SIEMENS

Data sheet

6ES7332-7ND02-0AB0



SIMATIC S7-300, Analog output SM 332, isolated by channel, 4 Al, Resolution 16 bit, 0-10 V, 1-5 V, +/-10 V, +/-20 mA, 0/4-20mA, 20-pole, suitable for isochronous mode improved bus cycle times for the isochronous mode

Figure similar

Supply voltage	
Load voltage L+	
 Rated value (DC) 	24 V
 Reverse polarity protection 	Yes
nput current	
from load voltage L+ (without load), max.	290 mA
from backplane bus 5 V DC, max.	120 mA
Power loss	
Power loss, typ.	3 W
Analog outputs	
Number of analog outputs	4; Isochronous mode
Voltage output, short-circuit protection	Yes
Voltage output, short-circuit current, max.	40 mA
Current output, no-load voltage, max.	18 V
Output ranges, voltage	
• 0 to 10 V	Yes
• 1 V to 5 V	Yes
• -10 V to +10 V	Yes
Output ranges, current	
• 0 to 20 mA	Yes
• -20 mA to +20 mA	Yes
• 4 mA to 20 mA	Yes
Load impedance (in rated range of output)	
with voltage outputs, min.	1 kΩ
 with voltage outputs, capacitive load, max. 	1 μF
with current outputs, max.	500 Ω
 with current outputs, inductive load, max. 	1 mH
Cable length	
• shielded, max.	200 m
Analog value generation for the outputs	
Integration and conversion time/resolution per channel	
 Resolution with overrange (bit including sign), max. 	16 bit
Conversion time (per channel)	200 μs; in isochronous mode 640 μs
Settling time	
for resistive load	0.2 ms
for capacitive load	3.3 ms
for inductive load	0.5 ms
rrors/accuracies	

 Voltage, relative to output range, (+/-) 	0.12 %	
 Current, relative to output range, (+/-) 	0.18 %	
Basic error limit (operational limit at 25 °C)		
 Voltage, relative to output range, (+/-) 	0.02 %	
 Current, relative to output range, (+/-) 	0.02 %	
Interrupts/diagnostics/status information		
Diagnostics function	Yes; Parameterizable	
Alarms		
Diagnostic alarm	Yes; Parameterizable	
Diagnoses		
Diagnostic information readable	Yes	
Diagnostics indication LED		
 Group error SF (red) 	Yes	
Potential separation		
Potential separation analog outputs		
 between the channels 	Yes	
 between the channels and backplane bus 	Yes	
 between the channels and the power supply of the electronics 	Yes	
Isolation		
Isolation tested with	1 500 V DC	
connection method		
required front connector	20-pin	
Dimensions		
Width	40 mm	
Height	125 mm	
Depth	117 mm	
Weights		
Weight, approx.	220 g	

last modified:

3/12/2024