

Data sheet
SM 232, ECO (232-1BD40)
Technical data

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|---|--|
| Order no. | 232-1BD40 |
| Type | SM 232, ECO |
| General information | |
| Note | - |
| Features | 4x AO 12 Bit Current 0(4)...20 mA Parameterizable |
| Current consumption/power loss | |
| Current consumption from backplane bus | 60 mA |
| Power loss | 1.5 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 load voltage L+ (without load) | 50 mA |
| Voltage output short-circuit protection | - |
| Voltage outputs | - |
| Min. load resistance (voltage range) | - |
| Max. capacitive load (current range) | - |
| Max. inductive load (current range) | - |
| Output voltage ranges | - |
| Operational limit of voltage ranges | - |
| Basic error limit voltage ranges | - |
| Destruction limit against external applied voltage | - |
| Current outputs | yes |
| Max. in load resistance (current range) | 350 Ohm |
| Max. inductive load (current range) | 10 mH |
| Typ. open circuit voltage current output | 13 V |
| Output current ranges | 0 mA ... +20 mA +4 mA ... +20 mA |
| Operational limit of current ranges | +/-0.4% |
| Basic error limit current ranges | +/-0.2% |
| Destruction limit against external applied voltage | max. 15V |
| Settling time for ohmic load | 0.03 ms |
| Settling time for capacitive load | - |
| Settling time for inductive load | 1.5 ms |
| Resolution in bit | 12 |
| Conversion time | 0.7 ms / all channels |
| Substitute value can be applied | no |
| Output data size | 8 Byte |

Status information, alarms, diagnostics

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|----------------------------------|-----------|
| Status display | none |
| Interrupts | no |
| Process alarm | no |
| Diagnostic interrupt | no |
| Diagnostic functions | no |
| Diagnostics information read-out | none |
| Supply voltage display | green LED |
| Group error display | none |
| Channel error display | none |

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 | 8 |
| Diagnostic bytes | 0 |

Housing

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|----------|--------------------|
| Material | PPE / PA 6.6 |
| Mounting | Profile rail 35 mm |

Mechanical data

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|------------------------------|-------------------------|
| Dimensions (WxHxD) | 25.4 mm x 76 mm x 88 mm |
| Net weight | 80 g |
| Weight including accessories | - |
| Gross weight | - |

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 | - |