


## Data sheet

### SM 223 (223-1BF00)

#### Technical data

<b>Order no.</b>	<b>223-1BF00</b>
Type	SM 223
<b>General information</b>	
Note	-
Features	8 channels (as input or output) Output current 1 A Diagnostics function
<b>Current consumption/power loss</b>	
Current consumption from backplane bus	65 mA
Power loss	2 W
<b>Technical data digital inputs</b>	
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	
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
<b>Technical data digital outputs</b>	
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

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	✔
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

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

Between channels	-
Between channels of groups to	8
Between channels and backplane bus	✔
Insulation tested with	DC 500 V

### Datasizes

Input bytes	1
Output bytes	1
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
Weight	100 g

### Environmental conditions

Operating temperature	0 °C to 60 °C
Storage temperature	-25 °C to 70 °C

## Certifications

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UL508 certification

yes

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