

# ISOLATING SIGNAL CONDITIONERS & CONVERTERS

**TYPES:** FOX.ISC-1-xxx Single input, single output  
 FOX.ISC-2-xxx Single input, dual output

## FEATURES

- 17.5mm width
- Single channel or dual channel outputs
- Analogue signal input selectable
- Analogue signal output selectable
- PT100 inputs
- Thermocouple inputs
- Resistance and potentiometer inputs
- LED indication
- Zero & span adjustment potentiometers



## DESCRIPTION

A range of slim (17.5mm wide) isolating signal conditioners and converters. The standard “in stock” product features selectable via dip switches, analogue input and analogue output signal ranges. Available is a single analogue input unit with a single analogue output, also available is a single analogue input unit with dual isolated analogue outputs (both outputs can be set to be different to each other). All units require a separate auxiliary supply, either a low voltage version 20-56V AC/DC, or a high voltage version 85-265VAC / 100-300VDC.

LED's indicate that the auxiliary supply is present, plus the input signal is present (approx 5% of full input range), a third LED signals that the output is present (approx 5% of full output range), dual output units will have two output LED's.

**We are happy to offer these units set up and calibrated to your requirements at time of ordering.** However, customers are able to change input and output ranges by dip switch selection, this is via removing a side cover, switch information is detailed below. Removing the front cover which hinges up gives access to Span and Zero adjustment potentiometers for fine tuning the output(s). **Units will be supplied unless otherwise requested at factory default of input 4-20mA and output 4-20mA.** Changing the output or input via the dip switches will cause the accuracy to drift this can be rectified by using the Span and Zero potentiometers.

## SPECIFICATIONS

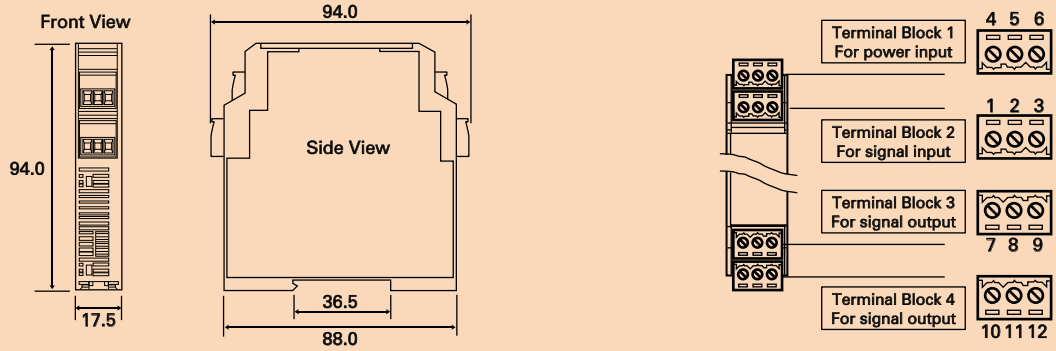
**Accuracy:**  $\leq \pm 0.2\%$  FS ( $\leq \pm 0.1\%$  FS option)  
**Response time:**  $\leq 250$  mSec (thermocouple inputs  $\leq 500$ mSec)  
**Output ripple:**  $\leq \pm 0.1\%$  FS  
**Output span adjust:**  $\pm 10\%$  via potentiometer  
**Output zero adjust:**  $\pm 10\%$  via potentiometer  
**Input impedance:** 0-20mA, 4-20mA 250 Ohms  
 0-5V, 0-10V, 1-5V, 2-10V 1 MOhms  
 All other inputs 1 MOhms  
**Output impedance:** 0-20mA, 4-20mA 520 Ohms  
 0-5VDC, 1-5VDC 500 Ohms  
 0-10VDC, 2-10VDC 1 KOhms  
**Power consumption:** DC 4W, AC 6VA  
**Operating temp:** 0-60°C  
**Operating humidity:** 20-95% RH, non condensing  
**Temp coefficient:**  $\leq 100$  PPM/°C  
**Isolation:** 2KV AC for 1 min  
 Between; aux supply / output(s) / input / case  
**Standards:** IEC 61010 (category 3)  
**EMC:** EN55011:2002 EN61326:2003  
**CE marked:** Yes  
**Rosh compliant:** Yes

## DIP SWITCH SETTINGS

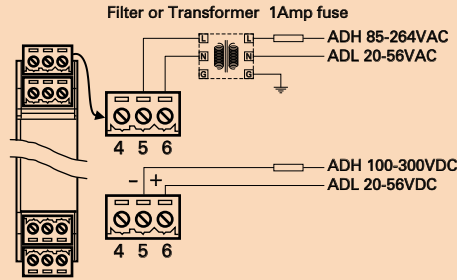
INPUT DIP SWITCH (ZC) SETTING				
INPUT	SW1	SW2	SW3	SW4
0-5VDC	OFF	OFF	OFF	OFF
0-10VDC	OFF	ON	OFF	OFF
1-5VDC	OFF	OFF	ON	ON
2-10VDC	OFF	ON	ON	ON
0-20mA	ON	OFF	OFF	OFF
4-20mA	ON	OFF	ON	ON

OUTPUT DIP SWITCH (ZB & ZA) SETTING						
OUTPUT 1 (ZB)			OUTPUT 2 (ZA)			
OUTPUT	SW1	SW2	SW3	SW4	SW5	SW6
0-5VDC	OFF	ON	ON	ON	OFF	ON
0-10VDC	OFF	ON	OFF	ON	OFF	ON
1-5VDC	ON	OFF	ON	ON	OFF	ON
2-10VDC	ON	OFF	OFF	ON	OFF	ON
0-20mA	OFF	ON	OFF	OFF	ON	OFF
4-20mA	ON	OFF	OFF	OFF	ON	OFF

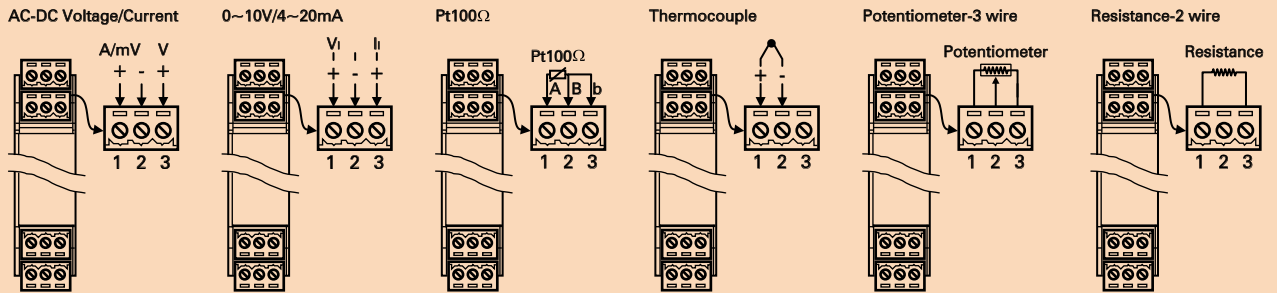
# DIMENSIONS & CONNECTIONS



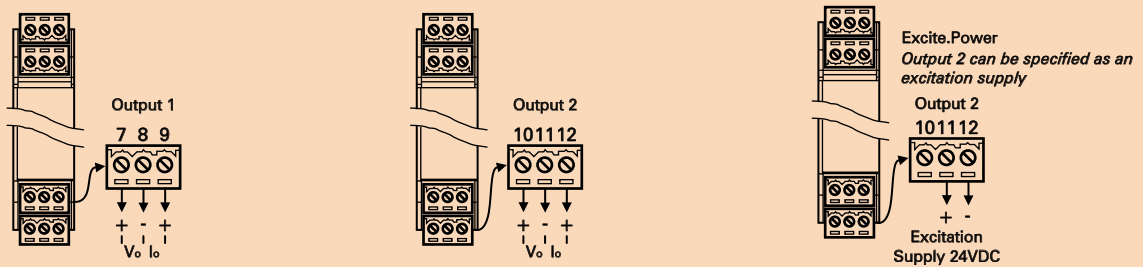
## Auxiliary power connections - Terminal block 1



## Input signal - Terminal block 2



## Output signal - Terminal blocks 3&4



## ORDERING INFORMATION

P/No.	DESCRIPTION
FOX.ISC-1-ADL	Selectable analogue single input, selectable analogue signal single output
FOX.ISC-1-ADH	Selectable analogue single input, selectable analogue signal single output
FOX.ISC-2-ADL	Selectable analogue single input, selectable analogue signal dual output
FOX.ISC-2-ADH	Selectable analogue single input, selectable analogue signal dual output
FOX.ISC-1-Spec}	Any standard or non standard analogue signal either input or output, or both }
FOX.ISC-2-spec}	PT100 3 wire input (specify temp. range and output signal required) }
	K, J, E, T thermocouple input (specify temp. range and output signal required) }
	Resistance 2 wire (specify resistance range and output signal required) }
	Potentiometer 3 wire (specify resistance range and output signal required) }

## AUXILIARY SUPPLY

20-56VAC/DC
85-265VAC / 100-300VDC
20-56VAC/DC
85-265VAC / 100-300VDC

All **Spec** units available with **ADL** or **ADH** auxiliary supply.

## OPTIONS

<b>24VDC EXCITATION</b>	The FOX.ISC-2 is available on request with a 24VDC excitation supply output, if requested one of the analogue outputs is forsaken for this.
<b>0.1% ACCURACY</b>	On request high accuracy units (not available in thermocouple input units)



## Isolating Signal Conditioners & Converters

Width only 17.5mm

Single input, single output

Single input, dual output

Selectable analogue signal inputs

Selectable analogue signal outputs

Also available:-

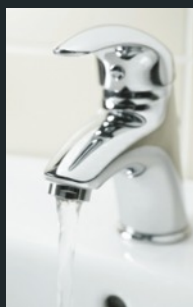
PT100 inputs

Thermocouple inputs

Resistance & potentiometer inputs



Serving:-



Water Industry



Process Control



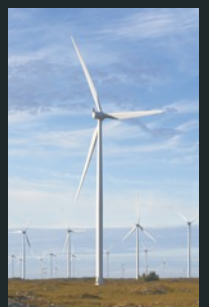
BMS



Transportation



HVAC



Energy

**Tel: 01276 25858 & 0161 6265316**



**NORTONICS FOXTAM LIMITED**

**HEAD OFFICE:** Bridge Road, Camberley, Surrey GU15 2QR  
Tel: +44 (01276) 25858 Fax: +44 (01276) 25885

**MANUFACTURING:** Foxtam House, Watts Street, Chadderton, Oldham, Lancs O19 9LQ  
Tel: +44 (0161) 626 5316 Fax: +44 (0161) 627 0929

e-mail: [sales@nortonicsfoxtam.co.uk](mailto:sales@nortonicsfoxtam.co.uk)

[www.nortonicsfoxtam.co.uk](http://www.nortonicsfoxtam.co.uk)



**Tel: 01276 25858 & 0161 6265316**