

Data sheet

SM 031 (031-1BB30)

Technical data

Order no.	031-1BB30
Туре	SM 031
Module ID	0401 15C3
General information	
Note	-
Features	2x AI 12 Bit Voltage 010 V
Current consumption/power loss	
Current consumption from backplane bus	80 mA
Power loss	0.7 W
Technical data analog inputs	
Number of inputs	2
Cable length, shielded	200 m
Rated load voltage	DC 24 V
Current consumption from load voltage L+ (without load)	15 mA
Voltage inputs	yes
Min. input resistance (voltage range)	100 kOhm
Input voltage ranges	0 V +10 V
Operational limit of voltage ranges	+/-0.3%
Operational limit of voltage ranges with SFU	-
Basic error limit voltage ranges	+/-0.2%
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	-
Operational limit of resistance thermometer ranges	-

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Basic error limit thermoresistor ranges with SPU - Basic coror limit thermoresistor ranges with SPU - Destruction limit setsateane thermoretrinputs - Thermoccupile inputs - Thermoccupile ranges - Operational limit of thermoccupile ranges - Operational limit of thermoccupile ranges - Basic error limit thermoclement ranges - Basic error limit thermoclement ranges with SPU - Basic error limit thermoccupile inputs - Programmable temperature compensation - External temperature compensation - Temperature error internal compensation - Temperature error internal compensation 1 Temperature error internal compensation 1 Technical unit of temperature compensation 1 Technical unit of temperature errors internal compensation 1 Resolution in bit 12 Messurement principle successive approximation Basic conversion time 2 Noise suppression for frequency > 50dB at 50Hz (UCM>2V) Status information, alarms, diagnostic	Operational limit of resistance thermometer ranges with SFU	-
Destruction limit resistance thermometer inputs Thermocouple inputs	Basic error limit thermoresistor ranges	-
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Output voltage (typ) - Output voltage (rated value) - Short-circuit protection -	Technical data encoder supply	
Output voltage (rated value) - Short-circuit protection -	Number of outputs	-
Short-circuit protection -	Output voltage (typ)	-
	Output voltage (rated value)	-
Binding of potential -	Short-circuit protection	-
	Binding of potential	•



Datasizes	
Input bytes	4
Output bytes	0
Parameter bytes	6
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	59 g
Weight including accessories	59 g
Gross weight	74 g
Environmental conditions	
Operating temperature	0 °C to 60 °C
Storage temperature	-25 °C to 70 °C
Certifications	
UL certification	yes
KC certification	yes