

Data sheet

SM M32 - Analog output (M32-1BD40)

Technical data

Order no.	M32-1BD40
Type	SM M32 - Analog output
Module ID	0504 25E0
General information	
Note	-
Features	4x AO 12 Bit Current 0/4...20 mA
Current consumption/power loss	
Current consumption from backplane bus	70 mA
Current consumption from load voltage L+ (without load)	18 mA
Power loss	0.8 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	yes
Current consumption from rated load voltage	-
Voltage output short-circuit protection	-
Voltage outputs	-
Min. load resistance (voltage range)	-
Max. capacitive load (current range)	-
Max. inductive load (current range)	-
Output voltage ranges	-
Operational limit of voltage ranges	-
Basic error limit voltage ranges	-
Destruction limit against external applied voltage	-
Current outputs	-
Max. in load resistance (current range)	350 Ohm
Max. inductive load (current range)	10 µH
Typ. open circuit voltage current output	12 V
Output current ranges	0 mA ... +20 mA +4 mA ... +20 mA
Operational limit of current ranges	+/-0.4% ... +/-0.5%
Basic error limit current ranges	+/-0.2% ... +/-0.3%
Destruction limit against external applied voltage	max. 12V (30V for 1s)
Settling time for ohmic load	0.25 ms
Settling time for capacitive load	-
Settling time for inductive load	1.5 ms
Resolution in bit	12
Conversion time	2 ms all channels
Substitute value can be applied	no
Output data size	8 Byte
Status information, alarms, diagnostics	

Status display	yes
Interrupts	no
Process alarm	no
Diagnostic interrupt	no
Diagnostic functions	yes
Diagnostics information read-out	possible
Supply voltage display	green LED
Group error display	Bicolour green/red LED
Channel error display	red LED per channel

Isolation

Between channels	-
Between channels of groups to	-
Between channels and backplane bus	yes
Between channels and power supply	yes
Max. potential difference between circuits	-
Max. potential difference between inputs (Ucm)	-
Max. potential difference between Mana and Mintern (Uiso)	DC 75 V/ AC 50 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	10
Diagnostic bytes	20

Housing

Material	PPE / PPE GF10
Mounting	Profile rail 35 mm

Mechanical data

Dimensions (WxHxD)	26 mm x 88 mm x 71 mm
Net weight	94 g
Weight including accessories	94 g
Gross weight	107 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