

SIMATIC S7-300, Analog output SM 332, isolated, 4 AO, U/I; diagnostics; resolution 11/12 bits, 20-pole, removing and inserting possible with active backplane bus

Supply voltage	
Load voltage L+	
<ul style="list-style-type: none"> • Rated value (DC) • Reverse polarity protection 	24 V Yes
Input current	
from load voltage L+ (without load), max.	240 mA
from backplane bus 5 V DC, max.	60 mA
Power loss	
Power loss, typ.	3 W
Analog outputs	
Number of analog outputs	4
Voltage output, short-circuit protection	Yes
Voltage output, short-circuit current, max.	25 mA
Current output, no-load voltage, max.	18 V
Output ranges, voltage	
<ul style="list-style-type: none"> • 0 to 10 V • 1 V to 5 V • -10 V to +10 V 	Yes Yes Yes
Output ranges, current	
<ul style="list-style-type: none"> • 0 to 20 mA • -20 mA to +20 mA • 4 mA to 20 mA 	Yes Yes Yes
Load impedance (in rated range of output)	
<ul style="list-style-type: none"> • with voltage outputs, min. • with voltage outputs, capacitive load, max. • with current outputs, max. • with current outputs, inductive load, max. 	1 kΩ 1 μF 500 Ω 10 mH
Cable length	
<ul style="list-style-type: none"> • shielded, max. 	200 m
Analog value generation for the outputs	
Integration and conversion time/resolution per channel	
<ul style="list-style-type: none"> • Resolution with overrange (bit including sign), max. • Conversion time (per channel) 	12 bit; ±10 V, ±20 mA, 4 mA to 20 mA, 1 V to 5 V: 11 bit + sign; 0 V to 10 V, 0 mA to 20 mA: 12 bit 0.8 ms
Settling time	
<ul style="list-style-type: none"> • for resistive load • for capacitive load • for inductive load 	0.2 ms 3.3 ms 0.5 ms; 0.5 ms (1 mH); 3.3 ms (10 mH)
Errors/accuracies	
Operational error limit in overall temperature range	
<ul style="list-style-type: none"> • Voltage, relative to output range, (+/-) • Current, relative to output range, (+/-) 	0.5 % 0.6 %
Basic error limit (operational limit at 25 °C)	
<ul style="list-style-type: none"> • Voltage, relative to output range, (+/-) • Current, relative to output range, (+/-) 	0.4 % 0.5 %
Interrupts/diagnostics/status information	
Diagnostics function	Yes; Parameterizable
Alarms	
<ul style="list-style-type: none"> • Diagnostic alarm 	Yes; Parameterizable
Diagnoses	
<ul style="list-style-type: none"> • Diagnostic information readable 	Yes

Diagnostics indication LED	
• Group error SF (red)	Yes
Potential separation	
Potential separation analog outputs	
• between the channels	No
• between the channels and backplane bus	Yes
• Between the channels and load voltage L+	Yes
• between the channels and the power supply of the electronics	Yes
Isolation	
Isolation tested with	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
last modified:	1/17/2021 