

1.0 Reference and Address			
Report Number	230901032SZN-001	Original Issued: 11-Oct-2023	Revised: None
Standard(s)	Fixed and Location-Dedicated Electric Room Heaters [UL 2021:2015 Ed.4+R:02Feb2021] Electric Air-Heaters (R2018) [CSA C22.2#46:2013 Ed.9]		
Entirely Replaces Report Number	230724052SZN-001		
Applicant	Dongguan Ruyijia electronic technology Co., LTD	Manufacturer	Huizhou Zhicheng Electric Appliance Co., LTD
Address	Room 101, No. 27, 1st Street, Jianshe Road, Dalingshan Town, DONGGUAN CITY Guangdong Province	Address	20 meters Road, Tiantou Village, Yuanzhou Town, Boluo County, HUIZHOU CITY Guangdong Province
Country	China	Country	China
Contact	Chen Huamei	Contact	Chen Huamei
Phone	13713098008	Phone	13713098008
FAX	NA	FAX	NA
Email	532348713@qq.com	Email	532348713@qq.com

2.0 Product Description				
Product	Electric Fireplace			
Brand name	NA			
Description	The product covered by this report are Electric Fireplace, rated 120VAC, 60Hz, intended to be installed in a matching cabinet, or fixed to the wall and for indoor and household use only, provided with a permanently connected flexible power supply cord terminated in a 3-wire polarized plug. NEMA Config 5-15P.			
Models	RYJ- followed by 18, 23, 26, 28, 30, 32, 36, 40, 42, 50, 60, 72, SM50, SM60 or SM72; may be followed by one character; may be followed by -; may be followed by two characters.			
Model Similarity	All models are identical except for model name, outline size and mounting means, refer to below for details:			
	Model	Size:(cm)	Mounting means	Similar difference
	RYJ-18 series	582x436x128	Stationary mounted	same as each models except model name.
	RYJ-23 series			
	RYJ-26 series			
	RYJ-28 series	750x345x120	Stationary mounted or Wall mounted	same as each models except model name.
	RYJ-30 series			
	RYJ-32 series			
	RYJ-36 series	1016x457x108	Stationary mounted or Wall mounted	same as each models except model name.
	RYJ-40 series			
	RYJ-42 series			
	RYJ-50 series			
	RYJ-60 series			
	RYJ-72 series			
	RYJ-SM50 series			
RYJ-SM60 series				
RYJ-SM72 series				
Ratings	120VAC, 60Hz, 1500W.			
Other Ratings	NA			

3.0 Product Photographs

Photo 1 - Overall view of RYJ-23 series, also represent models RYJ-18 series and RYJ-26 series



Photo 2 - Rear view of RYJ-23 series, also represent models RYJ-18 series and RYJ-26 series

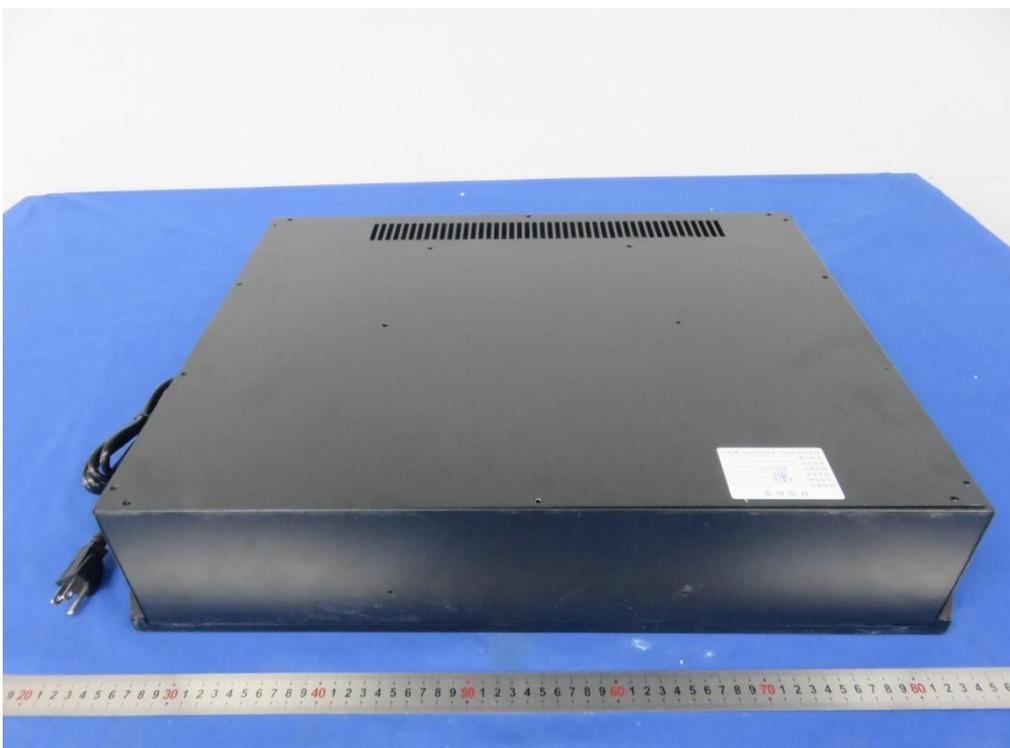


3.0 Product Photographs

Photo 3 - Side view of RYJ-23 series, also represent models RYJ-18 series and RYJ-26 series



Photo 4 - External view of RYJ-23 series, also represent models RYJ-18 series and RYJ-26 series



3.0 Product Photographs

Photo 5 - Internal view of RYJ-23 series, also represent models RYJ-18 series and RYJ-26 series

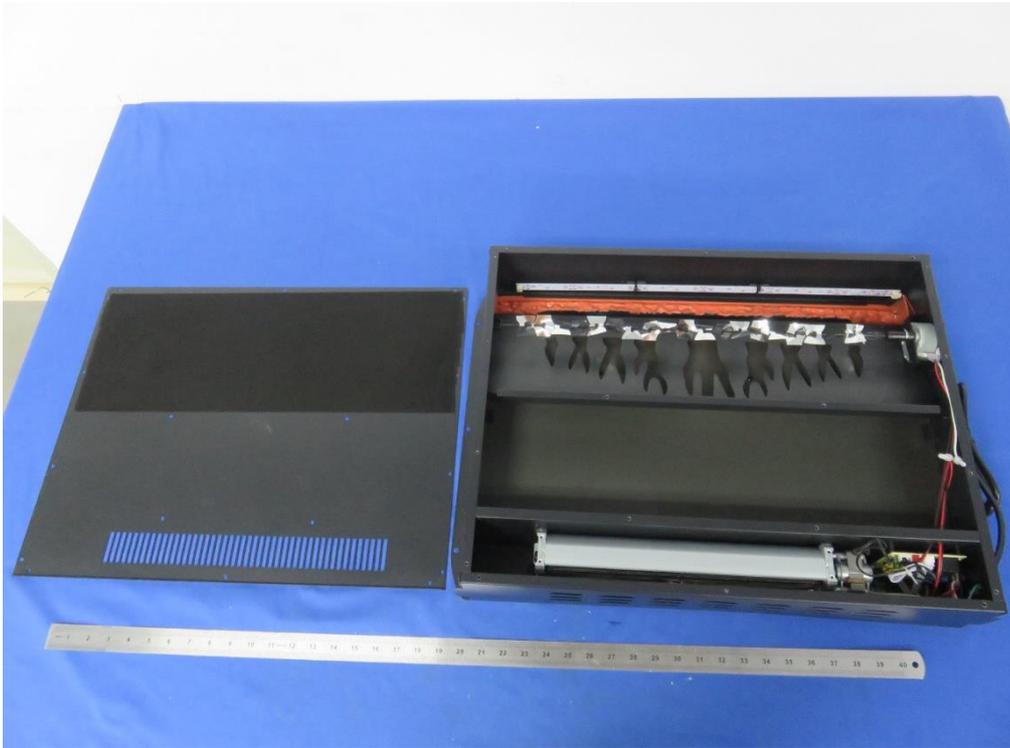


Photo 6 - Internal view of RYJ-23 series, also represent models RYJ-18 series and RYJ-26 series



3.0 Product Photographs

Photo 7 - Internal view of RYJ-23 series, also represent models RYJ-18 series and RYJ-26 series

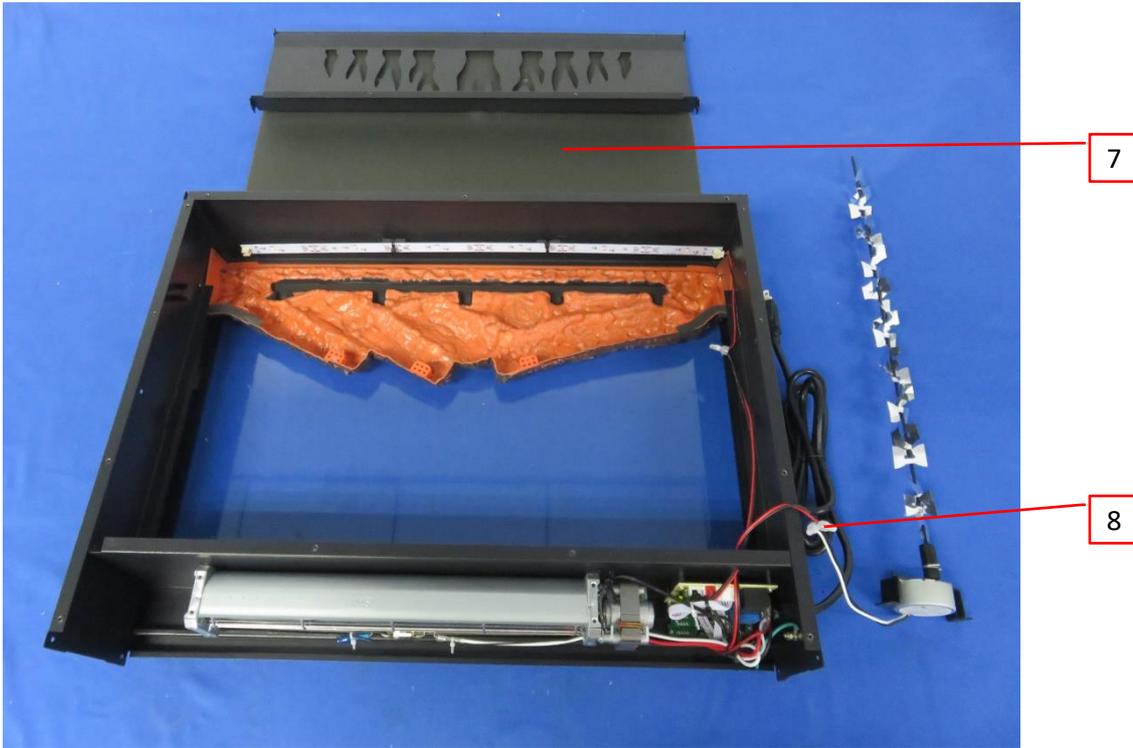
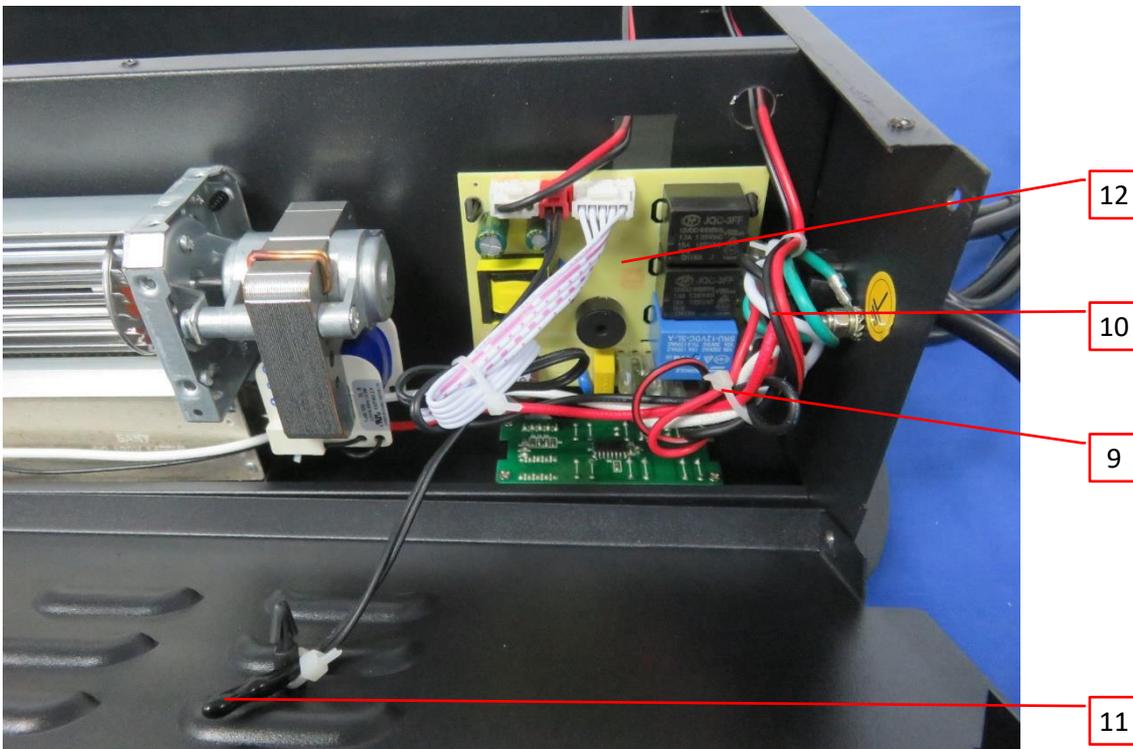


Photo 8 - Internal view of RYJ-23 series, also represent models RYJ-18 series and RYJ-26 series



3.0 Product Photographs

Photo 9 - Fan motor assembly view for all models

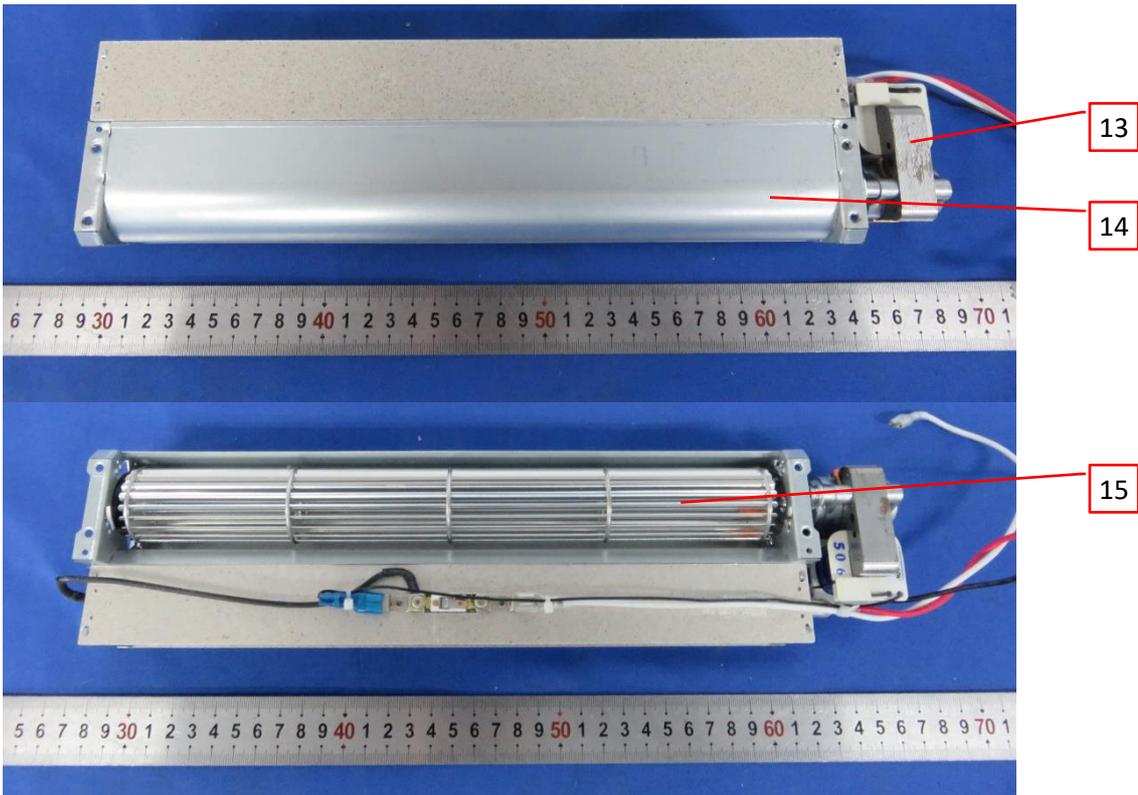
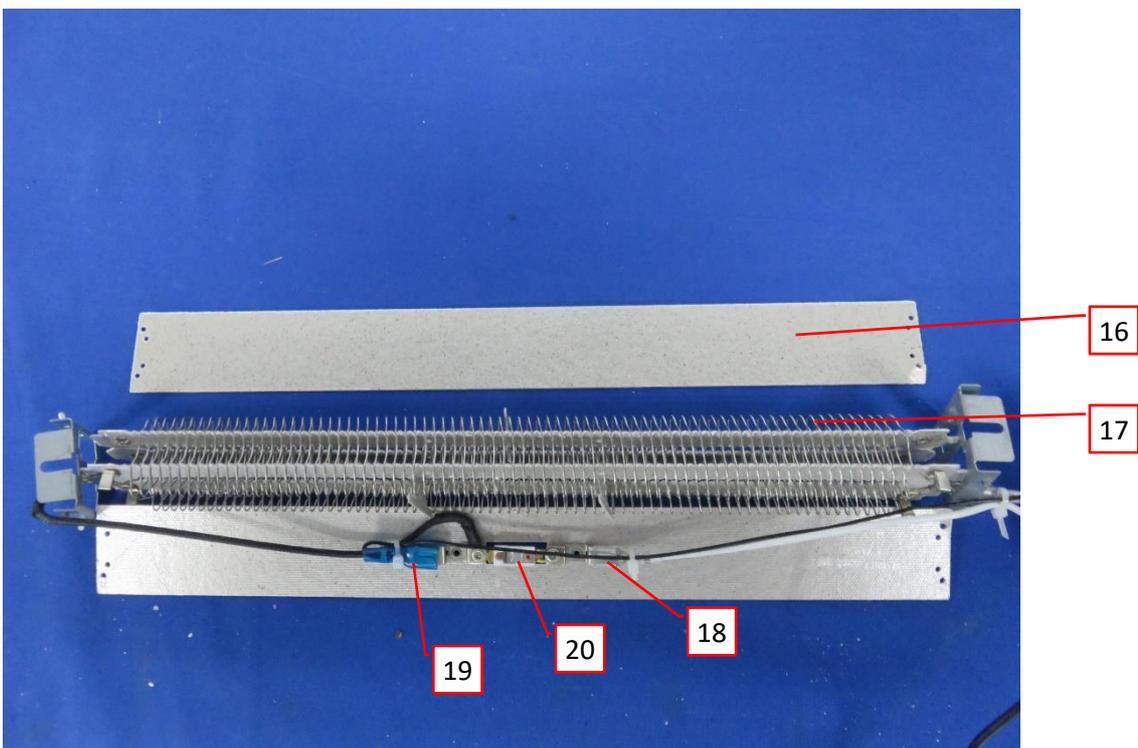


Photo 10 - Heating element view for all models

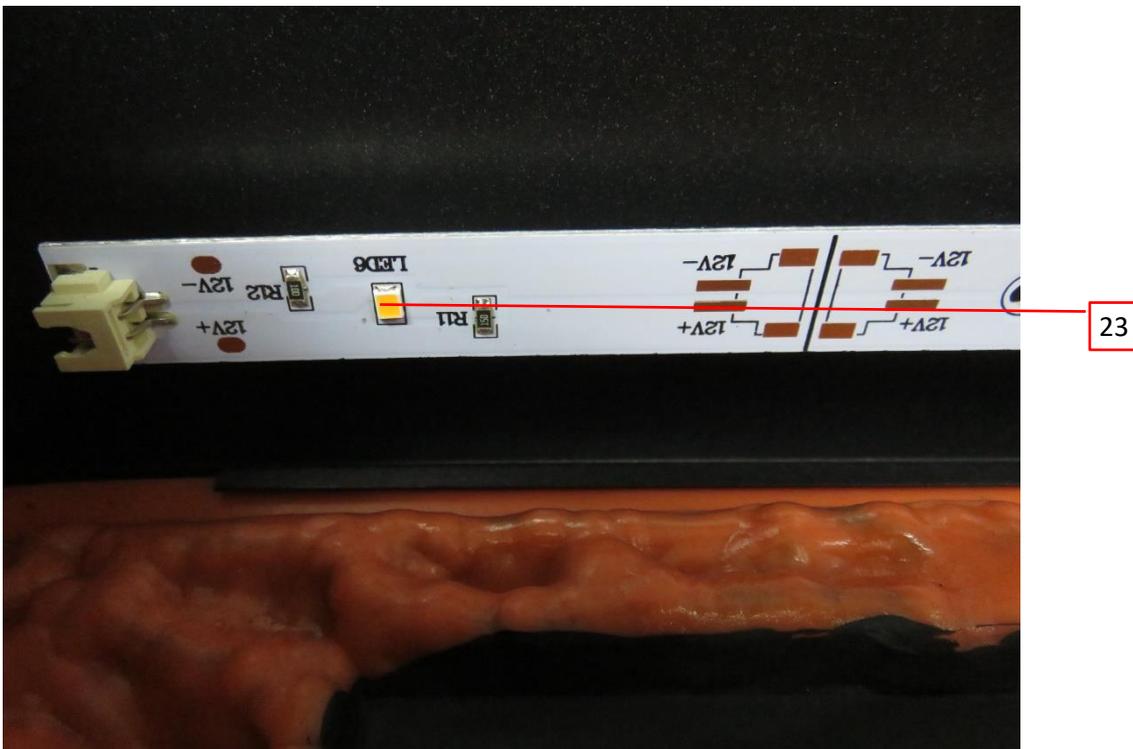


3.0 Product Photographs

Photo 11 - Synchronous motor view for all models



Photo 12 - Internal view of RYJ-23 series, also represent models RYJ-18 series and RYJ-26 series



3.0 Product Photographs

Photo 13 - PCB view of RYJ-23 series, also represent models RYJ-18 series and RYJ-26 series

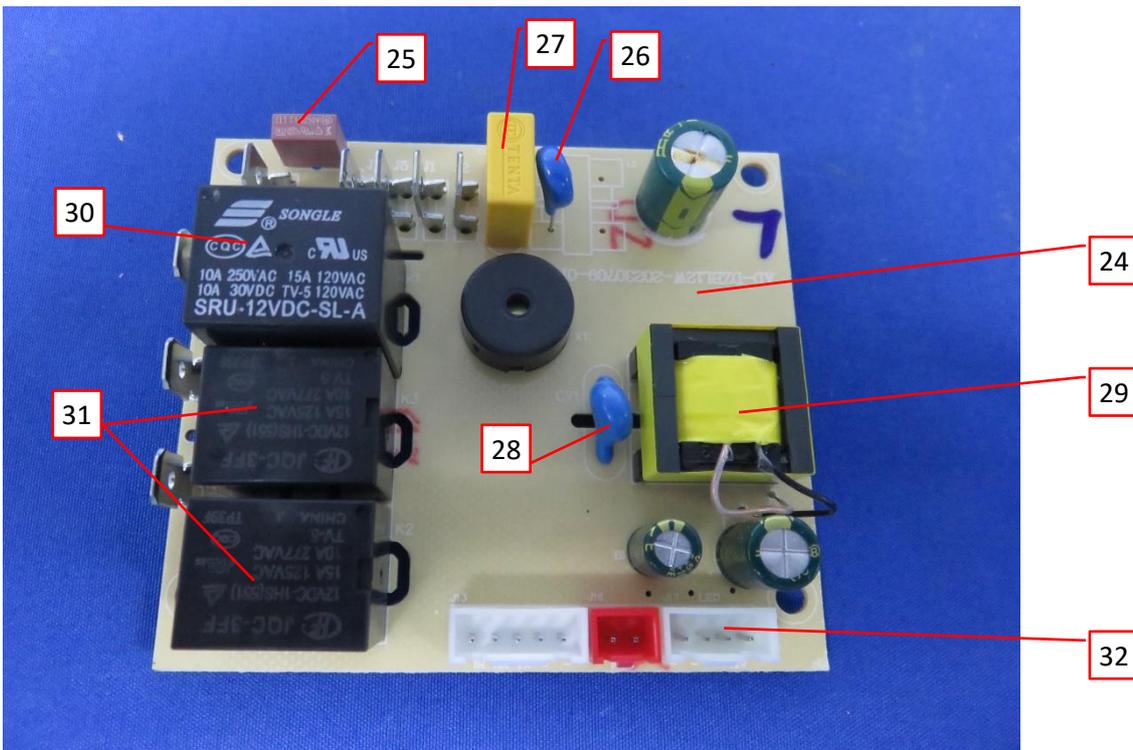
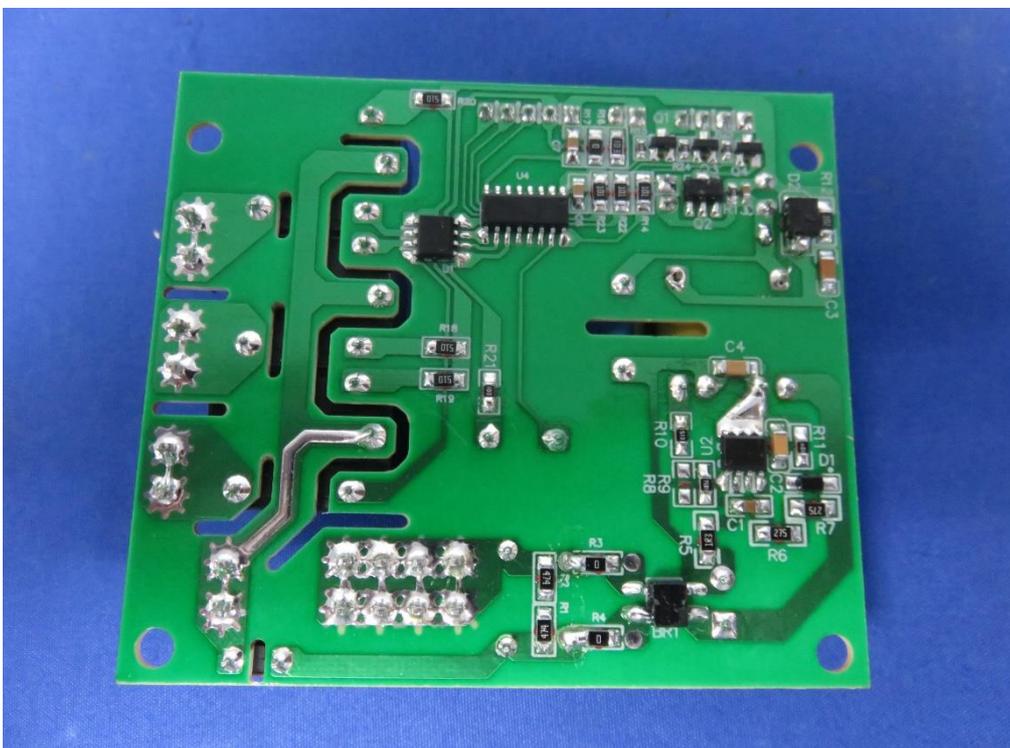


Photo 14 - PCB view of RYJ-23 series, also represent models RYJ-18 series and RYJ-26 series



3.0 Product Photographs

Photo 15 - PCB view of RYJ-23 series, also represent models RYJ-18 series and RYJ-26 series

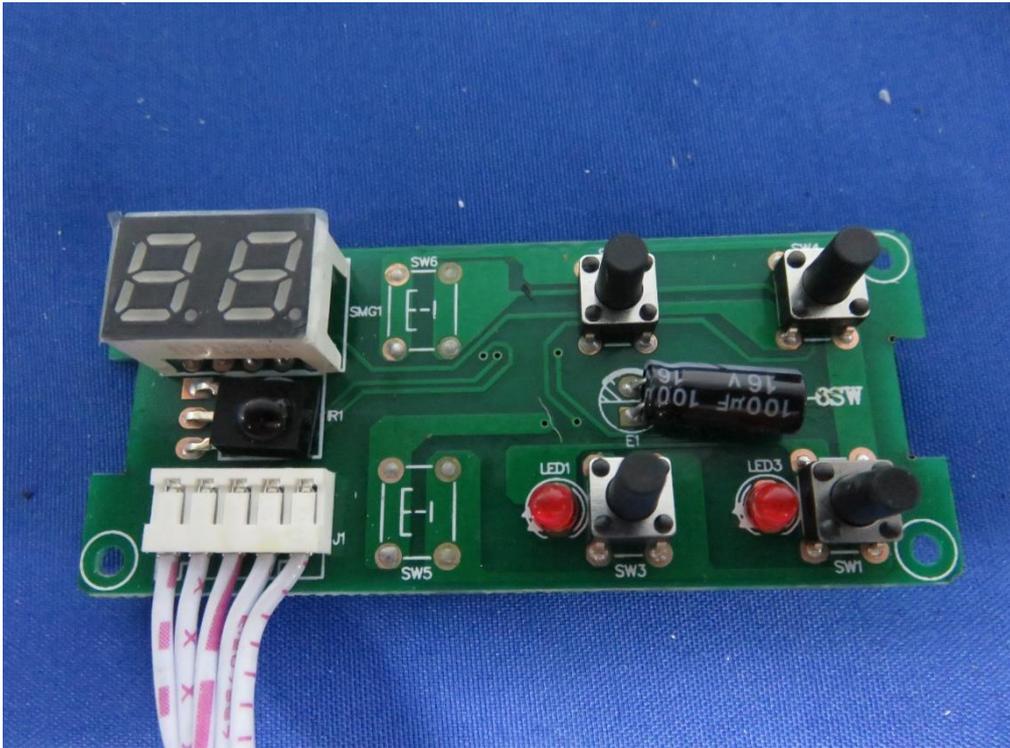
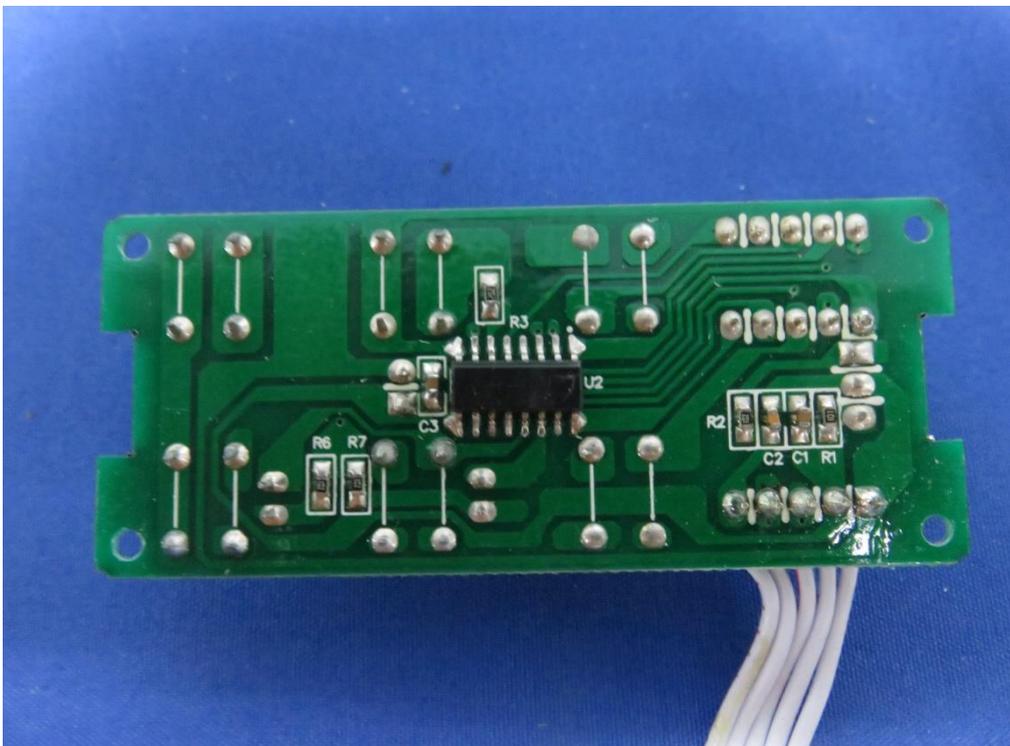
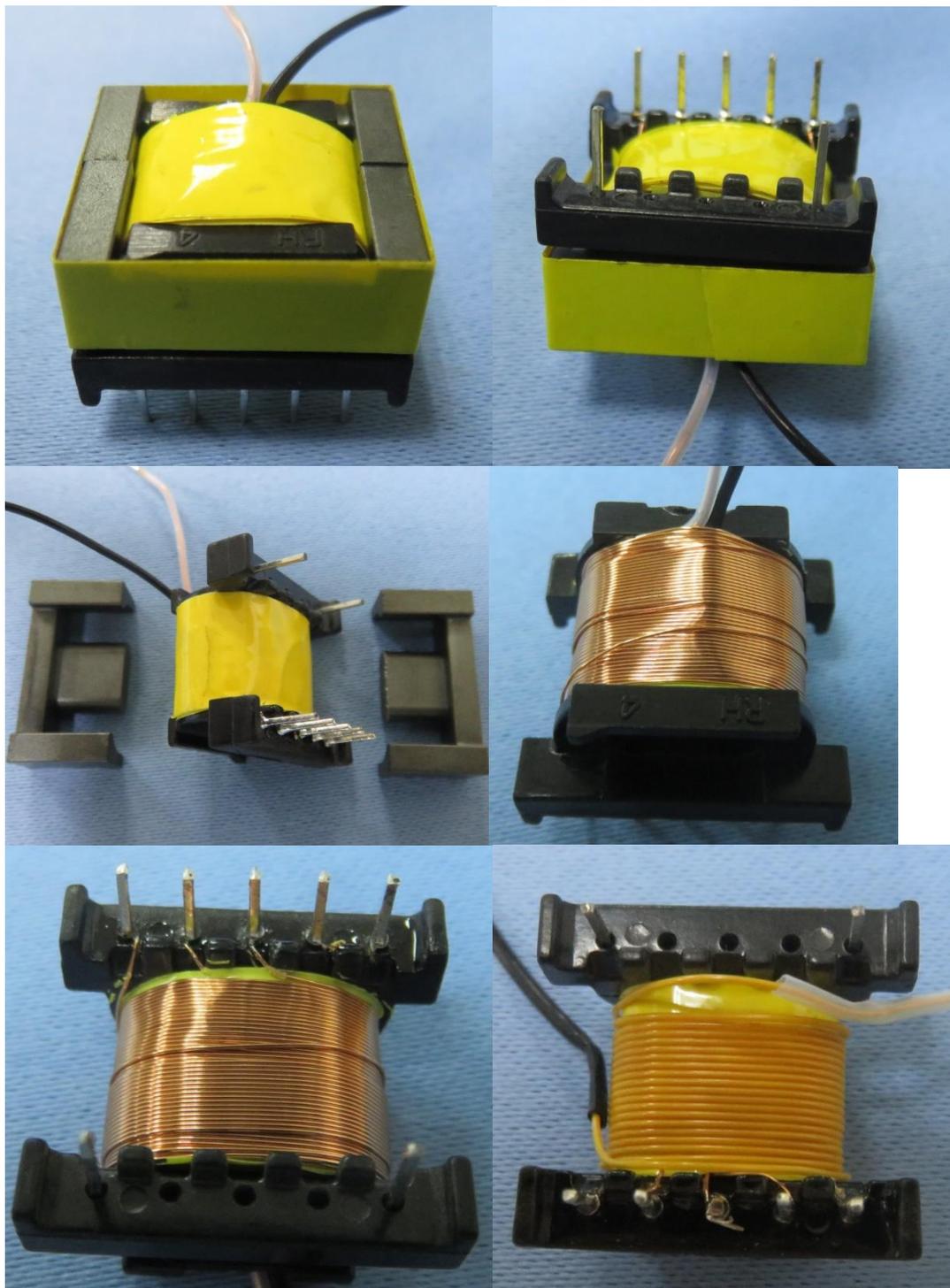


Photo 16 - PCB view of RYJ-23 series, also represent models RYJ-18 series and RYJ-26 series



3.0 Product Photographs

Photo 17 - Transformer view of RYJ-23 series, also represent models RYJ-18 series and RYJ-26 series



3.0 Product Photographs

Photo 18 - External view of RYJ-30 series, also represent models RYJ-28 series and RYJ-32 series

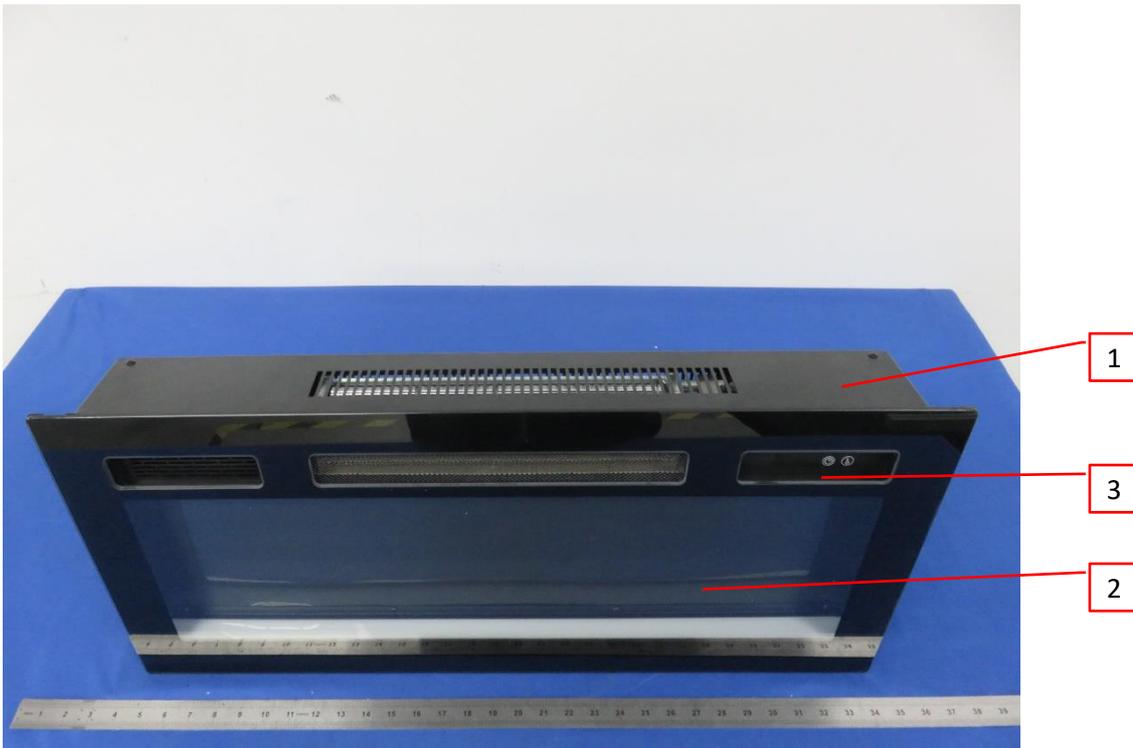
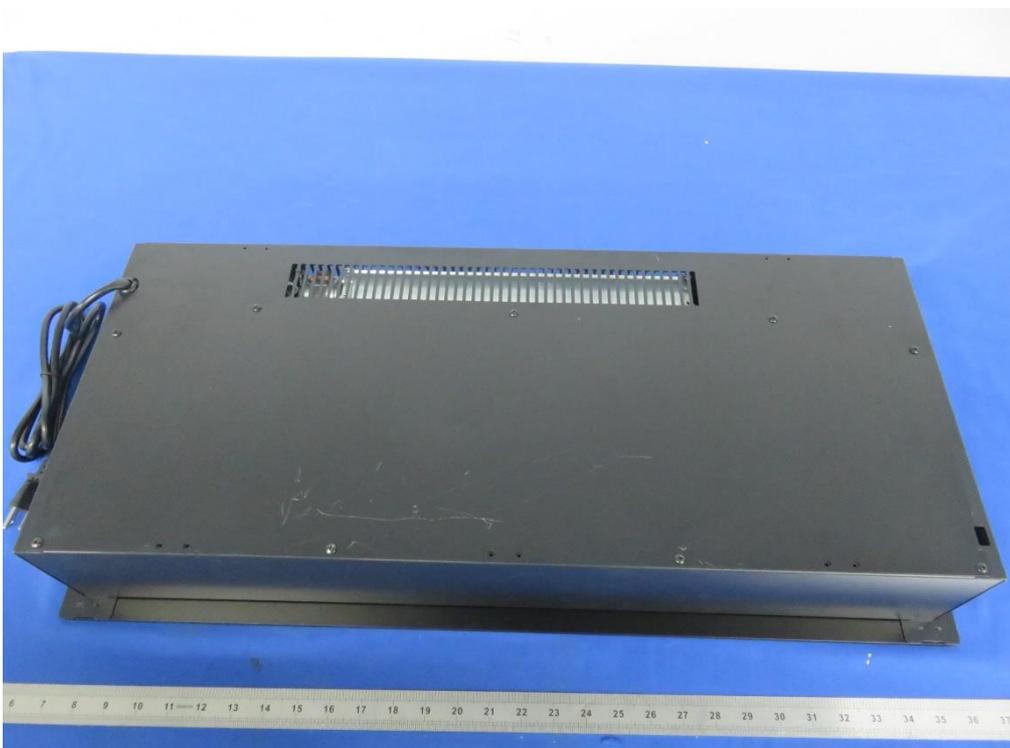


Photo 19 - External view of RYJ-30 series, also represent models RYJ-28 series and RYJ-32 series

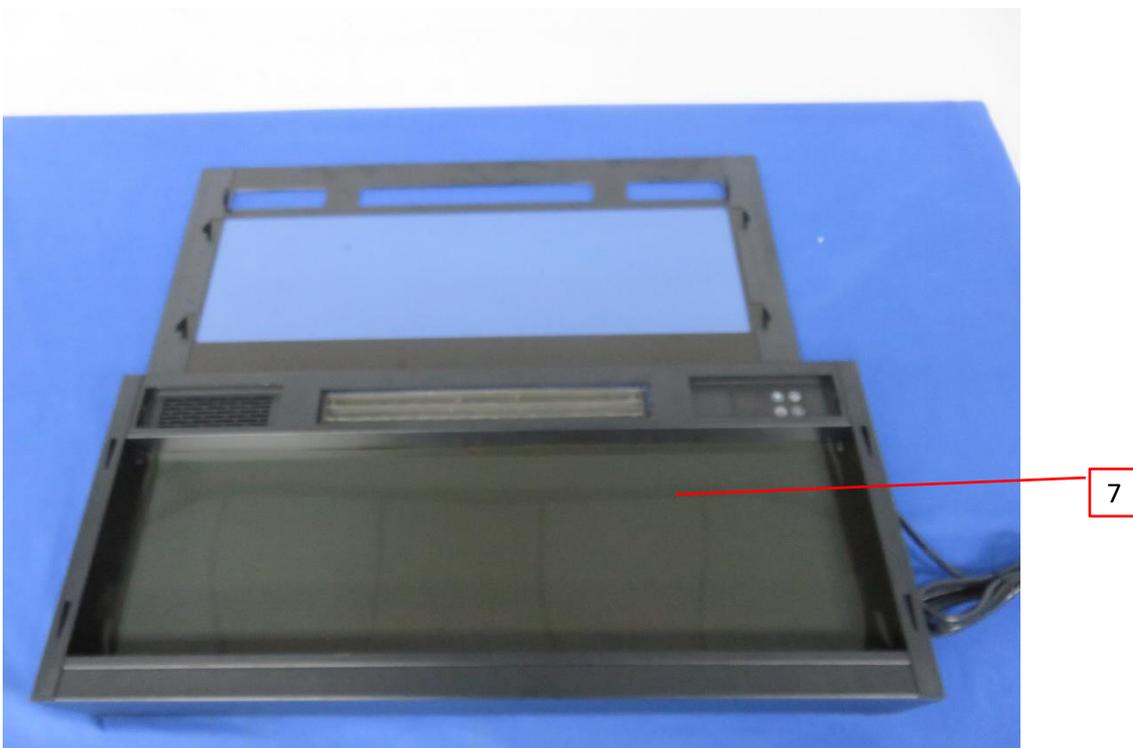


3.0 Product Photographs

Photo 20 - External view of RYJ-30 series, also represent models RYJ-28 series and RYJ-32 series



Photo 21 - Internal view of RYJ-30 series, also represent models RYJ-28 series and RYJ-32 series



3.0 Product Photographs

Photo 22 - Internal view of RYJ-30 series, also represent models RYJ-28 series and RYJ-32 series



Photo 23 - External view of RYJ-30 series, also represent models RYJ-28 series and RYJ-32 series

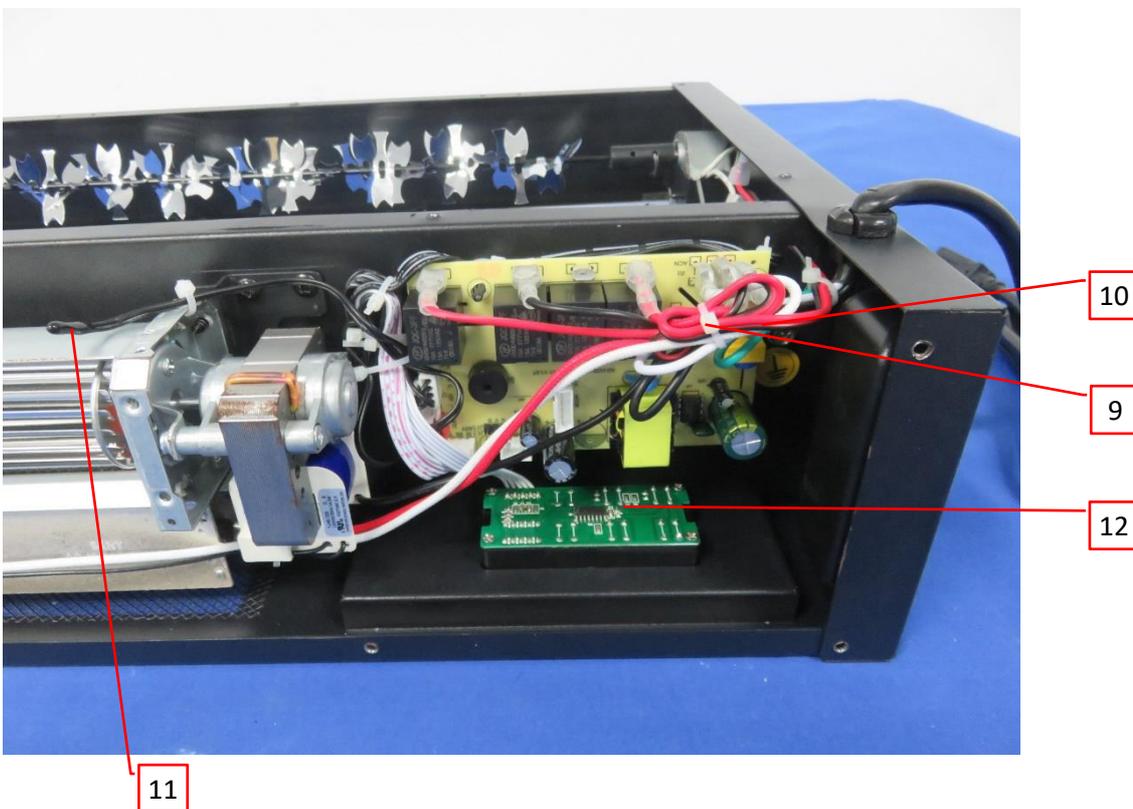


3.0 Product Photographs

Photo 24 - Internal view of RYJ-30 series, also represent models RYJ-28 series and RYJ-32 series



Photo 25 - Internal view of RYJ-30 series, also represent models RYJ-28 series and RYJ-32 series



3.0 Product Photographs

Photo 26 - Internal view of RYJ-30 series, also represent models RYJ-28 series and RYJ-32 series

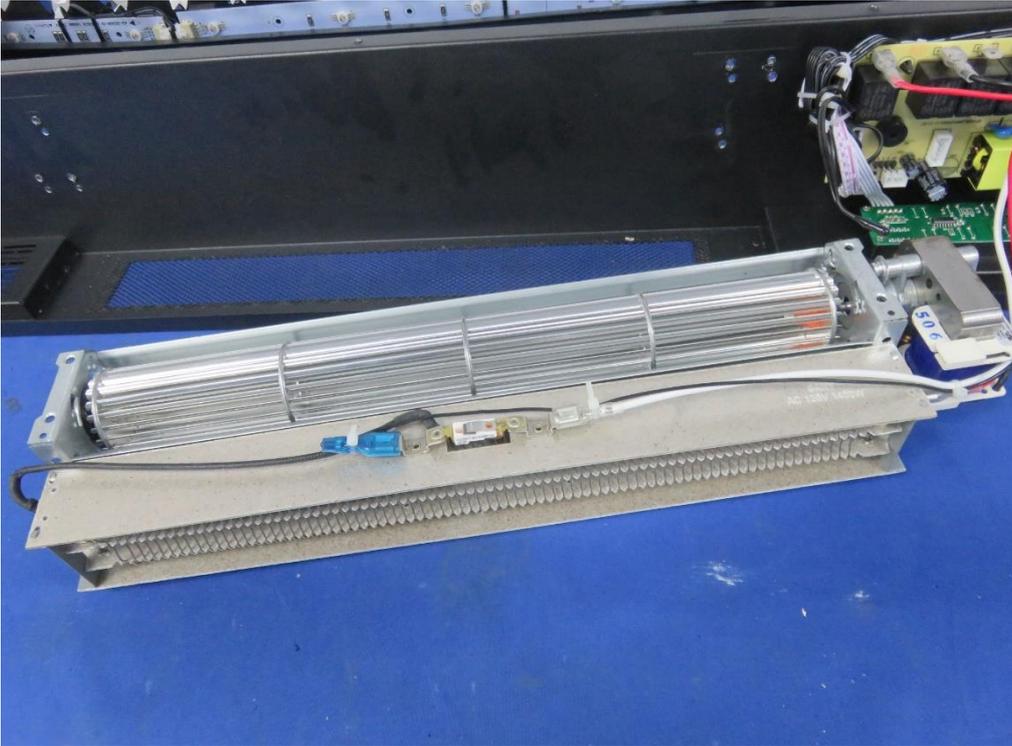
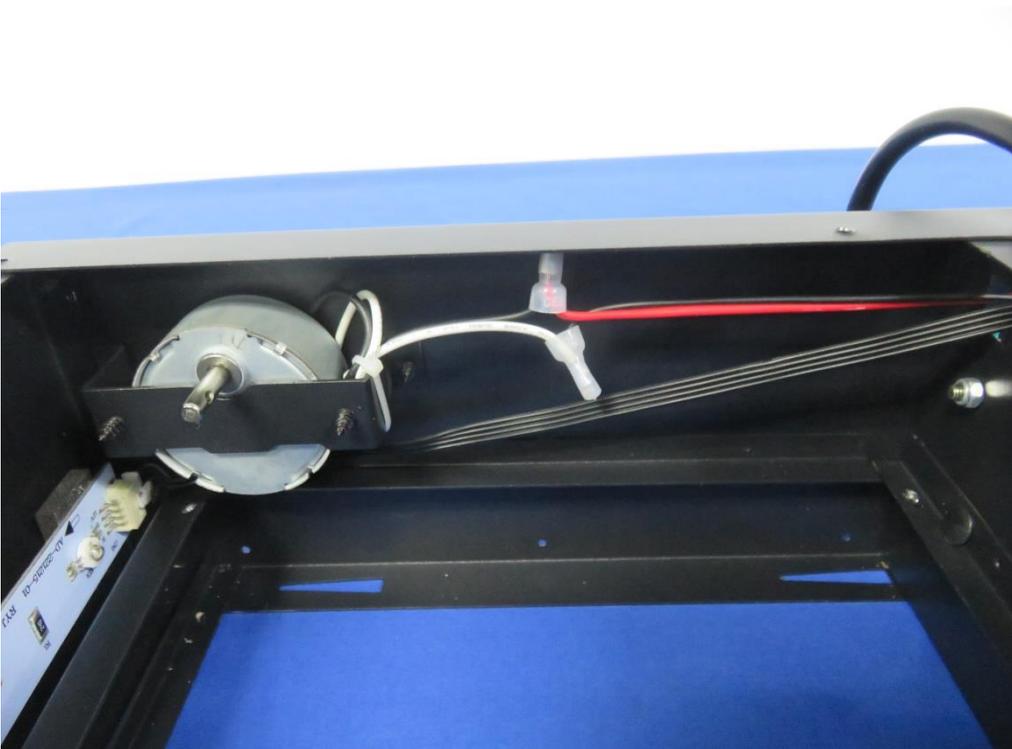


Photo 27 - Internal view of RYJ-30 series, also represent models RYJ-28 series and RYJ-32 series

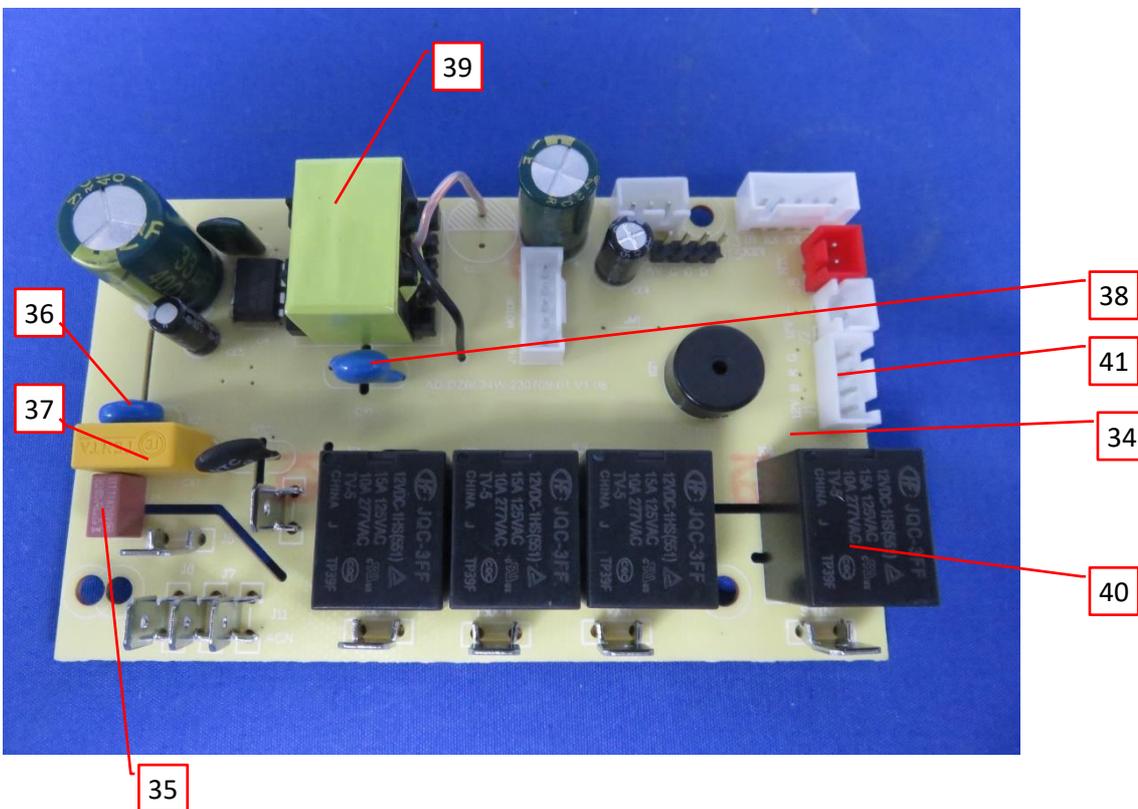


3.0 Product Photographs

Photo 28 - Internal view of RYJ-30 series, also represent models RYJ-28 series and RYJ-32 series



Photo 29 - PCB view of RYJ-30 series, also represent models RYJ-28 series and RYJ-32 series



3.0 Product Photographs

Photo 30 - PCB view of RYJ-30 series, also represent models RYJ-28 series and RYJ-32 series

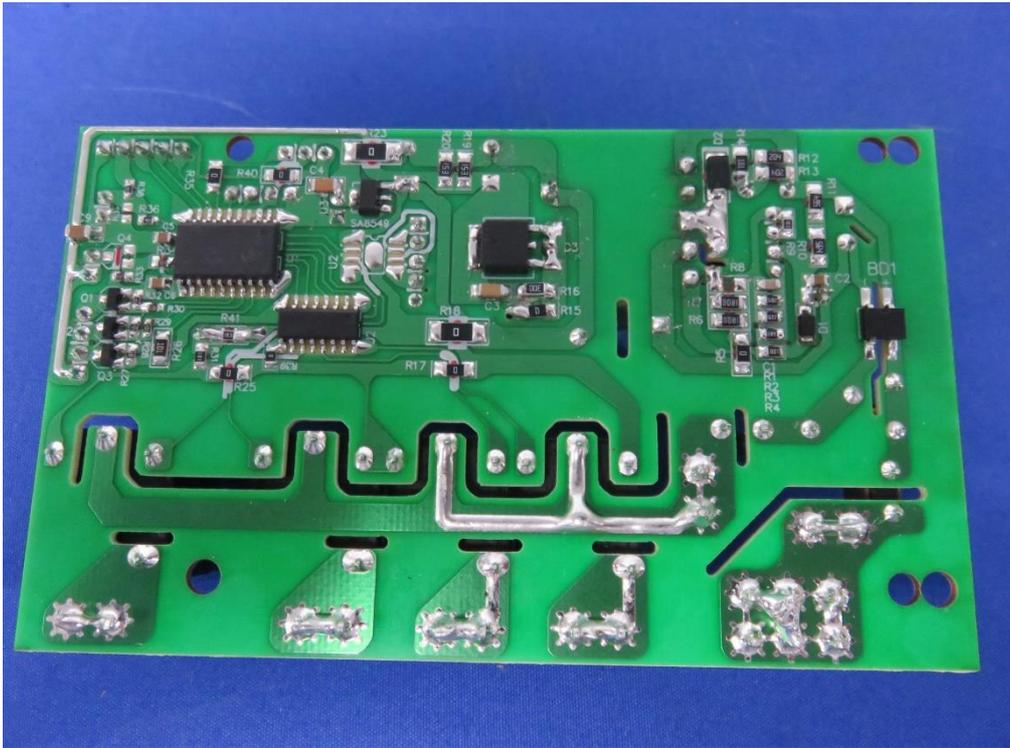
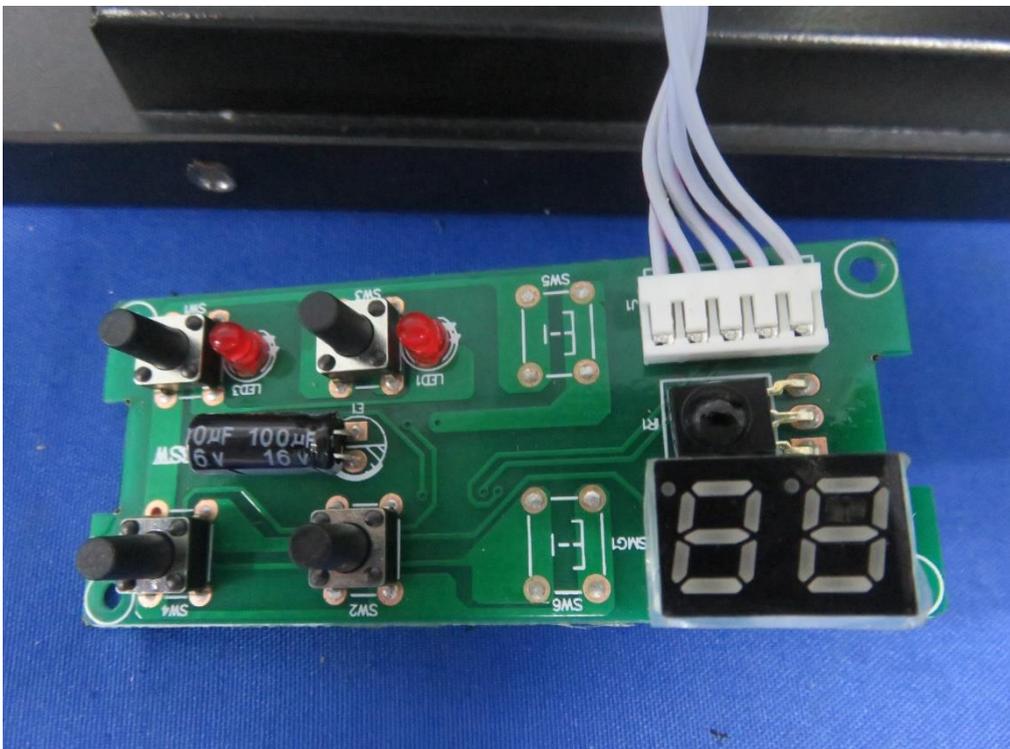


Photo 31 - PCB view of RYJ-30 series, also represent models RYJ-28 series and RYJ-32 series



3.0 Product Photographs

Photo 32 - PCB view of RYJ-30 series, also represent models RYJ-28 series and RYJ-32 series

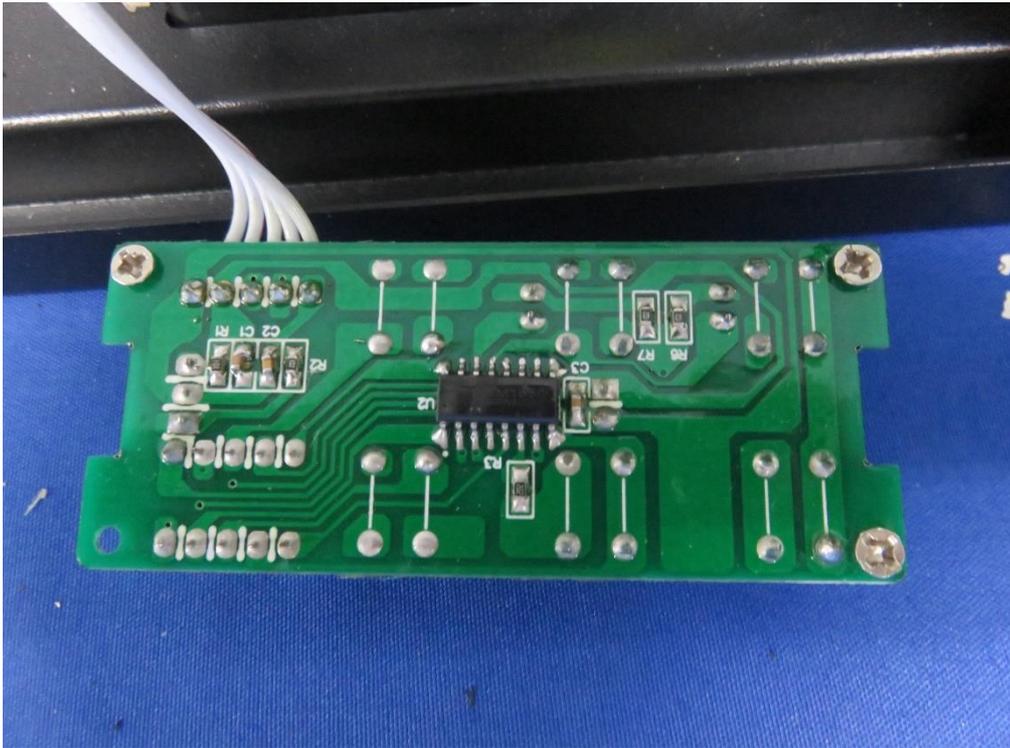
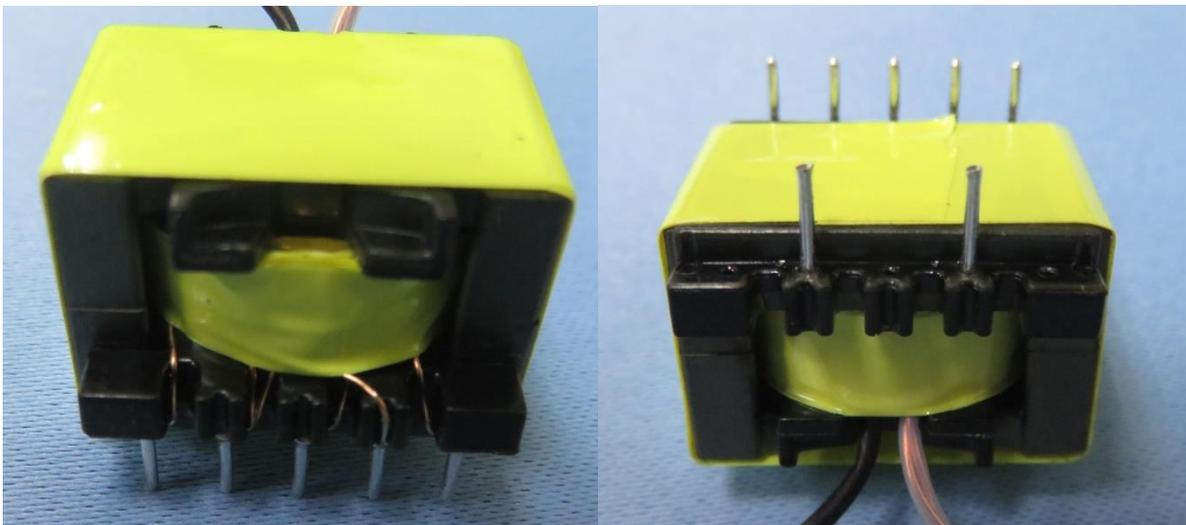
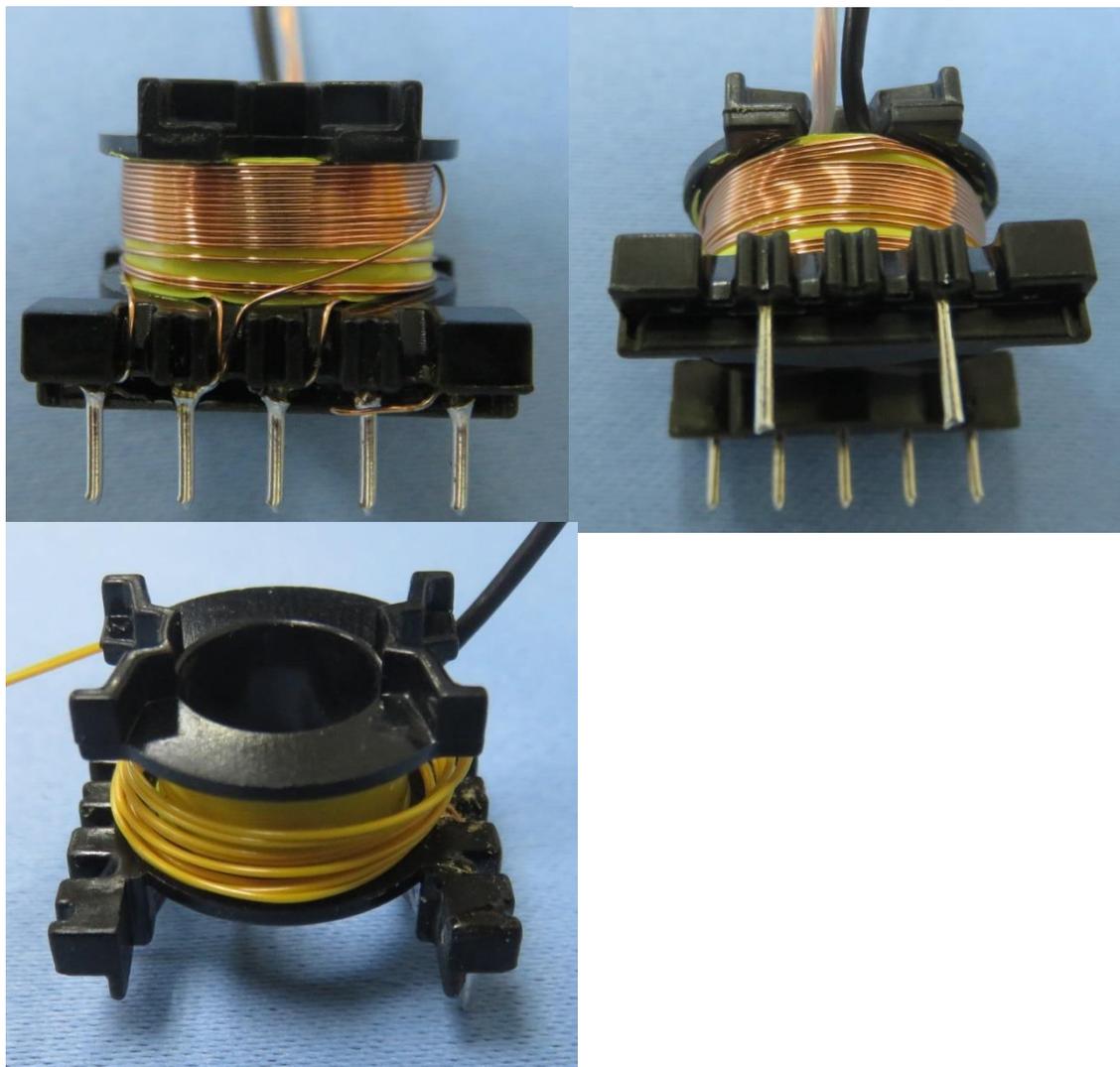


Photo 33 - Transformer view of RYJ-30 series, also represent models RYJ-28 series and RYJ-32 series



3.0 Product Photographs

Photo 34 - Transformer view of RYJ-30 series, also represent models RYJ-28 series and RYJ-32 series

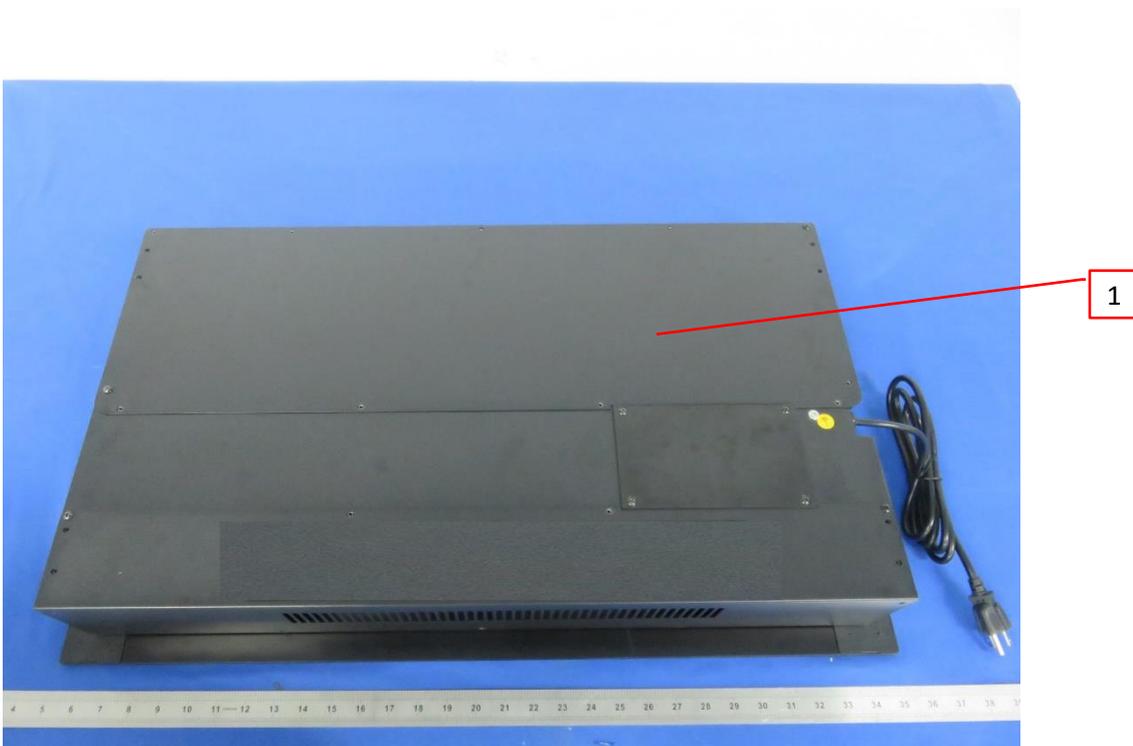


3.0 Product Photographs

Photo 35 - External view of RYJ-36 series, also represent models RYJ-40 series, RYJ-42 series, RYJ-50 series, RYJ-60 series, RYJ-72 series, RYJ-SM50 series, RYJ-SM60 series and RYJ-SM72 series.



Photo 36 - External view of RYJ-36 series, also represent models RYJ-40 series, RYJ-42 series, RYJ-50 series, RYJ-60 series, RYJ-72 series, RYJ-SM50 series, RYJ-SM60 series and RYJ-SM72 series.



3.0 Product Photographs

Photo 37 - External view of RYJ-36 series, also represent models RYJ-40 series, RYJ-42 series, RYJ-50 series, RYJ-60 series, RYJ-72 series, RYJ-SM50 series, RYJ-SM60 series and RYJ-SM72 series.

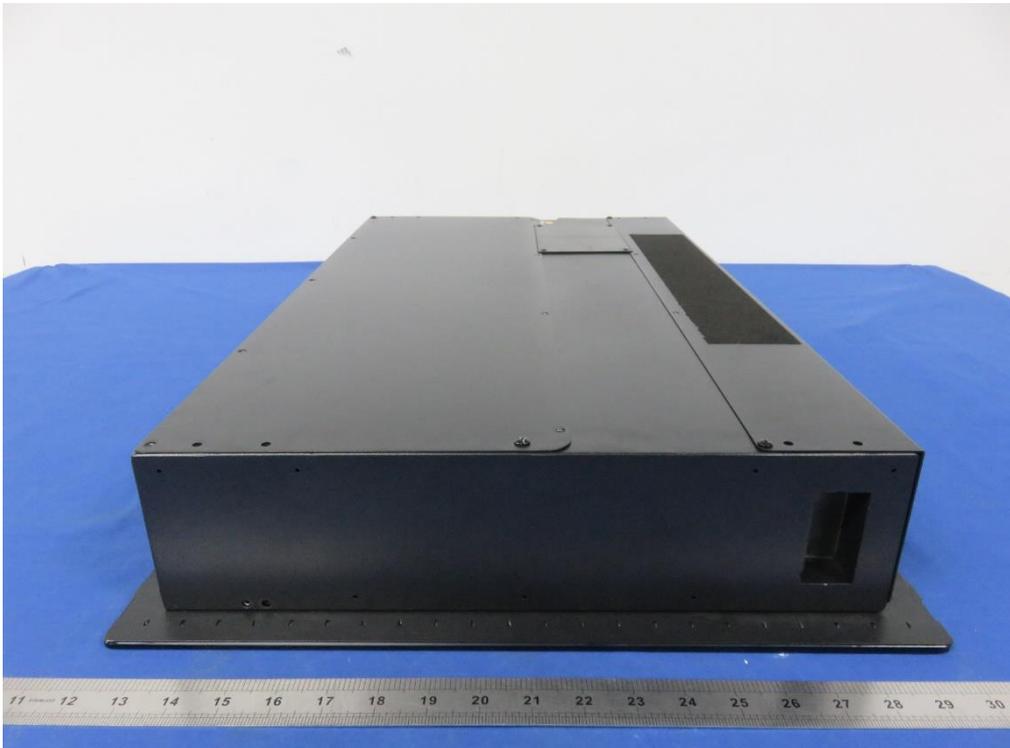


Photo 38 - External view of RYJ-36 series, also represent models RYJ-40 series, RYJ-42 series, RYJ-50 series, RYJ-60 series, RYJ-72 series, RYJ-SM50 series, RYJ-SM60 series and RYJ-SM72 series.



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3.0 Product Photographs

Photo 39 - Internal view of RYJ-36 series, also represent models RYJ-40 series, RYJ-42 series, RYJ-50 series, RYJ-60 series, RYJ-72 series, RYJ-SM50 series, RYJ-SM60 series and RYJ-SM72 series.

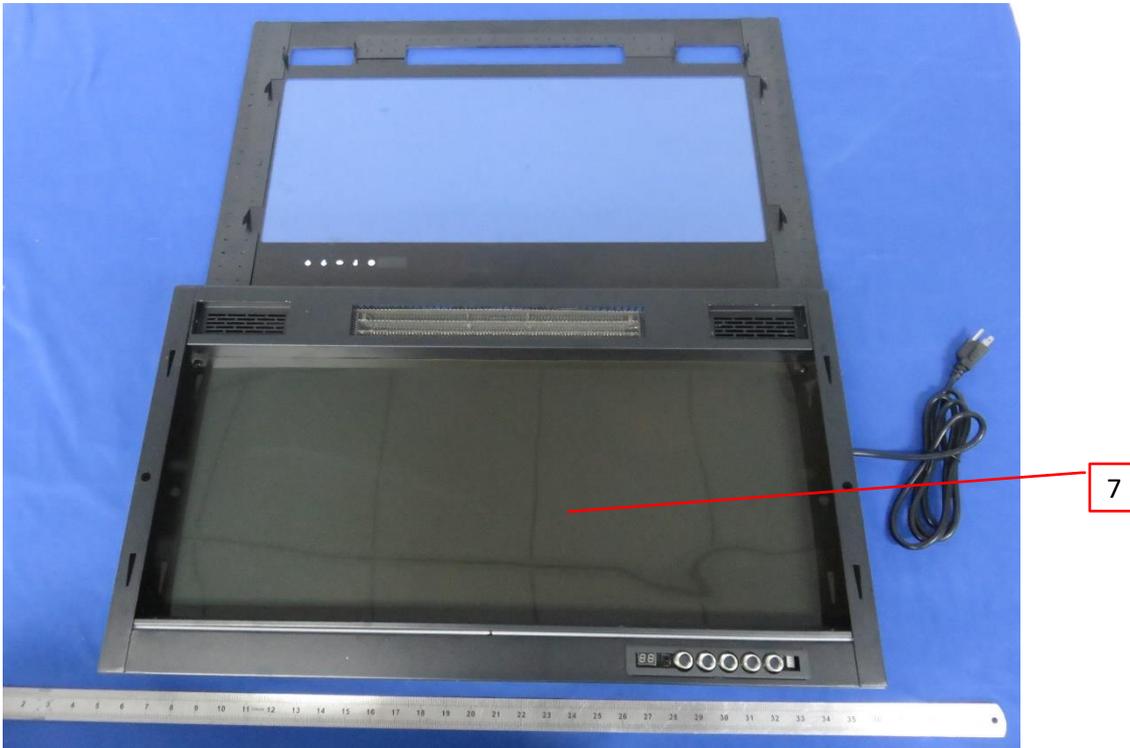
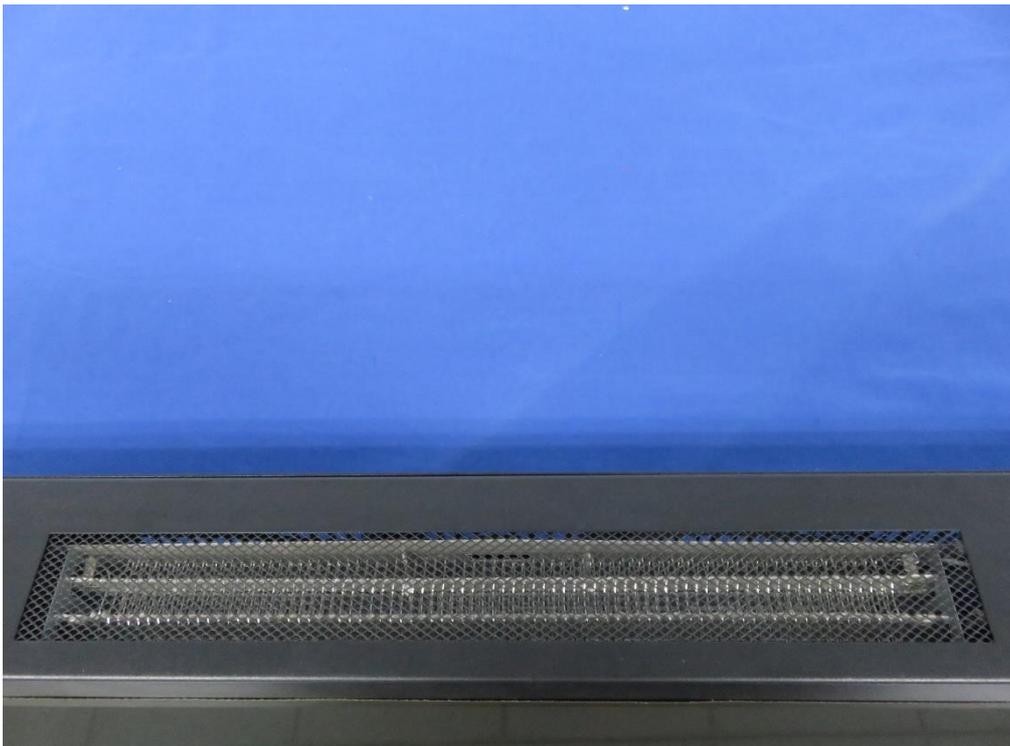


Photo 40 - External view of RYJ-36 series, also represent models RYJ-40 series, RYJ-42 series, RYJ-50 series, RYJ-60 series, RYJ-72 series, RYJ-SM50 series, RYJ-SM60 series and RYJ-SM72 series.



3.0 Product Photographs

Photo 41 - Internal view of RYJ-36 series, also represent models RYJ-40 series, RYJ-42 series, RYJ-50 series, RYJ-60 series, RYJ-72 series, RYJ-SM50 series, RYJ-SM60 series and RYJ-SM72 series.

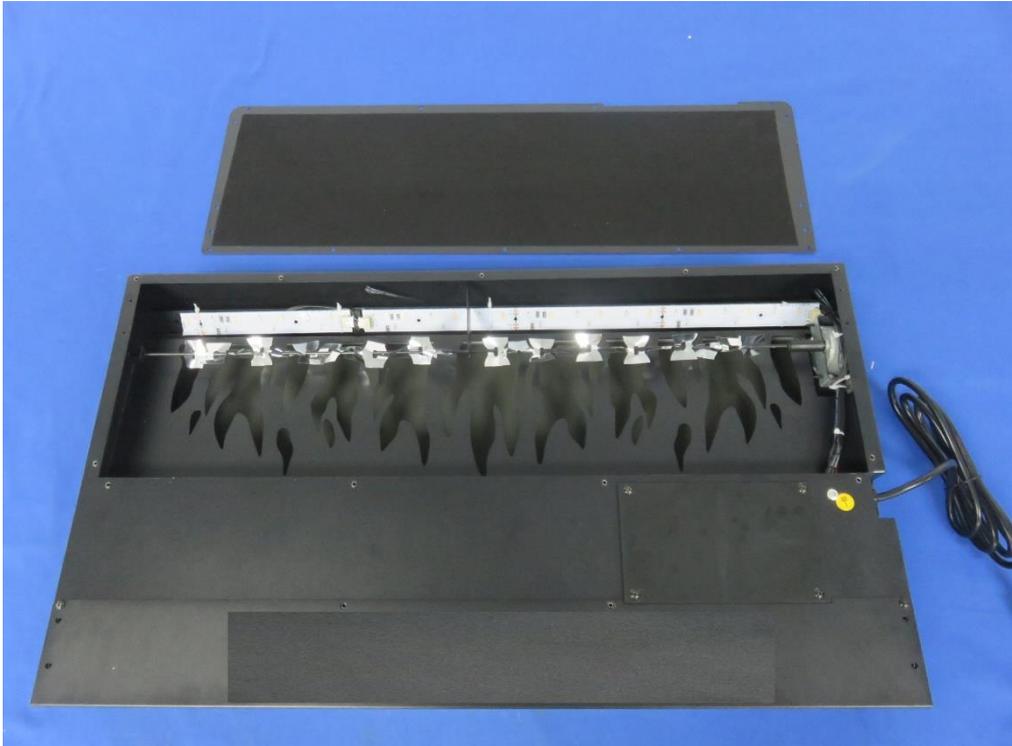
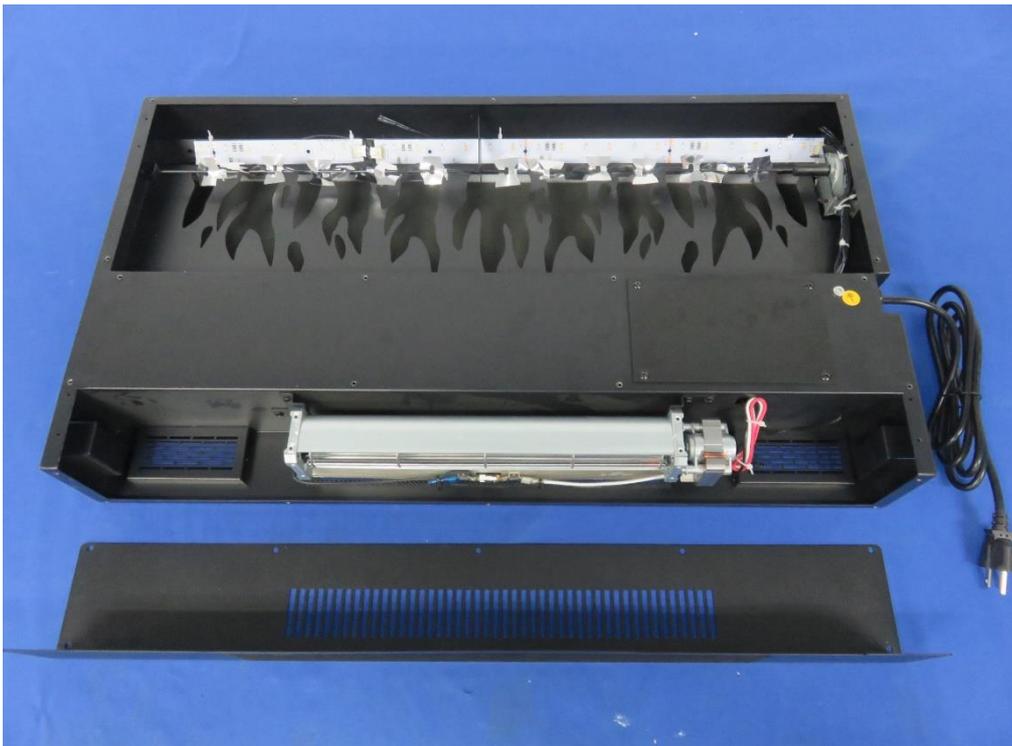


Photo 42 - Internal view of RYJ-36 series, also represent models RYJ-40 series, RYJ-42 series, RYJ-50 series, RYJ-60 series, RYJ-72 series, RYJ-SM50 series, RYJ-SM60 series and RYJ-SM72 series.



3.0 Product Photographs

Photo 43 - Internal view of RYJ-36 series, also represent models RYJ-40 series, RYJ-42 series, RYJ-50 series, RYJ-60 series, RYJ-72 series, RYJ-SM50 series, RYJ-SM60 series and RYJ-SM72 series.

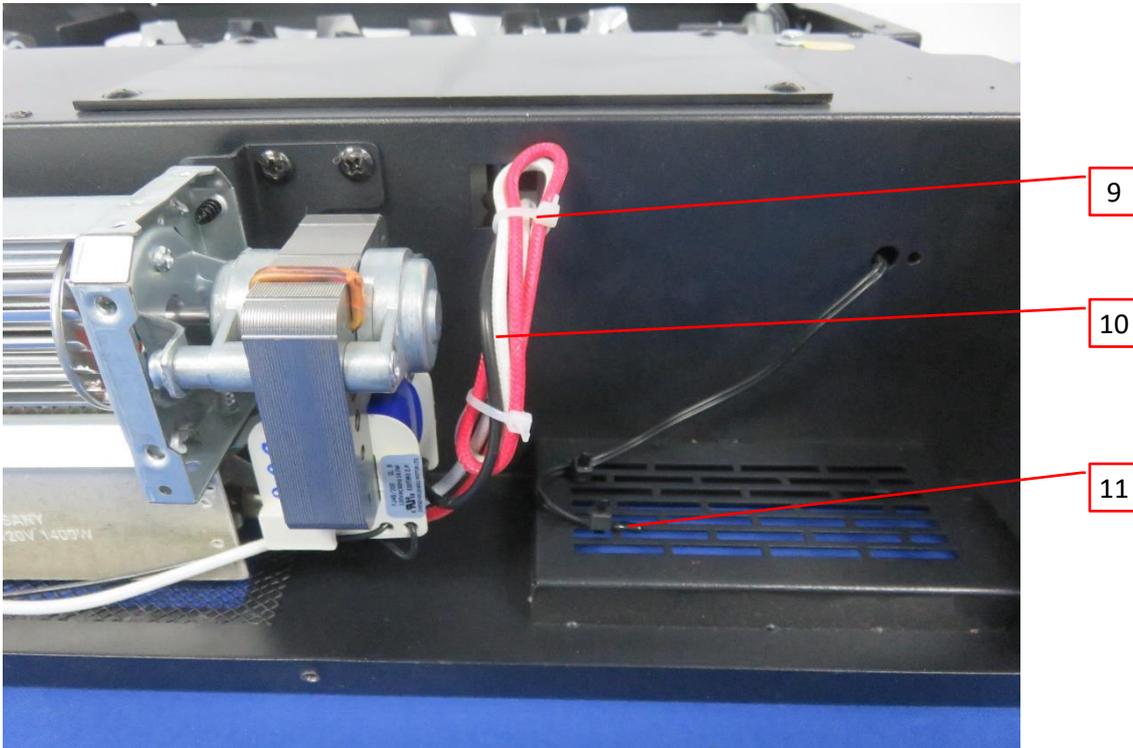
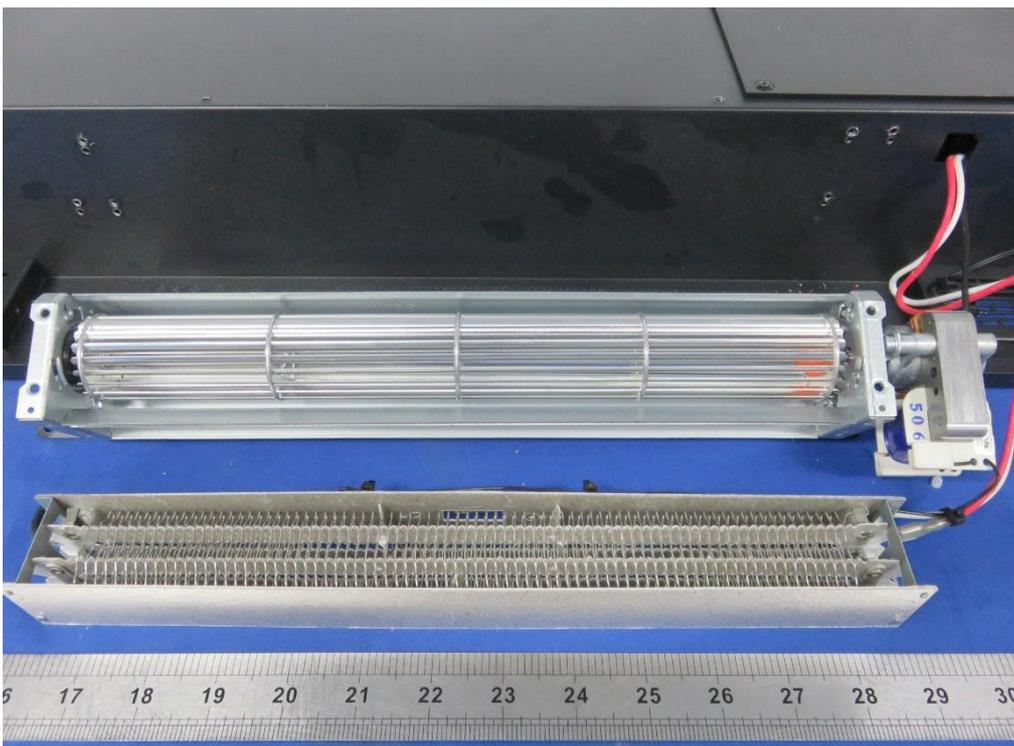


Photo 44 - Internal view of RYJ-36 series, also represent models RYJ-40 series, RYJ-42 series, RYJ-50 series, RYJ-60 series, RYJ-72 series, RYJ-SM50 series, RYJ-SM60 series and RYJ-SM72 series.

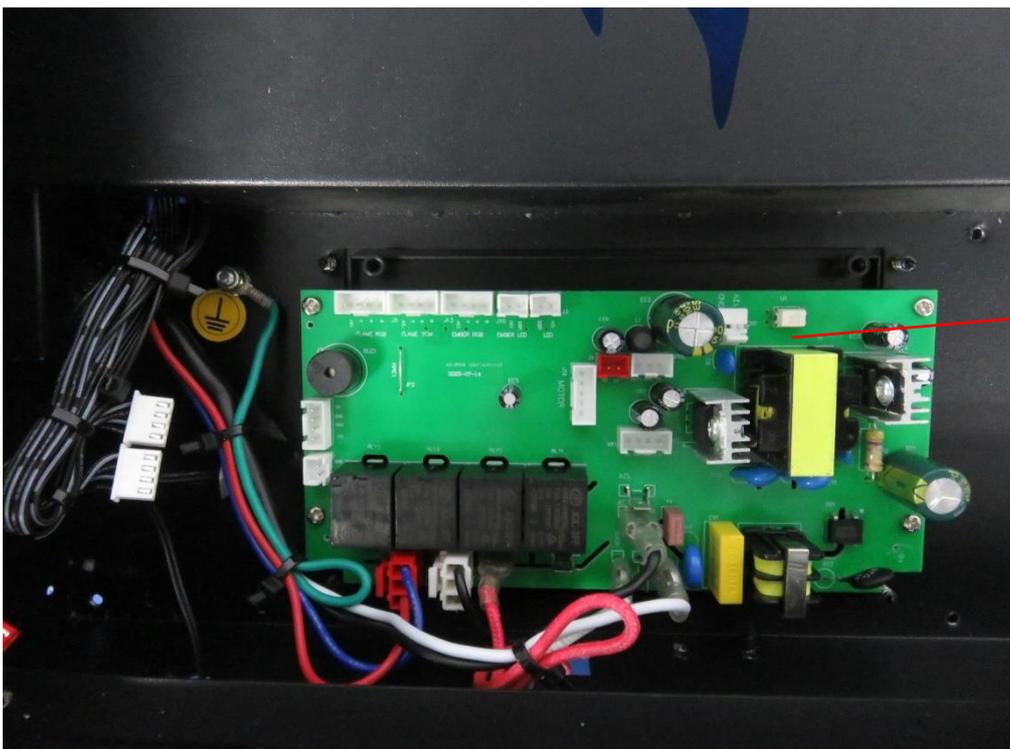


3.0 Product Photographs

Photo 45 - Internal view of RYJ-36 series, also represent models RYJ-40 series, RYJ-42 series, RYJ-50 series, RYJ-60 series, RYJ-72 series, RYJ-SM50 series, RYJ-SM60 series and RYJ-SM72 series.



Photo 46 - Internal view of RYJ-36 series, also represent models RYJ-40 series, RYJ-42 series, RYJ-50 series, RYJ-60 series, RYJ-72 series, RYJ-SM50 series, RYJ-SM60 series and RYJ-SM72 series.



3.0 Product Photographs

Photo 47 - Internal view of RYJ-36 series, also represent models RYJ-40 series, RYJ-42 series, RYJ-50 series, RYJ-60 series, RYJ-72 series, RYJ-SM50 series, RYJ-SM60 series and RYJ-SM72 series.

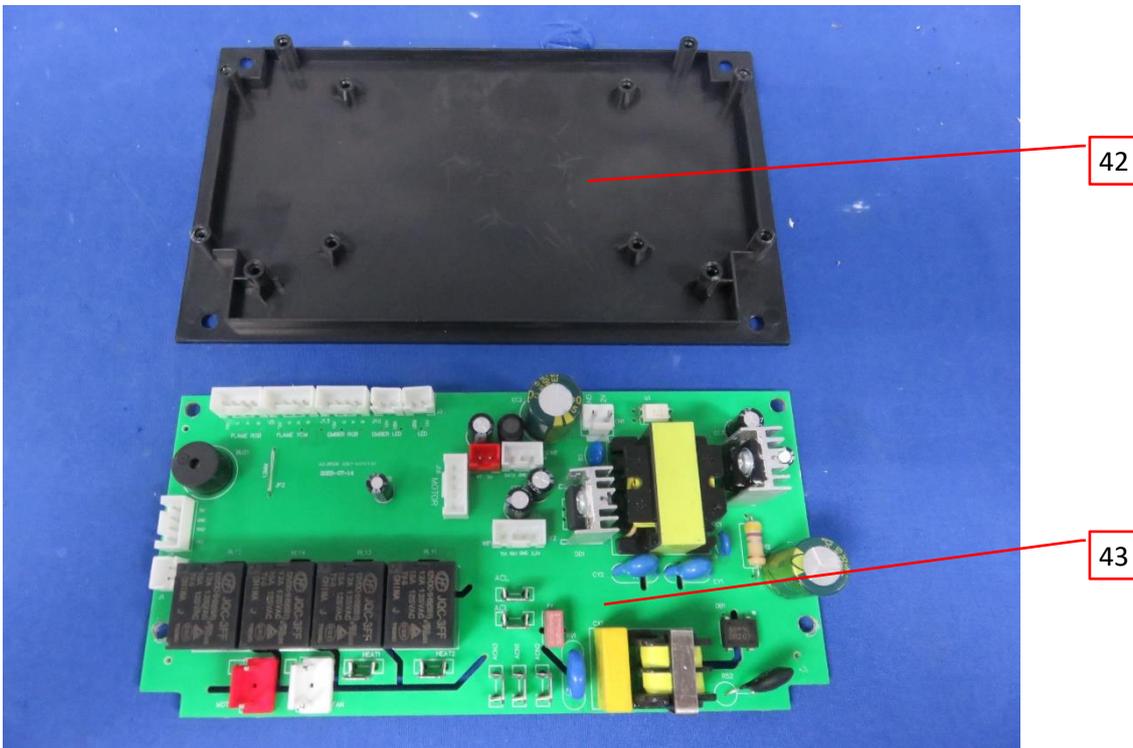
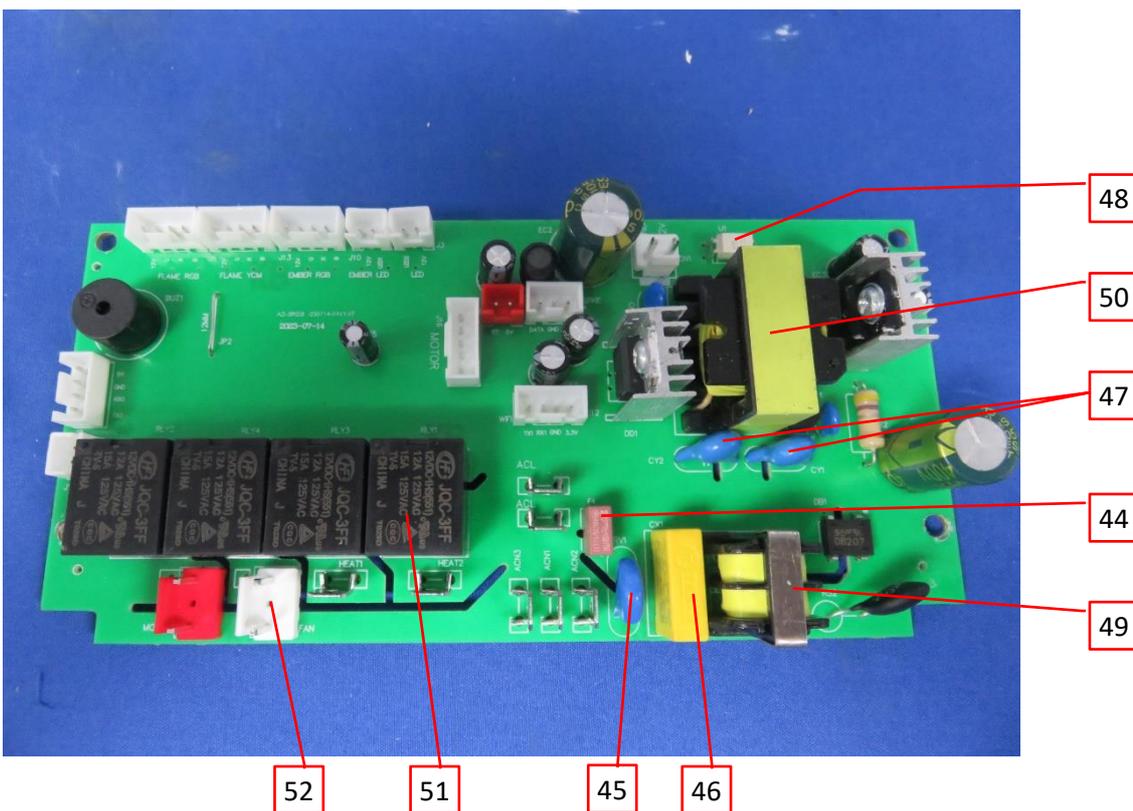


Photo 48 - PCB view of RYJ-36 series, also represent models RYJ-40 series, RYJ-42 series, RYJ-50 series, RYJ-60 series, RYJ-72 series, RYJ-SM50 series, RYJ-SM60 series and RYJ-SM72 series.



3.0 Product Photographs

Photo 49 - PCB view of RYJ-36 series, also represent models RYJ-40 series, RYJ-42 series, RYJ-50 series, RYJ-60 series, RYJ-72 series, RYJ-SM50 series, RYJ-SM60 series and RYJ-SM72 series.

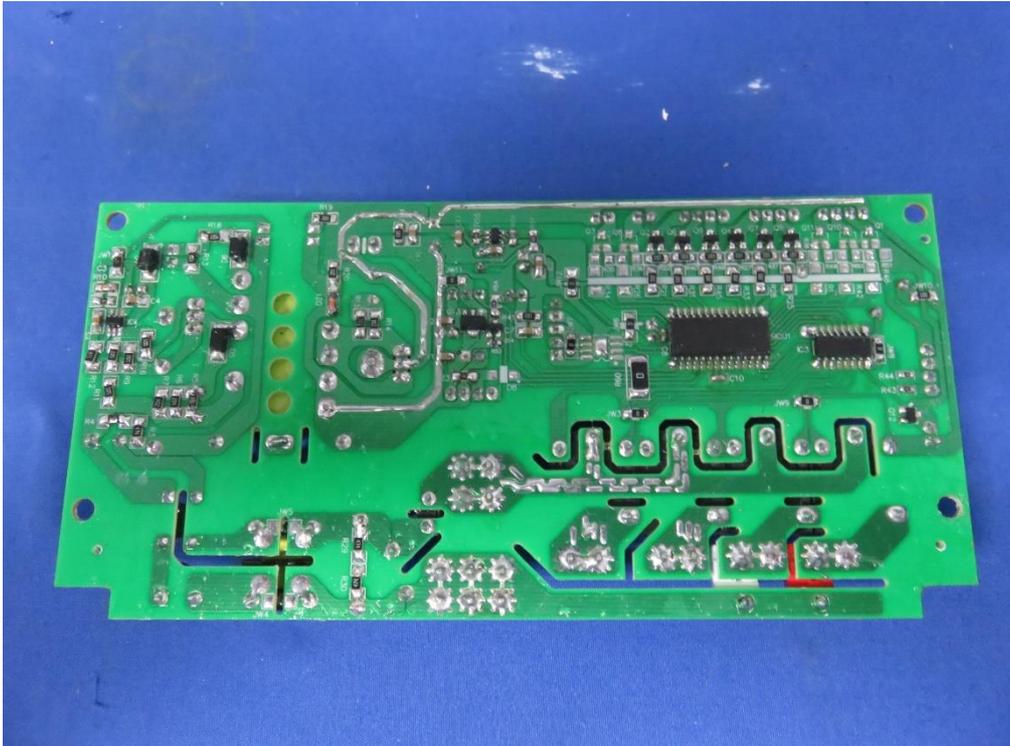


Photo 50 - PCB view of RYJ-36 series, also represent models RYJ-40 series, RYJ-42 series, RYJ-50 series, RYJ-60 series, RYJ-72 series, RYJ-SM50 series, RYJ-SM60 series and RYJ-SM72 series.



3.0 Product Photographs

Photo 51 - PCB view of RYJ-36 series, also represent models RYJ-40 series, RYJ-42 series, RYJ-50 series, RYJ-60 series, RYJ-72 series, RYJ-SM50 series, RYJ-SM60 series and RYJ-SM72 series.

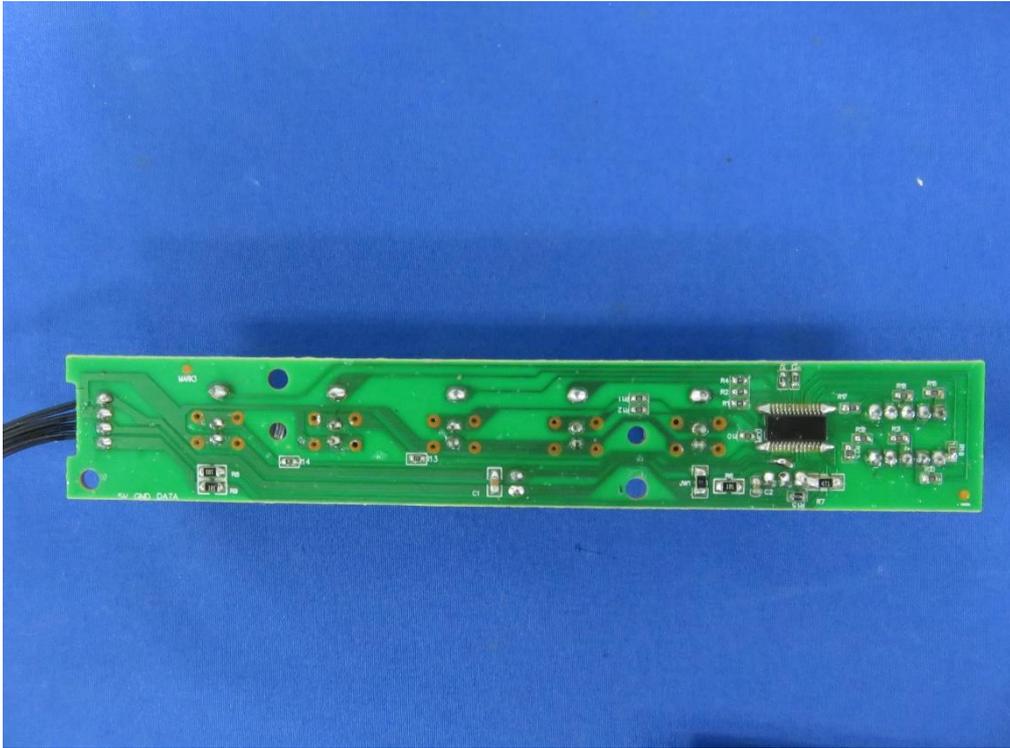
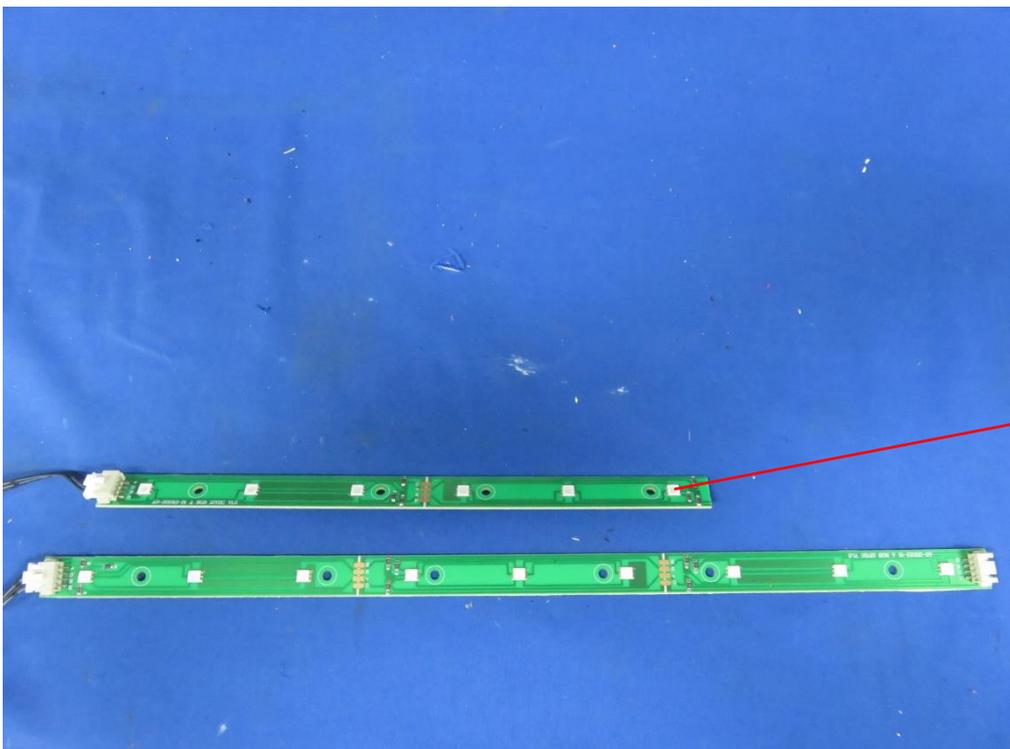


Photo 52 - PCB view of RYJ-36 series, also represent models RYJ-40 series, RYJ-42 series, RYJ-50 series, RYJ-60 series, RYJ-72 series, RYJ-SM50 series, RYJ-SM60 series and RYJ-SM72 series.



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3.0 Product Photographs

Photo 53 - PCB view of RYJ-36 series, also represent models RYJ-40 series, RYJ-42 series, RYJ-50 series, RYJ-60 series, RYJ-72 series, RYJ-SM50 series, RYJ-SM60 series and RYJ-SM72 series.

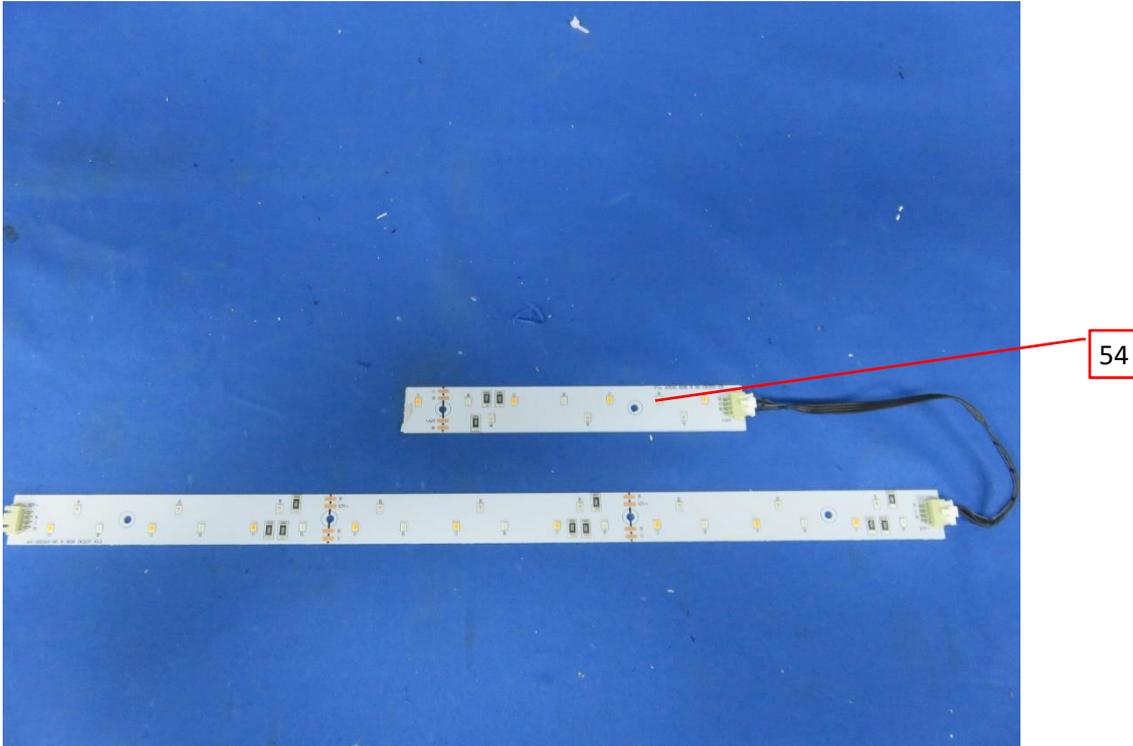
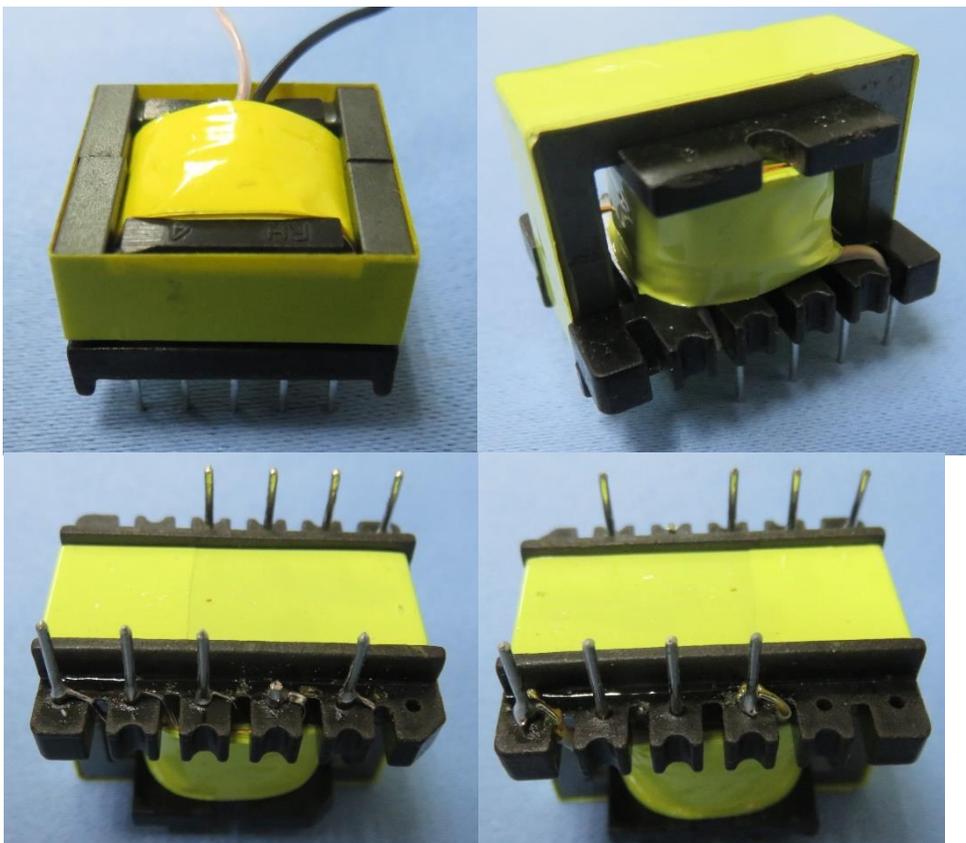
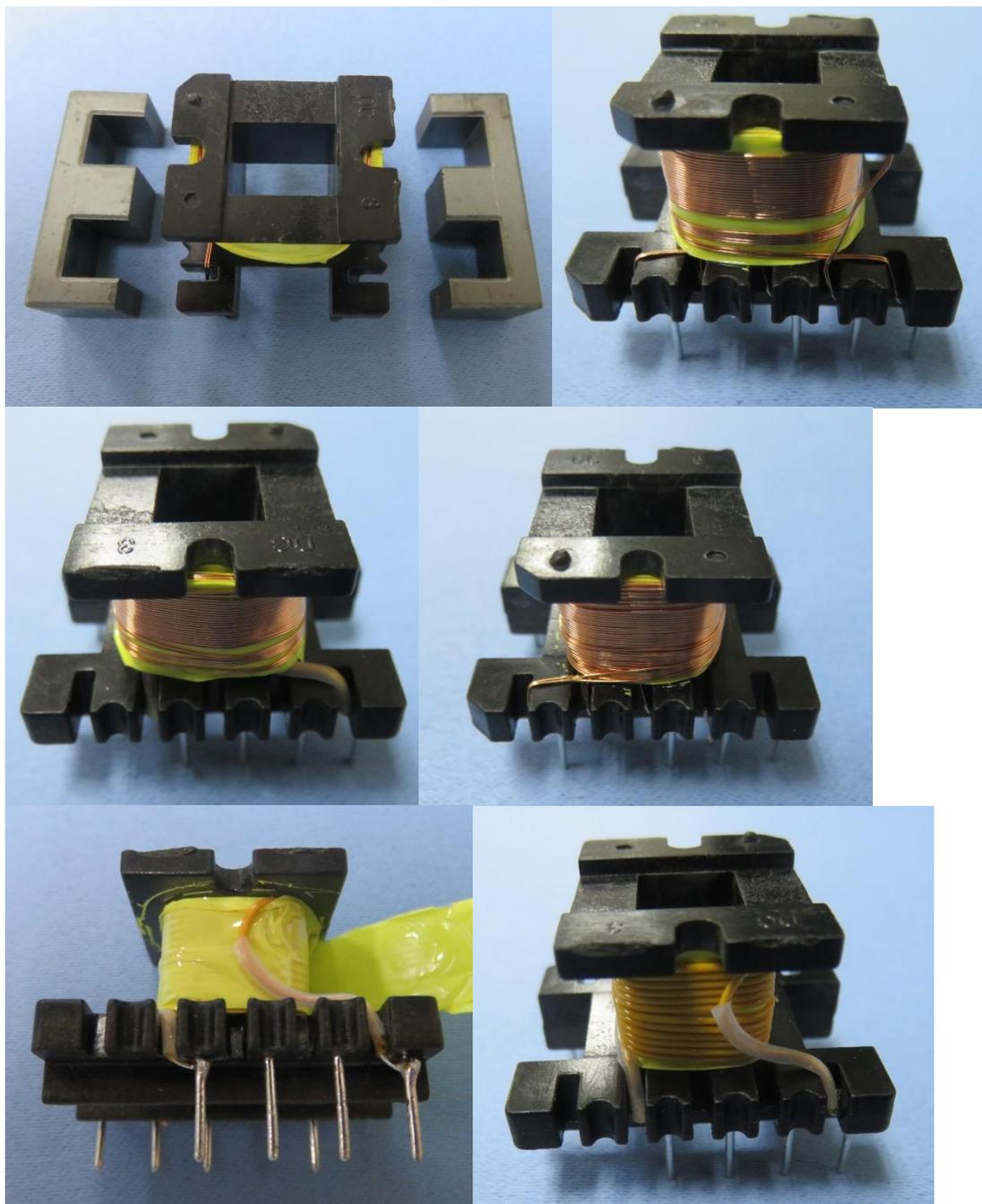


Photo 54 - Transformer view of RYJ-36 series, also represent models RYJ-40 series, RYJ-42 series, RYJ-50 series, RYJ-60 series, RYJ-72 series, RYJ-SM50 series, RYJ-SM60 series and RYJ-SM72 series.



3.0 Product Photographs

Photo 55 - Transformer view of RYJ-36 series, also represent models RYJ-40 series, RYJ-42 series, RYJ-50 series, RYJ-60 series, RYJ-72 series, RYJ-SM50 series, RYJ-SM60 series and RYJ-SM72 series.



4.0 Critical Components						
Photo #	Item no. ¹	Name	Manufacturer/ trademark ²	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
1, 18, 36	1	Metal enclosure	Various	Various	Painted Iron, min. thickness is 0.9mm, provided air intake and air outlet, measured major wide is 50mm in air intake and 35mm in air outlet, secured to rear cover by screws.	NR
1, 18, 35	2	Glass enclosure	Various	Various	Stalinite Glass material, min. thickness is 3.0mm, snapped to the main part.	NR
1, 18	3	Control panel	SABIC INNOVATIVE PLASTICS US L L C	ML7682 (f1)	PC, all color, Rated 5VA, 110°C, min. thickness 2.5mm, snapped to the main enclosure.	cURus
3, 20, 35	4	Power supply cord	Various	SVT	16AWG*3C, VW-1, 105°C, 300V. Terminated in a recognized mold-on grounding type attachment 5-15P plug, rated 125 V, 13 A, Crimped to internal wire with soldering, Length 1.8-2.4 m from where the cord enters the appliance to the face of the attachment plug, a cord bushing provided serviced as strain relief.	cULus or cETLus
3, 20, 38	5	Cord bushing	Heavy Power Co Ltd	6N-4	Suitable for type SVT cord, #16AWG x3C. Snap-fit to the hole of enclosure.	cURus
3	6	Mounting bracket (Not shown)	Various	Various	Painted Iron, min. thickness is 1.5mm, used for fixing the main enclosure in place.	NR
7, 21, 39	7	Decorative part	Hanwha TotalEnergies Petrochemical Co Ltd	FB51(+)	PP material, all color, Rated V-2, 130°C, min. thickness 2.0mm.	cURus
7, 22	8	Closed End Connector	Various	Various	Splicing wire connector, rated min. 300 V, 105°C, suitable for type 1015 size range #22 AWG. For the connections of internal lead wires, Fixed and located at least 12.7mm away from enclosure.	cURus
8, 25, 43	9	Cable tie	Various	Various	Rated type Dsg.11, 120°C. Tighted up internal wire.	cURus
8, 25, 43	10	Internal wire	Various	1332	Rated 300V, 200°C, VW-1, min. 22AWG, for connection heating element.	cURus
			Various	1015	Rated 600V, 105°C, VW-1, min. 24AWG, for connection Synchronous motor.	cURus
			Various	2651	Rated 300V, 105°C, VW-1, min. 26AWG, for connection NTC.	cURus
			Various	2468	Rated 300V, 80°C, VW-1, min. 26AWG, for connecting between PCBs.	cURus

4.0 Critical Components						
Photo #	Item no. ¹	Name	Manufacturer/ trademark ²	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
8, 25, 43	11	NTC	Guangdong Xinshiheng Technology Co. , Ltd.	MF52\$103&3380	Rated TS=105°C, Resistance 10k ohm at 25°C.	cURus
8, 25, 46	12	All PCB	Various	Various	Rated V-0, 130°C, complied with UL796 DSR.	cURus
9	13	Shaded Pole Motor	Guangdong Zhaoli Motor Group Co., Ltd	YJ48/200	Rated 120V, 60Hz, 14.5W.	cURus
9	14	Fan bracket	Various	Various	Galvanized steel, min. thickness is 0.8mm.	NR
9	15	Impeller	Various	Various	Aluminum, min. thickness is 0.65mm, refer to illustration 5 for details.	NR
10	16	Mica suppot	Various	Various	Mica sheet, Rated V-0, 200°C, min. thickness 0.8mm, Insulation between Heating Wire and Heater Bracket.	UR
10	17	Heating wire	Zhongshan Senying Electric Appliance Co., LTD	H305B-1	φ0.7mm, 10±0.5Ω, refer to illustration 6 for details.	NR
10	18	Quick connector	Various	Various	Quick connect connector for brass tabs, suitable for wiring range #22 AWG.	cURus
10	19	Sleeving for quick connector	Various	Various	Not Heat Shrinkable Silicone Dip Molded Insulators for quick-connect terminals, rated 600 V, 150°C.	cURus
10	20	Temperature limiter	DONGGUAN SHUNHE ELECTRONIC CO LTD	H20X	Manually Reset Safety Control, Rated 250VAC, 60Hz, 16A, 115°C. 5000 endur. Cycles, secured to mica support by rivets.	cURus
10	21	Heat Shrinkable Tube in Internal wire (Not shown)	Various	Various	Rated 600V, 125°C, VW-1.	cURus
11	22	Synchronous motor	ZhaoQing LongTou Electric Technology Co Ltd	TY-50B	Rated 110-120V, 50/60Hz, 4W.	cURus
12	23	LED 1	Various	Various	Vf: 3.1-3.2V, If: 300mA, 3.5x2.8x0.8mm.	NR
13	24	Switching Power Supply 1	Foshan Ondi Electronic Technology Co., LTD	AD-DZBL12W	Rated Input 120VAC, 60Hz, output 12VDC, 1A. Consisted of item 25~32, for models RYJ-18 series, RYJ-23 series and RYJ-26 series.	NR
13	25	Current Fuse 1	ZHONGSHAN CIYT KAIXU ELECTRICAL CO LTD	EET	F1. Rated 250VAC, T1A.	cURus

4.0 Critical Components						
Photo #	Item no. ¹	Name	Manufacturer/ trademark ²	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
13	26	Varistor 1	HONGZHI ENTERPRISES LTD	HEL07D471*#F	MOV1. Rated MOCV=300V, MLV=1080V, In=1.0kA. ambient temp: -40-130°C.	cURus
			Various	Various	MOV1. Rated min. MOCV=300V, max. MLV=1.5kV, min. In=750A. Min. ambient temp: 105°C.	cURus
13	27	X Capacitor 1	Various	Various	CX1. Min. 275VAC, 0.1uF, 110°C, X2 type.	cURus
13	28	Y Capacitor 1	Various	Various	CY1. min. 250VAC, max.2200pF, 125°C, Y1 or Y2 type.	cURus
13	29	Transformer 1	Zhongshan Transformer Electronic Technology CO.,LTD.	AD-EPC17-13620-1.2MH	T1, Class A, Input: 120V, 60Hz, Output 12VDC, 1A, Consisted of item 29a~29f, refer to illustration 4 for details.	NR
13	29a	Bobbin used in T1 (Not shown)	CHANG CHUN PLASTICS CO LTD	T375J(G5)(G6)	PMC, Rated V-0, HWI=1, HAI=0, CTI=3, 150°C, min. thickness 0.75mm.	UR
13	29b	Magnet Wire used in T1 (Not shown)	Various	Various	Polyurethane coated copper wire, ANSI type MW 79-C, rated min. 155°C.	UR
13	29c	Triple Insulation wire in T1 (Not shown)	DONGGUAN HILDE ELECTRONICS CO LTD	THW-F	Rated 155°C.	UR
13	29d	Insulation Tape used in T1 (Not shown)	SHEN ZHEN XINHUAHUI ELECTRONIC MATERIALS CO LTD	HMT803	Rated 130°C, Flame Retardant.	UR
13	29e	Tube used in T1 (Not shown)	DONGGUAN CITY CHANGJIE METALS & PLASTIC PRODUCTS CO LTD	CJ-TT-T	Rated 300V, 200°C, VW-1.	UR
13	29f	Varnish in T1 (Not shown)	ZHUHAI CHANGXIAN NEW MATERIALS TECHNOLOGY CO LTD	E962	Rated 130°C.	UR
13	30	Relay 1	NINGBO SONGLE RELAY CO LTD	SRU-12VDC-SL A	K1. Rated 120VAC, 15A; 12VDC, 10000 operation cycles.	cURus
13	31	Relay 2	XIAMEN HONGFA ELECTROACOUSTIC CO LTD	JQC-3FF	K2, K3. Rated 125VAC, 15A;12VDC, 10000 operation cycles.	cURus
13	32	Wire connector 1	Various	Various	V-0, Rated 6A, 250V, 85°C.	cURus
28	33	LED 2	Various	Various	Vf: 2.1V, If: 300mA, 14x7.2x5.4mm.	NR
29	34	Switching Power Supply 2	Foshan Ondi Electronic Technology Co., LTD	AD-DZBL24W	Rated Input 120VAC, 60Hz, output 12VDC, 2A. Consisted of item 35~41, for models RYJ-28 series, RYJ-30 series and RYJ-32 series.	NR

4.0 Critical Components						
Photo #	Item no. ¹	Name	Manufacturer/ trademark ²	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
29	35	Current Fuse 2	ZHONGSHAN CIYT KAIXU ELECTRICAL CO LTD	EET	F1. Rated 250VAC, T1A.	cURus
29	36	Varistor 2	HONGZHI ENTERPRISES LTD	HEL07D471*#F	MOV1. Rated MOCV=300V, MLV=1080V, In=1.0kA. ambient temp: -40-130°C.	cURus
			Various	Various	MOV1. Rated min. MOCV=300V, max. MLV=1.5kV, min. In=750A. Min. ambient temp: 105°C.	cURus
29	37	X Capacitor 2	Various	Various	CX1. Min. 275VAC, 0.1uF, 110°C, X2 type.	cURus
29	38	Y Capacitor 2	Various	Various	CY1. min. 250VAC, max.2200pF, 125°C, Y1 or Y2 type.	cURus
29	39	Transformer 2	Zhongshan Transformer Electronic Technology CO.,LTD.	AD-PQ2014-5707-750uH	T1, Class A, Input: 120V, 60Hz, Output 12VDC, 2A, Consisted of item 39a~39f, refer to illustration 4a for details.	NR
29	39a	Bobbin used in T1 (Not shown)	CHANG CHUN PLASTICS CO LTD	T375J(G5)(G6)	PMC, Rated V-0, HWI=1, HAI=0, CTI=3, 150°C, min. thickness 0.75mm.	UR
29	39b	Magnet Wire used in T1 (Not shown)	Various	Various	Polyurethane coated copper wire, ANSI type MW 79-C, rated min. 155°C.	UR
29	39c	Triple Insulation wire in T1 (Not shown)	DONGGUAN HILDE ELECTRONICS CO LTD	THW-F	Rated 155°C.	UR
29	39d	Insulation Tape used in T1 (Not shown)	SHEN ZHEN XINHUAHUI ELECTRONIC MATERIALS CO LTD	HMT803	Rated 130°C, Flame Retardant.	UR
29	39e	Tube used in T1 (Not shown)	DONGGUAN CITY CHANGJIE METALS & PLASTIC PRODUCTS CO	CJ-TT-T	Rated 300V, 200°C, VW-1.	UR
29	39f	Varnish in T1 (Not shown)	ZHUHAI CHANGXIAN NEW MATERIALS TECHNOLOGY CO LTD	E962	Rated 130°C.	UR
29	40	Relay 3	XIAMEN HONGFA ELECTROACOUSTIC CO LTD	JQC-3FF	K1, K2, K3, K4. Rated 125VAC, 15A; 12VDC, 10000 operation cycles.	cURus
29	41	Wire connector 2	Various	Various	V-0, Rated 6A, 250V, 85°C.	cURus

4.0 Critical Components						
Photo #	Item no. ¹	Name	Manufacturer/ trademark ²	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
47	42	Plastic enclosure	SABIC INNOVATIVE PLASTICS US LLC	ML7682 (f1)	PC, all color, Rated 5VA, HWI:0, HAI:1, CTI:3, 110°C, min. thickness 2.5mm, one side secured with metal enclosure by screws, another side supported the PCB board by screws. for models RYJ-36 series, RYJ-40 series, RYJ-42 series, RYJ-50 series, RYJ-60 series, RYJ-72 series, RYJ-SM50 series, RYJ-SM60 series and RYJ-SM72 series.	cURus
47	43	Switching Power Supply 3	Foshan Ondi Electronic Technology Co., LTD	AD-3RGB	Rated Input 120VAC, 60Hz, output 12VDC, 5A. Consisted of item 44~52, for models RYJ-36 series, RYJ-40 series, RYJ-42 series, RYJ-50 series, RYJ-60 series, RYJ-72 series, RYJ-SM50 series, RYJ-SM60 series and RYJ-SM72 series.	NR
48	44	Current Fuse 3	ZHONGSHAN CIYT KAIXU ELECTRICAL CO LTD	EET	F4. Rated 250VAC, T3.15A.	cURus
48	45	Varistor 3	CERGLASS MFG INC	10D471K	RV1. Rated MOCV=300V, MLV=1070V, In=1.5kA. ambient temp: -40-125°C.	cURus
			Various	Various	MOV1. Rated min. MOCV=300V, max. MLV=1.5kV, min. In=750A. Min. ambient temp: 105°C.	cURus
48	46	X Capacitor 3	Various	Various	CX1. Min. 275VAC, 0.1uF, 110°C, X2 type.	cURus
48	47	Y Capacitor 3	Various	Various	CY1, CY2. min. 250VAC, max.2200pF, 125°C, Y1 or Y2 type.	cURus
48	48	Optocoupler	ZHUHAI DAPENG ELECTRONICS TECHNOLOGY CO LTD	DP-817*	U1. Double protection optical isolators, providing 5000 vac isolation.	cURus
			Bright Led Electronics Corp.	BPC-817 C	U1. Double protection optical isolators, providing 5000 vac isolation.	cURus
			CRM ICBG (Wuxi) Co., Ltd.	PC817C	U1. Double protection optical isolators, providing 5000 vac isolation.	cURus
			Shenzhen Orient Components Co. Ltd	ORPC817MC	U1. Double protection optical isolators, providing 5000 vac isolation.	cURus
48	49	Inductance	Zhongshan Transformer Electronic Technology CO.,LTD.	UU10.5-030-40mH	L1. Class A, Min. 40uH, Consisted of item 49a~49c.	NR
48	49a	Bobbin in L1 (Not shown)	CHANG CHUN PLASTICS CO LTD	T310	PMC, Rated V-0, HWI=1, HAI=0, CTI=3, 150°C, min. thickness 1.0mm.	UR

4.0 Critical Components						
Photo #	Item no. ¹	Name	Manufacturer/ trademark ²	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
48	49b	Magnet Wire in L1 (Not shown)	Various	Various	Polyurethane coated copper wire, ANSI type MW 79-C, rated min. 155°C.	UR
48	49c	Insulation Tape used in L1 (Not shown)	SHEN ZHEN XINHUAHUI ELECTRONIC MATERIALS CO LTD	HMT803	Rated 130°C, Flame Retardant.	UR
48	50	Transformer 3	Zhongshan Transformer Electronic Technology CO.,LTD.	AD-EE28-8613-1.5mH	T1, Class A, Input: 120V, 60Hz, Output 12VDC, 5A, Consisted of item 50a~50f, refer to illustration 4b for details.	NR
48	50a	Bobbin used in T1 (Not shown)	CHANG CHUN PLASTICS CO LTD	T375J(G5)(G6)	PMC, Rated V-0, HWI=1, HAI=0, CTI=3, 150°C, min. thickness 0.75mm.	UR
48	50b	Magnet Wire used in T1 (Not shown)	Various	Various	Polyurethane coated copper wire, ANSI type MW 79-C, rated min. 155°C.	UR
48	50c	Triple Insulation wire in T1 (Not shown)	DONGGUAN HILDE ELECTRONICS CO LTD	THW-F	Rated 155°C.	UR
48	50d	Insulation Tape used in T1 (Not shown)	SHEN ZHEN XINHUAHUI ELECTRONIC MATERIALS CO LTD	HMT803	Rated 130°C, Flame Retardant.	UR
48	50e	Tube used in T1 (Not shown)	DONGGUAN CITY CHANGJIE METALS & PLASTIC PRODUCTS CO	CJ-TT-T	Rated 300V, 200°C, VW-1.	UR
48	50f	Varnish in T1 (Not shown)	ZHUHAI CHANGXIAN NEW MATERIALS TECHNOLOGY CO LTD	E962	Rated 130°C.	UR
48	51	Relay 4	XIAMEN HONGFA ELECTROACOUSTIC CO LTD	JQC-3FF	RLY1, RLY2, RLY3, RLY4. Rated 125VAC, 15A; 12VDC, 10000 operation cycles.	cURus
48	52	Wire connector 3	Various	Various	V-0, Rated 6A, 250V, 85°C.	cURus
52	53	LED 3	Various	Various	Vf: 1.9-2.1V for red, Vf: 3.0-3.2V for green, Vf: 3.0-3.2V for blue, If: 60mA, 5.0x5.0x1.5mm.	NR
53	54	LED 4	Various	Various	Vf: 3.1-3.2V, If: 60mA, 3.5x2.8x0.8mm.	NR
1	55	Marking Label (Not shown)	DONGGUAN QINGXI PENGFENG PACKAGE MATERIAL SALE DEPARTMENT	YF-01	Suitable for Alkyd paint material surface, at least 125°C. Adhered to the main part of appliance by labeling system.	UR
			Various	Various		UR

4.0 Critical Components						
Photo #	Item no. ¹	Name	Manufacturer/ trademark ²	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
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, 1.6 mm minimum spacing are maintained through air and over surfaces of the points between live parts of opposite polarity and between live parts and non-current-carrying conductive parts other than the enclosure, 6.4 mm minimum spacing are maintained through air and 12.7 mm over surfaces of the points between live parts and a conductive enclosure.
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 or non-metallic> 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. Polarized Connection - This product is provided with a polarized power supply connection. All single pole switches and fuses are connected only to the ungrounded supply circuit conductor.
7. 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.
8. Schematics - Refer to Illustration 3, 3a, 3b, 3c and 3d for schematics requiring verification during Field Representative Inspection Audits.
9. Markings - The product is marked on a labeling system as described in item No. 55 of section 4.0 as follows:
 - applicant's name
 - model number
 - date of manufacture
 - electrical ratings (volts, power & frequency)
10. Cautionary Markings - Refer to Illustration 1 for details.
11. Installation, Operating and Safety Instructions - Instructions for installation and use of this product are provided by the manufacturer as required by the standard.
 - Refer to Illustration 2 through 2j for details.
12. Transformer - Supplier records must be provided that indicate the received shipment of transformers (Section 4.0 item 29, 39 and 50) was constructed as indicated in Illustrations 4, 4a and 4b. These records must be available at the factory for inspection on every received shipment.
13. Carton Information - At least the following information pertaining to the product features and its use conditions shall be included on the external surface of the packaging of the product. All information shall be grouped together and appear on one side of the packaging.
 - Refer to Illustration 1a for details.

7.0 Illustrations

Illustration 1 - Cautionary Marking

WARNING: Risk of Fire - keep combustible material such as furniture, papers, clothes, and curtains at least 3 feet (0.9 m) from the front of the heater and away from the sides and rear.

ATTENTION: Risque d'incendie - conservez les matériaux combustibles comme les meubles, les papiers, les vêtements et les rideaux à au moins 3 pieds (0,9 m) de l'avant du foyer et loin des côtés et de l'arrière.

For a wall-mounted heater: Do not install less than 6 feet (or 1.8 meters) from the floor. Ne pas installer à moins de 6 pieds (ou 1,8 mètres) du sol.

Remark:

1. The marking shall be marked on a surface that is visible from the front of the heater. The readily visible means visible from a point 5 feet (1.5 m) above the floor and between 1 and 4 feet (0.3 and 1.2 m) away from the front surface of the heater when the heater is placed on the floor. The word "WARNING", "Risk of Fire - keep combustible material such as furniture, papers, clothes, and curtains at least 3 feet (0.9 m) from the front of the heater and away from the sides and rear." and equivalent wording, "ATTENTION", "Risque d'incendie - conservez les matériaux combustibles comme les meubles, les papiers, les vêtements et les rideaux à au moins 3 pieds (0,9 m) de l'avant du foyer et loin des côtés et de l'arrière." and equivalent wording shall be in letters not less than 1/8 inch (3.2 mm) in height and shall be of a permanent type and in a color that contrasts with that of the enclosure or background.
2. The heater shall be plainly and legibly marked, in a location where the marking will be readily visible after the heater has been installed as intended, with a warning that it should not be operated unless the guard is in place.

7.0 Illustrations

Illustration 1a - Carton Information

1. 120VAC, 60Hz, 1500W
2. Embedded- or wall-mounted Heater.
3. This heater is hot when in use. To avoid burns, do not let bare skin touch hot surfaces. If provided, use handles when moving this heater. Keep combustible materials, such as furniture, pillows, bedding, papers, clothes, and curtains at least 3 feet (0.9m) from the front of the heater and keep them away from the sides and rear.
4. Do not use outdoors.

1. 120VAC, 60Hz, 1500W
2. Chauffage encastré ou mural.
3. Ce radiateur est chaud lorsqu'il est utilisé. Pour éviter les brûlures, ne laissez pas la peau nue toucher les surfaces chaudes. Le cas échéant, utilisez les poignées pour déplacer cet appareil de chauffage. Gardez les matériaux combustibles, tels que les meubles, les oreillers, la literie, les papiers, les vêtements et les rideaux à au moins 3 pieds (0,9 m) de l'avant du radiateur et éloignez-les des côtés et de l'arrière.
4. Ne pas utiliser à l'extérieur.

Remark:

The above information shall be included on the external surface of the packaging of a heater. All information shall be grouped together and appear on one side of the packaging. The upper case letters shall be not less than 1/12 inch (2.1 mm) high and the lower case letters shall not be less than 1/16 inch (1.6 mm) high.

7.0 Illustrations

Illustration 2 - User manual

IMPORTANT INSTRUCTIONS

When using electrical appliances, basic precautions should always be followed to reduce the risk of fire, electrical shock, and/or injury including the following:

1. Read all instructions before using this heater.
2. This heater is hot when in use. To avoid burns, do not let bare skin touch hot surfaces. Keep combustible materials, such as furniture, pillows, bedding, papers, clothes, etc. and curtains at least 3 feet (0.9 m) from the front of the heater and keep them away from the sides and rear.
DANGER: High temperature may be generated under certain abnormal conditions. Do not partially or fully cover or obstruct the front of the heater.
WARNING: In order to avoid overheating, do not cover the heater. It cannot be used in a closet.
3. CAUTION: The appliance should not be used by children or persons with reduced physical, sensory or mental capabilities.
4. Children should be advised not to play with the appliance.
5. Always unplug this appliance when not in use.
6. Do not operate any heater with a damaged cord or plug or after the appliance malfunctions, or if it has been dropped or damaged in any manner.
7. 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.
8. Any repairs to this fireplace should be carried out by a qualified service person.
9. Under no circumstances should this fireplace be modified. Parts having to be removed for servicing must be replaced prior to operating this fireplace again.
10. Do not use outdoors.
11. This heater is not intended for use in bathrooms, laundry areas and similar indoor locations. Never locate this appliance where it may fall into a bathtub or other water container.
12. Do not run cord under carpeting. Do not cover cord with throw rugs, runners or the like. Arrange cord away from traffic areas and where it will not be tripped over.
13. To disconnect this appliance, turn controls to the off position, then remove plug from outlet.
14. Connect to properly grounded outlet only.
15. This appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the current CSA C22.1 Canadian Electrical Code or for USA installations, follow local codes and the National Electrical Code, ANSI/NFPA NO.70.
16. There is a protective thermostat limiter inside the heater. When the inner temperature overheats, the thermostat limiter will shut off the power supply to avoid the risk of fire damage to the appliance.
17. The heaters must not be located immediately below a socket-outlet.
18. Do not insert or allow foreign objects to enter any ventilation or exhaust opening as this may cause an electric shock or fire, or damage the appliance.
19. To prevent a possible fire, do not block air intake or exhaust in any manner. Do not use on soft surfaces, like beds, where openings may become blocked.
20. To reduce the risk of fire, this appliance has hot and arcing or sparking parts inside. Do not use where gasoline, paint, or flammable liquids are used or stored. This fireplace should not be used as a drying rack for clothing. Christmas stockings or decorations should not be hung in area of it.
21. Use this appliance only as described in the manual. Any other use not recommended by the manufacturer may cause fire, electric shock or injury to persons.
22. Always plug heaters directly into a wall outlet/receptacle. Never use with an extension cord or relocatable power tap (outlet/power strip).

7.0 Illustrations

Illustration 2a - User manual

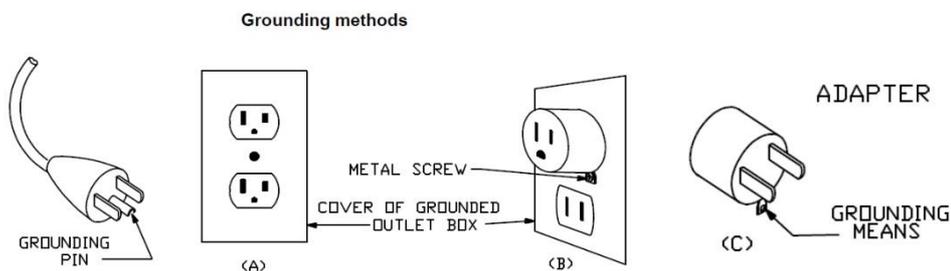
OPERATING INSTRUCTIONS

1. The heater must be properly installed before it is used.
2. The heater only needs surface cleaning during use. Any other servicing should be performed by an authorized service representative.
3. The heater incorporated with a voltage-maintain overheat protector, it will operate in such case as air outlet covered or any other abnormal situation. If it operates, just remove the covering objects then unplug the power supply cord. Wait until the heater cooling down then the protector will reset. You can again plug in and press the power-on button to use the Heater now. After such operation, if it still not works, please contact the authorized service representative.

4. If not use for long time, uninstall the Heater from wall, fold the power supply cord with tie, then put the heater and mounting bracket with screws into a suitable package. Place it in a dry room but without sunshine. Keep it out of reach by children.

GROUNDING INSTRUCTIONS

This heater is for use on 120 volts. The cord has a plug as shown at below. An adapter as shown at C is available for connecting three-blade grounding-type plugs to two-slot receptacles. The green grounding lug extending from the adapter must be connected to a permanent ground such as a properly grounded outlet box. The adapter should not be used if a three-slot grounded receptacle is available.



7.0 Illustrations

Illustration 2b - User manual

There are two ways to operate the electric fireplace:

*** Keyboard operation of electric fireplace.**

*** Remote control operation.**

The keypad is on the upper right of the electric fireplace. (See Figure 1)

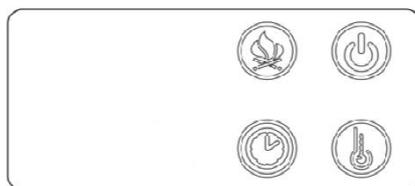
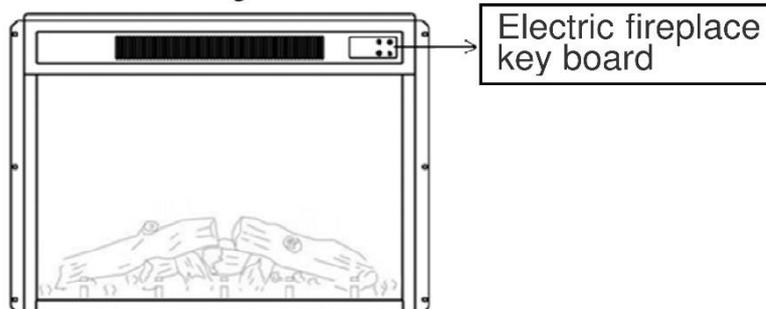
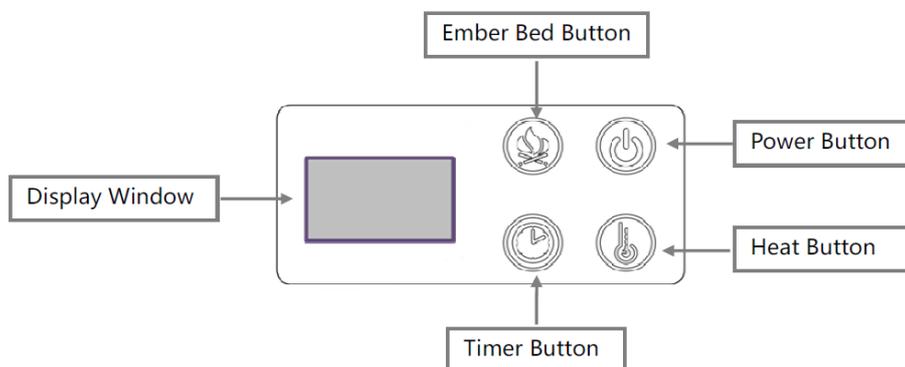


Figure 1



***Keyboard operation of the electric fireplace.**



7.0 Illustrations

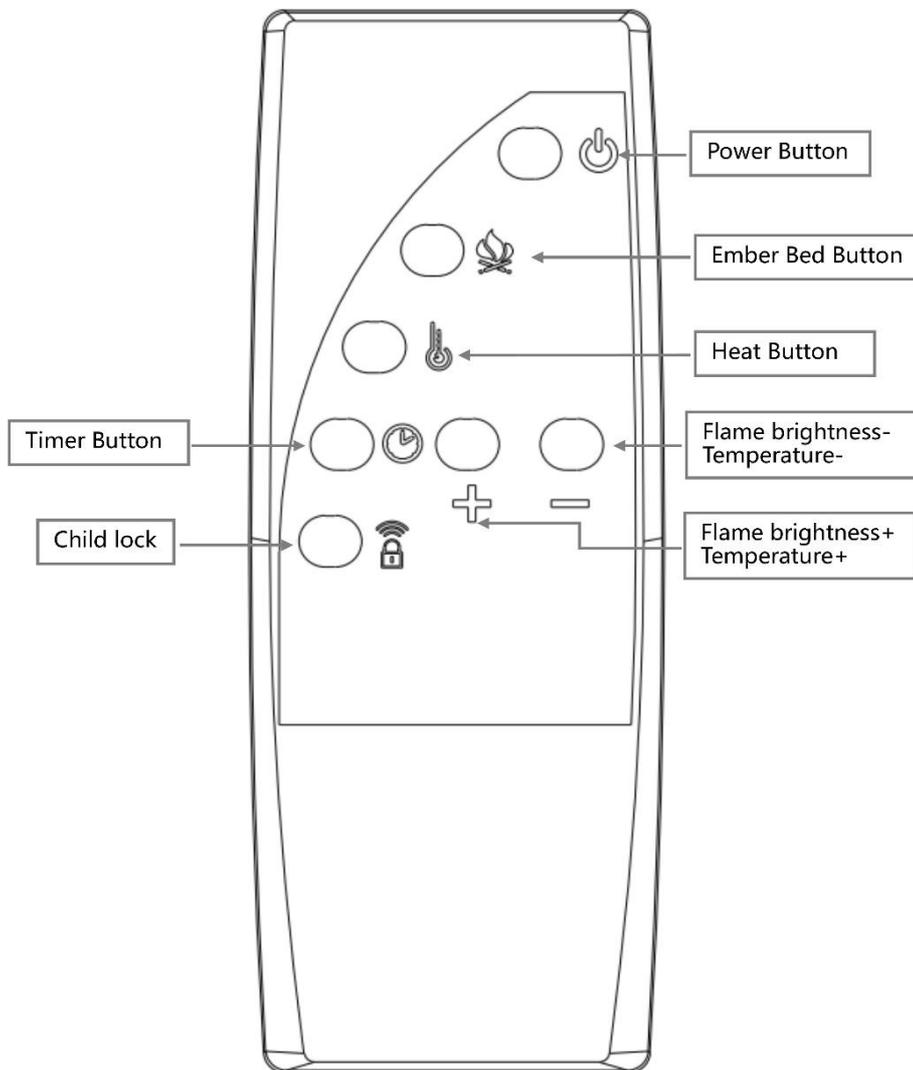
Illustration 2c - User manual

BUTTON	Operation	Function
 Power	When the Power is turned on, the display shows the ambient temperature and the flame is turned on.	
 Flame	Press the flame key to open the flame mode and display R/H/P.	When R is displayed, the light is adjusted by the remote control +- symbol; when H is displayed, the flame animation is frozen; when P is displayed, the flame brightness breathing mode is displayed.
 Heater	Press and hold for 3 seconds to turn the heating on and off; Every time the heating function is turned on, the heating will be forced to heat for 20 seconds (testing and demonstration of heating function).	<ul style="list-style-type: none"> • Press the heating key briefly to set the temperature, and do not operate for 15 seconds to lock the current temperature setting value; • The ambient temperature will be displayed after 15 seconds without any operation and the digital tube information screen will be displayed after 5 seconds (27°C/80 °F by default when heating is turned on); • When NTC senses that the ambient temperature is \geq the set temperature+2, the heater stops working (the fan is turned off with a delay of 3 seconds); • When NTC senses that the ambient temperature is lower than the set temperature, the heater will work again; • When the heating is turned off, the fan is delayed for 3 seconds; • The ambient temperature will be displayed after 15 seconds without any operation, and the digital tube information screen will be displayed after 5 seconds; • The default starting time is Fahrenheit (90°F /85°F/80°F/75°F/70°F/65°F/60°F), and it can be converted into Celsius (32°C/29°C/27°C/24°C /21°C/18°C/16°C) by pressing for 5 seconds.
 Timer	Long press the timer to turn it on or off the timer function, the default is 0.5H (timer can reach 8H).	Press timer to select time 0.5H, 1H, 2H, 3H, 4H, 5H, 6H, 7H, 8H; After 15 seconds of no operation, the setting will be automatically locked, the timer will be displayed, and the screen will be off after 5 seconds; When the timer ends, it will automatically shut down
 Display Window	Display the numbers flame, carbon bed, heating and timing	

7.0 Illustrations

Illustration 2d - User manual

Remote control operation



7.0 Illustrations

Illustration 2e - User manual

MAINTENANCE

Clean the metal trim using a water-dampened soft, clean cloth. DO NOT use brass polish or household cleaners as these products will damage the metal trim.

The motors used on the fan and the flame generator assembly are pre-lubricated for extended bearing life and require no further lubrication. However, periodic cleaning/vacuuming of the fan/heater and air intake/output vents is recommended. The heater should be cleaned and inspected regularly, depending on conditions, and at least at yearly intervals.

WARNING: Any electrical repairs of this unit should be carried out by a licensed electrician in accordance with national and local codes.

WARNING: Disconnect power by unplugging the power and allowing the heater to cool before attempting any maintenance or cleaning to reduce the risk of fire, electric shock, or injury.

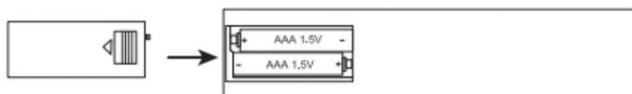
NOTE: When the heater is not in use, the heater should be stored in a dry location, away from possible damage. The power cord should be stored properly to avoid contact with hot or sharp objects.

REMOTE CONTROL

The battery compartment is located on the back end of the remote control.

1. Press and slide the battery cover open.
2. Insert two 1.5V (AAA) batteries (included) ensuring they are installed correctly with regard to the polarities (+ and -) marked on the inside of the battery compartment.
3. Replace the battery cover.

NOTE: The battery should be removed if the product is to be left unused for a long time.



When replacing the batteries, replace both batteries at the same time with new batteries of the correct type.

- Do not mix old and new batteries.
- Do not mix alkaline, standard (Carbon-Zinc), or rechargeable (Nicad, Nimh, etc) batteries.

7.0 Illustrations

Illustration 2f - User manual

RYJ-23A Installation Information

1. Inventory



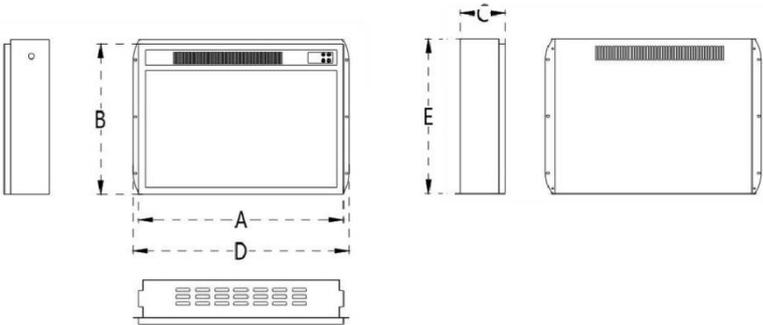
Machine body



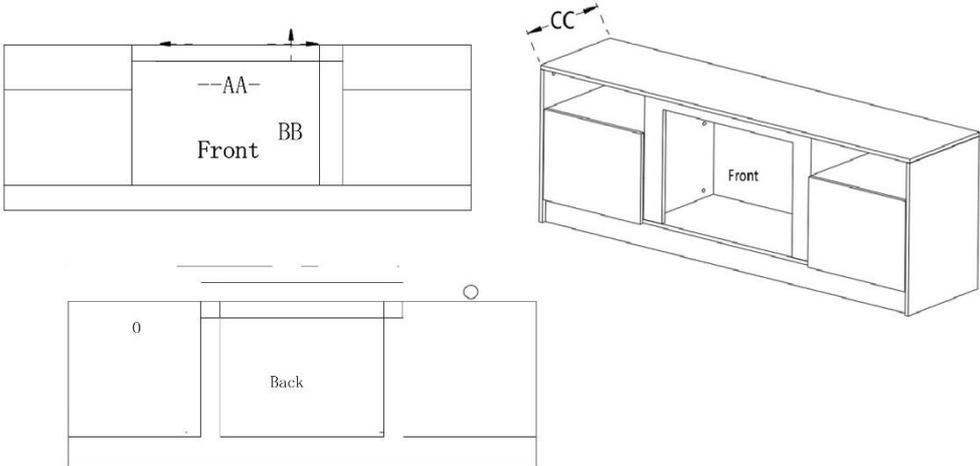
4*10mm
6pcs

2. 尺寸说明

① Fireplace size



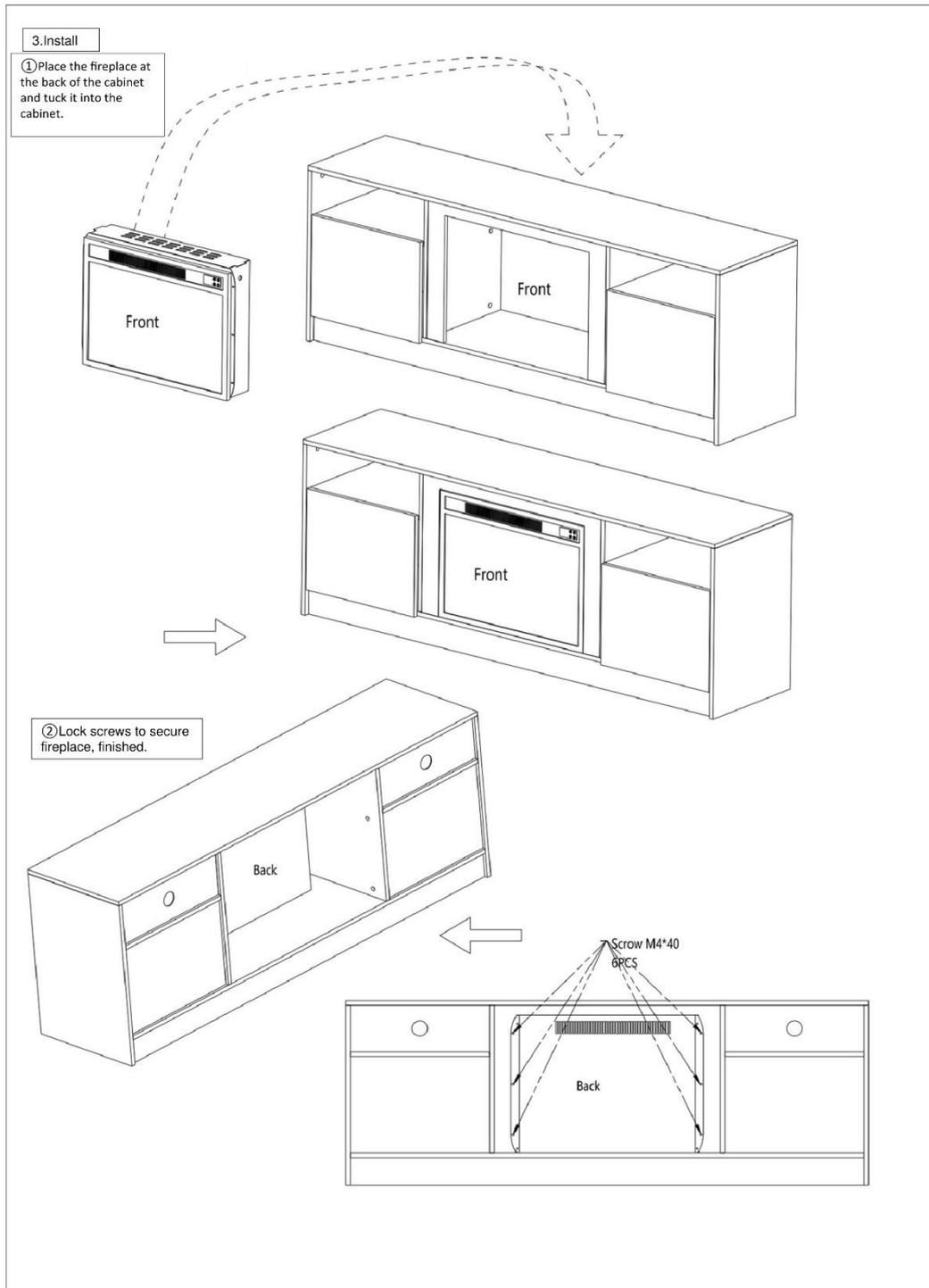
② Dimensions of cabinet openings



Model Number	A	B	C	D	E	AA	BB	CC	DD	EE
RYJ-23A	582	436	128	614	450	585	439	>168	>634	>470

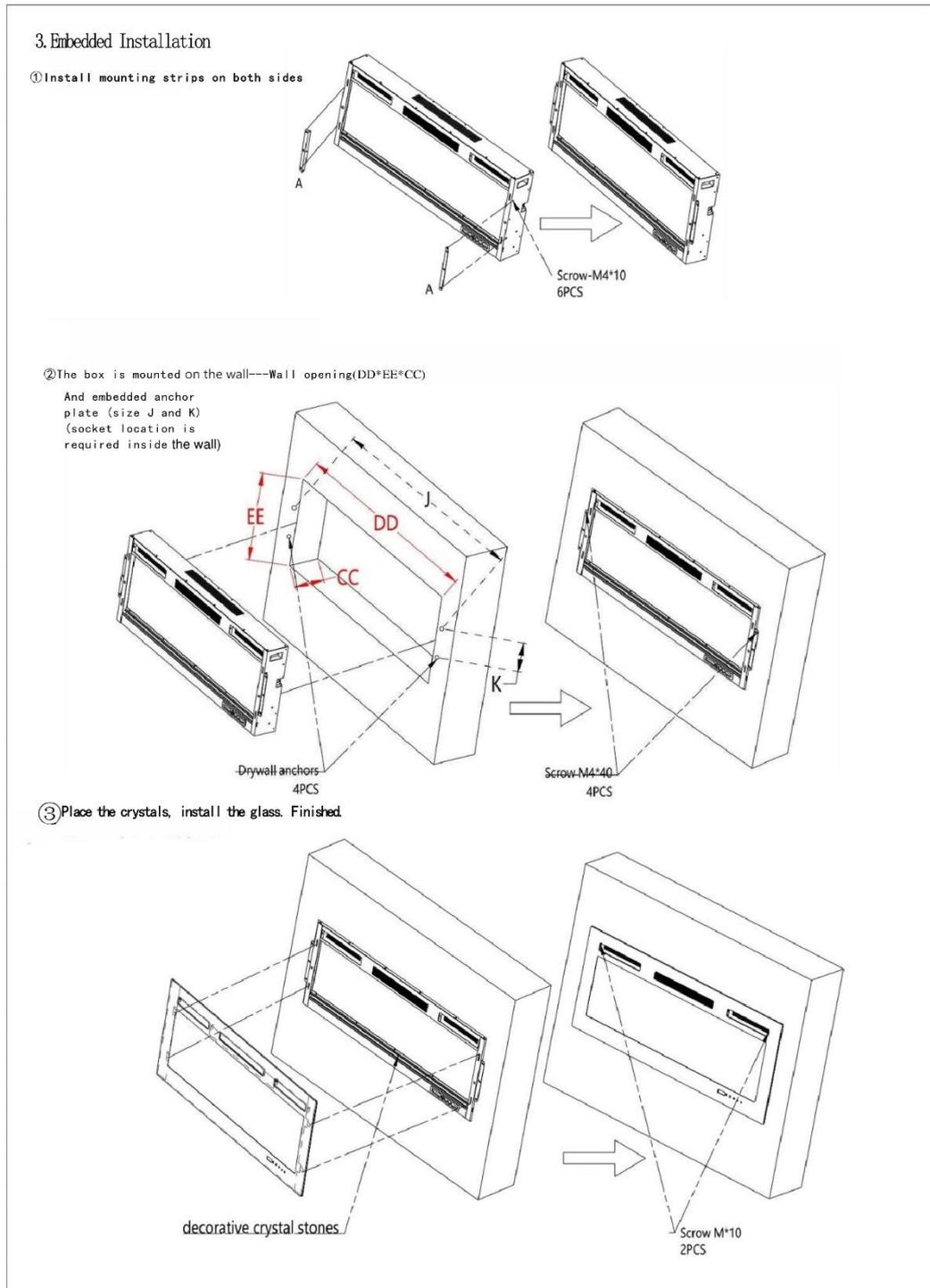
7.0 Illustrations

Illustration 2g - User manual



7.0 Illustrations

Illustration 2h - User manual

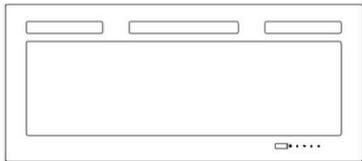


7.0 Illustrations

Illustration 2i - User manual

Installation Instructions

1. Inventory



Glass panel



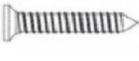
Machine body



A-Metal Bracket
2PCS



B-Embedded plat
4PCSe



C-4.2*40mm
6pcs



D-Drywall
anchors 6pcs

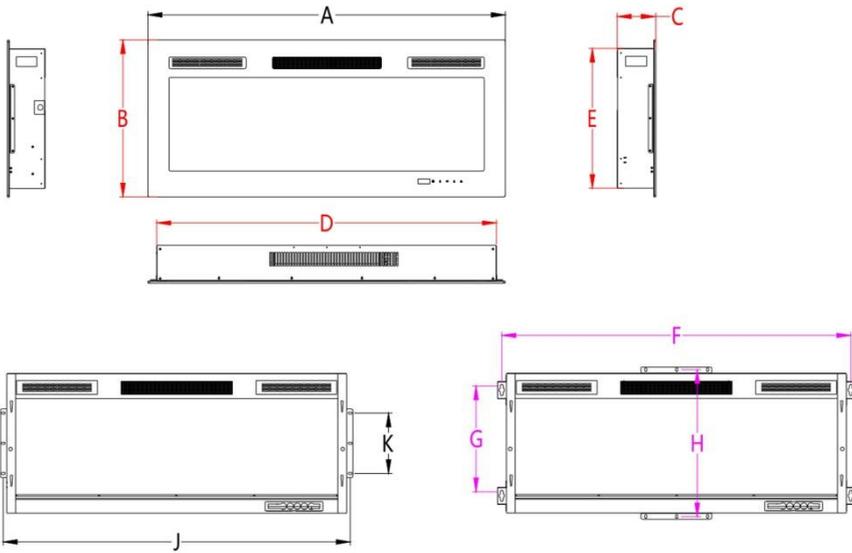


E-4*10mm
22pcs



A bag of decorative
crystal stones

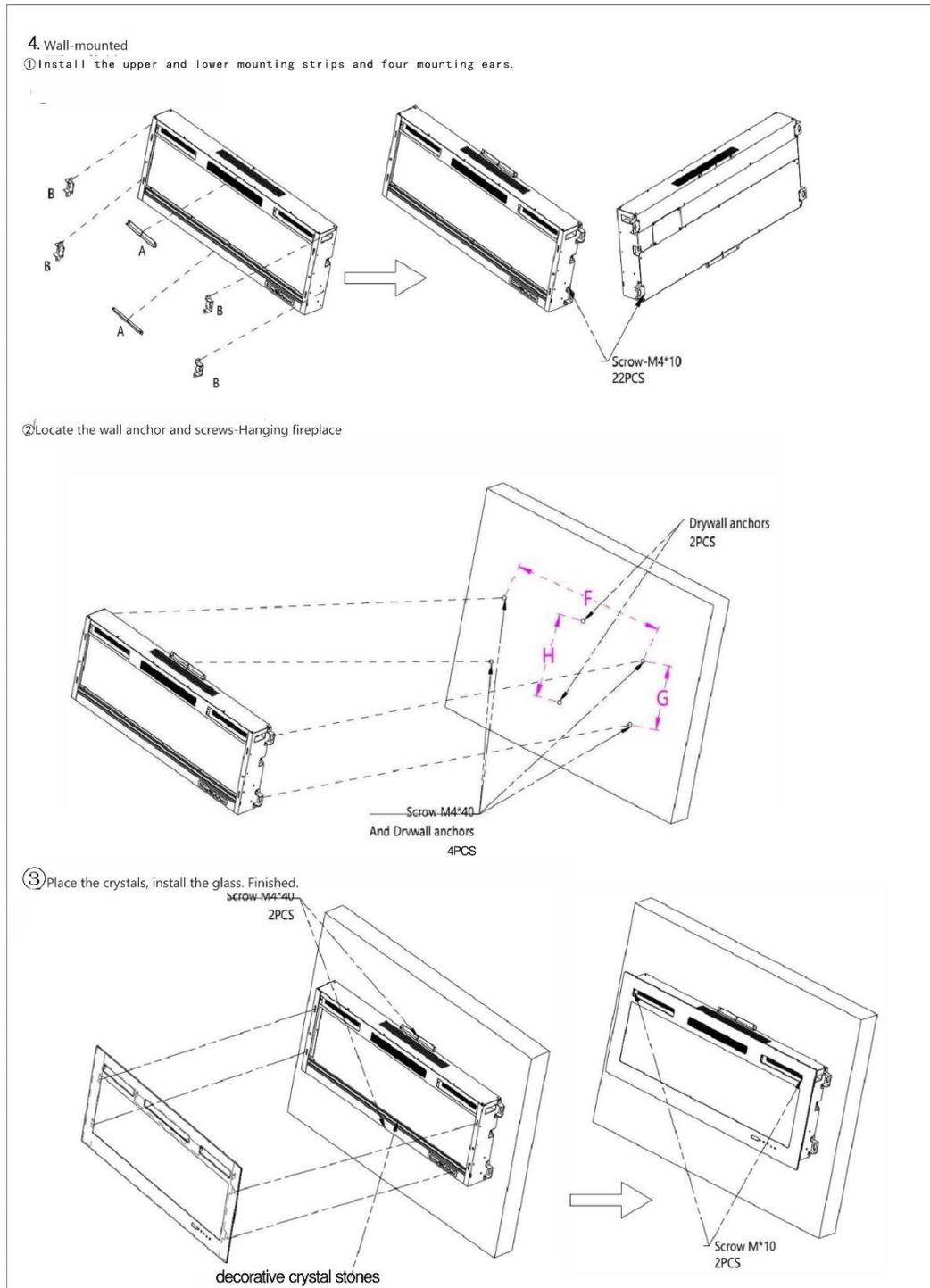
2. Sizing Specification



Model Number	A	B	C	D	E	F	G	H	DD	EE	CC	J	K
RYJ-30A	750	345	120	712	307	738	208	327	722	317	160	732	176

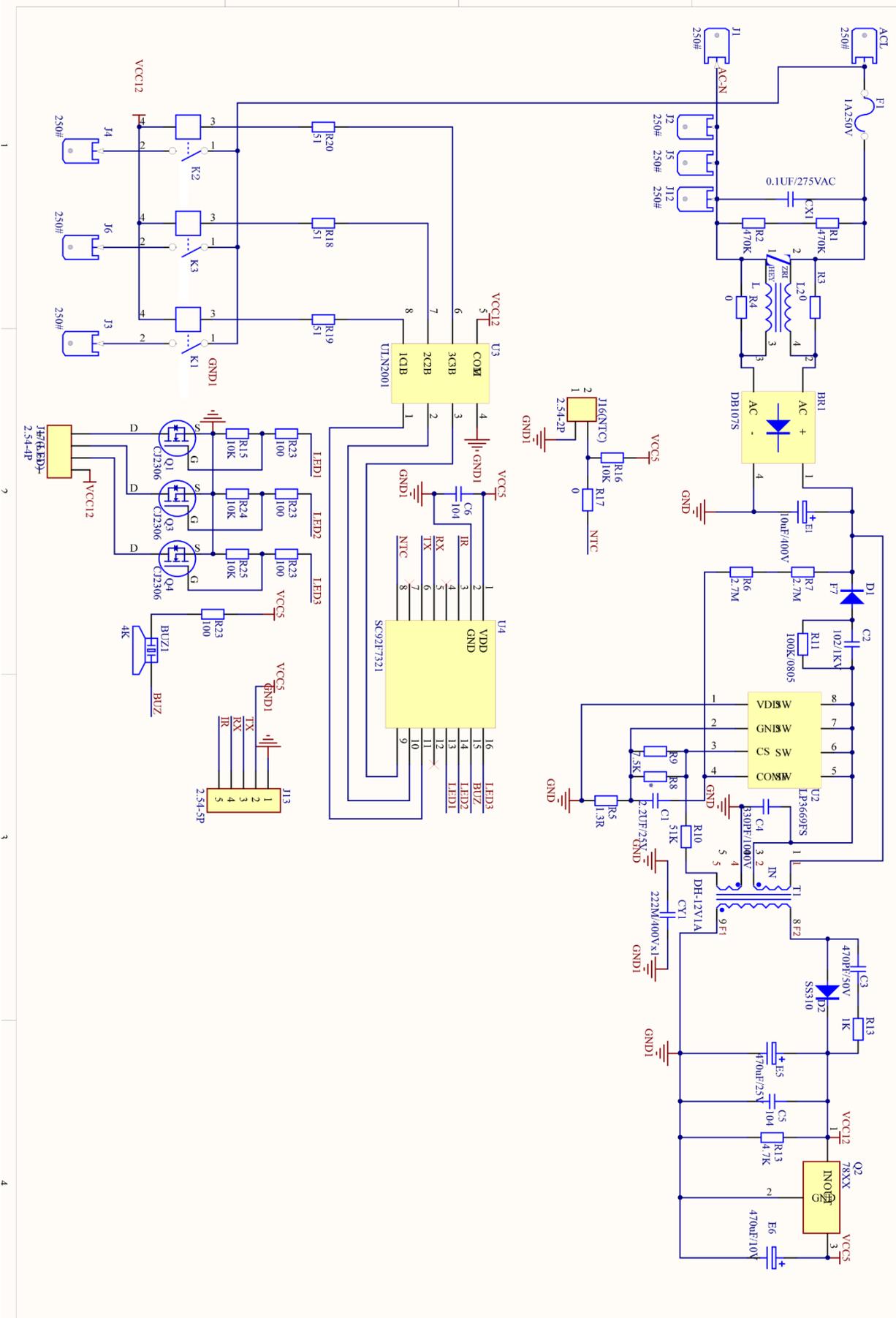
7.0 Illustrations

Illustration 2j - User manual



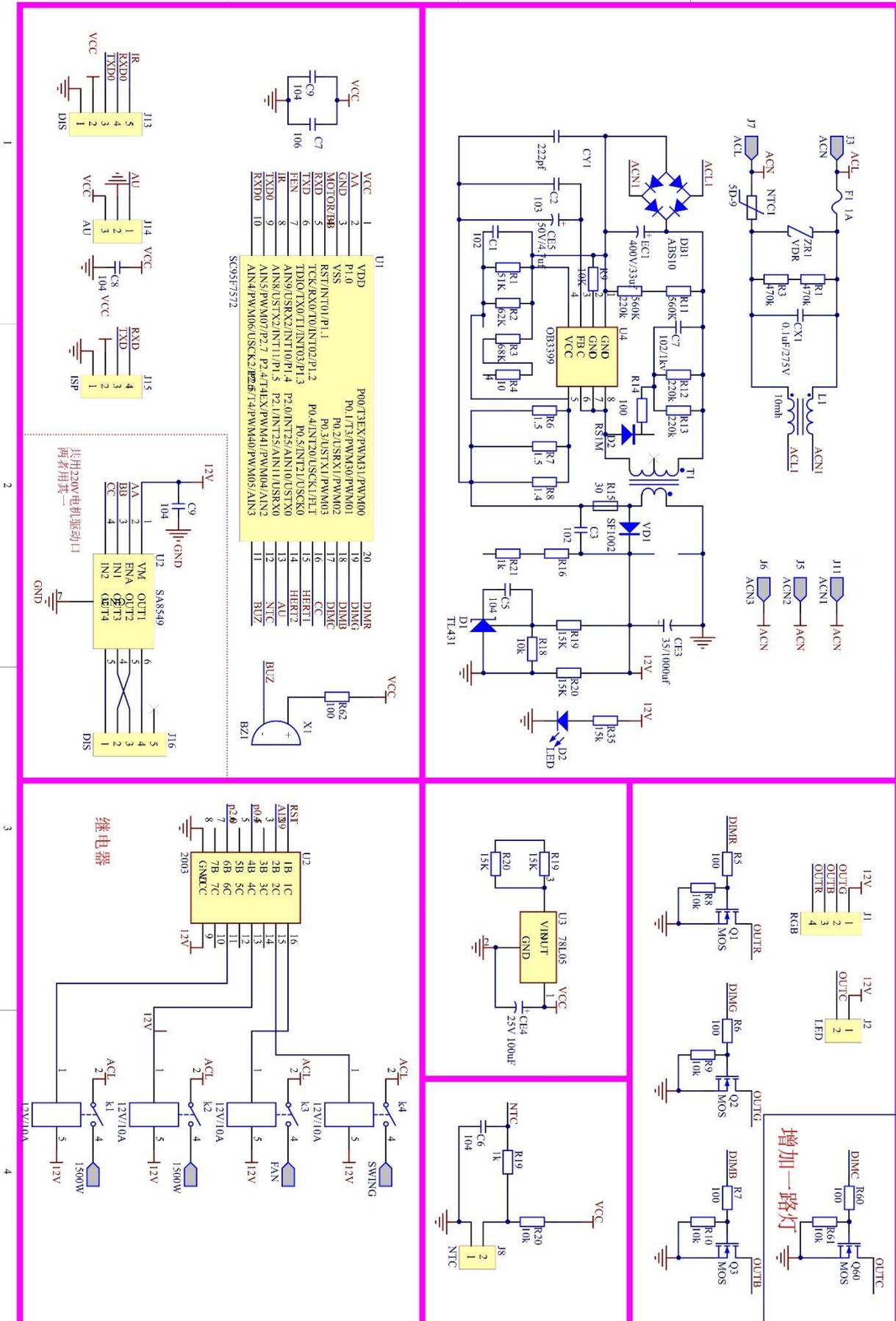
7.0 Illustrations

Illustration 3 - Circuit Diagram of power supply board, for models RYJ-18 series, RYJ-23 series and RYJ-26 series



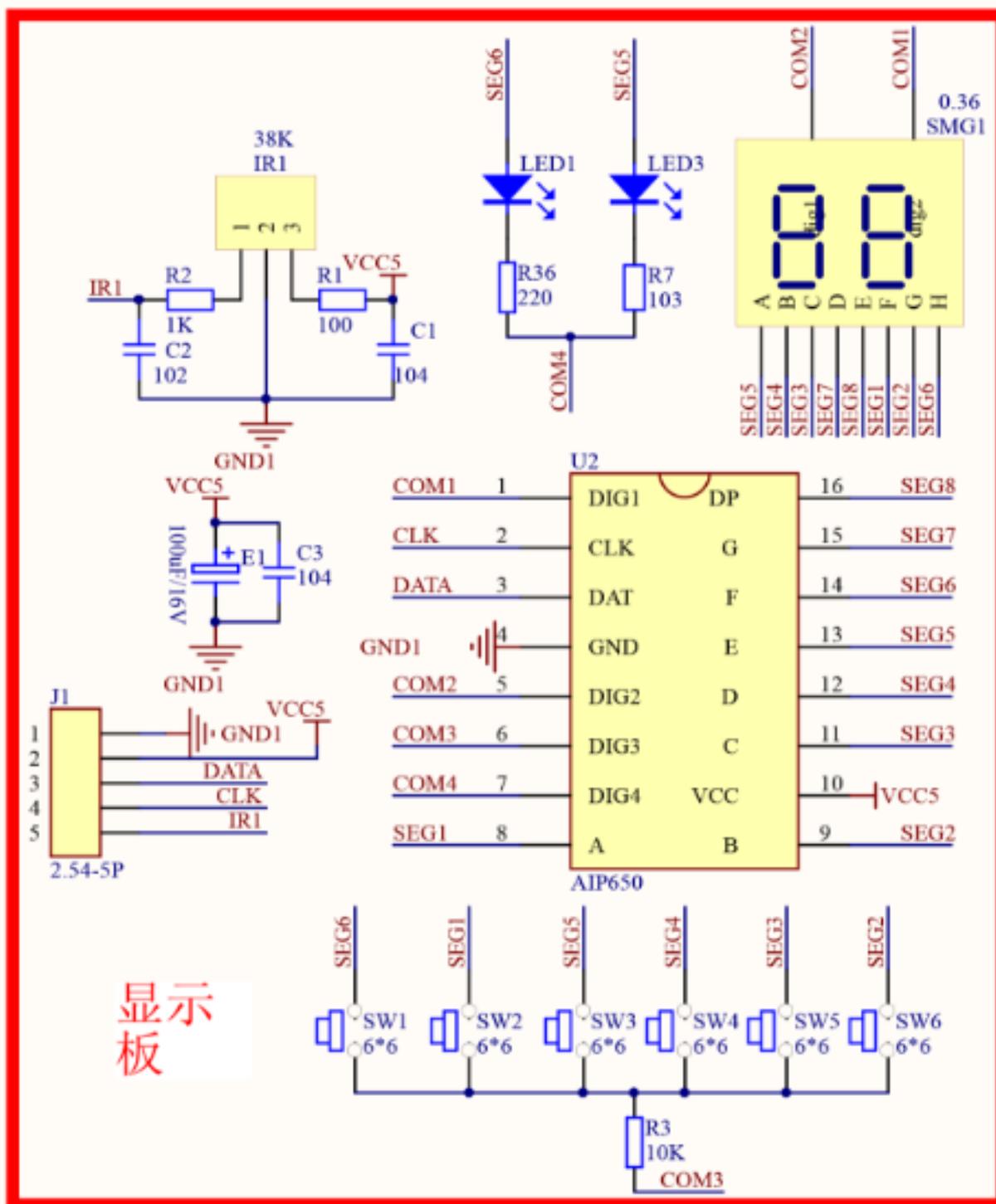
7.0 Illustrations

Illustration 3a -Circuit Diagram of power supply board, for models RYJ-28 series, RYJ-30 series and RYJ-32 series



7.0 Illustrations

Illustration 3b - Circuit Diagram of control board, for models RYJ-18 series, RYJ-23 series, RYJ-26 series, RYJ-28 series, RYJ-30 series and RYJ-32 series.



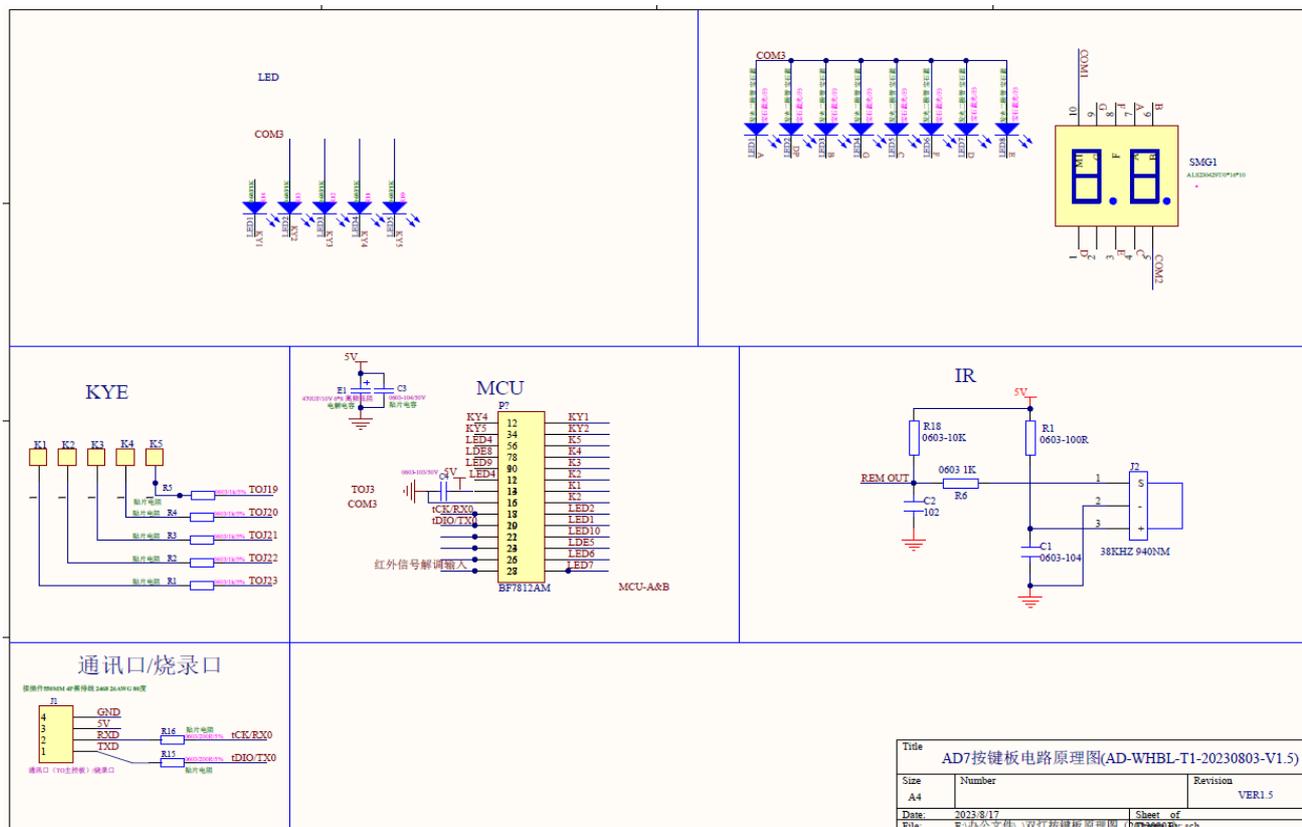
7.0 Illustrations

Illustration 3c - Circuit Diagram of power supply board, for models RYJ-36 series, RYJ-40 series, RYJ-42 series, RYJ-50 series, RYJ-60 series, RYJ-72 series, RYJ-SM50 series, RYJ-SM60 series and RYJ-SM72 series.



7.0 Illustrations

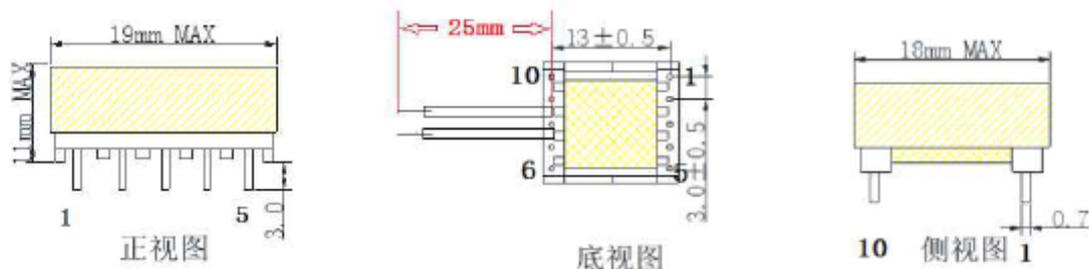
Illustration 3d - Circuit Diagram of control board, for models RYJ-36 series, RYJ-40 series, RYJ-42 series, RYJ-50 series, RYJ-60 series, RYJ-72 series, RYJ-SM50 series, RYJ-SM60 series and RYJ-SM72 series.



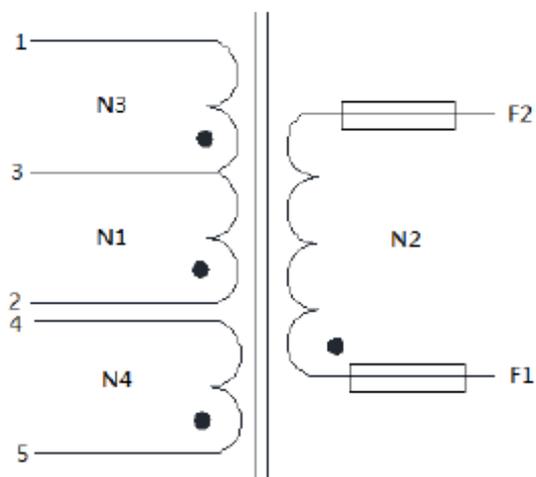
7.0 Illustrations

Illustration 4 - Specification of Transformer (AD-EPC17-13620-1.2MH)

产品外观图 单位 mm 未注公差 ±0.5mm



原理图



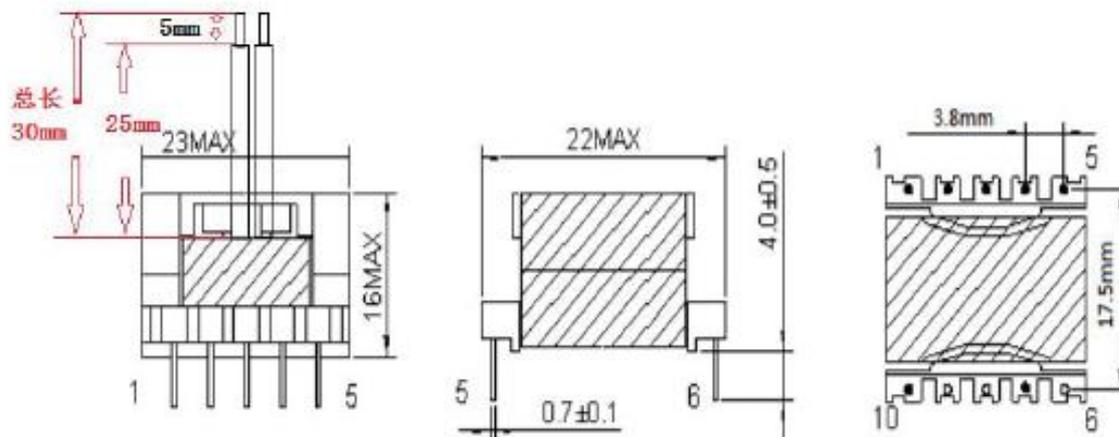
“●”表示绕组同名端
 “□”表示铁氟龙套管

绕组	挡带规格 圈数、位置	相位	起线收线 是否交叉	线径*股数	圈数	穿套管 脚位	胶带 圈数	绕制方法
N1	无	2—3	×	Φ0.20*1	75Ts	无	2Ts	密绕 2 层
N2	无	F1(白) —F2(黑)	×	TWΦ0.20*1	20Ts	F1,F2	2Ts	密绕 1 层
F1,F2 为顶部飞线, F1 对应 6 脚, F2 对应 10 脚 飞线总长度 25mm								
N3	无	3—1	//	Φ0.20*1	61Ts	无	2Ts	密绕 2 层
N4	无	5—4	//	Φ0.20*1	16Ts	无	2Ts	密绕 1 层

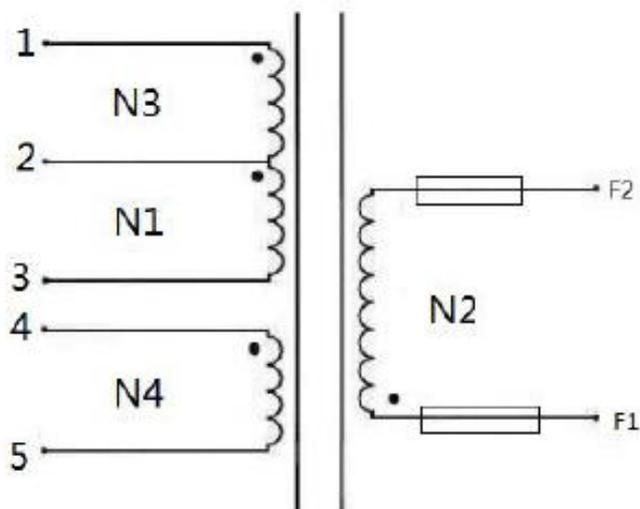
7.0 Illustrations

Illustration 4a - Specification of Transformer (AD-PQ2014-5707-750uH)

产品外观图 单位 mm 其它未注公差 ±1.0mm



原理图



“•”表示绕组同名端

“□”表示铁氟龙套管

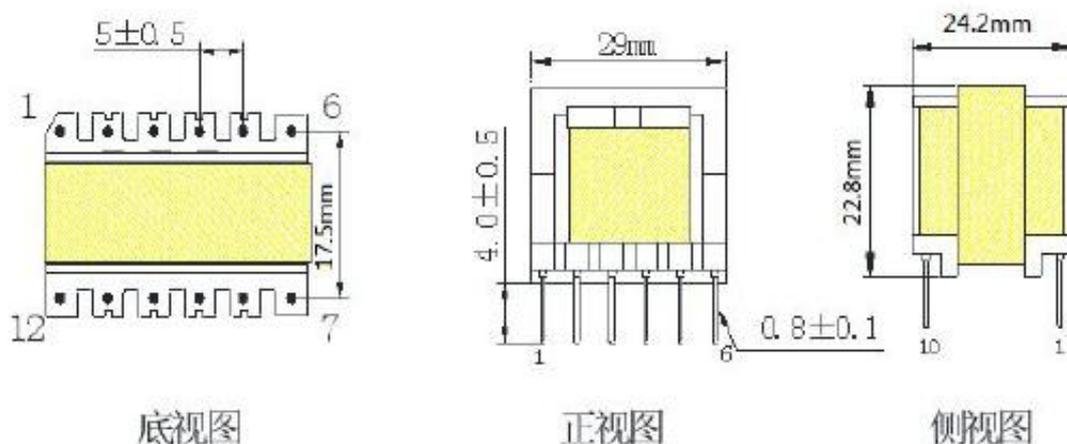
四、绕制方法及要求：“×”表示起线收线交叉；“//”表示起线收线不交叉

绕组	挡带规格 圈数、位置	相位	起线收线 是否交叉	线径*股数 (铜线/三层绝缘线)	圈数	穿套管 脚位	胶带 圈数	绕制方法 密绕/疏绕 居中/一层/靠边
N1	无	2—3	//	Φ0.25*1	40Ts	无	2Ts	密绕 2 层
N2	无	F1(白) — F2(黑)	×	TIWΦ0.20*2	7Ts	F1,F2	2Ts	密绕 1 层
F1,F2 为顶部飞线, F1 对应 9 脚, F2 对应 7 脚 飞线总长度为 30mm								
N3	无	1—2	//	Φ0.25*1	17Ts	无	2Ts	密绕 1 层
N4	无	4—5	//	Φ0.25*1	8Ts	无	2Ts	密绕 1 层

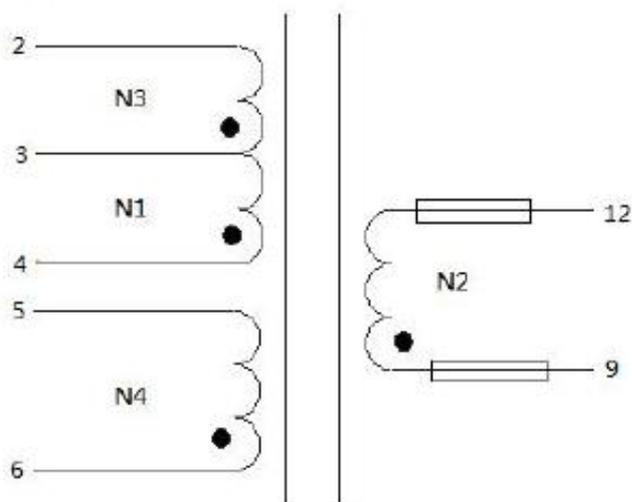
7.0 Illustrations

Illustration 4b - Specification of Transformer (AD-EE28-8613-1.5mH)

产品外观图 单位 mm 未注公差 ±0.5mm



原理图



● Start 同名端

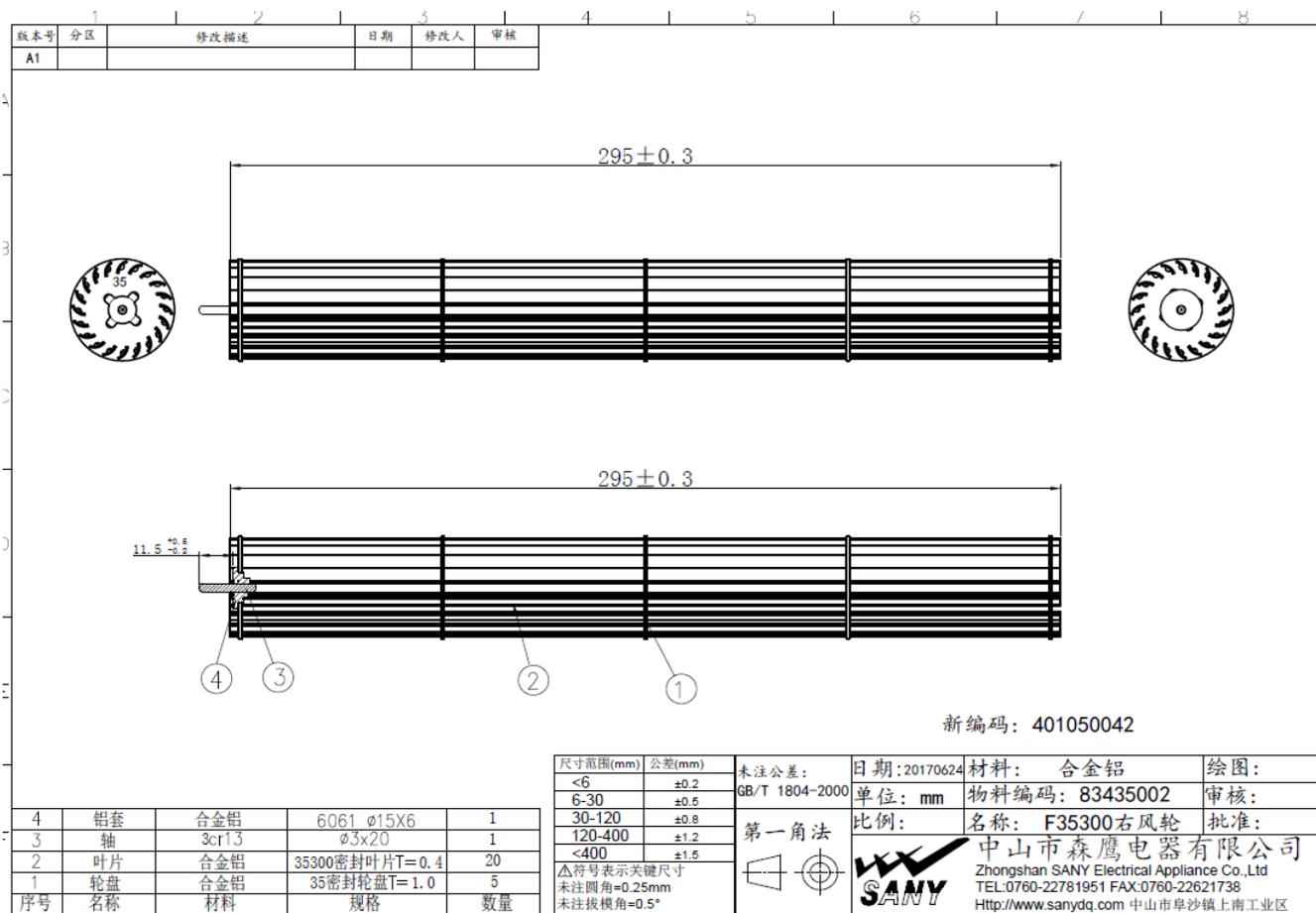
表示套管

四、绕制方法及要求 (“×”表示起线收线交叉; “//”表示起线收线不交叉)

绕组	挡带规格 圈数、位置	相位	起线收线 是否交叉	线径*股数	圈数	穿套管 脚位	胶带 圈数	绕制方法
N1	无	4—3	×	Φ0.2*2	43Ts	无	2Ts	密绕两层
N2	无	9—12	//	T1WΦ0.45*1	13Ts	9、12	2Ts	密绕一层
N3	无	3—2	×	Φ0.2*2	43Ts	无	2Ts	密绕两层
N4	无	6—5	×	Φ0.2*2	15Ts	无	3Ts	密绕一层
5脚入小槽								

7.0 Illustrations

Illustration 5 - Specification of Impeller



7.0 Illustrations

Illustration 6 - Specification of Heater

版本号	修改描述	日期	修改人	审核					
-----	------	----	-----	----	--	--	--	--	--

技术要求

- 1、电阻丝和上下面板之间应留有适当的距离。
- 2、电阻丝绕丝均匀，无过度拉伸或堆积。
- 3、温控器铆接固定可靠无松动，温控器需保持水平且对正大孔，金属片不得有碰撞变形。
- 4、所有零件必须符合ROHS。
- 5、引线铆接牢固。
- 6、外观无缺损、无脏污，面板打字清晰正确。新编码：101010419

16		铁铆钉	2.5*3mm	1	打一点							
15		温控器	H20X 105℃	1	印字为105℃, 实际温度为105-115℃							
14		热缩套管	φ4.5mm	2	L=22mm	技术参数						
13		地环	7026	2								
12	H305B-1	305折弯铁支架	0.5锌板	2		额定电压 (V)	额定功率 (W)	功率范围 (W)	档位	电阻丝(φ)	米电阻(Ω)	齿数
11		黑色引线	3122 16AWG	1	L=180mm	120V	1400W	1360-1440	一档	0.7mm	3.5-3.7	80
10		铁带耳连接片	δ 0.8铁电镀	1		圈数	单条电阻(Ω)	耗料 (g)	温控器			
9		云母连接片	δ 0.7云母板	2		74-80	20-20.5	34	H20X 105℃			
8		长定位片	0.7云母板	3	H=17mm	尺寸范围(mm)	公差(mm)	日期: 客户编码: ZSA004-24 绘图: 单位: mm 产品代码: 11158419 审核: 比例: 产品名称: 发热架 批准: 第一角法 装配图号: H305-419 第 页 共 页				
7		305A错齿密齿条	0.8云母板	4	齿距3.5mm	<6	±0.2					
6		发热丝	0.7±0.2mm	34g	铁蹄丝	>6-30	±0.5	中山市森鹰电器有限公司				
5	H305A-2	305底板	1.0云母板	1	320×35 mm	>30-120	±0.8					
4		铁铆钉	2.5×5×5 mm	12		>120-400	±1.2	△符号表示关键尺寸 未注圆角=0.25mm 未注拔模角=0.5°				
3		铁带脚弓形端子	δ 0.8铁电镀	2		<400	±1.5					
2		305单孔面板	1.0云母板	1	320×35 mm							
1		铁带耳端子	δ 0.8铁电镀	1								
序号	零件图号	物料编码	物料名称	材料规格型号	数量	备注						

8.0 Test Summary			
Evaluation Period	24-Jul-2023 to 28-Sep-2023		Project No. 230901032SZN
Sample Rec. Date	24-Jul-2023	Condition	Prototype
			Sample ID. Z230724052-019~027
Test Location	Intertek Testing Services Shenzhen Ltd. Longhua Branch (101, 201, Building B, No. 308 Wuhe Avenue, Zhangkengjing Community, GuanHu Subdistrict, LongHua District, Shenzhen, 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.			
Due to the previous testing performed under Intertek Report 230724052SZN-001 only the following testing was performed:			
Test Description	UL 2021:2015 Ed.4+R:02Feb202 1 / Clause	CSA C22.2#46:2013 Ed.9 / Clause	UL 746C:2018 Ed.7+R:30Jun202 2 / Clause
Strain Relief Test	13.3.5	--	--
Grounding Resistance Test	31.3	--	--
Power Input Test	34	--	--
Leakage Current Test	35	--	--
Normal Temperature Tests	36	--	--
Stalled Fan Test	41.3	--	--
Overvoltage Test	41.4	--	--
Terry Cloth Drape Test	41.7	--	--
Wall-mounted heaters	41.10	--	--
Dielectric Voltage-Withstand Test	46	--	--
Component Failure Test	53.4-53.9	--	--
Strength of Adjustment Stop Test	54	--	--
Bonding - Impedance Test	--	5.19.3	--
Rating	--	7.2	--
Temperature (Normal)	--	7.4	--
Dielectric Strength	--	7.5	--
Temperature (Abnormal)	--	7.6	--
Extreme Operating Voltage (Maximum) Test	--	7.7	--
Strain Relief	--	7.8	--
Physical Abuse Tests	--	7.11	--
Leakage Current	--	7.12	--
Strain-Relief Test after Mold Stress-Relief Distortion	--	--	31
Resistance to Impact Test	--	--	56
Abnormal Operation Test	--	--	59
Severe Condition / Severe Condition Test	--	--	28/60
Mold Stress-Relief Distortion / Mold Stress-Relief Distortion Test	--	--	29/61
Input to Motor / Input to Motor Test	--	--	30/63
Test Description	UL 1310:2018 Ed.7+R:16Aug20 19 / Clause	CSA C22.2#223:201 5 Ed.3 / Clause	--
Capacitor Discharge Test	--	4.6.2.7	--
Leakage Current Test	26	6.6	--
Leakage Current Test and Dielectric Voltage Withstand Test After Humidity Exposure	27	--	--
Maximum Output Voltage Test	28	6.3.1	--
Output Current and Power Test	30	6.3.4	--
Normal Temperature Test	33	6.4	--
Dielectric Voltage Withstand Test	34	6.5	--

8.0 Test Summary			
Secondary circuit protection	--	6.7	--
Abnormal Tests	39	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:	Jeffery Zhang	Reviewed by:	Leo Huang
Title:	Project Engineer	Title:	Project Engineer
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	Dongguan Ruyijia electronic technology Co., LTD
Address	Room 101, No. 27, 1st Street, Jianshe Road, Dalingshan Town, DONGGUAN CITY Guangdong Province
Country	China
Product	Electric Fireplace

MULTIPLE LISTEE 1	None
Address	
Country	
Brand Name	

ASSOCIATED MANUFACTURER	
Address	
Country	

MULTIPLE LISTEE 1 MODELS	BASIC LISTEE MODELS

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

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 Ltd. Longhua Branch

ETL Component Evaluation Center

101, 201, Building B, No. 308 Wuhe Avenue, Zhangkengjing Community, GuanHu

Subdistrict, LongHua District

Shenzhen, China

Attn: 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

- Dielectric Voltage Withstand Test
- Production-Line Grounding Continuity

11.1 Dielectric Voltage Withstand 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 Dielectric Voltage Withstand Test:

<u>Product</u>	<u>Test Voltage</u>	<u>Test Time</u>
All products covered by this Report.	1000V or 1200V	60 s 1 s
Product - One sample from each shipment of Section 4.0 item 29: Between primary winding and secondary winding	Test Voltage 1000V or 1200V	Test Time 60 s 1 s
Product - One sample from each shipment of Section 4.0 item 39: Between primary winding and secondary winding	Test Voltage 1000V or 1200V	Test Time 60 s 1 s
Product - One sample from each shipment of Section 4.0 item 50: Between primary winding and secondary winding	Test Voltage 1000V or 1200V	Test Time 60 s 1 s

11.2 Production-Line Grounding Continuity

Method

The manufacturer shall test each heater provided with a power-supply cord incorporating a grounding conductor to determine that electrical continuity exists between an exposed dead metal part of the heater and the grounding blade of the attachment plug.

The manufacturer should employ an indicating device (ohmmeter, buzzer, etc.) to indicate grounding continuity, and the resistance of the grounding path between a dead metal part and the equipment-grounding terminal and point of attachment of the wiring system shall not be more than 0.1 ohm..

Products Requiring Production-Line Grounding Continuity:

All products covered by this Report.

