

File E328847  
Project 08CA10576

August 14, 2009

REPORT

On

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

Antron Electronics Co. Ltd  
Taiwan

Copyright © 2009 Underwriters Laboratories Inc.

Underwriters Laboratories Inc. authorizes the above named company to reproduce this Report provided it is reproduced in its entirety.

Underwriters Laboratories Inc. authorizes the above-named company to reproduce the latest pages of that portion of this Report consisting of this Cover Page through Page 2.

## DESCRIPTION

## PRODUCT COVERED:

USR, CNR - **Class 2** LED Driver, Models Nos. **AC-05C350UVN**, **AC-05C500UVN**, AC-05C700UVN, AC-05C1050UVN, AC-12C1050H, AC-12C350UVH, AC-12C500UVH, AC-12C700UVH, AC-12C1050UVH, AC-24C1050H, and AC-24C1050UVH.

USR (**Class 2**), CNR (**LVLE**) - LED Driver, Models Nos. AC-12C350H, AC-12C500H, AC-12C700H, AC-D12C350UVH, AC-D12C500UVH, AC-D13C700UVH, AC-D12C700UVH, and AC-24C700UVH, AC-24C700UVBMH, AC-23CD670AKQ.

## ELECTRICAL RATINGS:

Cat. No.	Input Voltage (V)	Input Current (mA)	Max Output Voltage (Vdc)	Output Current (mA)	Output Power (W)
* <b>AC-05C350UVN</b>	120-277	117	<b>20</b>	350	6.3
<b>AC-05C500UVN</b>		120	13	500	6.5
AC-05C700UVN		129	9	700	6.3
* AC-5C1050UVN		137	<b>8</b>	1000	6.0
AC-12C350H	120	157	42	350	14.7
AC-12C500H		168	30	500	15.0
AC-12C700H		177	21	700	14.7
*AC-12C1050H		172	<b>17</b>	1000	14.0
AC-12C350UVH	120-277	154	42	350	14.7
AC-12C500UVH		163	30	500	15.0
AC-12C700UVH		169	21	700	14.7
AC-12C1050UVH		174	<b>18</b>	1000	14.0
* AC-24C1050H	120	294	<b>32</b>	1000	28.0
AC-D12C350UVH	120-277	296	42	350	29.4
AC-D12C500UVH		309	30	500	30.0
AC-D13C700UVH		296	21	700	29.4
AC-D12C700UVH					
AC-24C700UVH		303	42	700	29.4
AC-24C700UVBMH					
AC-23CD670AKQ					
* AC-4C1050UVH	309	<b>33</b>	1000	28.0	

## TECHNICAL CONSIDERATIONS (NOT FOR UL FIELD REPRESENTATIVE USE):

This component has been judged on the basis of the spacings required in the Standard for Light Emitting Diode (LED) Light Sources for Use In Lighting Products, Subject 8750, Issue 3, July 22, 2008, Section 7.10, which would cover the component itself if submitted for Listing. This product complies with NEC Class 2 output limits only.

USR - Indicates investigation to the United States requirements for the Outline of Investigation for Light Emitting Diode (LED) Light Sources for Use In Lighting Products, Subject 8750, Issue 3, July 22, 2008; the Standard for Fluorescent Ballast, UL 935, Tenth Ed.; and the Standard for Class 2 Power Units, UL 1310, Fifth Ed.

CNR - Indicates investigation to the Canadian Standard for Luminaires, CSA C22.2 No. 250.0-08; and the Standard for Power Supplies with Extra-Low-Voltage Class 2 Outputs, CAN/CSA-C22.2 No. 223-M91 dated June 1991 (Reaffirmed 2003).

## Electrical Schematic -

Models	ILL.NO.
<b>AC-05C350UVN</b> , <b>AC-05C500UVN</b> , AC-05C700UVN and AC-05C1050UVN	1
AC-12C350H, AC-12C500H, AC-12C700H and AC-12C1050H	2
AC-12C350UVH, AC-12C500UVH, AC-12C700UVH and AC-12C1050UVH	3
AC-24C1050H	4
AC-D12C350UVH, AC-D12C500UVH, AC-D13C700UVH AC-D12C700UVH, AC-24C700UVH, AC-24C700UVBMH, AC-23CD670AKQ and AC-24C1050UVH.	5

## Conditions of Acceptability -

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

1. These products are rated with a Tc location that is located on a label. See ILLS. 30 and 31 for the exact location of Tc. The maximum rated case enclosure temperature at the Tc location shall not exceed 90°C in the end product application.
2. The units are not provided with an external grounding connection. Consideration for connecting the metal enclosure to a suitable grounding point shall be considered in the end product.
3. The products were tested while connected to a 20 A branch circuit. If used on a branch circuit greater than 20 A, additional testing may be necessary and shall be considered in the end product.

## Conditions of Acceptability - (CONT.)

- 4.\* The LED supplies have been evaluated using the following loads resulting in a maximum input current as noted. The need for repeating tests related to heating **b** shall be considered in the end product.

Model	Input Voltage (V)	Max. Resistive Load (W)	Max. Input Current (mA)
<b>AC-05C350UVN</b>	120	6.3	120
	277	6.3	70
AC-05C500UVN	120	6.5	122
	277	6.5	67
AC-05C700UVN	120	6.3	122
	277	6.3	67
AC-05C1050UVN	120	6.0	122
	277	6.0	67
AC-12C350H	120	14.7	141
AC-12C500H	120	15.0	141
AC-12C700H	120	14.7	141
AC-12C1050H	120	14.0	160
AC-12C350UVH	120	14.7	157
	277	14.7	70
AC-12C500UVH	120	15.0	157
	277	15.0	70
AC-12C700UVH	120	14.7	157
	277	14.7	70
AC-12C1050UVH	120	14.0	165
	277	14.0	75
AC-24C1050H	120	28.0	305
AC-D12C350UVH	120	29.4	325
	277	29.4	143
AC-D12C500UVH	120	30.0	325
	277	30.0	143
AC-D13C700UVH	120	29.4	325
AC-D12C700UVH	277	29.4	143
AC-24C700UVH	120	29.4	325
AC-24C700UVBMH	277	29.4	143
AC-23CD670AKQ			
AC-24C1050UVH	120	28.0	309
	277	28.0	135

5. The products are provided with leads for connection to the supply and output load (no Field Wiring). The suitability of the wiring means and the need for the units to be installed in an overall enclosure shall be considered in the end product application.

## CONSTRUCTION DETAILS:

General - See the Sec. General.

Markings - Each unit is legibly and permanently marked with the following and as shown in ILL. 30. If a label is used, it shall be rated minimum 105°C.

Information Marking - Includes company name or file number, model number, and optional date of manufacture by date code as noted below.

## DATE CODE

Date code - Consists of: "Year". "Month", "Date" by serial number.

Example - AA.01

AA: Year, AA=2005, AB=2006, AC=2007...

01 : Week, 01= first week, 02= second week...