SIEMENS

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	OW 1222, DQ 10X24 V DOIG.O N		
permissible range, lower limit (DC)	20.4 V		
permissible range, upper limit (DC)	28.8 V		
Input current	20.0 V		
from backplane bus 5 V DC, max.	140 mA		
Power loss	140 1110		
	2.5 W		
Power loss, typ. 2.5 W Digital outputs			
	16		
Number of digital outputs	16		
• in groups of	1 No: to be provided externally		
Short-circuit protection	No; to be provided externally		
Limitation of inductive shutdown voltage to typ. (L+) -48 V			
Switching capacity of the outputs	0.5.4		
with resistive load, max.	0.5 A		
on lamp load, max.	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		
for signal "0" residual current, max.	10 μA		
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		
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 and backplane bus Degree and class of protection Pages of protection P20 Standards, approvals, certificates CE mark	 between the channels, in groups of 	1		
Pegree of protection IP20				
P degree of protection				
Standards, approvals, certificates		IP20		
CE mark				
UL approval Yes		Yes		
Culus	CSA approval	Yes		
FM approval	UL approval	Yes		
RCM (formerly C-TICK)	cULus	Yes		
KC approval Marine approval Ambient conditions Free fall Fall height, max. 0.3 m; five times, in product package Ambient temperature during operation min. min. horizontal installation, min. horizontal installation	FM approval	Yes		
Marine approval Ambient conditions Free fall Fall height, max. O.3 m; five times, in product package Ambient temperature during operation min. Occ max. Occ horizontal installation, min. horizontal installation, max. Occ vertical installation, min. vertical installation, min. Vertical installation, min. Vertical installation, max. Occ min. Vertical installation, max. Occ Tocc Vertical installation, max. Occ Wertical installation, max. Occ Vertical installation, max. Occ Wertical installation, max. Occ Vertical installation, max. Occ	RCM (formerly C-TICK)	Yes		
Ambient conditions Free fall Fre	KC approval	Yes		
Free fall Pall height, max. Ambient temperature during operation min. min. Pall height, max. O.3 m; five times, in product package Ambient temperature during operation min. Pall horizontal installation, min. Pall horizontal installation, min. Pertical installation, max. Permissible temperature change Ambient temperature during storage/transportation min. Max. Por C Air pressure acc. to IEC 60068-2-13 Storage/transport, min. Storage/transport, min. Operation at 25 °C without condensation, max. Poperation at 25 °C without condensation, max. Permissible temperature during storage/transportation min. Storage/transport, min. Storage/transport, min. Storage/transport, max. Relative humidity Operation at 25 °C without condensation, max. Permissible temperature during storage/transportation To "C Air pressure acc. to IEC 60068-2-13 Storage/transport, min. Storage/transport, max. 1 080 hPa Relative humidity Permissible temperature material (front) Permissible temperature material (front) Plastic Yes Dimensions Width A5 mm Height Dopth 75 mm Weights	Marine approval	Yes		
Fall height, max. Ambient temperature during operation • min. • max. • horizontal installation, min. • horizontal installation, min. • vertical installation, min. • vertical installation, min. • vertical installation, min. • vertical installation, max. • vertical installation, max. • permissible temperature change Ambient temperature during storage/transportation • min. • max. • 70 °C Air pressure acc. to IEC 60068-2-13 • Storage/transport, min. • Storage/transport, min. • Storage/transport, max. 1 080 hPa • Storage/transport max. Relative humidity • Operation at 25 °C without condensation, max. connection method required front connector Mechanics/material Enclosure material (front) • Plastic Dimensions Width 45 mm Height 100 mm Depth 75 mm Wolghts	Ambient conditions			
Ambient temperature during operation inin. inin	Free fall			
• min. • max. • horizontal installation, min. • horizontal installation, max. • horizontal installation, max. • vertical installation, max. • vertical installation, max. • vertical installation, max. • vertical installation, max. • permissible temperature change Ambient temperature during storage/transportation • min. • max. 70 °C Air pressure acc. to IEC 60068-2-13 • Storage/transport, min. • Storage/transport, min. • Storage/transport, max. 1 080 hPa Relative humidity • Operation at 25 °C without condensation, max. connection method required front connector Mechanics/material Enclosure material (front) • Plastic Yes Dimensions Width 45 mm Height 100 mm Depth 75 mm Weights	Fall height, max.	0.3 m; five times, in product package		
max. horizontal installation, min. horizontal installation, max. horizontal installation, max. vertical installation, min. vertical installation, min. vertical installation, min. vertical installation, max. permissible temperature change S° C to 55°C, 3°C / minute Ambient temperature during storage/transportation min.	Ambient temperature during operation			
 horizontal installation, min. horizontal installation, max. vertical installation, min. vertical installation, max. vertical installation, max. permissible temperature change fo c to 55°C, 3°C / minute Ambient temperature during storage/transportation min. 40 °C max. fo c Air pressure acc. to IEC 60068-2-13 Storage/transport, min. Storage/transport, max. Storage/transport, max. Plastive humidity Operation at 25 °C without condensation, max. connection method required front connector Yes Mechanics/material Enclosure material (front) Plastic Yes Dimensions Wright 45 mm Height Depth 75 mm Weights	• min.	-20 °C		
 horizontal installation, max. 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. max. 70 °C Air pressure acc. to IEC 60068-2-13 Storage/transport, min. Storage/transport, max. 1 080 hPa Relative humidity Operation at 25 °C without condensation, max. connection method required front connector Yes Mechanics/material Enclosure material (front) Plastic Yes Dimensions Width 45 mm Height 100 mm Depth 75 mm Weights	• max.	60 °C		
 vertical installation, min. vertical installation, max. vertical installation, max. permissible temperature change SC to 55°C, 3°C / minute Ambient temperature during storage/transportation min. -40 °C max. Air pressure acc. to IEC 60068-2-13 Storage/transport, min. 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 45 mm Height 100 mm Depth 75 mm Weights Weights 	 horizontal installation, min. 	-20 °C		
vertical installation, max. permissible temperature change Ambient temperature during storage/transportation min.	 horizontal installation, max. 	60 °C		
permissible temperature change Ambient temperature during storage/transportation min. min. 40 °C max. 70 °C Air pressure acc. to IEC 60068-2-13 Storage/transport, min. Storage/transport, max. 1 080 hPa Relative humidity Operation at 25 °C without condensation, max. permissible temperature change yes Mechanics/material Enclosure material (front) Plastic Plastic Yes Dimensions Width 45 mm Height 100 mm Depth 75 mm Weights	 vertical installation, min. 	-20 °C		
Ambient temperature during storage/transportation • min.	 vertical installation, max. 	50 °C		
	permissible temperature change	5°C to 55°C, 3°C / minute		
Nax. 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 Mechanics/material Enclosure material (front) Plastic Yes Dimensions Width 45 mm Height 100 mm Depth 75 mm Weights	Ambient temperature during storage/transportation			
Air pressure acc. to IEC 60068-2-13 • Storage/transport, min. • Storage/transport, max. 1 080 hPa Relative humidity • Operation at 25 °C without condensation, max. 95 % connection method required front connector Mechanics/material Enclosure material (front) • Plastic Plastic Yes Dimensions Width 45 mm Height 100 mm Depth 75 mm Weights	• min.	-40 °C		
Storage/transport, min. 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 45 mm Height 100 mm Depth 75 mm Weights	• max.	70 °C		
Storage/transport, max. Relative humidity Operation at 25 °C without condensation, max. 95 % connection method required front connector Yes Mechanics/material Enclosure material (front) Plastic Plastic Yes Dimensions Width 45 mm Height 100 mm Depth 75 mm Weights	Air pressure acc. to IEC 60068-2-13			
Relative humidity • Operation at 25 °C without condensation, max. connection method required front connector Mechanics/material Enclosure material (front) • Plastic Plastic Yes Dimensions Width 45 mm Height 100 mm Depth 75 mm Weights	 Storage/transport, min. 	660 hPa		
Operation at 25 °C without condensation, max. connection method required front connector Yes Mechanics/material Enclosure material (front)	Storage/transport, max.	1 080 hPa		
connection method required front connector Mechanics/material Enclosure material (front) ● Plastic Plastic Yes Dimensions Width 45 mm Height 100 mm Depth T5 mm Weights	Relative humidity			
required front connector Mechanics/material Enclosure material (front) Plastic Plastic Yes Dimensions Width 45 mm Height 100 mm Depth 75 mm Weights	 Operation at 25 °C without condensation, max. 	95 %		
Mechanics/material Enclosure material (front) Yes ● Plastic Yes Dimensions Width 45 mm Height 100 mm Depth 75 mm Weights	connection method			
Enclosure material (front) Plastic Plastic Yes Dimensions Width 45 mm Height 100 mm Depth 75 mm Weights	required front connector	Yes		
● Plastic Yes Dimensions Width 45 mm Height 100 mm Depth 75 mm Weights	Mechanics/material			
Dimensions Width 45 mm Height 100 mm Depth 75 mm Weights To me	Enclosure material (front)			
Width 45 mm Height 100 mm Depth 75 mm Weights	Plastic	Yes		
Height 100 mm Depth 75 mm Weights	Dimensions			
Depth 75 mm Weights	Width	45 mm		
Weights	Height	100 mm		
	Depth	75 mm		
Weight approx	Weights			
vveignt, approx. 220 g	Weight, approx.	220 g		

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