YASKAWA

Data sheet
SM 021 - Digital input (021-1BD70)

Technical data

Order no.	021-1BD70
Type	SM 021 - Digital input
Module ID	0F03 47C2
General information	
Note	-
Features	4x DI DC 24 V Input filter time delay parameterizable 2 µs...3 ms ETS function with µsec time stamp
Current consumption/power loss	
Current consumption from backplane bus	100 mA
Power loss	0.95 W
Technical data digital inputs	
Number of inputs	4
Cable length, shielded	1000 m
Cable length, unshielded	600 m
Rated load voltage	DC 24 V
Current consumption from load voltage L+ (without load)	15 mA
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	-
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"	parameterizable 2µs - 3ms
Input delay of "1" to "0"	parameterizable 2µs - 3ms
Number of simultaneously utilizable inputs horizontal configuration	4
Number of simultaneously utilizable inputs vertical configuration	4
Input characteristic curve	IEC 61131-2, type 1
Initial data size	60 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	possible
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	20 / 60
Output bytes	0
Parameter bytes	12
Diagnostic bytes	20

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	58 g
Weight including accessories	58 g
Gross weight	73 g

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

Certifications	
UL certification	yes
KC certification	yes