

TV0.3-28 Hardware Manual

P/N: EDO113 (Revision 1.02.00)



**Dedicated to the Science of
Motion**

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Revision History

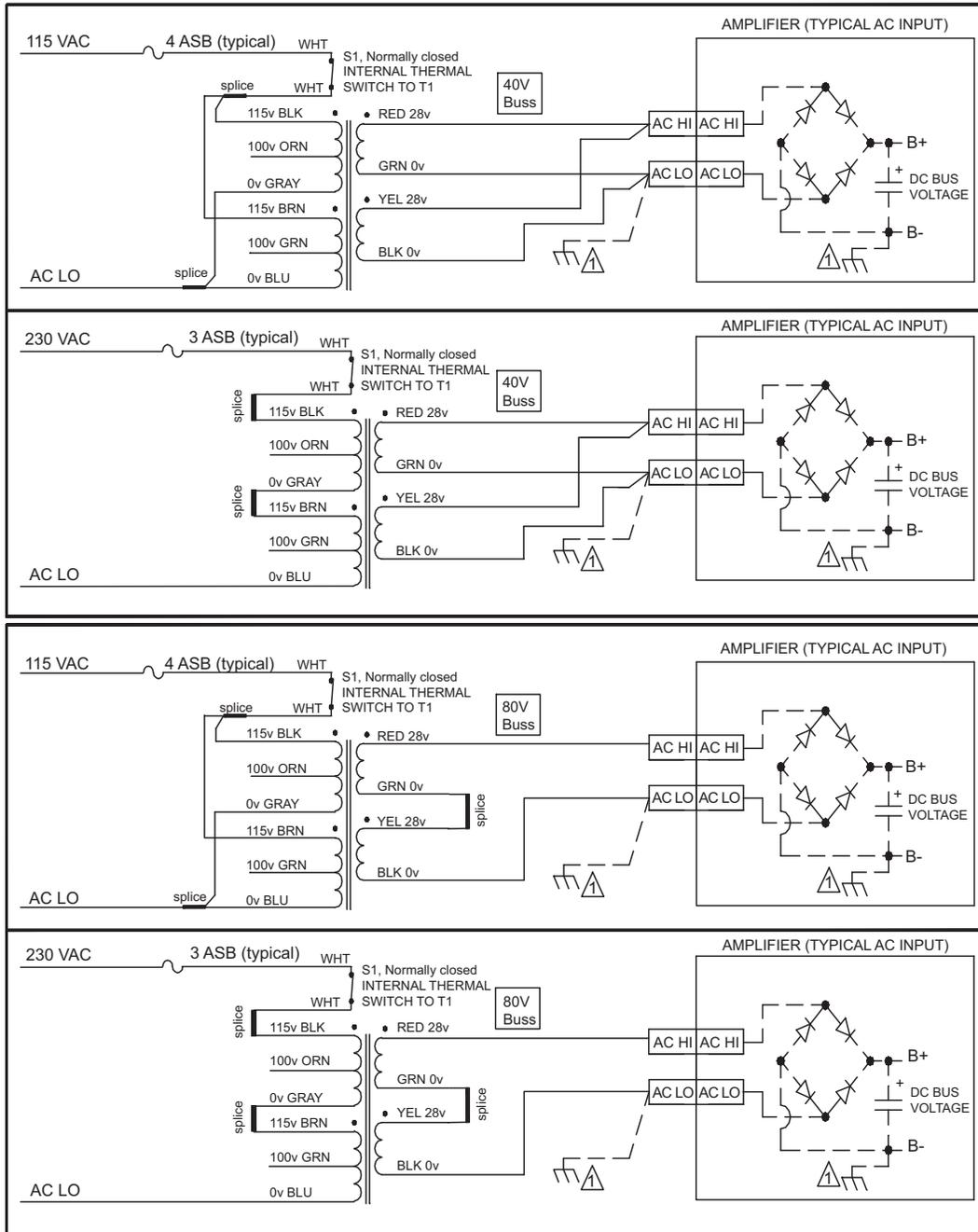
1.02.00	11/30/2011
1.01.00	06/09/2004
1.00.00	04/24/2000

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Chapter 1: TV0.3-28

The TV0.3-28 Transformer assembly is used with amplifiers when bus voltages below 160VDC are required (typically 40 or 80VDC). **Figure 1-1** shows the typical configuration for 115/230VAC input with 56/112VAC output, respectively.



⚠ With an isolation transformer, B- can be grounded to frame to reduce electrical noise. If B- cannot be easily accessed, the LO side of the transformer secondary should be connected to frame ground instead. DO NOT connect both the B- of the DC Bus supply and the AC LO side of the transformer secondary to frame ground at the same time.

Figure 1-1: Typical Transformer/Amplifier Configuration

Table 1-1: Electrical Specifications

Transformer	Aerotech EAX01007 Transformer
AC Input Configurations	115 VAC or 230 VAC (standard). 100 VAC and 200 VAC available upon request.
Operating Frequency	50/60Hz
Continuous Power	300 Watts, Max. @ 20°C. Additional cooling may be required.
Recommended Primary Fusing	100 VAC & 115 VAC require 4 ASB (Littelfuse PN: 313004 or Aerotech PN: EIF00104)
	200 VAC & 230 VAC require 3 ASB (Littelfuse PN: 313003 / Aerotech PN: EIF00103)
Thermal Production	Integral thermal switch (S1) is normally closed. Thermal switch opens when internal temperature of transformer reaches 110°C.
Secondary Winding Configuration	Secondary windings are matched for parallel operation and rated at 6 Arms.
	28 VAC (40 VDC Bus, 28 VAC windings connected in parallel)
	56 VAC (80 VDC Bus, 56 VAC windings connected in parallel)

Each transformer assembly is supplied with (2) 2-3/4" diameter metal hubs and (2) 2-7/8" diameter neoprene gaskets with associated hardware. [Figure 1-2](#) shows the typical mounting of a transformer.

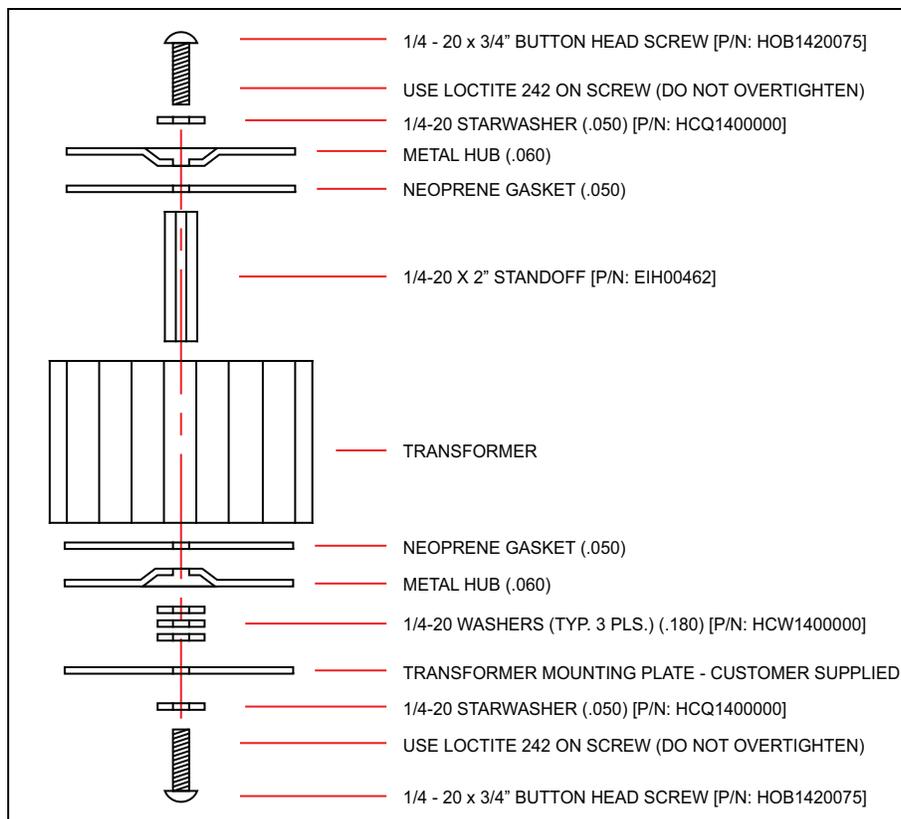


Figure 1-2: Typical Transformer Mounting

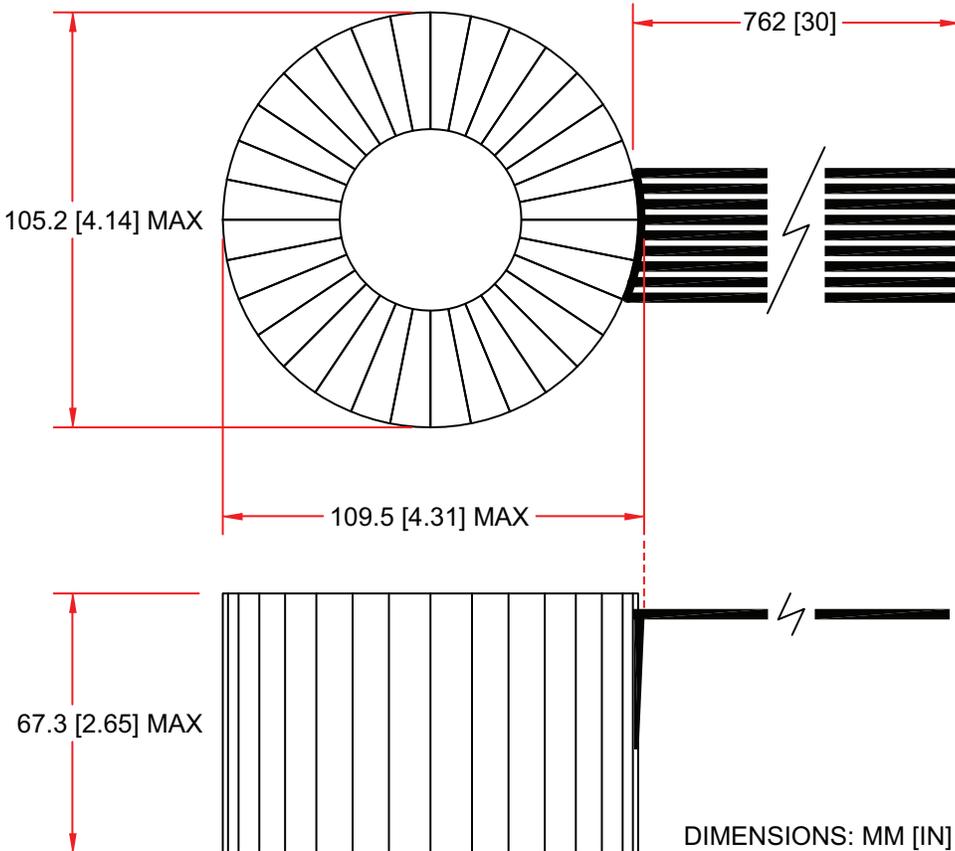


Figure 1-3: Transformer Dimensions

Appendix A: Warranty and Field Service

Aerotech, Inc. warrants its products to be free from defects caused by faulty materials or poor workmanship for a minimum period of one year from date of shipment from Aerotech. Aerotech's liability is limited to replacing, repairing or issuing credit, at its option, for any products that are returned by the original purchaser during the warranty period. Aerotech makes no warranty that its products are fit for the use or purpose to which they may be put by the buyer, where or not such use or purpose has been disclosed to Aerotech in specifications or drawings previously or subsequently provided, or whether or not Aerotech's products are specifically designed and/or manufactured for buyer's use or purpose. Aerotech's liability or any claim for loss or damage arising out of the sale, resale or use of any of its products shall in no event exceed the selling price of the unit.

Aerotech, Inc. warrants its laser products to the original purchaser for a minimum period of one year from date of shipment. This warranty covers defects in workmanship and material and is voided for all laser power supplies, plasma tubes and laser systems subject to electrical or physical abuse, tampering (such as opening the housing or removal of the serial tag) or improper operation as determined by Aerotech. This warranty is also voided for failure to comply with Aerotech's return procedures.

Laser Products

Claims for shipment damage (evident or concealed) must be filed with the carrier by the buyer. Aerotech must be notified within (30) days of shipment of incorrect materials. No product may be returned, whether in warranty or out of warranty, without first obtaining approval from Aerotech. No credit will be given nor repairs made for products returned without such approval. Any returned product(s) must be accompanied by a return authorization number. The return authorization number may be obtained by calling an Aerotech service center. Products must be returned, prepaid, to an Aerotech service center (no C.O.D. or Collect Freight accepted). The status of any product returned later than (30) days after the issuance of a return authorization number will be subject to review.

Return Procedure

After Aerotech's examination, warranty or out-of-warranty status will be determined. If upon Aerotech's examination a warranted defect exists, then the product(s) will be repaired at no charge and shipped, prepaid, back to the buyer. If the buyer desires an airfreight return, the product(s) will be shipped collect. Warranty repairs do not extend the original warranty period.

Returned Product Warranty Determination

After Aerotech's examination, the buyer shall be notified of the repair cost. At such time, the buyer must issue a valid purchase order to cover the cost of the repair and freight, or authorize the product(s) to be shipped back as is, at the buyer's expense. Failure to obtain a purchase order number or approval within (30) days of notification will result in the product(s) being returned as is, at the buyer's expense. Repair work is warranted for (90) days from date of shipment. Replacement components are warranted for one year from date of shipment.

Returned Product Non-warranty Determination

At times, the buyer may desire to expedite a repair. Regardless of warranty or out-of-warranty status, the buyer must issue a valid purchase order to cover the added rush service cost. Rush service is subject to Aerotech's approval.

Rush Service

On-site Warranty Repair If an Aerotech product cannot be made functional by telephone assistance or by sending and having the customer install replacement parts, and cannot be returned to the Aerotech service center for repair, and if Aerotech determines the problem could be warranty-related, then the following policy applies:

Aerotech will provide an on-site field service representative in a reasonable amount of time, provided that the customer issues a valid purchase order to Aerotech covering all transportation and subsistence costs. For warranty field repairs, the customer will not be charged for the cost of labor and material.

If service is rendered at times other than normal work periods, then special service rates apply. If during the on-site repair it is determined the problem is not warranty related, then the terms and conditions stated in the following "On-Site Non-Warranty Repair" section apply.

On-site Non-warranty Repair If any Aerotech product cannot be made functional by telephone assistance or purchased replacement parts, and cannot be returned to the Aerotech service center for repair, then the following field service policy applies:

Aerotech will provide an on-site field service representative in a reasonable amount of time, provided that the customer issues a valid purchase order to Aerotech covering all transportation and subsistence costs and the prevailing labor cost, including travel time, necessary to complete the repair.

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Appendix B: Current Changes

Table B-1: Revision 1.02.00 Manual Changes

Section	Description
Figure 1-3	Added dimensions

Table B-2: Manual Changes (Previous Revisions)

Revision	Section	Description
1.01.00	--	No Record of Changes
1.00.00		New Manual

