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ELECTRICAL MEASUREMENT TRANSDUCERS

FOXTAM ELECTRICAL MEASUREMENT TRANSDUCERS



GENERAL SPECIFICATIONS & DIMENSIONS

OUTPUT

Response time: <400mSec Warm up time: <15 mins

Output ripple: 1% peak full scale

Long term drift: +/- 0.25% per year non cumulative

Maximum load: 0-1mA 10 KOhm max

0-2.5mA 6 KOhm max 0-5mA 3 KOhm max 0-10mA 1.5 KOhm max

0-20mA & 4-20mA 750 Ohm max

Adjustment: Self powered voltage & current transducers have an adjustable span only

All other transducers have an adjustable zero & span

AUXILIARY SUPPLY

AC: 24 / 110 / 230 / 415V others on request

DC: 24 / 48 / 110V Tolerance: +/- 20%

Consumption: 4VA / W (combined Watt / VAr transducers 7VA / W)

■ EMC COMPLIANCE

Directive 89/36/EEC: Electrostatic discharge IEC801.2 (8KV)

Electromagnetic fields IEC801.3 level 3 Fast transient bursts IEC801.4 level 4

Surge withstand IEC255-5

ENCLOSURE

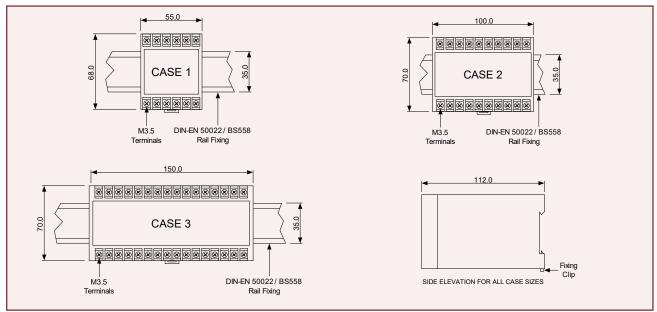
Material: Grey ABS plastic with finger proof terminal covers

Isolation: 4KV rms 50Hz for 1 min (to IEC414) between input / output / case / auxiliary supply

1KV DC / 600VAC between outputs on combined Watt / VAr transducers

Mounting: 35mm Din rail (DIN-EN 50022)

CE Marked: Yes



See individual transducer data sheets for unit specific specification details

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AC VOLTAGE TRANSDUCERS

TYPE: FOX.TR.AU

■ DESCRIPTION

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Foxtam AC voltage transducers can measure voltage either directly (max 600VAC) or via the secondary of a voltage transformer. The transducer converts the AC input voltage to an isolated analogue DC mA or DC voltage analogue signal output, directly proportional to the input. The 4KV isolated output signals can be utilised for many applications and can be fed into analogue meters, digital meters, PLC's or BMS systems.

Transducer types include:-

Self powered - The lower cost option where no auxiliary supply is required but at least 10% of the input range is required to start generating an accurate output. Self powered units can only give a zero based output, hence a 4-20mA output is not possible. Self powered units also have an enhanced burden on the input (circa 3VA).

Powered – An auxiliary supply is required, these transducers can be used accurately down to 0% of the input range. A wide choice of outputs are possible including 4-20mA.

Powered TRMS – As per the standard powered transducer but with enhanced measuring technology, typically used for the accurate measurement of distorted waveforms. TRMS versions are also suited for use on high frequency circuits between 40 to 500Hz.

SPECIFIC SPECIFICATIONS

Accuracy: Class 0.25

Input voltage: 0-50V...600VAC direct

VT ratio specify

Overload: 1.2 x Un continuous

1.5 x Un for 1 sec

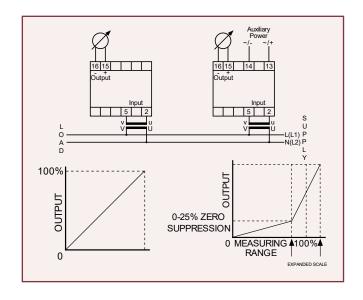
Working range: 0-120% Un (powered units)

10-120% Un (self powered units)

Frequency: 50Hz or 60Hz 40-500Hz (TRMS units)
Input burdens: <0.2VA (powered units)

<0.2VA (powered units)
<3VA (self powered units)

Case size:



ORDERING INFORMATION

| <u>TYPE</u> | INPUT RANGE | <u>OUTPUT</u> | AUX SUPPLY |
|--------------------------|--------------------------|---------------|-------------------|
| FOX.TR.AU / Self powered | 0-50600VAC direct* | 0-1mA | 24VAC |
| FOX.TR.AU / Powered | VT ratio | 0-2.5mA | 63VAC |
| FOX.TR.AU / Powered TRMS | Expandable input*** | 0-5mA | 110VAC |
| | Suppressed zero input*** | 0-10mA | 230VAC |
| | | 0-20mA | 415VAC |
| | | 4-20mA** | 24VDC |
| | | 0-1VDC | 48VDC |
| | | 0-5VDC | 110VDC |
| | | 0-10VDC | |

^{*}Specify exact direct input range required, recommended standard ranges 0-150V, 0-300V, 0-500V

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^{**}Not possible on self powered units