

OM8-21 "AC POWER" SERIES

AC Current Transducer
0.2% Accuracy Class

Specification Sheet M1702/1293

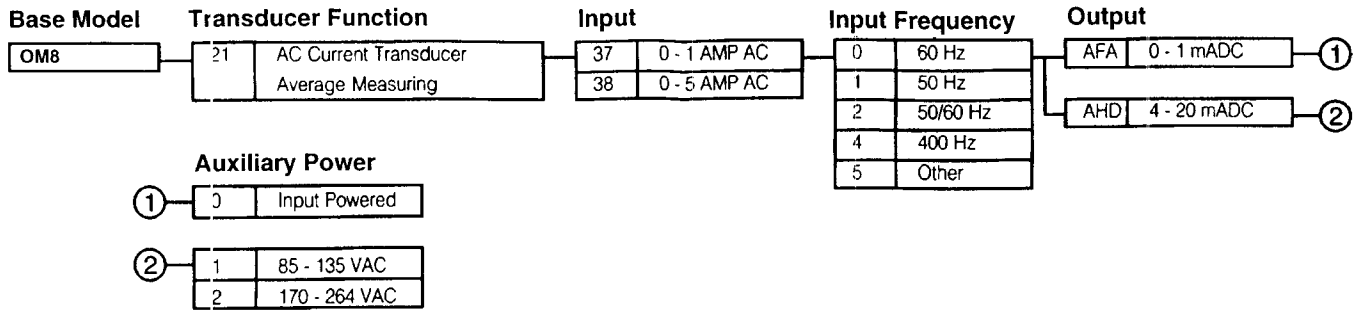
1. GENERAL

The Model CM8-21 Series is an AC Current Transducer with an output corresponding to the average value of the input signal. This transducer is calibrated to a true RMS AC Sine Wave.

2. SPECIFICATIONS

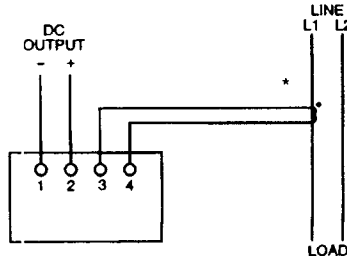
Input Burden	< 0.2 VA
Input Over Range Capability	200% of Rated Input Continuous 1000% of Rated Input for 5 Seconds
Output Compliance	0 - 1 mADC = 10 VDC 4 - 20 mADC = 15 VDC
Accuracy 10 - 100% of Rated Input	0 - 1 mADC = $\pm 0.2\%$ of Fullscale 4 - 20 mADC = $\pm 0.2\%$ of Span
External Calibration Adjust	ZERO : $\pm 5\%$ Minimum (AHD - only) 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 (AHD - only) 500 VAC Output to Case
SWC	IEEE472/ANSI C37.90.1 - 1989 JIS C1111 (5KV, 1.2 x 50 μ SEC)
Insulation Resistance	> 10 M Ω / 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	± 140 PPM/°C of Span
Weight	0 - 1 mADC : 358 g. (12.53 oz) 4 - 20 mADC : 897 g. (1.96 lb)
Ext. Magnetic Field	< 0.2% at 400 AT/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
Input Frequency Range	50 - 500 Hz < 0.2% Effect on Accuracy

3. ORDER FORMAT OM8-21



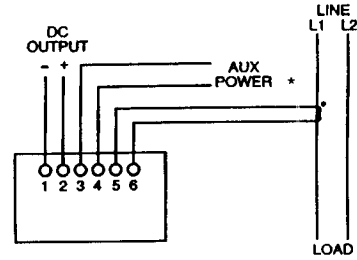
4. WIRING DIAGRAM

Input Powered



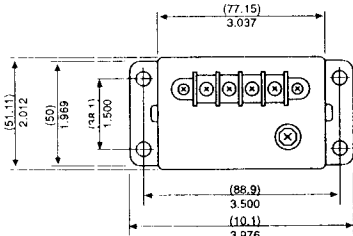
Auxiliary Powered

* Wiring Diagram shows optional current transformer.

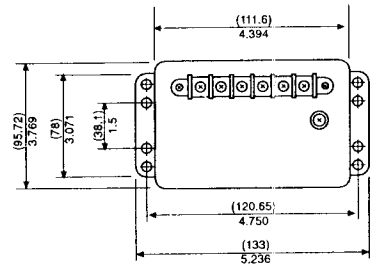


5. MOUNTING & OUTLINE

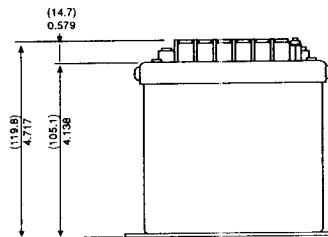
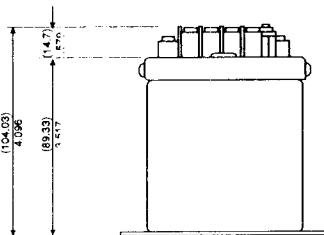
Input Powered



Auxiliary Powered



Dimensions shown in inches (mm)



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.

We are glad to offer suggestions on the use of our various products. Nevertheless, OMEGA only warrants that the parts manufactured by it will be as specified and free of defects. OMEGA MAKES NO OTHER WARRANTIES OR REPRESENTATIONS OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, EXCEPT THAT OF TITLE AND ALL IMPLIED WARRANTIES INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. LIMITATION OF LIABILITY: The remedies of buyer set forth herein are exclusive and the total liability of OMEGA with respect to this order, whether based on contract, warranty, negligence, indemnification, strict liability or otherwise, shall not exceed the purchase price of the component upon which liability is based. In no event shall OMEGA be liable for consequential, incidental or special damages.

Every precaution for accuracy has been taken in the preparation of this manual; however, OMEGA ENGINEERING, INC. neither assumes responsibility for any omissions or errors that may appear nor assumes liability for any damages that result from the use of the products in accordance with the information contained in the manual.

SPECIAL CONDITION: Should this equipment be used in or with any nuclear installation or activity, buyer will indemnify OMEGA and hold OMEGA harmless from any liability or damage whatsoever arising out of the use of the equipment in such a manner.



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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 of the repair/calibration,
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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