

**Data sheet**  
**SM 232, ECO (232-1BD30)**
**Technical data**

<b>Order no.</b>	<b>232-1BD30</b>
Type	SM 232, ECO
<b>General information</b>	
Note	-
Features	4x AO 12 Bit Voltage 0...10 V, +/- 10 V Parameterizable
<b>Current consumption/power loss</b>	
Current consumption from backplane bus	60 mA
Power loss	2.7 W
<b>Technical data analog outputs</b>	
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 load voltage L+ (without load)	100 mA
Voltage output short-circuit protection	yes
Voltage outputs	yes
Min. load resistance (voltage range)	5 kOhm
Max. capacitive load (current range)	1 µF
Max. inductive load (current range)	7 mA
Output voltage ranges	-10 V ... +10 V 0 V ... +10 V
Operational limit of voltage ranges	+/-0.4%
Basic error limit voltage ranges	+/-0.2%
Destruction limit against external applied voltage	max. 15V
Current outputs	-
Max. in load resistance (current range)	-
Max. inductive load (current range)	-
Typ. open circuit voltage current output	-
Output current ranges	-
Operational limit of current ranges	-
Basic error limit current ranges	-
Destruction limit against external applied voltage	-
Settling time for ohmic load	1.5 ms
Settling time for capacitive load	3 ms
Settling time for inductive load	-
Resolution in bit	12
Conversion time	0.7 ms / all channels
Substitute value can be applied	no
Output data size	8 Byte
<b>Status information, alarms, diagnostics</b>	
Status display	none

Interrupts	no
Process alarm	no
Diagnostic interrupt	no
Diagnostic functions	no
Diagnostics information read-out	none
Supply voltage display	green LED
Group error display	none
Channel error display	none

### 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	8
Diagnostic bytes	0

### Housing

Material	PPE / PA 6.6
Mounting	Profile rail 35 mm

### Mechanical data

Dimensions (WxHxD)	25.4 mm x 76 mm x 88 mm
Net weight	80 g
Weight including accessories	-
Gross weight	-

### Environmental conditions

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

### Certifications

UL certification	yes
KC certification	-