

## Data sheet

SM 221 (221-1BF00)

## Technical data

| Order no.   | 221-1BF00             |
|---|-----------------------|
| Туре  | SM 221                |
| One and information   |                       |
| General information   |                       |
| Note  | -                     |
| Features  | 8x DI<br>DC 24 V      |
| Current consumption/power loss                                      |                       |
| Current consumption from backplane bus                              | 25 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 20.428.8 V         |
| Input voltage for signal "0"  | DC 05 V               |
| Input voltage for signal "1"  | DC 1528.8 V           |
| Input voltage hysteresis  | -                     |
| Signal logic input  | Sinking input         |
| 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                |
| 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                        | 1                       |
| Output bytes                       | 0                       |
| Parameter bytes                    | 0                       |
| Diagnostic bytes                   | 0                       |
| Housing                            |                         |
| Material                           | PPE / PA 6.6            |
| Mounting                           | Profile rail 35 mm      |
| Mechanical data                    |                         |
| Dimensions (WxHxD)                 | 25.4 mm x 76 mm x 88 mm |
| Net weight                         | 60 g                    |
| Weight including accessories       | -                       |
| Gross weight                       | -                       |
| Environmental conditions           |                         |
| Operating temperature              | 0 °C to 60 °C           |
| Storage temperature                | -25 °C to 70 °C         |
| Certifications                     |                         |
| UL certification                   | yes                     |
| KC certification                   |                         |