File E318351
Project 4789283251

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REPORT

on

POWER SUPPLIES FOR USE WITH AUDIO/VIDEO, INFORMATION AND COMMUNICATION TECHNOLOGY EQUIPMENT FOR USE IN HAZARDOUS LOCATIONS – COMPONENT

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DESCRIPTION

PRODUCT COVERED:

USR, CNR – Component - Power Supplies For Use With Audio/Video, Information And Communication Technology Equipment for use in Class I, Division 2, Groups A, B, C, D Hazardous Locations.

Switch mode power supply model DRF240-24-1/HLSLC-xyz. HL - designates model provided with coating. SLC indicates that it is an Open Type Component. Suffix -xyz is any alphanumeric used for marketing purposes.

GENERAL:

These devices are open type power supply modules intended to be used in combination with Industrial Control Equipment, providing a single 24 Vdc output. The devices are intended to be installed in an enclosure providing adequate protection for the end-use environment.

These products shall comply with ordinary locations File E135494, Vol. X116, Sec. A6025, issued date 2020-04-30, Power Supplies For Use With Audio/Video, Information And Communication Technology Equipment – Component [QQJQ2/8], covering for this manufacturer and with the following description. Should the Procedure File E135494, Vol. X116, Sec. A6025, issued date 2020-04-30 be withdrawn, labeling under this Procedure must be discontinued until authorization to resume is received.

TECHNICAL CONSIDERATIONS:

USR – Indicates investigated to UL121201 Nonincendive Electrical Equipment for Use in Class I and II, Division 2 and Class III, Divisions 1 and 2 Hazardous (Classified) Locations, Edition 9, Revision Date 2019/08/26

CNR - Indicates investigated to CSA C22.2 No. 213-17 Nonincendive Electrical Equipment for Use in Class I and II, Division 2 and Class III, Divisions 1 and 2 Hazardous (Classified) Locations, Edition 3, Revision Date 2019/08/26

CONDITIONS OF ACCEPTABILITY

1. These devices are considered as components and shall be installed in a suitable end-use enclosure, and shall only be accessible with the use of a tool.

2. This equipment shall be temperature tested in end-use application.

    a. The sealed device relays RL11 and RL301 shall not exceed 85 °C at the seal in end-use application.

    b. For a temperature rating of T4, the surface temperature of component A201 (Integrated circuit, dimensions of 5 mm x 4 mm x 1.75 mm corresponding to a surface area of approximately 72 mm^2) must not exceed 200°C, and must not exceed 135°C on all other components.

RATINGS:

Model	Input Ratings	Output Ratings
DRF240-24-1/HLSLC-xyz	100 – 240 Vac, 50/60 Hz, 2.7 A	25.6 to 30 Vdc 8A; Max. output power: 240 W

Surrounding air temperature range, -25°C ≤ Ta ≤ +60°C at 100% load; from +60°C de-rate linearly 2.5%/°C to +70°C to a maximum load of 180W.

MARKING:

The following markings shall appear on the device in addition to ordinary locations marking under File E135494, Vol. X116, Sec. A6025, issued date 2020-04-30.

All required markings described are either permanently ink-stamped, silk-screened or are provided on R/C PGDQ2 self-adhesive labels suitable for adhesion to the surface used.

1. Listee’s name or trademark or File Number.

2. Catalog number.

3. Electrical ratings as per Ratings section.

4. Hazardous Locations Class, Groups, and Divisions as found under Product Covered.

5. Surrounding air temperature range, -25°C ≤ Ta ≤ +60°C or +70°C (See Ratings)

The following items are optional for R/C:

6. Date code.

7. Temperature code T4.

8. The symbol  directing the user to additional information in the instructions.