx.		30 g		
Classifications				
			Version	Classification
		eClass	14	27-24-26-04
		eClass	12	27-24-26-04
		eClass	9.1	27-24-26-04
		eClass	9	27-24-26-04
		eClass	8	27-24-26-04
		eClass	7.1	27-24-26-04
		eClass	6	27-24-26-04
		ETIM	9	EC001599
		ETIM	8	EC001599
		ETIM	7	EC001599
		IDEA	4	3566
		UNSPSC	15	32-15-17-05
Approvals / Certificates				
General Product Approval				EMV
Miscellaneous		Manufacturer Declaration		
 EG-Konf.				 UL
				 RCM
For use in hazardous locations		Marine / Shipping		Environment
 IECEX		 ATEX		CCC-Ex
		 DNV		
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