## **Data sheet**

6ES7222-1BH32-0XB0



SIMATIC S7-1200, Digital output SM 1222, 16 DO, 24 V DC, transistor 0.5 A  $\,$ 

General information	
Product type designation	SM 1222, DQ 16x24 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.	140 mA
Power loss	
Power loss, typ.	2.5 W
Digital outputs	
Number of digital outputs	16
<ul><li>in groups of</li></ul>	1
Short-circuit protection	No; to be provided externally
Limitation of inductive shutdown voltage to	typ. (L+) -48 V
Switching capacity of the outputs	
<ul> <li>with resistive load, max.</li> </ul>	0.5 A
<ul><li>on lamp load, max.</li></ul>	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
<ul><li>for signal "0" residual current, max.</li></ul>	10 μΑ
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.	8 A; Current per mass
Relay outputs	
Switching capacity of contacts	
<ul><li>— with inductive load, max.</li></ul>	0.5 A
— on lamp load, max.	5 W
— with resistive load, max.	0.5 A
Cable length	
<ul><li>shielded, max.</li></ul>	500 m
<ul><li>unshielded, max.</li></ul>	150 m
Interrupts/diagnostics/status information	
Alarms	
Diagnostic alarm	Yes

Discourse the locality LED	
Diagnostics indication LED	V
for status of the outputs	Yes
Potential separation	
Potential separation digital outputs	
<ul> <li>between the channels, in groups of</li> </ul>	1
between the channels and backplane bus	500 V AC
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	O O mar five times in manda. I
• Fall height, max.	0.3 m; five times, in product package
Ambient temperature during operation	00.00
• min.	-20 °C 60 °C
<ul><li>max.</li><li>horizontal installation, min.</li></ul>	-20 °C
horizontal installation, min.     horizontal installation, max.	-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	
<ul> <li>Storage/transport, min.</li> </ul>	660 hPa
Storage/transport, max.	1 080 hPa
Relative humidity	
<ul> <li>Operation at 25 °C without condensation, max.</li> </ul>	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.	220 g
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