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

F & HECCH	
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	
required front connector	20-pin
Dimensions	
Width	40 mm
Height	125 mm
Depth	117 mm
Weights	
Weight, approx.	220 g

last modified:

