



# 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

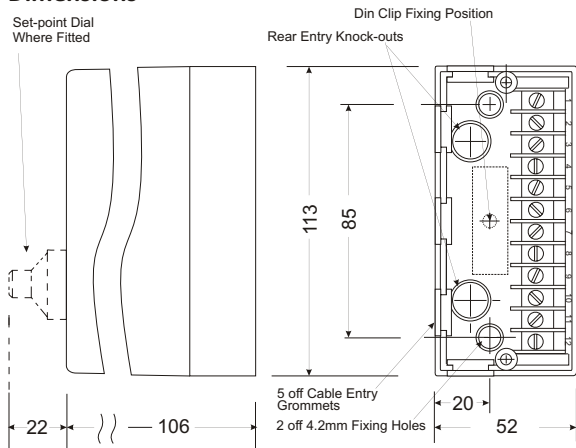
- For adjustable set-point, specify Type 'B12-1A'  
For adjustable remote set-point, Type 'B12-1/RP'  
For fixed set-point, Type 'B12-1/F'

- 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 1.5mm<sup>2</sup>

## Electrical Connections



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

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



**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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