

POWER FACTOR TRANSDUCERS

POWER FACTOR TRANSDUCERS

MODEL 2469/2489

DESCRIPTION

•The 2469 and 2489 Power Factor transducers have an analog output corresponding to 1-Cosine of the phase angle of the input current relative to the input voltage signal. The analog output will indicate leading or lagging Power Factor by its direction from center which would either be 0 mA or 12mA based on output selection.



Model 2469

Model 2489



SPECIFICATIONS

Model #	2469	2489
Current input/range	0-1 Amp AC or 0-5 Amp AC 10 to 200% of rated input	
Current input over range capability	200% of rated input continuous 1000% of rated input for 5 seconds	
Current input burden	<0.2VA per element	
Voltage inputs and range	120V 240V	120V 240V
Input powered range	100-135VAC 200-264VAC	85-135VAC 170-264VAc
Auxiliary powered range	0-120% rated input	
Voltage input burden per element	<0.5VA <1.0VA	<0.5VA <1.0VA
Sustained Voltage input overrange	150% of rated input without damage (Auxiliary powered only)	
Rated Outputs	+1mADC into a 10K OHms max. load; 10VDC output compliance 4-12-20 mADC into a 750Ohm max. load; 15VDC output compliance	
Accuracy	+0.01 Power factor	
Output Calibration	0-1-0 Power Factor or 0.5-1-0.5 Power Factor	
External calibration adjustment	Zero: + 1% minimum Span: + 2% minimum	Zero: + 5% minimum Span: +10% minimum
Response time	<400 milliseconds (0-99% of output)	
Output ripple	0.3% of FS peak-to-peak max.	0.5% of FS peak-to-peak max.
Isolation	2500 VAc input to output, power and case 2000 VAc aux. power to output and case 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	+500 PPM / °C of span	+150 PPM / °C of span
External magnetic field	< 0.2 % at 400 AT/m	
Influence of input Voltage	< 1% of span	Aux. Pwr. +0.01 max. +20% rated V. Self Pwr. +0.01 max. in range of Aux. Pwr.
Influence of input Current	<2% of span	<0.02PF for 20-200% rated input current
Low current detection	<4% of rated current	4% of rated input
Weight	1000g (2.2 lbs.)	
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	
Auxiliary Power burden	<5.0 VA	

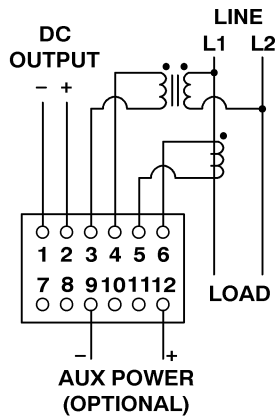
POWER FACTOR TRANSDUCERS

POWER FACTOR TRANSDUCERS

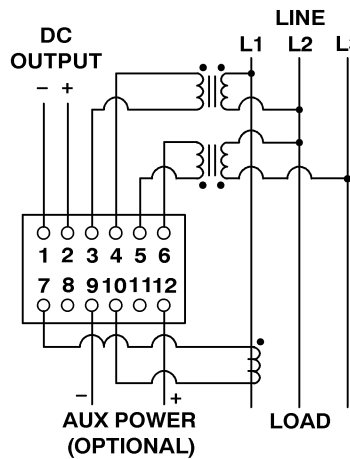
MODEL 2469/2489

ORDERING INFORMATION												
Model #	(1) Transducer function		(2) Input		(3) Frequency		(4) Output		(5) Aux. Power	(6) Input/output relationship		
2469	71	PF-Single Phase	53	120V/1A;0-1-0 PF	0	60Hz	AFB	+1 mADC	0	input powered	M	LAG=+POL.
2489	73	PF-3P3W balanced	54	120V/5A;0-1-0 PF	1	50Hz	AHF	12+8mADC	1	120 VAC	P	LEAD=+POL.
	74	PF-3P4W balanced	57	240V/1A;0-1-0 PF	4	400Hz			2	240 VAC		
			58	240V/5A;0-1-0 PF	5	Other						
			63	120V/1A;5-1-.5 PF								
			64	120V/5A;5-1-.5 PF								
			67	240V/1A;5-1-.5 PF								
			68	240V/5A;5-1-.5 PF								

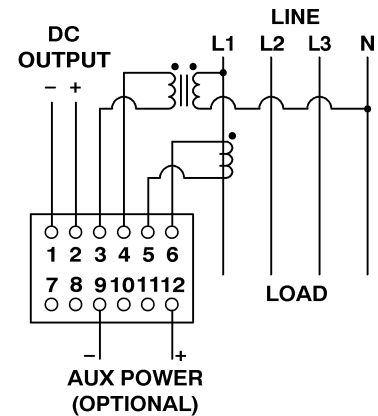
CONNECTION DIAGRAMS WITH PT AND CT INPUTS



246971
248971
Single phase

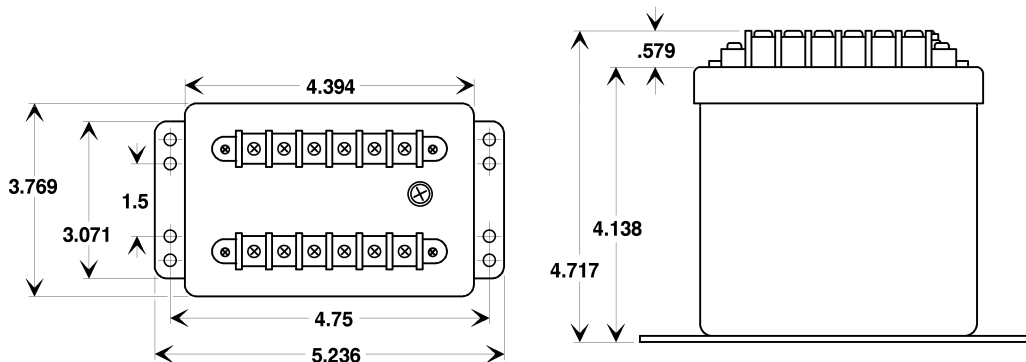


246973
248973
3 phase 3 wire balanced load



246974
248974
3 phase 4 wire balanced load

MOUNTING AND CASE DIMENSIONS



All Dimensions In Inches

FLEX-CORE®

Div. Morlan & Associates, Inc.

6625 McVey Blvd. Columbus, Ohio 43235

WWW.FLEX-CORE.COM

sales@flex-core.com

PHONE (614) 889-6152

TECH. ASSISTANCE (614) 876-8308

FAX # (614) 876-8538