

SIPLUS ET 200S EM 2AO U -25...+60°C based on 6ES7135-4fb01-0AB0



Supply voltage	
Load voltage L+	
<ul style="list-style-type: none"> Rated value (DC) Reverse polarity protection 	<p>24 V; From power module</p> <p>Yes</p>
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	
<ul style="list-style-type: none"> 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

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 bit, \pm 10 V: 13 bit + sign
Settling time	
• for resistive load	0.1 ms
• for capacitive load	0.5 ms
• for inductive load	0.5 ms
Errors/accuracies	
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 %
Interrupts/diagnostics/status information	
Diagnostic messages	
• Short-circuit	Yes
• Group error	Yes
Diagnostics indication LED	
• Group error SF (red)	Yes
Parameter	
Remark	7 byte
Diagnostics short-circuit	Disable / enable
Output type/range	deactivated / 1 to 5 V / \pm 10 V
Group diagnostics	Disable / enable
Response to CPU/master STOP	Output current and de-energized/substitute a value/keep last value

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 |

Ambient conditions

Ambient temperature during operation

- | | |
|--------|----------------|
| • min. | -25 °C; = Tmin |
| • max. | 60 °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) |
|---|---|

Resistance

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 ANSI/ISA-71.04 | * The supplied plug covers must remain in place over the unused interfaces during operation! |
|---|--|

Dimensions

Width	15 mm
Height	81 mm
Depth	52 mm

Weights

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

last modified: 05/09/2020