

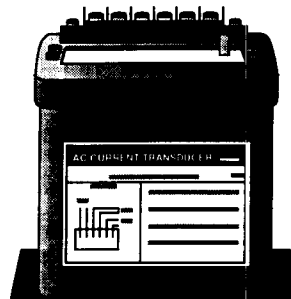


# OM9-31 "AC POWER" SERIES

## True RMS AC Current Transducer

### 0.2% Accuracy Class

Specification Sheet M1704/1293



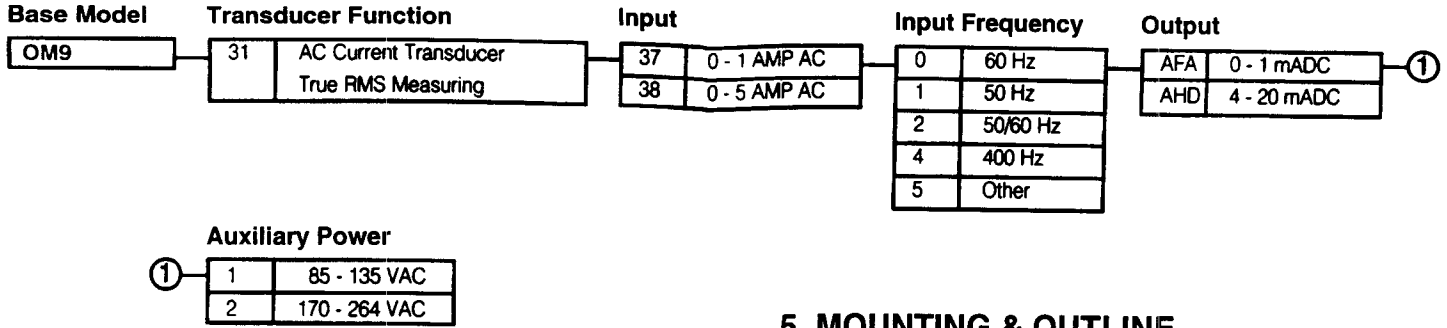
## 1. GENERAL

The Model OM9-31 Series is an externally powered AC Current Transducer with an analog output corresponding to the true RMS value of the input signal.

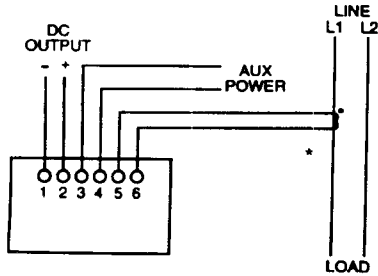
## 2. SPECIFICATIONS

Input Burden	< 0.2 VA
Input Over Range Capability	200% of Rated Input Continuous 1000% of Rated Input for 5 Seconds
Output Compliance	0 - 1 mADC = 10 VDC 4 - 20 mADC = 15 VDC
Accuracy 10 - 100% of Rated Input	0 - 1 mADC = $\pm 0.2\%$ of Fullscale 4 - 20 mADC = $\pm 0.2\%$ of Span
External Calibration Adjust	ZERO: $\pm 5\%$ Minimum SPAN: $\pm 10\%$ Minimum
Response Time	< 400 mSEC (0 - 99% of Output)
Output Ripple	$\pm 0.5\%$ of Span peak to peak max.
Isolation	2500 VAC Input to Output, Power & Case 2000 VAC Aux. Power to Output & Case 500 VAC Output to Case
SWC	IEEE472/ANSI C37.90.1 - 1989 JIS C1111 (5KV, 1.2 x 50 $\mu$ SEC)
Insulation Resistance	> 10 M $\Omega$ / 500 VDC Input / Output / Power / Case
Operating Temp.	-20° to + 60°C (-4.0° to 140°F)
Operating Humidity	0 - 90% Relative Humidity (Non-Condensing)
Temp. Drift	$\pm 140$ PPM / °C of Fullscale or Span
Weight	900 g (1.97 lb)
External Magnetic Field	< 0.2% at 400 A/m
Shock	< 0.2% after 50 G, 6 Axis, 3 Repetitions
Vibration	< 0.2% after 16.7 Hz, 4 mmp-p 1 HR, 3 Axis
Influence of Frequency	< 0.2%, 45-65 Hz, Fundamental thru 9th Harmonic

### 3. ORDER FORMAT OM9-31

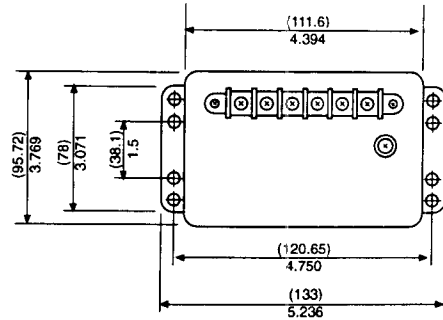


### 4. WIRING DIAGRAM

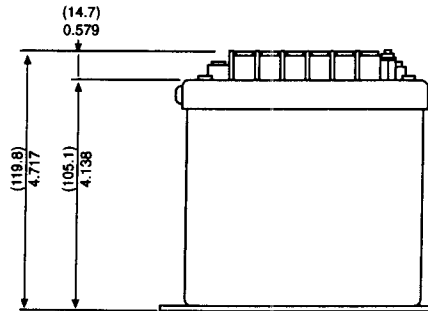


\* Wiring Diagram shows optional current transformer.

### 5. MOUNTING & OUTLINE



Dimensions shown in inches (mm)



Servicing USA and Canada: Call OMEGA Toll Free

<b>USA</b>	<b>Canada</b>
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### RETURN REQUESTS / INQUIRIES

Direct all warranty and repair requests/inquiries to the OMEGA ENGINEERING Customer Service Department. Call toll free in the USA and Canada: 1-800-622-2378, FAX: 203-359-7811; International: 203-359-1660, FAX: 203-359-7807.

BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, YOU MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OUR CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

FOR **WARRANTY** RETURNS, please have the following information available BEFORE contacting OMEGA:

1. P.O. number under which the product was PURCHASED,
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems you are having with the product.

FOR **NON-WARRANTY** REPAIRS OR **CALIBRATION**, consult OMEGA for current repair/calibration charges. Have the following information available BEFORE contacting OMEGA:

1. P.O. number to cover the COST of the repair/calibration, and
2. Model and serial number of product, and
3. Repair instructions and/or specific problems you are having with the product.

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### WARRANTY

OMEGA warrants this unit to be free of defects in materials and workmanship and to give satisfactory service for a period of **13 months** from date of purchase. OMEGA Warranty adds an additional one (1) month grace period to the normal **one (1) year product warranty** to cover handling and shipping time. This ensures that our customers receive maximum coverage on each product. If the unit should malfunction, it must be returned to the factory for evaluation. Our Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective it will be repaired or replaced at no charge. However, this WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of being damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components which wear or which are damaged by misuse are not warranted. These include contact points, fuses, and triacs.

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