



Figure similar

spare part SIMATIC S7-300, analog output SM 332, isolated, 4 AO, U/I; diagnostics; resolution 11/12 bits, 20-pole, removing and 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.	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
Connection of actuators	
• 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

• Conversion time (per channel)		mA to 20 mA: 12 bit	
		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



[China RoHS](#)

[Manufacturer Declaration](#)



EMV

For use in hazardous locations



[FM](#)



For use in hazardous locations

Maritime application

[Miscellaneous](#)

[CCC-Ex](#)



Maritime application

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

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