SIEMENS

Data sheet

6ES7332-7ND02-0AB0



SIMATIC S7-300, Analog output SM 332, isolated by channel, 4 AI, 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

Supply voltage		
Load voltage L+		
Rated value (DC)	24 V	
Reverse polarity protection	Yes	
Input 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	
Errors/accuracies		
Operational error limit in overall temperature range		
 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 / header	
required front connector	20-pin
Dimensions	
Width	40 mm
Height	125 mm
Depth	117 mm
Weights	
Weight, approx.	220 g
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