Ref. Certif. No.

US-19656-UL

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

SYSTEME CEI D'ACCEPTATION MUTUELLE DE CERTIFICATS D'ESSAIS DES EQUIPEMENTS ELECTRIQUES (IECEE) METHODE OC

CB TEST CERTIFICATE

CERTIFICAT D'ESSAI OC

Product Produit	Switching Power Supply
Name and address of the applicant Nom et adresse du demandeur	XP POWER L L C SUITE 150 1241 E DYER RD SANTA ANA, CA 92705 United States
Name and address of the manufacturer Nom et adresse du fabricant	XP POWER L L C SUITE 150 1241 E DYER RD SANTA ANA, CA 92705 United States
Name and address of the factory Nom et adresse de l'usine Note: *When more than one factory, please report on page 2* Note: *Lorsque il y plus d'une usine, veuillez utiliser la 2ème page*	XP POWER LLC 990 BENECIA AVE SUNNYVALE CA 94085 UNITED STATES ☒ Additional Information on page 2
Ratings and principal characteristics Valeurs nominales et caractéristiques principales	Input: 100-240 Vac, 50/60Hz, 2.5 A Output: See CB Test Report, Model Differences for details.
Trademark (if any) Marque de fabrique (si elle existe)	XP
Type of Manufacturer's Testing Laboratories used Type de programme du laboratoire d'essais constructeur	SMT
Model / Type Ref. Ref. De type	CLC125US12-XB0154A, CLC125US12-XB0289, CLC125USXX See Page 2
Additional information (if necessary may also be reported on page 2) Les informations complémentaires (si nécessaire,, peuvent être indiqués sur la 2ème page	Additionally evaluated to EN 60950-1:2006/ A11:2009/ A1:2010/ A12:2011; National Differences specified in the CB Test Report. ☐ Additional Information on page 2
A sample of the product was tested and found to be in conformity with Un échantillon de ce produit a été essayé et a été considéré conforme à la	IEC 60950-1(ed.2), IEC 60950-1(ed.2);am1
As shown in the Test Report Ref. No. which forms part of this Certificate Comme indiqué dans le Rapport d'essais numéro de référence qui constitue partie de ce Certificat	E139109-A54-CB-2 issued on 2012-08-29

This CB Test Certificate is issued by the National Certification Body
Ce Certificat d'essai OC est établi par l'Organisme **National de Certification**

☒ UL (US), 333 Pfingsten Rd IL 60062, Northbrook, USA
☐ UL (Demko), Borupvang 5A DK-2750 Ballerup, DENMARK
☐ UL (JP), Marunouchi Trust Tower Main Building 6F, 1-8-3 Marunouchi, Chiyoda-ku, Tokyo 100-0005, JAPAN
☐ UL (CA), 7 Underwriters Road, Toronto, M1R 3B4 Ontario, CANADA

For full legal entity names see www.ul.com/ncbnames

Date: 2012-08-29

Signature:

Jolanta M. Wroblewska

Ref. Certif. No.

US-19656-UL

Model Details:

CLC125USXX (where XX is a number between 12-48, may also be followed by suffixes, (3X5), -D, and C)

Factories:
XP POWER (KUNSHAN) LTD
230 BIN JIANG NAN RD ZHANGPU TOWN KUNSHAN JIANGSU 215321
CHINA

Additional information (if necessary)
Information complémentaire (si nécessaire)

- [x] UL (US), 333 Pfingsten Rd IL 60062, Northbrook, USA
- [ ] UL (Demko), Borupvang 5A DK-2750 Ballerup, DENMARK
- [ ] UL (JP), Marunouchi Trust Tower Main Building 6F, 1-8-3 Marunouchi, Chiyoda-ku, Tokyo 100-0005, JAPAN
- [ ] UL (CA), 7 Underwriters Road, Toronto, M1R 3B4 Ontario, CANADA

For full legal entity names see www.ul.com/ncbnames

Date: 2012-08-29

Signature:

Jolanta M. Wroblewska

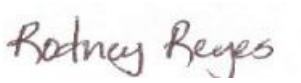
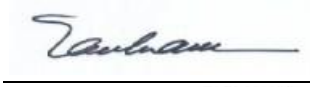
Test Report issued under the responsibility of:

TEST REPORT
IEC 60950-1
Information technology equipment - Safety - Part 1: General requirements

Report Reference No ..... :	E139109-A54-CB-2
Date of issue ..... :	2012-08-29
Total number of pages ..... :	74
CB Testing Laboratory ..... :	UL San Jose
Address ..... :	455 E. Trimble Rd., San Jose, CA, 95131-1230, USA
Applicant's name ..... :	XP POWER LLC SUITE 150
Address ..... :	1241 E DYER RD SANTA ANA CA 92705 UNITED STATES
Test specification:	
Standard ..... :	IEC 60950-1:2005 (2nd Edition); Am 1:2009
Test procedure ..... :	CB Scheme
Non-standard test method ..... :	N/A
Test Report Form No. ..... :	IEC60950_1B
Test Report Form originator ..... :	SGS Fimko Ltd
Master TRF ..... :	2010-04

This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.

Test item description ..... :	Switching Power Supply
Trade Mark ..... :	
Manufacturer ..... :	XP POWER LLC SUITE 150 1241 E DYER RD SANTA ANA CA 92705 UNITED STATES
Model/Type reference ..... :	CLC125USXX (where XX is a number between 12-48, may also be followed by suffixes, (3X5), -D, and C), CLC125US12-XB0154A, and CLC125US12-XB0289
Ratings ..... :	Input: 100-240 Vac, 50/60Hz, 2.5 A Output: See CB Test Report, Model Differences for details.

Testing procedure and testing location:			
[ ]	**CB Testing Laboratory**		
	Testing location / address..... :		
[ ]	**Associated CB Test Laboratory**		
	Testing location / address..... :		
	Tested by (name + signature) ..... :		
	Approved by (name + signature) ... :		
[ ]	**Testing Procedure: TMP**		
	Tested by (name + signature) ..... :		
	Approved by (+ signature) ..... :		
	Testing location / address..... :		
[ ]	**Testing Procedure: WMT**		
	Tested by (name + signature) ..... :		
	Witnessed by (+ signature)..... :		
	Approved by (+ signature) ..... :		
	Testing location / address..... :		
[x]	**Testing Procedure: SMT**		
	Tested by (name + signature) ..... :	Rodney Reyes	
	Approved by (+ signature) ..... :	Tac Pham	
	Supervised by (+ signature) ..... :	Linus Park	
	Testing location / address..... :	XP Power, 1241 E. Dyer Rd., Suite 150, Santa Ana, CA 92705	
[ ]	**Testing Procedure: RMT**		
	Tested by (name + signature) ..... :		
	Approved by (+ signature) ..... :		
	Supervised by (+ signature) ..... :		
	Testing location / address..... :		

List of Attachments

National Differences (37 pages)

Enclosures (88 pages)

Summary Of Testing

Unless otherwise indicated, all tests were conducted at XP Power, 1241 E. Dyer Rd., Suite 150, Santa Ana, CA 92705.

Tests performed (name of test and test clause)	**Testing location / Comments**

Input: Single-Phase (1.6.2)	Conducted as part of original evaluation.
Energy Hazard Measurements (2.1.1.5, 2.1.2, 1.2.8.10)	Conducted as part of original evaluation.
Capacitance Discharge (2.1.1.7)	Conducted as part of original evaluation.
SELV Reliability Test Including Hazardous Voltage Measurements (2.2.2, 2.2.3, 2.2.4, Part 22 6.1)	Conducted as part of original evaluation.
Limited Current Circuit Measurement (2.4.1, 2.4.2)	Conducted as part of original evaluation.
Humidity (2.9.1, 2.9.2, 5.2.2)	Conducted as part of original evaluation.
Determination of Working Voltage; Working Voltage Measurement (2.10.2)	Conducted as part of original evaluation.
Transformer and Wire /Insulation Electric Strength (2.10.5.13)	Conducted as part of original evaluation.
Heating (4.5.1, 1.4.12, 1.4.13)	Conducted as part of original evaluation.
Ball Pressure (4.5.5, 4.5)	Conducted as part of original evaluation.
Touch Current (Single-Phase; TN/TT System) (5.1, Annex D)	Conducted as part of original evaluation.
Electric Strength (5.2.2)	Conducted as part of original evaluation.
Component Failure (5.3.1, 5.3.4, 5.3.7)	Conducted as part of original evaluation.
Abnormal Operation (5.3.1 - 5.3.9)	Conducted as part of original evaluation.
Transformer Abnormal Operation (5.3.3, 5.3.7b, Annex C.1)	Conducted as part of original evaluation.
Power Supply Output Short-Circuit/Overload (5.3.7)	Conducted as part of original evaluation.

Summary of Compliance with National Differences:

Countries outside the CB Scheme membership may also accept this report.

List of countries addressed: AT, BE, BG, CA, CH, CN, CZ, DE, DK, ES, EU, FI, FR, GB, GR, HU, IE, IL, IT, JP, KR, NL, PL, PT, RO, SE, SI, SK, UK, US

The product fulfills the requirements of: CSA C22.2 No. 60950-1-07 + A1:2011, EN 60950-1:2006 + A1:2010 + A11:2009 + A12:2011, IEC 60950-1:2005 + A1:2009, UL 60950-1 2nd Ed. Revised 2011-12-19

Copy of Marking Plate - Refer to Enclosure titled Marking Plate for copy.

Test item particulars :	
Equipment mobility ..... :	for building-in
Connection to the mains ..... :	for building-in
Operating condition ..... :	continuous
Access location ..... :	N/A - for building-in
Over voltage category (OVC) ..... :	OVC II
Mains supply tolerance (%) or absolute mains supply values ..... :	+6%, -10%
Tested for IT power systems ..... :	No
IT testing, phase-phase voltage (V) ..... :	N/A
Class of equipment ..... :	Class I or Class II (Determined by end product)
Considered current rating of protective device as part of the building installation (A) ..... :	20A max.
Pollution degree (PD) ..... :	PD 2
IP protection class ..... :	IP X0
Altitude of operation (m) ..... :	3048
Altitude of test laboratory (m) ..... :	less than 2000 meters
Mass of equipment (kg) ..... :	175 g
Possible test case verdicts:	
- test case does not apply to the test object ..... :	N / A
- test object does meet the requirement ..... :	P(Pass)
- test object does not meet the requirement ..... :	F(Fail)
Testing:	
Date(s) of receipt of test item ..... :	2009-09-29
Date(s) of Performance of tests ..... :	2010-01-11 to 2010-05-07
General remarks:	
The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the testing laboratory. "(see Enclosure #)" refers to additional information appended to the report. "(see appended table)" refers to a table appended to the report. Throughout this report a point is used as the decimal separator.	
Manufacturer's Declaration per Sub Clause 6.25 of IECEE 02: The application for obtaining a CB Test Certificate includes more than one factory and a declaration form the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided ..... When differences exist, they shall be identified in the General Product Information section.	Yes
Name and address of Factory(ies): XP POWER LLC	

990 BENECIA AVE
SUNNYVALE CA 94085
UNITED STATES

XP POWER (KUNSHAN) LTD
230 BIN JIANG NAN RD
ZHANGPU TOWN
KUNSHAN
JIANGSU 215321 CHINA

GENERAL PRODUCT INFORMATION:

Report Summary

All applicable tests according to the referenced standard(s) have been carried out.

Product Description

Products are switching power supplies for building-in to Information Technology Equipment. It is an open frame power supply intended for building-in Class I or Class II end-products. Double insulated symbol is optionally provided. Earthing symbol may only be provided for Class I power supplies.

Model Differences

All models in the Model CLC125USXX Series are identical with exception to the Mains Transformer, T1, and minor secondary components that allow for different output voltage ratings.

See below for Model Ratings at 50°C Table Below:

Model CLC125US12: Output Rated: 12 Vdc, 10.4 A
Model CLC125US24: Output Rated: 24 Vdc, 5.2 A
Model CLC125US48: Output Rated: 48 Vdc, 2.6 A

See Enclosure - Miscellaneous for details on de-rated outputs based upon higher ambients.

Units provided with suffix "C" provided with cover.

Units provide with suffix "(3X5)" provided with components mounted on larger printed wiring board.

Units provided with suffix "-D" provided with secondary diode, CR3.

Models CLC125US12-XB0289 and CLC125US12-XB0154A are identical to CLC125US12 except for minor differences in the circuit which do not affect safety.

Additional Information

Required values for clearance are adjusted for 3048 m (1.15 correction factor as per IEC 60664-1, Table A2).

The need for the additional testing and evaluation shall be determined in the end product investigation.

The nameplate markings provided as an Enclosure - Marking Plate are considered representative of the entire series.

The power supply series covered by this report employ Double/Reinforced Insulation between Primary and Secondary circuits.

This Test Report is a reissue of CBTR Ref. No. E139109-A54-CB-1, CB Test Certificate Ref. No. US/15076/UL. Based on previously conducted testing and the review of product technical documentation it was determined that the product complies with the upgrade of the Second Edition of the standard to Amendment 1.

Technical Considerations

- The product was submitted and evaluated for use at the maximum ambient temperature (Tma) permitted by the manufacturer's specification of: 50°C (See De-rating Curve, Enclosure 7-01, for details)
- The means of connection to the mains supply is: for building-in
- The product is intended for use on the following power systems: TN
- The equipment disconnect device is considered to be: provided as part of the end product.,
- The product was investigated to the following additional standards: EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 (which includes all European national differences, including those specified in this test report).

Engineering Conditions of Acceptability

When installed in an end-product, consideration must be given to the following:

- The following Production-Line tests are conducted for this product: Electric Strength, Earthing Continuity,
- The end-product Electric Strength Test is to be based upon a maximum working voltage of: Primary-Earthed Dead Metal: 242 Vrms, 339 Vpk, Primary-SELV: 238 Vrms, 559 Vpk
- The following secondary output circuits are SELV: All outputs
- The power supply terminals and/or connectors are: Not investigated for field wiring,
- The maximum investigated branch circuit rating is: 20 A
- The investigated Pollution Degree is: 2
- Proper bonding to the end-product main protective earthing termination is: Required

- An investigation of the protective bonding terminals has: Been conducted
- The following input terminals/connectors must be connected to the end-product supply neutral: J1-N
- The following magnetic devices (e.g. transformers or inductor) are provided with an OBJY2 insulation system with the indicated rating greater than Class A (105°C): L1, L2, L3 and T1 (Class F, 155°C),
- The following end-product enclosures are required: Mechanical, Fire, Electrical
- When mounted inside the chassis, adequate creepage/ clearance shall be provided between live parts, including primary and secondary heatsinks, and accessible metal parts. --
- Suitable disconnect device is to be provided in the end system. --
- Leakage and Dielectric Strength testing shall be considered in the end system. --
- The need for protective bonding test to be determined as part of the end product evaluation. --
- Units were evaluated for use with 10 cfm external airflow. The need of cooling shall be determined as part of the end product. --
- Required values for clearance are adjusted for 3048 m (1.15 correction factor as per IEC 60664-1, Table A2) --

Abbreviations used in the report:

- normal condition	N.C.	- single fault condition	S.F.C
- operational insulation	OP	- basic insulation	BI
- basic insulation between parts of opposite polarity:	BOP	- supplementary insulation	SI
- double insulation	DI	- reinforced insulation	RI

Indicate used abbreviations (if any)