



SIMATIC DP, Electronics module f. ET200S, 2AI Standard I-2DMU 15 mm width, 4.. 20mA; 13 bit for 2-wire transducer Cycle time 65 ms/channel with SF LED (group fault)

| General information                                                    |                                                              |
|------------------------------------------------------------------------|--------------------------------------------------------------|
| Product function                                                       |                                                              |
| • Isochronous mode                                                     | No                                                           |
| Supply voltage                                                         |                                                              |
| Load voltage L+                                                        |                                                              |
| • Rated value (DC)                                                     | 24 V; From power module                                      |
| • Reverse polarity protection                                          | Yes; Destruction limit 35 mA per channel                     |
| Input current                                                          |                                                              |
| from load voltage L+ (without load), max.                              | 80 mA                                                        |
| from backplane bus 3.3 V DC, max.                                      | 10 mA                                                        |
| Power loss                                                             |                                                              |
| Power loss, typ.                                                       | 0.6 W                                                        |
| Address area                                                           |                                                              |
| Address space per module                                               |                                                              |
| • Address space per module, max.                                       | 4 byte                                                       |
| Analog inputs                                                          |                                                              |
| Number of analog inputs                                                | 2                                                            |
| permissible input current for current input (destruction limit), max.  | 40 mA                                                        |
| Cycle time (all channels) max.                                         | Number of active channels per module x basic conversion time |
| Input ranges (rated values), currents                                  |                                                              |
| • 4 mA to 20 mA                                                        | Yes; on 50 ohms                                              |
| Cable length                                                           |                                                              |
| • shielded, max.                                                       | 200 m                                                        |
| Analog value generation for the inputs                                 |                                                              |
| Measurement principle                                                  | integrating                                                  |
| Integration and conversion time/resolution per channel                 |                                                              |
| • Resolution with overrange (bit including sign), max.                 | 13 bit; 4 to 20 mA: 13 bit                                   |
| • Integration time (ms)                                                | 16,7 / 20 ms                                                 |
| • Interference voltage suppression for interference frequency f1 in Hz | 50 / 60 Hz                                                   |
| • Conversion time (per channel)                                        | 65 ms; 55 / 65 ms                                            |
| Smoothing of measured values                                           |                                                              |
| • parameterizable                                                      | Yes; In four stages by means of digital filtering            |
| • Step: None                                                           | Yes; 1x cycle time                                           |
| • Step: low                                                            | Yes; 4x cycle time                                           |
| • Step: Medium                                                         | Yes; 32x cycle time                                          |
| • Step: High                                                           | Yes; 64x cycle time                                          |
| Errors/accuracies                                                      |                                                              |
| Operational error limit in overall temperature range                   |                                                              |

|                                                  |                                                                                              |
|--------------------------------------------------|----------------------------------------------------------------------------------------------|
| • Current, relative to input range, (+/-)        | 0.6 %                                                                                        |
| Basic error limit (operational limit at 25 °C)   |                                                                                              |
| • Current, relative to input range, (+/-)        | 0.4 %                                                                                        |
| <b>Interrupts/diagnostics/status information</b> |                                                                                              |
| Diagnoses                                        |                                                                                              |
| • Wire-break                                     | Yes                                                                                          |
| • Group error                                    | Yes                                                                                          |
| • Overflow/underflow                             | Yes                                                                                          |
| Diagnostics indication LED                       |                                                                                              |
| • Group error SF (red)                           | Yes                                                                                          |
| <b>Parameter</b>                                 |                                                                                              |
| Remark                                           | 4 byte                                                                                       |
| Group diagnostics                                | Disable / enable                                                                             |
| Overflow/underflow                               | Disable / enable                                                                             |
| <b>Potential separation</b>                      |                                                                                              |
| Potential separation analog inputs               |                                                                                              |
| • between the channels                           | No                                                                                           |
| • between the channels and backplane bus         | Yes                                                                                          |
| • Between the channels and load voltage L+       | No                                                                                           |
| <b>Isolation</b>                                 |                                                                                              |
| Isolation tested with                            | 500 V DC                                                                                     |
| <b>Dimensions</b>                                |                                                                                              |
| Width                                            | 15 mm                                                                                        |
| Height                                           | 81 mm                                                                                        |
| Depth                                            | 52 mm                                                                                        |
| <b>Weights</b>                                   |                                                                                              |
| Weight, approx.                                  | 40 g                                                                                         |
| <b>last modified:</b>                            | 2/9/2021  |