



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	

• 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			
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		
Substitute values connectable	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		
Classifications			
		Version	Classification
	eClass	16	27-24-22-01
	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

[Miscellaneous](#)



[Manufacturer Declaration](#)



[Metrological Approval](#)

General Product Approval	EMV
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[China RoHS](#)

[Manufacturer Declaration](#)



EMV	For use in hazardous locations
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[EM](#)



For use in hazardous locations	Maritime application
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[Miscellaneous](#)

[CCC-Ex](#)



Maritime application

[NK / Nippon Kaiji Kyokai](#)



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

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