6ES7222-1HH32-0XB0

Data sheet

SIMATIC S7-1200, DIGITAL OUTPUT SM 1222, 16 DO, RELAY 2A



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		
• from load voltage L+, max.	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		
• with resistive load, max.	2 A	
● on lamp load, max.	30 W with DC, 200 W with AC	
Output voltage		

 Rated value (AC) Output current for signal "1" permissible range, max. Output delay with registive lead 	
• for signal "1" permissible range, max. 2 A	
Output delay with registive lead	
Output delay with resistive load	
• "0" to "1", max.	
• "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	
• Rated supply voltage of relay coil L+ (DC) 24 V	
 Number of operating cycles, max. mechanically 10 million, at rated load voltage 10 	00 000
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	
• unshielded, max.	
Interrupts/diagnostics/status information	
Alarms	
Diagnostic alarm Yes	
Diagnostics indication LED	
• for status of the outputs Yes	
Status indicator digital output (green) Yes	
Potential separation	
Potential separation digital outputs	
• between the channels Relays	
• between the channels, in groups of 4	
• between the channels and backplane bus 1500 V AC for 1 minute	
Permissible potential difference	
between different circuits 750 V AC for 1 minute	
between different circuits 750 V AC for 1 minute	
between different circuits 750 V AC for 1 minute Degree and class of protection	
Degree and class of protection Degree of protection acc. to EN 60529	
between different circuits 750 V AC for 1 minute Degree and class of protection Degree of protection acc. to EN 60529 ● IP20 Yes	

UL approval	Yes
cULus	Yes
FM approval	Yes
RCM (formerly C-TICK)	Yes
Marine approval	
Marine approval	Yes
Ambient conditions	
Free fall	
● Fall height, max.	0.3 m; five times, in product package
Ambient temperature during operation	
permissible temperature range	-20 °C to +60 °C horizontal mounting, -20 °C to 50 °C vertical
	mounting, 95% humidity, non-condensing
• 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
 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	
 permissible range (without condensation) at 25 °C 	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	
Weight, approx.	260 g
last modified:	10/11/2016