



SET-POINT GENERATOR

Types B12-1A, B12-1F & B12-1/RP

- Adjustable or fixed set-point versions
- Remote set-point version
- High impedance output drive option
- AC or low voltage (11-32 VDC, 12-24VAC) powered versions
- Wall or DIN rail mounting
- Module unplugs without disturbing wiring
- Analogue circuitry used throughout



The B12-1A Set-point Generator provides a current or voltage output for applications requiring a reference signal. The output signal is proportional to a local or remote ten-turn dial or may be an output set to a fixed level.

Three versions of set-point generator are available.

The **B12-1A** is an adjustable set-point where the output signal is proportional to the setting of a ten-turn dial mounted on the front of the unit.

The **B12-1F** output is set to a fixed value.

The **B12-1/RP** is similar to the B12-1A but the set-point potentiometer and dial are supplied loose for remote mounting e.g. in a control panel or enclosure door.

Information required when ordering

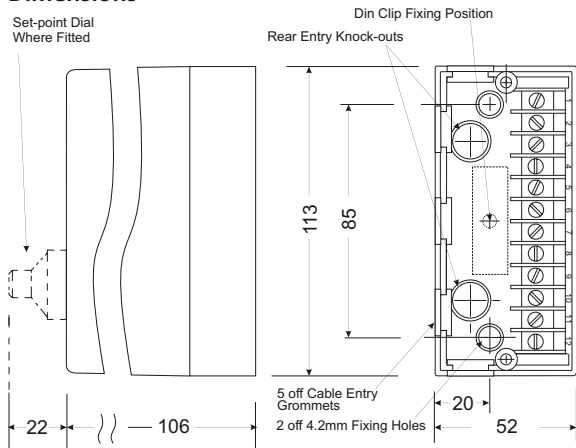
- For adjustable set-point, specify Type 'B12-1A'
For adjustable remote set-point, Type 'B12-1/RP'
For fixed set-point, Type 'B12-1/F'

- Output signal (see specification on page two)
- Supply voltage and frequency

Options

- High output drive required (mA outputs) ?
- DIN rail mounting clip required ?

Dimensions



Specifications

Notes:

1. Outputs, other than those shown are possible - our sales team will be pleased to advise.
2. Output ranges are factory calibrated for one type of signal and not user configurable

Outputs

0-10mA (2000R), 0-20 mA (1000R), 4-20 mA (1000R)

High impedance output drive options: 0-10mA (5000R), 0-20 mA (2500R), 4-20 mA (2500R)

Maximum output impedances in ohms shown in brackets.

0-5v, 1-5V, 0-10V, 2-10V (500R minimum)

Current sink 4-20mA @ 50 volts max.

Isolation

The output is isolated from the power supply.

Calibrated Accuracy

$\leq \pm 0.2\%$ FSD at 100%

Linearity Error

Set-point linearity error $\leq \pm 0.25\%$ FSD

Output Ripple

$\leq 0.2\%$ RMS of FSD

Load Resistance Effect

$\leq 0.001\%$ of span / 100 ohm change

Interference Rejection

Filtering is incorporated to attenuate R.F. and other industrial noise.

Temperature Coefficients

Zero: $\pm 0.02\%$ span / °C, Span: $\pm 0.02\%$ span / °C

Environmental

Temperature: operating -10 to +60°C, storage -20 to +70°C

Humidity: 0 – 95% RH non-condensing

Power Supply

AC Supply: 110, 220 or 230V $\pm 10\%$ 50/60Hz 5VA

Fuse: 100mA quick-blow (internal)

Low voltage: 11-32VDC 4 W / 12-24VAC

Fuse: 250mA anti-surge (internal)

Supply Voltage Rejection

Span change: $< 0.02\%$ span / % supply change.

Safety & EMC

Safety: EN61010-1, Immunity: EN50082-1,

Emissions: EN50081-1, CE certified

Mechanical

Weight: approx. 0.5kg

Enclosure: Fire retardent materials - PPO base, ABS cover

Screw terminal wire capacity: 2 x 1.5mm²

Electrical Connections



WARNING: these details are provided for pre-sales information only. Installation must be carried out in accordance with the User Guide

Input	1	- reserved	
	2	- reserved	
	3	- Input Signal (-)	
	4	- reserved	
	5	no internal connection	
	6	no internal connection	
Outputs	7	mA Output (+)	Current Sink
	8	mA Output (-)	8 (+)
		Voltage Output (+)	9 (-)
	9	Voltage Output (-)	
Supply	10	Earth } AC	Earth } DC
	11	Neutral } Mains	Negative (-) } Supply
	12	Line } Supply	Positive (+) } Option



THIS UNIT CAN BE MAINS POWERED, AND ALL INPUTS TO IT MUST BE ISOLATED FROM DANGEROUS VOLTAGES BEFORE THE FRONT COVER IS REMOVED. LIVE TERMINALS WILL BE EXPOSED.

Continuous development may necessitate changes in these details without notice

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