## **SIEMENS**

## **Data sheet**

6ES7222-1BF32-0XB0



SIMATIC S7-1200, Digital output SM 1222, 8 DO, 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	
<ul><li>with resistive load, max.</li></ul>	0.5 A
<ul><li>on lamp load, max.</li></ul>	5 W
Output voltage	
<ul> <li>Rated value (DC)</li> </ul>	24 V
• for signal "0", max.	0.1 V; with 10 kOhm load
• for signal "1", min.	20 V DC
Output current	
<ul><li>for signal "1" rated value</li></ul>	0.5 A
• for signal "0" residual current, max.	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.	4 A; Current per mass
Cable length	
<ul><li>shielded, max.</li></ul>	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	

a between the channels in groups of	4
between the channels, in groups of	1
between the channels and backplane bus	500 V AC
Degree and class of protection	IDOO
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
Ecological footprint	
environmental product declaration	Yes
Global warming potential	
— global warming potential, (total) [CO2 eq]	68.6 kg
<ul> <li>— global warming potential, (during production) [CO2 eq]</li> </ul>	8.16 kg
— global warming potential, (during operation) [CO2	60.7 kg
eq]	00.7 kg
<ul><li>— global warming potential, (after end of life cycle)</li><li>[CO2 eq]</li></ul>	-0.334 kg
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
<ul> <li>horizontal installation, min.</li> </ul>	-20 °C
<ul> <li>horizontal installation, max.</li> </ul>	60 °C
<ul> <li>vertical installation, min.</li> </ul>	-20 °C
<ul> <li>vertical installation, max.</li> </ul>	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	165
Enclosure material (front)	Voo
• Plastic	Yes
Dimensions	AF man
Width	45 mm
Height	100 mm
Depth	75 mm
Weights	400
Weight, approx.	180 g
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