



Figure similar

SIMATIC S7-300, Analog output SM 332, isolated, 4 AO, U/I; diagnostics; resolution 11/12 bits, 20-pole, removing and inserting possible with active backplane bus

| 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                                                                                                 |
| 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 |
| 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                |

last modified:

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