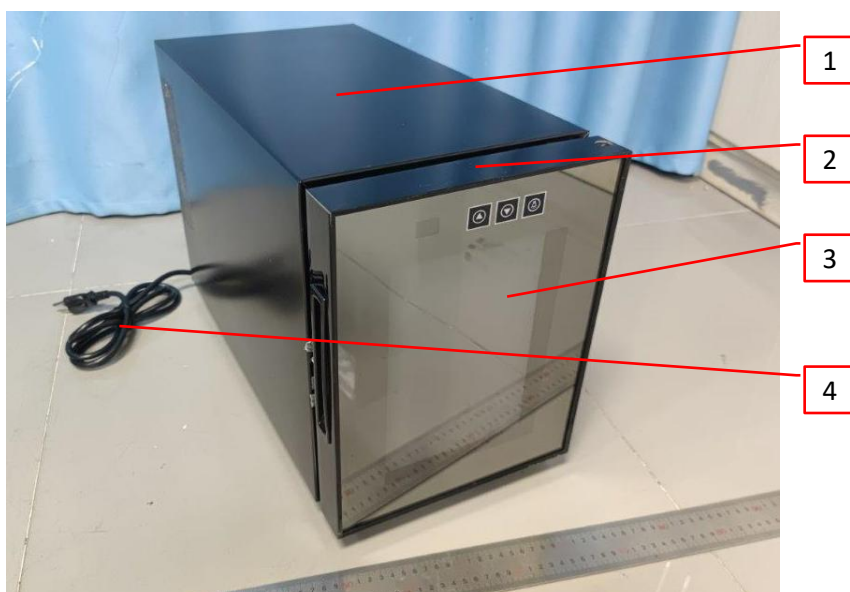


1.0 Reference and Address			
Report Number	211231006GZU-001	Original Issued: 11-Apr-2022	Revised: None
Standard(s)	<p>Household And Similar Electrical Appliances, Part 1: General Requirements [UL 60335-1:2016 Ed.6]</p> <p>Safety Requirements for Household and Similar Electrical Appliances - Part 2: Particular Requirements for Refrigerating Appliances, Ice-Cream Appliances and Ice-Makers [UL 60335-2-24:2017 Ed.2+R:27Feb2020]</p> <p>Safety Of Household And Similar Appliances - Part 1: General Requirements [CSA C22.2#60335-1:2016 Ed.2]</p> <p>Household and Similar Electrical Appliances – Safety – Part 2-24: Particular Requirements for Refrigerating Appliances, Ice-cream Appliances and Ice-makers [CSA C22.2#60335-2-24:2017 Ed.2+U1;U2]</p>		
Applicant	Guangdong Fuxin Technology Co., Ltd.	Manufacturer	<b>Guangdong Fuxin Technology Co., Ltd.</b>
Address	No. 20 Keyuan Road 3, Gaoli, Ronggui, Shunde, Foshan Guangdong	Address	No. 20 Keyuan Road 3, Gaoli, Ronggui, Shunde, Foshan Guangdong
Country	China	Country	China
Contact	Chenyun	Contact	Chenyun
Phone	0757-28812666-8087	Phone	0757-28812666-8087
FAX	0757-28812666-8087	FAX	0757-28812666-8087
Email	fx.cert@fuxin-cn.com	Email	fx.cert@fuxin-cn.com

2.0 Product Description		
Product	Semi-conductor Electric Refrigerator	
Brand name	Fuxin	
Description	The products covered by this report are semi-conductor electric refrigerators, rated 110-120 V, 60 Hz, intended for household indoor use only, provided with a permanently connected 3-wire flexible power supply cord terminated in a grounding type attachment plug, NEMA Config. 5-15P.	
Models	JC-16CPHFW, JC-23CPHFW, JC-33APHFW, JC-48B1PHFW, JC-48BPHFW	
Model Similarity	All the models are with same critical component and construction, except appearance, store volume size.	
Ratings	Model	Ratings
	JC-16CPHFW, JC-23CPHFW, JC-33APHFW, JC-48B1PHFW, JC-48BPHFW	110-120V, 60Hz, 60 W.
Other Ratings	NA	

### 3.0 Product Photographs

**Photo 1 - External view of model JC-16CPHFW**



**Photo 2 - External view of model JC-23CPHFW**



**Photo 3 - External view of model JC-33APHFW**



### 3.0 Product Photographs

**Photo 4** - External view of model JC-48B1PHFW, also represented model JC-48BPHFW



**Photo 5** - External view of model JC-16CPHFW, also represented model JC-23CPHFW



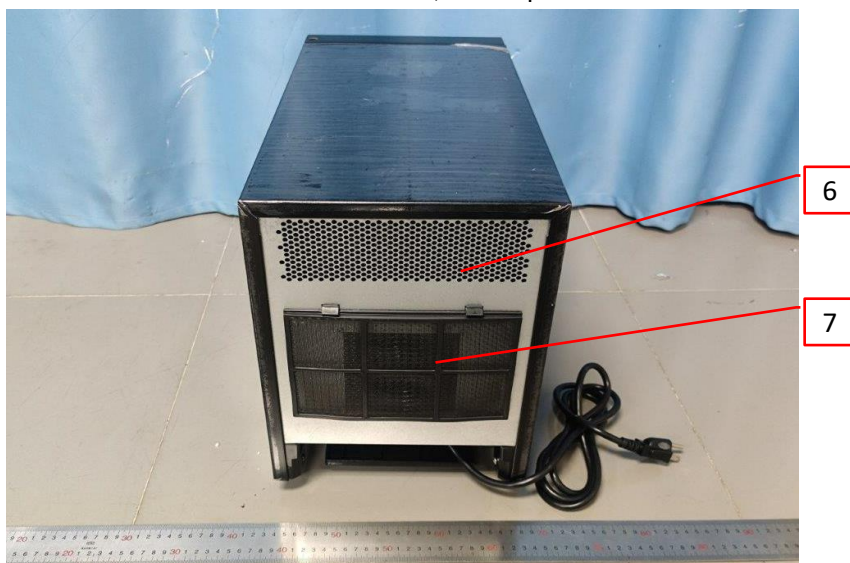
**Photo 6** - External view of model JC-33APHFW, also represented model JC-48B1PHFW and JC-48BPHFW





### 3.0 Product Photographs

**Photo 7** - External view of model JC-16CPHFW, also represented model JC-23CPHFW



**Photo 8** - External view of model JC-33APHFW

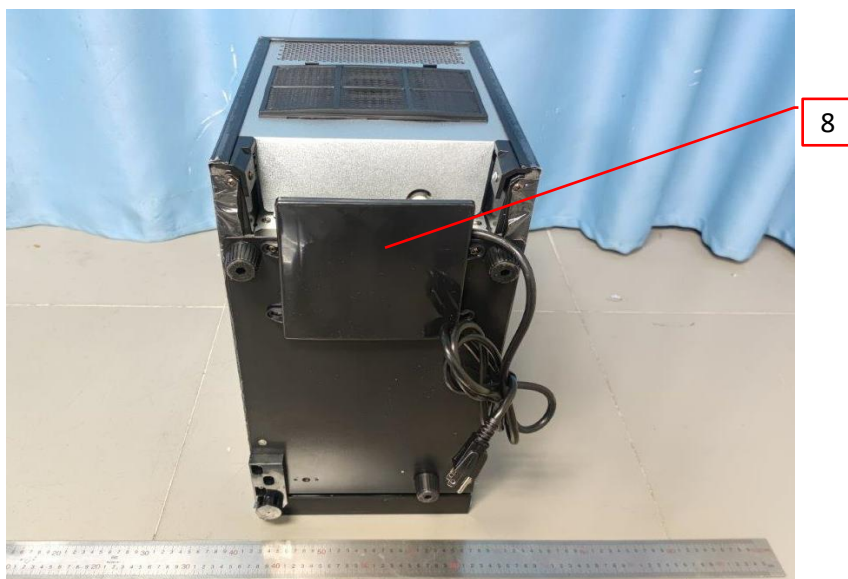


**Photo 9** - External view of model JC-48B1PHFW, also represented model JC-48BPHFW

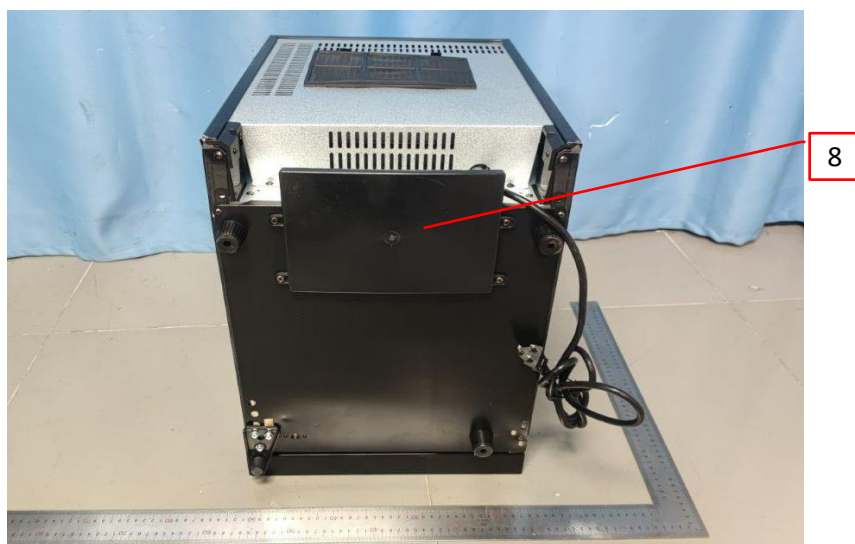


### 3.0 Product Photographs

**Photo 10** - External view of model JC-16CPHFW, also represented model JC-23CPHFW



**Photo 11** - External view of model JC-33APHFW



**Photo 12** - External view of model JC-48B1PHFW, also represented model JC-48BPHFW



### 3.0 Product Photographs

**Photo 13** - Internal view of model JC-16CPHFW, also represented model JC-23CPHFW



**Photo 14** - Internal view of model JC-33APHFW



**Photo 15** - Internal view of model JC-48B1PHFW, also represented model JC-48BPHFW





### 3.0 Product Photographs

**Photo 16** - Internal view of model JC-16CPHFW



**Photo 17** - Internal view of model JC-23CPHFW



**Photo 18** - Internal view of model JC-33APHFW





### 3.0 Product Photographs

**Photo 19** - Internal view of model JC-48B1PHFW, also represented model JC-48BPHFW



**Photo 20** - Internal view of model JC-16CPHFW



**Photo 21** - Internal view of model JC-23CPHFW



### 3.0 Product Photographs

**Photo 22** - Internal view of model JC-33APHFW



**Photo 23** - Internal view of model JC-16CPHFW, also represented model JC-23CPHFW, JC-33APHFW



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**Photo 24** - Internal view of model JC-48B1PHFW



### 3.0 Product Photographs

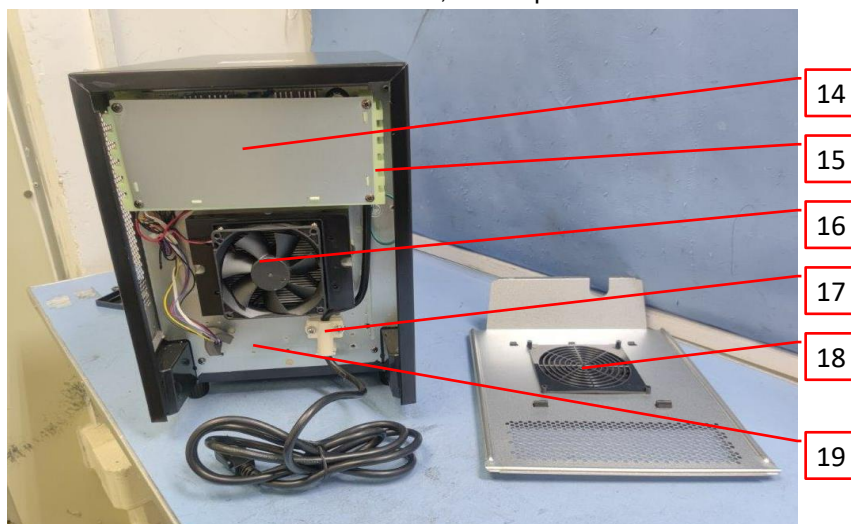
**Photo 25** - Internal view of model JC-48BPHFW



**Photo 26** - Internal view of model JC-48B1PHFW, also represented model JC-48BPHFW



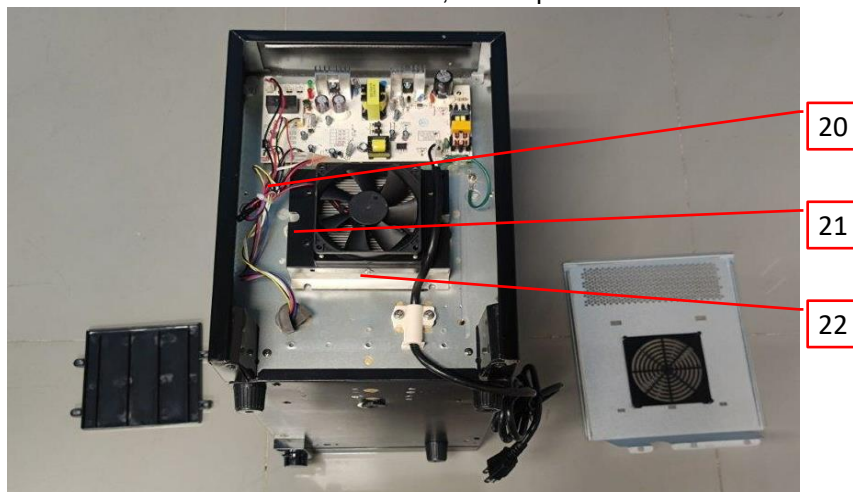
**Photo 27** - Internal view of model JC-16CPHFW, also represented model JC-23CPHFW





### 3.0 Product Photographs

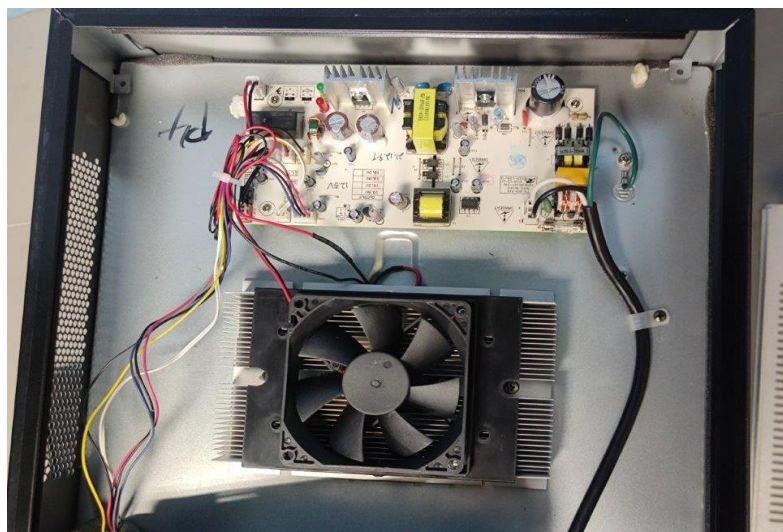
**Photo 28** - Internal view of model JC-16CPHFW, also represented model JC-23CPHFW



**Photo 29** - Internal view of model JC-33APHFW



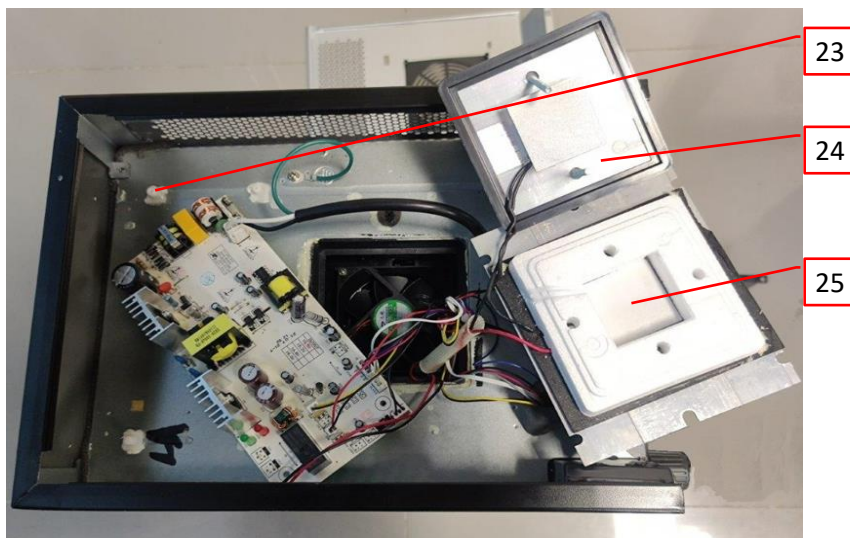
**Photo 30** - Internal view of model JC-33APHFW





### 3.0 Product Photographs

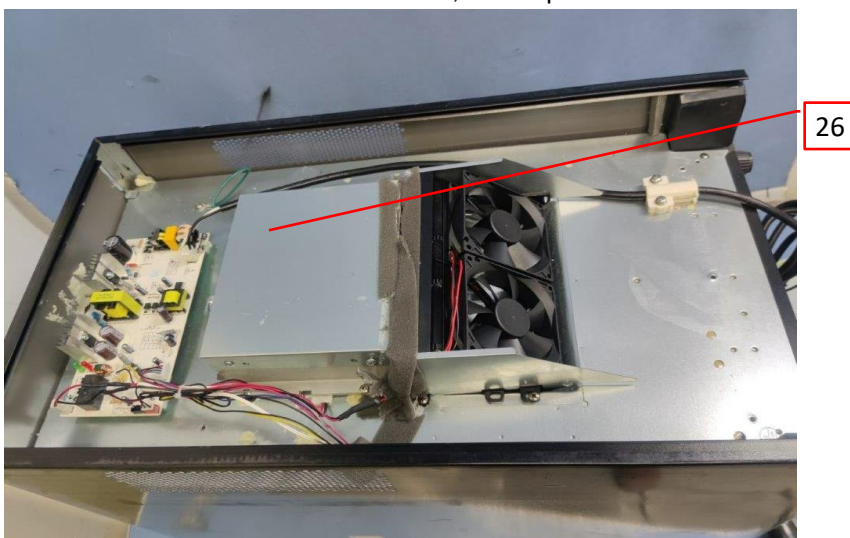
**Photo 31** - Internal view of model JC-16CPHFW, also represented model JC-23CPHFW, JC-33APHFW



**Photo 32** - Internal view of model JC-48B1PHFW, also represented model JC-48BPHFW

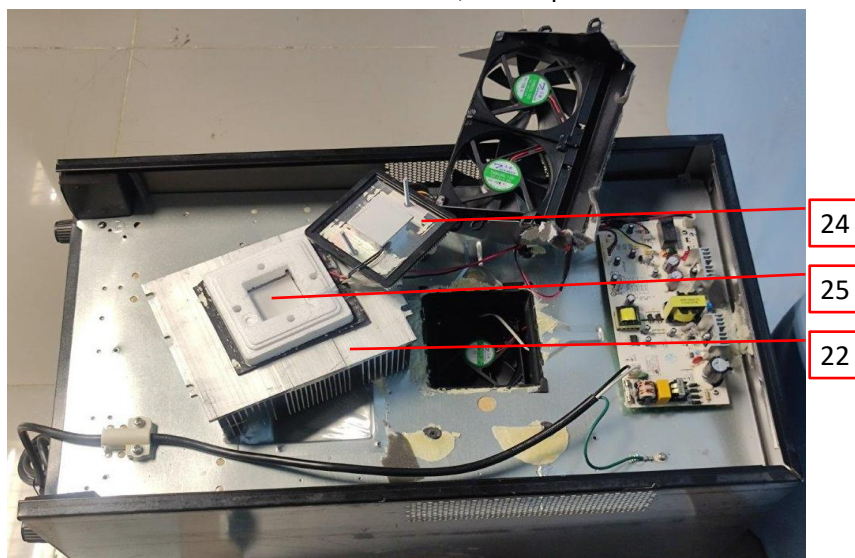


**Photo 33** - Internal view of model JC-48B1PHFW, also represented model JC-48BPHFW

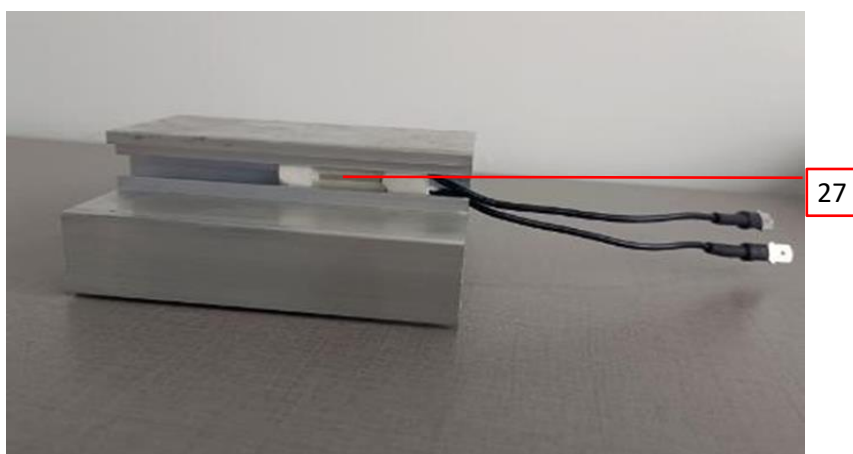


### 3.0 Product Photographs

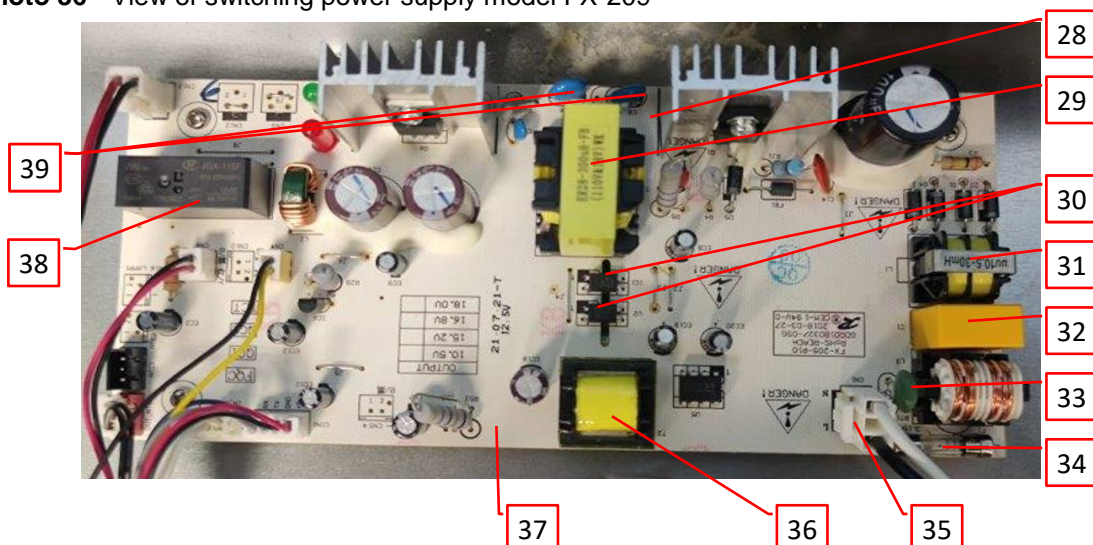
**Photo 34** - Internal view of model JC-48B1PHFW, also represented model JC-48BPHFW



**Photo 35** - Internal view of model JC-48B1PHFW, also represented model JC-16CPHFW, JC-23CPHFW, JC-33APHFW, JC-48BPHFW



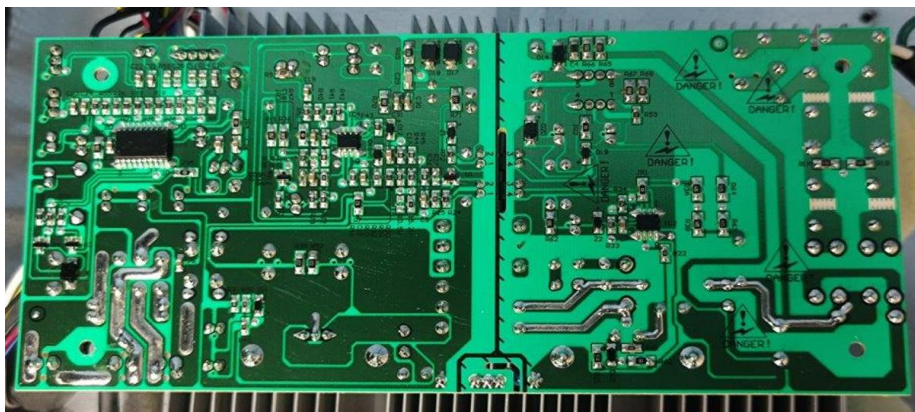
**Photo 36** - View of switching power supply model FX-209



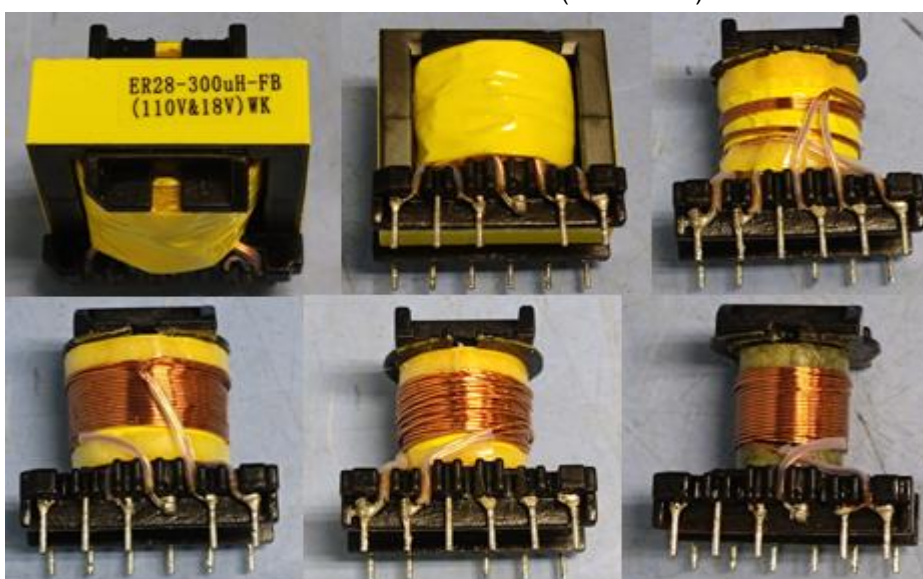


### 3.0 Product Photographs

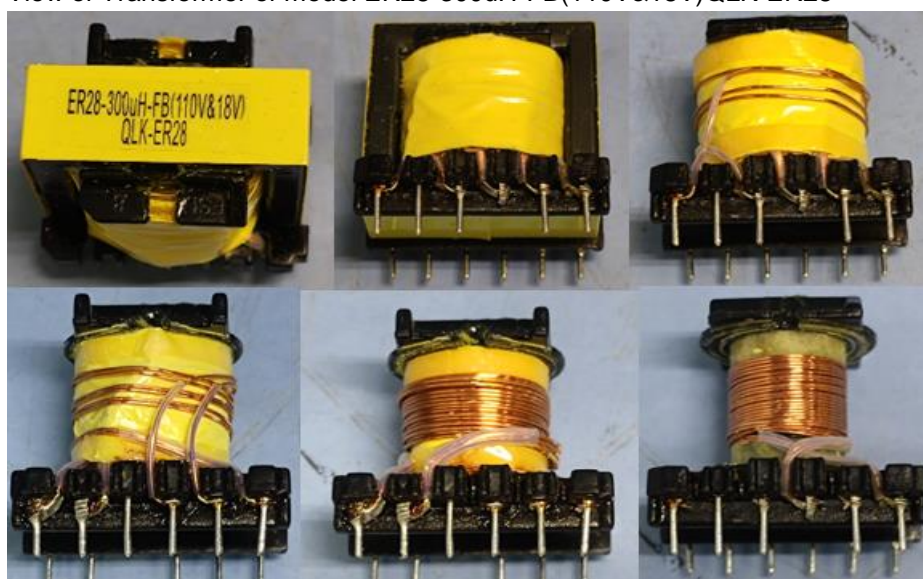
**Photo 37** - View of switching power supply model FX-209



**Photo 38** - View of Transformer of model ER28-300uH-FB(110V&18V)WK

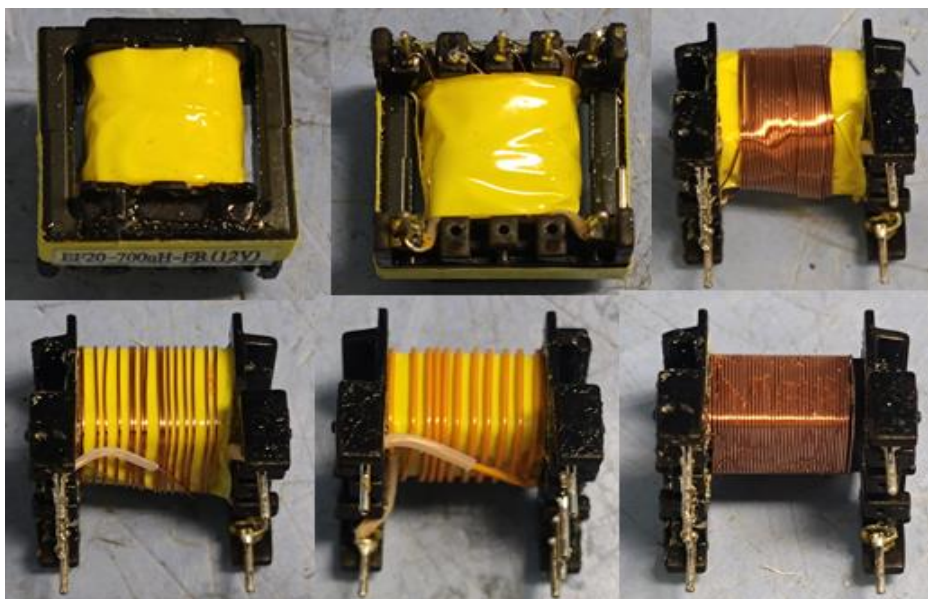


**Photo 39** - View of Transformer of model ER28-300uH-FB(110V&18V)QLK-ER28

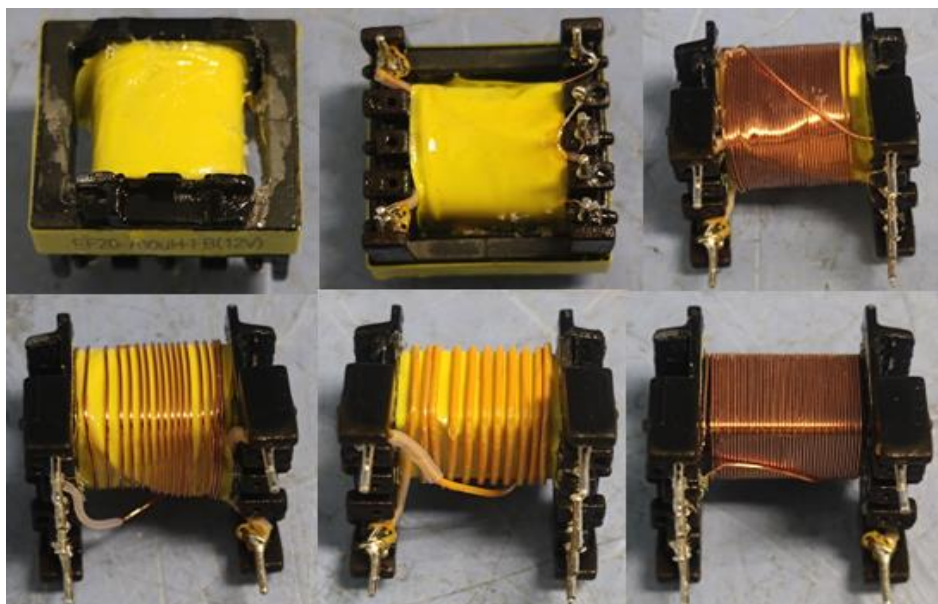


### 3.0 Product Photographs

**Photo 40** - View of Transformer of model EF20-700UH-FB(12V), manufacturer "FOSHAN SHUNDE QIAO JIN ELECTRONICS CO.,LTD"



**Photo 41** - View of Transformer of model EF20-700UH-FB(12V), manufacturer "Foshan City ShunDe Area QiangLi Electrical CO.,LTD"





4.0 Critical Components						
Photo #	Item no. <sup>1</sup>	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity <sup>3</sup>
1	1	Outer Enclosure	Various	Various	Made by painted steel sheet, min. 0.4mm thickness, including top, side, bottom enclosure. Provided some openings on side enclosure, measured max Φ 4.0 mm in diameter	NR
1	2	Door Enclosure	CHI MEI CORPORATION	PA-757(+)	ABS, all color, HB, 80°C, minimum 3.0 mm thickness. Flame spread rating 85 per UL 723.	cURus
1	3	Decorative Glass of Door	Guangdong Yaozhuo Glass Products Industrial Co.,Ltd	Various	Tempered glass, two layer, min. 3 mm in thickness for each layer. Used for all models.	NR
1	4	Power Supply Cord Set	Various	Various	SJT, 18 AWG, rated 300V, 105°C, VW-1, length: 1.5 -3 m, terminated in a 3-wire grounding type attachment plug, NEMA Config. 5-15P.	cULus or cETLus
1	5	Marking Label (not shown)	SHUNDE BEIJIAO LONGCHONG JIAMEI PRINTING CO	JM-03	Suitable for affixing on painted steel sheet and galvanized steel, rated temperature 150°C. UL Category PGDQ2 and PGDQ8.	cURus
			Various	Various	Suitable for affixing on painted steel sheet and galvanized steel, rated temperature min. 80°C. UL Category PGDQ2 and PGDQ8	cURus
7	6	Rear Cover	Various	Various	Galvanized steel, measured 0.4 mm in thickness. Provided some openings, measured max Φ4.0 mm in diameter for model JC-16CPHFW, JC-23CPHFW, 4.0 mm in width for model JC-33APHFW, upper opening Φ 4.0 mm in diameter and lower opening 4.0 mm in width for model JC-48B1PHFW, JC-48BPHFW. Secured to Rear Enclosure by screws.	NR
7	7	Dust Cover	CHI MEI CORPORATION	PA-757(+)	ABS, all color, HB, 80°C, minimum 1.5 mm thickness.	cURus
10, 11, 12	8	Condensate Drain Pan	CHI MEI CORPORATION	PA-757(+)	ABS, all color, HB, 80°C, minimum 1.5 mm thickness.	cURus
16	9	Shelf	Various	Various	Made by wood, 9.0 mm in thickness.	NR
20	10	Inner Fan Guard	CHI MEI CORPORATION	PA-757(+)	ABS, all color, HB, 80°C, measured 2.0 mm thickness, provided some air outlet opening measured 3.5 mm in minor dimension.	cURus
20	11	Cabinet Liner	TPSC ASIA PTE LTD	1540	PS, all color, HB, 50°C, minimum thickness: 1.5 mm.	cURus
21	12	LED Cover	TORAY INDUSTRIES INC	920	Acrylic/ABS, all color, HB, 60°C, measured 2.0 mm thickness.	cURus

4.0 Critical Components						
Photo #	Item no. <sup>1</sup>	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity <sup>3</sup>
23	13	Inner Fan	GUANGDONG FUXIN TECHNOLOGY CO LTD	TX8025L12S	Rating: 12V DC, 0.08A; Secured to Inner Fan Guard by screws. Used for all models.	cURus
27	14	Electric Box Cover	Various	Various	Galvanized chromium steel sheet. Thickness: 0.4mm. Secured to Electric Box by screws.	NR
27	15	Electric Box	CHI MEI CORPORATION	PA-766	ABS, All colors, 5VA, 60°C measured thickness at least 2.5 mm. Secured to Rear Enclosure by screws.	cURus
27	16	Outer Fan	GUANGDONG FUXIN TECHNOLOGY CO LTD	TX9025L12S	Rating: 12V DC, 0.16A. Secured to Outer Fan Guard by screws. Used for all models.	cURus
27	17	Strain Relief Means	LG Chem (Guangzhou) Engineering Plastics Co Ltd	AF312C	ABS, all color, V-0, 70°C, measures thickness 5.1mm. Secured to Rear Enclosure by screws.	cURus
27	18	Outer Fan Guard	CHI MEI CORPORATION	PA-757(+)	ABS, all color, HB, 80°C, measured 2.0 mm thickness, provided some air inlet opening measured 3.5 mm in minor dimension.	cURus
27	19	Rear Enclosure	Various	Various	Galvanized chromium steel sheet. Thickness: 0.4 mm.	NR
28	20	Internal Wire	Various	1015	600 V, 105°C, VW-1, 20 AWG for thermoelectric chip connected, 18-28 AWG for others.	cURus or cETLus
			Various	1007	300 V, 80°C, VW-1, 20 AWG for thermoelectric chip connected, 18-28 AWG for others.	cURus or cETLus
			Various	1674	300 V, 105°C, VW-1, 20 AWG for thermoelectric chip connected, 18-28 AWG for others.	cURus or cETLus
			Various	1061	300 V, 80°C, VW-1, 20 AWG for thermoelectric chip connected, 18-28 AWG for others.	cURus or cETLus
			Various	2468	300 V, 80°C, VW-1, 20 AWG for thermoelectric chip connected, 18-28 AWG for others.	cURus or cETLus
			Various	2547	80°C, VW-1, 20 AWG for thermoelectric chip connected, 18-28 AWG for others.	cURus or cETLus
			Various	2651	300 V, 105°C, VW-1, 20 AWG for thermoelectric chip connected, 18-28 AWG for others.	cURus or cETLus
28	21	Outer Fan Bracket	LG CHEM (GUANGZHOU) ENGINEERING PLASTICS CO LTD	LUPOL GP-3156F(#)	PP, all color, V-0, 120°C, minimum 2.0 mm thick.	cURus

4.0 Critical Components						
Photo #	Item no. <sup>1</sup>	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity <sup>3</sup>
28, 29, 34	22	Outer Heat Sink	Various	Various	Made by aluminum, size: 144 X 120 X34 mm for model JC-16CPHFW, JC-23CPHFW; size: 180 X 120 X34 mm for model JC-33APHFW; size: 200 X 150 X 60 mm for model JC-48B1PHFW, JC-48BPHFW.	NR
31	23	PCB Support Pillar	CHI MEI CORPORATION	PA-766	ABS, all color, 5VA, 60°C, pillar height measured 10.6mm, four provided, use screws fixed to support PCB. Used for all models.	cURus
31, 34	24	Inner Heat Sink	Various	Various	Made by aluminum, size: 200 X 150 X 60 mm for all models.	NR
31, 34	25	Thermoelectric Chip	Guangdong Fuxin Technology Co., Ltd	TEC1-12705FX	Rated 12 VDC, one piece, used for all models. Size:40×40×4.4 mm.	NR
33	26	Outer Heat Sink Cover	Various	Various	Galvanized chromium steel sheet. Thickness: 0.4mm. For model JC-48B1PHFW, JC-48BPHFW.	NR
35	27	Thermal Protector	JIANGSU ENG FEE ELECTRIC APPLIANCE TECHNOLOGY CO LTD	C17AM020A5	Auto. Reset typy. Rated 125V/16A, 250V/8A, operated temperature 65°C; Reset temperature 50°C. Fixed into Inner Heat Sink. For all models.	cURus
36	28	Switching Power Supply	Real-design Electrics Group	FX-209	Input: AC110-240V, 60Hz; Output: DC12.5 V, 5 A; DC12.0,V, 1 A, class 2 output. Consist of items 29 to 39. Used for all model.	NR
36	29	Transformer (T1)	FOSHAN SHUNDE WECAN ELECTRONICS CO.,LTD	ER28-300uH-FB(110V&18V) WK	Input: 110 VAC. Output: 18 VAC. Class A. Consist of items 29a to 29e. Refer to illustration 4.1 for detail.	NR
			Foshan City ShunDe Area QiangLi Electrical CO.,LTD	ER28-300uH-FB(110V&18V) QLK-ER28	Input: 110 VAC. Output: 18 VAC. Class A. Consist of items 29a to 29e. Refer to illustration 4.2 for detail.	NR
36	29a	Magnet wire of Transformer (not shown)	DONG GUAN YIDA INDUSTRIAL CO LTD	xUEW/155	Polyurethane coated copper wire, ANSI type MW 79-C, 155°C.	UR
				QA-x/155	Polyurethane coated copper wire, ANSI type MW 79-C, 155°C.	UR
			WUZHOU TOREAL COPPER CO LTD	xUEW/155	Polyurethane coated copper wire, ANSI type MW 79-C, 155°C.	UR
				QA-x/155	Polyurethane coated copper wire, ANSI type MW 79-C, 155°C.	UR
			Various	Various	Polyurethane coated copper wire, ANSI type MW 79-C, 155°C.	UR
36	29b	Bobbin of Transformer (not shown)	CHANG CHUN PLASTICS CO LTD	T375HF	PMC, BK color, V-0, 150°C, measured 1.50 mm in thickness.	UR

4.0 Critical Components						
Photo #	Item no. <sup>1</sup>	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity <sup>3</sup>
36	29c	Insulation Tape of Transformer (not shown)	SHEN ZHEN XINHUAHUI ELECTRONIC MATERIALS CO LTD	HMT803	PET films with acrylic adhesive, yellow color, rated 130°C.	UR
			JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	CT* (b)(g)	Polyethylene terephthalate film insulating tapes, all color except clear, rated 130°C.	UR
36	29d	Marginal Tap of Transformer (not shown)	CHANG SHU LIANG YI TAPE INDUSTRY CO LTD	LY-19-02-20b	Polyester PET film insulating tapes with acrylic adhesive, min 3.0 mm in width, all color except clear, rated 130°C.	UR
36	29e	Tubing of Transformer (not shown)	HUIZHOU DONGJU FLUO TECH PLASTIC	TFL	Not heat shrinkable PTFE tubing, rated 150 V, 200°C, BK or CL color, VW-1.	cURus
			CHANGYUAN ELECTRONICS GROUP CO LTD	CB-TT-L	Not heat shrinkable PTFE tubing, rated 150 V, 200°C, all color including clear, VW-1.	cURus
36	30	Optical isolator(IC1, U2)	EVERLIGHT ELECTRONICS CO LTD	EL817	5000 VAC isolation, rated 110°C..	cURus
			Sharp Corporation	PC817	5300 VAC isolation, rated 110°C.	cURus
36	31	Inductance (L1)	Foshan City ShunDe Area QiangLi Electrical CO.,LTD	uu10.5-30mH	30 mH.	NR
36	31a	Bobbin of Inductance (not shown)	CHANG CHUN PLASTICS CO LTD	T375HF	PMC, BK color, V-0, 150°C, measured 1.0 mm in thickness.	UR
36	31b	Magnet wire of Inductance (not shown)	Heshan Jiangci Wire & Cable Co Ltd	*UEW/155-UL	Polyurethane coated copper wire, ANSI type MW 79-C, 155°C.	UR
			WUZHOU TOREAL COPPER CO LTD	xUEW/155	Polyurethane coated copper wire, ANSI type MW 79-C, 155°C.	UR
				QA-x/155	Polyurethane coated copper wire, ANSI type MW 79-C, 155°C.	UR
			Various	Various	Polyurethane coated copper wire, ANSI type MW 79-C, 155°C.	UR
36	31c	Insulation Tape of Inductance (not shown)	SUZHOU MAILADUONA ELECTRIC MATERIAL CO LTD	JY313#	Polyethylene terephthalate film insulating tapes, 130°C.	UR
36	32	X2 Capacitor(C1)	GUANGDONG FENGMING ELECTRONIC TECH CO LTD	MKP-X2	0.47μF, 275V, X2, 105°C	cURus
			FOSHAN SHUNDE CHUANGGE ELECTRONIC INDUSTRIAL CO., LTD.	MKP-X2	0.47μF, 275V, X2, 105°C	cURus
			Various	Various	0.47μF max., 275V, min. 85°C, X2.	cURus



4.0 Critical Components						
Photo #	Item no. <sup>1</sup>	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity <sup>3</sup>
36	33	RTC(RT1)	THINKING ELECTRONIC INDUSTRIAL CO LTD	SCK-054	120/240VAC, 4,0A.	cURus
36	34	Fuse(F1)	XC ELECTRONICS (SHENZHEN) CORP LTD	5F	Rated 3.15 A, 250 Vac.	cURus
			HOLLYLAND CO LTD	50F	Rated 3.15 A, 250 Vac.	cURus
36	35	Quick Connector	Various	Various	Rated 250 V, min. 3 A, the composition of the plastic material rated 125°C, at least V-0.	cURus
36	36	Transformer (T2)	FOSHAN SHUNDE QIAO JIN ELECTRONICS CO.,LTD	EF20-700UH-FB(12V)	Input: 110 VAC. Output: 12 VAC. Class A. Consist of items36a to 36e. Refer to illustration 4.3 for detail.	NR
			Foshan City ShunDe Area QiangLi Electrical CO.,LTD	EF20-700UH-FB(12V)	Input: 110 VAC. Output: 12 VAC. Class A. Consist of items36a to 36e. Refer to illustration 4.4 for detail.	NR
36	36a	Bobbin of Transformer (not shown)	CHANG CHUN PLASTICS CO LTD	T375HF	PMC, BK color, V-0, 150°C, measured 1.0 mm in thickness.	UR
36	36b	Magnet Wire of Transformer (not shown)	DONG GUAN YIDA INDUSTRIAL CO LTD	xUEW/155	Polyurethane coated copper wire, ANSI type MW 79-C, 155°C.	UR
				QA-x/155	Polyurethane coated copper wire, ANSI type MW 79-C, 155°C.	UR
			WUZHOU TOREAL COPPER CO LTD	xUEW/155	Polyurethane coated copper wire, ANSI type MW 79-C, 155°C.	UR
				QA-x/155	Polyurethane coated copper wire, ANSI type MW 79-C, 155°C.	UR
			Various	Various	Polyurethane coated copper wire, ANSI type MW 79-C, 155°C.	UR
36	36c	Insulation Tape of Transformer (not shown)	SHEN ZHEN XINHUAHUI ELECTRONIC MATERIALS CO LTD	HMT803	PET films with acrylic adhesive insulating tape, yellow, 130°C.	UR
36	36d	Triple Wire of Transformer (notshown)	SHENZHEN KAIZHONG HEDONG NEW MATERIALS CO LTD	TIW-B	Triple Insulated Wire, 130°C.	UR
36	36e	Tubing (not shown)	HUIZHOU DONGJU FLUO TECH PLASTIC CO LTD	TFL	Not heat shrinkable PTFE tubing, rated 150 V, 200°C, BK or CL color, VW-1.	cURus
			CHANGYUAN ELECTRONICS GROUP CO LTD	CB-TT-L	Not heat shrinkable PTFE tubing, rated 150 V, 200°C, all color, VW-1.	cURus
36	37	PCB	Various	Various	Rated V-0, 130°C, min. 1.6 mm thickness, met UL 796.	cURus

4.0 Critical Components						
Photo #	Item no. <sup>1</sup>	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity <sup>3</sup>
36	38	Relay	XIAMEN HONGFA ELECTROACOUSTIC CO., LTD.	JQX-115F-012-2ZS4	DC12V, 250VAC, 8A, 85°C.	cURus
			DONGGUAN YONGNENG ELECTRONICS CO.,LTD	YX208LT-S-212D	DC12V, 250VAC, 8A, 85°C..	cURus
36	39	Y Capacitor(C8, C16)	JYH CHUNG ELECTRONICS CO LTD	JY	Y2 capacitor, rated 300Vac, 4700 pF, 125°C.	cURus
			SHANTOU HIGH-NEW TECHNOLOGY DEVELOPMNT ZONE SONGTIAN ENTERPRISE CO LTD	CE	Y2 capacitor, rated 300Vac, 4700 pF, 125°C.	cURus
			Various	Various	Y2 capacitor, rated 300Vac, 4700 pF, min, 105°C.	cURus
NOTES:						
1) Not all item numbers are indicated (called out) in the photos, as their location is obvious.						
2) "Various" means any type, from any manufacturer that complies with the "Technical data and securement means" and meets the "Mark(s) of conformity" can be used.						
3) Indicates specific marks to be verified, which assures the agreed level of surveillance for the component. "NR" - indicates Unlisted and only visual examination is necessary. "See 5.0" indicates Unlisted components or assemblies to be evaluated periodically refer to section 5.0 for details.						

## **5.0 Critical Unlisted CEC Components**

No Unlisted CEC components are used in this report.

## 6.0 Critical Features

Recognized Component - A component part, which has been previously evaluated by an accredited certification body with restrictions and must be evaluated as part of the basic product considering the restrictions as specified by the Conditions of Acceptability.

Listed Component - A component part, which has been previously Listed or Certified by an accredited Certification Organization with no restrictions and is used in the intended application within its ratings.

Unlisted Component - A part that has not been previously evaluated to the appropriate designated component standard. It may also be a Listed or Recognized component that is being used outside of its evaluated Listing or component recognition.

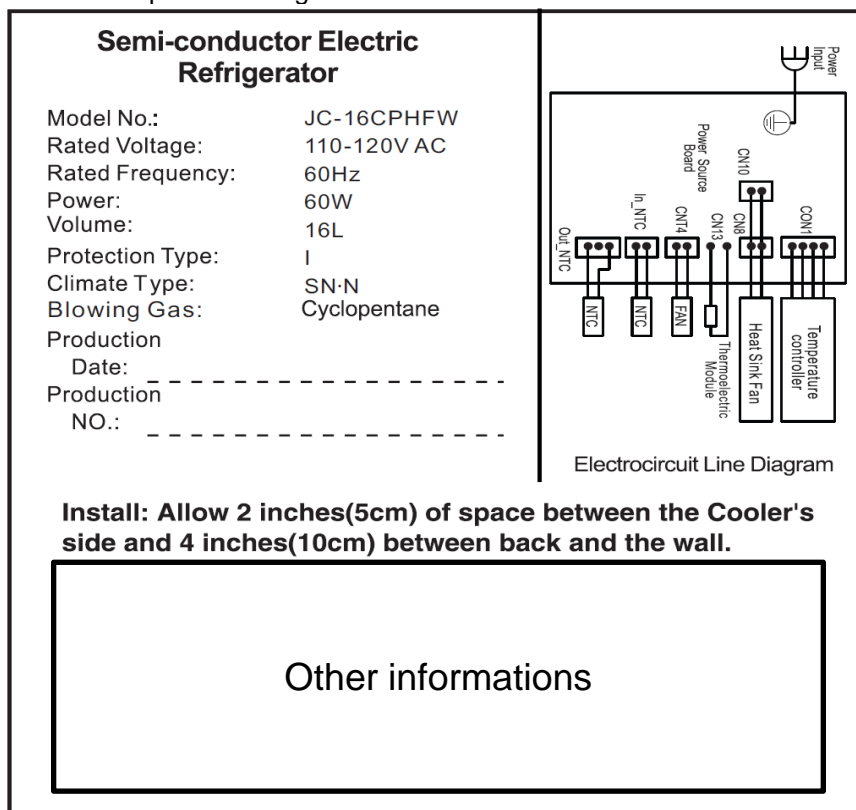
Critical Features/Components - An essential part, material, subassembly, system, software, or accessory of a product that has a direct bearing on the product's conformance to applicable requirements of the product standard.

Construction Details - For specific construction details, reference should be made to the photographs and descriptions. All dimensions are approximate unless specified as exact or within a tolerance. In addition to the specific construction details described in this Report, the following general requirements also apply.

1. Spacing - In primary circuits, 1.2 mm minimum clearance and 1.5 mm minimum creepage distance are maintained for basic insulation and supplementary insulation, 1.2 mm minimum clearance and 1.4 mm minimum creepage distance are maintained for function insulation, 1.5 mm minimum clearance and 3.0 mm minimum creepage distance are maintained for reinforced insulation.
2. Mechanical Assembly - Components such as switches, fuseholders, connectors, wiring terminals and display lamps are mounted and prevented from shifting or rotating by the use of lockwashers, starwashers, or other mounting format that prevents turning of the component.
3. Corrosion Protection - All ferrous metal parts are protected against corrosion by painting, plating or the equivalent.
4. Accessibility of Live Parts - All uninsulated live parts in primary circuitry are housed within a metal enclosure constructed with no openings other than those specifically described in Sections 4 and 5.
5. Grounding - All exposed dead-metal parts and all dead-metal parts within the enclosure that are exposed are connected to the grounding lead of the power supply cord.
6. Internal Wiring - Internal wiring is routed away from sharp or moving parts. Internal wiring leads terminating in soldered connections are made mechanically secure prior to soldering. Recognized Component separable (quick disconnect) connectors of the positive detent type, closed loop connectors, or other types specifically described in the text of this report are also acceptable as internal wiring terminals. At points where internal wiring passes through metal walls or partitions, the wiring insulation is protected against abrasion or damage by plastic bushings or grommets.
7. Schematics - Refer to Illustration No. 2.1, 3.1 for schematics requiring verification during Field Representative Inspection Audits.
8. Markings - The product is marked on a labeling system as described in item no. 5 of Section 4.0 as follows:
  - brand name or applicant's name
  - model number
  - date of manufacture (year, month)
  - electrical rating (volts, frequency, power)
  - Installation distance
  - flammable insulation blowing gas typeRefer to Illustration No. 1.1 for the layout.
9. Cautionary Markings - No caution marking required.
10. Installation, Operating and Safety Instructions - Instructions for installation and use of this product are provided by the manufacturer. Refer to Illustration No. 5.1 to 5.3 for the layout.
11. Transformer - Supplier records must be provided that indicate the received shipment of transformers (section 4.0, item 29, 36) were constructed as indicated in Illustrations 4.1~4.4. These records must be available at the factory for inspection on every received shipment.

## 7.0 Illustrations

**Illustration 1.1 - Nameplate marking**



Note: The above marking is representative for the applicant, other models listed in section 2.0 are same as the above except for volume, model number and different ratings which are listed in section 2.0.

**Illustration 1.2 - Marking for flammable insulation blowing gas type**

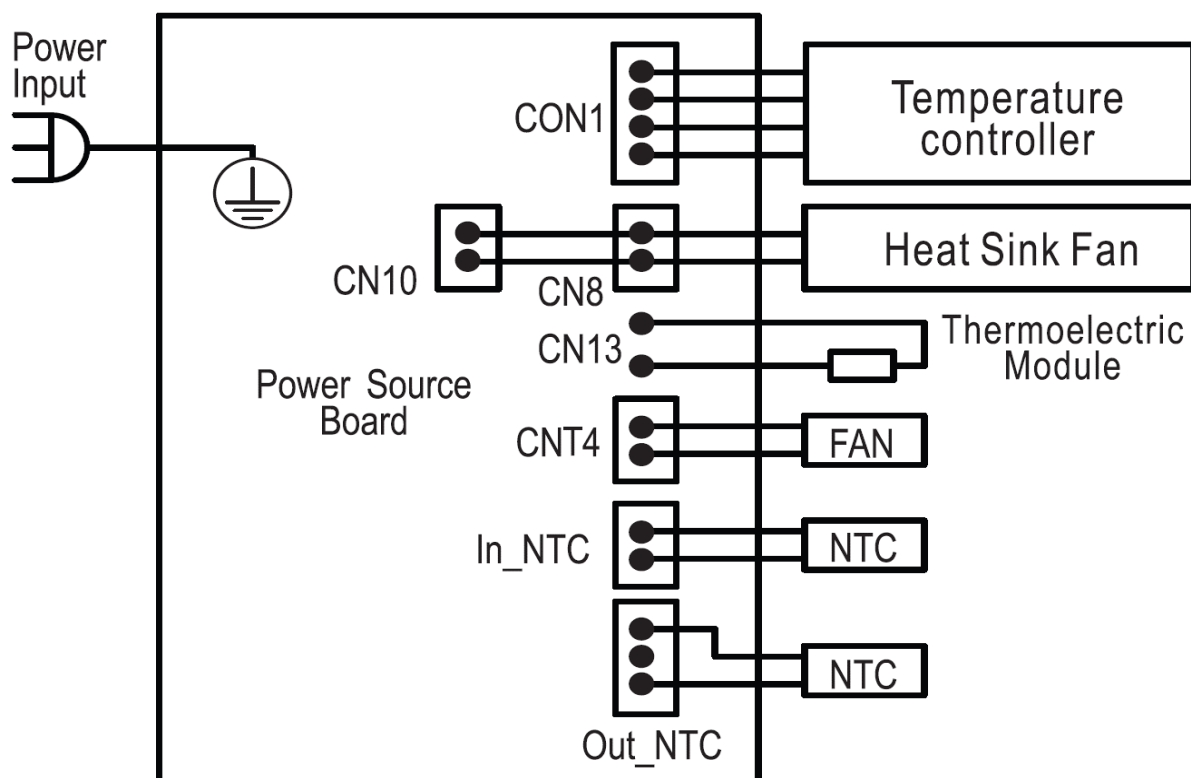


Noted: This marking letter height at least 40mm.

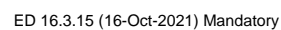


## 7.0 Illustrations

**Illustration 2.1** - Wiring diagram of model JC-16CPHFW, JC-23CPHFW, JC-33APHFW, JC-48B1PHFW, JC-48BPHFW



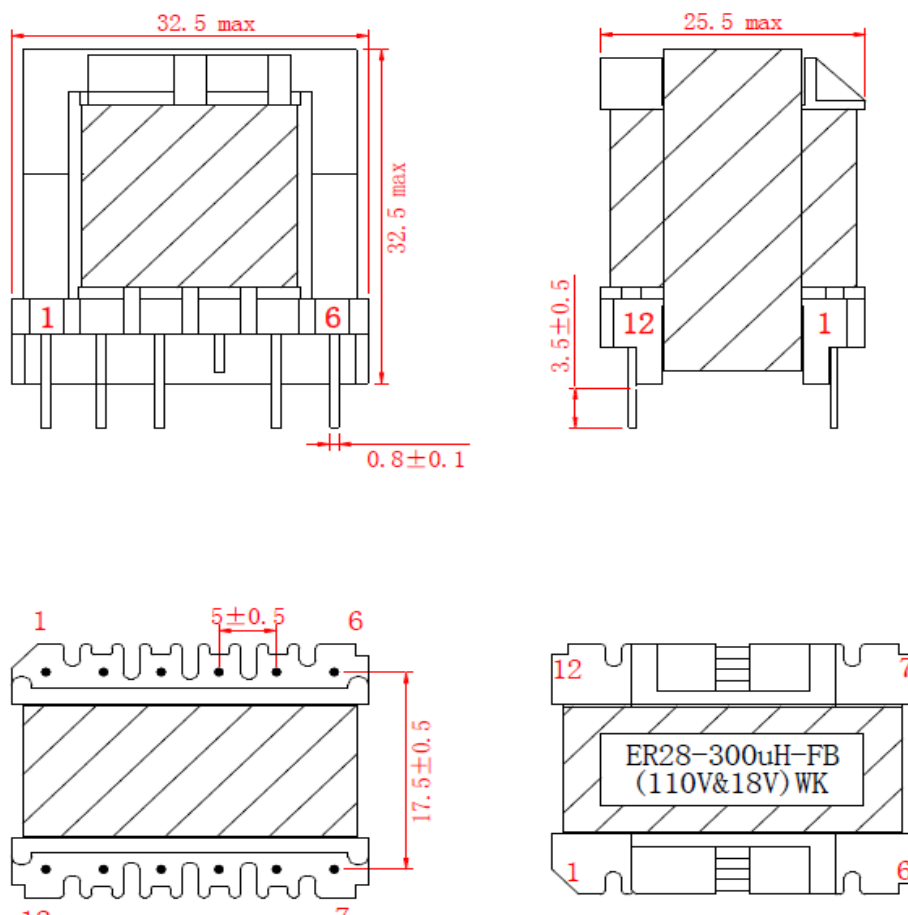
**Illustration 3.1** - Schematic circuit diagram of switching power supply model FX-209



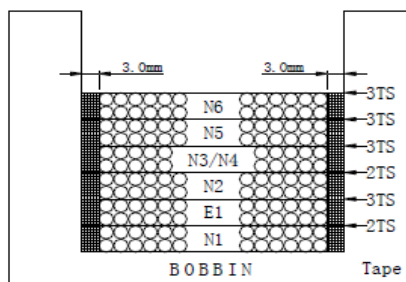
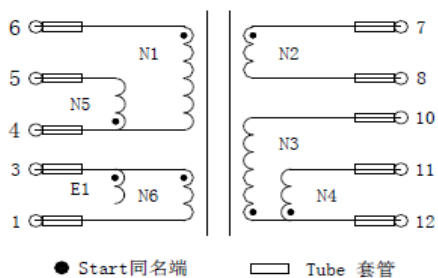
## 7.0 Illustrations

**Illustration 4.1** - The specification of transformer ER28-300uH-FB(110V&18V)WK

1、DIMENSION(外形尺寸图 单位: mm) :



## 2、SCHEMATIC DINGRAM & WINDING SECTION(原理图&绕线剖面图) :



## 3、WINDING TABLE(绕线结构):

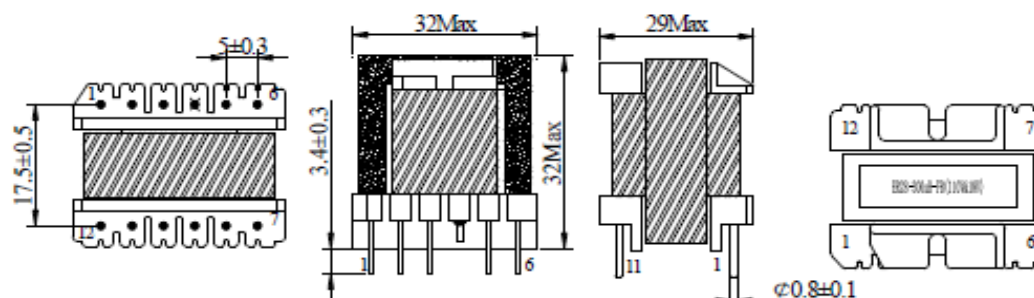
NO. 序号	S-F 起-收	Wire SPEC. & Shares 线径*股数	Turns 圈数 (TS)	Winding Way 绕线方式	Margin Tape 档墙 (TS)		TUBE 套管		TAPE 胶带 (TS)
					PIN	TOP	S	F	
N1	6-4	2UEW $\Phi 0.4 \times 2$	22	顺绕 密绕	2	2	TFL	TFL	2
E1	3--	t0.05*9.0mm	0.9	顺绕 密绕	1	1	TFL		3
N2	7-8	2UEW $\Phi 0.5 \times 4$	7	顺绕 密绕	3	3	TFL	TFL	2
N3	12-10	2UEW $\Phi 0.4$	4	顺绕 同层并绕 疏绕	1	1	TFL	TFL	3
N4	12-11	2UEW $\Phi 0.4$	4				TFL	TFL	
N5	4-5	2UEW $\Phi 0.4 \times 2$	12	顺绕 密绕	1	1	TFL	TFL	3
N6	3-1	2UEW $\Phi 0.4$	4	顺绕 疏绕	1	1	TFL	TFL	3

## 7.0 Illustrations

### Illustration 4.2 - The specification of transformer ER28-300uH-FB(110V&18V)QLK-ER28

#### 1. 安装尺寸及外形图 (CONFIGURATION & DIMENSIONS)

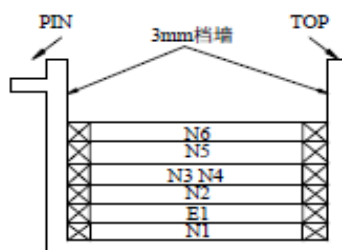
未标公差:  $\pm 0.5$



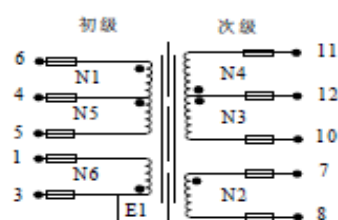
- 1、标签材质: 透明底黑字或激光打标或喷码, 规格: 20×8mm
- 2、成品第4脚剪掉2/3。

#### 2. 内部结构图 (WINDING CONSTRUCTION)

(用图示表明骨架中各绕组、绝缘层、隔离带的位置分布)



#### 3. 线圈联线图 (SCHEMATIC)



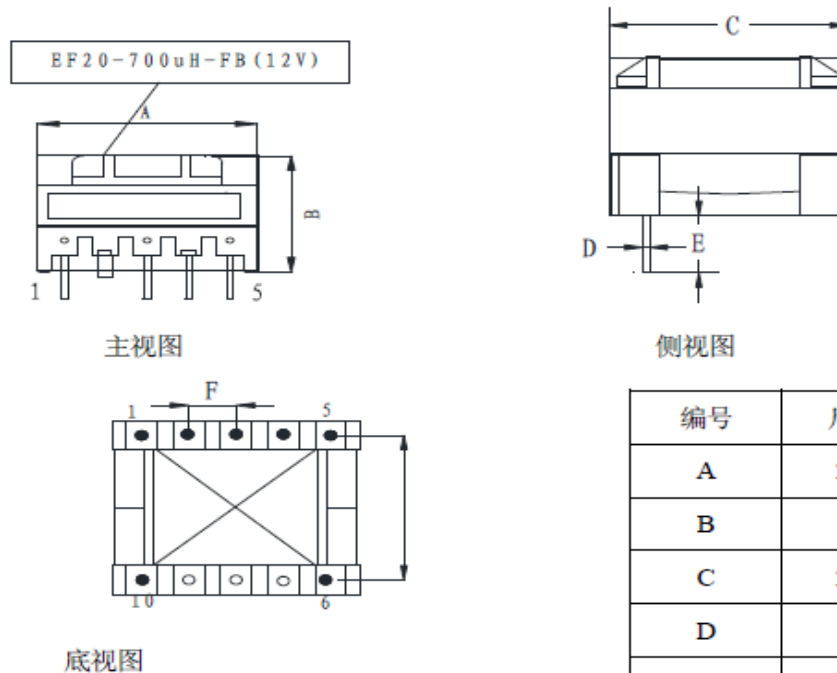
绕组	线材(纯直径)	起头	尾头	圈数	胶带层数	绕制方式	备注/套管
N1	QA-1 $\Phi 0.40\text{mm} \times 2\text{W}$	6	4	22Ts	2Ts	密绕	20L*10*1
E1	0.025mm*7mm*45mm 背胶铜箔	3	-	0.9Ts	3Ts	密绕	
N2	QA-1 $\Phi 0.50\text{mm} \times 4\text{w}$	7	8	7Ts	2Ts	密绕	14L*10*2
N3	QA-1 $\Phi 0.40\text{mm}$	12	10	4Ts	3Ts	同层并绕	24L*10*2
N4	QA-1 $\Phi 0.40\text{mm}$	12	11	4Ts		疏绕	24L*10*2
N5	QA-1 $\Phi 0.40\text{mm} \times 2\text{w}$	4	5	12Ts	3Ts	密绕	20L*10*1
N6	QA-1 $\Phi 0.40\text{mm}$	3	1	4Ts	3Ts	疏绕	24L*10*2

## 7.0 Illustrations

**Illustration 4.3** - The specification of transformer EF20-700UH-FB(12V), manufacturer "FOSHAN SHUNDE QIAO JIN ELECTRONICS CO.,LTD"

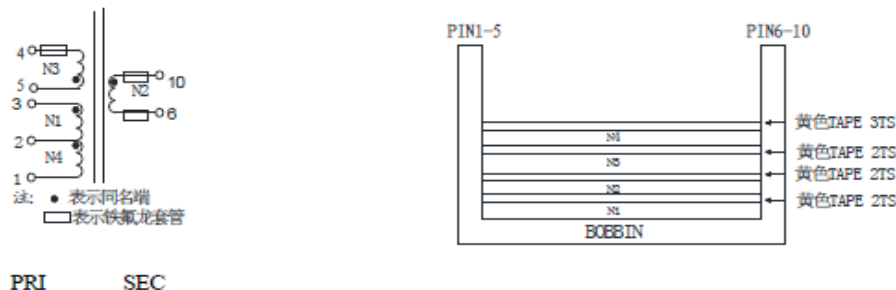
客户 (CUSTOMER)	规格 (SPECIFICATION)	客户料号 (CUSTOMER SPART NO)
QJ0129	EF20 变压器	EF20-700uH-FB(12V)
料号 (SPART NO)	公司编号 (OUR DWG. NO)	日期 (SIGNATURE DATE)
QJ180936	QJ-EF20-1225	2018-08-3

### 1、DIMENSION: UNIT: mm



备注:1.骨架用 EF20(5+5)卧式加宽, PIN7.8.9 拔掉; 成品后 PIN2 剪掉 2/3.  
2.磁芯 EF20 用 6mm 黄色胶带包三层, 研磨磁芯置于 PIN6-10 侧;  
3.标签为透明底黑字或喷码、激光打印, 楷体, 尺寸为 18mm\*5mm, 贴在 PIN1-5 侧;

### 2. 1. SCHEMATIC:



### 2. WINDING CONSTRUCTION

绕组	起始脚	圈数	铜线	胶带	起线套管收线	备注
N1	PIN3-2	42TS	2UEW $\Phi 0.25\text{mm}$	12.5mm*2TS*黄色	/	密绕
N2	PIN6-10	11TS	TIW-B $\Phi 0.4\text{mm}$	12.5mm*2TS*黄色	22L*10mm/ 22L*10mm	疏绕
N3	PIN5-4	17TS	2UEW $\Phi 0.25\text{mm}$	12.5mm*2TS*黄色	无/ 28L*10mm	疏绕
N4	PIN2-1	38TS	2UEW $\Phi 0.25\text{mm}$	12.5mm*3TS*黄色	/	密绕



## 7.0 Illustrations

**Illustration 4.4** - The specification of transformer EF20-700UH-FB(12V), manufacturer "Foshan City ShunDe Area QiangLi Electrical CO.,LTD"

客 户: 瑞德

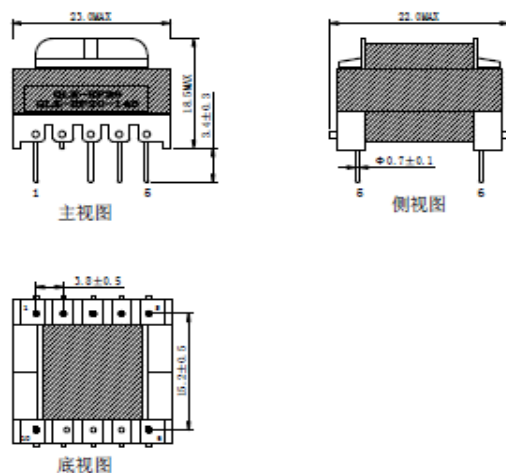
型 号: QLK-EF20-146

承制方: 佛山强立电器有限公司

第 3 页 共 8 页

### 1. 安装尺寸及外形图(CONFIGURATION & DIMENSIONS)

注: 未标公差为 $\pm 0.5$

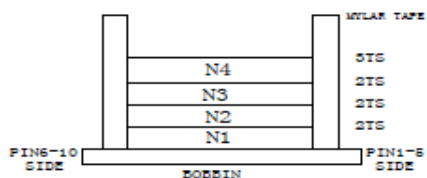


备注: 1、骨架空7.8.9脚,

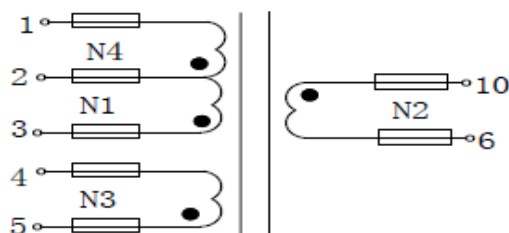
2、标签透明底黑字(4\*15), 贴在产品PIN1-5侧, 字体朝下。

### 2. 内部结构图(WINDING CONSTRUCTION)

(用图示表明骨架中各绕组、绝缘层、隔离带的位置分布)



### 3. 线圈联线图 (SCHEMATIC)



“•”表示同名端 “TFL TUBE”表示TFL TUBE。

绕组	线材(纯直径)	起头	尾头	圈数	端空	胶带层数	绕制方式	备注
N1	2UEW-F $\Phi 0.25\text{mm} \times 1\text{P}$	3	2	42Ts		2TS	密绕一层	28L*12*2
N2	TIW-B $\Phi 0.40\text{mm} \times 1\text{P}$	6	10	11Ts		2TS	疏绕一层	22L*15*2
N3	2UEW-F $\Phi 0.25\text{mm} \times 1\text{P}$	5	4	17Ts		2TS	疏绕一层	28L*12*2
N4	2UEW-F $\Phi 0.25\text{mm} \times 1\text{P}$	2	1	38Ts		3TS	密绕一层	28L*12*2

## 7.0 Illustrations

### Illustration 5.1 - Important instruction on user manual

#### **IMPORTANT SAFEGUARDS**

When using an electrical appliance, basic precautions should always be followed, including the following:

##### **READ ALL INSTRUCTIONS BEFORE USING THIS WINE COOLER**

- **WARNING:** When positioning the appliance, ensure the supply cord is not trapped or damaged.
- **WARNING:** Do not locate multiple portable socket-outlets or portable power supplies at the rear of the appliance.
- Children aged from 3 to 8 years are allowed to load and unload refrigerating appliances.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance.
- Cleaning and user maintenance shall not be made by children without supervision.
- If the SUPPLY CORD is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- Ensure the cooler is unplugged before cleaning or if the cooler is not in use.
- To clean the cooler use only mild detergents or glass cleaning products. Never use harsh detergents or solvents.
- It is not recommended to use this wine cooler with an extension cord or power board. Please ensure that the appliance is plugged directly into the electrical outlet.
- Do not store explosive substances such as aerosol cans with a flammable propellant in this appliance.
- This cooler is designed to store wine bottles, however, if placing food inside, ensure that there is sufficient airflow between items.
- Do not place hot food or drink into the wine cooler before it cools down to room temperature.
- Close the cooler door immediately after putting in any items so the inside temperature will not rise dramatically.
- Keep appliance away from any heat source or direct sunlight.
- To fix stably, the appliance must be placed on a flat and solid surface. It should not be laid on any soft material.
- Do not place any other appliance on top of the wine cooler.
- The Wine Cooler is an electrical appliance. To avoid injury or death from electrical shock do not operate the Wine Cooler with wet hands, while standing on a wet surface or while standing in water.
- Do not store explosive substances such as aerosol cans with a flammable propellant in this appliance.
- Do not use outdoors or in wet conditions.
- The appliance shall not be exposed to rain.
- When positioned or if moving the appliance ensure that it is not set horizontally or declined less than 45° or turned upside down.

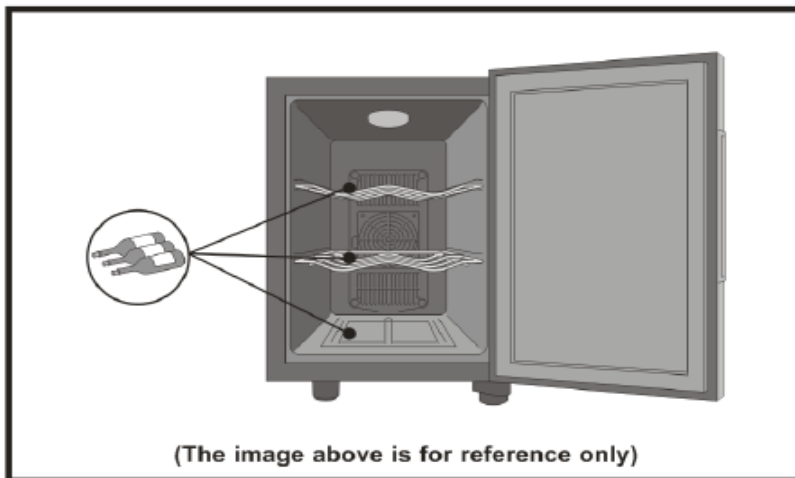
## 7.0 Illustrations

### Illustration 5.2 - Important instruction on user manual

- Never pull the cord to disconnect it from the outlet. Grasp the plug and pull it from the outlet.
- Never lift or carry the Wine Cooler by the cord.
- Keep the cord away from heated surfaces.
- This appliance is intended to be used in household and similar applications such as
  - staff kitchen areas in shops, offices and other working environments;
  - farm houses and by clients in hotels, motels and other residential type environments;
  - bed and breakfast type environments;
  - catering and similar non-retail applications.
- Do not plug into the power socket before set up is completed.
- An empty cooler can be a dangerous attraction to children. If disposing

of the cooler remove gaskets, latches, lids or the entire door from your unused appliance, or take other action to ensure the cooler is harmless.

- Do not store food in your wine cooler as interior temperature may not get cool enough to prevent spoilage. In summer months or areas of high humidity, the glass door may build up moisture. To remove the moisture, wipe it away.
- Zone illustration:



- To avoid contamination of food, please respect the following instructions:
  - Opening the door for long periods can cause a significant increase of the temperature in the compartments of the appliance.
  - Clean regularly surfaces that can come in contact with food and accessible drainage systems.
  - Clean water tanks if they have not been used for 48 h; flush the water system connected to a water supply if water has not been drawn for 5 days.
  - The appliance shall not be exposed to rain.
- **DANGER: Risk of child entrapment. Before you throw away your old refrigerator or freezer:**
  - Take off the doors.
  - Leave the shelves in place so that children may not easily climb inside.



## 7.0 Illustrations

### Illustration 5.3 - Important instruction on user manual

#### 5. How to clean

**Disconnect the power supply before cleaning and maintenance.**

**Cleaners:** Never use harsh, abrasive cleaners, heavy-duty cleaners, or solvents on any surface.

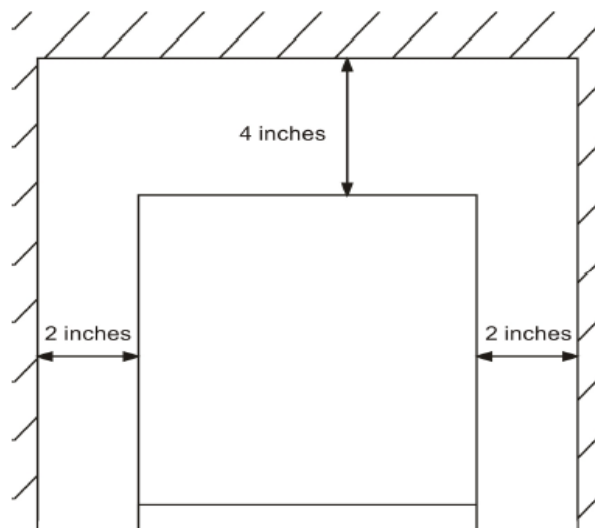
**Exterior:** Wipe with damp, sudsy cloth, rinse and dry. For stubborn stains and for periodic waxing, use silicon wax.

**Refrigeration Section:** Wash shelves and other removable parts in warm sudsy water, rinse and dry. Wash interior with baking soda solution (3 tablespoons to liter of water) or warm sudsy water, rinse and dry.

**Magnetic Door Seals:** Wash with warm sudsy water.

**The Finishing Touch:** Replace all parts and return thermostat dial to desired setting.

- Install cooler in a convenient location away from extreme heat and cold. Allow sufficient clearance between the cooler and side wall so the door will open without obstruction. Cooler is not designed for recessed installation.
- Select a space with strong level floor.
- Never place the appliance with the front edge along the edge of a table top or shelf, because there is a risk of the appliance tipping forwards and falling if the door compartments is overloaded. Take care to ensure that there is sufficient space in front of the appliance so that when opening the door, the door lies on the storage storage surface when the appliance is tipped.
- Allow 2 inches (5cm) of space between the cooler's side & wall and 4 inches (10cm) between back & the wall.



#### POWER CORD REPLACEMENT

If the SUPPLY CORD is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.





This marking indicates that this product should not be disposed with other household wastes throughout the local government. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.



8.0 Test Summary					
Evaluation Period	Dec. 31, 2021 to Apr. 11, 2022			Project No.	211231006GZU
Sample Rec. Date	24-Dec-2021	Condition	Prototype	Sample ID.	S211231006-001~015
Test Location	Intertek Testing Services Shenzhen Ltd. Guangzhou Branch Room 02, &101/E201/E301/E401/E501/E601/E701/E801 of Room 01 1-8/F., No. 7-2, Caipin Road, Science City, GETDD, Guangzhou, Guangdong, China				
Test Procedure	Testing Lab				
Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria.					
The following tests were performed:					
Test Description	UL 60335-1:2016 Ed.6, UL 60335-2-24:2017 Ed.2+R:27Feb2020, CSA C22.2#60335-1:2016 Ed.2 and CSA C22.2 #60335-2-24:2017 Ed.2+U1;U2 / Clause		--	--	
Marking and instructions - Marking legible and durable test	7.14		--	--	
Protection against access to live parts	8		--	--	
Power input and current	10		--	--	
Heating	11		--	--	
Leakage current and electric strength at operating temperature	13		--	--	
Moisture resistance – Humidity test	15.3		--	--	
Moisture resistance – Poured liquid over top	15.103		--	--	
Moisture resistance - Overflow test	15.107DV.1		--	--	
Leakage current and electric strength	16		--	--	
Abnormal operation – Locking moving parts of motor test	19.7(1)		--	--	
Abnormal operation – Fault conditions of electronic circuits test	19.11.1-19.11.2		--	--	
Abnormal operation – Current fuse reliability test	19.12		--	--	
Abnormal operation – Acceptance conditions after all abnormal operation tests	19.13		--	--	
Mechanical hazards test	20.2		--	--	
Stability test for Refrigerator	20.101DV,20.101DV.1-20.101DV.2		--	--	
Mechanical strength – Impact test	21.1		--	--	
Construction – Plug discharge test	22.5		--	--	
Construction – Non-detachable parts push and pull test	22.11		--	--	
Accessible glass panels test	22.116		--	--	
Internal wiring – Insulation test	23.5		--	--	
Supply connection and external flexible cords – Pull and torque test	25.15		--	--	
Provision for earthing – Ground impedance test	27.5		--	--	
Screws and connections – Screws torque test	28.1		--	--	
Clearances distance	29.1		--	--	
Creepage distance	29.2		--	--	
Resistance to heat and fire – Ball pressure test	30.1		--	--	
Resistance to heat and fire – Glow-wire Test Record	30.2.1 & 30.2.3		--	--	
Locked-rotor test of fan motors	Annex AA		--	--	

8.0 Test Summary			
Hot Coil Ignition Test	Annex 101.DVD.6	--	--
Test Description	UL 1310:2018 Ed.7+R:16Aug20 19 / Clause	CSA C22.2#223:201 5 Ed.3 / Clause	--
Maximum Output Voltage Test	28	--	--
Output Current and Power Test	30	--	--
Dielectric Voltage Withstand Test	34	--	--
Abnormal Tests – Output Loading	39.2	--	--
Abnormal Tests – Component Breakdown	39.7	--	--
Open-Circuit Secondary Voltage	--	6.3.1	--
Maximum Output Current and Power	--	6.3.4	--
Dielectric Strength	--	6.5	--
Secondary Circuit Protection	--	6.7	--
Abnormal Tests – Component Breakdown	--	6.8	--

8.1 Signatures			
A representative sample of the product covered by this report has been evaluated and found to comply with the applicable requirements of the standards indicated in Section 1.0.			
Completed by:	Jason Gao	Reviewed by:	Kelvin Guan
Title:	Project Engineer	Title:	Supervisor
Signature:		Signature:	

## 9.0 Correlation Page For Multiple Listings

The following products, which are identical to those identified in this report except for model number and Listee name, are authorized to bear the ETL label under provisions of the Intertek Multiple Listing Program.

BASIC LISTEE	Guangdong Fuxin Technology Co., Ltd.
Address	No. 20 Keyuan Road 3, Gaoli, Ronggui, Shunde, Foshan Guangdong
Country	China
Product	Semi-conductor Electric Refrigerator

MULTIPLE LISTEE 1	Guangzhou Huidafeng Trading Co., Ltd.
Address	Room A121, 308, 3rd Floor, No. 91, North Yuangang Street, Tianhe District, Guangzhou, Guangdong
Country	China
Brand Name	NeedOne

ASSOCIATED MANUFACTURER	Guangdong Fuxin Technology Co., Ltd.
Address	No. 20 Keyuan Road 3, Gaoli, Ronggui, Shunde, Foshan Guangdong
Country	China

MULTIPLE LISTEE 1 MODELS	BASIC LISTEE MODELS
NO-16B	JC-16CPHFW
NO-23B	JC-23CPHFW
NO-33B	JC-33APHFW
NO-48BT	JC-48BPHFW
NO-48BB	JC-48B1PHFW

MULTIPLE LISTEE 2	None
Address	
Country	
Brand Name	

ASSOCIATED MANUFACTURER	
Address	
Country	

MULTIPLE LISTEE 2 MODELS	BASIC LISTEE MODELS

MULTIPLE LISTEE 3	None
Address	
Country	
Brand Name	

ASSOCIATED MANUFACTURER	
Address	
Country	

MULTIPLE LISTEE 3 MODELS	BASIC LISTEE MODELS

## 10.0 General Information

The Applicant and Manufacturer have agreed to produce, test and label ETL Listed products in accordance with the requirements of this Report. The Manufacturer has also agreed to notify Intertek and to request authorization prior to using alternate parts, components or materials.

### COMPONENTS

Components used shall be those itemized in this Intertek report covering the product, including any amendments and/or revisions.

### LISTING MARK

The ETL Listing mark applied to the products shall either be separable in form, such as labels purchased from Intertek, or on a product nameplate or other media only as specifically authorized by Intertek. Use of the mark is subject to the control of Intertek.

The mark must include the following four items:

- 1) applicable country identifiers "US" and/or "C" or "US", "C" and "EU"
- 2) the word "Listed" or "Classified" or "Recognized Component" (whichever is appropriate)
- 3) a control number issued by Intertek
- 4) a product descriptor that identifies the standards used for certification. Example:

**For US standards**, the words, "Conforms to" shall appear with the standard number along with the word, "Standard" or "Std." Example: "Conforms to ANSI/UL Std. XX."

**For Canadian standards**, the words "Certified to CAN/CSA Standard CXX No. XX." shall be used, or abbreviated, "Cert. to CAN/CSA Std. CXX No. XX."

Can be used together when both standards are used.

**If all standards on the ATM have the same standard title**, the shared title or its abbreviation may be used in place of the examples above. Example: "Medical Electrical Equipment" or "MEE"; "Information Technology Equipment" or "ITE"; "Audio/Video Information And Communication Technology Equipment" or "A/V ICTE".

**Note: A facsimile must be submitted to Intertek, Attn: Follow-up Services for approval prior to use.**

The facsimile need not have a control number. A control number will be issued **after signed Certification Agreements** have been received by the Follow-up Services office, approval of the facsimile of your proposed Listing Mark, satisfactory completion of the Listing Report, and scheduling of a factory assessment in your facility.

### MANUFACTURING AND PRODUCTION TESTS

Manufacturing and Production Tests shall be performed as required in this Report.

### FOLLOW-UP SERVICE

Periodic unannounced audits of the manufacturing facility (and any locations authorized to apply the mark) shall be scheduled by Intertek. An audit report shall be issued after each visit. Special attention will be given to the following:

1. Conformance of the manufactured product to the descriptions in this Report.
2. Conformance of the use of the ETL mark with the requirements of this Report and the Certification Agreement.
3. Manufacturing changes.
4. Performance of specified Manufacturing and Production Tests.

In the event that the Intertek representative identifies non-conformance(s) to any provision of this Report, the Applicant shall take one or more of the following actions:

1. Correct the non-conformance.
2. Remove the ETL Mark from non-conforming product.
3. Contact the issuing product safety evaluation center for instructions.



### 10.1 Evaluation of Unlisted Components

Because Unlisted Components are uncontrolled, and they do not fall under a third party follow up program, Intertek may require these components to be tested and/or evaluated at least once annually, more often for certain components, as part of the independent certification process. The Unlisted Components in Section 5.0 require testing and/or evaluation as indicated.

**The Applicant will be notified, in writing, via the applicable contact methods, as defined in Section 1.0, when these components must be selected and sent to Component Evaluation Center (CEC) for re-evaluation.**

**Due to particular testing requirements, some components may be requested to be shipped to specific labs. Thus, specific shipment destination(s) for each sample will be provided in the written notification.**

Managing CEC Location:

Intertek Testing Services Shenzhen Limited Guangzhou Branch

ETL Component Evaluation Center

Room 02, &101/E201/E301/E401/E501/E601/E701/E801 of Room 01 1-8/F., No. 7-2,  
Caipin Road, Science City

GETDD Guangzhou, Guangdong, China

Attn: Ms. Joey Kuang

Sample Disposition: Due to the destructive nature of the testing, all samples will be discarded at the conclusion of testing unless, the manufacturer specifically requests the return of the samples. The request for return must accompany the initial component shipment.

## 11.0 Manufacturing and Production Tests

The manufacturer agrees to conduct the following Manufacturing and Production Tests as specified:

### Required Tests

Electric Strength Test  
Earth Continuity Test  
Functional Test

## 11.1 Electric Strength Test

### Method

One hundred percent of production of the products covered by this Report shall be subjected to a routine production line dielectric withstand test.

The test shall be conducted on products, which are fully assembled. Prior to applying the test potential, all switches, contactors, relays, etc., should be closed so that all primary circuits are energized by the test potential. If all primary circuits cannot be tested at one time, then separate applications of the test potential shall be made.

The test voltage specified below shall be applied between primary circuits and accessible dead-metal parts. The test voltage may be gradually increased to the specified value but must be maintained at the specified value for one second or one minute as required.

### Test Equipment

The test equipment shall incorporate a transformer with an essentially sinusoidal output, a means to indicate the applied test potential, and an audible and/or visual indicator of dielectric breakdown.

The test equipment shall incorporate a voltmeter in the output circuit to indicate directly the applied test potential if the rated output of the test equipment is less than 500VA.

If the rated output of the test equipment is 500VA or more, the applied test potential may be indicated by either:

- 1 - a voltmeter in the primary circuit;
- 2 - a selector switch marked to indicate the test potential; or
- 3 - a marking in a readily visible location to indicate the test potential for test equipment having a single test potential output.

In cases 2 and 3, the test equipment shall include a lamp or other visual means to indicate that the test potential is present at the test equipment output. All test equipment shall be maintained in current calibration.

### Products Requiring Electric Strength Test:

<u>Product</u>	<u>Test Voltage</u>	<u>Test Time</u>
Between Live Parts and BASIC INSULATION	800 Vac	1 s
	or	
Between Live Parts and DOUBLE or REINFORCED INSULATION	2000 Vac	1 s
<b>Product - One sample from each shipment of Section 4.0 item 29, 36:</b>	<b>Test Voltage</b>	<b>Test Time</b>
Between prim. and sec. output, and	1000Vac	1 s
Between prim. and core	1000Vac	1 s

## 11.2 Earth Continuity Test

### Method

A current of at least 10 A, derived from a source having a no-load voltage not exceeding 12 V (a.c. or d.c.), is passed between each of the ACCESSIBLE EARTHED METAL PARTS and

- for CLASS 0I APPLIANCES, and for CLASS I APPLIANCES intended to be permanently connected to fixed wiring, the earthing terminal;
- for other CLASS I APPLIANCES,
  - the earthing pin or earthing contact of the plug;
  - the earthing pin of the appliance inlet.

The voltage drop is measured and the resistance is calculated and shall not exceed

- for appliances having a SUPPLY CORD,  $0,2\ \Omega$  , or  $0,1\ \Omega$  plus the resistance of the SUPPLY CORD;
- for other appliances,  $0,1\ \Omega$  .

As an alternative to the test method specified, grounding continuity may be determined by any suitable indicating device, such as an ohmmeter, a battery and buzzer combination, or the like.

### Products Requiring Earth Continuity Test:

All products covered by this Report.

## 11.3 Functional Test

### Method

The correct functioning of an appliance is checked by inspection or by an appropriate test if the incorrect connection or adjustment of components has safety implications.

### Products Requiring Functional Test:

All products covered by this Report.

The following changes are in compliance with the declaration of Section 8.1:

ED 16.3.15 (16-Oct-2021) Mandatory