

# Round Dimmable Electronic Transformer 60/105/150/210W/VA Dimmable with Resistive and Inductive Dimmers

#### IMPORTANT NOTE TO THE INSTALLER

These instructions contain important information. Please ensure that a copy is left with the user/maintenance engineer.

#### WARNING

This product should be installed by a competent electrician in accordance with these instructions and the latest edition of the I.E.E. Wiring Regulations (BS 7671) and other relevant regulations (e.g Building, Fire etc).

For use with 12V tungsten halogen lamps in Class III low voltage luminaires only.

Isolate from the mains supply before installation or maintenance.

#### INSTALLATION INSTRUCTIONS

The mains supply should be connected to the Primary Input terminals as follows:

Black/Blue - Neutral (terminal marked N)

Red/Brown - Live (terminal marked L)

The output cables should be connected to the terminals marked SEC. Polarity is not important.

The transformer is suitable for integration into luminaires, for example floor/desk lamp bases, low voltage bar or plate luminaires or surface mounting.

IMPORTANT - If integrated into a luminaire ensure that the maximum ambient temperature at the point of integration does not exceed the maximum ta °C temperature marked on the transformer and in the table overleaf.

The transformer should be sited in a well ventilated position. Do not enclose or cover the transformer with thermal insulating materials. The ambient temperature during operation must not exceed the ta°C rating of the transformer.

Keep the transformer away from direct sources of heat such as low voltage lamps (see Figure 1 below).

Do not fit the transformer above the luminaire (see Figure 2 below).

Do not allow the input and output wiring to cross (see Figure 3 below).

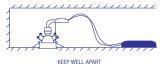
The transformer may be used in the same lighting circuit as inductive loads (fluorescent lamps etc) The transformer is protected against mains surges of up to 1.0kV (in accordance with EN61547).

The secondary (output) leads must not exceed 2m in length.

Ensure that the wattage of the lamps does not exceed the rating of the transformer.

Replace failed lamps immediately.

(Figure.1 - CORRECT Installation)

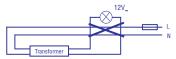


(Figure.2 - INCORRECT Installation)



(Figure.3)

DO NOT CROSS INPUT AND OUTPUT WIRING



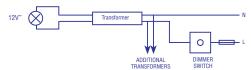
#### DIMMING

This transformer may be dimmed with most types of standard resistive and inductive dimmer switches. Install the dimmer switch on the <u>primary</u> (mains) side of the transformer.

A slight buzzing noise is normal with some types of dimmer switch. An increase in transformer noise may be experienced when dimmed.

The dimmer should be loaded to at least 75% of its maximum capacity (refer to the dimmer manufacturers' instructions).

- The 60VA transformer requires a minimum load of 20-Watts for normal operation.
  For dimming applications a minimum load of 35-Watts is required.
- The 105VA transformer requires a minimum load of 35-Watts for normal operation.
  For dimming applications a minimum load of 50-Watts is required.
- The 150VA transformer requires a minimum load of 50-Watts for normal operation.
  For dimming applications a minimum load of 75-Watts is required.
- The 210VA transformer requires a minimum load of 50-Watts for normal operation.
  For dimming applications a minimum load of 100-Watts is required.



INSTALLATION WITH DIMMER SWITCH

#### **RADIO INTERFERENCE**

In common with other high frequency convertors this product may cause radio interference.

Under certain circumstances interference may be experienced on the medium and long wave radio bands. Please note that these transformers are suppressed to all relevant EMC standards.

## THERMAL PROTECTION

The AU-RD105, AU-RD150 & AU-RD210 transformers feature an auto-reset thermal switch and will shut down in the event of overheating and re-start when the temperature returns to normal.

When installed, the transformer must have adequate air cooling to prevent overheating. Ensure that there is adequate distance from the lamp to prevent heat transfer (min. 200mm).

## FAULT FINDING/TESTING

Electronic transformers give little or no output unless connected to a load of the correct rating. To measure output voltage use a true r.m.s. A.C. voltmeter with a bandwidth>30Khz. The output cannot be measured with a standard multi-meter.

IMPORTANT - Do not use a Megger or similar insulation resistance tester on circuits with electronic transformers connected as permanent damage to the transformers may result. Disconnect the transformers before testing.

## **TECHNICAL DATA**

Model	Wattage	Pri. Current	Sec. Current	Ambient Temp.	Max. Case Temp.
AU-RD60E	20 - 60	0.25A	5A	-20 to +50C	+80C
AU-RD60	20 - 60	0.27A	5A	-20 to +50C	+75C
AU-RD105	35 - 105	0.43A	9A	-20 to +45C	+75C
AU-RD150	50 - 150	0.62A	13A	-20 to +45C	+80C
AU-RD210	50 - 210	0.87A	18.5A	-20 to +45C	+80C

## Environmental Protection (W.E.E.E.) - Aurora's WEEE Reg.No. WEE/BG0130YX



Waste Electrical & Electronic Equipment Regulations (WEEE) requires that any of our products showing this marking (left) must not be disposed of with other household or commercial waste. Aurora does not levy any WEEE disposal charges to its customers for affected WEEE related products. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate any such product from other

waste types and recycle it responsibly at your local facilities. Check with your Local Authority, Recycling Centre or retailer for recycling advice. If, when you purchased any Aurora product, your supplier included a WEEE disposal fee, you should then contact your supplier for advice on his takeback of the product for the correct disposal.

### GUARANTEE

This product is guaranteed for a period of 10 years from purchase. Should this product fail during the guarantee period it will be replaced free of charge, subject to correct installation and return of the faulty unit. The guarantee is invalid in the case of improper use or installation, tampering, removal of the Q.C. date label, installation in an improper working environment or installation not in accordance with the current edition of the I.E.E. Wiring Regulations (BS 7671). Aurora does not accept responsibility for any installation or site visit costs associated with replacement of this product. Aurora reserve the right to alter specifications without prior notice.







EN61347 EN61547















