

Data sheet

SM 221 (221-1FD00)

Technical data

Type	Order no.	221-1FD00
Note	Туре	SM 221
Note		
Features		
Current consumption/power loss Current consumption from backplane bus 40 mA Power loss 2 W Technical data digital inputs Number of inputs 4 Cable length, shielded 1000 m Cable length, unshielded 600 m Rated load voltage Current consumption from load voltage L+ (without load) Rated value AC/DC 90230 V Input voltage for signal *0* AC/DC 90230 V Input voltage for signal *1* AC/DC 90230 V Input voltage hysteresis Frequency range 5060 Hz Input resistance 136 kOhm Input current for signal *1* Connection of Two-Wire-BEROs possible Max. permissible BERO quiescent current Input delay of *0* to *1* 25 ms Input delay of *0* to *1* 25 ms Number of simultaneously utilizable inputs horizontal configuration 4 Input characteristic curve Initial data size 4 Bit Status information, alarms, diagnostics Status display green LED per channel Interrupts no Diagnostic functions no Diagnostics information read-out none		
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Number of inputs 4 Cable length, shielded 1000 m Cable length, unshielded 600 m Rated load voltage - Current consumption from load voltage L+ (without load) - Rated value AC/DC 90230 V Input voltage for signal *10* AC/DC 90230 V Input voltage for signal *11* AC/DC 90230 V Input voltage for signal *11* AC/DC 90230 V Input voltage hysteresis - Frequency range 5060 Hz Input current for signal *11* - Connection of Two-Wire-BEROs possible - Input delay of *0" to *1* 25 ms Input delay of *0" to *0" 25 ms Input delay of *10" to *0" 25 ms Input delay of *10" to *10" 25 ms Input characteristic curve - Initial data size 4 Bit Status display green LED per channel Interrupts no Diagnostic interrupt no Diagnostic functions no Diagnostics information read-out none	Power loss	2 W
Cable length, shielded 1000 m Cable length, unshielded 600 m Rated load voltage - Current consumption from load voltage L+ (without load) - Rated value AC/DC 90230 V Input voltage for signal "0" AC/DC 035 V Input voltage for signal "1" AC/DC 90230 V Input voltage for signal "1" AC/DC 90230 V Input voltage hysteresis - Frequency range 5060 Hz Input crient for signal "1" - Connection of Two-Wire-BEROs possible - Input current for signal "1" - Connection of Two-Wire-BEROs possible - Input delay of "0" to "1" 25 ms Input delay of "0" to "1" 25 ms Input delay of "1" to "0" 25 ms Number of simultaneously utilizable inputs vertical configuration 4 Input characteristic curve - Initial data size 4 Bit Status information, alarms, diagnostics Status display green LED per channel Interrupts no Diagnostic interrupt no Diagnostic interrupt no Diagnostic information read-out none	Technical data digital inputs	
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Frequency range 5060 Hz Input resistance 136 kOhm Input current for signal "1" - Connection of Two-Wire-BEROs possible - Max. permissible BERO quiescent current - Input delay of "0" to "1" 25 ms Input delay of "1" to "0" 25 ms Input delay of "1" to "0" 25 ms Number of simultaneously utilizable inputs horizontal configuration 4 Input characteristic curve - Initial data size 4 Bit 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		AC/DC 90230 V
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Number of simultaneously utilizable inputs horizontal configuration Number of simultaneously utilizable inputs vertical configuration Input characteristic curve Initial data size 4 Bit 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	Input delay of "0" to "1"	25 ms
Number of simultaneously utilizable inputs vertical configuration Input characteristic curve Initial data size 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	Input delay of "1" to "0"	25 ms
Input characteristic curve Initial data size 4 Bit 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	Number of simultaneously utilizable inputs horizontal configuration	4
Initial data size 4 Bit 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	Number of simultaneously utilizable inputs vertical configuration	4
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	Input characteristic curve	-
Status display green LED per channel Interrupts no Process alarm no Diagnostic interrupt no Diagnostic functions no Diagnostics information read-out none	Initial data size	4 Bit
Status display green LED per channel Interrupts no Process alarm no Diagnostic interrupt no Diagnostic functions no Diagnostics information read-out none	Status information, alarms, diagnostics	
Interrupts no Process alarm no Diagnostic interrupt no Diagnostic functions no Diagnostics information read-out none		green LED per channel
Diagnostic interrupt no Diagnostic functions no Diagnostics information read-out none	Interrupts	
Diagnostic functions no Diagnostics information read-out none	Process alarm	no
Diagnostics information read-out none	Diagnostic interrupt	no
	Diagnostic functions	no
	Diagnostics information read-out	none
Supply voltage display none	Supply voltage display	none
Group error display none	Group error display	none



Channel error display	none	A YASKAWA COMPANY	
Isolation			
Between channels	yes		
Between channels of groups to	1		
Between channels and backplane bus	yes	yes	
Insulation tested with	DC 500 V		
Datasizes			
Input bytes	1		
Output bytes	0		
Parameter bytes	0	0	
Diagnostic bytes	0		
Housing			
Material	PPE / PA 6.6	PPE / PA 6.6	
Mounting	Profile rail 35 mm	Profile rail 35 mm	
Mechanical data			
Dimensions (WxHxD)	25.4 mm x 76 mm x 88 mm		
Weight	90 g		
Environmental conditions			
Operating temperature	0 °C to 60 °C	0 °C to 60 °C	
Storage temperature	-25 °C to 70 °C		
Certifications			
UL certification	yes	yes	
KC certification	-		