



SIMATIC S7-1200,  
DIGITAL OUTPUT SM 1222, 8 DO, 24V DC,  
TRANSISTOR 0.5A

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
Power losses	
Power loss, typ.	1.5 W
Digital inputs	
Number/binary inputs	0
Digital outputs	
Number/binary outputs	8
In groups of	1
Functionality/short-circuit strength	No ; to be provided externally
Limitation of inductive shutdown voltage to	typ. (L+) -48 V
Switching capacity of the outputs	
with resistive load, max.	0.5 A
on lamp load, max.	5 W
Output voltage	

<b>Rated value (DC)</b>	24 V
<b>for signal "0", max.</b>	0.1 V ; with 10 kOhm load
<b>for signal "1", min.</b>	20 V DC
<b>Output current</b>	
<b>for signal "1" rated value</b>	0.5 A
<b>for signal "0" residual current, max.</b>	10 µA
<b>Output delay with resistive load</b>	
<b>"0" to "1", max.</b>	50 µs
<b>"1" to "0", max.</b>	200 µs
<b>Aggregate current of outputs (per group)</b>	
<b>horizontal installation</b>	
<b>up to 50 °C, max.</b>	4 A ; Current per mass
<b>Relay outputs</b>	
<b>Switching capacity of contacts</b>	
<b>with inductive load, max.</b>	0.5 A
<b>on lamp load, max.</b>	5 W
<b>Switching frequency/contacts/at ohmic load/maximum</b>	0.5 A
<b>Cable length</b>	
<b>Cable length, shielded, max.</b>	500 m
<b>Cable length unshielded, max.</b>	150 m
<b>Interrupts/diagnostics/status information</b>	
<b>Alarms</b>	
<b>Alarms</b>	Yes
<b>Diagnostic alarm</b>	Yes
<b>Diagnostic messages</b>	
<b>Diagnostic functions</b>	Yes
<b>Diagnostics indication LED</b>	
<b>For status of the outputs</b>	Yes
<b>for maintenance</b>	Yes
<b>Status indicator digital output (green)</b>	Yes
<b>Galvanic isolation</b>	
<b>Galvanic isolation digital outputs</b>	
<b>between the channels, in groups of</b>	1
<b>between the channels and the backplane bus</b>	500 V AC
<b>Degree and class of protection</b>	
<b>IP20</b>	Yes
<b>Standards, approvals, certificates</b>	
<b>CE mark</b>	Yes

<b>C-TICK</b>	Yes
<b>FM approval</b>	Yes
<b>Climatic and mechanical conditions for storage and transport</b>	
<b>Climatic conditions for storage and transport</b>	
<b>Free fall</b>	
<b>Drop height, max. (in packaging)</b>	0.3 m ; five times, in dispatch package
<b>Temperature</b>	
<b>Permissible temperature range</b>	-40 °C to +70 °C
<b>Air pressure acc. to IEC 60068-2-13</b>	
<b>Permissible air pressure</b>	1080 to 660 hPa
<b>Mechanical and climatic conditions during operation</b>	
<b>Climatic conditions in operation</b>	
<b>Temperature</b>	
<b>Permissible temperature range</b>	0 °C to 55 °C horizontal installation 0 °C to 45 °C vertical installation
<b>Permissible temperature change</b>	5°C to 55°C, 3°C / minute
<b>Connection method</b>	
<b>required front connector</b>	Yes
<b>Mechanics/material</b>	
<b>Type of housing (front)</b>	
<b>Plastic</b>	Yes
<b>Dimensions</b>	
<b>Width</b>	45 mm
<b>Height</b>	100 mm
<b>Depth</b>	75 mm
<b>Weight</b>	
<b>Weight, approx.</b>	180 g
Status	Mar 18, 2013