SIEMENS

Data sheet 6ES7222-1HH32-0XB0

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 inputs	
• from load voltage L+ (without load), max.	11 mA/relay coil
Power losses	
Power loss, typ.	8.5 W
Digital inputs	
Number of digital inputs	0
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 (DC)	5 V DC to 30 V DC
• Rated value (AC)	5 V AC to 250 V AC
Output current	
• for signal "1" permissible range, max.	2 A

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Output delay with resistive load	
• "0" to "1", max.	10 ms
• "1" to "0", max.	10 ms
Aggregate current of outputs (per group)	
horizontal installation	
— up to 50 °C, max.	10 A; Current per mass
Relay outputs	
• Number of relay outputs	16
• Rated input voltage of relay coil L+ (DC)	24 V
• Number of operating cycles, max.	mechanically 10 million, at rated load voltage 100,000
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.	150 m
Interrupts/diagnostics/status information	
Alarms	
• Alarms	Yes
• Diagnostic alarm	Yes
Diagnostic messages	
• Diagnostic functions	Yes
• 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 digital outputs	
• between the channels	Relays
• between the channels, in groups of	4
• between the channels and the 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	
Degree of protection to EN 60529	
• IP20	Yes
Standards, approvals, certificates	
CE mark	Yes
CSA approval	Yes

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UL approval	Yes
cULus	Yes
FM approval	Yes
RCM (formerly C-TICK)	Yes
Marine approval	
• Marine approval	Yes

Ambient conditions	
Free fall	
• Drop height, max. (in packaging)	0.3 m; five times, in dispatch package
Ambient temperature in 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	
Type of housing (front)	
• plastic	Yes

Dimensions	
Width	45 mm
Height	100 mm
Depth	75 mm

Weights	
Weight, approx.	260 g

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