

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

S7-300

6ES7332-7ND02-0AB0

ANALOG OUTPUT MODULE

Used with the applicable S7-300 configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: Siemens official manufacturer documentation

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



Figure similar

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 k Ω
• with voltage outputs, capacitive load, max.	1 μ F
• 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 μ s; in isochronous mode 640 μ s
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	
Diagnostic functions	Yes; Parameterizable
Substitute values connectable	Yes; Parameterizable
Alarms	
• Diagnostic alarm	Yes; Parameterizable
Diagnostic messages	
• Diagnostic information readable	Yes
Diagnostics indication LED	
• Group error SF (red)	Yes
Potential separation	
Potential separation analog outputs	

- between the channels and backplane bus

Yes

Isolation

Isolation tested with

1500 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:

08/22/2018 