UL TEST REPORT AND PROCEDURE

Standard:	UL 60950-1, 2nd Edition, 2014-10-14 (Information Technology Equipment - Safety - Part 1: General Requirements) CAN/CSA C22.2 No. 60950-1-07, 2nd Edition, 2014-10 (Information Technology Equipment - Safety - Part 1: General Requirements)
Certification Type:	Listing
CCN:	QQGQ, QQGQ7 (Power Supplies for Information Technology Equipment Including Electrical Business Equipment)
Product:	Switching Power Supply
Model:	BX090XYYX, XE90XYYXXXXX (Where X may be alphanumeric characters, "for marketing purpose and no impact safety related to critical components and constructions", where YY may be any number 12 through 48)
Rating:	BX090XYYX, XE90XYYXXXXX series; Input Rating: 100-240 Vac, 50-60 Hz, 1.3 A Output Rating: 12 Vdc, 7.5A or 15 Vdc, 6.0A or 18 Vdc, 5.0A or 24 Vdc, 3.75A or 48 Vdc, 1.87A or 12Vdc/7.5A~48Vdc /1.87A
Applicant Name and Address:	BRIDGEPOWER CORP (GOSAEK-DONG) 16 OMOKCHEN-RO 132BEON-GIL GWONSEON-GU SUWON-SI GYEONGGI 441-813 KOREA

This is to certify that representative samples of the products covered by this Test Report have been investigated in accordance with the above referenced Standards. The products have been found to comply with the requirements covering the category and the products are judged to be eligible for Follow-Up Service under the indicated Test Procedure. The manufacturer is authorized to use the UL Mark on such products which comply with this Test Report and any other applicable requirements of UL LLC ('UL') in accordance with the Follow-Up Service Agreement. Only those products which properly bear the UL Mark are considered as being covered by UL's Follow-Up Service under the indicated Test Procedure.

The applicant is authorized to reproduce the referenced Test Report provided it is reproduced in its entirety.

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL.

Prepared by: InYoung Hwang Reviewed by: ByoungUk Lee

Supporting Documentation

The following documents located at the beginning of this Procedure supplement the requirements of this Test Report:

A. Authorization - The Authorization page may include additional Factory Identification Code markings.

B. Generic Inspection Instructions -

i. Part AC details important information which may be applicable to products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of this Test Report.

ii. Part AE details any requirements which may be applicable to all products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of each Test Report.

iii. Part AF details the requirements for the UL Certification Mark which is not controlled by the technical standard used to investigate these products. Products are permitted to bear only the Certification Mark(s) corresponding to the countries for which it is certified, as indicated in each Test Report.

Product Description

Switching Mode Power Supply(AC/DC adaptor), consists of electronic components mounted on PWB, a switching transformer and electronic components mounted on PWB, housed with a plastic enclosure.

Model Differences

Models XE90 series is identical to models BX090 series except for model designation.

Nomenclature
B X 090 X YY X
(a) (b) (c) (d)

(a) Family Related Designs
X is A-Z
(b) Output
X is S (S=Single)
(c) Output Voltage
12, 15, 18, 24, 48, 12 through 48
(d) Standard Input Cord Options
Can be F or Q or N for input plug type. Photographs for each plug-type configuration
F : (Class I = IEC320-C14)
Q: (Class II = IEC320-C18)
N: ((Class II = IEC320-C8)

XE 90 X YY XX X XX
(a) (b) (c) (d) (e) (f)
(a) Family Related Designs
X is A-Z
(b) AC Ground Configuration
A to Z (Standard)
(c) Output Voltage
12, 15, 18, 24, 48, 12 through 48
(d) Standards Output Cord Options
Number : 00 thru 99
(e) Standard Input Connector Options
Can be F or Q or N for input plug type. Photographs for each plug-type configuration
F : (Class I = IEC320-C14)

Q: (Class II = IEC320-C18)
N: ((Class II = IEC320-C8)
(f) Model Configuration
Number : 00 thru 99

Technical Considerations

- Equipment mobility : movable
- Connection to the mains : pluggable A
- Operating condition : continuous
- Access location : operator accessible
- Over voltage category (OVC) : OVC II
- Mains supply tolerance (%) or absolute mains supply values : +10%, -10%
- Tested for IT power systems : Yes (for Norway only)
- IT testing, phase-phase voltage (V) : 230 Vac
- Class of equipment : Class I (earthed) or Class II (double insulated)
- Considered current rating of protective device as part of the building installation (A) : 20
- Pollution degree (PD) : PD 2
- IP protection class : IP 22
- Altitude of operation (m) : Up to 5000m
- Altitude of test laboratory (m) : N/A
- Mass of equipment (kg) : 520
- The product was submitted and evaluated for use at the maximum ambient temperature (Tma) permitted by the manufacturer's specification of: 40
- The means of connection to the mains supply is: Detachable power cord
- The product is intended for use on the following power systems: TN
- The equipment disconnect device is considered to be: , Appliance inlet
- The product was investigated to the following additional standards: EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013 (which includes all European national differences, including those specified in this test report).

Additional Information

4787147593(E300305-A114-CB-1)
Max. Normal Load Condition: Rated output current

Additional Standards

The product fulfills the requirements of: N/A

Markings and instructions

Clause Title	Marking or Instruction Details
1.7.1 Power rating - Ratings	Ratings (voltage, frequency/dc, current)
1.7.1 Power rating - Company	Listee's or Recognized company's name, Trade Name, Trademark or File Number

identification	
1.7.1 Power rating - Model	Model Number
1.7.1 Power rating - Class II symbol	Symbol for Class II construction

Special Instructions to UL Representative

Inspect the transformer(s) listed in BD1.1 per AA 1.1-(C). When the tests are conducted at other location, inspect test record and specification sheet provided by the component manufacturer. Verify the specification sheet indicates 100 % routine test specified in BD 1.1 be conducted at the component manufacturer. Products covered in this procedure which are received from factory locations covered by File E300305, Volume X2 bearing the split inspection marking noted below are authorized for use in products covered in this procedure which bear the UL Listing Mark.

Products not bearing the split inspection marking are not authorized for use in products at factory locations covered by E300305, Volume X1 which bear the UL Listing Mark.

Special Split Inspection Marking ;

S-BX090XYYX, S-XE90XYYXXXXX

Production-Line Testing Requirements

Electric Strength Test Special Constructions - Refer to Generic Inspection Instructions, Part AC for further information.

Model	Component	Removable Parts	Test probe location	V rms	V dc	Test Time, s
All models	Transformer(T2)	N/A	Primary to Secondary	3000	4242	1s

Earthing Continuity Test Exemptions - This test is not required for the following models:

ClassII models

Electric Strength Test Exemptions - This test is not required for the following models:

Electric Strength Test Component Exemptions - The following solid-state components may disconnected from the remainder of the circuitry during the performance of this test:

Sample and Test Specifics for Follow-Up Tests at UL

Model	Component	Material	Test	Sample(s)	Test Specifics
N/A					