

SIMATIC DP, ELECTRONIC MODULE FOR ET 200S, 2 AO U, 15 MM WIDTH, +/-10 V; 13 BIT + SIGN, 1..5V; 12BIT, CYCLE TIME < 1 MS WITH LED SF (GROUP FAULT)



| Supply voltage | |
|---|-------------------------|
| Load voltage L+ | |
| • Rated value (DC) | 24 V; From power module |
| • Reverse polarity protection | Yes |
| Input current | |
| from load voltage L+ (without load), max. | 130 mA |
| from backplane bus 3.3 V DC, max. | 10 mA |
| Power loss | |
| Power loss, max. | 2 W |
| Address area | |
| Address space per module | |
| • Address space per module, max. | 4 byte |
| Analog outputs | |
| Number of analog outputs | 2 |
| Voltage output, short-circuit protection | Yes |
| Voltage output, short-circuit current, max. | 25 mA |
| Cycle time (all channels) max. | 1.5 ms |

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| Output ranges, voltage | |
| • 1 V to 5 V | Yes |
| • -10 V to +10 V | Yes |
| Connection of actuators | |
| • for voltage output two-wire connection | Yes; Without compensation of the line resistances |
| • for voltage output four-wire connection | Yes |
| Load impedance (in rated range of output) | |
| • with voltage outputs, min. | 1 k Ω |
| • with voltage outputs, capacitive load, max. | 1 μ F |
| Destruction limits against externally applied voltages and currents | |
| • Voltages at the outputs towards MANA | 15 V; max. 15 V continuous; 75 V for max. 1 s (mark to space ratio 1:20) |
| • Current, max. | 50 mA; DC |
| 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. | 14 bit; 1 to 5 V: 12 bits, +/-10 V: 13 bits + sign |
| Settling time | |
| • for resistive load | 0.1 ms |
| • for capacitive load | 0.5 ms |
| • for inductive load | 0.5 ms |
| Errors/accuracies | |
| Output ripple (relative to output range, bandwidth 0 to 50 kHz), (+/-) | 0.02 % |
| Linearity error (relative to output range), (+/-) | 0.02 % |
| Temperature error (relative to output range), (+/-) | 0.01 %/K |
| Crosstalk between the outputs, min. | -40 dB |
| 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, (+/-) | 0.4 % |
| Basic error limit (operational limit at 25 °C) | |
| • Voltage, relative to output range, (+/-) | 0.2 % |
| Isochronous mode | |
| Isochronous operation (application synchronized up to terminal) | No |
| Interrupts/diagnostics/status information | |
| Substitute values connectable | Yes; 0 to 65535 (range of values must be within the rated range) |
| Diagnostic messages | |
| • Diagnostic information readable | Yes |

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| • Short-circuit | Yes |
| • Group error | Yes |
| Diagnostics indication LED | |
| • Group error SF (red) | Yes |

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| Parameter | |
| Remark | 7 byte |
| Diagnostics short-circuit | Disable / enable |
| Output type/range | deactivated / 1 to 5 V / +/- 10 V |
| Group diagnostics | Disable / enable |
| Response to CPU/master STOP | Output current and de-energized/substitute a value/keep last value |

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| 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 |

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| Permissible potential difference | |
| between MANA and M internally (UISO) | 75 V DC/60 V AC |

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| Isolation | |
| Isolation tested with | 500 V DC |

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| Dimensions | |
| Width | 15 mm |
| Height | 81 mm |
| Depth | 52 mm |

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| Weights | |
| Weight, approx. | 40 g |

last modified: 10/08/2016