

SIPLUS S7-400 SM432 8AA FOR MEDIAL STRESS BASED ON
6ES7432-1HF00-0AB0

Supply voltage

Load voltage L+

- | | |
|-------------------------------|------|
| • Rated value (DC) | 24 V |
| • Reverse polarity protection | Yes |

Input current

- | | |
|---------------------------------|--------|
| from supply voltage L+, max. | 400 mA |
| from backplane bus 5 V DC, max. | 150 mA |

Power loss

- | | |
|------------------|-----|
| Power loss, typ. | 9 W |
|------------------|-----|

Analog outputs

- | | |
|---|-------|
| Number of analog outputs | 8 |
| Voltage output, short-circuit protection | Yes |
| Voltage output, short-circuit current, max. | 30 mA |
| Current output, no-load voltage, max. | 19 V |

Output ranges, voltage

- | | |
|------------------|-----|
| • 0 to 10 V | Yes |
| • 1 V to 5 V | Yes |
| • -10 V to +10 V | Yes |

Output ranges, current

- | | |
|--------------------|-----|
| • 0 to 20 mA | Yes |
| • -20 mA to +20 mA | Yes |
| • 4 mA to 20 mA | Yes |

Load impedance (in rated range of output)

- | | |
|---|--|
| • with voltage outputs, min. | 1 k Ω |
| • with voltage outputs, capacitive load, max. | 1 μ F |
| • with current outputs, max. | 500 Ω ; 600 ohms if common-mode-voltage reduced to <1 V |

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. | 13 bit |
| • Conversion time (per channel) | 420 μ s; 420 μ s in the ranges 1 to 5 V and 4 to 20 mA; 300 μ s in all ranges |

Settling time	
• for resistive load	0.1 ms
• for capacitive load	3.5 ms
• for inductive load	0.5 ms

Errors/accuracies	
Operational error limit in overall temperature range	
• Voltage, relative to output range, (+/-)	0.5 %; +/-10 V, 0 to 10 V, 1 to 5 V
• Current, relative to output range, (+/-)	1 %; +/-20 mA, 4 to 20 mV
Basic error limit (operational limit at 25 °C)	
• Voltage, relative to output range, (+/-)	0.5 %; +/-10 V, 0 to 10 V, 1 to 5 V
• Current, relative to output range, (+/-)	0.5 %; +/-20 mA, 0 to 20 mA

Potential separation	
Potential separation analog outputs	
• between the channels and backplane bus	Yes

Isolation	
Isolation tested with	2120 V DC between bus and L+/M; 2120 V DC between bus and analog part; 500 V DC between bus and local ground; 707 V DC between analog part and L+/M; 2120 V DC between analog part and local ground; 2120 V DC between L+/M and local ground

Ambient conditions	
Ambient temperature during operation	
• min.	0 °C; = Tmin
• max.	60 °C; = Tmax
Ambient temperature during storage/transportation	
• min.	-40 °C
• max.	70 °C
Extended ambient conditions	
• 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); Class 3B3 on request
— against chemically active substances / conformity with EN 60721-3-3	Yes; Class 3C4 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	25 mm
Height	290 mm
Depth	210 mm

Weights

Weight, approx.	650 g
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last modified: 05/31/2017