



SIMATIC DP, ELECTRONIC MODULES FOR ET200PRO 4 DO DC 24V, 2.0A HIGH FEATURE, CHANNEL DIAGNOSTICS; SHORT CIRCUIT AND WIRE BREAK; INCLUSIVE BUS MODULE CONNECTING MODULE IO 6ES7194-4..00-0AA0 MUST BE ORDERED SEPERATELY

| Supply voltage                             |                                           |
|--------------------------------------------|-------------------------------------------|
| 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                   |                                           |
| • with packing                             | 4 bit                                     |
| • without packing                          | 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 $\Omega$        |
| • upper limit                               | 4 k $\Omega$       |
| 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   |                    |
| Diagnostic functions                        | Yes                |
| Substitute values connectable               | Yes                |
| Alarms                                      |                    |
| • Diagnostic alarm                          | Yes                |
| Diagnostic messages                         |                    |
| • Diagnostic information readable           | Yes                |
| • Wire-break                                | Yes                |
| • Short-circuit                             | Yes                |
| Diagnostics indication LED                  |                    |
| • Group error SF (red)                      | Yes                |
| • Status indicator digital output (green)   | Yes                |
| • Channel fault indicator F (red)           | Yes                |
| Parameter                                   |                    |
| Diagnostics wire break                      | channel by channel |

|                                                        |                                |
|--------------------------------------------------------|--------------------------------|
| Diagnostics short-circuit                              | channel by channel             |
| <b>Potential separation</b>                            |                                |
| between backplane bus and all other circuit components | Yes                            |
| <b>Potential separation digital outputs</b>            |                                |
| • between the channels                                 | No                             |
| • between the channels and backplane bus               | Yes                            |
| <b>Isolation</b>                                       |                                |
| Isolation tested with                                  | 707 V DC (type test)           |
| <b>Standards, approvals, certificates</b>              |                                |
| Suitable for safety-oriented group deactivation        | Yes                            |
| <b>Highest safety class achievable in safety mode</b>  |                                |
| • Performance level according to ISO 13849-1           | d                              |
| • SIL acc. to IEC 61508                                | 2                              |
| <b>Dimensions</b>                                      |                                |
| Width                                                  | 45 mm                          |
| Height                                                 | 130 mm                         |
| Depth                                                  | 35 mm; without terminal module |
| <b>Weights</b>                                         |                                |
| Weight, approx.                                        | 140 g                          |
| <b>last modified:</b>                                  | 09/12/2017                     |