

WATT/VAR TRANSDUCER

PRECISION WATT/VAR TRANSDUCER

MODEL GWV5

ACCURATE TO 0.2% OF READING

FEATURES

- Available in 1, 2, or 3 element configurations. Provides bi-directional operation.
- Accuracy maintained over wide temperature range.
- Calibration traceable to NIST.

APPLICATIONS

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

SINGLE PHASE - THREE PHASE, THREE WIRE - THREE PHASE, FOUR WIRE MODELS

INPUTS		F.S. IN (WATTS)	NO. ELEMENTS	PHASE CONN.	OPTIONAL OUTPUTS (WATT AND VAR) MODEL NUMBER GWV5-				
VOLTAGE	CURRENT				+/- 1mA*	+/- 1mA	4-20mA	+/- 10Vdc	+/- 5Vdc
0 to 150	0 to 5.0	500	1	1 Ph.-2 W	001A	001B	001E	001D	001X5
	0 to 5.0	1000	2	3 Ph.-3 W	004A	004B	004E	004D	004X5
	0 to 5.0	1500	3	3 Ph.-4 W	007A	007B	007E	007D	007X5
	0 to 5.0	1500	2 1/2	3 Ph.-4 W	7.5A	7.5B	7.5E	7.5D	7.5X5
0 to 300	0 to 5.0	1000	1	1 Ph.-2W	002A	002B	002E	002D	002X5
	0 to 5.0	2000	2	3 Ph.-3W	005A	005B	005E	005D	005X5
	0 to 5.0	3000	3	3 Ph.-4W	008A	008B	008E	008D	008X5
0 to 600	0 to 5.0	2000	1	1 Ph.-2W	003A	003B	003E	003D	003X5
	0 to 5.0	4000	2	3 Ph.-3W	006A	006B	006E	006D	006X5

GWV5 Transducers can be used with current transformers. Potential transformers can be used on 150V models. Standard units require 85-135VAC instrument power, (60 Hz.). Current ranges available from 1 to 20 amps. 50 HERTZ MODELS..... Add suffix "-50" to part number.

*Denotes self-powered unit, limiting input voltage ranges to:
85-135 For 150V Models
200-280 For 300V Models
380-550 For 600V Models

ORDERING INFORMATION

Example: Three-phase, three wire 120V, 5A input with 0-1mA output. **GWV5-004B**

MODEL GWV5 SPECIFICATIONS

INPUT

Voltage See Table
Current 0 to 5A
Frequency 60 Hz. standard; Optional 50 Hz.
Power Factor Any
Burden
Voltage Less than 0.1VA at 120V
Current Less than 0.28VA per element
Overload
Voltage (cont.) 175V, 350V, 600V
Current (cont.) 10A
Dielectric Test...(Input/Output/Case) 1800VAC
Surge Withstands IEEE SWC test
Operating Humidity 0-95% non-condensing

OUTPUT

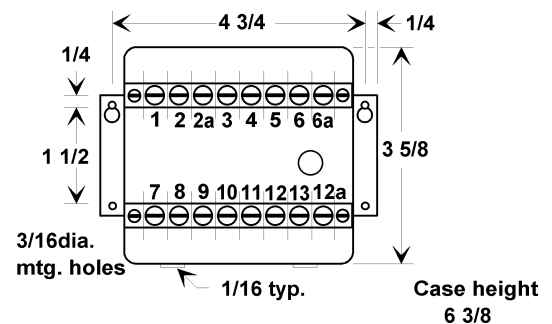
Output Watts, Vars
Output Loading (OHMS)
±1mA 10K
4-20mA 500
5V, 10V >2K
Response Time...(99%) ... Less than 400 milliSeconds
Field Adjustable Cal. ± 2% min.
Compliance Voltage 11Vdc min.
Open circuit Voltage ± 15Vdc

ACCURACY ± 0.2% RDG.; ± 0.05% F.S.

Includes combined effects of voltage, current, load and power factor.
Temperature Effect (-20° to 60°C)
Watt ± 0.005% per degree C
VAR ± 0.009% per degree C
Instrument Power (Std.) 85-135VAC, 60Hz., 7.5VA



CASE DIMENSIONS



ALL DIMENSIONS IN INCHES

FLEX-CORE®

Div. Morlan & Associates, Inc.

6625 McVey Blvd. Columbus, Ohio 43235

WWW.FLEX-CORE.COM

flexcore@msn.com

PHONE (614) 889-6152

TECH. ASSISTANCE (614) 876-8308

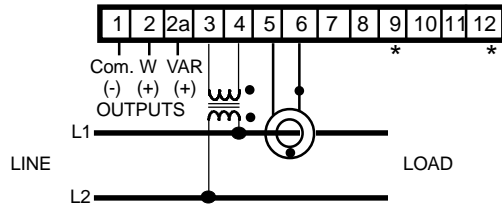
FAX # (614) 876-8538

WATT/VAR TRANSDUCER

CONNECTION DIAGRAMS

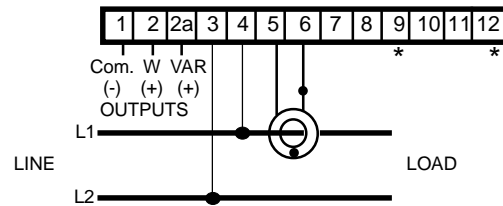
MODEL GWV5

SINGLE PHASE CONNECTIONS



*AC instrument power-terminals 9, 12.

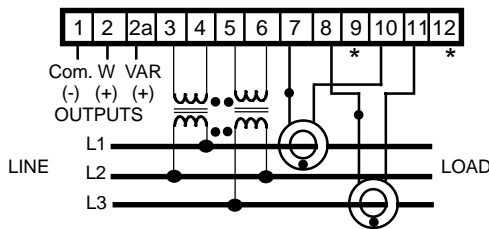
USING CURRENT TRANSFORMERS AND POTENTIAL TRANSFORMERS



*AC instrument power-terminals 9, 12, if not self-powered.

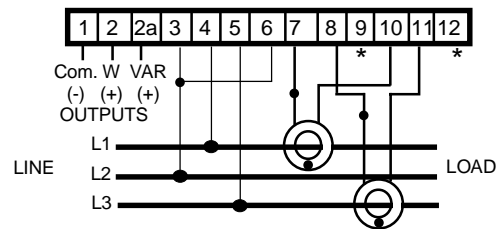
USING ONLY CURRENT TRANSFORMERS

THREE PHASE - THREE WIRE CONNECTIONS



*AC instrument power-terminals 9, 12.

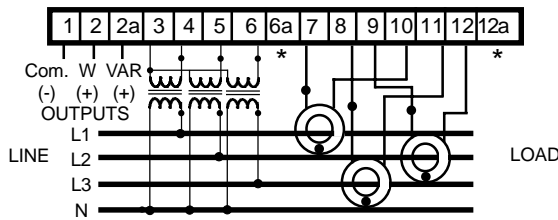
USING CURRENT TRANSFORMERS AND POTENTIAL TRANSFORMERS



*AC instrument power-terminals 9, 12, if not self-powered.

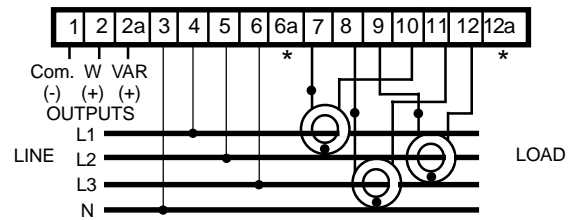
USING ONLY CURRENT TRANSFORMERS

THREE PHASE - FOUR WIRE CONNECTIONS (3 ELEMENTS)



*AC instrument power-terminals 6a, 12a.

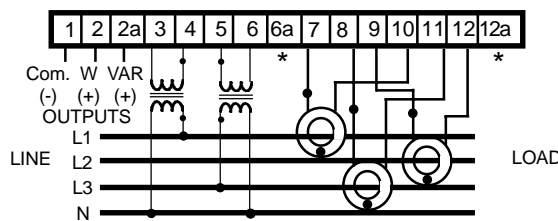
USING CURRENT TRANSFORMERS AND POTENTIAL TRANSFORMERS



*AC instrument power-terminals 6a, 12a, if not self-powered.

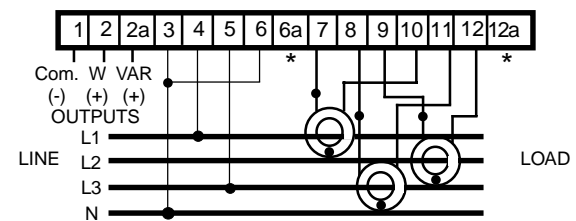
USING ONLY CURRENT TRANSFORMERS

THREE PHASE - FOUR WIRE CONNECTIONS (2 1/2 ELEMENTS)



*AC instrument power-terminals 6a, 12a.

USING CURRENT TRANSFORMERS AND POTENTIAL TRANSFORMERS



*AC instrument power-terminals 6a, 12a, if not self-powered.

USING ONLY CURRENT TRANSFORMERS

WATT / VAR TRANSDUCERS