# File E328847 Project 12SC04246

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REPORT

On

COMPONENT - DRIVERS FOR LIGHT-EMITTING-DIODE ARRAYS, MODULES AND CONTROLLERS

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## DESCRIPTION

#### PRODUCT COVERED:

USR/CNR - LED Driver, Models AC-A150V36AEA, AC-A150VD36AEB, AC-A150V36H4.2 and AC-A150VD36H4.2. Suitable for Damp Location.

#### GENERAL:

The units are switch-mode isolating power supply. The units consist of transformers and other related electronic circuitry provided with input/output pigtail leads for connection in the end-product application. The output of the driver is a constant voltage design. The power supply may also be provided with a Suffix "D" incorporated in the part number for a dimming circuit options, where the application of a 0-10Vdc source in the secondary which operates at maximum normal load when the dimmer is set at 10V or if the dimmer circuit is not connected to the unit.

### ELECTRICAL RATINGS:

Model Number	Input	Input	Frequency	Output	Output	Max.
	Voltage	Current	(Hz)	Voltage	Current	Output
	(Vac)	(A)		(Vdc)	(A)	Power
						(W)
AC-	120-277	1.48/0.62	50/60	36	4.2	150W
A150VD36H4.2				30	5.0	
AC-	120-277	1.48/0.62	50/60	36	4.2	150W
A150V36H4.2				30	5.0	
AC-	120-277	1.48/0.62	50/60	36	4.2	150W
A150VD36AEB						
AC-	120-277	1.48/0.62	50/60	36	4.2	150W
A150V36AEA						

TECHNICAL CONSIDERATIONS (NOT FOR UL FIELD REPRESENTATIVE USE):

Use - For use only in (or with) complete equipment where the acceptability of the combination is determined by UL LLC.

USR - Indicates investigation to the United States requirements UL Standard for Safety for Light Emitting Diode (LED) Equipment for Use In Lighting Products, UL 8750.

CNR - Indicates investigation to the Canadian Standard for the Standard for Light Emitting Diode (LED) Equipment for lighting applications, CSA C22.2 No. 250.13. Either the Canadian Standards Association Certification or Component Acceptance Mark or the UL Listing or UL Recognition Mark for Canada.

Spacing's have been evaluated in accordance with an Overvoltage Category II and Pollution Degree 1 (potted enclosure) per Exception #1 of cl. 7.8.3 of UL 8750 (with live parts to enclosure spacing's evaluated per Table 7.6) and CSA C22.2 No. 107.1 via the CSA Reference Standard C22.2 No. 0.2 for

voltages  $> 250 \, \mathrm{Vac}$  per cl. 4.17.1 and Table 6 (which included live parts to enclosure).

Conditions of Acceptability - When installed in the end-product equipment, the following are among the considerations to be made:

- 1. The driver shall be installed in compliance with the enclosure, mounting, spacing, casualty, temperature, and segregation requirements of the end-product application.
- 2. The driver utilizes a Class F (155 $^{\circ}$ C) insulation system for Transformer T2 and T1.
- 3. The driver was temperature tested with a case temperature of  $90^{\circ}\text{C}$  above T2.
- 4. The product was tested while connected to a 20A branch circuit.

  Additional testing shall be considered in the end-product if used on a branch circuit greater than 20A.
- 5. The product is provided with input, output and dimmer pigtail leads. The suitability of the leads shall be determined in the end-product application.
- 6. Test was conducted using resistive and/or electronic loads resulting in an output rating current as note in the electrical ratings table.
- 7. The driver has been evaluated for use in Dry and Damp location. The use of other environmental locations shall be considered in the end product.
- 8. Humidity Test was waived due to the diver is fully potted. The need for conducting Humidity Test is to be determined as part of the end-product evaluation.
- 9. Models provided with a suffix "D" indicates a dimming circuit for connection to a  $0-10{\rm Vdc}$  dimming source, and additional evaluation is to be considered as part of the end-product evaluation.