



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 |
| maximum values for connecting terminals for gas group IIC | |

| | |
|---|--------|
| • Uo (no-load voltage), max. | 14 V |
| • Io (short-circuit current), max. | 70 mA |
| • Po (power output), max. | 440 mW |
| • Co (permissible external capacity), max. | 850 nF |
| • Lo (permissible external inductivity), max. | 6.6 mH |

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

| | |
|-------------------|--|
| • ATEX marking | [EEx ib] IIC |
| • FM marking | 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 |
|-----------------|-------|

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