

SIPLUS S7-1200 SM 1222 8DQ -25...+70 °C with conformal coating based on 6ES7222-1BF32-0XB0 . Digital output 8 DQ, 24 V DC, transistor 0.5 A

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

Output voltage

• Rated value (DC) 24 V

• for signal "0", max. 0.1 V; with 10 kOhm load

• for signal "1", min. 20 V DC

Output current

• for signal "1" rated value 0.5 A

• for signal "0" residual current, max. 10 µA

Output delay with resistive load

• "0" to "1", max. 50 µs

• "1" to "0", max. 200 µs

Total current of the outputs (per group)

horizontal installation

— up to 50 °C, max. 4 A; Current per mass

Relay outputs

Switching capacity of contacts

— with inductive load, max. 0.5 A

— on lamp load, max.	5 W
— with resistive load, max.	0.5 A
Cable length	
• shielded, max.	500 m
• unshielded, max.	150 m
Interrupts/diagnostics/status information	
Alarms	Yes
Diagnostic functions	Yes
Alarms	
• Diagnostic alarm	Yes
Diagnostic messages	
• Monitoring the supply voltage	Yes
Diagnostics indication LED	
• for status of the outputs	Yes
• for maintenance	Yes
Potential separation	
Potential separation digital outputs	
• between the channels, in groups of	1
• between the channels and backplane bus	500 V AC
Degree and class of protection	
Degree of protection acc. to EN 60529	
• IP20	Yes
Standards, approvals, certificates	
CE mark	Yes
Ambient conditions	
Free fall	
• Fall height, max.	0.3 m; five times, in product package
Ambient temperature during operation	
• min.	-40 °C; = Tmin; Startup @ -25 °C
• max.	70 °C; = Tmax; Tmax > +60 °C number of simultaneously activated outputs 4 (no adjacent points) for horizontal mounting position
Ambient temperature during storage/transportation	
• min.	-40 °C
• max.	70 °C
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	
<ul style="list-style-type: none"> • 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
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; *
from supply voltage 1L+	
— Note regarding classification of environmental conditions acc. to EN 60721	* The supplied plug covers must remain in place over the unused interfaces during operation!
Connection method	
required front connector	Yes
Mechanics/material	
Enclosure material (front)	
<ul style="list-style-type: none"> • Plastic 	Yes
Dimensions	
Width	45 mm
Height	100 mm
Depth	75 mm
Weights	
Weight, approx.	180 g
last modified:	05/18/2018