

Data sheet SM 231 (231-1FD00)

Technical data

Order no.	231-1FD00
Туре	SM 231
General information	
Note	-
Features	4 fast inputs Configurable Voltage, current Cycle time 0.8 ms
Current consumption/power loss	
Current consumption from backplane bus	300 mA
Power loss	1.5 W
Technical data analog inputs	
Number of inputs	4
Cable length, shielded	200 m
Rated load voltage	-
Current consumption from load voltage L+ (without load)	-
Voltage inputs	v
Min. input resistance (voltage range)	10 MOhm
Input voltage ranges	-400 mV +400 mV -4 V +4 V -10 V +10 V
Operational limit of voltage ranges	+/-0.2% +/-0.4%
Operational limit of voltage ranges with SFU	
Basic error limit voltage ranges	+/-0.1% +/-0.3%
Basic error limit voltage ranges with SFU	-
Destruction limit current	-
Current inputs	✓
Max. input resistance (current range)	57 Ohm
Input current ranges	+4 mA +20 mA -20 mA +20 mA
Operational limit of current ranges	+/-0.2% +/-0.5%
Operational limit of current ranges with SFU	-
Radical error limit current ranges with SFU	+/-0.1% +/-0.3%
Radical error limit current ranges with SFU	-
Destruction limit current inputs (electrical current)	-
Destruction limit current inputs (voltage)	-
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 ranges - - - Operational limit of resistance thermometer ranges - - Basic error limit thermoresistor ranges with SFU - - Basic error limit thermoresistor ranges with SFU - - Destruction limit resistance thermometer inputs - - Thermocouple ranges - - Operational limit of thermocouple ranges - - Operational limit of thermocouple ranges - - Basic eror limit thermocouple ranges with SFU - - Basic eror limit thermocouple ranges with SFU - - Basic eror limit thermocouple ranges with SFU - - Basic eror limit thermocouple ranges with SFU - - Basic eror limit thermocouple ranges with SFU - - Basic eror limit thermocouple ranges with SFU - - Basic eror limit thermocouple ranges - - Basic eror limit thermocouple ranges - - Basic eror limit thermocouple ranges - - Basic eror limit thermocouple			
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Insulation tested with DC 500 V	Max. potential difference between Mintern and outputs	-	
	Insulation tested with	DC 500 V	



Datasizes	
Input bytes	8
Output bytes	0
Parameter bytes	34
Diagnostic bytes	12
Housing	
Material	PPE / PA 6.6
Mounting	Profile rail 35 mm
Mechanical data	
Dimensions (WxHxD)	25.4 mm x 76 mm x 88 mm
Weight	90 g
Environmental conditions	
Operating temperature	0 °C to 60 °C
Storage temperature	-25 °C to 70 °C
Certifications	
UL508 certification	yes