




Figure similar

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

| 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   |
| 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 %   |
| <b>Basic error limit (operational limit at 25 °C)</b>          |   |
| • Voltage, relative to output range, (+/-)                     | 0.4 %   |
| • Current, relative to output range, (+/-)                     | 0.5 %   |
| <b>Interrupts/diagnostics/status information</b>               |   |
| Diagnostics function   | Yes; Parameterizable  |
| <b>Alarms</b>  |   |
| • Diagnostic alarm   | Yes; Parameterizable  |
| <b>Diagnoses</b>   |   |
| • Diagnostic information readable                              | Yes   |
| <b>Diagnostics indication LED</b>                              |   |
| • Group error SF (red)   | Yes   |
| <b>Potential separation</b>                                    |   |
| <b>Potential separation analog outputs</b>                     |   |
| • 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   |
| <b>Isolation</b>   |   |
| Isolation tested with  | 500 V DC  |
| <b>connection method / header</b>                              |   |
| required front connector                                       | 20-pin  |
| <b>Dimensions</b>  |   |
| Width  | 40 mm   |
| Height   | 125 mm  |
| Depth  | 117 mm  |
| <b>Weights</b>   |   |
| Weight, approx.  | 220 g   |
| <b>last modified:</b>  | 1/17/2021  |