SIEMENS

Data sheet

6ES7142-4BD00-0AB0

SIMATIC DP, Electronic modules for ET 200 PRO 4 DO 24 V DC, 2.0A High Feature, Channel diagnostics; short-circuit and wire break; incl. bus module, Connection module IO 6ES7194-4..00-0AA0 order separately

| Supply voltage | Connection module to GEO 154 4GO O'VIO Graci separately |
|---|---|
| Load voltage 2L+ | |
| Rated value (DC) | 24 V |
| Short-circuit protection | Yes; per channel, electronic |
| Reverse polarity protection | Yes; against destruction; load increasing |
| Input current | |
| from load voltage 2L+ (without load), max. | 40 mA |
| from backplane bus 3.3 V DC, max. | 30 mA |
| Power loss | |
| Power loss, typ. | 2.5 W |
| Address area | |
| Address space per module | |
| Address space per module, max. | 1 byte |
| Digital outputs | |
| Number of digital outputs | 4 |
| Short-circuit protection | Yes |
| Response threshold, typ. | 2.8 A |
| Limitation of inductive shutdown voltage to | 2L+ (-47 V) |
| Controlling a digital input | Yes |
| Switching capacity of the outputs | |
| • on lamp load, max. | 10 W |
| Load resistance range | |
| • lower limit | 12 Ω |
| • upper limit | 4 kΩ |
| Output voltage | |
| • for signal "1", min. | 2L+ (-0,8 V) |
| Output current | |
| for signal "1" rated value | 2 A |
| for signal "0" residual current, max. | 0.5 mA |
| Parallel switching of two outputs | |
| for uprating | No |
| for redundant control of a load | Yes |
| Switching frequency | |
| with resistive load, max. | 100 Hz |
| with inductive load, max. | 0.5 Hz |
| on lamp load, max. | 1 Hz |
| Total current of the outputs (per group) | |
| all mounting positions | |
| — up to 55 °C, max. | 4 A |
| Cable length | |
| • shielded, max. | 30 m |
| • unshielded, max. | 30 m |
| Interrupts/diagnostics/status information | |
| Diagnostics function | Yes |
| Substitute values connectable | Yes |
| Alarms | |
| Diagnostic alarm | Yes |
| Diagnoses | |
| Diagnostic information readable | Yes |
| Wire-break | Yes; channel by channel |

| Short-circuit | Yes; channel by channel | |
|---|---|--|
| Diagnostics indication LED | | |
| Group error SF (red) | Yes | |
| Status indicator digital output (green) | Yes | |
| Channel fault indicator F (red) | Yes | |
| Potential separation | | |
| between backplane bus and all other circuit components | Yes | |
| Potential separation digital outputs | | |
| between the channels | No | |
| between the channels and backplane bus | Yes | |
| Isolation | | |
| Isolation tested with | 707 V DC (type test) | |
| Standards, approvals, certificates | | |
| Suitable for safety-related tripping of standard modules | Yes | |
| Highest safety class achievable for safety-related tripping of standard modules | | |
| Performance level according to ISO 13849-1 | PL d | |
| Category according to ISO 13849-1 | Cat. 3 | |
| • SIL acc. to IEC 62061 | SIL 2 | |
| remark on safety-oriented shutdown | https://support.industry.siemens.com/cs/de/en/view/39198632 | |
| Dimensions | | |
| Width | 45 mm | |
| Height | 130 mm | |
| Depth | 35 mm; without terminal module | |
| Weights | | |
| Weight, approx. | 140 g | |

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