## Data sheet

EM 123 (123-4EH01)

Technical data

| Order no. | 123-4EH01 |
| :--- | :--- |
| Type | EM 123 |
|  |  |
| General information | - |
| Note | $8 \times \mathrm{DI}$ |
| Features | $8 \times \mathrm{DO}$ |
|  | DC 24 V |
|  | $0,5 \mathrm{~A}$ |
|  | Isolated |

Current consumption/power loss

| Current consumption from backplane bus | 60 mA |
| :--- | :--- |
| Power loss | 3 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 24 V |
| Input voltage for signal "0" | DC $0 \ldots 5 \mathrm{~V}$ |
| Input voltage for signal "1" | DC $15 \ldots 28.8 \mathrm{~V}$ |


| Input voltage hysteresis | - |
| :--- | :--- |
| Signal logic input | Sinking input |


| Signal logic input | Sinking input |
| :--- | :--- |
| Frequency range | - |


| Input resistance | - |
| :--- | :--- |
| Input current for signal "1" | 7 mA |

Connection of Two-Wire-BEROs possible $\quad$ yes $\quad$
Max. permissible BERO quiescent current $\quad 1.5 \mathrm{~mA}$
Input delay of "0" to "1" 3 ms
Input delay of "1" to "0" 3 ms
Number of simultaneously utilizable inputs horizontal
configuration

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 24 V |
| Reverse polarity protection of rated load voltage | - |
| Current consumption from load voltage L+ (without load) | 20 mA |


| Output current at signal "1", rated value | 0.5 A |
| :---: | :---: |
| Signal logic output | Sourcing output |
| Output delay of "0" to "1" | max. $100 \mu \mathrm{~s}$ |
| Output delay of "1" to "0" | max. $350 \mu \mathrm{~s}$ |
| 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 A |
| Number of operating cycle of relay outputs | - |
| Switching capacity of contacts | - |
| Output data size | 1 Byte |
| Status information, alarms, diagnostics |  |
| 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 | none |
| Group error display | none |
| Channel error display | none |
| Isolation |  |
| Between channels | - |
| Between channels of groups to | 8 |
| Between channels and backplane bus | yes |
| Insulation tested with | DC 500 V |
| Datasizes |  |
| Input bytes | 2 |
| Output bytes | 2 |
| Parameter bytes | 0 |
| Diagnostic bytes | 0 |
| Housing |  |
| Material | PPE / PA 6.6 |
| Mounting | Profile rail 35 mm |
| Mechanical data |  |
| Dimensions (WxHxD) | $101.6 \mathrm{~mm} \times 76 \mathrm{~mm} \times 48 \mathrm{~mm}$ |
| Net weight | 222 g |
| Weight including accessories | - |
| Gross weight | - |
| Environmental conditions |  |


| Operating temperature | $0^{\circ} \mathrm{C}$ to $60^{\circ} \mathrm{C}$ |
| :--- | :--- |
| Storage temperature | $-25^{\circ} \mathrm{C}$ to $70^{\circ} \mathrm{C}$ |
| Certifications |  |
| UL certification | yes |
| KC certification | - |

