SIEMENS

Data sheet

6ES7145-4FF00-0AB0



SIMATIC DP, Electronic modules for ET 200 PRO 4 AO U High Feature, +-10 V; 0...10V; 1...5V, Channel diagnostics; incl. bus module, Connection module IO 6ES7194-4..00-0AA0 order separately

Figure similar

| F \$4110.70.0 | |
|--|--|
| Supply voltage | |
| Rated value (DC) | 24 V |
| Reverse polarity protection | Yes; against destruction |
| Input current | |
| from supply voltage 1L+, max. | 65 mA |
| from backplane bus 3.3 V DC, max. | 10 mA |
| Actuator supply | |
| Number of outputs | 4 |
| Short-circuit protection | Yes; per module |
| Output current | |
| • up to 55 °C, max. | 1 A |
| Power loss | |
| Power loss, typ. | 1.7 W |
| Address area | |
| Address space per module | |
| Address space per module, max. | 8 byte |
| Analog outputs | |
| Number of analog outputs | 4 |
| Voltage output, short-circuit protection | Yes; per channel, electronic to chassis |
| Voltage output, short-circuit current, max. | 50 mA |
| Cycle time (all channels) max. | 3 ms |
| Output ranges, voltage | |
| • 0 to 10 V | Yes |
| • 1 V to 5 V | Yes |
| • -10 V to +10 V | Yes |
| Connection of actuators | |
| for voltage output two-wire connection | Yes |
| for voltage output four-wire connection | Yes |
| Load impedance (in rated range of output) | |
| with voltage outputs, min. | 1 000 Ω |
| with voltage outputs, capacitive load, max. | 1 μF |
| Destruction limits against externally applied voltages and current | is and the second secon |
| Voltages at the outputs towards MANA | 16 V; Permanent |
| Cable length | |
| • shielded, max. | 30 m |
| Analog value generation for the outputs | |
| Integration and conversion time/resolution per channel | |
| Resolution with overrange (bit including sign), max. | 15 bit; at -10 to +10 V; 14 bit at 1 to 5 V; 15 bit at 0 to 10 V |
| Conversion time (per channel) | 0.7 ms |

| Settling time | |
|--|-------------------------------------|
| for resistive load | 0.1 ms |
| for capacitive load | 6 ms |
| Errors/accuracies | |
| Output ripple (relative to output range, bandwidth 0 to 50 kHz), (+/-) | 0.02 % |
| Linearity error (relative to output range), (+/-) | 0.1 % |
| Temperature error (relative to output range), (+/-) | 0.01 %/K |
| Repeat accuracy in steady state at 25 °C (relative to output range), (+/-) | 0.05 % |
| Operational error limit in overall temperature range | |
| Voltage, relative to output range, (+/-) | 0.2 % |
| Basic error limit (operational limit at 25 °C) | |
| Voltage, relative to output range, (+/-) | 0.15 % |
| Interrupts/diagnostics/status information | |
| Substitute values connectable | Yes |
| Alarms | |
| Diagnostic alarm | Yes; Parameterizable |
| Hardware interrupt | No |
| Diagnoses | |
| Diagnostic information readable | Yes |
| Wire-break | No |
| Short-circuit | Yes; per channel, not in zero range |
| 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 |
| Isolation | |
| Isolation tested with | 707 V DC (type test) |
| Dimensions | |
| Width | 45 mm |
| Height | 130 mm |
| Depth | 35 mm |
| Weights | |
| Weight, approx. | 150 g |

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