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REPORT

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

Antron Electronics Co. Ltd
Taiwan

DESCRIPTION

PRODUCT COVERED:

USR, CNR – Class 2 LED Driver, Models AC-A25V12H2.08, AC-A25VD12H2.08, AC-A60V12H5.0, AC-60V12A5.0LL, AC-A60VD12H5.0, AC-60VD12A5.0LL, AC-A12V24H0.5, AC-A25V24H1.04, AC-A25VD24H1.04, AC-A25V24H1.04C, AC-A50V24H2.1C, AC-60V24A2.5PF, AC-A60V24H2.5, AC-A60VD24H2.5, AC-60VD24AER, AC-60VD24H2.5DK, AC-A100V24H4.1, ACA100VD24H4.1C, AC-A100VD24H4.1 AC100VD24A4.1PG, AC60VD48A1.25NA, AC-60VD36B1.7LW, **AC-60VD24B2.5LV**, AC-60VD12B5.0LU

GENERAL:

The units are switch-mode isolating power supply with Class 2 output. The units consist of transformers and other related electronic circuitry provided with input/output pigtail leads or terminal block connectors for connection in the end-use application. Units with D suffix employ 0-10V dimming input leads.

ELECTRICAL RATINGS:

Cat. No.	Input Voltage (V)	Input Current (A)	Output Voltage (Vdc)	Output Current (A)	Output Power (W)
AC-A25V12H2.08	120-277	0.27-0.12	12	2.08	25
AC-A25VD12H2.08		0.27-0.12	12	2.08	25
AC-A60V12H5.0 AC-60V12A5.0LL		0.61-0.27	12	5	60
AC-A60VD12H5.0 AC-60VD12A5.0LL		0.61-0.27	12	5	60
AC-60VD12B5.0LU	**347**	**0.2**	**12**	**5**	**60**
AC-A12V24H0.5	120-277	0.14-0.06	24	0.5	12
AC-A25V24H1.04		0.26-0.12	24	1.04	25
AC-A25VD24H1.04		0.26-0.12	24	1.04	25
AC-A25V24H1.04C		0.26-0.12	24	1.04	25
AC-A50V24H2.1C		0.49-0.21	24	2.1A	50
AC-60V24A2.5PF AC-A60V24H2.5		0.6-0.26	24	2.5	60
AC-A60VD24H2.5		0.6-0.26	24	2.5	60
AC-60VD24AER		0.6-0.26	24	2.5	60
AC-60VD24H2.5DK		0.6-0.26	24	2.5	60
AC-A100V24H4.1		0.98-0.42	24	4.1	100
AC-A100VD24H4.1 AC100VD24A4.1PG		0.98-0.42	24	4.1	100
ACA100VD24H4.1C		0.98-0.42	24	4.1	100
AC-60VD24B2.5LV	**347**	**0.2**	**24**	**2.5**	**60**
AC-60VD36B1.7LW	**347**	**0.2**	**36**	**1.67**	**60**
AC60VD48A1.25NA	**120-277**	**0.6-0.26**	**48**	**1.25**	**60**

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 Underwriters Laboratories Inc.

USR – Indicates investigation to the United States requirements for Light Emitting Diode (LED) Equipment for Use In Lighting Products, UL 8750 and the Standard for Class 2 Power Units, UL 1310.

CNR – Indicates investigation to the Canadian Standard for the Standard for Power Supplies with Extra-Low-Voltage Class 2 Outputs, CAN/CSA-C22.2 No. 223.

CN – Either the Canadian Standards Association Certification or Component Acceptance Mark or the UL Listing or UL Recognition Mark for Canada.

PWB spacing have been evaluated in accordance with UL 1310, Clause 24.5 per the Standard for Insulation Coordination Including Clearances (Controlled Over-voltages) and Creepage Distances for Electrical Equipment, UL 840, Tables 8.1, 9.1 for an Overvoltage Category II and Pollution Degree 1 (potted enclosure) and CSA C22.2 No. 223, Clause 4.10.6 and CSA C22.2 No. 107.1 via the CSA Reference Standard C22.2 No. 0.2 for voltages > 250Vac.

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

1. The power supply shall be installed in compliance with the enclosure, mounting, spacing, casualty, temperature, and segregation requirements of the end-use application.

*2. All units utilize a Class B **or F** primary to secondary isolation transformer (T2) except for **Model** ACA100VD24H4.1C which is designated T3.

*3. The drivers were temperature tested in a static oven **at temperature as outline in the table below**. The maximum temperatures recorded on the **isolation** transformer and the enclosure above the transformer is as follows:

Model	Coil Temp (°C)	Enclosure (°C)	Ambient
AC-A12V24H0.5	70.0 **– Class B**	58.8	40
AC-A50V24H2.1C	85.5 **– Class B**	65.7	40
AC-A60VD12H5.0 AC-60VD12A5.0LL	99.2 **– Class B**	79.5	40
AC-A100VD24H4.1 AC100VD24A4.1PG	98.4 **– Class B**	82.2	40
AC-60VD24AER	106.0 **– Class B**	90.0	65
AC-60VD24H2.5DK	80.0 **– Class B**	--	45
ACA100VD24H4.1C	106.0 **– Class B**	74.0	45

Model is representative of Models AC60VD48A1.25NA, AC-60VD36B1.7LW, **AC-60VD24B2.5LV**, **and** AC-60VD12B5.0LU

4. The products were tested while connected to a 20A branch circuit. Additional testing shall be considered in the end-use product if used on a branch circuit greater than 20A.

5. The products are provided with input and output pigtail leads. The suitability of the leads shall be determined in the end-use application.

6. The input/output terminal blocks used on Model AC-A25V24H1.04C and AC-60VD24H2.5DK shall not exceed 95°C during temperature testing.

7. Tests were conducted using resistive and or electronic loads.

*8. Separation of dimming and output wiring shall be considered during the end product evaluation **for Model** AC-60VD24H2.5DK.

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9. Models AC60VD48A1.25NA comply with LVLE requirements per CSA C22.2 No. 250.13-12, Annex A and CSA Informs Ref. No. I13-020 and therefore may be marked Class 2 for Canada provided they include an identifier such as “LED Driver”, “LED Power Supply”, “LED Control gear” or similar. These outputs shall not be accessible and shall be determined in the end-use application.