Data sheet

SIMATIC S7-1200, Digital output SM 1222, 8 DO, Relay Changeover contact



General information	
Product type designation	SM 1222, DQ 8x 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.	140 mA
Digital outputs	
• from load voltage L+, max.	16.7 mA/relay coil
Power loss	
Power loss, typ.	5 W
Digital outputs	
Number of digital outputs	8
• in groups of	1
Short-circuit protection	No; to be provided externally
Switching capacity of the outputs	
• with resistive load, max.	2 A

Rated value (DC) Rated value (AC) S V AC to 250 V AC Quiput current • for signal "f" rated value Output delay with resistive load • "0" 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 • Namber of relay outputs • Namber of perating cycles, max. Switching capacity of contacts — with inductive load, max. — on lamp load, max. — on lamp load, max. — with resistive load finat. • Shelded, max. • shelded, max. • shelded, max. • unshielded, max. • unshielded, max. • unshielded, max. • unshielded in according to the companies of the compa	• on lamp load, max.	30 W with DC, 200 W with AC
Rated value (AC) 5 V AC to 250 V AC Output current • for signal "1" rated value 2 A Output delay with resistive load • "0" to "1", max. 10 ms • "1" to "0", max. 10 ms Total current of the outputs (per group) horizontal installation — up to 50 °C, max. 2 A: Current per mass Relay outputs • Number of relay outputs 8 • Rated supply voltage of relay coil L+ (DC) 24 V • Number of operating cycles, max. mechanically 10 million, at rated load voltage 100 000 Switching capacity of contacts — with inductive load, max. 2 A — on lamp load, max. 30 W with DC, 200 W with AC — with resistive load, max. 2 A Cable length • shielded, max. 500 m • unshielded, max. 150 m Interrupts/diagnostics/status information Alarms • Diagnostic alarm Yes Diagnostics indication LED • for status of the outputs Yes Potential separation Potential separation digital outputs • between the channels Relays • between the channels and backplane bus Permissible potential difference between difference between different circuits 750 V AC for 1 minute Permissible potential difference between difference rock of EN 60529 • IP20 Yes Standards, approvals, certificates	Output voltage	
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Degree of protection acc. to EN 60529	between different circuits	750 V AC for 1 minute
• IP20 Yes Standards, approvals, certificates		
Standards, approvals, certificates	Degree of protection acc. to EN 60529	
	• IP20	Yes
CE mark Yes		
	CE mark	Yes

CSA approval	Yes
UL approval	Yes
cULus	Yes
FM approval	Yes
RCM (formerly C-TICK)	Yes
Marine approval	Yes
Ambient conditions	
Free fall	
● Fall height, max.	0.3 m; five times, in product package
Ambient temperature during operation	
• min.	-20 °C
• max.	60 °C; Number of simultaneously activated outputs: 4 (no adjacent points) at 60 °C horizontal or 50 °C vertical, 8 at 55 °C horizontal
	or 45 °C vertical
horizontal installation, min.	-20 °C
horizontal installation, max.	60 °C
• vertical installation, min.	-20 °C
 vertical installation, max. 	50 °C
permissible temperature change	5°C to 55°C, 3°C / minute
Ambient temperature during storage/transportation	
• min.	-40 °C
• max.	70 °C
Air pressure acc. to IEC 60068-2-13	
Storage/transport, min.	660 hPa
Storage/transport, max.	1 080 hPa
Relative humidity	
Operation at 25 °C without condensation, max.	95 %
Connection method	
required front connector	Yes
Mechanics/material	
Enclosure material (front)	
• Plastic	Yes
Dimensions	
Width	70 mm
Height	100 mm
Depth	75 mm
Weights	
Weight, approx.	310 g
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