

Data sheet
SM 022 (022-1BD00)
Technical data

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| Order no. | 022-1BD00 |
| Type | SM 022 |
| Module ID | 0104 AFA0 |

General information

| | |
|----------|-----------------------------------|
| Note | - |
| Features | 4 outputs Output current 0.5 A |

Current consumption/power loss

| | |
|--|-------|
| Current consumption from backplane bus | 75 mA |
| Power loss | 0.5 W |

Technical data digital outputs

| | |
|---|------------------|
| Number of outputs | 4 |
| Cable length, shielded | 1000 m |
| Cable length, unshielded | 600 m |
| Rated load voltage | DC 20.4...28.8 V |
| Current consumption from load voltage L+ (without load) | 10 mA |
| Total current per group, horizontal configuration, 40°C | 2 A |
| Total current per group, horizontal configuration, 60°C | 2 A |
| Total current per group, vertical configuration | 2 A |
| Output current at signal "1", rated value | 0.5 A |
| Output delay of "0" to "1" | 30 µs |
| Output delay of "1" to "0" | 175 µs |
| Minimum load current | - |
| Lamp load | 10 W |
| Parallel switching of outputs for redundant control of a load | not possible |
| Parallel switching of outputs for increased power | not possible |
| Actuation of digital input | yes |
| Switching frequency with resistive load | max. 1000 Hz |
| Switching frequency with inductive load | max. 0.5 Hz |
| Switching frequency on lamp load | max. 10 Hz |
| Internal limitation of inductive shut-off voltage | L+ (-45 V) |
| Short-circuit protection of output | yes, electronic |
| Trigger level | 1 A |
| Number of operating cycle of relay outputs | - |
| Switching capacity of contacts | - |
| Output data size | 4 Bit |

Status information, alarms, diagnostics

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|----------------------|-----------------------|
| Status display | green LED per channel |
| Interrupts | no |
| Process alarm | no |
| Diagnostic interrupt | no |

| | |
|----------------------------------|------------|
| Diagnostic functions | no |
| Diagnostics information read-out | none |
| Supply voltage display | green LED |
| Group error display | red SF LED |
| Channel error display | none |

Isolation

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|------------------------------------|----------|
| Between channels | - |
| Between channels of groups to | - |
| Between channels and backplane bus | yes |
| Insulation tested with | DC 500 V |

PWM data

| | |
|---------------------|---|
| PWM channels | - |
| PWM time basis | - |
| Period length | - |
| Minimum pulse width | - |
| Type of output | - |

Safety

| | |
|---------------------|---|
| Safety protocol | - |
| Safety requirements | - |
| Secure user address | - |
| Watchdog | - |
| Two channels | - |
| Test pulse length | - |
| Circuit monitoring | - |

Datasizes

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|------------------|---|
| Input bytes | 0 |
| Output bytes | 1 |
| Parameter bytes | 0 |
| Diagnostic bytes | 0 |

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 | 60 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 | yes |