

## Data sheet

SM 221 (221-1BF50)

## Technical data

Type SM 221  General information  Note	Order no.	221-1BF50
Note   -	Туре	SM 221
Note   -		
Features 8 8 inputs Active low input  Current consumption/power loss  Current consumption from backplane bus 10 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 1528.8 V  Input voltage for signal "1" DC 05 V  Input voltage for signal "1" DC 05 V  Input voltage for signal "1" T 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 "0" to "1" 3 ms  Input delay of "1" to "0" 3 ms  Number of simultaneously utilizable inputs vertical configuration 8  Input characteristic curve  Initial data size 1 byte  Status display green LED per channel  Interrupts no  Diagnostics information , alarms, diagnostics  Diagnostics information read-out none	General information	
Current consumption/power loss  Current consumption from backplane bus 10 mA  Power loss 2 W  Technical data digital inputs  Number of inputs 8  Cable length, shielded 1000 m  Cable length, shielded 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 1528.8 V  Input voltage for signal "1" DC 05 V  Input voltage hysteresis  Frequency range  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 "0" to "1" 10" 3 ms  Input delay of "1" to "0" 3 ms  Number of simultaneously utilizable inputs horizontal 8  Input characteristic curve  Initial data size 1 Byte  Status display green LED per channel  Interrupts no  Diagnostics information read-out none  Supply voltage display none	Note	-
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Process alarm no Diagnostic interrupt no Diagnostic functions no Diagnostics information read-out none Supply voltage display none	Status display	green LED per channel
Diagnostic interrupt no  Diagnostic functions no  Diagnostics information read-out none  Supply voltage display none	Interrupts	no
Diagnostic functions no Diagnostics information read-out none Supply voltage display none	Process alarm	no
Diagnostics information read-out none Supply voltage display none	Diagnostic interrupt	no
Supply voltage display none	Diagnostic functions	no
	Diagnostics information read-out	none
Group error display none	Supply voltage display	none
	Group error display	none



Channel error display	none	A YASKAWA COMPANY	
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		
Weight	100 g		
Environmental conditions			
Operating temperature	0 °C to 60 °C	0 °C to 60 °C	
Storage temperature	-25 °C to 70 °C	-25 °C to 70 °C	
Certifications			
UL certification	yes	yes	
KC certification	-		