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武进区礼嘉镇何墅村

常州宝进电器有限公司

JianPing Wu



JianPing Wu
CHANGZHOU BAOJIN ELECTRICAL CO LTD
HESHU LIJIA WUJIN
CHANGZHOU
JIANGSU 213165 CHINA

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Subject: **Procedure And/Or Report Material**

The following material resulting from the investigation under the above numbers is enclosed.

Issue

<u>Date</u>	<u>Vol</u>	<u>Sec</u>	<u>Pages</u>	<u>Revised Date</u>
2006/05/11	1	1	Cert of Compliance	
2006/05/11	1	1	Add New Volume	
2006/05/12	1	2	Cert of Compliance	
2006/05/12	1	2	Add New Proc/Report Sect	
2006/05/25	1	3	Cert of Compliance	
2006/05/25	1	3	Add New Proc/Report Sect	
2006/05/26	1	4	Cert of Compliance	
2006/05/26	1	4	Add New Proc/Report Sect	
2010/06/19	1	5	Cert of Compliance	
2010/06/19	1	5	Add New Proc/Report Sect	

File E323535 Vol. 1 Sec.1,2,3,4 and 5 transferred to File E474768 Vol. 1 Sec. 1,2,3,4 and 5.

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EMAIL:UL.InspectionCenter521@ul.com

Please file revised pages and illustrations in place of material of like identity. New material should be filed in its proper numerical order.

NOTE: Follow-Up Service Procedure revisions DO NOT include Cover Pages, Test Records and Conclusion Pages. Report revisions DO NOT include Authorization Pages, Indices, Section General Pages and Appendixes.

Please review this material and report any inaccuracies to UL's Customer Service Professionals. Contact information for all of UL's global offices can be found at <http://ul.com/aboutul/locations>.

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SUZ File

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Follow-Up Service Procedure

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PAGES (in content order)	FUNCTION	HOW TO UPDATE
Authorization Page	Displays the Product Category, the type of Follow-Up Service (Type R=Reexamination / Type L=Label), the File Number and the Volume Number associated with each Applicant's, Manufacturer's and Listee's company name and address.	Replace existing page by matching the UL File Number and Volume Number. Discard the older page (refer to "Issued" or "Revised" date).
Addendum to Authorization Page*	Lists the additional names and addresses of manufacturing locations, when multiple locations exist	Replace existing page by matching the UL File Number and Volume Number. Discard the older page (refer to "Issued" or "Revised" date).
Listing Mark Data (LMD), Classification Mark Data (CMD) or Recognized Component Mark Data (RCMD) Pages* #	Used only for products covered under Type R Service. Displays the correct LMD, CMD, or RCMD Mark, the Control Number for Listed and Classified categories and additional information regarding minimum size, application, procurement, and any other optional markings, in addition to the UL Mark.	Replace existing page by matching the UL File Number and Volume Number. Discard the older page (refer to "Issued" or "Revised" date).
Multiple Listing (ML) Correlation Sheet*	Correlates product model numbers between those products made by a Manufacturer for the Basic Applicant and those supplied to another company, the Multiple Listee.	Replace, add or delete page(s) with most current "Issued" or "Revised" date.
Index*	Catalogs the contents of the Procedure by some logical means, i.e. Section Number, Report Reference Number, or Issue Date.	Replace present page by matching the UL File Number, Volume Number, Page Number and most current "Revised" date.
Appendices* # (App.)	Contains instructions for the Manufacturer and UL Representative concerning specific responsibilities and required periodic tests. May also outline tests to be conducted on samples to be forwarded to UL's facilities.	Replace present page by matching the UL File Number, Volume Number, Appendix letter (eg. App. A), Page Number and most current "Revised" date.
	Standardized Appendix Pages are the same for all manufacturers within a particular product category.	Replace present page by matching the Appendix letter (eg. App. A), Page Number and most current "Revised" date.
Follow-Up Inspection Instructions (FUII) Pages*	Contains information similar to that in the Appendices. FUII Pages are issued as part of the Procedure when a UL Standard is used in conjunction with the Procedure, and are the same for all manufacturers within a particular category.	Replace present pages by matching the Page Number and most current "Issued" or "Revised" date.
Section General* # (Sec. Gen.)	Contains description, requirements, identifications and/or specifications that are common to all products covered by the entire volume and supplements the information provided in the Description Section.	Replace present page by matching the UL File Number, Volume Number, Page Number and most current "Revised" date.
Description, or Section (Sec.)*	Contains the specific description of one or more products or systems. This includes written text supplemented by photographs, drawings, etc., as necessary, to define features that affect compliance with the applicable requirements.	Replace present page by matching the UL File Number, Volume Number, Section Number, Page Number and most current "Issued" date.

* The above page(s) may not appear in all UL Follow-Up Service Procedures; UL's Conformity Assessment Services staff determines their inclusion.

These pages are combined in the **Generic Inspection Instructions** for International Style Reports, identified, as example by Vol. X1, X2, etc.

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Vol 1

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Issued: 2017-09-07

Revised: 2017-09-07

FOLLOW-UP SERVICE PROCEDURE
(TYPE R)

DIRECT-PLUG-IN AND CORD-CONNECTED CLASS 2 POWER UNITS
(EPBU,EPBU7)

Manufacturer: SEE ADDENDUM FOR MANUFACTURER LOCATIONS

Applicant: 1271895 (Party Site)
Changzhou Baojin Electrical Co Ltd
Heshu Lijia Wujin
Changzhou
Jiangsu 213165 CHINA

Listee/Classified Co.: 1271895 (Party Site)
SAME AS APPLICANT

This Follow-Up Service Procedure authorizes the above Manufacturer(s) to use the marking specified by UL LLC, or any authorized licensee of UL LLC, including the UL Contracting Party, only on products when constructed, tested and found to be in compliance with the requirements of this Follow-Up Service Procedure and in accordance with the terms of the applicable service agreement with UL Contracting Party and any applicable Service Terms. The UL Contracting Party for Follow-Up Services is listed on addendum to this Follow-Up Service Procedure ("UL Contracting Party"). UL Contracting Party and UL LLC are referred to jointly herein as "UL."

UL further defines responsibilities, duties and requirements for both Manufacturers and UL representatives in the document titled, "UL Mark Surveillance Requirements" that can be located at the following web-site: <http://www.ul.com/fus> and in the document titled "UL and Subscriber Responsibilities" that can be located at the following website: <http://www.ul.com/responsibilities>. Manufacturers without Internet access may obtain the current version of these documents from their local UL customer service representative or UL field representative. For assistance, or to obtain a paper copy of these documents or the applicable Service Terms, please contact UL's Customer Service at <http://ul.com/aboutul/locations/>, select a location and enter your request, or call the number listed for that location.

The Applicant, the specified Manufacturer(s) and any Listee/Classified Co. in this Follow-Up Service Procedure must agree to receive Follow-Up Services from UL Contracting Party. If your applicable agreement is a Global Services Agreement ("GSA") with an effective date of January 1, 2012 or later and this Follow-Up Service Procedure is issued on or after that effective date, the Applicant, the specified Manufacturer(s) and any Listee/Classified Co. will be bound to a Service Agreement for Follow-Up Services upon the earliest by any Subscriber of use of the prescribed UL Mark, acceptance of the factory inspection, or payment of the Follow-Up Service fees which will incorporate such GSA, this Follow-Up Service Procedure and the Follow-Up Service Terms which can be accessed by clicking here: <http://www.ul.com/contracts/Terms-After-12-31-2011>. In all other events, Follow-Up Services will be governed by and incorporate the terms of your applicable service agreement and this Follow-Up Service Procedure.

It is the responsibility of the Listee/Classified Co. to make sure that only the products meeting the aforementioned requirements bear the authorized Marks of UL LLC, or any authorized licensee of UL LLC.

This Follow-Up Service Procedure contains information for the use of the above Manufacturer(s) and representatives of UL and is not to be used for any other purpose. It is provided to the Manufacturer with the understanding that it will be returned upon request and is not to be copied in whole or in part.

This Follow-Up Service Procedure, and any subsequent revisions, is the property of UL and is not transferable. This Follow-Up Service Procedure contains confidential information for use only by the above named Manufacturer(s) and representatives of UL and is not to be used for any other purpose. It is provided to the Subscribers with the understanding that it is not to be copied, either wholly or in part unless specifically allowed, and that it will be returned to UL, upon request.

Capitalized terms used but not defined herein have the meanings set forth in the GSA and the applicable Service Terms or any other applicable UL service agreement.

UL shall not incur any obligation or liability for any loss, expense or damages, including incidental, consequential or punitive damages arising out of or in connection with the use or reliance upon this Follow-Up Service Procedure to anyone other than the above Manufacturer(s) as provided in the agreement between UL LLC or an authorized licensee of UL LLC, including UL Contracting Party, and the Manufacturer(s).

UL LLC has signed below solely in its capacity as the accredited entity to indicate that this Follow-Up Service Procedure is in compliance with the accreditation requirements.

Bruce A. Mahrenholz
Director
North American Certification Program

File E474768 Vol 1 Addendum To Page 1 Issued: 2017-09-07
Authorization Page Revised: 2017-09-07

LOCATION

1271895 (Party Site)
Changzhou Baojin Electrical Co Ltd
Heshu Lijia Wujin
Changzhou
Jiangsu 213165 CHINA

Factory ID: None
UL Contracting Party for above site is: UL AG

Listing Mark Data Page (LMDP)

(FILE IMMEDIATELY AFTER AUTHORIZATION PAGE)

LISTING MARK

The Listing Mark consists of four elements placed in close proximity and shall appear on Listed products only. Minimum size is not specified, as long as the Listing Mark is legible. The following is suggested.



XXXX = The control number assigned by UL, E474768.

The minimum height of the registered trademark symbol ® shall be 3/64 of an inch. When the overall diameter of the UL Mark is less than 3/8 of an inch, the trademark symbol may be omitted if it is not legible to the naked eye.

The product identity is: "CLASS 2 POWER SUPPLY," "CLASS 2 TRANSFORMER," "CLASS 2 POWER UNIT," "CLASS 2 BATTERY CHARGER," or appropriate product identities, as shown in the individual Listing. The word "Transformer" may be abbreviated "XFMR," "XFRMR" or "XFORMER."

The product identity may be omitted if the Mark is directly and permanently applied to the product by stamping, molding, ink-stamping, silk screening or similar process. The product identity may appear elsewhere on the product if the other three elements are part of the nameplate which includes the rating or the catalog or model designation.

Separable Listing Mark (not part of a nameplate and in the form of decals, stickers or labels) will always include the four elements.

The manufacturer may reproduce the Mark or obtain it from a UL authorized supplier. The list of UL authorized label suppliers can be found on UL's online directory at www.ul.com.

(FILE IMMEDIATELY AFTER AUTHORIZATION PAGE)

LISTING MARK

The Listing Mark consists of four elements placed in close proximity and shall appear on Listed products only. Minimum size is not specified, as long as the Listing Mark is legible. The following is suggested. (If only Canadian coverage is authorized, use only the C-UL Symbol).

UL Symbol to the left and the C-UL Symbol to the right.



Alternatively, the Canadian/US Mark may be used. The UL Symbol with "C" to the left and "US" to the right.



XXXX = The control number assigned by UL, E474768.

The minimum height of the registered trademark symbol ® shall be 3/64 of an inch. When the overall diameter of the UL Mark is less than 3/8 of an inch, the trademark symbol may be omitted if it is not legible to the naked eye.

The product identity is: "CLASS 2 POWER SUPPLY," "CLASS 2 TRANSFORMER," "CLASS 2 POWER UNIT," "CLASS 2 BATTERY CHARGER," or appropriate product identities, as shown in the individual Listing. The word "Transformer" may be abbreviated "XFMR," "XFRMR" or "XFORMER."

The product identity may be omitted if the Mark is directly and permanently applied to the product by stamping, molding, ink-stamping, silk screening or similar process. The product identity may appear elsewhere on the product if the other three elements are part of the nameplate which includes the rating or the catalog or model designation.

THIS FORM PAGE IS TO BE REVISED BY THE NORTHBROOK LABEL DEPARTMENT ONLY

Separable Listing Mark (not part of a nameplate and in the form of decals, stickers or labels) will always include the four elements.

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Canadian Listing Mark Data Page (CLMDP)

The manufacturer may reproduce the Mark or obtain it from a UL authorized supplier. The list of UL authorized label suppliers can be found on UL's online directory at www.ul.com.

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Direct Plug In, Class 2 Power Supply, Models JXA-XXXXXXX-IP20 series for indoor use only and JXA-XXXXXXX-IP44 series for outdoor use	2	2006-05-12
Cord Connected, Class 2 Power Supply, Models JXD-XXXXXX-IP20 series for indoor use only	3	2006-05-25
Direct Plug In, Class 2 Power Supply, Models JXD-XXXXXXX-IP20 series for indoor use only	4	2006-05-26
Direct Plug In, Class 2 Power Supply, Model JXD-090010-IP20 for indoor use only	5	2010-06-19

ISSUED: 11-13-2007
REVISED: 01-01-2012

STANDARDIZED APPENDIX PAGES
Subject 1310

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STANDARDIZED APPENDIX PAGE (SAP)
Controlled Document: Direct Request for Revision to PDE for Category

Direct Plug-In and Cord-Connected Class 2 Power Units
(EPBU, EPBU2)

STANDARDIZED APPENDIX PAGES

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APPENDIX A - FIELD REPRESENTATIVE'S RESPONSIBILITIES AND INSTRUCTIONS FOR
EXAMINATION OF THE PRODUCT

FIELD REPRESENTATIVE'S RESPONSIBILITIES

The Field Representative's responsibilities include, but are not limited to:

Examine the construction of production bearing, or intended to bear, the UL Mark or Markings to determine compliance with the description of the product and any other requirements expressed in this Procedure.

Where so specified by Appendix B, select samples to be forwarded to the appropriate UL Testing Laboratory for Follow-Up Tests. The packaging and shipment of samples are the responsibility of the manufacturer.

Where so specified by Appendix D, inspect the test records and facilities of the manufacturer to verify that:

- a. The proper number of samples are undergoing the required tests,
- b. The required tests are being performed correctly and appropriate records are maintained,
- c. The proper information is being recorded and is up-to-date,
- d. The instruments being used for the tests have been calibrated at the prescribed interval and are in good working order.

Report to the manufacturer and the UL Responsible Office by means of a Variation Notice (VN) if:

- a. Variations in construction are found,
- b. The manufacturer's method and/or frequency of test is not as described,
- c. The records maintained by the manufacturer are not as described,
- d. The manufacturer's inspection program is not being performed as described,
- e. The manufacturer's test equipment is not properly calibrated, calibrations are not conducted at the prescribed frequency, or calibration certificates/records do not contain all required information. (Note: Variation Notices written for these issues are to be handled under Field Representative control.).

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- f. The calibration of the equipment before any adjustments are made is outside of the required tolerance (equipment manufacturer's accuracy specification), or the equipment is determined to be non-operational, discovered to be defective, or has other features that could affect the validity of previous measurements/test results. (Note: for these issues, the VN shall be issued under a Temporary Acceptance status for analysis by the Variation Notice Handling Office).
- g. Nonconforming test results are witnessed during tests conducted specifically for the Field Representative.

Explain to the manufacturer that a Variation Notice is a means of communication with the manufacturer and forms a record of those items where nonconformance with the Procedure has been encountered.

PROCEDURE IN THE EVENT OF NONCONFORMANCE

When a product does not comply with the Follow-Up Service Procedure require that the manufacturer shall either:

- a. Remove any markings referencing UL from the product, or obliterate these markings where the marking is imprinted, die-stamped, molded, etc., or
- b. Modify all products to bring them into compliance with the Follow-Up Service Procedure, or
- c. Hold shipment pending further instructions from UL.

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It is the manufacturer's responsibility to forward a copy of the Variation Notice to the Applicant. If the rejection of the product is questioned by the manufacturer and Applicant, the material may be held at the point of inspection, typically at the factory, pending an appeal. The manufacturer has the right to appeal a decision with which they disagree. Appeals of technical decisions and held shipments should be directed to the Variation Notice Handling Office. To resolve issues involving variations in construction, the manufacturer and Applicant may also be offered the option of contacting a Customer Service Professional.

Should UL grant temporary authorization for the continued use of the UL Mark, such temporary authorization shall only be for the time needed to review and/or process the Procedure revisions, or as otherwise specified to cover a particular lot or production run.

When it is decided that UL Marks are to be removed from products, the manufacturer shall demonstrate that all marks referencing UL are removed from the affected material. Those marks referencing UL not destroyed during their removal from the product shall be retrieved from the manufacturer's control by the Field Representative and either (1) held until the manufacturer demonstrates adequate control of their production to assure the application of the Mark to only those products that comply with requirements, (2) returned to the supporting UL Label Center, or (3) destroyed.

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APPENDIX B - INSTRUCTIONS FOR FIELD REPRESENTATIVE'S SAMPLE SELECTION

RESERVED FOR FUTURE USE

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APPENDIX C - INSTRUCTIONS FOR FOLLOW-UP TESTS AT UL

RESERVED FOR FUTURE USE

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APPENDIX D - MANUFACTURER' S RESPONSIBILITIES, CONSTRUCTION CONSIDERATIONS, AND
REQUIREMENTS FOR FACTORY TESTS

The Follow-Up Service Procedure covering the product is loaned to the manufacturer and constitutes the basis on which the product is judged for compliance with the applicable requirements.

MANUFACTURER' S RESPONSIBILITIES

The manufacturer's responsibilities include, but are not limited to:
Control of the UL Mark - Restrict the use of markings that reference UL (either directly by use of the name, an abbreviation of it, or the UL symbol, Classification Mark or Recognized Component Mark, or indirectly by means of agreed-upon markings that are understood to indicate acceptance by UL) to those products that are found by the manufacturer's own inspection to comply with the Follow-Up Service Procedure description. Use of such markings is further limited by the agreements that have been executed by the Subscriber and UL. Confine the application of markings referencing UL to the location or locations authorized in these Appendix Pages or the Follow-Up Service Procedure.

Access to Factory - During hours in which the factory is in operation, provide the Field Representative with free access to any portion of the premises where the product or components thereof are being fabricated, processed, finished or stored, and to the test areas when testing is required in this document. The Field Representative shall be permitted to inspect and witness prescribed tests, prior to shipment, any product bearing or intended to bear markings referencing UL. If product disassembly is required, it shall be undertaken by the manufacturer. Tests required, as part of this Procedure, shall be conducted by the manufacturer.

Corrective Action - Perform a root cause analysis of nonconforming test results reported by UL in order to determine and implement appropriate corrective actions. Upon request, the manufacturer shall submit the findings of their analysis and action plan for review and/or monitoring by UL. For those cases involving questionable test and measuring equipment, the manufacturer shall evaluate and document the effects of the equipment on previous inspections or tests. The manufacturer shall evaluate if the equipment condition could have significantly affected previous inspection or test results and take corrective action as appropriate. The equipment in question shall be removed from service by segregation or prominent labeling and marking.

Production-Line Tests - Conduct the Factory Tests detailed in Appendix D.

Required Records - Maintain records of test performance. Unless indicated otherwise in the Procedure, the information to be recorded should include the model or catalog number, identification of the product, the test conducted, the test date, and the results. The record for a specific lot or group of products may consist only of a statement, without specific details, that the entire lot or group was tested and found acceptable. Generally, a form record sheet should be used to assist in and expedite the record-keeping task. Records are to be retained for at least 6 months and shall be readily available for review by the Field Representative. Note: It is not necessary to keep complete test records when 100% of production is tested, if the manufacturer has an auditable system

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in place to confirm that production is always subjected to the required tests. Instead, exception reports indicating noncompliance and corrective action should be retained.

Test Equipment and Personnel - Provide, at a convenient location, all required test equipment and facilities and any required personnel for conducting all tests that are to be performed at the factory. These shall be available when needed so that the inspection work can proceed without undue delay.

Test and Measuring Equipment and Standards Calibration - The Manufacturer shall determine daily that test equipment is functioning properly. In addition,

- a. Unless specified elsewhere in the Follow-Up Services Procedure, all test and measuring instruments required as part of the Follow-Up Services Procedure or used by Field Representatives in the conduct of inspection activity at the factory shall be calibrated yearly (or whenever it has been subject to abuse such as dropped or struck with an object, or its accuracy is otherwise questionable) for its intended use. Exception 1 - Instruments used as part of processing equipment, i.e. equipment used in the manufacturing of the product, are not generally subject to this calibration requirement unless specifically noted otherwise elsewhere in the Follow-Up Services Procedure. Exception 2 - Measuring equipment such as steel rules, tape measures, protractors, and radius gauges typically only need in-service checks to verify their fitness for use.
- b. For in-house calibrations of weights and gauge blocks, the Standard used for the calibrations shall only be used for calibration purposes and be calibrated by a competent body every three years, or whenever the Standard has been subject to some form of abuse that may affect the Standard's fitness for use.
- c. For other Standards (such as Voltmeters), the Standard shall only be used for calibration purposes and be calibrated by a competent body yearly or in accordance with the equipment manufacturer's specifications, as well as, whenever the Standard has been subject to some form of abuse that may affect the Standard's fitness for use.
- d. All Standards shall be stored per the Standard manufacturer's recommendations to protect them from damage or deterioration.
- d. The calibrated test and measuring equipment, and the Standards used for in-house calibration, should be provided with a label or the like indicating the next calibration due date. The manufacturer must keep records of calibrations. The records are to include information equivalent to that noted in item f.

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- f. When calibration service providers are utilized, who are accredited to ISO 17025 and where the calibration certificates show evidence of this accreditation, it is only necessary for the Field Representative to verify that the instrument is covered by the certificate, is within the calibration period and has been calibrated for the measurements for which it will be used. For calibration service providers who are not accredited to ISO 17025 (including in-house calibrations), the Field Representative shall verify the following information on the certificates provided (or records maintained for in-house calibrations):
1. Title, e.g. "Calibration Certificate", "Calibration Report", etc. (or equivalent)
 2. Name and address of laboratory, and the location where the calibration was carried out, if different from the address of the laboratory.
 3. Unique identification of the certificate (such as serial number), and on each page, an identification in order to ensure each page is part of the calibration certificate with a clear indication of the end of the calibration certificate (such as page numbers and total pages - Page X of Y)
 4. Name and address of customer
 5. Description of the condition of the item calibrated (e.g., received out of calibration, damaged, etc.)
 6. Date(s) of performance of the calibration.
 7. Model number and serial number of the item calibrated or other unambiguous identification of the item calibrated.
 8. The measured value(s) of the calibration with units of measurement(s).
 9. A signature and title, or equivalent identification of the persons authorizing the calibration certificate.
 10. Where relevant, a statement to the effect that the results relate only to the items calibrated.
 11. Evidence that the measurements are traceable to national/international standards.
- g. There should not be any alteration to the calibration data/results without laboratory authorization).
- h. When the certificate or report contains results of calibrations performed by subcontractors, these results shall be clearly identified.

Samples for Follow-Up Testing at UL - If Appendix B specifies that samples are required to be forwarded to UL for Follow-Up Testing, the manufacturer shall forward the samples selected by the Field Representative, to the specified UL Testing Laboratory, within five working days of the Field Representative's inspection visit. Packaging and shipment of the samples are the responsibility of the manufacturer.

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SPECIAL REQUIREMENTS

Special requirements that may also apply to some or all of the products covered by this Procedure include the following:

1. Power Supply Cords

Non-Detachable Power Supply Cord -

A non-detachable power supply cord as described in the individual sections of the Procedure must be provided and shipped with the unit in all cases. The power supply cord and any alternatives must be described in each Procedure section or Section General.

Detachable Power Supply Cord -

The detachable power supply cord as described in the individual sections of the Procedure may or may not be shipped with the unit. Use the guidelines in Table 1 in assisting the manufacturer to apply the alternatives under each of the situations described in the notes to Table 1. Table 1 also includes alternative detachable power supply cords that may be shipped with units intended for use outside the USA and/or Canada.

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TABLE 1 - DETACHABLE POWER SUPPLY CORD REQUIREMENTS

The requirements for detachable power supply cords depend on whether the cord is provided.

This table, along with the following notes, details the requirements for each of the possible situations.

Status of Detachable Power Cord	
Provided	Not Provided
Note A or D	(Notes B and C) or (Notes B and E)

NOTE:

A. The power supply cord should be as described in the Procedure section.

B. A marking must be provided adjacent to the appliance coupler or at an equivalent location either to inform the user on proper selection of the power supply cord or to see the instruction manual for this information. This marking may be in the form of a tag, nonpermanent label, or product insert that is provided on or packaged with the product so that the marking is visible at the time of installation.

C. The marking (tag, label, or product insert) or instruction manual must contain complete instructions concerning selection of the proper power supply cord. The reference to the power supply cord must be of a UL Listed detachable power supply cord consisting of the specific configuration of appliance coupler, the cord type, and the electrical rating of the power supply cord as described in the appropriate sections of the Procedure. Refer to Table 2 for equivalent types of cords.

D. The manufacturer is to supply the Field Representative with information that allows the Field Representative to verify that the products are intended to be sold outside of the USA and/or Canada and that the cord is certified or similarly appropriate for use in the destination country.

E. The reference to the power supply cord (see Note B) shall include instructions for selection of the proper power supply cord as in the destination country other than the USA or Canada.

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TABLE 2 - EQUIVALENT CORDS

Basic Cord Type	Other Suitable Types
TS	TST
SP-2	SPE-2, SPT-2
SP-3	SPE-3, SPT-3
SV	SVE, SVO, SVOO, SVT, SVT0, SVTOO
SJ	SJE, SJO, SJOO, SJT, SJTO, SJTOO
S	SE, SO, SOO, ST, STO, STOO

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REQUIREMENTS FOR FACTORY TESTS

The following Production-Line Tests shall be conducted on products covered by this Procedure. During production, test equipment shall be checked for proper operation at least once daily.

A. Production-Line Dielectric Voltage-Withstand Test

General - Except as may be noted under Exceptions in Sp. App. D, the manufacturer shall subject 100 percent of production of all products to a routine Production-Line Dielectric Voltage-Withstand Test in accordance with the following.

Test Equipment - The equipment shall provide the following features.

1. The test equipment shall have a means of indicating the test potential, an audible or visual indicator of electrical breakdown, and, if for automated or station type operations, either a manual-reset device to restore the equipment after electrical breakdown or an automatic-reject feature for any nonconforming unit (appliance). When an ac test potential is applied, the test equipment shall include a transformer having an essentially sinusoidal output.
2. When the rated output of the test equipment is less than 500 volt-amperes, the equipment shall include a voltmeter in the output circuit to directly indicate the applied test potential.
3. When the rated output of the test equipment is 500 volt-amperes or more, the test potential may be indicated by (1) a voltmeter in the primary circuit or in a tertiary-winding circuit, (2) by a selector switch marked to indicate the test potential, or, (3) in the case of equipment having a single test-potential output, by a marking in a readily visible location to indicate the test potential. If an indicating voltmeter is not used, the test equipment shall include a visual means, such as an indicator lamp, to indicate that the test voltage is present at the test-equipment output.

Direct Plug-In and Cord-Connected Class 2 Power Units
(EPBU, EPBU2)

Method - Each unit shall withstand without electrical breakdown the application of an ac potential at a frequency within the range of 40-70 Hz between (1) the primary wiring, including connected components, and accessible dead metal parts, and (2) between the primary wiring, including connected components, and output circuits. If indicated on Sp. App. D page 1, the test potential shall also be applied between primary circuits and the inaccessible transformer core.

For the test, either a sufficient number of control devices are to be closed or separate applications of the test potential are to be made so that all parts of the primary circuit are tested.

The unit may be at intended operating temperature, at room temperature, or at any intermediate temperature for the test.

The test duration and potential shall be:

- A. 1000 Vac for 60 seconds, or
- B. 1200 Vac for one second.

The test potential may be gradually increased to the minimum required value but the full test potential value is to be applied for the specified test duration.

The test shall be conducted when the unit is fully assembled. It is not intended that the unit be rewired, modified, or disassembled for the test.

Exception No. 1: Parts such as snap covers or friction-fit knobs that interfere with performance of the test need not be in place.

Exception No. 2: The test may be performed before final assembly if the test represents that for the completed unit. Any component not included shall not affect the results with respect to determination of possible electric shock from miswiring, defective components, nonconforming spacings, and the like.

Exception No. 3: The test need not be performed using the power supply cord provided with the product. However, if the manufacturer's test method employs a test power supply cord, then the continuity of the test power supply cord conductor connections shall be checked once daily.

Direct Plug-In and Cord-Connected Class 2 Power Units
(EPBU, EPBU2)

When authorized by the Exceptions in Sp. App. D, solid-state components that might be damaged by a secondary effect (induced voltage surge, excessive heating, and the like) of the test may be short-circuited by means of a temporary electrical jumper, or the test may be conducted without the component electrically connected, providing the wiring and terminal spacings are maintained. Additionally, transient voltage suppression devices other than capacitors connected from primary wiring to dead metal may be disconnected during the test.

Basis for Acceptability: All products shall withstand the applied potential without electrical breakdown.

Direct Plug-In and Cord-Connected Class 2 Power Units
(EPBU, EPBU2)

B. Production-Line Grounding Continuity Test

General - Except as may be noted on any Exceptions page included with Sp. App. D, the manufacturer shall subject 100 percent of all products intended to be grounded to a grounding continuity test.

Test Equipment - Any suitable continuity indicating device (such as an ohmmeter, a battery and buzzer combination, or the like) may be used to determine compliance with the Grounding Continuity Test requirements. Additionally, commercial ground continuity testers that pass a current through the grounding path may be used to determine compliance with the same requirements.

Method -

Cord-Connected Units: Grounding continuity shall be determined between the grounding conductor of the attachment plug cap, and/or the designated main grounding point and accessible dead-metal parts of the product, using the test equipment indicated above.

Direct Plug-In Units: Grounding continuity shall be determined between the ground pin and accessible dead-metal parts of the product, using the test equipment indicated above.

Basis for Acceptability - Grounding continuity shall be confirmed between the parts specified.

Direct Plug-In and Cord-Connected Class 2 Power Units (EPBU, EPBU2)

PRODUCTS WHICH REQUIRES PRODUCTION DIELECTRIC TEST BETWEEN
PRIMARY CIRCUIT PARTS AND INACCESSIBLE TRANSFORMER CORE
(see Method, Appendix D Page 8)

Product Designation

Procedure Section or Date

Reserved for future use

Exceptions

Production-Line Dielectric Voltage-Withstand Test

1. Production-Line Dielectric Voltage-Withstand Test Voltages - For products which have specific testing conditions, the voltage to be used for the Production-Line Dielectric Voltage-Withstand Test on 100% of production is specified below.

Procedure Section or Date	Product Designation	Test Potential V ac	Test Potential V dc	Time Seconds	Applied Between

Reserved for future use

Comments:

2. Production Exempt From Production-Line Dielectric Voltage-Withstand Test - Based on engineering judgment, this test is not required to be performed on the following products.

Product Name	Product Designation	Procedure Section or Date

Reserved for future use

3. Components Exempt From Production-Line Dielectric Voltage-Withstand Test - The following components may be disconnected from the remainder of the circuitry during the performance of this test.

Product Name	Product Designation	Component Designation	Procedure Section or Date Fig., Item, Ill.

Reserved for future use

Exceptions

Production-Line Grounding Continuity Test

Based on engineering judgment, this test is not required to be performed on the following products.

Product Name	Product Designation	Procedure Section or Date
	All the models in this Volume	

GENERAL

PRODUCT COVERED:

Direct Plug-In and Cord-Connected Class 2 Power Units.

TECHNICAL CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE USE):

Products designated USL have been investigated using requirements contained in the Standard for Class 2 Power Units, UL 1310, 5th Edition.

Products designated CNL have been investigated to Canadian requirements using requirements contained in CAN/CSA C22.2 No. 223-M91, Second Edition.

"CN" indicates that the component has been evaluated to Canadian requirements. The Field Representative shall confirm that the component has a Canadian UL Listing or Recognition Mark, a CSA Certification Mark or an equivalent identifier. If the Power Unit does not bear the C-UL or C-UR Mark, the CN reference should be disregarded.

Circuit Designation -

Primary Circuit (PRI) - indicates an internal circuit that is directly connected to the external supply mains or other equivalent source which supplies the electric power.

Secondary Circuit (SEC) - indicates a circuit which has no direct connection to primary power and derives its power from a transformer, converter, or equivalent isolation device situated within the equipment, and does not exceed Class 2 Voltage, Current, and Power Limitations.

MARKINGS:

Application -

1. Markings are molded, die-stamped, paint-stenciled, stamped or etched in metal or indelibly stamped or printed on pressure-sensitive label secured by adhesive.
2. Unless otherwise specified, pressure sensitive labels which contain any of the required markings shall be R/C (PGDQ2/8), suitable for minimum 60°C and for the surface material or finish to which adhered.

Product Marking - All units shall be marked with the following.

1. Listee's name or File No. "E323535" or trademark as specified in Note 1 below.
2. Model designation.
3. Electrical ratings, including input voltage or voltage range, input frequency and, if specified in the individual Reports, input amperes, volt-amperes or wattage rating. Additionally, output voltage in ac or dc and output current in amperes, volt-amperes or watts shall be marked, unless the unit is a battery charger marked for use with a specific battery pack.
4. Output polarity (Note 2).
5. Date code (Note 3).
6. Factory identification if applicable.
7. Product Identification and Use. A unit shall be marked with one of the following terms, as applicable. See individual Reports.
 - a) "Class 2 Battery Charger,"
 - b) "Class 2 Transformer,"
 - c) "Class 2 Power Supply," or
 - d) "Class 2 Power Unit."

Note 1: The following marking or trademark may be used to identify the Listee. (None)

Note 2: The polarity of a direct current output shall be plainly marked unless the unit is provided with a polarized output termination.

Note 3: Date Code - Consist of four digits: WWYY. Month and year of manufacture are provided as follows: Location: On the unit, 2 numbers are used to represent the week and 2 numbers are used to represent the year. Example, "1504" represent fifteenth week, 2004.

May be on label on top enclosure or ink-stamped on bottom enclosure.

Cautionary Markings - Shall include the following:

"CAUTION" and "Risk of electric shock" and the following: "Dry location use only" or "Do not expose to liquid, vapor, or rain."

See also individual Reports.

A cautionary marking shall be located on a part that cannot be removed without impairing the operation of the unit, or it may be provided on a permanent tag secured to the output or input cord.

The tag shall be of cloth, plastic or other durable material and large enough to accommodate the required marking. The tag may be either a flat tag with a hole large enough for the cord but not so large that it can be easily torn from the cord, or the tag may be an adhesive back, flag-type tag wrapped tightly around the cord. The ends of the tag are to adhere to each other and form the flag.

Markings on a tag are to be printed in contrasting colors on a background other than blue or yellow.

The tag shall be marked "Do Not Remove This Tag" or the equivalent in letters minimum 2.4 mm (3/32 in.) tall.

Note 4: The words "CAUTION", "WARNING", and/or "DANGER" shall be in letters not less than 3.2 mm (1/8 in.) tall, remaining letters not less than 1.6 mm (1/16 in.) tall.

This product shall comply with the Standard of Underwriters Laboratories Inc. for UL 1310 Class 2 Power Units and with the applicable description, if any, given elsewhere in this procedure.

CONSTRUCTION DETAILS:

General - Unless otherwise described in the individual Reports, the following paragraphs apply to all products included in this Procedure.

Abbreviations -

Sec. Gen.	- Sectional General
R/C	- Recognized Component
USL	- United States, Listed
CNL	- Canadian Standard, Listed

Blades - Folded over or solid, copper, brass or bronze. Located minimum 5.1 mm for USL units and 8 mm for CNL units from edge of enclosure. See Sec. Gen., ILL. 1 for dimensions, spacing and relative location of blades.

Printed Wiring Boards - Unless designated as "SEC", all printed wiring boards (PWB), shall be R/C (ZPMV2) with a minimum flammability rating of V-2 for units without openings, V-1 for units with openings, and have a minimum operating temperature rating of 90°C. Also, the solder time and temperature of any wave soldering machines shall not exceed the values indicated in the Component Recognition Report or Directory. Hand soldered boards shall be examined for charring, burned areas or other damage.

See also the individual Reports for additional requirements or instructions that may supersede these instructions.

Internal Wiring - Unless otherwise specified, internal wiring shall be R/C (AVLV2), CN, rated 300 V, 80°C minimum, VW-1.

Electrical Connections - Electrical connections may be accomplished by soldering or use of wire connectors.

Wire connectors or terminals, shall be Listed or Recognized (ZMVV2), CN, suitable for the type, size and number of conductors and applied using the tool recommended by the connector manufacturer. Additionally, terminals shall be of the closed loop, or spade type with upturned ends.

Quick connect terminals shall be Listed with integral detent or locking type, suitable for the type, size and number of conductors and applied using the tool recommended by the connector manufacturer.

Solder connections shall be mechanically secured prior to soldering. Printed wiring assemblies may be wave soldered.

Insulation Tubing/Sleeving - R/C (YDPU2)/CN; (YDTU2)/CN; (UZFT2) or (UZKX2)/CN, rated minimum 90°C, 300 V, VW-1.

Wire Positioning Devices - Unless otherwise specified, R/C (ZODZ2)/CN, rated minimum 60°C.

Corrosion Protection - Iron and steel parts shall be protected against corrosion by painting, plating, galvanizing or enameling.

Exception: Laminations and small parts of iron or steel such as washers or screws that are not current carrying parts do not require corrosion protection.

Spacings - Unless otherwise specified in the individual Report, minimum spacings between live parts of opposite polarity and between live and dead-metal parts shall be as specified below:

Spacings in units having openings in the Enclosure:

Potential Involved V, rms	Through-Air, mm (in.)	Over-Surface, mm (in.)
50 or less	1.6 (1/16)	1.6 (1/16)
51 - 150	3.2 (1/8)	6.4 (1/4)
151 - 250	6.4 (1/4)	9.5 (3/8)

Spacings in units without openings in the Enclosure:

Potential Involved V, rms	Through-Air, mm (in.)	Over-Surface, mm (in.)
50 or less	1.6 (1/16)	1.6 (1/16)
51 - 150	1.6 (1/16)	1.6 (1/16)
151 - 250	4.8 (3/16)	4.8 (3/16)

Segregation - Insulated conductors of different circuits shall be provided with spacings as specified above unless both circuits are insulated for the highest voltage involved. Insulated conductors shall be maintained away from bare live parts of different circuits, sharp edges, and heat producing components by routing or clamping.

Alternate - Segregation may be maintained by use of a barrier. Refer to the individual Reports for details concerning barrier.

Class 2 Secondary Circuit Spacings - Not specified as spacings are based on Dielectric voltage-Withstand Tests.

Instruction Manual - The following instructions shall be provided in the instruction manual.

1. The operating orientation of a direct plug-in power unit shall be indicated in the instructions as follows:

"This power unit is intended to be correctly orientated in a vertical or floor mount position." or equivalent wording.

Alternate - The instructions may be marked on the units.

Exception: The instruction is not required for a direct plug-in power unit weighing 1 pound (454 g) or less.

2. The instructions for a power unit intended for use by travelers shall include (a) - (c) or the equivalent, as appropriate. The items shall be precede by "IMPORTANT SAFETY INSTRUCTIONS - SAVE THESE INSTRUCTIONS" and "DANGER - TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK. CAREFULLY FOLLOW THESE INSTRUCTIONS" in letters of 1/8 inch (3.18 mm) high or in a readily visible contrasting text.

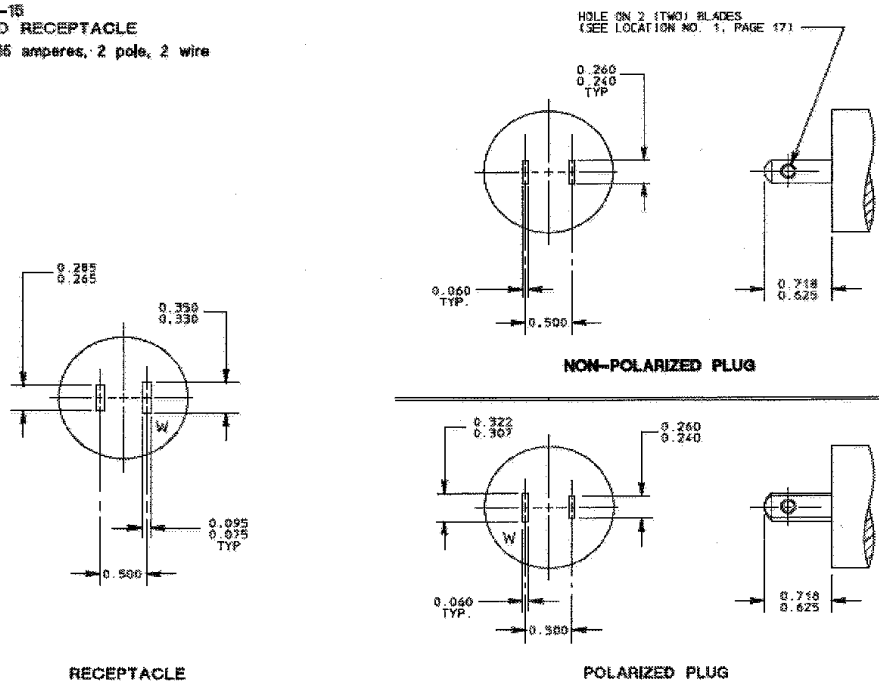
(a) "Be sure voltage selector is in correct voltage position before plugging in."

(b) "For use in the U.S.A., the voltage selector switch must be placed in the 120 volt position. For use in countries other than the U.S.A., the voltage selector may need to be placed in other than the 120 volt position. Confirm the voltage available at each country location before using the product."

(c) "For connection to a supply not in the U.S.A., use an attachment plug adapter of the proper configuration for the power outlet, if needed." or "If the shape of the plug does not fit the power outlet, use an attachment plug adaptor of the proper configuration for the power outlet."

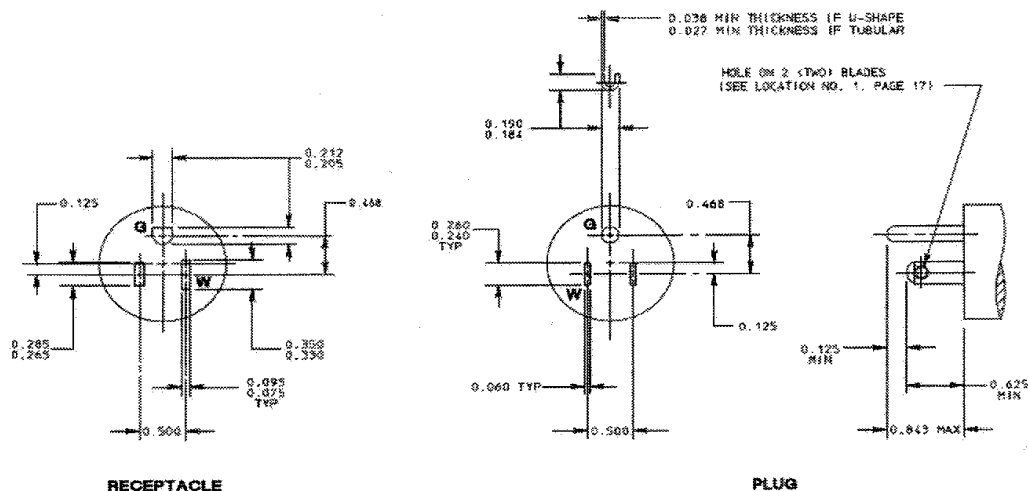
Note: Items (a) and (b) are only for unit employed voltage selector.

FIGURE 1-15
PLUG AND RECEPTACLE
125 volts, 15 amperes, 2 pole, 2 wire



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FIGURE 5-16
PLUG AND RECEPTACLE
 125 volts, 15 amperes, 2 pole, 3 wire, Grounding type



1. All dimensions are in inches, unless otherwise specified.
2. Decimal dimensions without tolerances shall be subject to a plus or minus 0.005-inch tolerance.
3. Angular dimensions without tolerances shall be subject to a plus or minus 1 degree tolerance.
4. "G" denotes equipment ground.
5. "W" denotes system ground.
6. Leading edges of plug blades shall be free of burrs and sharp edges.
7. All slots and slot tolerances are symmetrically located about centerlines.
8. Female contacts associated with plug blades that are 0.125 minimum longer than other blades are engaged prior to the other female contacts.

DESCRIPTION

PRODUCT COVERED:

USL, CNL - Cord Connected, Class 2 Power Supply, Models JXA-XXXXXXX-IP20 series for indoor use only and JXA-XXXXXXX-IP44 series for outdoor use.

GENERAL CHARACTER:

The products covered by this Report are Cord Connected, Class 2 Power Supply.

These units consist of a linear transformer and other related electronic circuitry housed in a thermoplastic enclosure composed of two parts and secured by ultrasonic welding. Units employ a power cord with non-grounding parallel blade plug configuration plug into line voltage.

USL - Investigated in accordance with UL Standard for Safety for Class 2 Power Units, UL1310, Fifth Edition.

CNL - Investigated in accordance with CSA CAN/CSA - C22.2 No. 223-M91, Power Supplies with Extra-Low-Voltage Class 2 Outputs and CAS TIL-I42 Power Supplies for Outdoor Use.

ELECTRICAL RATING :

Model	Input			Output	
	V ac	mA	Hz	V ac	mA
JXA-12V2500-IP20	120	670	60	12.0	2500
JXA-12V3000-IP20	120	670	60	12.0	3000
JXA-12V3500-IP20	120	670	60	12.0	3500
JXA-12V4200-IP20	120	670	60	12.0	4200
JXA-12V5000-IP20	120	670	60	12.0	5000
JXA-24V1500-IP20	120	670	60	24.0	1500
JXA-24V1700-IP20	120	670	60	24.0	1700
JXA-24V2000-IP20	120	670	60	24.0	2000
JXA-24V2100-IP20	120	670	60	24.0	2100
JXA-24V2500-IP20	120	670	60	24.0	2500
JXA-24V3000-IP20	120	670	60	24.0	3000
JXA-12V2500-IP44	120	670	60	12.0	2500
JXA-12V3000-IP44	120	670	60	12.0	3000
JXA-12V3500-IP44	120	670	60	12.0	3500
JXA-12V4200-IP44	120	670	60	12.0	4200
JXA-12V5000-IP44	120	670	60	12.0	5000
JXA-24V1500-IP44	120	670	60	24	1500
JXA-24V1700-IP44	120	670	60	24	1700
JXA-24V2000-IP44	120	670	60	24	2000
JXA-24V2100-IP44	120	670	60	24	2100
JXA-24V2500-IP44	120	670	60	24	2500
JXA-24V3000-IP44	120	670	60	24	3000

CONSTRUCTION DETAILS:

The unit or units shall be constructed in accordance with the following items. See also, Section General, Construction Details.

MARKING AND NOTICES:

General - All markings shall be legible. Units shall be marked for US - "CLASS 2 NOT WET, CLASS 3 WET" and units shall be marked for Canada - "CLASS 2 NOT WET, CLASS 1 WET" for models JXA-XXXXXXX-IP44 - series. Units shall be marked "Class 2 Power Supply for dry location use only for models JXA-XXXXXXX-IP20 series.

Marking - See Section General, Marking. The following markings are also placed on the product for outdoor use:

"Raintight" or "Rainproof"

"Warning: Risk of Electric Shock. Install only to covered Class A GFCI receptacle that has an enclosure that is weatherproof with the attachment plug cap inserted or removed".

Appliance Marking - Model designation, electrical rating, Listee's identification: Listee's name or Trade name. Location: On the unit

Date of Manufacture Marking - Month and year of manufacture are provided as follows: Location: On the unit, 2 numbers are used to represent the week and 2 numbers are used to represent the year. Example, "1504" represent fifteenth week, 2004.

Important Safety Instructions - Provided with each unit, see ILL.1 for details.

Label - The marking shall be ink-stamped, die-stamped, painted or on R/C (PGDQ2) printed labels. See ILL.2 for detail.

MODEL JXA-XXXXXXX-IP20, series, Indoor unit - FIG. 1

General - Shows external view of model JXA-XXXXXXX-IP20, series, Indoor unit

1. Enclosure - Two piece construction. R/C (QMFZ2), GE Plastics China, Type 940(f1) rated V-1, minimum 1.5 mm thick. Overall dimensions 76.0 mm by 66.0 mm by 104.0 mm. Two halves are secured by ultrasonic weld.

Provided with the following openings:

Input Strain Relief Opening - overall 8.90 mm by 8.70 mm

Output Connector Opening - overall 13.30 mm by 12.30 mm

2. Power Supply Cord - Listed, SPT-2, 16 AWG/2C, rated 105°C "dry", Provided with polarized, solid copper alloy with Zinc plated, NEMA 1-15P type attachment plug. Supply cord leads are mechanically secured, soldered and sleeved with tubing to internal wiring.
3. Input Strain Relief - Integrally molded to the supply cord. Secured by fit of flange with the opening of the enclosure, inside partition measured 11.30 mm by 13.90 mm, 3.70 mm thick, central partition measured 8.40 mm by 8.80 mm by 3.60 mm wide, outer partition measures 11.30 mm by 13.90 mm by 2.10 mm thick.
4. Output connector - R/C (QMFZ2) GE Plastics China, Type 940(f1), rated V-1, minimum 1.5 mm thick.

Alternate: Output Cord - SEC. R/C (AVLV2), type AWM 2468, rated 300V, 85 °C. Two conductors flexible cord, No. 20 AWG, having minimum 0.33 thick thermoplastic insulation. One end of cord terminates at internal connections; other end terminates in a two wires female connector. Cord measured 141 mm external length.

Output Cord Relief - Integrally molded to the supply cord. Secured by fit of flange with the opening of the enclosure, inside partition measured 17.60 mm by 14.90 mm, 2.60 mm thick, central partition measured 12.90 mm by 10.60 mm, 2.60 mm wide, outer partition measures 17.60 mm by 14.90 mm by 3.90 mm thick.

Model JXA-XXXXXXX-IP44, series, Outdoor unit - FIG. 2

General - Shows external view of model JXA-XXXXXXX-IP44, series, Outdoor unit

1. Enclosure - Two piece construction. R/C (QMFZ2), GE Plastics China, Type 940(f1) rated V-1, minimum 1.5 mm thick. Overall dimensions 82.80 mm by 63.70 mm by 76.30 mm. Two halves are secured together by ultrasonic weld.

Provided with the following openings:

Input Strain Relief Opening - overall 11.60 mm by 12.50 mm

Output Connector Opening - overall 12.90 mm by 13.60 mm

2. Power Supply Cord - Listed, SJT-W, 16 AWG/2C, rated 105°C "dry", 60 °C "WET". Provided with polarized, solid copper alloy with Zinc plated, NEMA 1-15P type attachment plug. Supply cord leads are mechanically secured, soldered and sleeved with tubing R/C (YDPU2), rated VW-1 to internal wiring.
3. Input Strain Relief - Integrally molded to the supply cord. Secured by fit of flange with the opening of the enclosure, inside partition measured 17.70 mm by 15.30 mm, 3.30 mm thick, central partition measured 12.00 mm by 9.80 mm by 3.3 mm wide, outer partition measures 17.60 mm by 15.40mm by 5.00 mm thick.
4. Output connector - R/C (QMFZ2), GE Plastics China, Type 940(f1) rated V-1, minimum 1.5 mm thick. , suitable for outdoor use.

Model JXA-XXXXXXX-IP20 Series for Indoor use - FIG. 3

General - The general design, shape and arrangement shall be as illustrated in FIG. 3.

1. Transformer - Constructed as follows:

- A. Core - Laminated silicon steel, E-I combination, 66.30 mm by 46.0 mm by 55.2 mm overall.
- B. Primary Winding - R/C (OBMW2) Polyurethane magnet wire, 360 turns.
- C. Secondary Winding - R/C (OBMW2) Polyurethane magnet wire, see Electrical Ratings for diameter and number of turns for each model in the series.
- D. Slip Bobbin Construction - Two 2-flange bobbin provided. R/C (QMFZ2), EI Dupont De Numours (E41938), Type FR7025VOF+, rated V-0, minimum 0.88 mm thick.
- E. Polyester Insulation Tape - (PRI, SEC) R/C (OANZ2) minimum 0.05 mm thick.
- F. Primary Winding to Core Insulation - Bobbin flange is 0.88 mm thick, with two layers of R/C (OANZ2), Suzhou Jingy Adhesive Tape Co., Ltd., Type JY312, minimum 0.05 mm thick provided, bent up and over the bobbin flanges a minimum 5.6 mm for additional window insulation.
- G. Primary Outerwrap - R/C (OANZ2), 3 layers of polyester tape, each 0.05 mm thick.
- H. Secondary Outerwrap - R/C (OANZ2), 2 layers of polyester tape, each 0.05 mm thick.
- I. Primary Lead Connection to Primary Winding Insulation - 2 Layers of polyester film tape, each 0.05 mm thick.
- J. Primary to Secondary Insulation - Bobbin flange, 0.88 mm thick, with one layer of slip bobbin material, minimum width 5.0, provided on all four sides to increase the oversurface spacing between primary and secondary windings to a minimum of 6.4 mm.
- K. Secondary Winding to Core Insulation (Bottom) - Bobbin flange, 0.88 mm thick.

- L. Thermal Cutoff - (PRI) R/C (XCMQ2), Aupo Electronics Ltd., Type A4, rated 130°C, located at primary winding. Provided with 2 layers of insulating tape. Leads are mechanically secured and soldered to primary winding. The leads and body are sleeved with tubing.
 - M. Crossover Insulation - 1 layer of polyester tape, minimum 0.05 mm thick.
2. Fuse - (SEC) Listed or R/C (JDYX), Walter Electronic Type TDS, rated 6.3 A. Leads and body are sleeved with tubing, R/C (YDPU2), rated VW-1.

Model JXA-XXXXXXX-IP44 , Series for Outdoor use - FIG. 4

General - Same as illustrated in FIG. 3 except as follow:

1. Epoxy - R/C (QMFZ2), Suzhou Eattto Electronic Material Co., Ltd. and type 3300A/B, rated 90 °C. Completely filled in the internal cavity of the unit.



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N080460929



N080460930



N080460931

IMPORTANT SAFETY INSTRUCTIONS

SAVE THESE INSTRUCTIONS – This manual contains important safety and operating instructions for power units.

When using electrical products, basic precautions should always be practiced (including the following):

1. **READ AND FOLLOW ALL SAFETY INSTRUCTIONS.**
2. Read and follow all instructions that provided with the product.
3. Do not use an extension cord.
4. Reference the National Electrical Code, ANSI/NFPA 70, specifically for the installation of wiring and clearances from power and lighting conductors.
5. Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction
6. For a cord-connected or direct plug-in power unit, do not install or use within 10 feet of a pool.
7. Do not use in a bathroom
8. **WARNING: Risk of Electric Shock.** When used outdoors, install only to a covered Class A GFCI protected receptacle that is weatherproof with the power unit connected to the receptacle. If one is not provided, contact a qualified electrician for proper installation. Ensure that the power unit and cord do not interfere with completely closing the receptacle cover.
9. **WARNING: Risk of Electric Shock.** When used outdoors, install only on a circuit protected by a Class A GFCI.
10. **WARNING: Risk of Fire.** Installation involving special wiring methods to run wiring through a building structure. Consult a qualified electrician.

WARNING: Risk of Electric Shock. Install
Only to covered Class A GFCI receptacle
that has an enclosure that is wetherproof
with the attachment plug cap inserted or
removed.
MODEL NO.: JXA-24V300-IP44
INPUT: 120Vac 60Hz 0.67A
OUTPUT: 24Vac 0.3A
cULus EXXXXX Rainproof
XXXXX
LISTED Date:xxxx
US-CLASS 2 NOT MET, CLASS 3 MET
CUL-CLASS 2 NOT MET, CLASS 1 MET
Changzhou Changheng Goldstar Communication
Appliances Co., Ltd

N080460960

DESCRIPTION

PRODUCT COVERED:

USL, CNL - Direct Plug In, Class 2 Power Supply, Models JXA-XXXXXXX-IP20 series for indoor use only and JXA-XXXXXXX-IP44 series for outdoor use.

GENERAL CHARACTER:

The products covered by this Report are Direct Plug In, Class 2 Power Supply.

These units consist of a linear transformer and other related electronic circuitry housed in a thermoplastic enclosure composed of two parts and secured by ultrasonic welding. Units employ a power cord with non-grounding parallel blade plug configuration plug into line voltage.

USL - Investigated in accordance with UL Standard for Safety for Class 2 Power Units, UL1310, Fifth Edition.

CNL - Investigated in accordance with CSA CAN/CSA - C22.2 No. 223-M91, Power Supplies with Extra-Low-Voltage Class 2 Outputs and CSA TIL-I42 Power Supplies for Outdoor Use.

ELECTRICAL RATING :

Model No.	Input			Output	
	V ac	Hz	mA	V ac	mA
JXA-6V500-IP20	120 V	60	280	6	500
JXA-6V600-IP20	120 V	60	280	6	600
JXA-6V800-IP20	120 V	60	280	6	800
JXA-6V1000-IP20	120 V	60	280	6	1000
JXA-6V1200-IP20	120 V	60	280	6	1200
JXA-6V1500-IP20	120 V	60	280	6	1500
JXA-6V1700-IP20	120 V	60	280	6	1700
JXA-12V300-IP20	120 V	60	280	12	300
JXA-12V400-IP20	120 V	60	280	12	400
JXA-12V500-IP20	120 V	60	280	12	500
JXA-12V600-IP20	120 V	60	280	12	600
JXA-12V800-IP20	120 V	60	280	12	800

Model No.	Input			Output	
	V ac	Hz	mA	V ac	mA
JXA-24V150-IP20	120 V	60	280	24	150
JXA-24V200-IP20	120 V	60	280	24	200
JXA-24V250-IP20	120 V	60	280	24	250
JXA-24V300-IP20	120 V	60	280	24	300
JXA-24V350-IP20	120 V	60	280	24	350
JXA-24V400-IP20	120 V	60	280	24	400
JXA-6V2000-IP20	120 V	60	280	6	2000
JXA-12V1000-IP20	120 V	60	280	12	1000
JXA-12V1250-IP20	120 V	60	280	12	1250
JXA-12V1500-IP20	120 V	60	280	12	1500
JXA-12V1700-IP20	120 V	60	280	12	1700
JXA-12V2000-IP20	120 V	60	280	12	2000
JXA-12V2100-IP20	120 V	60	280	12	2100
JXA-24V450-IP20	120 V	60	280	24	450
JXA-24V500-IP20	120 V	60	280	24	500
JXA-24V560-IP20	120 V	60	280	24	560
JXA-24V650-IP20	120 V	60	280	24	650
JXA-24V750-IP20	120 V	60	280	24	750
JXA-24V850-IP20	120 V	60	280	24	850
JXA-24V1000-IP20	120 V	60	280	24	1000
JXA-24V1200-IP20	120 V	60	280	24	1200

Model No.	Input			Output	
	V ac	Hz	mA	V ac	mA
JXA-6V500-IP44	120 V	60	280	6	500
JXA-6V600-IP44	120 V	60	280	6	600
JXA-6V800-IP44	120 V	60	280	6	800
JXA-6V1000-IP44	120 V	60	280	6	1000
JXA-6V1200-IP44	120 V	60	280	6	1200
JXA-6V1500-IP44	120 V	60	280	6	1500
JXA-6V1700-IP44	120 V	60	280	6	1700
JXA-12V300-IP44	120 V	60	280	12	300
JXA-12V400-IP44	120 V	60	280	12	400
JXA-12V500-IP44	120 V	60	280	12	500
JXA-12V600-IP44	120 V	60	280	12	600
JXA-12V800-IP44	120 V	60	280	12	800
JXA-24V150-IP44	120 V	60	280	24	150
JXA-24V200-IP44	120 V	60	280	24	200
JXA-24V250-IP44	120 V	60	280	24	250
JXA-24V300-IP44	120 V	60	280	24	300
JXA-24V350-IP44	120 V	60	280	24	350
JXA-24V400-IP44	120 V	60	280	24	400
JXA-6V2000-IP44	120 V	60	280	6	2000
JXA-12V1000-IP44	120 V	60	280	12	1000
JXA-12V1250-IP44	120 V	60	280	12	1250
JXA-12V1500-IP44	120 V	60	280	12	1500
JXA-12V1700-IP44	120 V	60	280	12	1700
JXA-12V2000-IP44	120 V	60	280	12	2000
JXA-12V2100-IP44	120 V	60	280	12	2100
JXA-24V450-IP44	120 V	60	280	24	450
JXA-24V500-IP44	120 V	60	280	24	500
JXA-24V560-IP44	120 V	60	280	24	560
JXA-24V650-IP44	120 V	60	280	24	650
JXA-24V750-IP44	120 V	60	280	24	750
JXA-24V850-IP44	120 V	60	280	24	850
JXA-24V1000-IP44	120 V	60	280	24	1000
JXA-24V1200-IP44	120 V	60	280	24	1200

CONSTRUCTION DETAILS:

The unit or units shall be constructed in accordance with the following items. See also, Section General, Construction Details.

MARKING AND NOTICES:

General - All markings shall be legible. Units shall be marked for US - "CLASS 2 NOT WET, CLASS 3 WET" and units shall be marked for Canada - "CLASS 2 NOT WET, CLASS 1 WET" for models JXA-XXXXXXX-IP44 - series. Units shall be marked "Class 2 Power Supply for dry location use only for models JXA-XXXXXXX-IP20 series.

Marking - See Section General, Marking. The following markings are also placed on the product for outdoor use:

"Raintight" or "Rainproof"

"Warning: Risk of Electric Shock. Install only to covered Class A GFCI receptacle that has an enclosure that is weatherproof with the attachment plug cap inserted or removed".

Appliance Marking - Model designation, electrical rating, Listee's identification: Listee's name or Trade name. Location: On the unit

Date of Manufacture Marking - Month and year of manufacture are provided as follows: Location: On the unit, 2 numbers are used to represent the week and 2 numbers are used to represent the year. Example, "1504" represent fifteenth week, 2004.

Important Safety Instructions - Provided with each unit, see ILL.1 for details.

Label - The marking shall be ink-stamped, die-stamped, painted or on R/C (PGDQ2) printed labels. See ILL.2 for detail.

Engineering Note - The internal view and external view of model JXA-24V400-IP20 represents models JXA-6V500-IP20, JXA-6V600-IP20, JXA-6V800-IP20, JXA-6V1000-IP20, JXA-6V1200-IP20, JXA-6V1500-IP20, JXA-6V1700-IP20, JXA-12V300-IP20, JXA-12V400-IP20, JXA-12V500-IP20, JXA-12V600-IP20, JXA-12V800-IP20, JXA-24V150-IP20, JXA-24V200-IP20, JXA-24V250-IP20, JXA-24V300-IP20, JXA-24V350-IP20, JXA-24V400-IP20, JXA-6V500-IP44, JXA-6V600-IP44, JXA-6V800-IP44, JXA-6V1000-IP44, JXA-6V1200-IP44, JXA-6V1500-IP44, JXA-6V1700-IP44, JXA-12V300-IP44, JXA-12V400-IP44, JXA-12V500-IP44, JXA-12V600-IP44,

JXA-12V800-IP44, JXA-24V150-IP44, JXA-24V200-IP44, JXA-24V250-IP44, JXA-24V300-IP44, JXA-24V350-IP44, JXA-24V400-IP44.

The internal view and external view of model JXA-12V2100-IP20 represents models JXA-6V2000-IP20, JXA-12V1000-IP20, JXA-12V1250-IP20, JXA-12V1500-IP20, JXA-12V1700-IP20, JXA-12V2000-IP20, JXA-12V2100-IP20, JXA-24V450-IP20, JXA-24V500-IP20, JXA-24V560-IP20, JXA-24V650-IP20, JXA-24V750-IP20, JXA-24V850-IP20, JXA-24V1000-IP20, JXA-24V1200-IP20, JXA-6V2000-IP44, JXA-12V1000-IP44, JXA-12V1250-IP44, JXA-12V1500-IP44, JXA-12V1700-IP44, JXA-12V2000-IP44, JXA-12V2100-IP44, JXA-24V450-IP44, JXA-24V500-IP44, JXA-24V560-IP44, JXA-24V650-IP44, JXA-24V750-IP44, JXA-24V850-IP44, JXA-24V1000-IP44, JXA-24V1200-IP44

MODEL JXA-24V400-IP20 series, Indoor unit - FIG. 1

General - Shows external view of model JXA-24V400-IP20, series, Indoor unit

1. Enclosure - Two piece construction. R/C (QMFZ2), GE Plastics China, Type 940(f1) rated V-1, minimum 1.5 mm thick. Overall dimensions 52.0 mm by 70.0 mm by 42.8 mm. Two halves are secured by ultrasonic weld, suitable for outdoor use with respect to exposure to Ultraviolet Light, Water Exposure and Immersion in accordance with UL 746C.

Provided with the following openings:

Output Connector Opening - overall 13.30 mm by 11.30 mm

2. Input Blades - Non-polarized, solid copper alloy with zinc plating, integrally molded into enclosure, connected to transformer primary winding by R/C (AVLV), wire, rated VW-1, 300 V, See Section General construction for blades dimensions, spacing and relative location of plug face.
3. Output connector - R/C (QMFZ2) GE Plastics China, Type 940(f1), rated V-1, minimum 1.5 mm thick.

Model JXA- JXA-24V400-IP44, series, Outdoor unit - FIG. 2

General - Shows external view of model JXA-24V400-IP44 series, Outdoor unit

1. Enclosure - Same as Fig. 1.

Provided with the following openings:

Output Connector Opening - overall 12.90 mm by 13.60 mm

2. Input Blades - Same as Fig. 1.
3. Output connector - R/C (QMFZ2), GE Plastics China, Type 940(f1) rated V-1, minimum 1.5 mm thick. , suitable for outdoor use with respect to exposures to ultraviolet light, water exposure and immersion in accordance with UL 746C.

Model JXA-24V400-IP20 Series for Indoor use - FIG. 3

General - Internal View of model JXA-24V400-IP20.

1. Transformer - Constructed as follows:

- A. Core - Laminated silicon steel, E-I combination, 41.30 mm by 25.6 mm by 33.6 mm overall.
- B. Primary Winding - R/C (OBMW2) Polyurethane magnet wire, 1120 turns.
- C. Secondary Winding - R/C (OBMW2) Polyurethane magnet wire, see Electrical Ratings for diameter and number of turns for each model in the series.
- D. Slip Bobbin Construction - Two 2-flange bobbin provided. R/C (QMFZ2), EI Dupont De Numours (E41938), Type FR7025VOF+, rated V-0, minimum 0.88 mm thick.
- E. Polyester Insulation Tape - (PRI, SEC) R/C (OANZ2), Suzhou Jingy Adhesive Tape Co., Ltd., Type JY312, minimum 0.05 mm thick.
- F. Primary Winding to Core Insulation - Bobbin flange is 0.88 mm thick, with two layers of R/C (OANZ2), Suzhou Jingy Adhesive Tape Co., Ltd., Type JY312, minimum 0.05 mm thick provided, bent up and over the bobbin flanges a minimum 5.6 mm for additional window insulation.
- G. Primary Outerwrap - R/C (OANZ2), 3 layers of polyester tape, each 0.05 mm thick.
- H. Secondary Outerwrap - R/C (OANZ2), 2 layers of polyester tape, each 0.05 mm thick.
- I. Primary Lead Connection to Primary Winding Insulation - 2 Layers of polyester film tape, each 0.05 mm thick.
- J. Primary to Secondary Insulation - Bobbin flange, 0.88 mm thick, with one layer of slip bobbin material, minimum width 5.0, provided on all four sides to increase the oversurface spacing between primary and secondary windings to a minimum of 6.4 mm.
- K. Secondary Winding to Core Insulation (Bottom) - Bobbin flange, 0.88 mm thick.

- L. Thermal Cutoff - (PRI) R/C (XCMQ2), Aupo Electronics Ltd., Type A4, rated 130°C, located at primary winding. Provided with 2 layers of insulating tape. Leads are mechanically secured and soldered to primary winding. The leads and body are sleeved with tubing.
 - M. Crossover Insulation - 1 layer of polyester tape, minimum 0.05 mm thick.
3. Fuse - (SEC) Listed or R/C (JDYX), Walter Electronic Type TDS, rated 6.3 A. Leads and body are sleeved with tubing, R/C (YDPU2), rated VW-1.

Model JXA-24V400-IP44, Series for Outdoor use - FIG. 4

General - The general design, shape and arrangement shall be as illustrated in FIG. 3 except as follow:

1. Epoxy - R/C (QMFZ2), Suzhou Eattto Electronic Material Co., Ltd. and type 3300A/B, rated 90 °C. Completely filled the internal cavity of the unit.

MODEL JXA-12V2100-IP20, series, Indoor unit - FIG. 5

General - Shows external view of model JXA-12V2100-IP20 series, Indoor unit

1. Enclosure - Two piece construction. R/C (QMFZ2), GE Plastics China, Type 940(f1) rated V-1, minimum 1.5 mm thick. Overall dimensions 57.2 mm by 83.8 mm by 50.5 mm. Two halves are secured by ultrasonic weld, suitable for outdoor use with respect to exposure to Ultraviolet Light, Water Exposure and Immersion in accordance with UL 746C.

Provided with the following openings:

Output Connector Opening - overall 13.30 mm by 13.0 mm

2. Input Blades - Non-polarized, solid copper alloy with zinc plating, integrally molded into enclosure, connected to transformer primary winding by R/C (AVLV), wire, rated VW-1, 300 V, See Section General construction for blades dimensions, spacing and relative location of plug face.
3. Output connector - R/C (QMFZ2) GE Plastics China, Type 940(f1), rated V-1, minimum 1.5 mm thick.

Model JXA- JXA-24V1200-IP44, series, Outdoor unit - FIG. 6

General - Shows external view of model JXA-12V2100-IP20, series, Outdoor unit

1. Enclosure - Same as Fig. 5.

Provided with the following openings:

Output Connector Opening - overall 13.2 mm by 13.60 mm

2. Input Blades - Same as Fig. 5.
3. Output connector - R/C (QMFZ2), GE Plastics China, Type 940(f1) rated V-1, minimum 1.5 mm thick. , suitable for outdoor use with respect to exposures to ultraviolet light, water exposure and immersion in accordance with UL 746C.

Model JXA-12V2100-IP20 Series for Indoor use - FIG.7

General - Internal View of model JXA-12V2100-IP20

1. Transformer - Constructed as follows:

- A. Core - Laminated silicon steel, E-I combination 48.1 mm by 35.1 mm by 35.0 mm overall.
- B. Primary Winding - R/C (OBMW2) Polyurethane magnet wire, 630 turns.
- C. Secondary Winding - R/C (OBMW2) Polyurethane magnet wire, see Electrical Ratings for diameter and number of turns for each model in the series.
- D. Slip Bobbin Construction - Two 2-flange bobbin provided. R/C (QMFZ2), EI Dupont De Numours (E41938), Type FR7025VOF+, rated V-0, minimum 0.88 mm thick.
- E. Polyester Insulation Tape - (PRI, SEC) R/C (OANZ2), Suzhou Jingy Adhesive Tape Co., Ltd., Type JY312, minimum 0.05 mm thick.
- F. Primary Winding to Core Insulation - Bobbin flange is 0.88 mm thick, with two layers of R/C (OANZ2), Suzhou Jingy Adhesive Tape Co., Ltd., Type JY312, minimum 0.05 mm thick provided, bent up and over the bobbin flanges a minimum 5.6 mm for additional window insulation.
- G. Primary Outerwrap - R/C (OANZ2), 3 layers of polyester tape, each 0.05 mm thick.
- H. Secondary Outerwrap - R/C (OANZ2), 2 layers of polyester tape, each 0.05 mm thick.
- I. Primary Lead Connection to Primary Winding Insulation - 2 Layers of polyester film tape, each 0.05 mm thick.
- J. Primary to Secondary Insulation - Bobbin flange, 0.88 mm thick, with one layer of slip bobbin material, minimum width 5.0, provided on all four sides to increase the oversurface spacing between primary and secondary windings to a minimum of 6.4 mm.
- L. Secondary Winding to Core Insulation (Bottom) - Bobbin flange, 0.88 mm thick.

- L. Thermal Cutoff - (PRI) R/C (XCMQ2), Aupo Electronics Ltd., Type A4, rated 130°C, located at primary winding. Provided with 2 layers of insulating tape. Leads are mechanically secured and soldered to primary winding. The leads and body are sleeved with tubing.
 - M. Crossover Insulation - 1 layer of polyester tape, minimum 0.05 mm thick.
3. Fuse - (SEC) Listed or R/C (JDYX), Walter Electronic Type TDS, rated 6.3 A. Leads and body are sleeved with tubing, R/C (YDPU2), rated VW-1.

Model JXA-24V1200-IP44, Series for Outdoor use - FIG. 8

General - The general design, shape and arrangement shall be as illustrated in FIG. 7 except as follow:

1. Epoxy - R/C (QMFZ2), Suzhou Eattto Electronic Material Co., Ltd. and type 3300A/B, rated 90 °C. Completely filled the internal cavity of the unit.



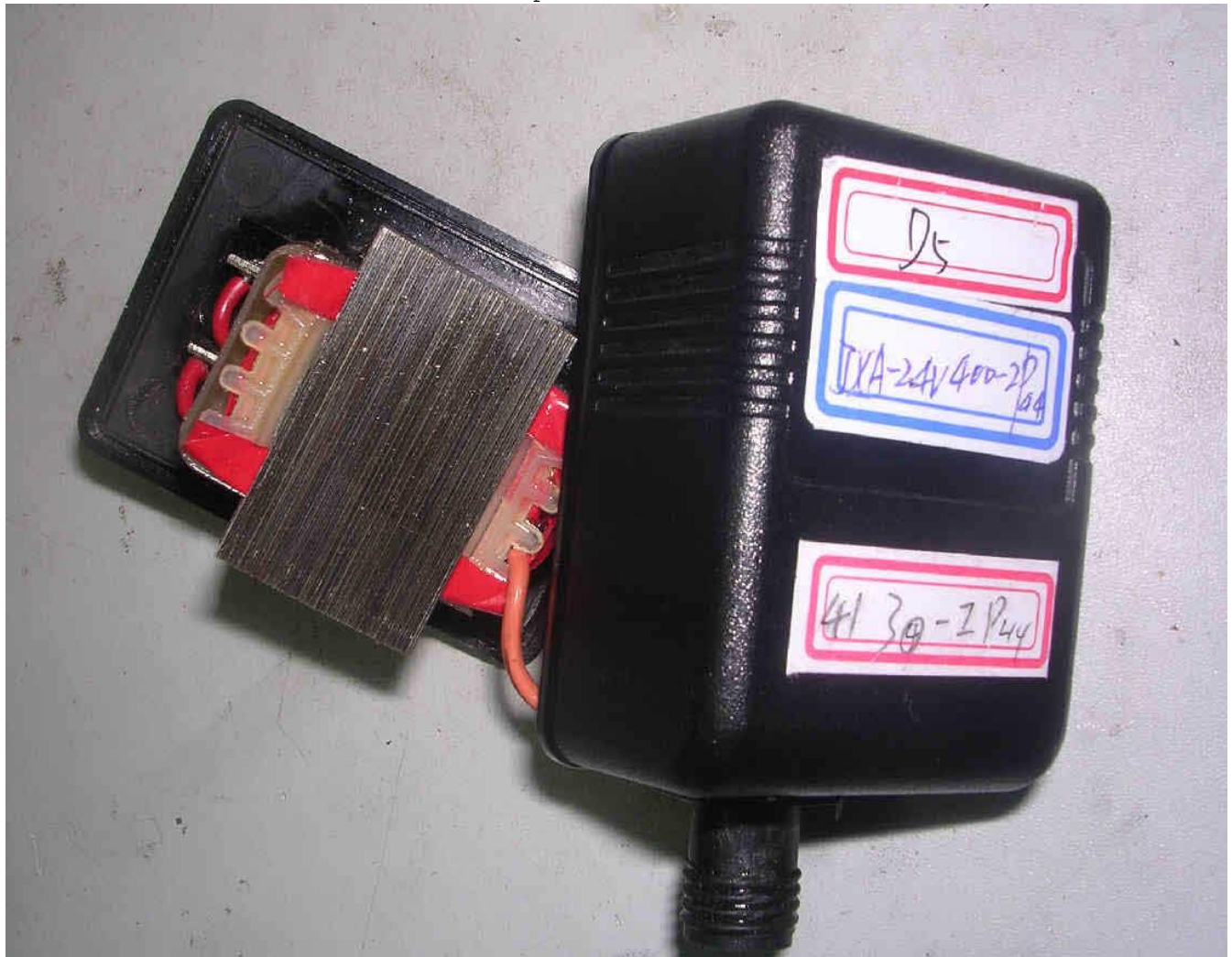
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IMPORTANT SAFETY INSTRUCTIONS

SAVE THESE INSTRUCTIONS – This manual contains important safety and operating instructions for power units.

When using electrical products, basic precautions should always be practiced (including the following):

1. **READ AND FOLLOW ALL SAFETY INSTRUCTIONS.**
2. Read and follow all instructions that provided with the product.
3. Do not use an extension cord.
4. Reference the National Electrical Code, ANSI/NFPA 70, specifically for the installation of wiring and clearances from power and lighting conductors.
5. Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction
6. For a cord-connected or direct plug-in power unit, do not install or use within 10 feet of a pool.
7. Do not use in a bathroom
8. **WARNING: Risk of Electric Shock.** When used outdoors, install only to a covered Class A GFCI protected receptacle that is weatherproof with the power unit connected to the receptacle. If one is not provided, contact a qualified electrician for proper installation. Ensure that the power unit and cord do not interfere with completely closing the receptacle cover.
9. **WARNING: Risk of Electric Shock.** When used outdoors, install only on a circuit protected by a Class A GFCI.
10. **WARNING: Risk of Fire.** Installation involving special wiring methods to run wiring through a building structure. Consult a qualified electrician.

**WARNING: Risk of Electric Shock: Install
Only to covered Class A GFCI receptacle
that has an enclosure that is weatherproof
with the attachment plug cap inserted or
removed.**

MODEL NO.: JXA-24V1200-IP44
INPUT: 120Vac 60Hz 0.28A
OUTPUT: 24Vac 0.4A

cULus EXXXXX Rainproof
LISTED XXXX Date: XXXX

US-CLASS 2 NOT VET, CLASS 3 VET
CU-CLASS 2 NOT VET, CLASS 1 VET
Chongqing Chongqing Goldstar Communication
Appliances Co., Ltd.

N080462603

DESCRIPTION

PRODUCT COVERED:

USL, CNL - Cord Connected, Class 2 Power Supply, Models JXD-XXXXXX-IP20 series for indoor use only.

GENERAL CHARACTER:

The products covered by this Report are Cord Connected, Class 2 Power Supply.

These units consist of a linear transformer and other related electronic circuitry housed in a thermoplastic enclosure composed of two parts and secured by ultrasonic welding. Units employ a power cord with non-grounding parallel blade plug configuration plug into line voltage.

USL - Investigated in accordance with UL Standard for Safety for Class 2 Power Units, UL1310, Fifth Edition.

CNL - Investigated in accordance with CSA CAN/CSA - C22.2 No. 223-M91, Power Supplies with Extra-Low-Voltage Class 2 Outputs.

ELECTRICAL RATING :

Model No.	Input			Output	
	V ac	Hz	mA	V dc	mA
JXD-120180-IP20	120 V	60	600	12.0	1800
JXD-120200-IP20	120 V	60	600	12.0	2000
JXD-120250-IP20	120 V	60	600	12.0	2500
JXD-120300-IP20	120 V	60	600	12.0	3000
JXD-240085-IP20	120 V	60	600	24.0	850
JXD-240100-IP20	120 V	60	600	24.0	1000
JXD-240120-IP20	120 V	60	600	24.0	1200
JXD-240150-IP20	120 V	60	600	24.0	1500
JXD-240180-IP20	120 V	60	600	24.0	1800
JXD-240200-IP20	120 V	60	600	24.0	2000

CONSTRUCTION DETAILS:

The unit or units shall be constructed in accordance with the following items. See also, Section General, Construction Details.

MARKING AND NOTICES:

General - All markings shall be legible. Units shall be marked "Class 2 Power Supply for dry location use only for models JXD-XXXXXX-IP20 series. "

Appliance Marking - Model designation, electrical rating, Listee's identification: Listee's name or Trade name. Location: On the unit

Date of Manufacture Marking - Month and year of manufacture are provided as follows: Location: On the unit, 2 numbers are used to represent the week and 2 numbers are used to represent the year. Example, "1504" represent fifteenth week, 2004.

Important Safety Instructions - Provided with each unit, see ILL.1 for details.

Label - The marking shall be ink-stamped, die-stamped, painted or on R/C (PGDQ2) printed labels. See ILL.2 for detail.

MODEL JXD-120300-IP20 - FIG. 1

General - Shows external view of model JXD-120300-IP20

1. Enclosure - Two piece construction. R/C (QMFZ2), GE Plastics China, Type 940(f1) rated V-1, minimum 1.5 mm thick. Overall dimensions 65.6 mm by 92.0 mm by 102.9 mm. Two halves are secured by ultrasonic weld.

Provided with the following openings:

Input Strain Relief Opening - overall 8.90 mm by 8.70 mm

Output Connector Opening - overall 13.30 mm by 12.30 mm

2. Power Supply Cord - Listed, SPT-2, 16 AWG/2C, rated 105°C "dry", 10 feet maximum, rated 300 V. Provided with polarized, solid copper alloy with Zinc plated, NEMA 1-15P type attachment plug. Supply cord leads are mechanically secured, soldered and sleeved with tubing R/C (YDPU2), rated VW-1, to internal wiring.
3. Input Strain Relief - Integrally molded to the supply cord. Secured by fit of flange with the opening of the enclosure, inside partition measured 11.30 mm by 13.90 mm, 3.70 mm thick, central partition measured 8.40 mm by 8.40 mm by 3.30 mm wide, outer partition measures 11.30 mm by 13.90 mm by 2.00 mm thick.
4. Output Cord - SEC. Two conductors flexible cord, No. 18 AWG, style mAWM2468, rated 80 °C, 300 V, having minimum 0.33 mm thick thermoplastic insulation. 6 feet minimum. One end of cord terminates at internal connections; other end terminates in a two wires female connector.

Output Cord Relief - Integrally molded to the supply cord. Secured by fit of flange with the opening of the enclosure, inside partition measured 16.0 mm by 13.7 mm, 2.5 mm thick, central partition measured 12.50 mm by 10.60 mm, 2.50 mm wide, outer partition measures 16.0 mm by 13.7 mm by 2.5 mm thick.

Model JXD-120300-IP20 - FIG. 2

General - The general design, shape and arrangement shall be as illustrated in FIG. 2.

1. Transformer - Constructed as follows:

- A. Core - Laminated silicon steel, E-I combination, 66.30 mm by 46.0 mm by 55.3 mm overall.
- B. Primary Winding - R/C (OBMW2) Polyurethane magnet wire.
- C. Secondary Winding - R/C (OBMW2) Polyurethane magnet wire, see Electrical Ratings for diameter and number of turns for each model in the series.
- D. Slip Bobbin Construction - Two 2-flange bobbin provided. R/C (QMFZ2), EI Dupont De Numours (E41938), Type FR7025VOF+, rated V-0, minimum 0.88 mm thick.
- E. Polyester Insulation Tape - (PRI, SEC) R/C (OANZ2), Suzhou Jingy Adhesive Tape Co., Ltd., Type JY312, minimum 0.05 mm thick.

	Transformer Winding	Insulation	
F	Primary - Core	Bobbin flange and 2 layers of tape bent up over the bobbin flanges to provide 5.6 mm for additional window insulation.	
G	Primary Outerwrap	3 layers of tape	
H	Secondary outerwrap	2 layers of tape	
I	Primary lead - primary winding	2 layers of tape	
J	Primary - Secondary	Bobbin flange thickness and one layer of slip bobbin thickness. Slip bobbin width is 5.0 mm minimum.	
K	Secondary - core	Bobbin flange	
L	Crossover I	One layer of tape	

2. Fuse - (SEC) Listed or R/C (JDYX), Walter Electronic Type TDS, rated 6.3 A. Leads and body are sleeved with tubing, R/C (YDPU2), rated VW-1.
3. Diodes - (SEC) Silicon rectifier type, four provided.
4. PWB Board - (SEC) R/C (ZPMV2), rated minimum V-0, 130 °C. Dimensions 62.5 mm by 24.0 mm by 1.7 mm thick, rated 130 °C. Secured to transformer bobbin by physical fit and soldering with secondary windings.
5. Capacitor - (SEC) Electrolytic type, rated 4700 uF, 50 V, 105 °C, provided with integral pressure relief.
6. Thermal Cutoff - (PRI) R/C (XCMQ2), Aupo Electronics Ltd., Type A4, rated 130°C, located at primary winding. Provided with 2 layers of insulating tape. Leads are mechanically secured and soldered to primary winding. The leads and body are sleeved with tubing



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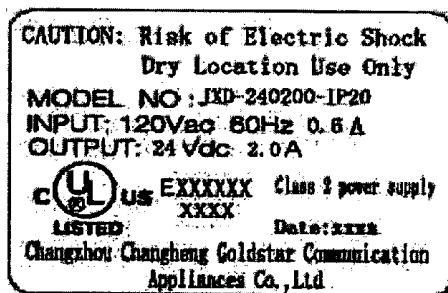
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IMPORTANT SAFETY INSTRUCTIONS

SAVE THESE INSTRUCTIONS – This manual contains important safety and operating instructions for power units.

When using electrical products, basic precautions should always be practiced including the following:

1. **READ AND FOLLOW ALL SAFETY INSTRUCTIONS.**
2. Read and follow all instructions that provided with the product.
3. Do not use an extension cord.
4. Reference the National Electrical Code, ANSI/NFPA 70, specifically for the installation of wiring and clearances from power and lighting conductors.
5. Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction.
6. For a cord-connected or direct plug-in power unit, do not install or use within 10 feet of a pool.
7. Do not use in a bathroom.
8. **WARNING: Risk of Electric Shock.** When used outdoors, install only to a covered Class A GFCI protected receptacle that is weatherproof with the power unit connected to the receptacle. If one is not provided, contact a qualified electrician for proper installation. Ensure that the power unit and cord do not interfere with completely closing the receptacle cover.
9. **WARNING: Risk of Electric Shock.** When used outdoors, install only on a circuit protected by a Class A GFCI.
10. **WARNING: Risk of Fire.** Installation involving special wiring methods to run wiring through a building structure. Consult a qualified electrician.



N080462662

DESCRIPTION

PRODUCT COVERED:

USL, CNL - Direct Plug In, Class 2 Power Supply, Models JXD-XXXXXXX-IP20 series for indoor use only.

GENERAL CHARACTER:

The products covered by this Report are Direct Plug In, Class 2 Power Supply.

These units consist of a linear transformer and other related electronic circuitry housed in a thermoplastic enclosure composed of two parts and secured by ultrasonic welding. Units employ a power cord with non-grounding parallel blade plug configuration plug into line voltage.

USL - Investigated in accordance with UL Standard for Safety for Class 2 Power Units, UL1310, Fifth Edition.

CNL - Investigated in accordance with CSA CAN/CSA - C22.2 No. 223-M91, Power Supplies with Extra-Low-Voltage Class 2 Outputs.

ELECTRICAL RATING :

Model No.	Input			Output	
	V ac	Hz	mA	V dc	mA
JXD-036030-IP20	120 V	60	250	3.6	300
JXD-036050-IP20	120 V	60	250	3.6	500
JXD-036080-IP20	120 V	60	250	3.6	800
JXD-036100-IP20	120 V	60	250	3.6	1000
JXD-060030-IP20	120 V	60	250	6	300
JXD-060040-IP20	120 V	60	250	6	400
JXD-060050-IP20	120 V	60	250	6	500

Model No.	Input			Output	
	V ac	Hz	mA	V dc	mA
JXD-060060-IP20	120 V	60	250	6	600
JXD-060080-IP20	120 V	60	250	6	800
JXD-060100-IP20	120 V	60	250	6	1000
JXD-060120-IP20	120 V	60	250	6	1200
*					
JXD-090020-IP20	120 V	60	250	9	200
JXD-090030-IP20	120 V	60	250	9	300
JXD-090040-IP20	120 V	60	250	9	400
JXD-090050-IP20	120 V	60	250	9	500
JXD-090060-IP20	120 V	60	250	9	600
JXD-090080-IP20	120 V	60	250	9	800
JXD-096010-IP20	120 V	60	250	9.6	100
JXD-096020-IP20	120 V	60	250	9.6	200
JXD-096030-IP20	120 V	60	250	9.6	300
JXD-096040-IP20	120 V	60	250	9.6	400
JXD-096050-IP20	120 V	60	250	9.6	500
JXD-096060-IP20	120 V	60	250	9.6	600
JXD-120010-IP20	120 V	60	250	12	100
JXD-120020-IP20	120 V	60	250	12	200
JXD-120030-IP20	120 V	60	250	12	300
JXD-120040-IP20	120 V	60	250	12	400
JXD-120050-IP20	120 V	60	250	12	500
JXD-120060-IP20	120 V	60	250	12	600
JXD-150010-IP20	120 V	60	250	15	100
JXD-150015-IP20	120 V	60	250	15	150
JXD-150020-IP20	120 V	60	250	15	200
JXD-150030-IP20	120 V	60	250	15	300
JXD-150040-IP20	120 V	60	250	15	400
JXD-150050-IP20	120 V	60	250	15	500

Model No.	Input			Output	
	V ac	Hz	mA	V dc	mA
JXD-180010-IP20	120 V	60	250	18	100
JXD-180020-IP20	120 V	60	250	18	200
JXD-180030-IP20	120 V	60	250	18	300
JXD-180040-IP20	120 V	60	250	18	400
JXD-240010-IP20	120 V	60	250	24	100
JXD-240015-IP20	120 V	60	250	24	150
JXD-240020-IP20	120 V	60	250	24	200
JXD-240025-IP20	120 V	60	250	24	250
JXD-240030-IP20	120 V	60	250	24	300
JXD-060150-IP20	120 V	60	250	6	1500
JXD-060180-IP20	120 V	60	250	6	1800
JXD-060200-IP20	120 V	60	250	6	2000
JXD-000100-IP20	120 V	60	250	9	1000
JXD-090120-IP20	120 V	60	250	9	1200
JXD-090150-IP20	120 V	60	250	9	1500
JXD-090180-IP20	120 V	60	250	9	1800
JXD-096080-IP20	120 V	60	250	9.6	800
JXD-096100-IP20	120 V	60	250	9.6	1000
JXD-096120-IP20	120 V	60	250	9.6	1200
JXD-096150-IP20	120 V	60	250	9.6	1500
JXD-120080-IP20	120 V	60	250	12	800
JXD-120100-IP20	120 V	60	250	12	100
JXD-120120-IP20	120 V	60	250	12	1200
JXD-120150-IP20	120 V	60	250	12	1500
JXD-150060-IP20	120 V	60	250	15	600
JXD-150080-IP20	120 V	60	250	15	800
JXD-150100-IP20	120 V	60	250	15	1000

Model No.	Input			Output	
	V ac	Hz	mA	V dc	mA
JXD-180050-IP20	120 V	60	250	18	500
JXD-180060-IP20	120 V	60	250	18	600
JXD-180080-IP20	120 V	60	250	18	800
JXD-180100-IP20	120 V	60	250	18	1000
JXD-240035-IP20	120 V	60	250	24	350
JXD-240040-IP20	120 V	60	250	24	400
JXD-240045-IP20	120 V	60	250	24	450
JXD-240050-IP20	120 V	60	250	24	500
JXD-240060-IP20	120 V	60	250	24	600
JXD-240065-IP20	120 V	60	250	24	650
JXD-240075-IP20	120 V	60	250	24	750

CONSTRUCTION DETAILS:

The unit or units shall be constructed in accordance with the following items. See also, Section General, Construction Details.

MARKING AND NOTICES:

General - All markings shall be legible. Units shall be marked "Class 2 Power Supply for dry location use only for models JXA-XXXXXXX-IP20 series".

Appliance Marking - Model designation, electrical rating, Listee's identification: Listee's name or Trade name. Location: On the unit

Date of Manufacture Marking - Month and year of manufacture are provided as follows: Location: On the unit, 2 numbers are used to represent the week and 2 numbers are used to represent the year. Example, "1504" represent fifteenth week, 2004.

Important Safety Instructions - Provided with each unit, see ILL.1 for details.

Label - The marking shall be ink-stamped, die-stamped, painted or on R/C (PGDQ2) printed labels. See ILL. 2 for detail.

*Engineering Note - The internal view and external view of model JXD-240025-IP20 represents models JXD-036030-IP20, JXD-036050-IP20, JXD-036080-IP20, JXD-036100-IP20, JXD-060030-IP20, JXD-060040-IP20, JXD-060050-IP20, JXD-060060-IP20, JXD-060080-IP20, JXD-060100-IP20, JXD-060120-IP20, JXD-090020-IP20, JXD-090030-IP20, JXD-090040-IP20, JXD-090050-IP20, JXD-090060-IP20, JXD-090080-IP20, JXD-096010-IP20, JXD-096020-IP20, JXD-096030-IP20, JXD-096040-IP20, JXD-096050-IP20, JXD-096060-IP20, JXD-120010-IP20, JXD-120020-IP20, JXD-120030-IP20, JXD-120040-IP20, JXD-120050-IP20, JXD-120060-IP20, JXD-150010-IP20, JXD-150015-IP20, JXD-150020-IP20, JXD-150030-IP20, JXD-150040-IP20, JXD-150050-IP20, JXD-180010-IP20, JXD-180020-IP20, JXD-180030-IP20, JXD-180040-IP20, JXD-240010-IP20, JXD-240015-IP20, JXD-240020-IP20, JXD-240025-IP20, JXD-240030-IP20.

The internal view and external view of model JXD-120150-IP20 represents models JXD-060150-IP20, JXD-060180-IP20, JXD-060200-IP20, JXD-090100-IP20, JXD-090120-IP20, JXD-090150-IP20, JXD-090180-IP20, JXD-096080-IP20, JXD-096100-IP20, JXD-096120-IP20, JXD-096150-IP20, JXD-120080-IP20, JXD-120100-IP20, JXD-120120-IP20, JXD-120150-IP20, JXD-150060-IP20, JXD-150080-IP20, JXD-150100-IP20, JXD-180050-IP20, JXD-180060-IP20, JXD-180080-IP20, JXD-180100-IP20, JXD-240035-IP20, JXD-240040-IP20, JXD-240045-IP20, JXD-240050-IP20, JXD-240060-IP20, JXD-240065-IP20, JXD-240075-IP20.

MODEL JXD-240025-IP20, series, Indoor unit - FIG. 1

General - Shows external view of model JXD-240025-IP20, series, Indoor unit

1. Enclosure - Two piece construction. R/C (QMFZ2), GE Plastics China, Type 940(f1) rated V-1, minimum 1.5 mm thick. Overall dimensions 52.0 mm by 70.0 mm by 42.8 mm. Two halves are secured by ultrasonic weld.
2. Input Blades - Non-polarized, solid copper alloy with Zinc plating, integrally molded into the transformer bobbin and passed through the enclosure, connected to transformer primary winding by R/C (AVLV2) wire, rated minimum VW-1, 300 V. See Section General Construction for blades dimensions, spacing and relative location of plug face. The perimeter of the face section from which the blade projection shall be minimum 8.0 mm from any point on either blade.
3. Output Cord - SEC. Two conductors flexible cord, No. 22 AWG, style AWM2468, rated 80 °C, 300 V, having minimum 0.33 mm thick thermoplastic insulation. One end of cord terminates at internal connections; other end terminates in a standard polarized barrel jack connector. Cord minimum 1.8 m external length.
4. Strain Relief - PVC bushing integrally molded with output cord. Secured in opening 13.2 mm by 11.6 mm in the enclosure. Inside partition measures 12.5 mm by 15.9 mm by 1.86 mm thick, central partition measures 12.4 mm by 10.0 mm by 3.0 mm wide. Outer partition measures 15.4 mm by 13.0 mm by 1.8 mm thick

Model JXD-240025-IP20 Series for Indoor use - FIG. 2

General - Internal View of model JXD-240025-IP20.

1. Transformer - Constructed as follows:

- A. Core - Laminated silicon steel, E-I combination, 41.60 mm by 25.8 mm by 33.2 mm overall.
- B. Primary Winding - R/C (OBMW2) Polyurethane magnet wire, 1250 turns.
- C. Secondary Winding - R/C (OBMW2) Polyurethane magnet wire, see Electrical Ratings for diameter and number of turns for each model in the series.
- D. Slip Bobbin Construction - Two 2-flange bobbin provided. R/C (QMFZ2), EI Dupont De Numours (E41938), Type FR7025VOF+, rated V-0, minimum 0.88 mm thick.
- E. Polyester Insulation Tape - (PRI, SEC) R/C (OANZ2), Suzhou Jingy Adhesive Tape Co., Ltd., Type JY312, minimum 0.05 mm thick.

	Transformer Winding	Insulation	
F	Primary - Core	Bobbin flange and 2 layers of tape bent up over the bobbin flanges to provide 5.6 mm for additional window insulation.	
G	Primary Outerwrap	3 layers of tape	
H	Secondary outerwrap	2 layers of tape	
I	Primary lead - primary winding	2 layers of tape	
J	Primary - Secondary	Bobbin flange thickness and one layer of slip bobbin thickness. Slip bobbin width is 5.0 mm minimum.	
K	Secondary - core	Bobbin flange	
L	Crossover I	One layer of tape	

2. Fuse - (SEC) Listed or R/C (JDYX), Walter Electronic Type TDS, rated 6.3 A. Leads and body are sleeved with tubing, R/C (YDPU2), rated VW-1.
3. Diodes - SEC. Silicon rectifier type, four provided.
4. PWB Secondary - SEC. R/C (ZPMV2), rated V-0, 130 °C. Dimensions 40.0 mm by 16.7 mm by 1.5 mm thick, rated 130°C. Secured to transformer bobbin by physical fit and soldering with secondary windings.
5. Capacitor - SEC. Electrolytic type, rated 470 µF, 50 V, 105°C, provided with integral pressure relief.
6. Thermal Cutoff - (PRI) R/C (XCMQ2), Aupo Electronics Ltd., Type A4, rated 130°C, located at primary winding. Provided with 2 layers of insulating tape. Leads are mechanically secured and soldered to primary winding. The leads and body are sleeved with tubing.

MODEL JXD-120150-IP20, series, Indoor unit - FIG. 3

General - Shows external view of model JXA-120150-IP20, series, Indoor unit

1. Enclosure - Two piece construction. R/C (QMFZ2), GE Plastics China, Type 940(f1) rated V-1, minimum 1.5 mm thick. Overall dimensions 58.5 mm by 83.8 mm by 51.2 mm. Two halves are secured by ultrasonic weld.
2. Input Blades - Non-polarized, solid copper alloy with Zinc plating, integrally molded into the transformer bobbin and passed through the enclosure, connected to transformer primary winding by R/C (AVLV2) wire, rated minimum VW-1, 300 V. See Section General Construction for blades dimensions, spacing and relative location of plug face. The perimeter of the face section from which the blade projection shall be minimum 8.0 mm from any point on either blade.
3. Output Cord - SEC. Two conductors flexible cord, No. 18 AWG, style AWM2468, rated 80 °C, 300 V, having minimum 0.33 mm thick thermoplastic insulation. One end of cord terminates at internal connections; other end terminates in a standard polarized barrel jack connector. Cord minimum 1.8 m external length.
4. Strain Relief - PVC bushing integrally molded with output cord. Secured in opening 11.2 mm by 13.7 mm in the enclosure. Inside partition measures 13.6 mm by 16.2 mm by 2.2 mm thick, central partition measures 12.6 mm by 10.5 mm by 3.0 mm wide. outer partition measures 15.9 mm by 13.8 mm by 2.1 mm thick

Model JXD-120150-IP20 Series for Indoor use - FIG.4

General - Internal View of model JXD-120150-IP20.

1. Transformer - Constructed as follows:

- A. Core - Laminated silicon steel, E-I combination 48.1 mm by 32.3 mm by 40.6 mm overall.
- B. Primary Winding - R/C (OBMW2) Polyurethane magnet wire, 860 turns.
- C. Secondary Winding - R/C (OBMW2) Polyurethane magnet wire, see Electrical Ratings for diameter and number of turns for each model in the series.
- D. Slip Bobbin Construction - Two 2-flange bobbin provided. R/C (QMFZ2), EI Dupont De Numours (E41938), Type FR7025VOF+, rated V-0, minimum 0.88 mm thick.
- E. Polyester Insulation Tape - (PRI, SEC) R/C (OANZ2), Suzhou Jingy Adhesive Tape Co., Ltd., Type JY312, minimum 0.05 mm thick.

	Transformer Winding	Insulation	
F	Primary - Core	Bobbin flange and 2 layers of tape bent up over the bobbin flanges to provide 5.6 mm for additional window insulation.	
G	Primary Outerwrap	3 layers of tape	
H	Secondary outerwrap	2 layers of tape	
I	Primary lead - primary winding	2 layers of tape	
J	Primary - Secondary	Bobbin flange thickness and one layer of slip bobbin thickness. Slip bobbin width is 5.0 mm minimum.	
K	Secondary - core	Bobbin flange	
L	Crossover I	One layer of tape	

2. Fuse - (SEC) Listed or R/C (JDYX), Walter Electronic Type TDS, rated 6.3 A. Leads and body are sleeved with tubing, R/C (YDPU2), rated VW-1.
3. Diodes - SEC. Silicon rectifier type, four provided.
4. PWB Secondary - SEC. R/C (ZPMV2), rated V-0, 130 °C. Dimensions 47.6 mm by 21.3 mm by 1.7 mm thick, rated 130°C. Secured to transformer bobbin by physical fit and soldering with secondary windings.
5. Capacitor - SEC. Electrolytic type, rated 3300 µF, 25 V, 85°C, provided with integral pressure relief.
6. Thermal Cutoff - (PRI) R/C (XCMQ2), Aupo Electronics Ltd., Type A4, rated 130°C, located at primary winding. Provided with 2 layers of insulating tape. Leads are mechanically secured and soldered to primary winding. The leads and body are sleeved with tubing.



N080462669



N080462670



N080462671



N080462672

IMPORTANT SAFETY INSTRUCTIONS

SAVE THESE INSTRUCTIONS – This manual contains important safety and operating instructions for power units:

When using electrical products, basic precautions should always be practiced including the following:

1. **READ AND FOLLOW ALL SAFETY INSTRUCTIONS.**
2. Read and follow all instructions that provided with the product.
3. Do not use an extension cord.
4. Reference the National Electrical Code, ANSI/NFPA 70, specifically for the installation of wiring and clearances from power and lighting conductors.
5. Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction
6. For a cord-connected or direct plug-in power unit, do not install or use within 10 feet of a pool.
7. Do not use in a bathroom
8. **WARNING: Risk of Electric Shock.** When used outdoors, install only to a covered Class A GFCI protected receptacle that is weatherproof with the power unit connected to the receptacle. If one is not provided, contact a qualified electrician for proper installation. Ensure that the power unit and cord do not interfere with completely closing the receptacle cover.
9. **WARNING: Risk of Electric Shock.** When used outdoors, install only on a circuit protected by a Class A GFCI.
10. **WARNING: Risk of Fire.** Installation involving special wiring methods to run wiring through a building structure. Consult a qualified electrician.

CAUTION: Risk of Electric Shock
Dry Location Use Only
MODEL NO : JXD-120150-IP20
INPUT: 120Vac 60Hz 0.25A
OUTPUT: 12Vdc 1.5A
cULus EXXXXXX Class 2 power supply
XXXX
LISTED Date:xxxx
Changzhou Changheng Goldstar Communication
Appliances Co., Ltd

N080462674

DESCRIPTION

PRODUCT COVERED:

USL, CNL - Class 2 inherently limited Power Supply, Model JXD-090010-IP20.

GENERAL:

The unit covered by this Report is a direct plug-in Class 2 Power Supply.

The unit consists of a linear mode transformer and other related electronic circuitry housed in a thermoplastic enclosure, and provided with non-polarized parallel blades for connection to line voltage.

ELECTRICAL RATING:

Model	V ac	Input	mA	V dc	Output
		Hz			mA
JXD-090010-IP20	120	60	250	9	100

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

USL indicates investigation to the UL Standard for Safety for Class 2 Power Units, UL 1310, Fifth Edition, with revisions including and through April 1, 2010.

CNL indicates product complies with the Standard for Power Supplies with Extra Low Voltage Class 2 Outputs, CAN/CSA C22.2 No. 223-M91, Second Edition, with revisions including and through September 1, 2009.

The maximum room ambient temperature is 40°C (Tmra).

CONSTRUCTION DETAILS:

Units shall be constructed in accordance with the following items. See also, Sec. Gen., Construction Details.

C-UL Requirements	Instruction Manual
Abbreviations	Printed Wiring Boards
Markings	Internal Wiring
Blades	Electrical Connections
Spacings	Insulation Tubing/Sleeving
Segregation	Corrosion Protection

Markings - See Sec. Gen, Markings. The following marking shall be additionally provided.

"Class 2 Power Supply"

Illustrations - The following Illustrations are referenced in this report:

<u>ILL. No.</u>	<u>Description</u>
1	Transformer Insulation

General - The general design, shape and arrangement shall be as illustrated except where variations are specifically described.

MODEL JXD-090010-IP20 - Fig. 1

1. Top Enclosure - R/C (QMFZ2), SABIC INNOVATIVE PLASTICS CHINA CO LTD (E161723), Type 940, rated V-0, 120°C, measured minimum 1.5 mm thick. Overall measured 61.2 by 45.2 by 38.7 mm. Provided with one 6.3 by 5.3 mm cutout for Output Cord Strain Relief. Two halves are secured by ultrasonic weld.
2. Output Cord - R/C (AVLV2, AVLV8), Style 2468, two-conductor, 24 AWG, rated 80°C, 300 V, VW-1. One end terminates in a molded-on output connector. The other end terminates in PWB by soldering. Cord minimum 1.8 m for external length.
3. Output Cord Strain Relief - PVC bushing integrally molded with output cord. Outer portion measures 8.8 by 6.9 mm tapering to 6.1 by 6 mm by 19.5 mm long, inside portion measures 8.3 by 8.2 by 2.9 mm thick, center part measures 6 by 4.9 by 2.6 mm thick. Secured by fit of flange to opening of enclosure.
4. Blades - Non-polarized. Plated copper alloy, two provided. Each blade located measured minimum 8.2 mm (more than 8 mm) from side of platform edge. See Section General, ILL. 1 for dimensions, spacing and location of blades.

MODEL JXD-090010-IP20 - FIGS. 2 and 3

1. Printed Wiring Board - Secondary (SEC), R/C (ZPMV2), rated minimum V-2, 105°C. Dimensions 34 mm by 14.3 mm by 1.6 mm thick.
2. Internal Wirings - R/C (AVLV2, AVLV8), two provided, Style 1617, 22 AWG, rated 600 V ac, 105°C, VW-1. Mechanically secured before soldering. Connected between Blades and transformer primary winding.
3. Diodes - Four provided, Type 1N4007.
4. Capacitor - Electrolytic with integral pressure relief, rated 16 V, 470 uF, 105°C.
5. Transformer - Constructed as below.
 - A. Core - Laminated sheet steel, varnished, E-I type, dimensions measured 35 by 29.8 mm, overall with a stacking height of 10 mm. Window dimensions, measured 19.5 by 7.7 mm.
 - B. Primary Winding - Enameled copper magnet wire, random wound. Mechanically secured to Internal Wirings before soldering. 0.08 mm by 3400 turns.
 - C. Secondary Winding - Enameled copper magnet wire, random wound, Mechanically secured to PWB before soldering. 0.25 mm by 256 turns.
 - D. Bobbin - Two provided. R/C (QMFZ2), E I DUPONT DE NEMOURS & CO INC (E41938), Type FR7025V0F, Polyamide 66, natural color, rated 65°C, measured minimum 0.69 mm thick.
 - E. Bobbin Holder - R/C (QMFZ2), E I DUPONT DE NEMOURS & CO INC (E41938), Type FR7025V0F, rated 130°C, measured minimum 0.75 mm thick.
 - F. Tape - R/C (OANZ2), Polyethylene terephthalate (PET) film tape, measured min. 0.05 mm thick.
 - G. Thermal Cutoff - R/C (XCMQ2, XCMQ8), AUPO ELECTRONICS LTD (E140847), Type A4, rated 130°C, 250 Vac, 2 A. Connected in series with primary winding, mechanically secured to primary winding and internal wirings before soldering.

Alternate - Same as above except for R/C (XCMQ2, XCMQ8), HONG HU BLUELIGHT ELECTRONIC CO LTD (E239646), Type RH130-2.

H. Transformer Insulation as follows:

Description	Insulation Material	Total Thickness, mm	Layers
Primary Winding and Secondary Winding	Primary Bobbin	0.95	-
	Secondary Bobbin	0.9	-
	Bobbin Holder	0.75	-
Primary Outer-wrap	Tape	Min. 0.1	Min. 2
Primary Winding and Core Insulation (Bottom)	Bobbin	0.87	-
	Bobbin Holder (#)	0.75	-
Primary Winding and Core Insulation (Centre)	Bobbin	0.69	-
Primary Winding and Core Insulation (Side)	Bobbin Holder	0.81	-
	Tape	Min. 0.1	Min. 2
Thermal Cutoff Body and Primary Winding	Tape	Min. 0.1	Min. 2
Primary Lead connection and Primary Winding	Tape	Min. 0.1	Min. 2
Primary crossover lead and primary winding	Tape	0.05	1
Secondary Outer-wrap	Tape	Min. 0.1	Min. 2
Secondary Winding and Core Insulation (Centre)	Bobbin	0.69	-
Secondary Winding and Core Insulation (Top)	Bobbin	0.9	-
	Tape (@)	Min. 0.1	Min. 2
Secondary Winding and Core Insulation (Side)	Bobbin Holder	0.78	-
	Tape	Min. 0.1	Min. 2

Bobbin holder (#): The bent-up of bobbin holder is at least 1.6 mm for spacing between winding and core. See ILL.1 for detail.

Tape (@): The bent-up of tape is at least 1.6 mm for spacing between secondary winding and core. See ILL.1 for detail



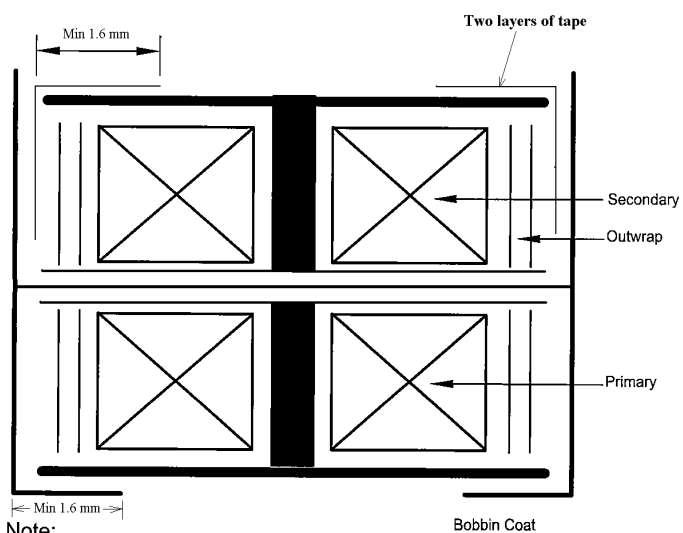
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**Note:**

Over surface between Primary and Secondary is Min1.6mm

Over surface between Primary and Core is Min1.6mm

Over surface between Secondary and Core is Min1.6mm

F100130681

CERTIFICATE OF COMPLIANCE

Certificate Number 20170908-E474768
Report Reference E474768-20060511
Issue Date 2017-SEPTEMBER-08

Issued to: Changzhou Baojin Electrical Co Ltd
Heshu Lijia Wujin
Changzhou
Jiangsu 213165 CHINA

**This is to certify that
representative samples of**

**DIRECT-PLUG-IN AND CORD-CONNECTED CLASS 2
POWER UNITS**

USL, CNL – Cord Connected, Class 2 Power Supply,
Models: JXA-12V2500-IP20, JXA-12V3000-IP20, JXA-
12V3500-IP20, JXA-12V4200-IP20, JXA-12V5000-IP20,
JXA-24V1500-IP20, JXA-24V1700-IP20, JXA-24V2000-
IP20, JXA-24V2100-IP20, JXA-24V2500-IP20, JXA-
24V3000-IP20, JXA-12V2500-IP44, JXA-12V3000-IP44,
JXA-12V3500-IP44, JXA-12V4200-IP44, JXA-12V5000-
IP44, JXA-24V1500-IP44, JXA-24V1700-IP44, JXA-
24V2000-IP44, JXA-24V2100-IP44, JXA-24V2500-IP44,
JXA-24V3000-IP44.

Have been investigated by UL in accordance with the
Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 1310 - Class 2 Power Units.
C22.2 No. 223-M91 - Power Supplies with Extra Low
Voltage Class 2 Outputs.

Additional Information: See the UL Online Certifications Directory at
www.ul.com/database for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's
Certification and Follow-Up Service.

Look for the UL Certification Mark on the product.



Bruce Mahrenholz, Director North American Certification Program

UL LLC

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contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>



File E474768
Service Request: 4310488

May 11, 2006

REPORT

On

DIRECT PLUG-IN AND CORD CONNECTED CLASS 2 POWER UNITS -
FOR INDOOR AND OUTDOOR USE

Changzhou Baojin Electrical Co Ltd
Changzhou Jiangsu China

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reproduce this Report provided it is reproduced in its entirety.

DESCRIPTION

PRODUCT COVERED:

USL, CNL - Cord Connected, Class 2 Power Supply, Models JXA-XXXXXXX-IP20 series for indoor use only and JXA-XXXXXXX-IP44 series for outdoor use.

GENERAL CHARACTER:

The products covered by this Report are Cord Connected, Class 2 Power Supply.

These units consist of a linear transformer and other related electronic circuitry housed in a thermoplastic enclosure composed of two parts and secured by ultrasonic welding. Units employ a power cord with non-grounding parallel blade plug configuration plug into line voltage.

USL - Investigated in accordance with UL Standard for Safety for Class 2 Power Units, UL1310, Fifth Edition.

CNL - Investigated in accordance with CSA CAN/CSA - C22.2 No. 223-M91, Power Supplies with Extra-Low-Voltage Class 2 Outputs and CAS TIL-I42 Power Supplies for Outdoor Use.

ELECTRICAL RATING :

Model	Input			Output	
	V ac	mA	Hz	V ac	mA
JXA-12V2500-IP20	120	670	60	12.0	2500
JXA-12V3000-IP20	120	670	60	12.0	3000
JXA-12V3500-IP20	120	670	60	12.0	3500
JXA-12V4200-IP20	120	670	60	12.0	4200
JXA-12V5000-IP20	120	670	60	12.0	5000
JXA-24V1500-IP20	120	670	60	24.0	1500
JXA-24V1700-IP20	120	670	60	24.0	1700
JXA-24V2000-IP20	120	670	60	24.0	2000
JXA-24V2100-IP20	120	670	60	24.0	2100
JXA-24V2500-IP20	120	670	60	24.0	2500
JXA-24V3000-IP20	120	670	60	24.0	3000
JXA-12V2500-IP44	120	670	60	12.0	2500
JXA-12V3000-IP44	120	670	60	12.0	3000
JXA-12V3500-IP44	120	670	60	12.0	3500
JXA-12V4200-IP44	120	670	60	12.0	4200
JXA-12V5000-IP44	120	670	60	12.0	5000
JXA-24V1500-IP44	120	670	60	24	1500
JXA-24V1700-IP44	120	670	60	24	1700
JXA-24V2000-IP44	120	670	60	24	2000
JXA-24V2100-IP44	120	670	60	24	2100
JXA-24V2500-IP44	120	670	60	24	2500
JXA-24V3000-IP44	120	670	60	24	3000

CONSTRUCTION DETAILS:

The unit or units shall be constructed in accordance with the following items. See also, Section General, Construction Details.

MARKING AND NOTICES:

General - All markings shall be legible. Units shall be marked for US - "CLASS 2 NOT WET, CLASS 3 WET" and units shall be marked for Canada - "CLASS 2 NOT WET, CLASS 1 WET" for models JXA-XXXXXXX-IP44 - series. Units shall be marked "Class 2 Power Supply for dry location use only for models JXA-XXXXXXX-IP20 series.

Marking - See Section General, Marking. The following markings are also placed on the product for outdoor use:

"Raintight" or "Rainproof"

"Warning: Risk of Electric Shock. Install only to covered Class A GFCI receptacle that has an enclosure that is weatherproof with the attachment plug cap inserted or removed".

Appliance Marking - Model designation, electrical rating, Listee's identification: Listee's name or Trade name. Location: On the unit

Date of Manufacture Marking - Month and year of manufacture are provided as follows: Location: On the unit, 2 numbers are used to represent the week and 2 numbers are used to represent the year. Example, "1504" represent fifteenth week, 2004.

Important Safety Instructions - Provided with each unit, see ILL.1 for details.

Label - The marking shall be ink-stamped, die-stamped, painted or on R/C (PGDQ2) printed labels. See ILL.2 for detail.

MODEL JXA-XXXXXXX-IP20, series, Indoor unit - FIG. 1

General - Shows external view of model JXA-XXXXXXX-IP20, series, Indoor unit

1. Enclosure - Two piece construction. R/C (QMFZ2), GE Plastics China, Type 940(f1) rated V-1, minimum 1.5 mm thick. Overall dimensions 76.0 mm by 66.0 mm by 104.0 mm. Two halves are secured by ultrasonic weld.

Provided with the following openings:

Input Strain Relief Opening - overall 8.90 mm by 8.70 mm

Output Connector Opening - overall 13.30 mm by 12.30 mm

2. Power Supply Cord - Listed, SPT-2, 16 AWG/2C, rated 105°C "dry", Provided with polarized, solid copper alloy with Zinc plated, NEMA 1-15P type attachment plug. Supply cord leads are mechanically secured, soldered and sleeved with tubing to internal wiring.
3. Input Strain Relief - Integrally molded to the supply cord. Secured by fit of flange with the opening of the enclosure, inside partition measured 11.30 mm by 13.90 mm, 3.70 mm thick, central partition measured 8.40 mm by 8.80 mm by 3.60 mm wide, outer partition measures 11.30 mm by 13.90 mm by 2.10 mm thick.
4. Output connector - R/C (QMFZ2) GE Plastics China, Type 940(f1), rated V-1, minimum 1.5 mm thick.

Alternate: Output Cord - SEC. R/C (AVLV2), type AWM 2468, rated 300V, 85 °C. Two conductors flexible cord, No. 20 AWG, having minimum 0.33 thick thermoplastic insulation. One end of cord terminates at internal connections; other end terminates in a two wires female connector. Cord measured 141 mm external length.

Output Cord Relief - Integrally molded to the supply cord. Secured by fit of flange with the opening of the enclosure, inside partition measured 17.60 mm by 14.90 mm, 2.60 mm thick, central partition measured 12.90 mm by 10.60 mm, 2.60 mm wide, outer partition measures 17.60 mm by 14.90 mm by 3.90 mm thick.

Model JXA-XXXXXXX-IP44, series, Outdoor unit - FIG. 2

General - Shows external view of model JXA-XXXXXXX-IP44, series, Outdoor unit

1. Enclosure - Two piece construction. R/C (QMFZ2), GE Plastics China, Type 940(f1) rated V-1, minimum 1.5 mm thick. Overall dimensions 82.80 mm by 63.70 mm by 76.30 mm. Two halves are secured together by ultrasonic weld.

Provided with the following openings:

Input Strain Relief Opening - overall 11.60 mm by 12.50 mm

Output Connector Opening - overall 12.90 mm by 13.60 mm

2. Power Supply Cord - Listed, SJT-W, 16 AWG/2C, rated 105°C "dry", 60 °C "WET". Provided with polarized, solid copper alloy with Zinc plated, NEMA 1-15P type attachment plug. Supply cord leads are mechanically secured, soldered and sleeved with tubing R/C (YDPU2), rated VW-1 to internal wiring.
3. Input Strain Relief - Integrally molded to the supply cord. Secured by fit of flange with the opening of the enclosure, inside partition measured 17.70 mm by 15.30 mm, 3.30 mm thick, central partition measured 12.00 mm by 9.80 mm by 3.3 mm wide, outer partition measures 17.60 mm by 15.40mm by 5.00 mm thick.
4. Output connector - R/C (QMFZ2), GE Plastics China, Type 940(f1) rated V-1, minimum 1.5 mm thick. , suitable for outdoor use.

Model JXA-XXXXXXX-IP20 Series for Indoor use - FIG. 3

General - The general design, shape and arrangement shall be as illustrated in FIG. 3.

1. Transformer - Constructed as follows:

- A. Core - Laminated silicon steel, E-I combination, 66.30 mm by 46.0 mm by 55.2 mm overall.
- B. Primary Winding - R/C (OBMW2) Polyurethane magnet wire, 360 turns.
- C. Secondary Winding - R/C (OBMW2) Polyurethane magnet wire, see Electrical Ratings for diameter and number of turns for each model in the series.
- D. Slip Bobbin Construction - Two 2-flange bobbin provided. R/C (QMFZ2), EI Dupont De Numours (E41938), Type FR7025VOF+, rated V-0, minimum 0.88 mm thick.
- E. Polyester Insulation Tape - (PRI, SEC) R/C (OANZ2) minimum 0.05 mm thick.
- F. Primary Winding to Core Insulation - Bobbin flange is 0.88 mm thick, with two layers of R/C (OANZ2), Suzhou Jingy Adhesive Tape Co., Ltd., Type JY312, minimum 0.05 mm thick provided, bent up and over the bobbin flanges a minimum 5.6 mm for additional window insulation.
- G. Primary Outerwrap - R/C (OANZ2), 3 layers of polyester tape, each 0.05 mm thick.
- H. Secondary Outerwrap - R/C (OANZ2), 2 layers of polyester tape, each 0.05 mm thick.
- I. Primary Lead Connection to Primary Winding Insulation - 2 Layers of polyester film tape, each 0.05 mm thick.
- J. Primary to Secondary Insulation - Bobbin flange, 0.88 mm thick, with one layer of slip bobbin material, minimum width 5.0, provided on all four sides to increase the oversurface spacing between primary and secondary windings to a minimum of 6.4 mm.
- K. Secondary Winding to Core Insulation (Bottom) - Bobbin flange, 0.88 mm thick.

- L. Thermal Cutoff - (PRI) R/C (XCMQ2), Aupo Electronics Ltd., Type A4, rated 130°C, located at primary winding. Provided with 2 layers of insulating tape. Leads are mechanically secured and soldered to primary winding. The leads and body are sleeved with tubing.
 - M. Crossover Insulation - 1 layer of polyester tape, minimum 0.05 mm thick.
2. Fuse - (SEC) Listed or R/C (JDYX), Walter Electronic Type TDS, rated 6.3 A. Leads and body are sleeved with tubing, R/C (YDPU2), rated VW-1.

Model JXA-XXXXXXX-IP44 , Series for Outdoor use - FIG. 4

General - Same as illustrated in FIG. 3 except as follow:

1. Epoxy - R/C (QMFZ2), Suzhou Eattto Electronic Material Co., Ltd. and type 3300A/B, rated 90 °C. Completely filled in the internal cavity of the unit.



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N080460929



N080460930



N080460931

IMPORTANT SAFETY INSTRUCTIONS

SAVE THESE INSTRUCTIONS – This manual contains important safety and operating instructions for power units.

When using electrical products, basic precautions should always be practiced (including the following):

1. **READ AND FOLLOW ALL SAFETY INSTRUCTIONS.**
2. Read and follow all instructions that provided with the product.
3. Do not use an extension cord.
4. Reference the National Electrical Code, ANSI/NFPA 70, specifically for the installation of wiring and clearances from power and lighting conductors.
5. Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction
6. For a cord-connected or direct plug-in power unit, do not install or use within 10 feet of a pool.
7. Do not use in a bathroom
8. **WARNING: Risk of Electric Shock.** When used outdoors, install only to a covered Class A GFCI protected receptacle that is weatherproof with the power unit connected to the receptacle. If one is not provided, contact a qualified electrician for proper installation. Ensure that the power unit and cord do not interfere with completely closing the receptacle cover.
9. **WARNING: Risk of Electric Shock.** When used outdoors, install only on a circuit protected by a Class A GFCI.
10. **WARNING: Risk of Fire.** Installation involving special wiring methods to run wiring through a building structure. Consult a qualified electrician.

WARNING: Risk of Electric Shock. Install
Only to covered Class A GFCI receptacle
that has an enclosure that is wetherproof
with the attachment plug cap inserted or
removed.
MODEL NO.: JXA-24V300-IP44
INPUT: 120Vac 60Hz 0.67A
OUTPUT: 24Vac 0.3A
cULus EXXXXXX Rainproof
XXXXX
LISTED Date:XXXX
US-CLASS 2 NOT MET, CLASS 3 MET
CUL-CLASS 2 NOT MET, CLASS 1 MET
Changzhou Changheng Goldstar Communication
Appliances Co., Ltd

N080460960

TEST RECORD NO. 1

SAMPLES:

The manufacturer submitted representative production samples of power supply models JXA-12V2500-IP44, JXA-12V5000-IP44, JXA-12V2500-IP20, , JXA-12V5000-IP20, and JXA-12V3000-IP20. Each was representative of the construction described in the preceding section of this Report and the following tests were conducted. Test results relate only to the items tested.

GENERAL:

The following tests were conducted under Project 06CA10680 at Shanghai Jielan Electronic Technology, China in accordance with the Standard for Class 2 Power Units, UL 1310, Fifth Edition and witnessed by a member of UL Staff.

Leakage Current Test
Dielectric Voltage Withstand Test After Leakage Current Test
Maximum Output Voltage Test
Normal Input Test
Maximum Input Test
Transformer Characteristics Test
Output Current And Power Test
Dielectric Voltage Withstand Test After Output Current And Power Test
Full-Load Output Current Test
Normal temperature Test
Dielectric Voltage Withstand Test
Induced Potential Test
Abnormal Tests - Output Loading
Dielectric Voltage Withstand Test After Abnormal Tests - Output Loading
Transformer Burnout Test
Dielectric Voltage Withstand Test After Transformer Burnout Test
Impact Tes
Dielectric Voltage Withstand Test After Impact Test

Strain Relief Test
Mold Stress Relief Distortion Test
Strain Relief Test After Mold Stress Relief Distortion Test
Transformer Insulating Materials Test
Rain Test
Leakage Current Test After Rain Test
Dielectric Voltage Withstand Test After Rain Test
Standing Water Immersion Test
Leakage Current Test After Standing Water Immersion Test
Dielectric Voltage Withstand Test After Standing Water Immersion Test
Cold Conditioning Test

Tests conducted on models JXA-12V2500-IP44, JXA-12V5000-IP44, JXA-12V2500-IP20, , JXA-12V5000-IP20, and JXA-12V3000-IP20 were considered to represent models, JXA-12V3500-IP20, JXA-12V4200-IP20, JXA-12V1500-IP20, JXA-12V1700-IP20, JXA-12V2000-IP20, JXA-12V2100-IP20, JXA-12V2500-IP20, JXA-12V3000-IP20, JXA-12V3000-IP44, JXA-12V3500-IP44, JXA-12V4200-IP44.

Only the above tests were considered necessary. Test results relate only to the items tested.

The unit weight: > 1 kg.

The manufacturer's recommended ambient (Tmra) is 25°C.

The test methods and results of the above tests have been reviewed and found in accordance with the requirements in the Standard for Class 2 Power Units, UL 1310 and Power Supplies with Extra Low Voltage Class 2 Outputs, C22.2 No. 223-M91.

CONCLUSION

Samples of the products covered by this Report have been found to comply with the requirements covering the category and the products judged to be eligible for Listing and Follow-Up Service. The manufacturer is authorized to use the UL Mark on such products, which comply with the Follow-Up Service Procedure and any other applicable requirements of Underwriters Laboratories Inc. Only those products, which properly bear the UL Mark are considered as Listed by Underwriters Laboratories Inc.

Report by:
KAM H CHAN
Senior Project Engineer
Conformity Assessment Services

Reviewed by:
THOMAS K. FILLER
Senior Project Engineer
Conformity Assessment Services

CERTIFICATE OF COMPLIANCE

Certificate Number 20170908-E474768
Report Reference E474768-20060512
Issue Date 2017-SEPTEMBER-08

Issued to: Changzhou Baojin Electrical Co Ltd
Heshu Lijia Wujin
Changzhou
Jiangsu 213165 CHINA

This is to certify that representative samples of DIRECT-PLUG-IN AND CORD-CONNECTED CLASS 2 POWER UNITS
SEE ADDENDUM PAGE FOR MODELS

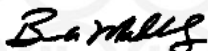
Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 1310 - Class 2 Power Units.
C22.2 No. 223-M91 - Power Supplies with Extra Low Voltage Class 2 Outputs.
CAS TIL-I42 Power Supplies for Outdoor Use

Additional Information: See the UL Online Certifications Directory at www.ul.com/database for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's Certification and Follow-Up Service.

Look for the UL Certification Mark on the product.



Bruce Mahrenholz, Director North American Certification Program

UL LLC

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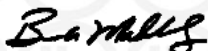
CERTIFICATE OF COMPLIANCE

Certificate Number 20170908-E474768
Report Reference E474768-20060512
Issue Date 2017-SEPTEMBER-08

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

USL, CNL – Direct Plug In, Class 2 Power Supply,

Models: JXA-6V500-IP20, JXA-6V600-IP20, JXA-6V800-IP20, JXA-6V1000-IP20, JXA-6V1200-IP20, JXA-6V1500-IP20, JXA-6V1700-IP20, JXA-12V300-IP20, JXA-12V400-IP20, JXA-12V500-IP20, JXA-12V600-IP20, JXA-12V800-IP20, JXA-24V150-IP20, JXA-24V200-IP20, JXA-24V250-IP20, JXA-24V300-IP20, JXA-24V350-IP20, JXA-24V400-IP20, JXA-6V2000-IP20, JXA-12V1000-IP20, JXA-12V1250-IP20, JXA-12V1500-IP20, JXA-12V1700-IP20, JXA-12V2000-IP20, JXA-12V2100-IP20, JXA-24V450-IP20, JXA-24V500-IP20, JXA-24V560-IP20, JXA-24V650-IP20, JXA-24V750-IP20, JXA-24V850-IP20, JXA-24V1000-IP20, JXA-24V1200-IP20, JXA-6V500-IP44, JXA-6V600-IP44, JXA-6V800-IP44, JXA-6V1000-IP44, JXA-6V1200-IP44, JXA-6V1500-IP44, JXA-6V1700-IP44, JXA-12V300-IP44, JXA-12V400-IP44, JXA-12V500-IP44, JXA-12V600-IP44, JXA-12V800-IP44, JXA-24V150-IP44, JXA-24V200-IP44, JXA-24V250-IP44, JXA-24V300-IP44, JXA-24V350-IP44, JXA-24V400-IP44, JXA-6V2000-IP44, JXA-12V1000-IP44, JXA-12V1250-IP44, JXA-12V1500-IP44, JXA-12V1700-IP44, JXA-12V2000-IP44, JXA-12V2100-IP44, JXA-24V450-IP44, JXA-24V500-IP44, JXA-24V560-IP44, JXA-24V650-IP44, JXA-24V750-IP44, JXA-24V850-IP44, JXA-24V1000-IP44, JXA-24V1200-IP44.



Bruce Mahrenholz, Director North American Certification Program

UL LLC

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File E474768
Service Request: 4310488

May 12, 2006

REPORT

On

DIRECT PLUG-IN AND CORD CONNECTED CLASS 2 POWER UNITS -
FOR INDOOR AND OUTDOOR USE

Changzhou Baojin Electrical Co Ltd
Changzhou Jiangsu China

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reproduce this Report provided it is reproduced in its entirety.

DESCRIPTION

PRODUCT COVERED:

USL, CNL - Direct Plug In, Class 2 Power Supply, Models JXA-XXXXXXX-IP20 series for indoor use only and JXA-XXXXXXX-IP44 series for outdoor use.

GENERAL CHARACTER:

The products covered by this Report are Direct Plug In, Class 2 Power Supply.

These units consist of a linear transformer and other related electronic circuitry housed in a thermoplastic enclosure composed of two parts and secured by ultrasonic welding. Units employ a power cord with non-grounding parallel blade plug configuration plug into line voltage.

USL - Investigated in accordance with UL Standard for Safety for Class 2 Power Units, UL1310, Fifth Edition.

CNL - Investigated in accordance with CSA CAN/CSA - C22.2 No. 223-M91, Power Supplies with Extra-Low-Voltage Class 2 Outputs and CSA TIL-I42 Power Supplies for Outdoor Use.

ELECTRICAL RATING :

Model No.	Input			Output	
	V ac	Hz	mA	V ac	mA
JXA-6V500-IP20	120 V	60	280	6	500
JXA-6V600-IP20	120 V	60	280	6	600
JXA-6V800-IP20	120 V	60	280	6	800
JXA-6V1000-IP20	120 V	60	280	6	1000
JXA-6V1200-IP20	120 V	60	280	6	1200
JXA-6V1500-IP20	120 V	60	280	6	1500
JXA-6V1700-IP20	120 V	60	280	6	1700
JXA-12V300-IP20	120 V	60	280	12	300
JXA-12V400-IP20	120 V	60	280	12	400
JXA-12V500-IP20	120 V	60	280	12	500
JXA-12V600-IP20	120 V	60	280	12	600
JXA-12V800-IP20	120 V	60	280	12	800

Model No.	Input			Output	
	V ac	Hz	mA	V ac	mA
JXA-24V150-IP20	120 V	60	280	24	150
JXA-24V200-IP20	120 V	60	280	24	200
JXA-24V250-IP20	120 V	60	280	24	250
JXA-24V300-IP20	120 V	60	280	24	300
JXA-24V350-IP20	120 V	60	280	24	350
JXA-24V400-IP20	120 V	60	280	24	400
JXA-6V2000-IP20	120 V	60	280	6	2000
JXA-12V1000-IP20	120 V	60	280	12	1000
JXA-12V1250-IP20	120 V	60	280	12	1250
JXA-12V1500-IP20	120 V	60	280	12	1500
JXA-12V1700-IP20	120 V	60	280	12	1700
JXA-12V2000-IP20	120 V	60	280	12	2000
JXA-12V2100-IP20	120 V	60	280	12	2100
JXA-24V450-IP20	120 V	60	280	24	450
JXA-24V500-IP20	120 V	60	280	24	500
JXA-24V560-IP20	120 V	60	280	24	560
JXA-24V650-IP20	120 V	60	280	24	650
JXA-24V750-IP20	120 V	60	280	24	750
JXA-24V850-IP20	120 V	60	280	24	850
JXA-24V1000-IP20	120 V	60	280	24	1000
JXA-24V1200-IP20	120 V	60	280	24	1200

Model No.	Input			Output	
	V ac	Hz	mA	V ac	mA
JXA-6V500-IP44	120 V	60	280	6	500
JXA-6V600-IP44	120 V	60	280	6	600
JXA-6V800-IP44	120 V	60	280	6	800
JXA-6V1000-IP44	120 V	60	280	6	1000
JXA-6V1200-IP44	120 V	60	280	6	1200
JXA-6V1500-IP44	120 V	60	280	6	1500
JXA-6V1700-IP44	120 V	60	280	6	1700
JXA-12V300-IP44	120 V	60	280	12	300
JXA-12V400-IP44	120 V	60	280	12	400
JXA-12V500-IP44	120 V	60	280	12	500
JXA-12V600-IP44	120 V	60	280	12	600
JXA-12V800-IP44	120 V	60	280	12	800
JXA-24V150-IP44	120 V	60	280	24	150
JXA-24V200-IP44	120 V	60	280	24	200
JXA-24V250-IP44	120 V	60	280	24	250
JXA-24V300-IP44	120 V	60	280	24	300
JXA-24V350-IP44	120 V	60	280	24	350
JXA-24V400-IP44	120 V	60	280	24	400
JXA-6V2000-IP44	120 V	60	280	6	2000
JXA-12V1000-IP44	120 V	60	280	12	1000
JXA-12V1250-IP44	120 V	60	280	12	1250
JXA-12V1500-IP44	120 V	60	280	12	1500
JXA-12V1700-IP44	120 V	60	280	12	1700
JXA-12V2000-IP44	120 V	60	280	12	2000
JXA-12V2100-IP44	120 V	60	280	12	2100
JXA-24V450-IP44	120 V	60	280	24	450
JXA-24V500-IP44	120 V	60	280	24	500
JXA-24V560-IP44	120 V	60	280	24	560
JXA-24V650-IP44	120 V	60	280	24	650
JXA-24V750-IP44	120 V	60	280	24	750
JXA-24V850-IP44	120 V	60	280	24	850
JXA-24V1000-IP44	120 V	60	280	24	1000
JXA-24V1200-IP44	120 V	60	280	24	1200

CONSTRUCTION DETAILS:

The unit or units shall be constructed in accordance with the following items. See also, Section General, Construction Details.

MARKING AND NOTICES:

General - All markings shall be legible. Units shall be marked for US - "CLASS 2 NOT WET, CLASS 3 WET" and units shall be marked for Canada - "CLASS 2 NOT WET, CLASS 1 WET" for models JXA-XXXXXXX-IP44 - series. Units shall be marked "Class 2 Power Supply for dry location use only for models JXA-XXXXXXX-IP20 series.

Marking - See Section General, Marking. The following markings are also placed on the product for outdoor use:

"Raintight" or "Rainproof"

"Warning: Risk of Electric Shock. Install only to covered Class A GFCI receptacle that has an enclosure that is weatherproof with the attachment plug cap inserted or removed".

Appliance Marking - Model designation, electrical rating, Listee's identification: Listee's name or Trade name. Location: On the unit

Date of Manufacture Marking - Month and year of manufacture are provided as follows: Location: On the unit, 2 numbers are used to represent the week and 2 numbers are used to represent the year. Example, "1504" represent fifteenth week, 2004.

Important Safety Instructions - Provided with each unit, see ILL.1 for details.

Label - The marking shall be ink-stamped, die-stamped, painted or on R/C (PGDQ2) printed labels. See ILL.2 for detail.

Engineering Note - The internal view and external view of model JXA-24V400-IP20 represents models JXA-6V500-IP20, JXA-6V600-IP20, JXA-6V800-IP20, JXA-6V1000-IP20, JXA-6V1200-IP20, JXA-6V1500-IP20, JXA-6V1700-IP20, JXA-12V300-IP20, JXA-12V400-IP20, JXA-12V500-IP20, JXA-12V600-IP20, JXA-12V800-IP20, JXA-24V150-IP20, JXA-24V200-IP20, JXA-24V250-IP20, JXA-24V300-IP20, JXA-24V350-IP20, JXA-24V400-IP20, JXA-6V500-IP44, JXA-6V600-IP44, JXA-6V800-IP44, JXA-6V1000-IP44, JXA-6V1200-IP44, JXA-6V1500-IP44, JXA-6V1700-IP44, JXA-12V300-IP44, JXA-12V400-IP44, JXA-12V500-IP44, JXA-12V600-IP44,

JXA-12V800-IP44, JXA-24V150-IP44, JXA-24V200-IP44, JXA-24V250-IP44, JXA-24V300-IP44, JXA-24V350-IP44, JXA-24V400-IP44.

The internal view and external view of model JXA-12V2100-IP20 represents models JXA-6V2000-IP20, JXA-12V1000-IP20, JXA-12V1250-IP20, JXA-12V1500-IP20, JXA-12V1700-IP20, JXA-12V2000-IP20, JXA-12V2100-IP20, JXA-24V450-IP20, JXA-24V500-IP20, JXA-24V560-IP20, JXA-24V650-IP20, JXA-24V750-IP20, JXA-24V850-IP20, JXA-24V1000-IP20, JXA-24V1200-IP20, JXA-6V2000-IP44, JXA-12V1000-IP44, JXA-12V1250-IP44, JXA-12V1500-IP44, JXA-12V1700-IP44, JXA-12V2000-IP44, JXA-12V2100-IP44, JXA-24V450-IP44, JXA-24V500-IP44, JXA-24V560-IP44, JXA-24V650-IP44, JXA-24V750-IP44, JXA-24V850-IP44, JXA-24V1000-IP44, JXA-24V1200-IP44

MODEL JXA-24V400-IP20 series, Indoor unit - FIG. 1

General - Shows external view of model JXA-24V400-IP20, series, Indoor unit

1. Enclosure - Two piece construction. R/C (QMFZ2), GE Plastics China, Type 940(f1) rated V-1, minimum 1.5 mm thick. Overall dimensions 52.0 mm by 70.0 mm by 42.8 mm. Two halves are secured by ultrasonic weld, suitable for outdoor use with respect to exposure to Ultraviolet Light, Water Exposure and Immersion in accordance with UL 746C.

Provided with the following openings:

Output Connector Opening - overall 13.30 mm by 11.30 mm

2. Input Blades - Non-polarized, solid copper alloy with zinc plating, integrally molded into enclosure, connected to transformer primary winding by R/C (AVLV), wire, rated VW-1, 300 V, See Section General construction for blades dimensions, spacing and relative location of plug face.
3. Output connector - R/C (QMFZ2) GE Plastics China, Type 940(f1), rated V-1, minimum 1.5 mm thick.

Model JXA- JXA-24V400-IP44, series, Outdoor unit - FIG. 2

General - Shows external view of model JXA-24V400-IP44 series, Outdoor unit

1. Enclosure - Same as Fig. 1.

Provided with the following openings:

Output Connector Opening - overall 12.90 mm by 13.60 mm

2. Input Blades - Same as Fig. 1.
3. Output connector - R/C (QMFZ2), GE Plastics China, Type 940(f1) rated V-1, minimum 1.5 mm thick. , suitable for outdoor use with respect to exposures to ultraviolet light, water exposure and immersion in accordance with UL 746C.

Model JXA-24V400-IP20 Series for Indoor use - FIG. 3

General - Internal View of model JXA-24V400-IP20.

1. Transformer - Constructed as follows:

- A. Core - Laminated silicon steel, E-I combination, 41.30 mm by 25.6 mm by 33.6 mm overall.
- B. Primary Winding - R/C (OBMW2) Polyurethane magnet wire, 1120 turns.
- C. Secondary Winding - R/C (OBMW2) Polyurethane magnet wire, see Electrical Ratings for diameter and number of turns for each model in the series.
- D. Slip Bobbin Construction - Two 2-flange bobbin provided. R/C (QMFZ2), EI Dupont De Numours (E41938), Type FR7025VOF+, rated V-0, minimum 0.88 mm thick.
- E. Polyester Insulation Tape - (PRI, SEC) R/C (OANZ2), Suzhou Jingy Adhesive Tape Co., Ltd., Type JY312, minimum 0.05 mm thick.
- F. Primary Winding to Core Insulation - Bobbin flange is 0.88 mm thick, with two layers of R/C (OANZ2), Suzhou Jingy Adhesive Tape Co., Ltd., Type JY312, minimum 0.05 mm thick provided, bent up and over the bobbin flanges a minimum 5.6 mm for additional window insulation.
- G. Primary Outerwrap - R/C (OANZ2), 3 layers of polyester tape, each 0.05 mm thick.
- H. Secondary Outerwrap - R/C (OANZ2), 2 layers of polyester tape, each 0.05 mm thick.
- I. Primary Lead Connection to Primary Winding Insulation - 2 Layers of polyester film tape, each 0.05 mm thick.
- J. Primary to Secondary Insulation - Bobbin flange, 0.88 mm thick, with one layer of slip bobbin material, minimum width 5.0, provided on all four sides to increase the oversurface spacing between primary and secondary windings to a minimum of 6.4 mm.
- K. Secondary Winding to Core Insulation (Bottom) - Bobbin flange, 0.88 mm thick.

- L. Thermal Cutoff - (PRI) R/C (XCMQ2), Aupo Electronics Ltd., Type A4, rated 130°C, located at primary winding. Provided with 2 layers of insulating tape. Leads are mechanically secured and soldered to primary winding. The leads and body are sleeved with tubing.
 - M. Crossover Insulation - 1 layer of polyester tape, minimum 0.05 mm thick.
3. Fuse - (SEC) Listed or R/C (JDYX), Walter Electronic Type TDS, rated 6.3 A. Leads and body are sleeved with tubing, R/C (YDPU2), rated VW-1.

Model JXA-24V400-IP44, Series for Outdoor use - FIG. 4

General - The general design, shape and arrangement shall be as illustrated in FIG. 3 except as follow:

1. Epoxy - R/C (QMFZ2), Suzhou Eattto Electronic Material Co., Ltd. and type 3300A/B, rated 90 °C. Completely filled the internal cavity of the unit.

MODEL JXA-12V2100-IP20, series, Indoor unit - FIG. 5

General - Shows external view of model JXA-12V2100-IP20 series, Indoor unit

1. Enclosure - Two piece construction. R/C (QMFZ2), GE Plastics China, Type 940(f1) rated V-1, minimum 1.5 mm thick. Overall dimensions 57.2 mm by 83.8 mm by 50.5 mm. Two halves are secured by ultrasonic weld, suitable for outdoor use with respect to exposure to Ultraviolet Light, Water Exposure and Immersion in accordance with UL 746C.

Provided with the following openings:

Output Connector Opening - overall 13.30 mm by 13.0 mm

2. Input Blades - Non-polarized, solid copper alloy with zinc plating, integrally molded into enclosure, connected to transformer primary winding by R/C (AVLV), wire, rated VW-1, 300 V, See Section General construction for blades dimensions, spacing and relative location of plug face.
3. Output connector - R/C (QMFZ2) GE Plastics China, Type 940(f1), rated V-1, minimum 1.5 mm thick.

Model JXA- JXA-24V1200-IP44, series, Outdoor unit - FIG. 6

General - Shows external view of model JXA-12V2100-IP20, series, Outdoor unit

1. Enclosure - Same as Fig. 5.

Provided with the following openings:

Output Connector Opening - overall 13.2 mm by 13.60 mm

2. Input Blades - Same as Fig. 5.
3. Output connector - R/C (QMFZ2), GE Plastics China, Type 940(f1) rated V-1, minimum 1.5 mm thick. , suitable for outdoor use with respect to exposures to ultraviolet light, water exposure and immersion in accordance with UL 746C.

Model JXA-12V2100-IP20 Series for Indoor use - FIG.7

General - Internal View of model JXA-12V2100-IP20

1. Transformer - Constructed as follows:

- A. Core - Laminated silicon steel, E-I combination 48.1 mm by 35.1 mm by 35.0 mm overall.
- B. Primary Winding - R/C (OBMW2) Polyurethane magnet wire, 630 turns.
- C. Secondary Winding - R/C (OBMW2) Polyurethane magnet wire, see Electrical Ratings for diameter and number of turns for each model in the series.
- D. Slip Bobbin Construction - Two 2-flange bobbin provided. R/C (QMFZ2), EI Dupont De Numours (E41938), Type FR7025VOF+, rated V-0, minimum 0.88 mm thick.
- E. Polyester Insulation Tape - (PRI, SEC) R/C (OANZ2), Suzhou Jingy Adhesive Tape Co., Ltd., Type JY312, minimum 0.05 mm thick.
- F. Primary Winding to Core Insulation - Bobbin flange is 0.88 mm thick, with two layers of R/C (OANZ2), Suzhou Jingy Adhesive Tape Co., Ltd., Type JY312, minimum 0.05 mm thick provided, bent up and over the bobbin flanges a minimum 5.6 mm for additional window insulation.
- G. Primary Outerwrap - R/C (OANZ2), 3 layers of polyester tape, each 0.05 mm thick.
- H. Secondary Outerwrap - R/C (OANZ2), 2 layers of polyester tape, each 0.05 mm thick.
- I. Primary Lead Connection to Primary Winding Insulation - 2 Layers of polyester film tape, each 0.05 mm thick.
- J. Primary to Secondary Insulation - Bobbin flange, 0.88 mm thick, with one layer of slip bobbin material, minimum width 5.0, provided on all four sides to increase the oversurface spacing between primary and secondary windings to a minimum of 6.4 mm.
- L. Secondary Winding to Core Insulation (Bottom) - Bobbin flange, 0.88 mm thick.

- L. Thermal Cutoff - (PRI) R/C (XCMQ2), Aupo Electronics Ltd., Type A4, rated 130°C, located at primary winding. Provided with 2 layers of insulating tape. Leads are mechanically secured and soldered to primary winding. The leads and body are sleeved with tubing.
 - M. Crossover Insulation - 1 layer of polyester tape, minimum 0.05 mm thick.
3. Fuse - (SEC) Listed or R/C (JDYX), Walter Electronic Type TDS, rated 6.3 A. Leads and body are sleeved with tubing, R/C (YDPU2), rated VW-1.

Model JXA-24V1200-IP44, Series for Outdoor use - FIG. 8

General - The general design, shape and arrangement shall be as illustrated in FIG. 7 except as follow:

1. Epoxy - R/C (QMFZ2), Suzhou Eattto Electronic Material Co., Ltd. and type 3300A/B, rated 90 °C. Completely filled the internal cavity of the unit.



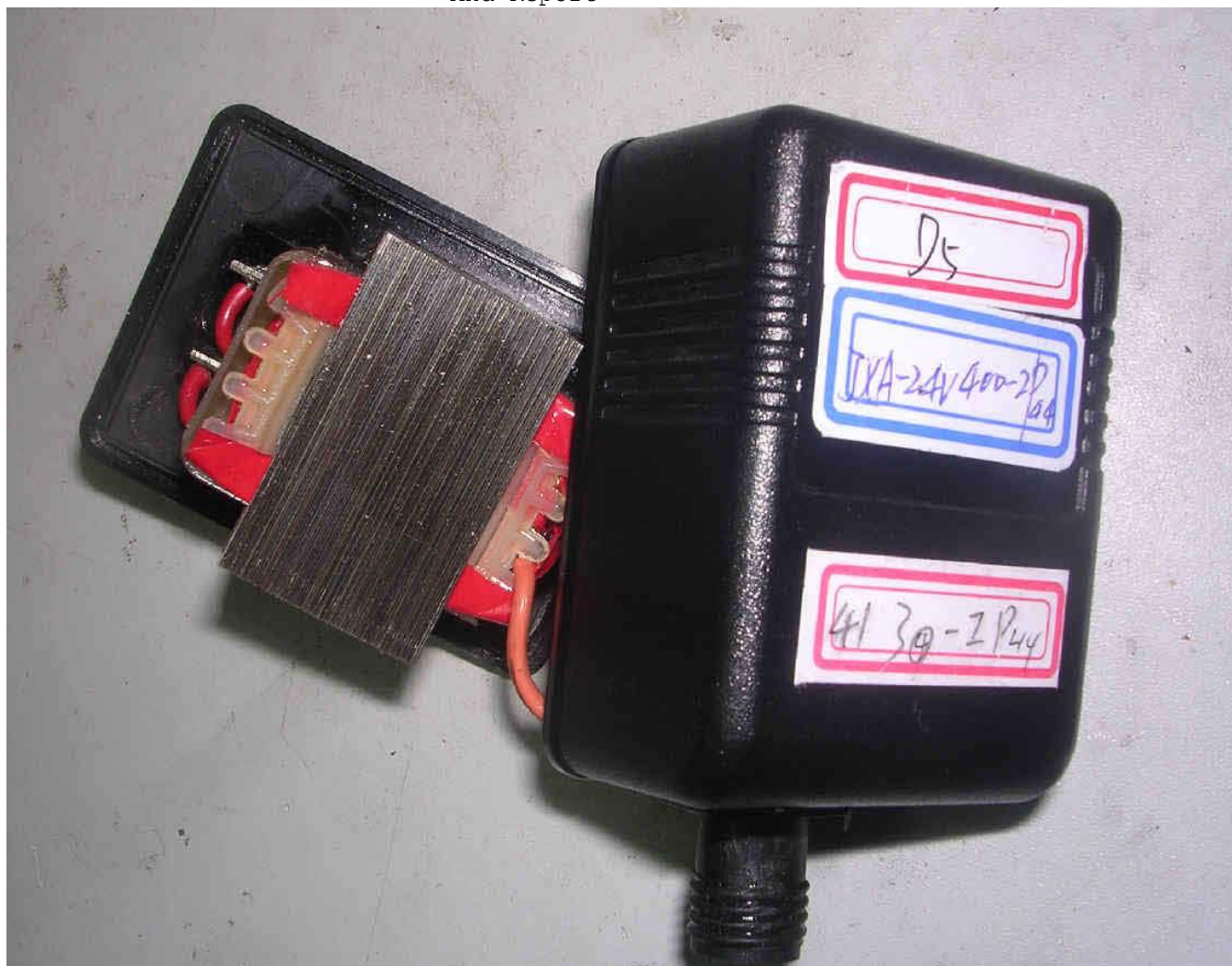
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IMPORTANT SAFETY INSTRUCTIONS

SAVE THESE INSTRUCTIONS – This manual contains important safety and operating instructions for power units.

When using electrical products, basic precautions should always be practiced including the following:

1. **READ AND FOLLOW ALL SAFETY INSTRUCTIONS.**
2. Read and follow all instructions that provided with the product.
3. Do not use an extension cord.
4. Reference the National Electrical Code, ANSI/NFPA 70, specifically for the installation of wiring and clearances from power and lighting conductors.
5. Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction
6. For a cord-connected or direct plug-in power unit, do not install or use within 10 feet of a pool.
7. Do not use in a bathroom
8. **WARNING: Risk of Electric Shock.** When used outdoors, install only to a covered Class A GFCI protected receptacle that is weatherproof with the power unit connected to the receptacle. If one is not provided, contact a qualified electrician for proper installation. Ensure that the power unit and cord do not interfere with completely closing the receptacle cover.
9. **WARNING: Risk of Electric Shock.** When used outdoors, install only on a circuit protected by a Class A GFCI.
10. **WARNING: Risk of Fire.** Installation involving special wiring methods to run wiring through a building structure. Consult a qualified electrician.

WARNING: Risk of Electric Shock: Install
Only to covered Class A GFCI receptacle
that has an enclosure that is weatherproof
with the attachment plug cap inserted or
removed.
MODEL NO.: JXA-24V1200-IP44
INPUT: 120Vac 60Hz 0.28A
OUTPUT: 24Vac 0.4A
cULus EXXXXX Rainproof
LISTED XXXX Date: XXXX
US-CLASS 2 NOT VET, CLASS 3 VET
CAN-CLASS 2 NOT VET, CLASS 1 VET
Chongqing Chongheng Goldstar Communication
Appliances Co., Ltd.

N080462603

TEST RECORD NO. 1

SAMPLES:

The manufacturer submitted representative production samples of power supply models JXA-6V500-IP44, JXA-6V1700-IP44, JXA-12V8000-IP44, JXA-24V400-IP44, JXA-6V2000-IP44, JXA-12V2100-IP44, JXA-24V1200-IP44, JXA-6V500-IP20, JXA-6V1700-IP20, JXA-12V800-IP20, JXA-24V400-IP20, JXA-6V2000-IP20, JXA-12V2100-IP20, and JXA-24V1200-IP20. Each was representative of the construction described in the preceding section of this Report and the following tests were conducted. Test results relate only to the items tested.

GENERAL:

The following tests were conducted under Project 06CA10681 at Shanghai Jielan Electronic Technology, China in accordance with the Standard for Class 2 Power Units, UL 1310, Fifth Edition and CSA CAN/CSA - C22.2 No. 223-M91, Power Supplies with Extra-Low-Voltage Class 2 Outputs and CAS TIL-I42 Power Supplies for Outdoor Use and witnessed by a member of UL Staff.

Leakage Current Test

Dielectric Voltage Withstand Test After Leakage Current Test

Maximum Output Voltage Test

Normal Input Test

Maximum Input Test

Transformer Characteristics Test

Output Current And Power Test

Dielectric Voltage Withstand Test After Output Current And Power Test

Calibration Of Overcurrent Protective Devices Test

Dielectric Voltage Withstand Test After Calibration Of Overcurrent Protective Devices Test

Full-Load Output Current Test

Normal temperature Test

Dielectric Voltage Withstand Test

Induced Potential Test

Abnormal Tests - Output Loading

Dielectric Voltage Withstand Test After Abnormal Tests - Output Loading

Transformer Burnout Test

Blade Secureness Test

Impact Test

Dielectric Voltage Withstand Test After Impact Test

Rod Pressure Test

Dielectric Voltage Withstand Test After Rod Pressure Test

Resistance to Crushing Test

Mold Stress Relief Distortion Test
Weight and Moment Determination
Transformer Insulating Materials Test
Rain Test
Leakage Current Test After Rain Test
Dielectric Voltage Withstand Test After Rain Test
Standing Water Immersion Test
Leakage Current Test After Standing Water Immersion Test
Dielectric Voltage Withstand Test After Standing Water Immersion Test
Cold Conditioning Test

Tests conducted on models JXA-6V500-IP44, JXA-6V1700-IP44, JXA-12V8000-IP44, JXA-24V400-IP44, JXA-6V2000-IP44, JXA-12V2100-IP44, JXA-24V1200-IP44, JXA-6V500-IP20, JXA-6V1700-IP20, JXA-12V800-IP20, JXA-24V400-IP20, JXA-6V2000-IP20, JXA-12V2100-IP20, and JXA-24V1200-IP20 were considered to represent models JXA-XXXXXXX-IP20 series and JXA-XXXXXXX-IP44 series.

Only the above tests were considered necessary. Test results relate only to the items tested.

The unit weight: 1.1 kg.

The manufacturer's recommended ambient (Tmra) is 25°C.

The test methods and results of the above tests have been reviewed and found in accordance with the requirements in the Standard for Class 2 Power Units, UL 1310, Fifth Edition and CSA CAN/CSA - C22.2 No. 223-M91, Power Supplies with Extra-Low-Voltage Class 2 Outputs and CAS TIL-I42 Power Supplies for Outdoor Use.

CONCLUSION

Samples of the products covered by this Report have been found to comply with the requirements covering the category and the products judged to be eligible for Listing and Follow-Up Service. The manufacturer is authorized to use the UL Mark on such products, which comply with the Follow-Up Service Procedure and any other applicable requirements of Underwriters Laboratories Inc. Only those products, which properly bear the UL Mark are considered as Listed by Underwriters Laboratories Inc.

Report by:
KAM H CHAN
Senior Project Engineer
Conformity Assessment Services

Reviewed by:
THOMAS K FILLER
Senior Project Engineer
Conformity Assessment Services

CERTIFICATE OF COMPLIANCE

Certificate Number 20170908-E474768
Report Reference E474768-20060525
Issue Date 2017-SEPTEMBER-08

Issued to: Changzhou Baojin Electrical Co Ltd
Heshu Lijia Wujin
Changzhou
Jiangsu 213165 CHINA

**This is to certify that
representative samples of**

DIRECT-PLUG-IN AND CORD-CONNECTED CLASS 2
POWER UNITS

USL, CNL – Cord Connected, Class 2 Power Supply,
Models: JXD-120180-IP20, JXD-120200-IP20, JXD-
120250-IP20, JXD-120300-IP20, JXD-240085-IP20, JXD-
240100-IP20, JXD-240120-IP20, JXD-240150-IP20, JXD-
240180-IP20, JXD-240200-IP20.

Have been investigated by UL in accordance with the
Standard(s) indicated on this Certificate.

Standard(s) for Safety:

UL 1310 - Class 2 Power Units.
C22.2 No. 223-M91 - Power Supplies with Extra Low
Voltage Class 2 Outputs.

Additional Information:

See the UL Online Certifications Directory at
www.ul.com/database for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's
Certification and Follow-Up Service.

Look for the UL Certification Mark on the product.



Bruce Mahrenholz, Director North American Certification Program

UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please
contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>



File E474768
Service Request: 4310488

May 25, 2006

REPORT

On

DIRECT PLUG-IN AND CORD CONNECTED CLASS 2 POWER UNITS -
FOR INDOOR USE

Changzhou Baojin Electrical Co Ltd
Changzhou Jiangsu China

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reproduce this Report provided it is reproduced in its entirety.

DESCRIPTION

PRODUCT COVERED:

USL, CNL - Cord Connected, Class 2 Power Supply, Models JXD-XXXXXX-IP20 series for indoor use only.

GENERAL CHARACTER:

The products covered by this Report are Cord Connected, Class 2 Power Supply.

These units consist of a linear transformer and other related electronic circuitry housed in a thermoplastic enclosure composed of two parts and secured by ultrasonic welding. Units employ a power cord with non-grounding parallel blade plug configuration plug into line voltage.

USL - Investigated in accordance with UL Standard for Safety for Class 2 Power Units, UL1310, Fifth Edition.

CNL - Investigated in accordance with CSA CAN/CSA - C22.2 No. 223-M91, Power Supplies with Extra-Low-Voltage Class 2 Outputs.

ELECTRICAL RATING :

Model No.	Input			Output	
	V ac	Hz	mA	V dc	mA
JXD-120180-IP20	120 V	60	600	12.0	1800
JXD-120200-IP20	120 V	60	600	12.0	2000
JXD-120250-IP20	120 V	60	600	12.0	2500
JXD-120300-IP20	120 V	60	600	12.0	3000
JXD-240085-IP20	120 V	60	600	24.0	850
JXD-240100-IP20	120 V	60	600	24.0	1000
JXD-240120-IP20	120 V	60	600	24.0	1200
JXD-240150-IP20	120 V	60	600	24.0	1500
JXD-240180-IP20	120 V	60	600	24.0	1800
JXD-240200-IP20	120 V	60	600	24.0	2000

CONSTRUCTION DETAILS:

The unit or units shall be constructed in accordance with the following items. See also, Section General, Construction Details.

MARKING AND NOTICES:

General - All markings shall be legible. Units shall be marked "Class 2 Power Supply for dry location use only for models JXD-XXXXXX-IP20 series. "

Appliance Marking - Model designation, electrical rating, Listee's identification: Listee's name or Trade name. Location: On the unit

Date of Manufacture Marking - Month and year of manufacture are provided as follows: Location: On the unit, 2 numbers are used to represent the week and 2 numbers are used to represent the year. Example, "1504" represent fifteenth week, 2004.

Important Safety Instructions - Provided with each unit, see ILL.1 for details.

Label - The marking shall be ink-stamped, die-stamped, painted or on R/C (PGDQ2) printed labels. See ILL.2 for detail.

MODEL JXD-120300-IP20 - FIG. 1

General - Shows external view of model JXD-120300-IP20

1. Enclosure - Two piece construction. R/C (QMFZ2), GE Plastics China, Type 940(f1) rated V-1, minimum 1.5 mm thick. Overall dimensions 65.6 mm by 92.0 mm by 102.9 mm. Two halves are secured by ultrasonic weld.

Provided with the following openings:

Input Strain Relief Opening - overall 8.90 mm by 8.70 mm

Output Connector Opening - overall 13.30 mm by 12.30 mm

2. Power Supply Cord - Listed, SPT-2, 16 AWG/2C, rated 105°C "dry", 10 feet maximum, rated 300 V. Provided with polarized, solid copper alloy with Zinc plated, NEMA 1-15P type attachment plug. Supply cord leads are mechanically secured, soldered and sleeved with tubing R/C (YDPU2), rated VW-1, to internal wiring.
3. Input Strain Relief - Integrally molded to the supply cord. Secured by fit of flange with the opening of the enclosure, inside partition measured 11.30 mm by 13.90 mm, 3.70 mm thick, central partition measured 8.40 mm by 8.40 mm by 3.30 mm wide, outer partition measures 11.30 mm by 13.90 mm by 2.00 mm thick.
4. Output Cord - SEC. Two conductors flexible cord, No. 18 AWG, style mAWM2468, rated 80 °C, 300 V, having minimum 0.33 mm thick thermoplastic insulation. 6 feet minimum. One end of cord terminates at internal connections; other end terminates in a two wires female connector.

Output Cord Relief - Integrally molded to the supply cord. Secured by fit of flange with the opening of the enclosure, inside partition measured 16.0 mm by 13.7 mm, 2.5 mm thick, central partition measured 12.50 mm by 10.60 mm, 2.50 mm wide, outer partition measures 16.0 mm by 13.7 mm by 2.5 mm thick.

Model JXD-120300-IP20 - FIG. 2

General - The general design, shape and arrangement shall be as illustrated in FIG. 2.

1. Transformer - Constructed as follows:

- A. Core - Laminated silicon steel, E-I combination, 66.30 mm by 46.0 mm by 55.3 mm overall.
- B. Primary Winding - R/C (OBMW2) Polyurethane magnet wire.
- C. Secondary Winding - R/C (OBMW2) Polyurethane magnet wire, see Electrical Ratings for diameter and number of turns for each model in the series.
- D. Slip Bobbin Construction - Two 2-flange bobbin provided. R/C (QMFZ2), EI Dupont De Numours (E41938), Type FR7025VOF+, rated V-0, minimum 0.88 mm thick.
- E. Polyester Insulation Tape - (PRI, SEC) R/C (OANZ2), Suzhou Jingy Adhesive Tape Co., Ltd., Type JY312, minimum 0.05 mm thick.

	Transformer Winding	Insulation	
F	Primary - Core	Bobbin flange and 2 layers of tape bent up over the bobbin flanges to provide 5.6 mm for additional window insulation.	
G	Primary Outerwrap	3 layers of tape	
H	Secondary outerwrap	2 layers of tape	
I	Primary lead - primary winding	2 layers of tape	
J	Primary - Secondary	Bobbin flange thickness and one layer of slip bobbin thickness. Slip bobbin width is 5.0 mm minimum.	
K	Secondary - core	Bobbin flange	
L	Crossover I	One layer of tape	

2. Fuse - (SEC) Listed or R/C (JDYX), Walter Electronic Type TDS, rated 6.3 A. Leads and body are sleeved with tubing, R/C (YDPU2), rated VW-1.
3. Diodes - (SEC) Silicon rectifier type, four provided.
4. PWB Board - (SEC) R/C (ZPMV2), rated minimum V-0, 130 °C. Dimensions 62.5 mm by 24.0 mm by 1.7 mm thick, rated 130 °C. Secured to transformer bobbin by physical fit and soldering with secondary windings.
5. Capacitor - (SEC) Electrolytic type, rated 4700 uF, 50 V, 105 °C, provided with integral pressure relief.
6. Thermal Cutoff - (PRI) R/C (XCMQ2), Aupo Electronics Ltd., Type A4, rated 130°C, located at primary winding. Provided with 2 layers of insulating tape. Leads are mechanically secured and soldered to primary winding. The leads and body are sleeved with tubing



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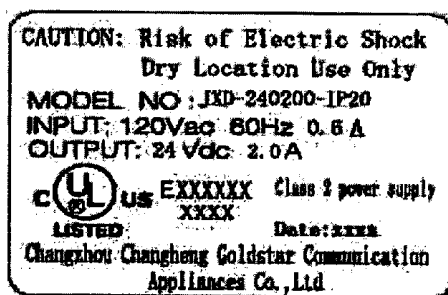
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IMPORTANT SAFETY INSTRUCTIONS

SAVE THESE INSTRUCTIONS – This manual contains important safety and operating instructions for power units.

When using electrical products, basic precautions should always be practiced including the following:

1. **READ AND FOLLOW ALL SAFETY INSTRUCTIONS.**
2. Read and follow all instructions that provided with the product.
3. Do not use an extension cord.
4. Reference the National Electrical Code, ANSI/NFPA 70, specifically for the installation of wiring and clearances from power and lighting conductors.
5. Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction.
6. For a cord-connected or direct plug-in power unit, do not install or use within 10 feet of a pool.
7. Do not use in a bathroom.
8. **WARNING: Risk of Electric Shock.** When used outdoors, install only to a covered Class A GFCI protected receptacle that is weatherproof with the power unit connected to the receptacle. If one is not provided, contact a qualified electrician for proper installation. Ensure that the power unit and cord do not interfere with completely closing the receptacle cover.
9. **WARNING: Risk of Electric Shock.** When used outdoors, install only on a circuit protected by a Class A GFCI.
10. **WARNING: Risk of Fire.** Installation involving special wiring methods to run wiring through a building structure. Consult a qualified electrician.



N080462662

TEST RECORD NO. 1

SAMPLES:

The manufacturer submitted representative production samples of power supplies, Models JXD-120300-IP20, JXD-240085-IP20, and JXD-240200-IP20. Each was representative of the construction described in this Report and the following tests were conducted. Test results relate only to the items tested.

GENERAL:

The following tests were conducted under Project 06CA10439 at Shanghai Jielan Electronic Technology, China in accordance with the Standard for Class 2 Power Units, UL 1310, Fifth Edition and Power Supplies with Extra Low Voltage Class 2 Outputs, CAN/ CSA-C22.2 No. 223-M91 and witnessed by a member of UL Staff under the WTDP program.

Leakage Current Test
Dielectric Voltage Withstand Test After Leakage Current Test
Maximum Output Voltage Test
Normal Input Test
Maximum Input Test
Transformer Characteristics Test
Output Current And Power Test
Dielectric Voltage Withstand Test After Output Current And Power Test
Full-Load Output Current Test
Normal temperature Test
Dielectric Voltage Withstand Test
Induced Potential Test
Abnormal Tests - Output Loading
Dielectric Voltage Withstand Test After Abnormal Tests - Output Loading
Transformer Burnout Test
Dielectric Voltage Withstand Test After Transformer Burnout Test
Impact Test
Dielectric Voltage Withstand Test After Impact Test
Calibration of Overcurrent Protection Devices Test
Dielectric Voltage Withstand Test After Calibration of Overcurrent Protection Devices Test

Strain Relief Test
Mold Stress Relief Distortion Test
Strain Relief Test After Mold Stress Relief Distortion Test
Transformer Insulating Materials Test

Tests conducted on models JXD-120300-IP20, JXD-240085-IP20, and JXD-240200-IP20 were considered to represent models, JXD-120180-IP20, JXD-120200-IP20, JXD-120250-IP20, JXD-120300-IP20, JXD-240085-IP20, JXD-240100-IP20, JXD-240120-IP20, JXD-240150-IP20, JXD-240180-IP20, JXD-240200-IP20.

Only the above tests were considered necessary. Test results relate only to the items tested.

The unit weight: 1.494 kg.

The manufacturer's recommended ambient (Tmra) is 25°C.

The test methods and results of the above tests have been reviewed and found in accordance with the requirements in the Standard for Class 2 Power Units, UL 1310 and Power Supplies with Extra Low Voltage Class 2 Outputs, C22.2 No. 223-M91.

CONCLUSION

Samples of the products covered by this Report have been found to comply with the requirements covering the category and the products judged to be eligible for Listing and Follow-Up Service. The manufacturer is authorized to use the UL Mark on such products, which comply with the Follow-Up Service Procedure and any other applicable requirements of Underwriters Laboratories Inc. Only those products, which properly bear the UL Mark are considered as Listed by Underwriters Laboratories Inc.

Report by:
KAM H CHAN
Senior Project Engineer
Conformity Assessment Services

Reviewed by:
THOMAS FILLER
Senior Project Engineer
Conformity Assessment Services

CERTIFICATE OF COMPLIANCE

Certificate Number 20170908-E474768
Report Reference E474768-20060526
Issue Date 2017-SEPTEMBER-08

Issued to: Changzhou Baojin Electrical Co Ltd
Heshu Lijia Wujin
Changzhou
Jiangsu 213165 CHINA

**This is to certify that
representative samples of** DIRECT-PLUG-IN AND CORD-CONNECTED CLASS 2
POWER UNITS
SEE ADDENDUM PAGE FOR MODELS

Have been investigated by UL in accordance with the
Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 1310 - Class 2 Power Units.
C22.2 No. 223-M91 - Power Supplies with Extra Low
Voltage Class 2 Outputs.

Additional Information: See the UL Online Certifications Directory at
www.ul.com/database for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's
Certification and Follow-Up Service.

Look for the UL Certification Mark on the product.



Bruce Mahrenholz, Director North American Certification Program

UL LLC

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contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>



CERTIFICATE OF COMPLIANCE

Certificate Number	20170908-E474768
Report Reference	E474768-20060526
Issue Date	2017-SEPTEMBER-08

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

USL, CNL – Direct Plug In, Class 2 Power Supply,

Models: JXD-036030-IP20, JXD-036050-IP20, JXD-036080-IP20, JXD-036100-IP20, JXD-060030-IP20, JXD-060040-IP20, JXD-060050-IP20, JXD-060060-IP20, JXD-060080-IP20, JXD-060100-IP20, JXD-060120-IP20, JXD-090020-IP20, JXD-090030-IP20, JXD-090040-IP20, JXD-090050-IP20, JXD-090060-IP20, JXD-090080-IP20, JXD-096010-IP20, JXD-096020-IP20, JXD-096030-IP20, JXD-096040-IP20, JXD-096050-IP20, JXD-096060-IP20, JXD-120010-IP20, JXD-120020-IP20, JXD-120030-IP20, JXD-120040-IP20, JXD-120050-IP20, JXD-120060-IP20, JXD-150010-IP20, JXD-150015-IP20, JXD-150020-IP20, JXD-150030-IP20, JXD-150040-IP20, JXD-150050-IP20, JXD-180010-IP20, JXD-180020-IP20, JXD-180030-IP20, JXD-180040-IP20, JXD-240010-IP20, JXD-240015-IP20, JXD-240020-IP20, JXD-240025-IP20, JXD-240030-IP20, JXD-060150-IP20, JXD-060180-IP20, JXD-060200-IP20, JXD-000100-IP20, JXD-090120-IP20, JXD-090150-IP20, JXD-090180-IP20, JXD-096080-IP20, JXD-096100-IP20, JXD-096120-IP20, JXD-096150-IP20, JXD-120080-IP20, JXD-120100-IP20, JXD-120120-IP20, JXD-120150-IP20, JXD-150060-IP20, JXD-150080-IP20, JXD-150100-IP20, JXD-180050-IP20, JXD-180060-IP20, JXD-180080-IP20, JXD-180100-IP20, JXD-240035-IP20, JXD-240040-IP20, JXD-240045-IP20, JXD-240050-IP20, JXD-240060-IP20, JXD-240065-IP20, JXD-240075-IP20.



Bruce Mahrenholz, Director North American Certification Program

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File E474768
Service Request: 4310488

May 26, 2006

REPORT

On

DIRECT PLUG-IN AND CORD CONNECTED CLASS 2 POWER UNITS -
FOR INDOOR USE

Changzhou Baojin Electrical Co Ltd
Changzhou Jiangsu China

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DESCRIPTION

PRODUCT COVERED:

USL, CNL - Direct Plug In, Class 2 Power Supply, Models JXD-XXXXXXX-IP20 series for indoor use only.

GENERAL CHARACTER:

The products covered by this Report are Direct Plug In, Class 2 Power Supply.

These units consist of a linear transformer and other related electronic circuitry housed in a thermoplastic enclosure composed of two parts and secured by ultrasonic welding. Units employ a power cord with non-grounding parallel blade plug configuration plug into line voltage.

USL - Investigated in accordance with UL Standard for Safety for Class 2 Power Units, UL1310, Fifth Edition.

CNL - Investigated in accordance with CSA CAN/CSA - C22.2 No. 223-M91, Power Supplies with Extra-Low-Voltage Class 2 Outputs.

ELECTRICAL RATING :

Model No.	Input			Output	
	V ac	Hz	mA	V dc	mA
JXD-036030-IP20	120 V	60	250	3.6	300
JXD-036050-IP20	120 V	60	250	3.6	500
JXD-036080-IP20	120 V	60	250	3.6	800
JXD-036100-IP20	120 V	60	250	3.6	1000
JXD-060030-IP20	120 V	60	250	6	300
JXD-060040-IP20	120 V	60	250	6	400
JXD-060050-IP20	120 V	60	250	6	500

Model No.	Input			Output	
	V ac	Hz	mA	V dc	mA
JXD-060060-IP20	120 V	60	250	6	600
JXD-060080-IP20	120 V	60	250	6	800
JXD-060100-IP20	120 V	60	250	6	1000
JXD-060120-IP20	120 V	60	250	6	1200
*					
JXD-090020-IP20	120 V	60	250	9	200
JXD-090030-IP20	120 V	60	250	9	300
JXD-090040-IP20	120 V	60	250	9	400
JXD-090050-IP20	120 V	60	250	9	500
JXD-090060-IP20	120 V	60	250	9	600
JXD-090080-IP20	120 V	60	250	9	800
JXD-096010-IP20	120 V	60	250	9.6	100
JXD-096020-IP20	120 V	60	250	9.6	200
JXD-096030-IP20	120 V	60	250	9.6	300
JXD-096040-IP20	120 V	60	250	9.6	400
JXD-096050-IP20	120 V	60	250	9.6	500
JXD-096060-IP20	120 V	60	250	9.6	600
JXD-120010-IP20	120 V	60	250	12	100
JXD-120020-IP20	120 V	60	250	12	200
JXD-120030-IP20	120 V	60	250	12	300
JXD-120040-IP20	120 V	60	250	12	400
JXD-120050-IP20	120 V	60	250	12	500
JXD-120060-IP20	120 V	60	250	12	600
JXD-150010-IP20	120 V	60	250	15	100
JXD-150015-IP20	120 V	60	250	15	150
JXD-150020-IP20	120 V	60	250	15	200
JXD-150030-IP20	120 V	60	250	15	300
JXD-150040-IP20	120 V	60	250	15	400
JXD-150050-IP20	120 V	60	250	15	500

Model No.	Input			Output	
	V ac	Hz	mA	V dc	mA
JXD-180010-IP20	120 V	60	250	18	100
JXD-180020-IP20	120 V	60	250	18	200
JXD-180030-IP20	120 V	60	250	18	300
JXD-180040-IP20	120 V	60	250	18	400
JXD-240010-IP20	120 V	60	250	24	100
JXD-240015-IP20	120 V	60	250	24	150
JXD-240020-IP20	120 V	60	250	24	200
JXD-240025-IP20	120 V	60	250	24	250
JXD-240030-IP20	120 V	60	250	24	300
JXD-060150-IP20	120 V	60	250	6	1500
JXD-060180-IP20	120 V	60	250	6	1800
JXD-060200-IP20	120 V	60	250	6	2000
JXD-000100-IP20	120 V	60	250	9	1000
JXD-090120-IP20	120 V	60	250	9	1200
JXD-090150-IP20	120 V	60	250	9	1500
JXD-090180-IP20	120 V	60	250	9	1800
JXD-096080-IP20	120 V	60	250	9.6	800
JXD-096100-IP20	120 V	60	250	9.6	1000
JXD-096120-IP20	120 V	60	250	9.6	1200
JXD-096150-IP20	120 V	60	250	9.6	1500
JXD-120080-IP20	120 V	60	250	12	800
JXD-120100-IP20	120 V	60	250	12	100
JXD-120120-IP20	120 V	60	250	12	1200
JXD-120150-IP20	120 V	60	250	12	1500
JXD-150060-IP20	120 V	60	250	15	600
JXD-150080-IP20	120 V	60	250	15	800
JXD-150100-IP20	120 V	60	250	15	1000

Model No.	Input			Output	
	V ac	Hz	mA	V dc	mA
JXD-180050-IP20	120 V	60	250	18	500
JXD-180060-IP20	120 V	60	250	18	600
JXD-180080-IP20	120 V	60	250	18	800
JXD-180100-IP20	120 V	60	250	18	1000
JXD-240035-IP20	120 V	60	250	24	350
JXD-240040-IP20	120 V	60	250	24	400
JXD-240045-IP20	120 V	60	250	24	450
JXD-240050-IP20	120 V	60	250	24	500
JXD-240060-IP20	120 V	60	250	24	600
JXD-240065-IP20	120 V	60	250	24	650
JXD-240075-IP20	120 V	60	250	24	750

CONSTRUCTION DETAILS:

The unit or units shall be constructed in accordance with the following items. See also, Section General, Construction Details.

MARKING AND NOTICES:

General - All markings shall be legible. Units shall be marked "Class 2 Power Supply for dry location use only for models JXA-XXXXXXX-IP20 series".

Appliance Marking - Model designation, electrical rating, Listee's identification: Listee's name or Trade name. Location: On the unit

Date of Manufacture Marking - Month and year of manufacture are provided as follows: Location: On the unit, 2 numbers are used to represent the week and 2 numbers are used to represent the year. Example, "1504" represent fifteenth week, 2004.

Important Safety Instructions - Provided with each unit, see ILL.1 for details.

Label - The marking shall be ink-stamped, die-stamped, painted or on R/C (PGDQ2) printed labels. See ILL. 2 for detail.

*Engineering Note - The internal view and external view of model JXD-240025-IP20 represents models JXD-036030-IP20, JXD-036050-IP20, JXD-036080-IP20, JXD-036100-IP20, JXD-060030-IP20, JXD-060040-IP20, JXD-060050-IP20, JXD-060060-IP20, JXD-060080-IP20, JXD-060100-IP20, JXD-060120-IP20, JXD-090020-IP20, JXD-090030-IP20, JXD-090040-IP20, JXD-090050-IP20, JXD-090060-IP20, JXD-090080-IP20, JXD-096010-IP20, JXD-096020-IP20, JXD-096030-IP20, JXD-096040-IP20, JXD-096050-IP20, JXD-096060-IP20, JXD-120010-IP20, JXD-120020-IP20, JXD-120030-IP20, JXD-120040-IP20, JXD-120050-IP20, JXD-120060-IP20, JXD-150010-IP20, JXD-150015-IP20, JXD-150020-IP20, JXD-150030-IP20, JXD-150040-IP20, JXD-150050-IP20, JXD-180010-IP20, JXD-180020-IP20, JXD-180030-IP20, JXD-180040-IP20, JXD-240010-IP20, JXD-240015-IP20, JXD-240020-IP20, JXD-240025-IP20, JXD-240030-IP20.

The internal view and external view of model JXD-120150-IP20 represents models JXD-060150-IP20, JXD-060180-IP20, JXD-060200-IP20, JXD-090100-IP20, JXD-090120-IP20, JXD-090150-IP20, JXD-090180-IP20, JXD-096080-IP20, JXD-096100-IP20, JXD-096120-IP20, JXD-096150-IP20, JXD-120080-IP20, JXD-120100-IP20, JXD-120120-IP20, JXD-120150-IP20, JXD-150060-IP20, JXD-150080-IP20, JXD-150100-IP20, JXD-180050-IP20, JXD-180060-IP20, JXD-180080-IP20, JXD-180100-IP20, JXD-240035-IP20, JXD-240040-IP20, JXD-240045-IP20, JXD-240050-IP20, JXD-240060-IP20, JXD-240065-IP20, JXD-240075-IP20.

MODEL JXD-240025-IP20, series, Indoor unit - FIG. 1

General - Shows external view of model JXD-240025-IP20, series, Indoor unit

1. Enclosure - Two piece construction. R/C (QMFZ2), GE Plastics China, Type 940(f1) rated V-1, minimum 1.5 mm thick. Overall dimensions 52.0 mm by 70.0 mm by 42.8 mm. Two halves are secured by ultrasonic weld.
2. Input Blades - Non-polarized, solid copper alloy with Zinc plating, integrally molded into the transformer bobbin and passed through the enclosure, connected to transformer primary winding by R/C (AVLV2) wire, rated minimum VW-1, 300 V. See Section General Construction for blades dimensions, spacing and relative location of plug face. The perimeter of the face section from which the blade projection shall be minimum 8.0 mm from any point on either blade.
3. Output Cord - SEC. Two conductors flexible cord, No. 22 AWG, style AWM2468, rated 80 °C, 300 V, having minimum 0.33 mm thick thermoplastic insulation. One end of cord terminates at internal connections; other end terminates in a standard polarized barrel jack connector. Cord minimum 1.8 m external length.
4. Strain Relief - PVC bushing integrally molded with output cord. Secured in opening 13.2 mm by 11.6 mm in the enclosure. Inside partition measures 12.5 mm by 15.9 mm by 1.86 mm thick, central partition measures 12.4 mm by 10.0 mm by 3.0 mm wide. Outer partition measures 15.4 mm by 13.0 mm by 1.8 mm thick

Model JXD-240025-IP20 Series for Indoor use - FIG. 2

General - Internal View of model JXD-240025-IP20.

1. Transformer - Constructed as follows:

- A. Core - Laminated silicon steel, E-I combination, 41.60 mm by 25.8 mm by 33.2 mm overall.
- B. Primary Winding - R/C (OBMW2) Polyurethane magnet wire, 1250 turns.
- C. Secondary Winding - R/C (OBMW2) Polyurethane magnet wire, see Electrical Ratings for diameter and number of turns for each model in the series.
- D. Slip Bobbin Construction - Two 2-flange bobbin provided. R/C (QMFZ2), EI Dupont De Numours (E41938), Type FR7025VOF+, rated V-0, minimum 0.88 mm thick.
- E. Polyester Insulation Tape - (PRI, SEC) R/C (OANZ2), Suzhou Jingy Adhesive Tape Co., Ltd., Type JY312, minimum 0.05 mm thick.

	Transformer Winding	Insulation	
F	Primary - Core	Bobbin flange and 2 layers of tape bent up over the bobbin flanges to provide 5.6 mm for additional window insulation.	
G	Primary Outerwrap	3 layers of tape	
H	Secondary outerwrap	2 layers of tape	
I	Primary lead - primary winding	2 layers of tape	
J	Primary - Secondary	Bobbin flange thickness and one layer of slip bobbin thickness. Slip bobbin width is 5.0 mm minimum.	
K	Secondary - core	Bobbin flange	
L	Crossover I	One layer of tape	

2. Fuse - (SEC) Listed or R/C (JDYX), Walter Electronic Type TDS, rated 6.3 A. Leads and body are sleeved with tubing, R/C (YDPU2), rated VW-1.
3. Diodes - SEC. Silicon rectifier type, four provided.
4. PWB Secondary - SEC. R/C (ZPMV2), rated V-0, 130 °C. Dimensions 40.0 mm by 16.7 mm by 1.5 mm thick, rated 130°C. Secured to transformer bobbin by physical fit and soldering with secondary windings.
5. Capacitor - SEC. Electrolytic type, rated 470 µF, 50 V, 105°C, provided with integral pressure relief.
6. Thermal Cutoff - (PRI) R/C (XCMQ2), Aupo Electronics Ltd., Type A4, rated 130°C, located at primary winding. Provided with 2 layers of insulating tape. Leads are mechanically secured and soldered to primary winding. The leads and body are sleeved with tubing.

MODEL JXD-120150-IP20, series, Indoor unit - FIG. 3

General - Shows external view of model JXA-120150-IP20, series, Indoor unit

1. Enclosure - Two piece construction. R/C (QMFZ2), GE Plastics China, Type 940(f1) rated V-1, minimum 1.5 mm thick. Overall dimensions 58.5 mm by 83.8 mm by 51.2 mm. Two halves are secured by ultrasonic weld.
2. Input Blades - Non-polarized, solid copper alloy with Zinc plating, integrally molded into the transformer bobbin and passed through the enclosure, connected to transformer primary winding by R/C (AVLV2) wire, rated minimum VW-1, 300 V. See Section General Construction for blades dimensions, spacing and relative location of plug face. The perimeter of the face section from which the blade projection shall be minimum 8.0 mm from any point on either blade.
3. Output Cord - SEC. Two conductors flexible cord, No. 18 AWG, style AWM2468, rated 80 °C, 300 V, having minimum 0.33 mm thick thermoplastic insulation. One end of cord terminates at internal connections; other end terminates in a standard polarized barrel jack connector. Cord minimum 1.8 m external length.
4. Strain Relief - PVC bushing integrally molded with output cord. Secured in opening 11.2 mm by 13.7 mm in the enclosure. Inside partition measures 13.6 mm by 16.2 mm by 2.2 mm thick, central partition measures 12.6 mm by 10.5 mm by 3.0 mm wide. outer partition measures 15.9 mm by 13.8 mm by 2.1 mm thick

Model JXD-120150-IP20 Series for Indoor use - FIG.4

General - Internal View of model JXD-120150-IP20.

1. Transformer - Constructed as follows:

- A. Core - Laminated silicon steel, E-I combination 48.1 mm by 32.3 mm by 40.6 mm overall.
- B. Primary Winding - R/C (OBMW2) Polyurethane magnet wire, 860 turns.
- C. Secondary Winding - R/C (OBMW2) Polyurethane magnet wire, see Electrical Ratings for diameter and number of turns for each model in the series.
- D. Slip Bobbin Construction - Two 2-flange bobbin provided. R/C (QMFZ2), EI Dupont De Numours (E41938), Type FR7025VOF+, rated V-0, minimum 0.88 mm thick.
- E. Polyester Insulation Tape - (PRI, SEC) R/C (OANZ2), Suzhou Jingy Adhesive Tape Co., Ltd., Type JY312, minimum 0.05 mm thick.

	Transformer Winding	Insulation	
F	Primary - Core	Bobbin flange and 2 layers of tape bent up over the bobbin flanges to provide 5.6 mm for additional window insulation.	
G	Primary Outerwrap	3 layers of tape	
H	Secondary outerwrap	2 layers of tape	
I	Primary lead - primary winding	2 layers of tape	
J	Primary - Secondary	Bobbin flange thickness and one layer of slip bobbin thickness. Slip bobbin width is 5.0 mm minimum.	
K	Secondary - core	Bobbin flange	
L	Crossover I	One layer of tape	

2. Fuse - (SEC) Listed or R/C (JDYX), Walter Electronic Type TDS, rated 6.3 A. Leads and body are sleeved with tubing, R/C (YDPU2), rated VW-1.
3. Diodes - SEC. Silicon rectifier type, four provided.
4. PWB Secondary - SEC. R/C (ZPMV2), rated V-0, 130 °C. Dimensions 47.6 mm by 21.3 mm by 1.7 mm thick, rated 130°C. Secured to transformer bobbin by physical fit and soldering with secondary windings.
5. Capacitor - SEC. Electrolytic type, rated 3300 µF, 25 V, 85°C, provided with integral pressure relief.
6. Thermal Cutoff - (PRI) R/C (XCMQ2), Aupo Electronics Ltd., Type A4, rated 130°C, located at primary winding. Provided with 2 layers of insulating tape. Leads are mechanically secured and soldered to primary winding. The leads and body are sleeved with tubing.



N080462669



N080462670



N080462671



N080462672

IMPORTANT SAFETY INSTRUCTIONS

SAVE THESE INSTRUCTIONS – This manual contains important safety and operating instructions for power units:

When using electrical products, basic precautions should always be practiced including the following:

1. **READ AND FOLLOW ALL SAFETY INSTRUCTIONS.**
2. Read and follow all instructions that provided with the product.
3. Do not use an extension cord.
4. Reference the National Electrical Code, ANSI/NFPA 70, specifically for the installation of wiring and clearances from power and lighting conductors.
5. Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction
6. For a cord-connected or direct plug-in power unit, do not install or use within 10 feet of a pool.
7. Do not use in a bathroom
8. **WARNING: Risk of Electric Shock.** When used outdoors, install only to a covered Class A GFCI protected receptacle that is weatherproof with the power unit connected to the receptacle. If one is not provided, contact a qualified electrician for proper installation. Ensure that the power unit and cord do not interfere with completely closing the receptacle cover.
9. **WARNING: Risk of Electric Shock.** When used outdoors, install only on a circuit protected by a Class A GFCI.
10. **WARNING: Risk of Fire.** Installation involving special wiring methods to run wiring through a building structure. Consult a qualified electrician.

CAUTION: Risk of Electric Shock
Dry Location Use Only

MODEL NO : JXD-120150-IP20
INPUT: 120Vac 60Hz 0.25A
OUTPUT: 12Vdc 1.5A

 **us** EXXXXXX Class 2 power supply
XXXX

LISTED **Date:xxxx**
Changzhou Changheng Goldstar Communication
Appliances Co., Ltd

N080462674

TEST RECORD NO. 1

SAMPLES:

The manufacturer submitted representative production samples of power supply models JXD-036030-IP20, JXD-150050-IP20, JXD-240025-IP20, JXD-060150-IP20, JXD-120150-IP20 and JXD-240025-IP20. Each was representative of the construction described in this Report and the following tests were conducted. Test results relate only to the items tested.

GENERAL:

The following tests were conducted under Project 06CA10682 at Shanghai Jielan Electronic Technology, China in accordance with the Standard for Class 2 Power Units, UL 1310, Fifth Edition and CSA CAN/CSA - C22.2 No. 223-M91, Power Supplies with Extra-Low-Voltage Class 2 Outputs and witnessed by a member of UL Staff under the WTDP program.

Leakage Current Test
Dielectric Voltage Withstand Test After Leakage Current Test
Maximum Output Voltage Test
Normal Input Test
Maximum Input Test
Transformer Characteristics Test
Output Current And Power Test
Dielectric Voltage Withstand Test After Output Current And Power Test
Calibration Of Overcurrent Protective Devices Test
Dielectric Voltage Withstand Test After Calibration Of Overcurrent Protective Devices Test
Full-Load Output Current Test
Normal temperature Test
Dielectric Voltage Withstand Test
Induced Potential Test
Abnormal Tests - Output Loading
Dielectric Voltage Withstand Test After Abnormal Tests - Output Loading
Transformer Burnout Test
Dielectric Voltage Withstand Test Transformer Burnout Test
Blade Secureness Test
Impact Test
Dielectric Voltage Withstand Test After Impact Test
Rod Pressure Test
Dielectric Voltage Withstand Test After Rod Pressure Test
Resistance to Crushing Test

Strain Relief Test
Push-Back Relief Test
Blade Secureness Test
Mold Stress Relief Distortion Test
Strain Relief Test After Mold Stress Relief Distortion Test
Weight and Moment Determination
Transformer Insulating Materials Test
Rain Test
Leakage Current Test After Rain Test
Dielectric Voltage Withstand Test After Rain Test
Standing Water Immersion Test
Leakage Current Test After Standing Water Immersion Test
Dielectric Voltage Withstand Test After Standing Water Immersion Test
Cold Conditioning Test

Tests conducted on models JXD-036030-IP20, JXD-150050-IP20, JXD-240025-IP20, JXD-060150-IP20, JXD-120150-IP20 and JXD-240025-IP20 were considered to represent models JXD-XXXXXXX-IP20.

Only the above tests were considered necessary. Test results relate only to the items tested.

The unit weight: 0.593 kg.

The manufacturer's recommended ambient (Tmra) is 25°C.

The test methods and results of the above tests have been reviewed and found in accordance with the requirements in the Standard for Class 2 Power Units, UL 1310, Fifth Edition and CSA CAN/CSA - C22.2 No. 223-M91, Power Supplies with Extra-Low-Voltage Class 2 Outputs.

CONCLUSION

Samples of the products covered by this Report have been found to comply with the requirements covering the category and the products judged to be eligible for Listing and Follow-Up Service. The manufacturer is authorized to use the UL Mark on such products, which comply with the Follow-Up Service Procedure and any other applicable requirements of Underwriters Laboratories Inc. Only those products, which properly bear the UL Mark are considered as Listed by Underwriters Laboratories Inc.

Report by:
KAM H CHAN
Senior Project Engineer
Conformity Assessment Services

Reviewed by:
THOMAS K FILLER
Senior Project Engineer
Conformity Assessment Services

CERTIFICATE OF COMPLIANCE

Certificate Number 20170908-E474768
Report Reference E474768-20100619
Issue Date 2017-SEPTEMBER-08

Issued to: Changzhou Baojin Electrical Co Ltd
Heshu Lijia Wujin
Changzhou
Jiangsu 213165 CHINA

**This is to certify that
representative samples of**

DIRECT-PLUG-IN AND CORD-CONNECTED CLASS 2
POWER UNITS

USL, CNL - Class 2 inherently limited Power Supply, Model
JXD-090010-IP20.

Have been investigated by UL in accordance with the
Standard(s) indicated on this Certificate.

Standard(s) for Safety:

UL 1310 - Class 2 Power Units.
CAN/CSA C22.2 No. 223 - Power Supplies with Extra Low
Voltage Class 2 Outputs.

Additional Information:

See the UL Online Certifications Directory at
www.ul.com/database for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's
Certification and Follow-Up Service.

Look for the UL Certification Mark on the product.



Bruce Mahrenholz, Director North American Certification Program

UL LLC

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File E474768
Service Request: 4310488

June 19, 2010

REPORT

on

DIRECT PLUG-IN AND CORD-CONNECTED
CLASS 2 POWER UNITS

Changzhou Baojin Electrical Co Ltd
Jiangsu, China

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reproduce this Report provided it is in its entirety.

DESCRIPTION

PRODUCT COVERED:

USL, CNL - Class 2 inherently limited Power Supply, Model JXD-090010-IP20.

GENERAL:

The unit covered by this Report is a direct plug-in Class 2 Power Supply.

The unit consists of a linear mode transformer and other related electronic circuitry housed in a thermoplastic enclosure, and provided with non-polarized parallel blades for connection to line voltage.

ELECTRICAL RATING:

Model	V ac	Input	mA	V dc	Output
		Hz			mA
JXD-090010-IP20	120	60	250	9	100

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

USL indicates investigation to the UL Standard for Safety for Class 2 Power Units, UL 1310, Fifth Edition, with revisions including and through April 1, 2010.

CNL indicates product complies with the Standard for Power Supplies with Extra Low Voltage Class 2 Outputs, CAN/CSA C22.2 No. 223-M91, Second Edition, with revisions including and through September 1, 2009.

The maximum room ambient temperature is 40°C (Tmra).

CONSTRUCTION DETAILS:

Units shall be constructed in accordance with the following items. See also, Sec. Gen., Construction Details.

C-UL Requirements	Instruction Manual
Abbreviations	Printed Wiring Boards
Markings	Internal Wiring
Blades	Electrical Connections
Spacings	Insulation Tubing/Sleeving
Segregation	Corrosion Protection

Markings - See Sec. Gen, Markings. The following marking shall be additionally provided.

"Class 2 Power Supply"

Illustrations - The following Illustrations are referenced in this report:

<u>ILL. No.</u>	<u>Description</u>
1	Transformer Insulation

General - The general design, shape and arrangement shall be as illustrated except where variations are specifically described.

MODEL JXD-090010-IP20 - Fig. 1

1. Top Enclosure - R/C (QMFZ2), SABIC INNOVATIVE PLASTICS CHINA CO LTD (E161723), Type 940, rated V-0, 120°C, measured minimum 1.5 mm thick. Overall measured 61.2 by 45.2 by 38.7 mm. Provided with one 6.3 by 5.3 mm cutout for Output Cord Strain Relief. Two halves are secured by ultrasonic weld.
2. Output Cord - R/C (AVLV2, AVLV8), Style 2468, two-conductor, 24 AWG, rated 80°C, 300 V, VW-1. One end terminates in a molded-on output connector. The other end terminates in PWB by soldering. Cord minimum 1.8 m for external length.
3. Output Cord Strain Relief - PVC bushing integrally molded with output cord. Outer portion measures 8.8 by 6.9 mm tapering to 6.1 by 6 mm by 19.5 mm long, inside portion measures 8.3 by 8.2 by 2.9 mm thick, center part measures 6 by 4.9 by 2.6 mm thick. Secured by fit of flange to opening of enclosure.
4. Blades - Non-polarized. Plated copper alloy, two provided. Each blade located measured minimum 8.2 mm (more than 8 mm) from side of platform edge. See Section General, ILL. 1 for dimensions, spacing and location of blades.

MODEL JXD-090010-IP20 - FIGS. 2 and 3

1. Printed Wiring Board - Secondary (SEC), R/C (ZPMV2), rated minimum V-2, 105°C. Dimensions 34 mm by 14.3 mm by 1.6 mm thick.
2. Internal Wirings - R/C (AVLV2, AVLV8), two provided, Style 1617, 22 AWG, rated 600 V ac, 105°C, VW-1. Mechanically secured before soldering. Connected between Blades and transformer primary winding.
3. Diodes - Four provided, Type 1N4007.
4. Capacitor - Electrolytic with integral pressure relief, rated 16 V, 470 uF, 105°C.
5. Transformer - Constructed as below.
 - A. Core - Laminated sheet steel, varnished, E-I type, dimensions measured 35 by 29.8 mm, overall with a stacking height of 10 mm. Window dimensions, measured 19.5 by 7.7 mm.
 - B. Primary Winding - Enameled copper magnet wire, random wound. Mechanically secured to Internal Wirings before soldering. 0.08 mm by 3400 turns.
 - C. Secondary Winding - Enameled copper magnet wire, random wound, Mechanically secured to PWB before soldering. 0.25 mm by 256 turns.
 - D. Bobbin - Two provided. R/C (QMFZ2), E I DUPONT DE NEMOURS & CO INC (E41938), Type FR7025V0F, Polyamide 66, natural color, rated 65°C, measured minimum 0.69 mm thick.
 - E. Bobbin Holder - R/C (QMFZ2), E I DUPONT DE NEMOURS & CO INC (E41938), Type FR7025V0F, rated 130°C, measured minimum 0.75 mm thick.
 - F. Tape - R/C (OANZ2), Polyethylene terephthalate (PET) film tape, measured min. 0.05 mm thick.
 - G. Thermal Cutoff - R/C (XCMQ2, XCMQ8), AUPO ELECTRONICS LTD (E140847), Type A4, rated 130°C, 250 Vac, 2 A. Connected in series with primary winding, mechanically secured to primary winding and internal wirings before soldering.

Alternate - Same as above except for R/C (XCMQ2, XCMQ8), HONG HU BLUELIGHT ELECTRONIC CO LTD (E239646), Type RH130-2.

H. Transformer Insulation as follows:

Description	Insulation Material	Total Thickness, mm	Layers
Primary Winding and Secondary Winding	Primary Bobbin	0.95	-
	Secondary Bobbin	0.9	-
	Bobbin Holder	0.75	-
Primary Outer-wrap	Tape	Min. 0.1	Min. 2
Primary Winding and Core Insulation (Bottom)	Bobbin	0.87	-
	Bobbin Holder (#)	0.75	-
Primary Winding and Core Insulation (Centre)	Bobbin	0.69	-
Primary Winding and Core Insulation (Side)	Bobbin Holder	0.81	-
	Tape	Min. 0.1	Min. 2
Thermal Cutoff Body and Primary Winding	Tape	Min. 0.1	Min. 2
Primary Lead connection and Primary Winding	Tape	Min. 0.1	Min. 2
Primary crossover lead and primary winding	Tape	0.05	1
Secondary Outer-wrap	Tape	Min. 0.1	Min. 2
Secondary Winding and Core Insulation (Centre)	Bobbin	0.69	-
Secondary Winding and Core Insulation (Top)	Bobbin	0.9	-
	Tape (@)	Min. 0.1	Min. 2
Secondary Winding and Core Insulation (Side)	Bobbin Holder	0.78	-
	Tape	Min. 0.1	Min. 2

Bobbin holder (#): The bent-up of bobbin holder is at least 1.6 mm for spacing between winding and core. See ILL.1 for detail.

Tape (@): The bent-up of tape is at least 1.6 mm for spacing between secondary winding and core. See ILL.1 for detail



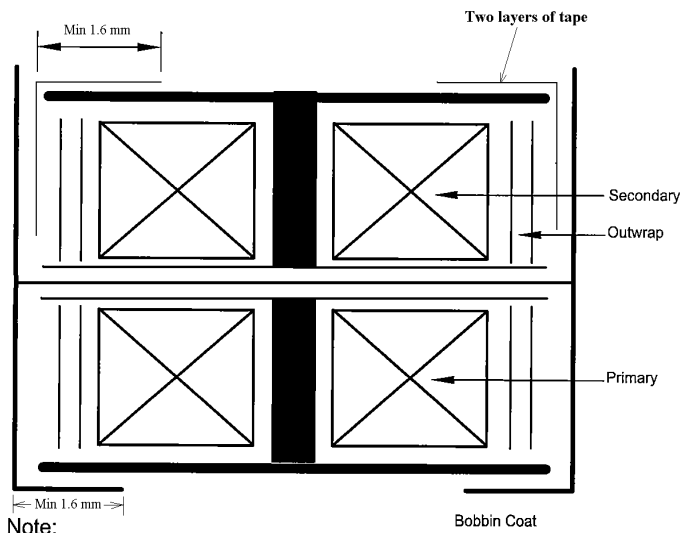
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Note:

Over surface between Primary and Secondary is Min1.6mm

Over surface between Primary and Core is Min1.6mm

Over surface between Secondary and Core is Min1.6mm

F100130681

TEST RECORD NO. 1

SAMPLES:

Samples of Class 2 Power Supply, Model JXD-090010-IP20 were submitted by the manufacturer and subjected to the following tests with the requirements in the Standard for Class 2 Power Units, UL 1310, Fifth Edition and the Canadian Standard for Power Supplies with Extra Low Voltage Class 2 Outputs, CAN/CSA C22.2 No. 223, Second Edition.

GENERAL:

Test results relate only to the items tested.

The following tests were conducted in accordance with UL 1310 and Canadian Standard, CAN/CSA C22.2 No. 223 with acceptable results. Clause and paragraph reference conventions consist of UL 1310 reference followed by (C22.2 No. 223) reference.

The following tests were conducted:			
TEST	STANDARD	CODE (See Below)	CLAUSE
Leakage Current Test	UL 1310 CAN/CSA C22.2 No. 223	C	26 6.5
Dielectric Voltage Withstand Test Following Leakage Current Test	UL 1310	OS	34
Leakage Current Test After Humidity Exposure	UL 1310	OS	27
Dielectric Voltage Withstand Test After Humidity Exposure	UL 1310	OS	34
- Maximum Output Voltage Test - Open-Circuit Secondary Voltage	UL 1310 CAN/CSA C22.2 No. 223	C	28 6.2.1
- Normal Input Test - Rated Input	UL 1310 CAN/CSA C22.2 No. 223	C	50.2 6.2.2
- Maximum Input Test - Rated Input	UL 1310 CAN/CSA C22.2 No. 223	S	29 6.2.2
- Transformer Characteristics Test - Maximum Output Current And Power	UL 1310 CAN/CSA C22.2 No. 223	S	30 6.2.4

The following tests were conducted:			
TEST	STANDARD	CODE (See Below)	CLAUSE
- Dielectric Voltage Withstand Test After Transformer Characteristics Test - Dielectric Strength	UL 1310 CAN/CSA C22.2 No. 223	C	34 6.4
- Output Current And Power Test - Maximum Output Current And Power	UL 1310 CAN/CSA C22.2 No. 223	C	30 6.2.4
- Dielectric Voltage Withstand Test After Output Current And Power Test [C22.2 No. 223 Units] - Dielectric Strength	UL 1310 CAN/CSA C22.2 No. 223	C	34 6.4
Full-Load Output Current Test	UL 1310	OS	32
- Normal Temperature Test - General - Temperature (Normal)	UL 1310 CAN/CSA C22.2 No. 223	C	33 6.3
- Dielectric Voltage Withstand Test - Dielectric Strength	UL 1310 CAN/CSA C22.2 No. 223	C	34 6.4
Induced Potential Test	UL 1310 CAN/CSA C22.2 No. 223	S	34.2 6.4.3.2
Abnormal Tests	UL 1310 CAN/CSA C22.2 No. 223	C	39 6.7
- Output Loading Test - Abnormal - Secondary Circuit Protection	UL 1310 CAN/CSA C22.2 No. 223	C	39.2 6.6
- Dielectric Voltage Withstand Test After Output Loading Test - Dielectric Strength	UL 1310 CAN/CSA C22.2 No. 223	C	34 6.4
Transformer Burnout Test (Linear Designs) - Abnormal	UL 1310	OS	39.3
Dielectric Voltage Withstand Test After Transformer Burnout Test	UL 1310	OS	34

The following tests were conducted:			
TEST	STANDARD	CODE (See Below)	CLAUSE
- Component Breakdown Test - Abnormal - Abnormal	UL 1310 CAN/CSA C22.2 No. 223	C	39.6 6.7
- Dielectric Voltage Withstand Test After Component Breakdown Test - Dielectric Strength	UL 1310 CAN/CSA C22.2 No. 223	C	34 6.4
- Transformer Insulating Materials Test - Insulating Material	UL 1310 CAN/CSA C22.2 No. 223	C	40 6.13
- Strain Relief Test - Strain Relief And Blade Retention	UL 1310 CAN/CSA C22.2 No. 223	C	41 6.10
- Blade Secureness Test: (Direct Plug-In Unit) - Strain Relief And Blade Retention	UL 1310 CAN/CSA C22.2 No. 223	S	43 6.10
- Input Contact Security Test: (Direct Plug-In Unit) - Strain Relief And Blade Retention	UL 1310 CAN/CSA C22.2 No. 223	S	44 6.10
- Impact Test: (Direct Plug-In Unit) - Drop And Impact Test	UL 1310 CAN/CSA C22.2 No. 223	C	46.2 6.9
- Dielectric Voltage Withstand Test After Impact Test - Dielectric Strength	UL 1310 CAN/CSA C22.2 No. 223	S	34 6.4
Rod Pressure Test: (Direct Plug-In Unit)	UL 1310	OS	46.4
Dielectric Voltage Withstand Test (After Rod Pressure Test)	UL 1310	OS	34
Resistance To Crushing Test: (Direct Plug-In Unit)	UL 1310	OS	46.5
Mold Stress Relief Distortion Test	UL 1310	OS	Table 25.1
Strain Relief Test After Mold Stress Relief Distortion Test	UL 1310	OS	Table 25.1

The following tests were conducted:			
TEST	STANDARD	CODE (See Below)	CLAUSE
• Weight And Moment Determination: (Direct Plug-In Unit) • Construction - General	UL 1310	S	7.11
	CAN/CSA C22.2 No. 223		4.1.4
S = Same test.			
C = Combined test (identified by the test names of two or more similar tests in multiple standards) to represent the worst-case parameters of the similar tests.			
OS = Testing requirements come from one standard only.			
MS = One of the two or more standards identified is more severe and the more severe one is indicated by underlining.			

The test methods and results of the above tests have been reviewed and found in accordance with the requirements in the standards mentioned above.

Test Record Summary:

The results of this investigation, including construction review and testing indicate that the product evaluated comply with the applicable requirements in Class 2 Power Units, UL1310, Fifth Edition, dated May 3, 2005, Last Revised date April 1, 2010 and Power Supplies with Extra-Low-Voltage Class 2 Outputs, CAN/CSA C22.2 No. 223, Second Edition, with last revised date September 1, 2009, therefore, such products are judged eligible to bear UL's Mark as described on the Conclusion Page of this Report.

CONCLUSION

Samples of the products covered by this Report have been found to comply with the requirements covering the category and the products are found to comply with UL's applicable requirements. The description and test result in this Report are only applicable to the samples investigated by UL and does not signify the product described as being covered under UL's Follow-Up Service Program. When covered under UL's Follow-Up Service Program, the manufacturer is authorized to use the UL Listing Mark on such products which comply with UL's Follow-Up Service Procedure and any other application requirements of Underwriters Laboratories Inc. The Listing Mark of Underwriters Laboratories Inc. on the product, or the UL symbol on the product and the Listing Mark on the smallest unit container in which the product is packaged, is the only method to identify products investigated by UL to published requirements and manufactured under UL's Listing and Follow-Up Service.

This Report is intended solely for the use of UL and the Applicant for establishment of UL certification coverage of the product under UL's Follow-Up Service. Any use of the Report other than to indicate that the sample(s) of the product covered by the Report has been found to comply with UL's applicable requirements is not authorized and renders the Report null and void. UL shall not incur any obligation or liability for any loss, expense, or punitive damages, arising out of or in connection with the use or reliance upon the contents of this Report to anyone other than the Applicant as provided in the agreement between UL and Applicant. Any use or reference to UL's name or certification mark(s) by anyone other than the Applicant in accordance with the agreement is prohibited without the express written approval of UL.

Report by:

PAULINE WU
Associate Project Engineer

Reviewed by:

SUNNY LIU
Associate Project Engineer