

Data sheet SM 031 - Analog input (031-1BF74)

Technical data

Order no.	031-1BF74
Туре	SM 031 - Analog input
Module ID	0415 15C5
General information	
Note	
Features	8x AI single ended (reference potential 0V) 12 Bit Voltage 010 V +-10 V Separate parameterizable inputs Isolated from backplane bus
Current consumption/power loss	
Current consumption from backplane bus	70 mA
Power loss	0.8 W
Technical data analog inputs	
Number of inputs	8
Cable length, shielded	200 m
Rated voltage power section supply	DC 24 V
Current consumption from power section supply (without load)	20 mA
Voltage inputs	yes
Min. input resistance (voltage range)	100 kOhm
Input voltage ranges	0 V +10 V -10 V +10 V
Operational limit of voltage ranges	+/-1.1%
Operational limit of voltage ranges with SFU	-
Basic error limit voltage ranges	+/-1.0%
Basic error limit voltage ranges with SFU	-
Destruction limit voltage	max. 30V
Current inputs	-
Max. input resistance (current range)	-
Input current ranges	-
Operational limit of current ranges	-
Operational limit of current ranges with SFU	-
Basic error limit current ranges	-
Radical error limit current ranges with SFU	-
Destruction limit current inputs (voltage)	-
Destruction limit current inputs (electrical current)	-
Resistance inputs	-
Resistance ranges	-
Operational limit of resistor ranges	-
Operational limit of resistor ranges with SFU	-
Basic error limit	-
Basic error limit with SFU	-
Destruction limit resistance inputs	-
Resistance thermometer inputs	-
Resistance thermometer ranges	-



-
-
-
-
-
-
_
-
-
-
-
-
_
-
12
successive approximation
1.1 ms all channels
>50dB at 50Hz (UCM<2V)
2000D at 30112 (OOIVINZV)
was
yes
no
no
no
no yes
no yes possible
no yes possible green LED
no yes possible green LED red LED
no yes possible green LED
no yes possible green LED red LED
no yes possible green LED red LED
no yes possible green LED red LED red LED per channel
no yes possible green LED red LED
no yes possible green LED red LED red LED per channel yes
no yes possible green LED red LED red LED per channel yes -
no yes possible green LED red LED red LED per channel yes -
no yes possible green LED red LED red LED per channel yes
no yes possible green LED red LED red LED per channel yes
no yes possible green LED red LED red LED per channel yes DC 75 V/ AC 50 V
no yes possible green LED red LED red LED per channel yes DC 75 V/ AC 50 V
no yes possible green LED red LED red LED per channel yes DC 75 V/ AC 50 V
no yes possible green LED red LED red LED per channel yes DC 75 V/ AC 50 V
no yes possible green LED red LED red LED per channel yes DC 75 V/ AC 50 V
no yes possible green LED red LED red LED per channel yes DC 75 V/ AC 50 V
no yes possible green LED red LED red LED per channel yes DC 75 V/ AC 50 V



Binding of potential

Binding of potential	•
Datasizes	
Input bytes	16
Output bytes	0
Parameter bytes	14
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	72 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