



SIPLUS ET 200S EM 4 AI I 2-wire based on 6ES7134-4GD00-0AB0 with conformal coating, -25...+70 °C, electronic module 4-20 mA; 13 bit 15 mm width, for 2-wire transmitter cycle time 40 ms/module with SF LED (group fault)

| General information  |  |
|--|--|
| Product function   |  |
| <ul style="list-style-type: none"> <li>• Isochronous mode</li> </ul>   | No   |
| Supply voltage   |  |
| Load voltage L+  |  |
| <ul style="list-style-type: none"> <li>• Rated value (DC)</li> <li>• Reverse polarity protection</li> </ul>  | 24 V; From power module<br>Yes                                   |
| Input current  |  |
| from load voltage L+ (without load), max.  | 125 mA   |
| from backplane bus 3.3 V DC, max.  | 10 mA  |
| output voltage / header  |  |
| supply voltage of the transmitters / header  |  |
| <ul style="list-style-type: none"> <li>• present</li> <li>• short-circuit proof</li> </ul>   | Yes<br>Yes; approx. 200 mA for module                            |
| Power loss   |  |
| Power loss, typ.   | 0.6 W  |
| Address area   |  |
| Address space per module   |  |
| <ul style="list-style-type: none"> <li>• Address space per module, max.</li> </ul>   | 8 byte   |
| Analog inputs  |  |
| Number of analog inputs  | 4  |
| permissible input current for current input (destruction limit), max.  | 30 mA; limited electronically                                    |
| Cycle time (all channels) max.   | 40 ms; 33 to 40 ms   |
| Input ranges (rated values), currents  |  |
| <ul style="list-style-type: none"> <li>• 4 mA to 20 mA</li> </ul>  | Yes; Into 25 Ohm   |
| Cable length   |  |
| <ul style="list-style-type: none"> <li>• shielded, max.</li> </ul>   | 200 m  |
| Analog value generation for the inputs   |  |
| Measurement principle  | integrating  |
| Integration and conversion time/resolution per channel   |  |
| <ul style="list-style-type: none"> <li>• Resolution with overrange (bit including sign), max.</li> <li>• Integration time, parameterizable</li> <li>• Integration time (ms)</li> <li>• Interference voltage suppression for interference frequency f1 in Hz</li> </ul> | 13 bit; 4 to 20 mA: 13 bit<br>Yes<br>16,67 / 20 ms<br>50 / 60 Hz |
| Smoothing of measured values   |  |
| <ul style="list-style-type: none"> <li>• parameterizable</li> <li>• Step: None</li> <li>• Step: low</li> </ul>   | Yes; in 4 stages<br>Yes; 1x cycle time<br>Yes; 4x cycle time     |

|  |   |
|--|---|
| • Step: Medium   | Yes; 16x cycle time   |
| • Step: High   | Yes; 32x cycle time   |
| <b>Errors/accuracies</b>   |   |
| Operational error limit in overall temperature range   |   |
| • Current, relative to input range, (+/-)  | 0.5 %   |
| Basic error limit (operational limit at 25 °C)   |   |
| • Current, relative to input range, (+/-)  | 0.3 %   |
| <b>Interrupts/diagnostics/status information</b>   |   |
| Diagnoses  |   |
| • Wire-break   | Yes; Measuring range 1 to 5 V only  |
| • Group error  | Yes   |
| • Overflow/underflow   | Yes   |
| Diagnostics indication LED   |   |
| • Group error SF (red)   | Yes   |
| <b>Parameter</b>   |   |
| Remark   | 7 byte  |
| Diagnostics wire break   | 1   |
| Group diagnostics  | 1   |
| Overflow/underflow   | 1   |
| <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>Standards, approvals, certificates</b>  |   |
| CE mark  | Yes   |
| <b>Ambient conditions</b>  |   |
| Ambient temperature during operation   |   |
| • min.   | -25 °C; = Tmin  |
| • max.   | 70 °C; = Tmax   |
| Altitude during operation relating to sea level  |   |
| • Installation altitude above sea level, max.  | 5 000 m   |
| • Ambient air temperature-barometric pressure-altitude                                       | Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m) |
| Relative humidity  |   |
| • With condensation, tested in accordance with IEC 60068-2-38, max.                          | 100 %; RH incl. condensation/frost (no commissioning under condensation conditions)   |
| <b>Resistance</b>  |   |
| Use in stationary industrial systems   |   |
| — to biologically active substances according to EN 60721-3-3                                | Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request  |
| — to chemically active substances according to EN 60721-3-3                                  | Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *  |
| — to mechanically active substances according to EN 60721-3-3                                | Yes; Class 3S4 incl. sand, dust, *  |
| Use on ships/at sea  |   |
| — to biologically active substances according to EN 60721-3-6                                | Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request   |
| — to chemically active substances according to EN 60721-3-6                                  | Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *  |
| — to mechanically active substances according to EN 60721-3-6                                | Yes; Class 6S3 incl. sand, dust; *  |
| Usage in industrial process technology   |   |
| — Against chemically active substances acc. to EN 60654-4                                    | Yes; Class 3 (excluding trichlorethylene)   |
| — Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04 | Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)                             |
| Remark   |   |
| — Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and | * The supplied plug covers must remain in place over the unused interfaces during operation!  |

ANSI/ISA-71.04

**Dimensions**

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

**Weights**

|                 |      |
|-----------------|------|
| Weight, approx. | 40 g |
|-----------------|------|

**last modified:** 5/13/2024 