



FEATURES AND APPLICATIONS

- Utility tested and approved.
- Provides $\pm 0.2\%$ of reading accuracy.
- No zero adjustment required.
- Long term stability.
- Digital circuitry.
- Models available in 1, 1½, 2, 2½ and 3 element.
- Measures forward and reverse power flow.
- Accuracy specifications include influences of variation in voltage, current, power factor, frequency and load changes.
- Temperature effects are less than $\pm 0.005\%$ per $^{\circ}\text{C}$ over the range of -20°C to $+70^{\circ}\text{C}$.
- Made with pride in the U.S.A.

ACCURACY $\pm 0.2\%$ OF READING

ORDERING INFORMATION

MODEL NUMBER		ELEMENT	CONNECTION	SYSTEM REQUIREMENTS		WATTS/VARS AT RATED OUTPUT
INSTRUMENT POWERED	SELF POWERED (1)			VOLTAGE	CURRENT	
UG0806501	UG0806001	1	SINGLE PHASE	— — —	— — —	500
UG0806601	UG0806101	1½	3 PHASE 3 WIRE	Balanced	Balanced	1000
UG0806701	UG0806201	2	3 PHASE 3 WIRE	Unrestricted	Unrestricted	1000
UG0806801	UG0806301	2½	3 PHASE 4 WIRE	Balanced	Unrestricted	1500
UG0806901	UG0806401	3	3 PHASE 4 WIRE	Unrestricted	Unrestricted	1500

SPECIFICATIONS

Potential Range (1)	0-150 VAC	Response Time (99%)	<400ms
Potential Input (nominal)	120VAC	Open Circuit Output Voltage	<20Vdc (1mA RO)
Potential Overload	175V continuous	Frequency Range	60Hz
Potential Burden (per element)	0.1VA @ 120V	Calibration Adjustment	$\pm 2\%$ Minimum
Current Range	0-10A AC	Power Factor	Any
Current Input (nominal)	5A AC	Temperature Range	-20°C to +60°C
Current Overload	15A continuous 50A 10s/h 400A 1 s/h	Temperature Coefficient	$\pm 0.005\%/\text{°C}$ WATTS $\pm 0.009\%/\text{°C}$ VARS
Current Burden (per element)	0.2VA @ 5A	Relative Humidity	0.95%
Rated Output (RO)	$\pm 1\text{mA}$ dc	Stability (per year)	$\pm 0.1\%$ RO max.
Accuracy (2)	$\pm (0.2\% \text{ reading} + 0.01\% \text{ RO})$ WATTS + 0.02% RO VARS	Dielectric Withstand Voltage (Isolation)	1800VRMS Input, output, case, instrument Power
Load Resistance (RL)	0-10kΩ for 1mA RO	Transient Test	IEEE STD. 472 SWC
Compliance Voltage (3)	11Vdc minimum	Output Protection	Open and Short Circuit
Output Ripple Peak	<0.5% RO	Instrument Power	85-135VAC, 60Hz, $\pm 10\text{Hz}$ (2.5VA @ 120VAC)

NOTES:

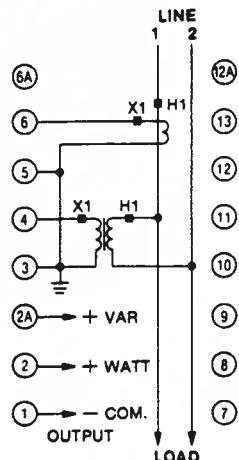
- (1) Potential range limited to 85V to 135V if self powered.
- (2) Includes worst combined effects of current, voltage, power factor, frequency and load resistance.
- (3) For 1.0mA RO, insure that (Io) output current x (RL) load resistance is less than 11.0 volts.

OHIO SEMITRONICS, INC.

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 TO PLACE AN ORDER 1-800-537-6732



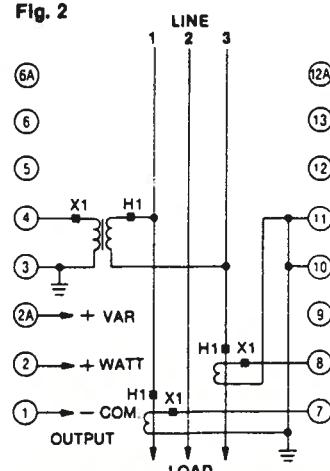
COMBINATION WATT/VAR TRANSDUCER INSTALLATION DIAGRAMS



1 ELEMENT, WATT/VAR TRANSDUCER

*120V AC AMPLIFIER POWER REQUIRED
AT TERMINALS 9 & 12

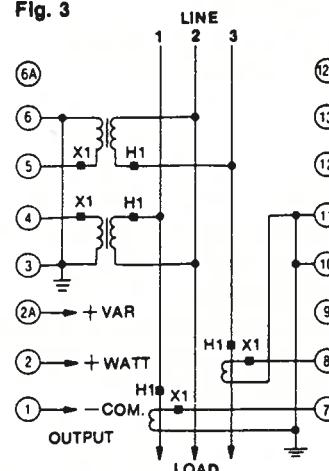
Fig. 2



1 1/2 ELEMENT, WATT/VAR TRANSDUCER

*120V AC AMPLIFIER POWER REQUIRED
AT TERMINALS 9 & 12

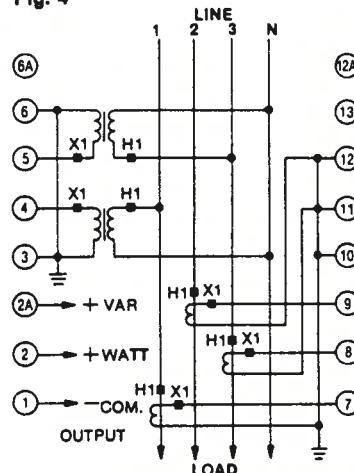
Fig. 3



2 ELEMENT, WATT/VAR TRANSDUCER

*120V AC AMPLIFIER POWER REQUIRED
AT TERMINALS 9 & 12

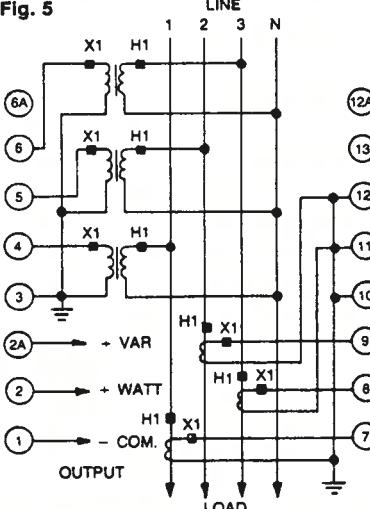
Fig. 4



2 1/2 ELEMENT, WATT/VAR TRANSDUCER

*120V AC AMPLIFIER POWER REQUIRED
AT TERMINALS 6A & 12A

Fig. 5



3 ELEMENT, WATT/VAR TRANSDUCER

*120V AC AMPLIFIER POWER REQUIRED
AT TERMINALS 6A & 12A

