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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

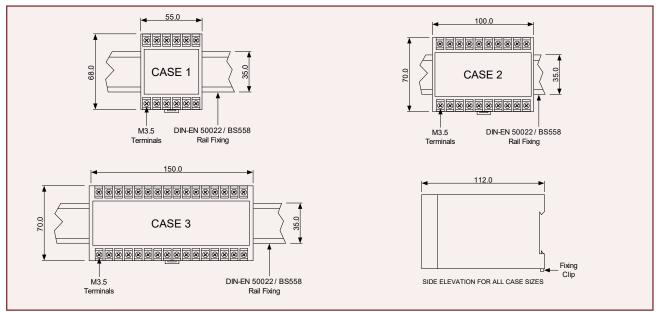
Material: Grey ABS plastic with finger proof terminal covers

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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PRODUCT

ELECTRICAL MEASUREMENT TRANSDUCERS

AC CURRENT TRANSDUCERS

TYPE: FOX.TR.AI





Foxtam AC current transducers can measure current either directly (max 7.5 Amps) or via the secondary of a current transformer, either 0-1 Amp or 0-5 Amp. The transducer converts the AC input current 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.

Powered Bi-polar – For use in bi-directional current flow applications such as import / export scenarios. The analogue output signal can be either mA (but not 4-20mA) or voltage and is also bi-polar for example -10VDC to 0 to +10VDC.

SPECIFIC SPECIFICATIONS

Accuracy: Class 0.25

Input current: 0-0.7A...7.5A direct

0-1A or 0-5A CT input

Overload: 2 x In continuous

30 x In for 1 sec

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

10-120% In (self powered units)

Frequency: 50Hz or 60Hz, 40-500Hz (TRMS units)

Input burdens: <0.3VA (powered units)

<3VA (self powered units)

Case size: 1 (Bi-polar units 2)

ORDERING INFORMATION

TYPE	INPUT RANGE
FOX.TR.Al / Self powered	0-0.77.5A direct*
FOX.TR.Al / Powered	0-1A CT
FOX.TR.AI / Powered TRMS	0-5A CT
FOX.TR.AI / Powered Bi-polar	

OUTPUT	AUX SUPPLY
0-1mA	24VAC
0-2.5mA	63VAC
0-5mA	110VAC
0-10mA	230VAC
0-20mA	415VAC
4-20mA**	24VDC
0-1VDC	48VDC
0-5VDC	110VDC
0-10VDC	
Bi-polar***	

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^{*}Specify exact direct input range required

^{**}Not possible on self powered units

^{***}Bi-polar units will be +/- outputs (4-20mA not possible)