## SIEMENS

## Data sheet

## 6ES7222-1HH32-0XB0



SIMATIC S7-1200, Digital output SM 1222, 16 DO, relay 2 A

Figure similar	
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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	
<ul> <li>from load voltage L+, max.</li> </ul>	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	
<ul> <li>with resistive load, max.</li> </ul>	2 A
• on lamp load, max.	30 W with DC, 200 W with AC
Output voltage	
<ul> <li>Rated value (DC)</li> </ul>	5 V DC to 30 V DC
Rated value (AC)	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	
Number of relay outputs	16
<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	2.4
— with inductive load, max.	
— on lamp load, max. — with resistive load, max.	30 W with DC, 200 W with AC 2 A
	2 1
Cable length	

e shielded may	500 m
<ul><li>shielded, max.</li><li>unshielded, max.</li></ul>	500 m 150 m
unsnielded, max. Interrupts/diagnostics/status information	
Alarms	
Alarms     Diagnostic alarm	Yes
Diagnostics indication LED	
for status of the outputs	Yes
Potential separation	
Potential separation digital outputs	
between the channels	Relays
<ul> <li>between the channels, in groups of</li> </ul>	4
<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	IFZU
CE mark	Vec
	Yes
CSA approval 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	
• min.	-20 °C
• max.	60 °C; Number of simultaneously activated outputs: 8 (no adjacent points) at 60 °C horizontal or 50 °C vertical, 16 at 55 °C horizontal or 45 °C vertical
<ul> <li>horizontal installation, min.</li> </ul>	-20 °C
<ul> <li>horizontal installation, max.</li> </ul>	60 °C
• vertical installation, min.	-20 °C
<ul> <li>vertical installation, max.</li> </ul>	50 °C
<ul> <li>permissible temperature change</li> </ul>	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	
<ul> <li>Storage/transport, min.</li> </ul>	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)	
Plastic	Yes
Dimensions	
Width	45 mm
Height	100 mm
Depth	75 mm
Weights	
Weight, approx.	260 g
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