

Data sheet

SM 223 (223-1BF00)

Technical data

Order no.	223-1BF00
Type	SM 223


General information

Note	-
Features	8 channels (as input or output) Output current 1 A Diagnostics 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	
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 μ s

Output delay of "1" to "0"	100 μ 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	
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

UL508 certification

yes
