

Data sheet

SM 021 - Digital input (021-1DF50)

Technical data

Order no.	021-1DF50
Type	SM 021 - Digital input
Module ID	0025 1F41
General information	
Note	-
Features	8x DI DC 24 V Diagnostics function NPN
Current consumption/power loss	
Current consumption from backplane bus	53 mA
Power loss	1.25 W
Technical data digital inputs	
Number of inputs	8
Cable length, shielded	1000 m
Cable length, unshielded	600 m
Rated voltage power section supply	-
Permitted range	-
Current consumption from power section supply (without load)	-
Input rated voltage	DC 24 V
Permitted range	DC 20.4...28.8 V
Input voltage for signal "0"	DC 15...28.8 V
Input voltage for signal "1"	DC 0...5 V
Input voltage hysteresis	-
Signal logic input	Sourcing input
Frequency range	-
Input resistance	-
Input capacitance	-
Input current for signal "1"	2.3 mA
Connection of Two-Wire-BEROs possible	yes
Max. permissible BERO quiescent current	1.5 mA
Input delay of "0" to "1"	parameterizable 100µs - 20ms
Input delay of "1" to "0"	parameterizable 100µs - 20ms
Number of simultaneously utilizable inputs horizontal configuration	8
Number of simultaneously utilizable inputs vertical configuration	8
Input characteristic curve	IEC 61131-2, type 3
Initial data size	8 Bit
Status information, alarms, diagnostics	
Status display	green LED per channel
Interrupts	yes
Process alarm	no
Diagnostic interrupt	yes, parameterizable
Diagnostic functions	yes

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

Datasizes

Input bytes	1
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	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
UKCA certification	yes
ChinaRoHS certification	yes