## SIEMENS

## Data sheet

## 6ES7222-1HF32-0XB0

SIMATIC S7-1200, Digital output SM 1222, 8 DO, relay 2 A



Figure similar

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.	120 mA
Digital outputs	
<ul> <li>from load voltage L+, max.</li> </ul>	11 mA/relay coil
Power loss	
Power loss, typ.	4.5 W
Digital outputs	
Number of digital outputs	8
• in groups of	2
Short-circuit protection	No; to be provided externally
Switching capacity of the outputs	
<ul> <li>with resistive load, max.</li> </ul>	2 A
<ul> <li>on lamp load, max.</li> </ul>	30 W with DC, 200 W with AC
Output voltage	
<ul> <li>Rated value (DC)</li> </ul>	5 V DC to 30 V DC
<ul> <li>Rated value (AC)</li> </ul>	5 V AC to 250 V AC
Output current	
<ul> <li>for signal "1" rated value</li> </ul>	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.	10 A; Current per mass
Relay outputs	
<ul> <li>Number of relay outputs</li> </ul>	8
<ul> <li>Rated supply voltage of relay coil L+ (DC)</li> </ul>	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
<ul> <li>unshielded, max.</li> </ul>	150 m

Interrupts/diagnostics/status information		
Alarms		
Diagnostic alarm	Yes	
Diagnostics indication LED		
<ul> <li>for status of the outputs</li> </ul>	Yes	
Potential separation		
Potential separation digital outputs		
<ul> <li>between the channels</li> </ul>	Relays	
<ul> <li>between the channels, in groups of</li> </ul>	2	
<ul> <li>between the channels and backplane bus</li> </ul>	1 500 V AC for 1 minute	
Permissible potential difference		
between different circuits	750 V AC for 1 minute	
Degree and class of protection		
IP degree of protection	IP20	
Standards, approvals, certificates		
CE mark	Yes	
CSA approval	Yes	
UL approval	Yes	
cULus	Yes	
FM approval	Yes	
RCM (formerly C-TICK)	Yes	
KC approval	Yes	
Marine approval	Yes	
Ambient conditions		
Free fall		
• Fall height, max.	0.3 m; five times, in product package	
Ambient temperature during operation	0.5 m, nye times, in product package	
• min.	-20 °C	
• max.	20 °C	
<ul> <li>horizontal installation, min.</li> </ul>	-20 °C	
<ul> <li>horizontal installation, max.</li> </ul>	20 °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 / header		
required front connector	Yes	
Mechanics/material		
Enclosure material (front) <ul> <li>Plastic</li> </ul>	Yes	
• Plastic Dimensions	163	
	45 mm	
Width	45 mm	
Height	100 mm	
Depth	75 mm	
Weights		
Weight, approx.	190 g	
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