

OSI PRECISION AC WATT/VAR TRANSDUCER MODEL GWV5-

COMBINATION WATT & VAR MEASUREMENTS

FEATURES

- Available in 1-, 2-, or 3-element configurations.
- Some models provide bidirectional outputs.
- 0.2% of reading accuracy
- Accuracy maintained over wide temperature range, calibration traceable to NIST.

APPLICATIONS

- Integration into energy management systems and sub-metering applications.
- Measurement using direct connection, current transformers, and/or potential transformers.
- Sinusoidal waveforms.



5 YEAR WARRANTY

SINGLE- AND THREE-PHASE MODELS WITH INTERNAL SENSOR

INPUTS		F.S. WATT/VAR	PHASE	NO. OF ELE	STANDARD OUTPUTS MODEL GWV5-									
AC VOLTS	AC AMPS				0-±1mAdc*	0-1±mAdc	0-±10Vdc*	0-±10Vdc	4-20mA	4-20mA*	4-12-20mA	0-±5Vdc*	0-±5Vdc	
0-150	0-2.5	250	1P-2W	1	106A	106B	106C	106D	106E	106EG	106EM	106CX5	106X5	
0-150	0-5	500	1P-2W	1	001A	001B	001C	001D	001E	001EG	001EM	001CX5	001X5	
0-300	0-2.5	500	1P-2W	1	107A	107B	107C	107D	107E	107EG	107EM	107CX5	107X5	
0-300	0-5	1000	1P-2W	1	002A	002B	002C	002D	002E	002EG	002EM	002CX5	002X5	
0-600	0-2.5	1000	1P-2W	1	108A	108B	108C	108D	108E	108EG	108EM	108CX5	108X5	
0-600	0-5	2000	1P-2W	1	003A	003B	003C	003D	003E	003EG	003EM	003CX5	003X5	
0-150	0-2.5	500	3P-3W	2	129A	129B	129C	129D	129E	129EG	129EM	129CX5	129X5	
0-150	0-5	1000	3P-3W	2	004A	004B	004C	004D	004E	004EG	004EM	004CX5	004X5	
0-300	0-2.5	1000	3P-3W	2	130A	130B	130C	130D	130E	130EG	130EM	130CX5	130X5	
0-300	0-5	2000	3P-3W	2	005A	005B	005C	005D	005E	005EG	005EM	005CX5	005X5	
0-600	0-2.5	2000	3P-3W	2	131A	131B	131C	131D	131E	131EG	131EM	131CX5	131X5	
0-600	0-5	4000	3P-3W	2	006A	006B	006C	006D	006E	006EG	006EM	006CX5	006X5	
0-150 L-N	0-2.5	750	3P-4W	3	132A	132B	132C	132D	132E	132EG	132EM	132CX5	132X5	
0-150 L-N	0-5	1500	3P-4W	3	007A	007B	007C	007D	007E	007EG	007EM	007CX5	007X5	
0-300 L-N	0-2.5	1500	3P-4W	3	133A	133B	133C	133D	133E	133EG	133EM	133CX5	133X5	
0-300 L-N	0-5	3000	3P-4W	3	008A	008B	008C	008D	008E	008EG	008EM	008CX5	008X5	

* Denotes self-powered unit, voltage range limited to:
 85-135V For 150V Models
 200-280V For 300V Models
 380-550V For 600V Models
 Current Transformers available.

All units other than self-powered require 85-135Vac inst. power.
50 HERTZ MODELS - Add suffix **"-50"** to part number.
 Additional Current Ranges available - Consult Factory
 50ms Output Response to 90% - Add suffix **"W"**
 Optional 230Vac Instrument Power - Add suffix **"-22"**

ORDERING INFORMATION

Example: Three-Phase, Three-Wire 120Vac,
 5A Input with 0-±1mA Output
 Equals 1000W & VARs.
GWV5-004B

SPECIFICATIONS

INPUT

Voltage See Table
 Current 0-5Aac
 Frequency 60Hz standard; 50Hz optional
 Power Factor Any
 Burden
 Voltage <0.1VA/phase
 Current <0.28VA/phase
 Overload
 Voltage (continuous) 175V, 350V, 600V
 Current (continuous) 10A

DIELECTRIC TEST

Input/Output/Case 1800Vac
 Surge Withstands IEEE SWC test

INSTRUMENT POWER

Standard 85-135Vac, 60Hz, 7.5VA
"-22" option 230Vac, 50/60Hz, ±15%
"A", "C", "CX5" and **"EG"** models not required

OUTPUT

VARs + = Lagging/ - = Leading
 Output Watts, VAR See Table
 Loading
"A" models (0-±1mAdc output) ... 0-10kΩ
"C", "D", "CX5", "X5" models (0-±10, 0-±5Vdc) >2kΩ
"E", "EG", "EM" models (4-20mAdc output) ... 0-500Ω
 Response Time to 99% <400ms
 50ms Response to 90% Add suffix **"W"**
 Field Adjustable Cal. ±2% min.

ACCURACY ±0.2% Rdg. ±0.05% F.S.
 Includes combined effects of voltage, current, load and power factor

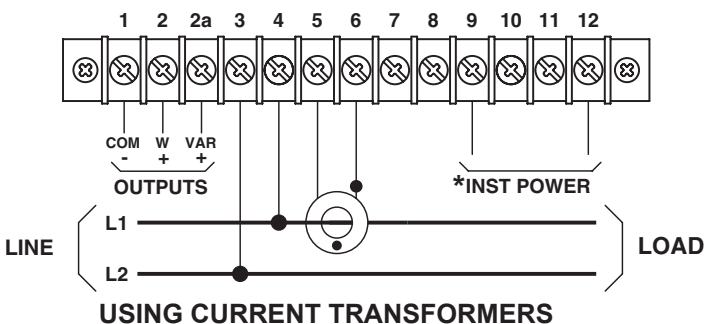
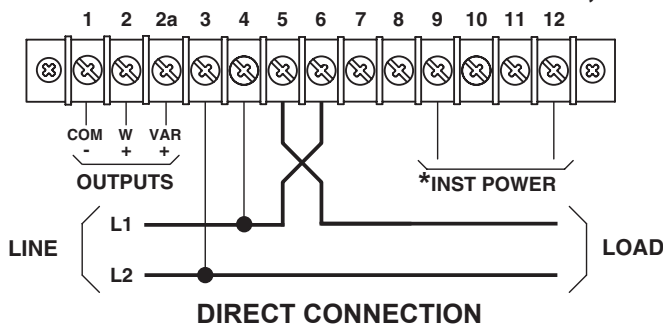
TEMPERATURE & PHYSICAL

Temperature Effect (-20°C to 60°C)
 Watt ±0.005%/°C
 VAR ±0.009%/°C
 Operating Humidity 0-95% non-condensing

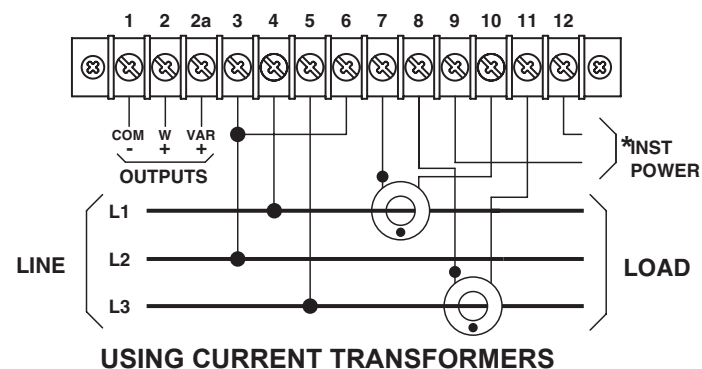
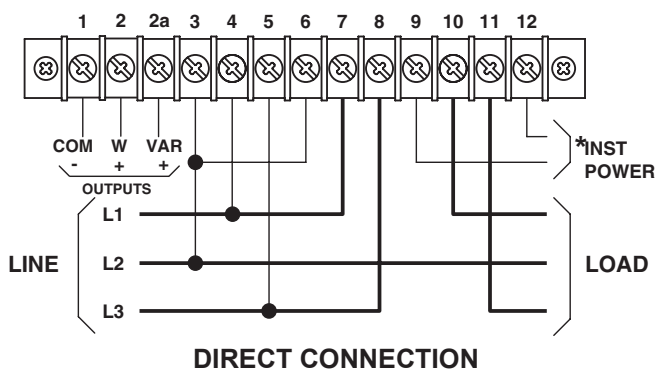
OHIO SEMITRONICS, INC. 4242 REYNOLDS DRIVE * HILLIARD, OHIO * 43026-1264
 PHONE: (614) 777-1005 * FAX: (614) 777-4511
 WWW.OHIOSEMITRONICS.COM * 1-800-537-6732

CONNECTION DIAGRAMS

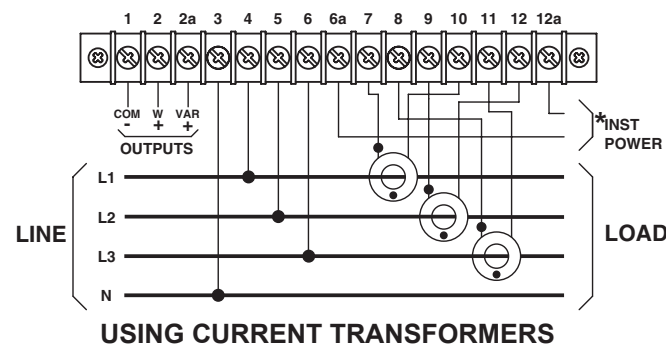
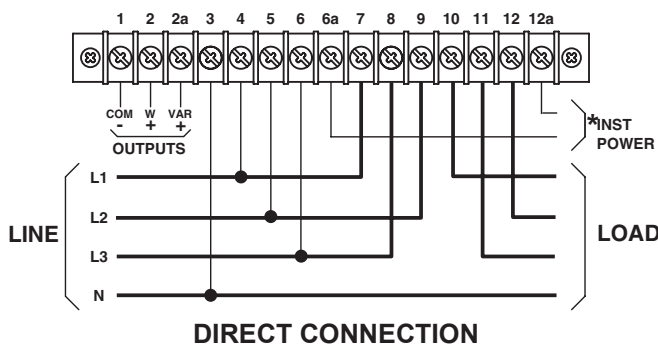
SINGLE-PHASE, TWO-WIRE CONNECTIONS



THREE-PHASE, THREE-WIRE CONNECTIONS

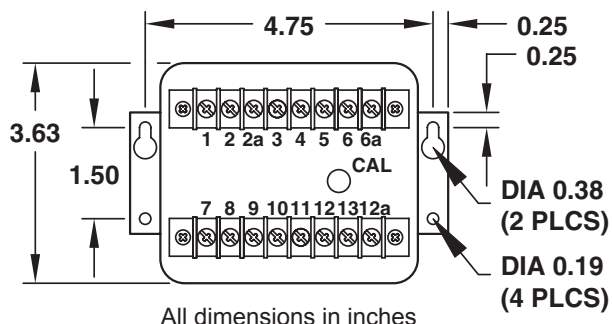


THREE-PHASE, FOUR-WIRE CONNECTIONS



- * 115Vac on models with B, D, E, EM or X5 suffix.
- * 230Vac on models with -22 suffix.
- * Not required on models with A, C, CX5, or EG suffix.

CASE DIMENSIONS



CASE HEIGHT 6.50"	
1PH 2W	2.6 LBS
3PH 3W	3.0 LBS
3PH 4W	3.5 LBS