OSI AC VAR TRANSDUCER — MODEL VAR5-

THREE PHASE 50/60 HZ

FEATURES

- Accurate, regardless of phase, voltage unbalance, current unbalance or power factor.
- Provides Leading/Lagging VAR indication.
- Not frequency sensitive.

APPLICATIONS

- Standard outputs provide signal for interface with meters, recorders, or data acquisition equipment.

THREE-PHASE, THREE-WIRE MODELS - INTERNAL SENSOR (TWO ELEMENT)

INPUTS		F.S. IN VARS	STANDARD OUTPUTS MODEL VAR5-							
VOLTS	AMPS		±1mAdc*	±1mAdc	±10Vdc*	±10Vdc	4-20mA	4-20mA**	±5Vdc*	±5Vdc
0 - 150	0 - 5	1000	004A	004B	004C	004D	004E	004E2	004CX5	004X5
	0 - 10	2000	013A	013B	013C	013D	013E	013E2	013CX5	013X5
	0 - 15	3000	022A	022B	022C	022D	022E	022E2	022CX5	022X5
	0 - 20	4000	112A	112B	112C	112D	112E	112E2	112CX5	112X5
0 - 300	0 - 5	2000	005A	005B	005C	005D	005E	005E2	005CX5	005X5
	0 - 10	4000	014A	014B	014C	014D	014E	014E2	014CX5	014X5
	0 - 15	6000	023A	023B	023C	023D	023E	023E2	023CX5	023X5
	0 - 20	8000	113A	113B	113C	113D	113E	113E2	113CX5	113X5
0 - 600	0 - 5	4000	006A	006B	006C	006D	006E	006E2	006CX5	006X5
	0 - 10	8000	015A	015B	015C	015D	015E	015E2	015CX5	015X5
	0 - 15	12000	024A	024B	024C	024D	024E	024E2	024CX5	024X5
	0 - 20	16000	114A	114B	114C	114D	114E	114E2	114CX5	114X5

*Denotes self-powered unit, voltage ranges limited to:
85 - 135 for 150V models
200 - 280 for 300V models
380 - 550 for 600V models
**4 - 20mA loop-powered unit (15 - 40Vdc).
All others require 85 - 135Vac instrument power, (50 - 60 Hz.)
All three-phase, four-wire voltage specifications are **line-to-neutral voltages**.
Optional 230Vac instrument power - Add suffix **"-22"**
Option **"EM"** provides 4-12-20mA output. (Leading/Lagging)

ORDERING INFORMATION

Example: Self-Powered Three-Phase, Three-Wire 120V, 5 Amp Input, with 0-5Vdc Output Proportional to 0-1000VAR.
VAR5-004CX5

5 YEAR WARRANTY

THREE-PHASE, FOUR-WIRE MODELS - INTERNAL SENSOR (THREE ELEMENT)

INPUTS		F.S. IN VARS	STANDARD OUTPUTS MODEL VAR5-							
VOLTS	AMPS		±1mAdc*	±1mAdc	±10Vdc*	±10Vdc	4-20mA	4-20mA**	±5Vdc*	±5Vdc
0 - 150	0 - 5	1500	007A	007B	007C	007D	007E	007E2	007CX5	007X5
	0 - 10	3000	016A	016B	016C	016D	016E	016E2	016CX5	016X5
L-N	0 - 15	4500	025A	025B	025C	025D	025E	025E2	025CX5	025X5
	0 - 20	6000	115A	115B	115C	115D	115E	115E2	115CX5	115X5
0 - 300	0 - 5	3000	008A	008B	008C	008D	008E	008E2	008CX5	008X5
	0 - 10	6000	017A	017B	017C	017D	017E	017E2	017CX5	017X5
L-N	0 - 15	9000	026A	026B	026C	026D	026E	026E2	026CX5	026X5
	0 - 20	12000	116A	116B	116C	116D	116E	116E2	116CX5	116X5

SPECIFICATIONS

INPUT

Voltage ..... See Tables
Current ..... See Tables
Frequency Range ..... 48 to 70 Hz
Response (Transient 90%)
With Internal sensors ..... < 100 microseconds
With Current transformers ..... 1 millisecond
Burden
Voltage and Current 1.25VA
Output amplifier ..... 2 Watts
Current Overload (continuous) ..... 5A,10A ..... 2 X F.S.
15A,20A ..... F.S.
Dielectric Test....(Input/Output/Case) ..... 1500Vac (RMS)
Surge ..... Withstands IEEE SWC test
Instrument Power 85-135Vac, 50/60 Hz,5VA
"**-22**" Option ..... 230Vac, 50/60Hz, ±15%

OUTPUT

+ = Lagging / - = Leading
ACCURACY ..... ± 0.5% F.S.
Includes combined effects of power factor, linearity,repeatability and current sensor.
Output Ripple ..... < 1% F.S.
Output Loading (Ohms)
±1mA 0-10K
±10Vdc ..... 2K min.
4-20mA (E) 0-1500
4-20mA (E2) ..... @24Vdc=0-600
@40Vdc=0-1400
±5Vdc ..... 2K min.
Response Time....(90%) ..... 250 milliseconds
Field Adjustable Cal. ..... ± 10%
Temperature Range ..... -10°C to +60°C
Temperature Effect ..... ±1.0% of Rdg, ±0.1% F.S. Output

OHIO SEMITRONICS, INC.
4242 REYNOLDS DRIVE * HILLIARD, OHIO * 43026-1264
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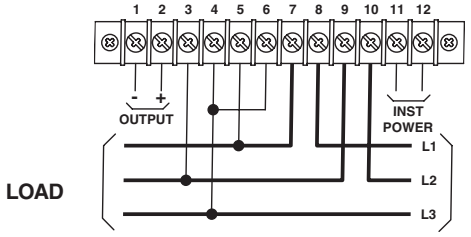
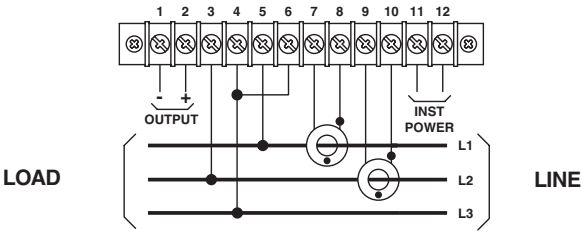
WWW.OHIOSEMITRONICS.COM * 1-800-537-6732

AC VAR TRANSDUCER — MODEL VAR5-

THREE PHASE, THREE-WIRE CONNECTIONS

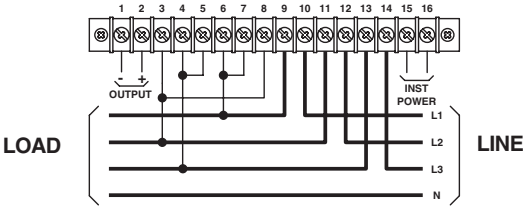


DIRECT CONNECTION

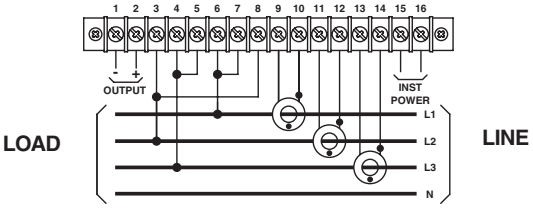


USING CURRENT TRANSFORMERS

THREE-PHASE, FOUR-WIRE CONNECTIONS

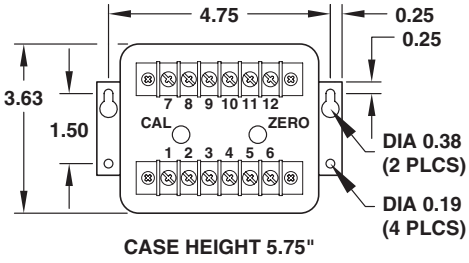


DIRECT CONNECTION



USING CURRENT TRANSFORMERS

CASE DIMENSIONS

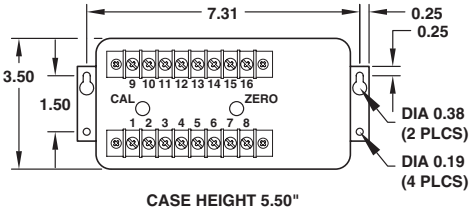


CASE HEIGHT 5.75"

THREE-PHASE, THREE-WIRE

(except models with 4-20mA output)

Weight: 3.7lbs



CASE HEIGHT 5.50"

THREE-PHASE, FOUR-WIRE

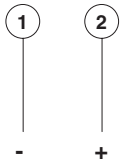
(also used for three-phase, three-wire models with 4-20mA output)

Weight: 4.2lbs

All Dimensions in Inches

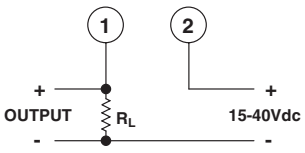
OUTPUT CONNECTIONS

A, B, C, D, E, X5, CX5 MODELS



0-5V, 10V, 1mA, 4-20mA

E2 MODELS



4-20mAdc LOOP POWERED

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