

DESCRIPTION

PRODUCT COVERED:

USL, CNL - Switching Power Supply, Model RWS300B-24; may be followed by "/", may be followed by "R" and/or "CO2" and/or "FG".

GENERAL:

These devices are open-type switching type power supplies, employing an isolated switching transformer involving a regulating network and a related circuitry. The output is considered as a limited voltage isolated secondary circuit defined by the Standard for Industrial Control Equipment UL 508. These power supplies are intended for use in a controlled environment of a pollution degree 2.

ELECTRICAL RATINGS:

Model	Power Input	Power Output
RWS300B-24 series	100 - 240 Vac, 50 - 60 Hz, 3.8 A; See ILL. 1 for Derating Curve.	24 Vdc (21.6 - 27.6 Vdc), max. 12.5 A (max. 300 W) See ILL. 2 for Derating Curve.

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.

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

Products designated USL have been investigated using requirements contained in the Standard for Industrial Control Equipment UL 508, Seventeenth Edition, dated January 28, 1999, with revisions through and including March 19, 2013.

Products designated CNL have been investigated using requirements contained in the Canadian Standard for General Use Power Supplies, CSA C22.2 No. 107.1-01, Third Edition, with revisions through and including September 2001, Reaffirmed 2011.

CONSTRUCTION DETAILS:

General - The devices shall be constructed in accordance with the following description.

Corrosion Protection - All parts are of corrosion resistant material or are suitably plated, painted or otherwise protected against corrosion.

Tolerances - Unless specified otherwise, all dimensions are nominal.

Spacings - Spacings were evaluated and found to be in accordance with UL 508, Table 36.3 and CSA C22.2 No. 107-01, Tables 6 and 8. Spacing at Terminal Block evaluated and found to be in accordance with UL 508, Table 36.4 and CSA C22.2 No. 107-01, Table 6.

Printed Wiring Board - Unless otherwise specified, all printed wiring boards shall be R/C (ZPMV2), rated min. V-1 with a temperature rating of 130°C minimum.

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	Model RWS300B-24 overall view
FIG. 2	Model RWS300B-24 bottom view
FIG. 3	Model RWS300B-24 inside view

Model Difference - These devices are similar in construction and appearance except for the function.

RWS300B-24: Model RWS300B-24;
RWS300B-24/R: Model RWS300B-24 provided with optional ON/OFF control function;
 RWS300B-24/CO2: Model RWS300B-24 provided with thin coating on both sides of pwb;
 RWS300B-24/FG: Low leakage current type of Model **RWS300B-24;**
RWS300B-24/RCO2: Model RWS300B-24 provided with optional ON/OFF control function and thin coating on both sides of pwb;
RWS300B-24/RFG: Low leakage current type of Model RWS300B-24 provided with optional ON/OFF control function;
 RWS300B-24/CO2FG: Low leakage current type of Model RWS300B-24 provided
 with thin coating on both sides of **pwb;**
RWS300B-24/RCO2FG: Low leakage current type of Model RWS300B-24 provided with optional ON/OFF control function and thin coating on both sides of pwb;

Markings -

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.; and
5. Maximum surrounding air temperature rating related to the input derating curve and the output derating curve.
6. **"For use in Pollution Degree 2 Environment".**