File E476231
Project 4786880597

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REPORT

on

POWER CIRCUIT AND MOTOR-MOUNTED APPARATUS FOR USE IN HAZARDOUS LOCATIONS

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United Kingdom

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DESCRIPTION

PRODUCT COVERED:

USL, CNL – Open Type Industrial Control Equipment for use in Class I, Division 2, Groups A, B, C, D Hazardous Locations.

Switch mode power supply model DRF240-24-1-xyz; DRF240-24-1/HL-xyz; **DRF240-24-1/HLIVS-xyz**, where x, y and z can be any alphanumeric character or blank and is non safety relevant information. HL - designates model provided with coating. **HLIVS - designates model provided with coating and designates a DC input option. The Model DRF240-24-1/HLIVS-xyz has a lower Over Voltage Protection (OVP) setting in comparison to the model DRF240-24-1-xyz.**

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.

* Models DRF240-24-1-xyz and DRF240-24-1/HL-xyz are identical **except** model **DRF240-24-1/HL-xyz** is provided with coating.

Model DRF240-24-1/HLIVS-xyz is identical to model DRF240-24-1-xyz except model DRF240-24-1/HLIVS-xyz is provided with coating and designates a DC input option. The Model DRF240-24-1/HLIVS-xyz has a lower Over Voltage Protection (OVP) setting in comparison to the model DRF240-24-1-xyz.

These products shall comply with ordinary locations File E362999, issued date 2014-06-27, Power Circuit and Motor-Mounted Apparatus, covering for this manufacturer and with the following description. Should the Procedure File E362999, issued date 2014-06-27 be withdrawn, labeling under this Procedure must be discontinued until authorization to resume is received.

TECHNICAL CONSIDERATIONS:

*CNL - Indicates investigated to CSA C22.2 NO. 213-M1987 **Non-Incendive Electrical Equipment for Use in Class** I, **Division** 2 **Hazardous Locations** (1987 **Edition)** - Edition 1 - Issue Date 1987/03/01

*USL – Indicates investigated to ISA 12.12.01 **Nonincendive Electrical Equipment for Use in Class** I **and** II, **Division** 2, **and Class** III, **Divisions** 1 **and** 2 **Hazardous (Classified) Locations** - Edition N/A - Issue Date 2013/06/03

RATINGS:

Table 1

Model	Input Ratings	Output Ratings	Temperature Code
DRF240-24-1-xyz; DRF240-24-1/HL-xyz	100-240 Vac, max 2.7A, 50/60 Hz	24-28 Vdc, 10-8.6 A Max. output power: 240 W	T4
DRF240-24-1/HLIVS-xyz	**100 – 240 Vac, 50/60 Hz, 2.7 A** **108 - 145 Vdc, 2.7 A**	**22.5-25.5 Vdc** **10-9.4A;** **Max. output power:** **240 W**	**T4**

Ambient temperature range, $-25^{o}C \leq Ta \leq +60^{o}C$ at 100 % load; from $+60^{o}C$ de-rate linearly $2.5\%/^{o}C$ to $+70^{o}C$