MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

SIEMENS

6ES7332-5HD01-0AB0

FOUR-CHANNEL VOLTAGE/CURRENT OUTPUT MODULE

Used with the applicable SIMATIC S7-300 SM 332 configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: Siemens original SIMATIC S7-300 SM 332 documentation; applicable pages 1, 2.

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Data sheet 6ES7332-5HD01-0AB0



Figure similar

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+	
● Rated value (DC)	24 V
● Reverse polarity protection	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	
● 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.	10 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.	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
● Conversion time (per channel)	0.8 ms
Settling time	
● for resistive load	0.2 ms
● for capacitive load	3.3 ms
● for inductive load	0.5 ms; 0.5 ms (1 mH); 3.3 ms (10 mH)
Errors/accuracies	

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Operational error limit in overall temperature range	
● Voltage, relative to output range, (+/-)	0.5 %
● Current, relative to output range, (+/-)	0.6 %
Basic error limit (operational limit at 25 °C)	
● Voltage, relative to output range, (+/-)	0.4 %
● Current, relative to output range, (+/-)	0.5 %
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	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	
required front connector	20-pin
Dimensions	
Width	40 mm
Height	125 mm
Depth	117 mm
Weights	
Weight, approx.	220 g

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