

SIMATIC S7, analog output SM 332, isolated, 4 AA; 0/4 to 20 mA, 20-pole, for signals from the hazardous area, diagnostics-capable, PTB tested



Supply voltage	
Load voltage L+	
• Rated value (DC)	24 V
• Reverse polarity protection	Yes
Input current	
from load voltage L+ (without load), max.	200 mA
from backplane bus 5 V DC, max.	80 mA
Power loss	
Power loss, typ.	4 W
Analog outputs	
Number of analog outputs	4
Voltage output, short-circuit protection	Yes
Voltage output, short-circuit current, max.	70 mA
Current output, no-load voltage, max.	14 V
Output ranges, current	
• 0 to 20 mA	Yes
• 4 mA to 20 mA	Yes
Load impedance (in rated range of output)	

• with current outputs, max.	500 Ω
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.	15 bit
Errors/accuracies	
Operational error limit in overall temperature range	
• Current, relative to output range, (+/-)	0.55 %
Basic error limit (operational limit at 25 °C)	
• Current, relative to output range, (+/-)	0.2 %
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Diagnoses	
• Overage	Yes
• Wire-break in actuator cable	Yes
Diagnostics indication LED	
• Group error SF (red)	Yes
• Channel fault indicator F (red)	Yes
Ex(i) characteristics	
Module for Ex(i) protection	Yes
Max. values of output circuits for gas group IIC (per channel)	
• Co (permissible external capacity), max.	850 nF
• Io (short-circuit current), max.	70 mA
• Lo (permissible external inductivity), max.	6.6 mH
• Po (power of load), max.	440 mW
• Uo (output no-load voltage), max.	14 V
Potential separation	
Potential separation analog outputs	
• between the channels	Yes
• between the channels and backplane bus	Yes
• Between the channels and load voltage L+	Yes
Standards, approvals, certificates	
Use in hazardous areas	
• Type of protection acc. to EN 50020 (CENELEC)	[EEx ib] IIC
• Type of protection acc. to FM	Class I, Division 2, Group A, B, C, D T4
• Test number PTB	Ex-96.D.2026X

Ambient conditions	
Ambient temperature during operation	
• max.	60 °C
Connection method	
required front connector	20-pin
Dimensions	
Width	40 mm
Height	125 mm
Depth	120 mm
Weights	
Weight, approx.	280 g
last modified:	10/13/2020