



Figure similar

spare part SIMATIC S7-300, analog output SM 332, isolated, 2 AO, U/I; resolution 11/12 bits, 20-pole, removing/inserting with active backplane bus possible

General information	
Product function	
• Isochronous mode	No
Supply voltage	
Load voltage L+	
• Rated value (DC)	24 V
• Reverse polarity protection	Yes
Input current	
from load voltage L+ (without load), max.	135 mA
from backplane bus 5 V DC, max.	60 mA
Power loss	
Power loss, typ.	3 W
Analog outputs	
Number of analog outputs	2
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
Connection of actuators	
• for voltage output two-wire connection	Yes
• for voltage output four-wire connection	Yes
• for current output two-wire connection	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	

<ul style="list-style-type: none"> 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	
<ul style="list-style-type: none"> Conversion time (per channel) 	0.8 ms	
Settling time		
<ul style="list-style-type: none"> for resistive load 	0.2 ms	
<ul style="list-style-type: none"> for capacitive load 	3.3 ms	
<ul style="list-style-type: none"> for inductive load 	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, (+/-) 	0.5 %	
<ul style="list-style-type: none"> Current, relative to output range, (+/-) 	0.6 %	
Basic error limit (operational limit at 25 °C)		
<ul style="list-style-type: none"> Voltage, relative to output range, (+/-) 	0.4 %	
<ul style="list-style-type: none"> Current, relative to output range, (+/-) 	0.5 %	
Interrupts/diagnostics/status information		
Diagnostics function	Yes; Parameterizable	
Substitute values connectable	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		
<ul style="list-style-type: none"> Group error SF (red) 	Yes	
Potential separation		
Potential separation analog outputs		
<ul style="list-style-type: none"> between the channels 	No	
<ul style="list-style-type: none"> between the channels and backplane bus 	Yes	
<ul style="list-style-type: none"> Between the channels and load voltage L+ 	Yes	
<ul style="list-style-type: none"> 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	
Classifications		
	Version	Classification
eClass	14	27-24-22-01
eClass	12	27-24-22-01
eClass	9.1	27-24-22-01
eClass	9	27-24-22-01
eClass	8	27-24-22-01
eClass	7.1	27-24-22-01
eClass	6	27-24-22-01
ETIM	10	EC001420
ETIM	9	EC001420
ETIM	8	EC001420
ETIM	7	EC001420
IDEA	4	3562
UNSPSC	15	32-15-17-05
Approvals / Certificates		

General Product Approval

[China RoHS](#)

[Manufacturer Declaration](#)

[Miscellaneous](#)



General Product Approval

EMV

[Metrological Approval](#)



For use in hazardous locations



[FM](#)



[Miscellaneous](#)

For use in hazardous locations

Maritime application

[CCC-Ex](#)



[NK / Nippon Kaiji Kyokai](#)

Maritime application



[CCS \(China Classification Society\)](#)

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