

Data sheet
SM 223 (223-1BF00)
Technical data

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|---|--|
| Order no. | 223-1BF00 |
| Type | SM 223 |
| General information | |
| Note | - |
| Features | 8x DIO DC 24 V DO 1 A Diagnostic function |
| Current consumption/power loss | |
| Current consumption from backplane bus | 65 mA |
| Power loss | 2 W |
| Technical data digital inputs | |
| Number of inputs | 8 |
| Cable length, shielded | 1000 m |
| Cable length, unshielded | 600 m |
| Rated load voltage | - |
| Current consumption from load voltage L+ (without load) | - |
| Rated value | DC 20.4...28.8 V |
| Input voltage for signal "0" | DC 0...5 V |
| Input voltage for signal "1" | DC 15...28.8 V |
| Input voltage hysteresis | - |
| Frequency range | - |
| Input resistance | - |
| Input current for signal "1" | 7 mA |
| Connection of Two-Wire-BEROs possible | yes |
| Max. permissible BERO quiescent current | 1.5 mA |
| Input delay of "0" to "1" | 3 ms |
| Input delay of "1" to "0" | 3 ms |
| Number of simultaneously utilizable inputs horizontal configuration | 8 |
| Number of simultaneously utilizable inputs vertical configuration | 8 |
| Input characteristic curve | IEC 61131-2, type 1 |
| Initial data size | 1 Byte |
| Technical data digital outputs | |
| Number of outputs | 8 |
| Cable length, shielded | 1000 m |
| Cable length, unshielded | 600 m |
| Rated load voltage | DC 20.4...28.8 V |
| Reverse polarity protection of rated load voltage | - |
| Current consumption from load voltage L+ (without load) | 10 mA |
| Output current at signal "1", rated value | 1 A |
| Output delay of "0" to "1" | 150 µs |

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| Output delay of "1" to "0" | 100 µs |
| Minimum load current | - |
| Lamp load | 5 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+ (-52 V) |
| Short-circuit protection of output | yes, electronic |
| Trigger level | 1.7 A |
| Number of operating cycle of relay outputs | - |
| Switching capacity of contacts | - |
| Output data size | 1 Byte |

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 | 8 |
| Between channels and backplane bus | yes |
| Insulation tested with | DC 500 V |

Datasizes

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| Input bytes | 1 |
| Output bytes | 1 |
| Parameter bytes | 0 |
| 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 | 100 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 | - |
