



SIMATIC S7-300, ANALOG OUTPUT SM 332,
OPTICALLY ISOLATED, 4 AO, U/I;
DIAGNOSTICS;
RESOLUTION 11/12 BITS, 20 PIN,
REMOVE/INSERT W. ACTIVE, BACKPLANE BUS

| | |
|---|--------|
| Supply voltage | |
| Load voltage L+ | |
| Rated value (DC) | 24 V |
| 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 to 5 V | Yes |
| -10 to +10 V | Yes |
| Output ranges, current | |

| | |
|---|--|
| 0 to 20 mA | Yes |
| -20 to +20 mA | Yes |
| 4 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 | |
| Cable length, shielded, max. | 200 m |
| Analog value generation | |
| Integration and conversion time/resolution per channel | |
| Resolution with overrange (bit including sign), max. | 12 bit ; +/-10 V, +/-20 mA, 4 to 20 mA, 1 to 5 V: 11 bits + sign; 0 to 10 V, 0 to 20 mA: 12 bits |
| 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 area, (+/-) | 0.5 % |
| Current, relative to output area, (+/-) | 0.6 % |
| Basic error limit (operational limit at 25 °C) | |
| Voltage, relative to output area, (+/-) | 0.4 % |
| Current, relative to output area, (+/-) | 0.5 % |
| Interrupts/diagnostics/status information | |
| Substitute values connectable | Yes ; Parameterizable |
| Alarms | |
| Diagnostic alarm | Yes ; Parameterizable |
| Diagnostic messages | |
| Diagnostic information readable | Yes |
| Diagnostics | Yes |
| Diagnostics indication LED | |
| Group error SF (red) | Yes |
| Galvanic isolation | |
| Galvanic isolation analog outputs | |
| between the channels and the backplane bus | Yes |

| Isolation | |
|--------------------------|-------------|
| Isolation tested with | 500 V DC |
| Connection method | |
| required front connector | 20-pin |
| Dimensions | |
| Width | 40 mm |
| Height | 125 mm |
| Depth | 120 mm |
| Weights | |
| Weight, approx. | 220 g |
| Status | Jul 7, 2014 |