6ES7222-1HF32-0XB0

Data sheet

SIMATIC S7-1200, DIGITAL OUTPUT SM 1222, 8 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.	120 mA	
Digital inputs		
 from load voltage L+ (without load), max. 	11 mA/relay coil	
Power loss		
Power loss, typ.	4.5 W	
Digital outputs		
Number of digital outputs	8	
• in groups of	2	
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 (DC)	5V DC to 30V DC
• Rated value (AC)	5 V AC to 250 V AC
Output current	
• for signal "1" permissible range, max.	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)	10 1110
horizontal installation	
— up to 50 °C, max.	10 A; Current per mass
Relay outputs	107, Guillon, por mass
Number of relay outputs	8
Rated supply voltage of relay coil L+ (DC)	24 V
	mechanically 10 million, at rated load voltage 100 000
Number of operating cycles, max.	mechanically to million, at fated load voltage 100 000
Switching capacity of contacts	0.4
— 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.	150 m
Interrupts/diagnostics/status information	
Alarms	Yes
Diagnostic functions	Yes
Alarms	
Diagnostic alarm	Yes
Diagnostic messages	
 Monitoring the supply voltage 	Yes
Diagnostics indication LED	
• for status of the outputs	Yes
• for maintenance	Yes
 Status indicator digital output (green) 	Yes
Potential separation	
Potential separation digital outputs	
• between the channels	Relays
• between the channels, in groups of	2
 between the channels and backplane bus 	1500 V AC for 1 minute
Permissible potential difference	
between different circuits	750 V AC for 1 minute
Degree and class of protection	

Decree of analystics and to EN COTOO	
Degree of protection acc. to EN 60529	V
• IP20	Yes
Standards, approvals, certificates	
CE mark	Yes
CSA approval	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 dispatch 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
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.	190 g

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