

Data sheet

SM 232 (232-1BD51)

Technical data

Order no.	232-1BD51
Type	SM 232
General information	
Note	-
Features	4 outputs Configurable Voltage, current
Current consumption/power loss	
Current consumption from backplane bus	75 mA
Power loss	1.8 W
Technical data analog outputs	
Number of outputs	4
Cable length, shielded	200 m
Rated load voltage	DC 24 V
Reverse polarity protection of rated load voltage	✓
Current consumption from load voltage L+ (without load)	60 mA
Voltage output short-circuit protection	✓
Voltage outputs	✓
Min. load resistance (voltage range)	1 kOhm
Max. capacitive load (current range)	1 µF
Max. inductive load (current range)	30 mA
Output voltage ranges	-10 V ... +10 V +1 V ... +5 V 0 V ... +10 V
Operational limit of voltage ranges	+/-0.4% ... +/-0.8%
Basic error limit voltage ranges	+/-0.2% ... +/-0.4%
Destruction limit against external applied voltage	-
Current outputs	✓
Max. in load resistance (current range)	500 Ohm
Max. inductive load (current range)	10 mH
Max. inductive load (current range)	12 V
Output current ranges	0 mA ... +20 mA +4 mA ... +20 mA -20 mA ... +20 mA
Operational limit of current ranges	+/-0.3% ... +/-0.8%
Basic error limit current ranges	+/-0.2% ... +/-0.5%
Destruction limit against external applied voltage	-
Settling time for ohmic load	0.05 ms
Settling time for capacitive load	0.5 ms
Settling time for inductive load	0.1 ms
Resolution in bit	12
Conversion time	0.45 ms / channel

Substitute value can be applied	no
Output data size	8 Byte

Status information, alarms, diagnostics

Status display	none
Interrupts	yes
Process alarm	no
Diagnostic interrupt	yes, parameterizable
Diagnostic functions	yes
Diagnostics information read-out	possible
Supply voltage display	none
Group error display	red SF LED
Channel error display	none

Isolation

Between channels	-
Between channels of groups to	-
Between channels and backplane bus	✓
Between channels and power supply	✓
Max. potential difference between circuits	-
Max. potential difference between inputs (Ucm)	-
Max. potential difference between Mana and Mintern (Uiso)	DC 75 V/ AC 60 V
Max. potential difference between inputs and Mana (Ucm)	-
Max. potential difference between inputs and Mintern (Uiso)	-
Max. potential difference between Mintern and outputs	-
Insulation tested with	DC 500 V

Datasizes

Input bytes	0
Output bytes	8
Parameter bytes	8
Diagnostic bytes	4

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	100 g

Environmental conditions

Operating temperature	0 °C to 60 °C
Storage temperature	-25 °C to 70 °C

Certifications

UL508 certification	yes
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