

CERTIFICATE OF COMPLIANCE

Certificate Number A-E136791
Report Reference E136791-A6010-UL
Issue Date 2020-JULY-06

Issued to: SL POWER ELECTRONICS CORP
BLDG A
6050 KING DR
VENTURA CA 93003

**This certificate confirms that
representative samples of**

COMPONENT - POWER SUPPLIES FOR USE WITH
AUDIO/VIDEO, INFORMATION AND COMMUNICATION
TECHNOLOGY EQUIPMENT

See addendum page

Have been investigated by UL in accordance with the
component requirements in the Standard(s) indicated on
this Certificate. UL Recognized components are incomplete
in certain constructional features or restricted in
performance capabilities and are intended for installation in
complete equipment submitted for investigation to UL LLC.

Standard(s) for Safety: UL 62368-1 and CAN/CSA C22.2 No. 62368-1-14,
Audio/video, information and communication technology
equipment Part 1: Safety requirements

Additional Information: See the UL Online Certifications Directory at
<https://iq.ulprospector.com> for additional information.

This *Certificate of Compliance* does not provide authorization to apply the UL Recognized Component Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Recognized Component Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Recognized Component Mark on the product.



Bruce Mahrenholz, Director North American Certification Program
UL LLC

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

Models

POWER SUPPLY

GB130QZYY, GB130QZ-CYY

where Z represents A, C, D, E or P, due to different output voltages,

-C means with metal cover and chassis,

YY represents any number from 00 to 99 or blank, which only for market purpose, not influence safety function.



Bruce Mahrenholz, Director North American Certification Program

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UL TEST REPORT AND PROCEDURE

Standard:	UL 62368-1, 2nd Ed, 2014-12-01 (Audio/video, information and communication technology equipment Part 1: Safety requirements) CAN/CSA C22.2 No. 62368-1-14, 2nd Ed-(Audio/video, information and communication technology equipment Part 1: Safety requirements)
Certification Type:	Component Recognition
CCN:	QQJQ2, QQJQ8 (Power Supplies for Use in Audio/Video, Information and Communication Technology Equipment)
Complementary CCN:	N/A
Product:	POWER SUPPLY
Model:	GB130QZYY, GB130QZ-CYY where Z represents A, C, D, E or P, due to different output voltages, -C means with metal cover and chassis, YY represents any number from 00 to 99 or blank, which only for market purpose, not influence safety function.
Rating:	Input: 100-240 Vac, 50-60 Hz, 2.0A Output: for model GB130QZYY: For convection, V5: 5Vdc/1.0A, Max. total power of 100W for V1, V2, V3 and V4 outputs. See model difference for detail. For 200LFM, V5: 5Vdc/1.0A, Max. total power of 130W for V1, V2, V3 and V4 outputs. See model difference for detail. for model GB130QZ-CYY: For convection, V5: 5Vdc/1.0A, Max. total power of 75W for V1, V2, V3 and V4 outputs. See model difference for detail. For 200LFM, V5: 5Vdc/1.0A, Max. total power of 104W for V1, V2, V3 and V4 outputs. See model difference for detail.
Applicant Name and Address:	SL SHANGHAI POWER ELECTRONICS CORP 4TH FL, BLDG 53 1089 QINZHOU NORTH RD SHANGHAI 200233 CHINA

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

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

UL authorizes the applicant to reproduce the latest pages of the referenced Test Report consisting of the first page of the Specific Technical Criteria through to the end of the Conditions of Acceptability.

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

Prepared By: Jie Qian / Project Handler

Reviewed By: Xing Liu / Reviewer

Supporting Documentation

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

- A. Authorization - The Authorization page may include additional Factory Identification Code markings.
- B. Generic Inspection Instructions -
 - i. Part AC details important information which may be applicable to products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of this Test Report.
 - ii. Part AE details any requirements which may be applicable to all products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of each Test Report.
 - iii. Part AF details the requirements for the UL Certification Mark which is not controlled by the technical standard used to investigate these products. Products are permitted to bear only the Certification Mark(s) corresponding to the countries for which it is certified, as indicated in each Test Report.

Product Description

POWER SUPPLY utilizing a transformer for reinforced isolation between input and output, intended for building in. A suitable input/output connector is provided for internal connection in the end use product.

Model Differences

Models GB130QZYY, GB130QZ-CYY are similar to each other except for the following:

- a. Model designation,
- b. Output rating,
- c. GB130QZ-CYY is with additional metal cover and chassis.

Model GB130QAYY, GB130QCYY, GB130QDYY, GB130QEYY, GB130QPYY are similar to each other except some secondary components and the output voltage and current, see enclosure 7-03 for details.

Model GB130QA-CYY, GB130QC-CYY, GB130QD-CYY, GB130QE-CYY, GB130QP-CYY are similar to each other except some secondary components and the output voltage and current, see enclosure 7-03 for details.

Test Item Particulars

Classification of use by	Ordinary person
Supply Connection	AC Mains
Supply % Tolerance	+10%/-10%
Supply Connection – Type	mating connector
Considered current rating of protective device as part of building or equipment installation	20 A; building;
Equipment mobility	for building-in
Over voltage category (OVC)	OVC II
Class of equipment	Class I
Access location	N/A
Pollution degree (PD)	PD 2
Manufacturer's specified maximum operating ambient (°C)	Max. 50
IP protection class	IPX0
Power Systems	TN
Altitude during operation (m)	5000 m

Altitude of test laboratory (m)	2000 m or less
Mass of equipment (kg)	0.302 max. for model GB130QZYY, 0.47 for model GB130QZ-CYY
Technical Considerations	
<ul style="list-style-type: none"> The product was submitted and evaluated for use at the maximum ambient temperature (Tma) permitted by the manufacturer's specification of : Max. 50 degree C The product is intended for use on the following power systems : TN Considered current rating of protective device as part of the building installation (A) : 20 Mains supply tolerance (%) or absolute mains supply values : +10%/-10% The equipment disconnect device is considered to be : evaluated in end use product 	
Engineering Conditions of Acceptability	
For use only in or with complete equipment where the acceptability of the combination is determined by UL LLC. When installed in an end-product, consideration must be given to the following:	
<ul style="list-style-type: none"> The following product-line tests are conducted for this product : Electric Strength, Earthing Continuity for model GB130QZ-CYY The end-product Electric Strength Test is to be based upon a maximum working voltage of : Primary-Earthed Dead Metal: 347 Vrms, 588 Vpk, Primary-SELV: 347 Vrms, 588 Vpk, , The following output circuits are at ES1 energy levels : All output ports The following output circuits are at PS3 energy levels : All output ports The maximum investigated branch circuit rating is : 20 A The investigated Pollution Degree is : 2 Proper bonding to the end-product main protective earthing termination is : Required An investigation of the protective bonding terminals has : been conducted for model GB130QZ-CYY The following input terminals/connectors must be connected to the end-product supply neutral : N The following end-product enclosures are required : Mechanical, Electrical, Fire The following magnetic devices (e.g. transformers or inductor) are provided with an OBJY2 insulation system with the indicated rating greater than Class A (105°C) : T1(Class F) , T2(Class F) The equipment is suitable for direct connection to : AC mains supply The power supply was evaluated to be used at altitudes up to : "5,000 m" Clause 5.6.4 shall be evaluated in end products. 	
<ul style="list-style-type: none"> Different output loading based on convection and 200LFM, see model difference for details. 	
<ul style="list-style-type: none"> An instructional safeguard shall state in end use product that the fuse is in the neutral, and that the mains shall be disconnected to de-energize the phase conductors 	
Additional Information	
N/A	
Additional Standards	
The product fulfills the requirements of: EN 62368-1:2014 + A11:2017	
Markings and Instructions	
Clause Title	Marking or Instruction Details

Equipment identification marking – Manufacturer identification	Listee's or Recognized companys name, Trade Name, Trademark or File Number
Equipment identification marking – model identification	Model Number
Equipment rating marking – ratings	"Input Ratings (voltage, frequency/dc, current/power)", "Output Ratings (voltage, frequency/dc, current/power)"
Fuses – replaceable by ordinary or instructed person	(component ID:F11), "250V T12AH" located on or adjacent to fuse or fuseholder or in service manual.
Special Instructions to UL Representative Inspect the transformer(s) listed in table "Electric Strength Test Special Constructions" per AA1.1- (C): When the tests are conducted at other location, inspect test record and specification sheet provided by the component manufacturer. Verify the specification sheet indicates 100% routine test specified in the table be conducted at the component manufacturer.	