

Data sheet

SM 032 - Analog output (032-1BD70)

Technical data

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|---|--|
| Order no. | 032-1BD70 |
| Type | SM 032 - Analog output |
| Module ID | 0506 25E0 |
| General information | |
| Note | - |
| Features | 4x AO 12 Bit Voltage -10 V...+10 V |
| Current consumption/power loss | |
| Current consumption from backplane bus | 60 mA |
| Current consumption from load voltage L+ (without load) | 20 mA |
| Power loss | 0.8 W |
| Technical data analog outputs | |
| Number of outputs | 4 |
| Cable length, shielded | 200 m |
| Rated load voltage | DC 24 V |
| Reverse polarity protection of rated load voltage | yes |
| Current consumption from rated load voltage | - |
| Voltage output short-circuit protection | yes |
| Voltage outputs | yes |
| Min. load resistance (voltage range) | 5 kOhm |
| Max. capacitive load (current range) | 1 µF |
| Max. inductive load (current range) | 10 mA |
| Output voltage ranges | -10 V ... +10 V 0 V ... +10 V |
| Operational limit of voltage ranges | +/-0.3% |
| Basic error limit voltage ranges | +/-0.2% |
| Destruction limit against external applied voltage | max. 24V |
| Current outputs | - |
| Max. in load resistance (current range) | - |
| Max. inductive load (current range) | - |
| Typ. open circuit voltage current output | - |
| Output current ranges | - |
| Operational limit of current ranges | - |
| Basic error limit current ranges | - |
| Destruction limit against external applied voltage | - |
| Settling time for ohmic load | 3 ms |
| Settling time for capacitive load | 3 ms |
| Settling time for inductive load | - |
| Resolution in bit | 12 |
| Conversion time | 2 ms all channels |
| Substitute value can be applied | no |
| Output data size | 8 Byte |
| Status information, alarms, diagnostics | |

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|----------------------------------|---------------------|
| Status display | yes |
| Interrupts | no |
| Process alarm | no |
| Diagnostic interrupt | no |
| Diagnostic functions | yes |
| Diagnostics information read-out | possible |
| Supply voltage display | green LED |
| Group error display | red LED |
| Channel error display | red LED per channel |

Isolation

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|---|------------------|
| Between channels | - |
| Between channels of groups to | - |
| Between channels and backplane bus | yes |
| Between channels and power supply | yes |
| Max. potential difference between circuits | - |
| Max. potential difference between inputs (Ucm) | - |
| Max. potential difference between Mana and Mintern (Uiso) | DC 75 V/ AC 50 V |
| Max. potential difference between inputs and Mana (Ucm) | - |
| Max. potential difference between inputs and Mintern (Uiso) | - |
| Max. potential difference between Mintern and outputs | - |
| Insulation tested with | DC 500 V |

Datasizes

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| Input bytes | 0 |
| Output bytes | 8 |
| Parameter bytes | 10 |
| Diagnostic bytes | 20 |

Housing

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| Material | PPE / PPE GF10 |
| Mounting | Profile rail 35 mm |

Mechanical data

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|------------------------------|----------------------------|
| Dimensions (WxHxD) | 12.9 mm x 109 mm x 76.5 mm |
| Net weight | 62 g |
| Weight including accessories | 62 g |
| Gross weight | 76 g |

Environmental conditions

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|-----------------------|-----------------|
| Operating temperature | 0 °C to 60 °C |
| Storage temperature | -25 °C to 70 °C |

Certifications

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| UL certification | yes |
| KC certification | yes |