

J U X T A A C C U R R E N T T R A N S D U C E R S

1) GENERAL

The 2469 and 2489 AC Average Current transducers produce an analog DC signal output corresponding to the average value of the AC input. The true RMS versions always require external power and produce an analog DC output corresponding to the true RMS value of the input signal.

2) SPECIFICATIONS

Model #	2469	2489
Input Current	0-1 Amp AC or 0-5 Amp AC	
Input over range capability	200% of rated input continuous 1000% of rated input for 5 seconds	
Input Burden	<0.2VA per element	
Rated outputs	0-1mADC into 10 k Ω max. load; 10VDC output compliance 4-20 mADC into 750 Ω max. load; 15VDC output compliance	
Accuracy 10-100% of rated input	0-1mADC=±0.5% of full scale 4-20mADC=±0.5% of span	0-1mADC=±0.2% of full scale 4-20mADC=±0.2% of span
External calibration adjustment	Zero: ±1% minimum(AHD only) Span: ± 2% minimum	Zero: ±5% minimum(AHD only) Span: ± 10% minimum
Response time	<400 milliseconds(0-99% of output)	
Output ripple	0.3% of span peak-to-peak max.	0.5% of span peak-to-peak max.
Isolation	2500 VAC input to output, power and case 2000 VAC aux. power to output and case (AHD and TRMS) 500 VAC output to case	
Surge Withstand Capability	IEEE472/ANSI C37.90.1 - 1989, JIS C1111(5KV, 1.2 x 50 microseconds)	
Insulation resistance	>10 megohm / 500VDC input/output/power/case	
Operating temperature	-20°C to +60°C	
Operating humidity	0 - 90% relative humidity (non-condensing)	
Temperature effect	± 250 PPM / °C of span	± 140 PPM / °C of span
External magnetic field	< 0.2% at 400 AT/m	
Input frequency range	50 - 500 Hz < 0.2% effect on accuracy	
Influence of frequency	< 0.2%, 45-65 Hz, fundamental through 9th harmonic (TRMS models only)	
Weight	TRMS = 900g, 0-1mA = 358g, 4-20mA = 897g, 3 in 1 = 1100g	
Shock	< 0.2% after 50G, 3 Axis and 6 repetitions	
Vibration	< 0.2% after 16.7 Hz, 4 mmp-p 1 hour, 3 Axis	
UL Recognition	File # E60579	

3) STANDARD MODELS

0-5 Amp AC, 60 HZ input	2469 (0.5% Accuracy)	2489 (0.2% Accuracy)
AVG./0-1 mA output / self powered	246921-380-AFA-0	248921-380-AFA-0
TRMS / 0-1mA output / 120V aux. power	246931-380-AFA-1	248931-380-AFA-1
AVG./4-20mA output / 120V aux. power	246921-380-AHD-1	248921-380-AHD-1
TRMS / 4-20mA / 120V aux. power	246931-380-AHD-1	248931-380-AHD-1
3 in 1 / 0-1mA output / self-powered	246923-380-AFA-0	248923-380-AFA-0

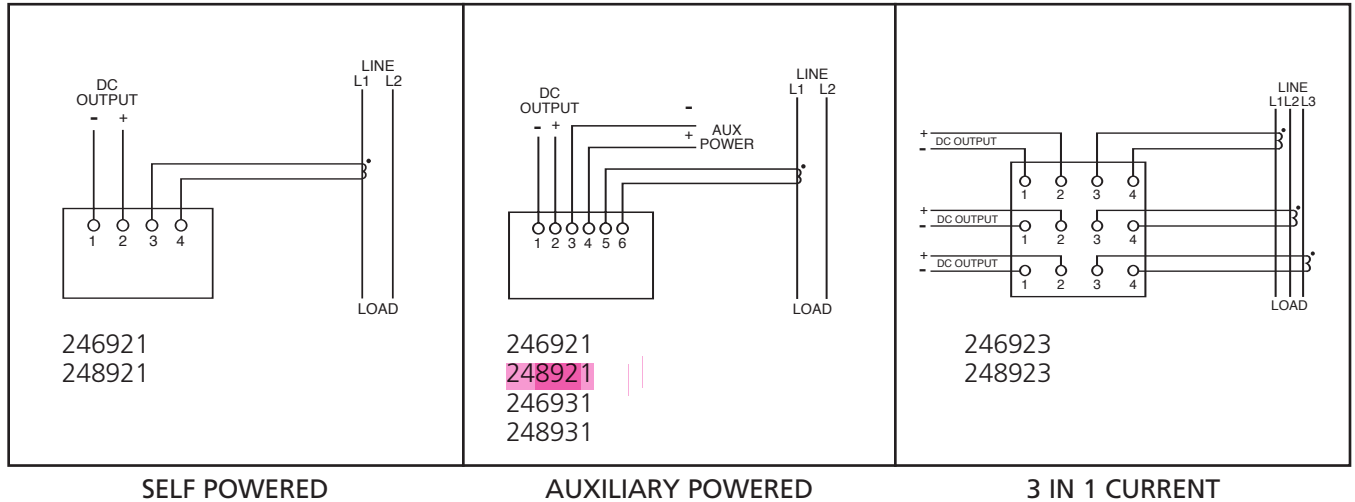
NOTE: See order format on next page for additional ratings, frequency calibrations, power-up and output options.
Auxiliary power supply options <5.0 VA burden.

JUXTA AC CURRENT TRANSDUCERS

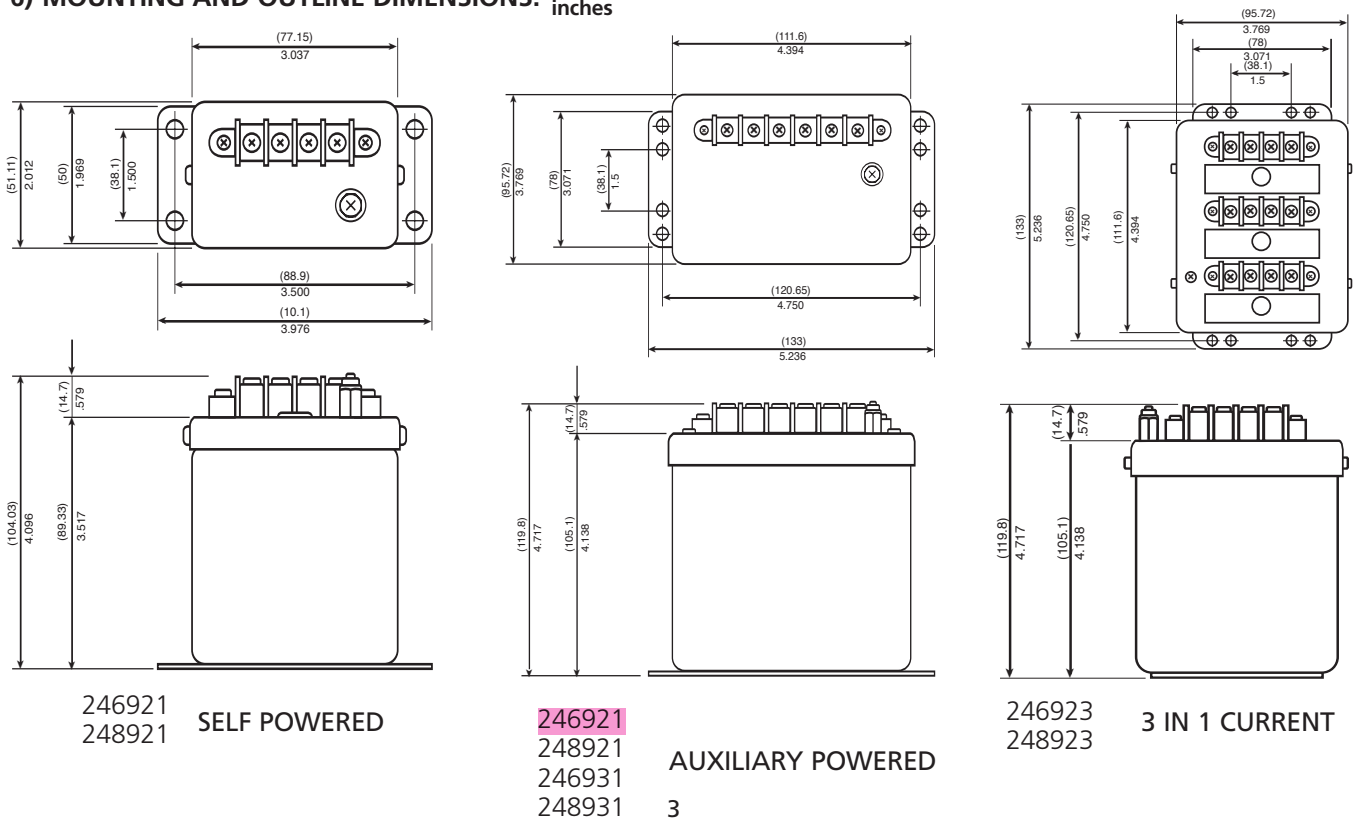
4) ORDER FORMAT 2469 / 89 - -

Model#	(1) Transducer function	(2) Input	(3) Input frequency	(4) Output	(5) Aux. power
2469	21 Average current	37 0-1 Amp AC	0 60 Hz	AFA 0-1 mADC (21 & 23 only)	0 Input powered
2489	23 3 in 1 Avg. current	38 0-5 Amp AC	1 50 Hz	AFA 0-1 mADC (TRMS only)	1 85-135 VAC
	31 True RMS current		2 50/60 Hz	AHD 4-20 mADC (21 & 31 only)	2 170-264 VAC
			4 400 Hz		
			5 Other		

5) CONNECTION DIAGRAMS FOR CT INPUT



6) MOUNTING AND OUTLINE DIMENSIONS: (mm) inches



J U X T A A C V O L T A G E T R A N S D U C E R S

1) GENERAL

The 2469 and 2489 AC Average Voltage transducers produce an analog DC signal output corresponding to the average value of the AC input. The true RMS versions always require external power and produce an analog DC output corresponding to the true RMS value of the input signal.

2) SPECIFICATIONS

Model #	2469	2489
Input Voltage	0-150 VAC or 0-300 VAC	
Input over range capability	120% of rated input continuous	
Input Burden (Averaging models)	150 VAC: <1.8VA / element; 300 VAC: <3.6VA / element	
Input Burden (true RMS models)	150 VAC: <0.8VA; 300 VAC: <1.6VA	
Rated outputs	0-1mADC into 10 k Ω max. load; 10VDC output compliance 4-20 mADC into 750 Ω max. load; 15VDC output compliance	
Accuracy 10-100% of rated input	0-1mADC=±0.5% of full scale 4-20mADC=±0.5% of span	0-1mADC=±0.2% of full scale 4-20mADC=±0.2% of span
External calibration adjustment	Zero: ±1% minimum(AHD only) Span: ±2% minimum	Zero: ±5% minimum(AHD only) Span: ±10% minimum
Response time	<400 milliseconds(0-99% of output)	
Output ripple	0.3% of span peak-to-peak max.	0.5% of span peak-to-peak max.
Isolation	2500 VAC input to output, power and case 2000 VAC aux. power to output and case(AHD + TRMS) 500 VAC output to case	
Surge Withstand Capability	IEEE472/ANSI C37.90.1 - 1989, JIS C1111(5KV 1.2 x 50 microseconds)	
Insulation resistance	>10 megohm / 500VDC input/output/power/case	
Operating temperature	-20°C to +60°C	
Operating humidity	0 - 90% relative humidity (non-condensing)	
Temperature drift	± 250 PPM / °C of span	± 140 PPM / °C of span
External magnetic field	< 0.2% at 400 AT/m	
Input frequency range	50 - 500 Hz < 0.2% effect on accuracy	
Influence of frequency	< 0.2%, 45-65 Hz, fundamental through 9th harmonic (TRMS models only)	
Weight	TRMS = 900g, 0-1mA = 358g, 4-20mA = 897g, 3 in 1 = 1100g	
Shock	< 0.2% after 50G, 3 Axis and 6 repetitions	
Vibration	< 0.2% after 16.7 Hz, 4 mmp-p 1 hour, 3Axis	
UL Recognition	File # E60579	

3) STANDARD MODELS

0-150 VAC, 60 HZ input	2469 (0.5% Accuracy)	2489 (0.2% Accuracy)
AVG./0-1 mA / self powered	246922-330-AFA-0	248922-330-AFA-0
TRMS / 0-1mA / 120V aux. power	246932-330-AFA-1	248932-330-AFA-1
AVG./4-20mA / 120V aux. power	246922-330-AHD-1	248922-330-AHD-1
TRMS / 4-20mA / 120V aux. power	246932-330-AHD-1	248932-330-AHD-1
3 in 1 / 0-1mA output / self-powered	246924-330-AFA-0	248924-330-AFA-0

NOTE: See order format on next page for additional ratings, frequency calibrations, power-up and output options.
Auxiliary power supply options <5.0 VA burden.

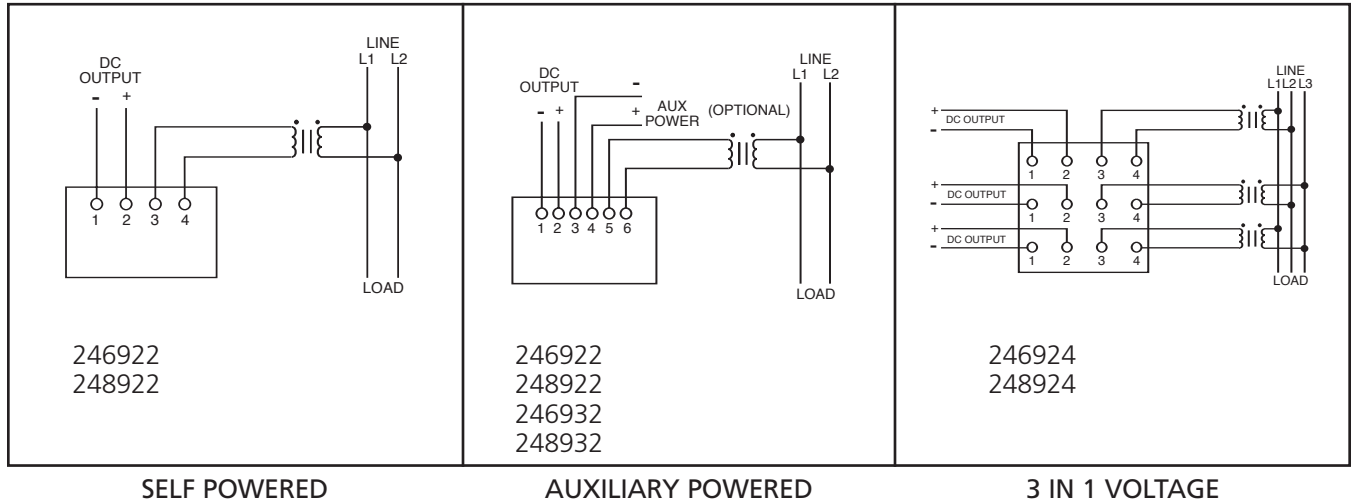
JUXTA AC VOLTAGE TRANSDUCERS

4) ORDER FORMAT 2469 / 89 (1) (2) (3) (4) (5)

Model#	(1) Transducer function	(2) Input	(3) Input frequency	(4) Output	(5) Aux. power*
2469	22 Average Voltage	33 0-150 VAC	0 60 Hz	AFA 0-1 mADC (22 & 24 only)	0 Input powered
2489	24 3 in 1 Avg. Voltage	36 0-300 VAC	1 50 Hz	AFA 0-1 mADC (TRMS only)	1 85-135 VAC
	32 True RMS Voltage		2 50/60 Hz	AHD 4-20 mADC (22 & 32 only)	2 170-264 VAC
			4 400 Hz		
			5 Other		

*Contact Factory
For Other Power
Supply Options

5) CONNECTION DIAGRAMS FOR PT INPUT



6) MOUNTING AND OUTLINE DIMENSIONS: (mm) inches

