DESCRIPTION

PRODUCTS COVERED:

USL, CNL – Switching power supplies, Models RWS150B-5, RWS150B-12, RWS150B-24; may be followed by suffix "abc" (a is /, b is CO2, c is FG or DIN, and **"a", "b", and "c" may be blank).**

GENERAL:

These devices are open-type switching power supplies, employing an Isolating-Type, Step-down Transformer and related circuitry enclosed within a metallic cover. These power supplies are intended for use in industrial control applications, in a pollution degree 2 environment.

ELECTRICAL RATINGS:

Model	Power Input			Power Output		
	V (ac)	Hz	A	V (dc)	A (max.)	w (max.)
RWS150B-5	100-240	50-60	1.5	5 (4.5-5.75)	21	105
RWS150B-12	100-240	50-60	1.9	12 (10.8-13.8)	13	156
RWS150B-24	100-240	50-60	1.9	24 (21.6-27.6)	6.5	156

ENVIRONMENTAL RATINGS:

Maximum surrounding air temperature rating: 70°C @

Note: @ - The permissible max. surrounding air temperature rating is specified in the derating curve related to the load by which the output current would be consumed. See ILL. 1.

TECHNICAL CONSIDERATIONS (NOT FOR UL REPRESENTATIVE'S USE):

USL - Indicates Investigated To UL 508, Standard for Industrial Control Equipment.

CNL – Indicates Investigated To Canadian National Standard(s) CSA C22.2 No. 107.1-01.

Note: CNL = Canadian National Standards – Listed
USL = United States Standards – Listed

CONSTRUCTION DETAILS

* Spacings were evaluated to the standard for Industrial Control Equipment – UL 508, 17th Edition, Table 36.3 other than at **field** wiring terminal for pollution degree 2 and Table 36.4 at **field** wiring terminal for pollution degree 2. CSA C22.2 No. 107.1-01, Standard for General Use Power Supply, Table 6 power supply for use in controlled environment and Table 8 printed circuit board for use in controlled environment, Transient not Limited Uncoated.

Corrosion Protection – All ferrous metal parts are suitably protected against corrosion by painting, plating or the equivalent.

Connections – All electrical connections made by wiring mechanically secured before soldering, or terminated in Listed closed-loop type, unturned-end type, or male/female quick-disconnect type connectors with positive engagement.

Printed Wiring Boards – R/C (ZPMV2), rated min. V-1, 130°C. Comply with Direct Support Requirements. (Maximum PLC (Lesser Number) - HWI (4), HAI(3), CTI(3); or Meet UL 796 DSR). May be conformally coated with R/C (QMJU2).

Installation and Operating Instructions - An installation manual or similar shall be provided with each a shipping container of the devices that is directly to users for the proper installation and operation of the device. As indicated in the Marking section, some markings may be located in the installation and operating instruction manuals.

Summary of Figures and Illustrations – The following figures and illustrations are included in this Report.

FIG or ILL. No.	Description
FIG. 1, FIG. 2	Overall view
FIG. 3	Internal view
ILL. 1	Derating Curve
ILL. 2	PWB Trace
ILL. 3	Insulation Sheet
ILL. 4	Transformer T1 for model RWS150B-5
ILL. 5	Transformer T1 for model RWS150B-12
ILL. 6	Transformer T1 for model RWS150B-24
ILL. 7	**Alternate Inductor L3 for all models**

Model Difference – Suffix /CO2, /FG, and /DIN are identical.

No suffix: Standard model
CO2: PWB coating model
FG: Low leakage current model
DIN: DIN rail mounting

Markings shall be in accordance with Clause 63 and Table 67.1 of UL 508, and Section 5 of CSA C22.2 No. 107.1-01. The followings shall be included.

* The following markings ink printed, silk-screened, **laser** engraved or ink stamped or printed on a label in R/C (PGDQ2/8) or R/C (PGJI2/8) shall be appeared on the device and is visible when the device is mounted singularly but not necessarily visible when mounted side by side:

1. Listee's name, trademark, or identifier;
2. Catalog number;
3. Power input ratings;
4. Power output ratings;
5. "Maximum surrounding air temperature rating of 70°C" or "Max. surrounding air temperature: 70°C" or equivalent;
6. "Use wires suitable for at least 75°C" or "Use wires rating at least 75°C" or equivalent;
7. "For use in Pollution Degree 2 Environment" or "Pollution Degree: 2" or equivalent; and
8. The month and year of manufacture, date coding serial numbers may be used.

The following markings shall be shipped separately with the device and may appear in the installation or operating instructions:

1. Temperature rating of field installed conductors 75°C of the field installed conductors for which the device has been investigated;
2. Marking for proper connections at wiring terminals;
3. Field wiring terminal marking for wire type, Copper conductors only;
4. Torque values marking for power supply field terminals, 14.2 lb-in.;
5. Maximum surrounding air temperature rating related to the input derating curve and the output derating curve; and
6. "For use in Pollution Degree 2 Environment".