

SIPLUS ET200S EM 2AO I STANDARD -25 ... +70 DGR C WITH CONFORMAL COATING BASED ON 6ES7135-4GB01-0AB0 . +/- 20MA; 13 BIT + VZ, 4 . .20MA; 13 BIT CYCLE TIME < 1MS WITH LED GF (GROUP FAULT)



Supply voltage	
Load voltage L+	
• Rated value (DC)	24 V; From power module
• Reverse polarity protection	Yes
Input current	
from load voltage L+ (without load), max.	150 mA
from backplane bus 3.3 V DC, max.	10 mA
Power loss	
Power loss, max.	2 W
Address area	
Address space per module	
• Address space per module, max.	4 byte
Analog outputs	
Number of analog outputs	2
Current output, no-load voltage, max.	18 V
Cycle time (all channels) max.	1.5 ms
Output ranges, current	

• -20 mA to +20 mA	Yes
• 4 mA to 20 mA	Yes
Connection of actuators	
• for current output two-wire connection	Yes
• for current output four-wire connection	No
Load impedance (in rated range of output)	
• with current outputs, max.	500 Ω
• with current outputs, inductive load, max.	1 mH
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; 4 to 20 mA: 13 bits, +/-20 mA: 14 bits
Settling time	
• for resistive load	0.1 ms
• for capacitive load	0.5 ms
• for inductive load	0.5 ms
Errors/accuracies	
Output ripple (relative to output range, bandwidth 0 to 50 kHz), (+/-)	0.02 %
Linearity error (relative to output range), (+/-)	0.02 %
Temperature error (relative to output range), (+/-)	0.01 %/K
Repeat accuracy in steady state at 25 °C (relative to output range), (+/-)	0.05 %
Operational error limit in overall temperature range	
• Current, relative to output range, (+/-)	0.5 %
Basic error limit (operational limit at 25 °C)	
• Current, relative to output range, (+/-)	0.3 %
Interrupts/diagnostics/status information	
Substitute values connectable	Yes; 0 to 65535 (range of values must be within the rated range)
Diagnostic messages	
• Wire-break	Yes
• Group error	Yes
Diagnostics indication LED	
• Group error SF (red)	Yes
Parameter	

Remark	7 byte
Diagnostics wire break	Disable / enable
Output type/range	deactivated / +/-20 mA / 4 to 20 mA
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 |

Permissible potential difference

between MANA and M internally (UISO)	75 V DC/60 V AC
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Ambient conditions

Ambient temperature during operation

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|--------|----------------|
| • min. | -25 °C; = Tmin |
| • max. | 70 °C; = Tmax |

Extended ambient conditions

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|--|---|
| • relative to ambient temperature-atmospheric pressure-installation altitude | Tmin ... Tmax at 1080 hPa ... 795 hPa (-1000 m ... +2000 m) // Tmin ... (Tmax - 10K) at 795 hPa ... 658 hPa (+2000 m ... +3500 m) // Tmin ... (Tmax - 20K) at 658 hPa ... 540 hPa (+3500 m ... +5000 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

- | | |
|---|---|
| — against biologically active substances / conformity with EN 60721-3-3 | Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation in corrosive atmospheres! |
| — against chemically active substances / conformity with EN 60721-3-3 | Yes; Class 3C4 (RH < 75%) incl. salt spray according to EN 60068-2-52 (degree of severity 3). The supplied connector covers must remain on the unused interfaces during operation! |
| — against mechanically active substances / conformity with EN 60721-3-3 | Yes; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation! |

Dimensions

Width	15 mm
Height	81 mm
Depth	52 mm

Weights

Weight, approx.	40 g
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last modified:

10/29/2016