

Data sheet SM 021 - Digital input (021-1BD40)

Technical data

Type SM 021 - Digital input Module ID 0008 9F84 General Information Note - Features 4° DI C24 V Connect 2/3 wire Current consumption/power loss Current consumption from backplane bus 6.5 mA Power loss 0.6 W Technical data digital inputs 4 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 DC 20.428.8 V Input voltage for signal '0' DC 05 V Input voltage for signal '1' DC 1528.8 V Input voltage for signal '1' DC 1528.8 V Input voltage hysteresis - Signal logic input Sinking input Frequency range - Input capacitance - Input capacitance - Input delay of '1' to '1' 3 mA Connection of Two-Wire-BEROs possible yes Max.	Order no.	021-1BD40
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Input voltage for signal "1" DC 1528.8 V Input voltage hysteresis - Signal logic input Sinking input Frequency range - Input resistance - Input capacitance - Input current for signal "1" 3 mA Connection of Two-Wire-BEROs possible yes Max. permissible BERO quiescent current 0.5 mA Input delay of "0" to "1" 3 ms Input delay of "1" to "0" 3 ms Input delay of "1" to "0" 3 ms Number of simultaneously utilizable inputs horizontal configuration 4 Input characteristic curve IEC 61131-2, type 1 Initial data size 4 bit Status information, alarms, diagnostics Status display green LED per channel Interrupts no Process alarm no Diagnostic interrupt no Diagnostics information read-out none	Rated value	DC 20.428.8 V
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Signal logic input Frequency range Input resistance Input capacitance Input capacitance Input capacitance Input capacitance Input common Two-Wire-BEROs possible Max. permissible BERO quiescent current Input delay of "0" to "1" Input delay of "1" to "0" Input delay of simultaneously utilizable inputs horizontal configuration Input characteristic curve Input deat size Input delay of "0" to "1" Input characteristic curve Initial data size Input delay of "0" to "0" Input characteristic curve Initial data size Input characteristic curve Input characteristic curve Initial data size Input characteristic curve Input characteris	Input voltage for signal "1"	DC 1528.8 V
Frequency range	Input voltage hysteresis	-
Input resistance - Input capacitance - Input current for signal "1" 3 mA Connection of Two-Wire-BEROs possible yes Max. permissible BERO quiescent current 0.5 mA Input delay of "0" to "1" 3 ms Input delay of "1" to "0" 3 ms Number of simultaneously utilizable inputs horizontal configuration 4 Input characteristic curve IEC 61131-2, type 1 Initial data size 4 Bit Status information, alarms, diagnostics Status display green LED per channel Interrupts no Diagnostic interrupt no Diagnostic functions no Diagnostics information read-out none	Signal logic input	Sinking input
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Max. permissible BERO quiescent current Input delay of "0" to "1" 3 ms Input delay of "1" to "0" 3 ms Number of simultaneously utilizable inputs horizontal configuration Aumber of simultaneously utilizable inputs vertical configuration 4 Input characteristic curve IEC 61131-2, type 1 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 current for signal "1"	3 mA
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Status information, alarms, diagnosticsStatus displaygreen LED per channelInterruptsnoProcess alarmnoDiagnostic interruptnoDiagnostic functionsnoDiagnostics information read-outnone	Input characteristic curve	IEC 61131-2, type 1
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
Interrupts no Process alarm no Diagnostic interrupt no Diagnostic functions no Diagnostics information read-out none	Status information, alarms, diagnostics	
Process alarm no Diagnostic interrupt no Diagnostic functions no Diagnostics information read-out none	Status display	green LED per channel
Diagnostic interrupt no Diagnostic functions no Diagnostics information read-out none	Interrupts	no
Diagnostic functions no none	Process alarm	no
Diagnostics information read-out none	Diagnostic interrupt	no
	Diagnostic functions	no
Module state green LED	Diagnostics information read-out	none
	Module state	green LED



Module error display	red LED
Channel error display	none
Isolation	
Between channels	
Between channels of groups to	-
Between channels and backplane bus	yes
Insulation tested with	DC 500 V
Safety	
Safety protocol	-
Safety requirements	-
Secure user address	-
Watchdog	-
Two channels	-
Test pulse outputs	-
Datasizes	
Input bytes	1
Output bytes	0
Parameter bytes	0
Diagnostic bytes	0
Housing	
Material	PPE / PPE GF10
Mounting	Profile rail 35 mm
Mechanical data	
Dimensions (WxHxD)	12.9 mm x 109 mm x 76.5 mm
Net weight	57 g
Weight including accessories	57 g
Gross weight	71 g
Environmental conditions	
Operating temperature	0 °C to 60 °C
Storage temperature	-25 °C to 70 °C
Certifications	
UL certification	yes
KC certification	yes