Data sheet

SIPLUS S7-1200 SM 1222 16DQ RLY -25...+70°C with conformal coating based on 6ES7222-1HH32-0XB0 . Digital output 16 DQ, relay 2 A



Figure similar

General information	
Product type designation	SM 1222, DQ 16x relay/2 A
Supply voltage	
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
Input current	
from backplane bus 5 V DC, max.	135 mA
Digital outputs	
• from load voltage L+, max.	11 mA/relay coil
Power loss	
Power loss, typ.	8.5 W
Digital outputs	
Number of digital outputs	16
• in groups of	1
Short-circuit protection	No; to be provided externally
Switching capacity of the outputs	

On lamp load, max. Output voltage Rated value (DC) Rated value (AC) Output correct For signal "1" rated value Output delay with resistive load Output delay with resistiv	• with resistive load, max.	2 A
Output voltage Rated value (DC) Rated value (AC) S V AC to 250 V AC Output current • for signal "1" rated value • 70" to "1", max. • "1" to "0", max. 10 ms Total current of the outputs (per group) horizontal installation — up to 50 "C, max. Relay outputs • Number of relay outputs • Rated supply voltage of relay coil L+ (DC) • Number of operating cycles, max. Switching capacity of contacts — with inductive load, max. — on lamp load, max. — on lamp load, max. — with resistive load, max. • shelded, max. • unshielded, max. • unshielded, max. • unshielded, max. • Diagnostics function Diagnostics function Diagnostics function Diagnostics function Diagnostics indication LED • for status of the outputs • for maintenance Potential separation Potential separation Potential separation Potential separation Potential separation groups of • between the channels in groups of • between the channels of the control of the channels • between the channels in groups of • between the channels of the control of the		
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Output current • for signal "1" rated value Output delay with resistive load • "0" to "1", max. • "1" to "0", max. 10 ms • "1" to "0", max. 10 ms Total current of the outputs (per group) horizontal installation — up to 50 °C, max. Relay outputs • Number of relay outputs • Rated supply voltage of relay coil L+ (DC) • Number of operating cycles, max. Switching capacity of contacts — with inductive load, max. — on lamp load, max. — on lamp load, max. — with resistive load, max. — bielded, max. — unshielded, max. • Unshielded,		
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between the channels and backplane bus 1 500 V AC for 1 minute Permissible potential difference	• between the channels, in groups of	4
		1 500 V AC for 1 minute
between different circuits 750 V AC for 1 minute		
	between different circuits	750 V AC for 1 minute



Degree and class of protection	
IP degree of protection	IP20
Ambient conditions	
Free fall	
● Fall height, max.	0.3 m; five times, in product package
Ambient temperature during operation	
• min.	-40 °C; = Tmin (incl. condensation/frost); start-up @ -25 °C
max.At cold restart, min.	70 °C; = Tmax; Tmax > +60 °C number of simultaneously activated outputs 8 (no adjacent points) for horizontal mounting position -25 °C
Ambient temperature during storage/transportation	
• min.	-40 °C
• max.	70 °C
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) // 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); above 2 000 m max. 132 V AC
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,	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas
measuring and control systems acc. to	concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)
ANSI/ISA-71.04	permissible), level EG3 (sait spray) and level EB3 (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
Connection method	
required front connector	Yes
Mechanics/material	
Mechanics/material Enclosure material (front)	
	Yes
Enclosure material (front)	Yes
Enclosure material (front) • Plastic	Yes 45 mm
Enclosure material (front) • Plastic Dimensions	
Enclosure material (front) • Plastic Dimensions Width	45 mm
Enclosure material (front) • Plastic Dimensions Width Height	45 mm 100 mm

10/13/2020



last modified: