

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 calibration to drift this can be rectified by using the Span and Zero potentiometers.

SPECIFIC SPECIFICATIONS

Accuracy: $\leq \pm 0.2\% \text{ FS}$ ($\leq \pm 0.1\% \text{ FS}$ option)
Response time: $\leq 250 \text{ mSec}$ (thermocouple inputs $\leq 500 \text{ mSec}$)
Output ripple: $\leq \pm 0.1\% \text{ FS}$
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: $\pm 100 \text{ PPM}/^\circ\text{C}$
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

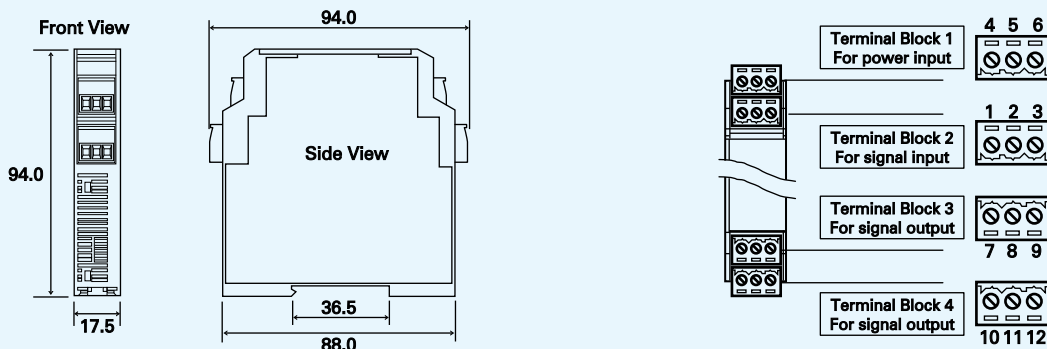
| INPUT DIP SWITCH (ZC) SETTING | | | | |
|-------------------------------|-----|-----|-----|-----|
| INPUT | SW1 | SW2 | SW3 | SW4 |
| 0-5VDC | OFF | OFF | OFF | OFF |
| 0-10VDC | OFF | ON | OFF | OFF |
| 1-5VDC | OFF | OFF | ON | ON |
| 2-10VDC | OFF | ON | ON | ON |
| 0-20mA | ON | OFF | OFF | OFF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

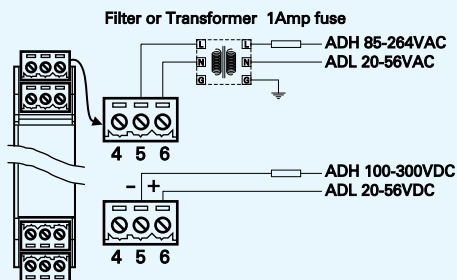
MATHSCON

Available also, are dual input, single output "Maths" units, for say summing two input signals together, or subtracting one from another. The inputs and output do not need to be the same. The product is called a MATHSCON, please contact sales office for assistance with your exact requirements, the MATHSCON's are manufactured to order

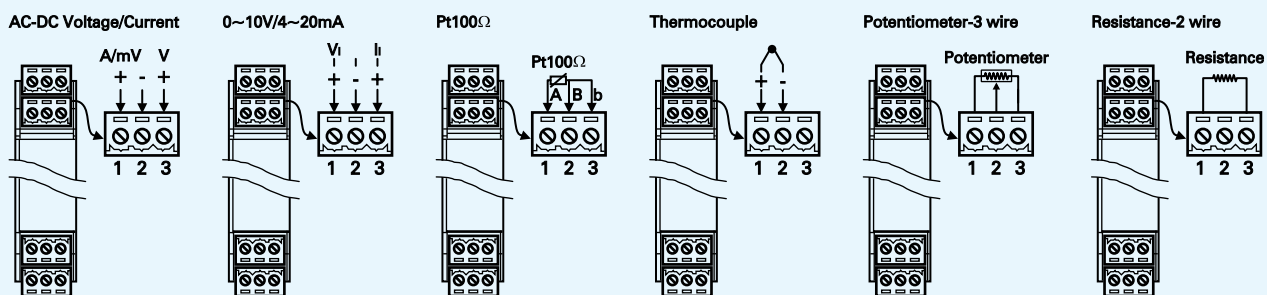
DIMENSIONS & CONNECTIONS



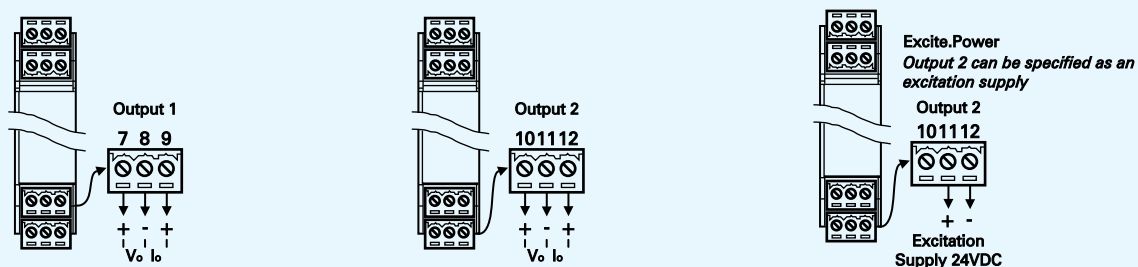
Auxiliary power connections - Terminal block 1



Input signal - Terminal block 2



Output signal - Terminal blocks 3&4



ORDERING INFORMATION

| P/No. | DESCRIPTION | AUXILIARY SUPPLY |
|---------------|--|------------------------|
| FOX.ISC-1-ADL | Selectable analogue single input, selectable analogue signal single output | 20-56VAC/DC |
| FOX.ISC-1-ADH | Selectable analogue single input, selectable analogue signal single output | 85-265VAC / 100-300VDC |
| FOX.ISC-2-ADL | Selectable analogue single input, selectable analogue signal dual output | 20-56VAC/DC |
| FOX.ISC-2-ADH | Selectable analogue single input, selectable analogue signal dual output | 85-265VAC / 100-300VDC |

| | | |
|-----------------|--|--|
| FOX.ISC-1-Spec} | Any standard or non standard analogue signal either input or output, or both | All Spec units available with ADL or ADH auxiliary supply. |
| 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) | |

OPTIONS

| | |
|------------------|---|
| 24VDC EXCITATION | 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. |
| 0.1% ACCURACY | On request high accuracy units (not available in thermocouple input units) |