

WATT TRANSUDUCERS

ACWATT/POWER FACTOR/VOLT-AMPERE TRANSUDUCER

**MODEL
PC20**

FEATURES

- True Power measurements for sinusoidal and distorted waveforms.
- Volt-Ampere measurement for sinusoidal and distorted waveforms.
- Power Factor is derived from the ratio of True Power to Apparent Power and remains accurate for SCR controlled or otherwise distorted waveforms.
- Three separate output signals - one each for Watts, Power Factor, Volt-Amperes.
- Wide frequency range - 50 to 400Hz.

APPLICATIONS

- Equipment monitoring to determine and/or maintain efficiency.
- Process monitoring and/or controlling to maintain consistent product quality.
- For use with SCR controlled, chopped, or otherwise distorted waveforms.
- **.25% Accuracy.**



SINGLE PHASE - TWO WIRE (ONE ELEMENT)

INPUTS		F.S. (W,VA)	STANDARD OUTPUTS (W, PF, VA) MODEL PC20 -						
AC VOLTS	AC AMPS		0-1mA ^{dc} *	0-1mA ^{dc}	0-10V ^{dc} *	0-10V ^{dc}	0-5V ^{dc} *	0-5V ^{dc}	4-20mA
0-150	0 - 1	100	103A	103B	103C	103D	103CX5	103X5	103E
	0 - 5	500	001A	001B	001C	001D	001CX5	001X5	001E
Nominal 115	0 - 10	1000	010A	010B	010C	010D	010CX5	010X5	010E
	0 - 20	2000	117A	117B	117C	117D	117CX5	117X5	117E
0-300	0 - 1	200	104A	104B	104C	104D	104CX5	104X5	104E
	0 - 5	1000	002A	002B	002C	002D	002CX5	002X5	002E
Nominal 230	0 - 10	2000	011A	011B	011C	011D	011CX5	011X5	011E
	0 - 20	4000	110A	110B	110C	110D	110CX5	110X5	110E
0-600	0 - 1	400	105A	105B	105C	105D	105CX5	105X5	105E
	0 - 5	2000	003A	003B	003C	003D	003CX5	003X5	003E
Nominal 480	0 - 10	4000	012A	012B	012C	012D	012CX5	012X5	012E
	0 - 20	8000	111A	111B	111C	111D	111CX5	111X5	111E

THREE PHASE - THREE WIRE (TWO ELEMENT)

INPUTS		F.S. (W,VA)	STANDARD OUTPUTS (W, PF, VA) MODEL PC20 -						
AC VOLTS	AC AMPS		0-1mA ^{dc} *	0-1mA ^{dc}	0-10V ^{dc} *	0-10V ^{dc}	0-5V ^{dc} *	0-5V ^{dc}	4-20mA
0-150	0 - 1	200	118A	118B	118C	118D	118CX5	118X5	118E
	0 - 5	1000	004A	004B	004C	004D	004CX5	004X5	004E
Nominal 115	0 - 10	2000	013A	013B	013C	013D	013CX5	013X5	013E
	0 - 20	4000	112A	112B	112C	112D	112CX5	112X5	112E
0-300	0 - 1	400	119A	119B	119C	119D	119CX5	119X5	119E
	0 - 5	2000	005A	005B	005C	005D	005CX5	005X5	005E
Nominal 230	0 - 10	4000	014A	014B	014C	014D	014CX5	014X5	014E
	0 - 20	8000	113A	113B	113C	113D	113CX5	113X5	113E
0-600	0 - 1	800	120A	120B	120C	120D	120CX5	120X5	120E
	0 - 5	4000	006A	006B	006C	006D	006CX5	006X5	006E
Nominal 480	0 - 10	8000	015A	015B	015C	015D	015CX5	015X5	015E
	0 - 20	16000	114A	114B	114C	114D	114CX5	114X5	114E

Highlighted models (5A) may be used with current transformers.

*Denotes self-powered units. Input voltage ranges limited to:

- 85-135 for 150Vac models
- 200-280 for 300Vac models
- 380-550 for 600Vac models

All others require a separate 120Vac (85 - 135V) instrument power.

Optional 230Vac instrument power - Add suffix "-22"

ORDERING INFORMATION

Example: Three-Phase, Three-Wire,
230V 5A, 0-10V Output,
Proportional to 0-2000W (VA),
with Separate 120Vac Instrument Power.
PC20-005D

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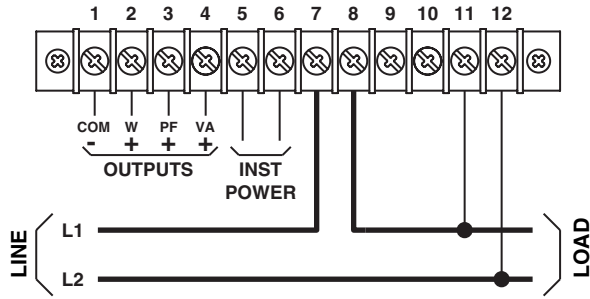
FAX # (614) 876-8538

WATT TRANSDUCERS

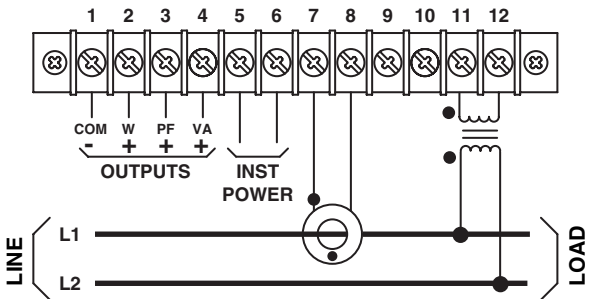
CONNECTION DIAGRAMS

MODEL PC20

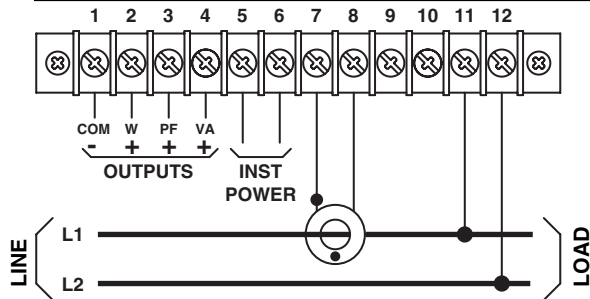
SINGLE PHASE CONNECTIONS (ONE ELEMENT)



USING INTERNAL SENSORS

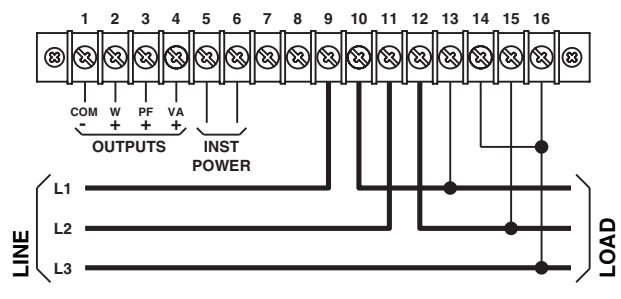


USING CURRENT TRANSFORMERS
AND POTENTIAL TRANSFORMERS

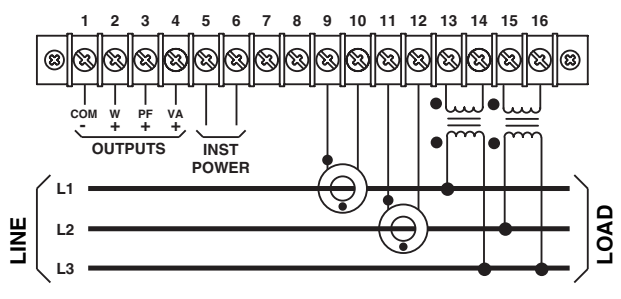


USING CURRENT TRANSFORMERS

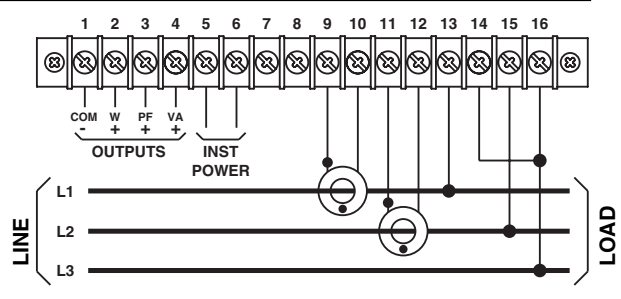
THREE-PHASE, THREE-WIRE CONNECTIONS (TWO ELEMENT)



USING INTERNAL SENSORS

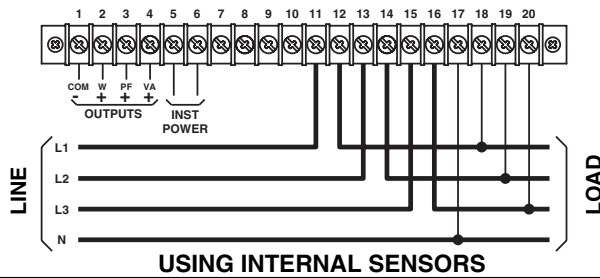


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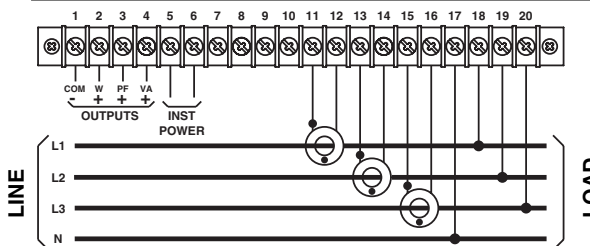


USING CURRENT TRANSFORMERS

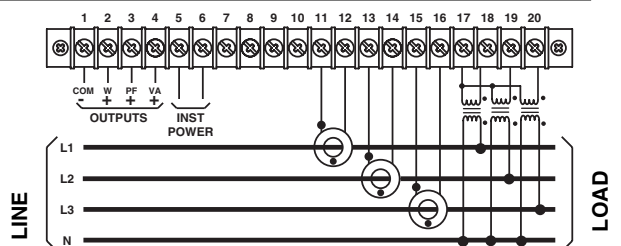
THREE-PHASE, FOUR-WIRE CONNECTIONS (THREE ELEMENT)



USING INTERNAL SENSORS



USING CURRENT TRANSFORMERS



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