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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

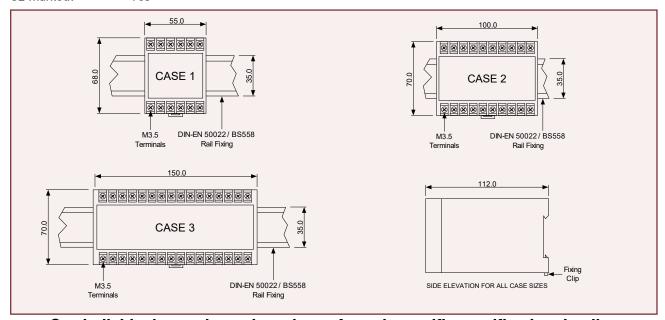
Material: Grey ABS plastic with finger proof terminal covers

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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**POWER FACTOR (COS) TRANSDUCERS** 

**TYPE: FOX.TR.COS** 

### DESCRIPTION

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**PRODUCT** 

**GROUP** 

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Foxtam power factor transducers measure the Cosine of the phase angle between the current and the voltage. All power factor transducers require a separate auxiliary supply. At the time of ordering the input voltage and current details especially any CT and VT input ratio details must be specified. Any specific power factor scale range can also be determined. The 4KV isolated output signals are suitable for many applications, such as inputs to analogue and digital meters, PLC's or BMS systems and in particular power factor correction systems.

Transducer types include:-

FOX.TR.COS.12 - Single phase, requiring a single current and voltage input.

FOX.TR.COS.33B – Three phase, three wire balanced load, requiring a current input from L1 and voltage inputs from L2 & L3.

Any of the above power factor transducers can be supplied with a bi-polar output (+/-) or as an example 4-12-20mA output or 0-5-10VDC.

### SPECIFIC SPECIFICATIONS

Accuracy: Class 0.5 (down to 10% of FS)

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

VT ratio specify

Current input: 0-0.7A...7.5A direct

CT ratio specify 1A or 5A

Overload: 1.2 x Un & 2 x In continuous

1.5 x Un & 30 x In for 1 sec

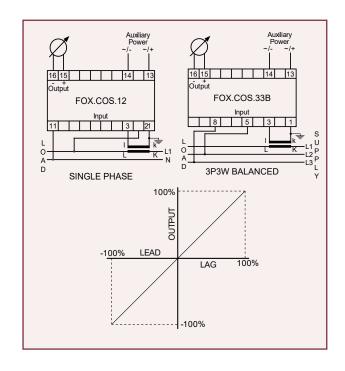
Working range: 20-120% Un

5-120% In

Frequency: 50Hz or 60 Hz
Input burdens: <0.2VA voltage input

< 0.3VA current input

Case size: 2



### ORDERING INFORMATION

<u>TYPE</u>	<u>INPUTS</u>	COS RANGE	<u>OUTPUT</u>	<b>AUX SUPPLY</b>
FOX.TR.COS.12 / Single phase	0-50600VAC direct*	-0.5 to 1 to +0.5	+/-1mA	24VAC
FOX.TR.COS.33B / 3P3W balanced	VT ratio*	0 to 1 to 0	+/-2.5mA	63VAC
	Plus:-	Specify other	+/-5mA	110VAC
	0.7A7.5A direct*		+/-10mA	230VAC
	CT ratio*		+/-20mA	415VAC
			4-12-20mA**	24VDC
			+/-1VDC	48VDC
			+/-5VDC	110VDC
			+/-10VDC	

<sup>\*</sup>Specify exact direct input ranges required and/or CT & VT ratios and power factor scale range required

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<sup>\*\*</sup>Also possible to have a signal output for example 0-5-10VDC output or similar, consult the sales office for technical viability.