## **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+	
<ul> <li>Rated value (DC)</li> </ul>	24 V
<ul> <li>Reverse polarity protection</li> </ul>	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)	
<ul><li>with voltage outputs, min.</li></ul>	1 kΩ
<ul> <li>with voltage outputs, capacitive load, max.</li> </ul>	1 μF
<ul><li>with current outputs, max.</li></ul>	500 Ω
<ul> <li>with current outputs, inductive load, max.</li> </ul>	1 mH
Cable length	
• shielded, max.	200 m
Analog value generation for the outputs	
Integration and conversion time/resolution per channel	
<ul> <li>Resolution with overrange (bit including sign), max.</li> </ul>	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	

<ul> <li>Voltage, relative to output range, (+/-)</li> </ul>	0.12 %	
<ul> <li>Current, relative to output range, (+/-)</li> </ul>	0.18 %	
Basic error limit (operational limit at 25 °C)		
<ul> <li>Voltage, relative to output range, (+/-)</li> </ul>	0.02 %	
<ul> <li>Current, relative to output range, (+/-)</li> </ul>	0.02 %	
Interrupts/diagnostics/status information		
Diagnostics function	Yes; Parameterizable	
Alarms		
Diagnostic alarm	Yes; Parameterizable	
Diagnoses		
Diagnostic information readable	Yes	
Diagnostics indication LED		
<ul> <li>Group error SF (red)</li> </ul>	Yes	
Potential separation		
Potential separation analog outputs		
<ul> <li>between the channels</li> </ul>	Yes	
<ul> <li>between the channels and backplane bus</li> </ul>	Yes	
<ul> <li>between the channels and the power supply of the electronics</li> </ul>	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:

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