

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
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Digital inputs

- | | |
|---|------------------|
| <ul style="list-style-type: none"> from load voltage L+ (without load), max. | 11 mA/relay coil |
|---|------------------|

Power losses

Power loss, typ.	4.5 W
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Digital inputs

Number of digital inputs	0
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Digital outputs

Number of digital outputs	8
<ul style="list-style-type: none"> In groups of 	2
short-circuit protection	No; to be provided externally
Switching capacity of the outputs	
<ul style="list-style-type: none"> with resistive load, max. 	2 A
<ul style="list-style-type: none"> on lamp load, max. 	30 W with DC, 200 W with AC

Output voltage

- | | |
|--|--------------------|
| <ul style="list-style-type: none"> Rated value (AC) | 5 V AC to 250 V AC |
| <ul style="list-style-type: none"> Rated value (DC) | 5 V DC to 30 V DC |

Output current

- | | |
|--|-----|
| <ul style="list-style-type: none"> 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
Aggregate current of outputs (per group)	
horizontal installation	
— up to 50 °C, max.	10 A; Current per mass
Relay outputs	
• Number of relay outputs	8
• 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
Galvanic isolation digital outputs	
• between the channels	Relays
• between the channels, in groups of	2
• 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

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

Ambient conditions

Free fall

• Drop height, max. (in packaging)	0.3 m; five times, in dispatch package
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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
• Permissible temperature change	5°C to 55°C, 3°C / minute

Storage/transport temperature

• 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 %
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Connection method

required front connector	Yes
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Mechanics/material

Type of housing (front)	
• plastic	Yes

Dimensions

Width	45 mm
Height	100 mm
Depth	75 mm

Weights

Weight, approx.	190 g
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last modified: 12.03.2015