

## Data sheet

### SM 021 - Digital input (021-1DF00)

#### Technical data

<b>Order no.</b>	<b>021-1DF00</b>
Type	SM 021 - Digital input
Module ID	0012 1F41
<b>General information</b>	
Note	-
Features	8x DI DC 24 V Diagnostic of wiring errors
<b>Current consumption/power loss</b>	
Current consumption from backplane bus	60 mA
Power loss	1.1 W
<b>Technical data digital inputs</b>	
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 20.4...28.8 V
Input voltage for signal "0"	DC 0...5 V
Input voltage for signal "1"	DC 10,8...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	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
<b>Status information, alarms, diagnostics</b>	
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
------------------------	----------

## Safety

Safety protocol	-
-----------------	---

Safety requirements	-
---------------------	---

Secure user address	-
---------------------	---

Watchdog	-
----------	---

Two channels	-
--------------	---

Test pulse outputs	-
--------------------	---

## 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
------------------	-----