## **SIEMENS**

Product data sheet 6ES7222-1HF32-0XB0

SIMATIC S7-1200, DIGITAL OUTPUT SM 1222, 8 DO, RELAY 2A

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 losses	Ti ilizviciay coli
Power loss, typ.	4.5 W
	4.5 VV
Digital outputs	0
Number/binary outputs	8
In groups of	2
Functionality/short-circuit strength	No ; to be provided externally
Switching capacity of the outputs	
with resistive load, max.	2 A
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
Aggregate current of outputs (per group)	
horizontal installation	
up to 50 °C, max.	10 A
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
Switching frequency/contacts/at ohmic load/maximum	2 A
Cable length	
Cable length, shielded, max.	500 m
Cable length unshielded, max.	150 m
Interrupts/diagnostics/status information	

Alarms Yes Diagnostic alarm Yes Diagnostic messages 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 Galvanic isolation digital outputs between the channels Between the channels Between the channels, in groups of 2 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 IP20 Yes Standards, approvals, certificates CE mark CSA approval Yes UL Yes CULus Yes C-TICK Yes FM approval Yes Marine approval Yes Marine approval Yes Climatic and mechanical conditions for storage and transport Free fall Drop height, max. (in packaging) 0.3 m; five times, in dispatch package Temperature Permissible air pressure Permissible air pressure 1080 to 660 hPa Mcchanical and climatic conditions during operation Climatic conditions in operation Temperature	Alarms		
Diagnostic messages  Diagnostic functions  Monitoring the supply voltage  Pes  Diagnostics indication LED  For status of the outputs  for maintenance  Yes  Status indicator digital output (green)  Galvanic isolation  Galvanic isolation  Galvanic isolation digital outputs  between the channels  Relay  between the channels, in groups of  2  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  IP20  Yes  Standards, approvals, certificates  CE mark  CSA approval  Ves  C-TICK  Yes  C-TICK  Yes  C-TICK  Yes  CIImatic and mechanical conditions for storage and transport  Free fall  Drop height, max. (in packaging)  Temperature  Permissible temperature range  -40 °C to +70 °C  Air pressure acc. to IEC 60068-2-13  Permissible air pressure  1080 to 660 hPa  Mechanical and climatic conditions in operation  Climatic conditions in operation	Alarms	Yes	
Diagnostic functions  Monitoring the supply voltage  Pes  Diagnostics indication LED  For status of the outputs  for maintenance  Status indicator digital output (green)  Galvanic isolation  Galvanic isolation digital outputs  between the channels  between the channels and the backplane bus  Permissible potential difference  between different circuits  750 V AC for 1 minute  Pegree and class of protection  IP20  Yes  Standards, approvals, certificates  CE mark  CSA approval  UL  Yes  CULus  C-TICK  Pes  FM approval  Marine approval  Climatic and mechanical conditions for storage and transport  Free fall  Drop height, max. (in packaging)  O 3 m : five times, in dispatch package  Temperature  Permissible temperature range  -40 °C to +70 °C  Air pressure acc. to IEC 60068-2-13  Permissible air pressure  1080 to 660 hPa  Mechanical and climatic conditions operation	Diagnostic alarm	Yes	
Monitoring the supply voltage  Diagnostics indication LED  For status of the outputs  for maintenance  Yes  Status indicator digital output (green)  Galvanic isolation  Galvanic isolation  Galvanic isolation digital outputs  between the channels  Relay  between the channels in groups of  between the channels and the backplane bus  Degree and class of protection  IP20  Yes  Standards, approvals, certificates  CE mark  Yes  CSA approval  UL  Yes  UL  Yes  C-TICK  FM approval  Marine approval  Marine approval  Climatic and mechanical conditions for storage and transport  Free fall  Drop height, max. (in packaging)  Temperature  Permissible temperature range  -40 °C to +70 °C  Air pressure acc, to IEC 60068-2-13  Permissible air pressure  Mechanical and climatic conditions four during operation  Climatic conditions in operation	Diagnostic messages		
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Standards, approvals, certificates  CE mark  CSA approval  Yes  UL  Yes  C-TICK  FM approval  Yes  Marine approval  Yes  Climatic and mechanical conditions for storage and transport  Climatic conditions for storage and transport  Free fall  Drop height, max. (in packaging)  Temperature  Permissible temperature range  -40 °C to +70 °C  Air pressure acc. to IEC 60068-2-13  Permissible air pressure  1080 to 660 hPa  Mechanical and climatic conditions during operation  Climatic conditions in operation	between different circuits	750 V AC for 1 minute	
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C-TICK Yes  FM approval Yes  Marine approval Yes  Climatic and mechanical conditions for storage and transport  Climatic conditions for storage and transport  Free fall  Drop height, max. (in packaging)  Temperature  Permissible temperature range -40 °C to +70 °C  Air pressure acc. to IEC 60068-2-13  Permissible air pressure  1080 to 660 hPa  Mechanical and climatic conditions during operation  Climatic conditions in operation	CSA approval	Yes	
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Marine approval  Yes  Climatic and mechanical conditions for storage and transport  Climatic conditions for storage and transport  Free fall  Drop height, max. (in packaging)  O.3 m; five times, in dispatch package  Temperature  Permissible temperature range  -40 °C to +70 °C  Air pressure acc. to IEC 60068-2-13  Permissible air pressure  1080 to 660 hPa  Mechanical and climatic conditions during operation  Climatic conditions in operation	cULus	Yes	
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Temperature  Permissible temperature range  -40 °C to +70 °C  Air pressure acc. to IEC 60068-2-13  Permissible air pressure  1080 to 660 hPa  Mechanical and climatic conditions during operation  Climatic conditions in operation	Free fall		
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Mechanical and climatic conditions during operation  Climatic conditions in operation	Air pressure acc. to IEC 60068-2-13		
Climatic conditions in operation	Permissible air pressure	1080 to 660 hPa	
	Mechanical and climatic conditions during operation		
Temperature	Climatic conditions in operation		
	Temperature		

Min.	-20 °C
max.	60 °C
Permissible temperature change	5°C to 55°C, 3°C / minute
Connection method	
required front connector	Yes
Mechanics/material	
Type of housing (front)	
Plastic	Yes
Dimensions	
Width	45 mm
Height	100 mm
Depth	75 mm
Weight	
Weight, approx.	190 g
Status	May 20, 2013