

SIPLUS S7-1200 SM 1222 8DQ for medial exposure with conformal coating based on 6ES7222-1BF32-0XB0 . Digital output 8 DQ, 24 V DC, transistor 0.5 A



Figure similar

General information	
Product type designation	SM 1222, DQ 8x24 V DC/0.5 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.	120 mA
Power loss	
Power loss, typ.	1.5 W
Digital outputs	
Number of digital outputs	8
• in groups of	1
Short-circuit protection	No; to be provided externally
Limitation of inductive shutdown voltage to	typ. (L+) -48 V
Switching capacity of the outputs	
• with resistive load, max.	0.5 A

• on lamp load, max.	5 W
<b>Output voltage</b>	
• Rated value (DC)	24 V
• for signal "0", max.	0.1 V; with 10 kOhm load
• for signal "1", min.	20 V DC
<b>Output current</b>	
• for signal "1" rated value	0.5 A
• for signal "0" residual current, max.	10 µA
<b>Output delay with resistive load</b>	
• "0" to "1", max.	50 µs
• "1" to "0", max.	200 µs
<b>Total current of the outputs (per group)</b>	
horizontal installation	
— up to 50 °C, max.	4 A; Current per mass
<b>Relay outputs</b>	
<b>Switching capacity of contacts</b>	
— with inductive load, max.	0.5 A
— on lamp load, max.	5 W
— with resistive load, max.	0.5 A
<b>Cable length</b>	
• shielded, max.	500 m
• unshielded, max.	150 m
<b>Interrupts/diagnostics/status information</b>	
Diagnostics function	Yes
<b>Alarms</b>	
• Diagnostic alarm	Yes
<b>Diagnostic messages</b>	
• Monitoring the supply voltage	Yes
<b>Diagnostics indication LED</b>	
• for status of the outputs	Yes
• for maintenance	Yes
<b>Potential separation</b>	
<b>Potential separation digital outputs</b>	
• between the channels, in groups of	1
• between the channels and backplane bus	500 V AC
<b>Degree and class of protection</b>	
IP degree of protection	IP20
<b>Ambient conditions</b>	
<b>Free fall</b>	
• Fall height, max.	0.3 m; five times, in product package

<b>Ambient temperature during operation</b>	
• min.	-20 °C; = Tmin (incl. condensation/frost); start-up @ 0 °C
• max.	60 °C; = Tmax
• At cold restart, min.	0 °C
<b>Ambient temperature during storage/transportation</b>	
• min.	-40 °C
• max.	70 °C
<b>Altitude during operation relating to sea level</b>	
• 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)
<b>Relative humidity</b>	
• With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)
<b>Resistance</b>	
<b>Coolants and lubricants</b>	
— Resistant to commercially available coolants and lubricants	Yes; Incl. diesel and oil droplets in the air
<b>Use in stationary industrial systems</b>	
— 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, *
<b>Use on ships/at sea</b>	
— 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; *
<b>Usage in industrial process technology</b>	
— 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)
<b>Remark</b>	
— 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"> <li>• Coatings for printed circuit board assemblies acc. to EN 61086</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Protection against fouling acc. to EN 60664-3</li> </ul>	Yes; Type 1 protection
<ul style="list-style-type: none"> <li>• Military testing according to MIL-I-46058C, Amendment 7</li> </ul>	Yes; Discoloration of coating possible during service life
<ul style="list-style-type: none"> <li>• Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A</li> </ul>	Yes; Conformal coating, Class A

Connection method	
required front connector	Yes

Mechanics/material	
Enclosure material (front)	
<ul style="list-style-type: none"> <li>• Plastic</li> </ul>	Yes

Dimensions	
Width	45 mm
Height	100 mm
Depth	75 mm

Weights	
Weight, approx.	180 g
<b>last modified:</b>	05/15/2020