

1.0 Reference and Address			
Report Number	171200144HZH-001	Original Issued: 31-May-2018	Revised: 6-May-2022
Standard(s)	Movable and Wall- or Ceiling-Hung Electric Room Heaters [UL 1278:2014 Ed.4+R:10Sep2020]		
	Electric Air-Heaters (R2018) [CSA C22.2#46:2013 Ed.9]		
Applicant	Ningbo Rowan Electric Appliance Co., Ltd.	Manufacturer	<b>ZHEJIANG FUTENG ELECTRIC APPLIANCE CO.,LTD</b>
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<b>2.0 Product Description</b>	
Product	Electric Fireplace
Brand name	Antarctic Star, R.W.FLAME, XBEAUTY, Kismile, AGLUCKY
Description	The products covered by this report are electric fireplaces intended for household & indoor use only. Each product is cord-connected product with a recognized mould-on grounding plug and intended to be connected to 120V power supply.
Models	RFH-3001L, RFH-3601L, RFH-4201L, RFH-5001L, RFH-6001L, RFH-7401L, RFH-10201L, RFI-2601L, RFI-3001L, RFI-3301L, RFI-3601L or RFI-3901L; followed by one character. ZBI-15SRLT/ May be followed by three to four characters. S180, S230A, S230B, S230C, S280, L250, C280, EP24702, FP10162, EP24703, FP10163, EP24704, FP10164, EP24705, FP10165, EP24706, FP10166, FP10167, EP23627, FP10187, EP23628, FP10188, FP10189, EP23629, FP10190, FP10191, EP24789, FP10185, EP247890, FP10186, FP10217
Model Similarity	<p>All models of electric fireplaces share similar electrical construction and components and heating assembly.</p> <p>"Followed by one character" means the character can be A or B.</p> <p>"May be followed by three or four characters" mean the characters can be R13,M16, R16, M18, R18, M21, R21, M13, M24, M26, MR24, MR26 or MR36.</p> <p>The suffix of "M" in the model name means mechanical control. The suffix of "R" in the model name means remote control. The suffix of "MR" or "L" in the model name means both electronic switch and remote control. The suffix of "A" of RFI series that in the model name means that model has single glass panel. The suffix of "A" of RFH series that in the model name means that model has single air outlet. The suffix of "B" of RFI series that in the model name means that model has two glass panel. The suffix of "B" of RFH series that in the model name means that model has three air outlets.</p> <p>ZBI-15SRLT/M16 is same with ZBI-15SRLT/M18, ZBI-15SRLT/M21 controlled by a power switch,a switch for heating and a flame adjustment except ZBI-15SRLT/M18 has an extra adjustable thermostat.Switch of model ZBI-15SRLT/M21 can be set to full or half heating output.</p> <p>ZBI-15SRLT/M13, ZBI-15SRLT/M24, ZBI-15SRLT/M26 are same with ZBI-15SRLT/R13, ZBI-15SRLT/MR24, ZBI-15SRLT/MR26 except different control mode.</p> <p>ZBI-15SRLT/MR36 is same with ZBI-15SRLT/MR26 except different size.</p> <p>For "R" series beside the remote control, ZBI-15SRLT/R16 and ZBI-15SRLT/R18 can also be operated through panel on the front of the heater.</p> <p>RFH series and RFI series are same except for shape, same series are same except for shape size, Different numbers mean different shape size (example for 13, 16, 2601, 3001).</p> <p>S180, S230A, S230B, S230C and S280 are one series, they are all same except for shape size and light effect.</p> <p>L250 and C280 are one series, they are all same except for appearance.</p> <p>EP24702, FP10162 are same as RFH-3001L except for model name; so do as EP24703, FP10163 and RFH-3601L; EP24704, FP10164 and RFH-4201L; EP24705, FP10165 and RFH-5001L; EP24706, FP10166 and RFH-6001L; FP10167 and RFH-7401L; EP23627, FP10187 and RFI-2601L; EP23628, FP10188 and RFI-3001L; FP10189 and RFI-3301L; EP23629, FP10190 and RFI-3601L; FP10191 and RFI-3901L; EP24789, FP10185 and ZBI-15SRLT/M18; EP247890, FP10186 and ZBI-15SRLT/M21; FP10217 and L250.</p>
Ratings	120V, 60Hz, 1500W
Other Ratings	NA

### 3.0 Product Photographs

**Photo 1** - Front view of model ZBI-15SRLT/M16



**Photo 2** - side view for all models except ZBI-15SRLT/M13, ZBI-15SRLT/R13, RFH series and RFI series



**Photo 3** - back view of model ZBI-15SRLT/M16 and ZBI-15SRLT/R16

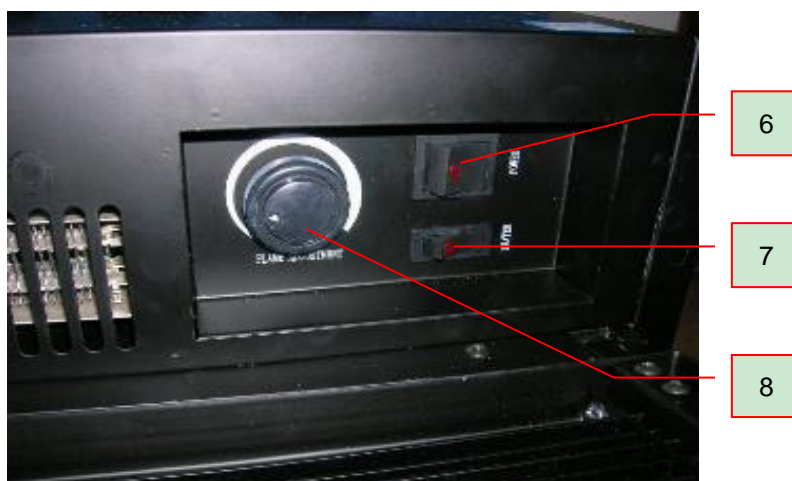


### 3.0 Product Photographs

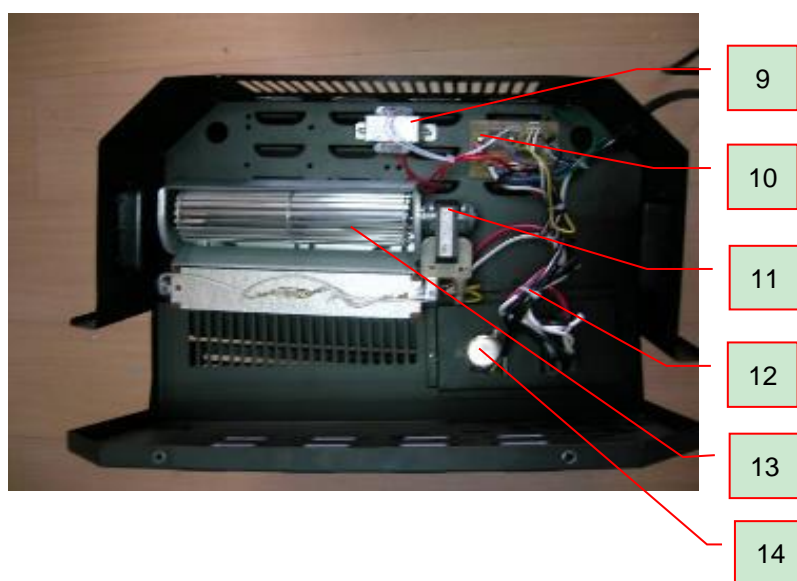
**Photo 4** - bottom view for all models except for ZBI-15SRLT/R13, RFH series and RFI series



**Photo 5** - control panel view of model ZBI-15SRLT/M16



**Photo 6** - internal view of model ZBI-15SRLT/M16



### 3.0 Product Photographs

**Photo 7** - flame internal view for all models except for ZBI-15SRLT/R13, RFH series and RFI series



**Photo 8** - heating element for all models



**Photo 9** - front view of model ZBI-15SRLT/R16





### 3.0 Product Photographs

**Photo 10** - control panel view of model ZBI-15SRLT/R16 and ZBI-15SRLT/R18



**Photo 11** - internal view of model ZBI-15SRLT/R16

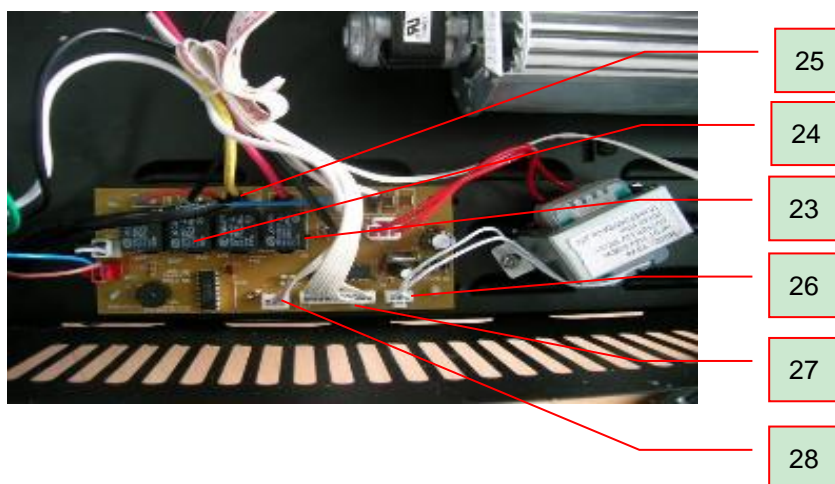


**Photo 12** - internal view of model ZBI-15SRLT/R16, ZBI-15SRLT/R18 and ZBI-15SRLT/R21

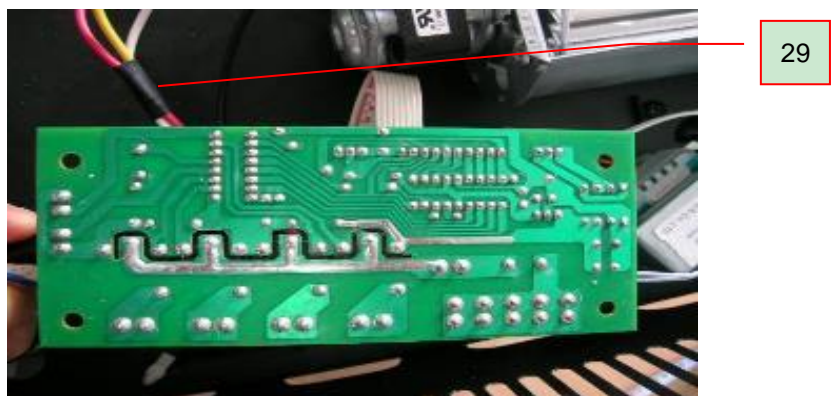


### 3.0 Product Photographs

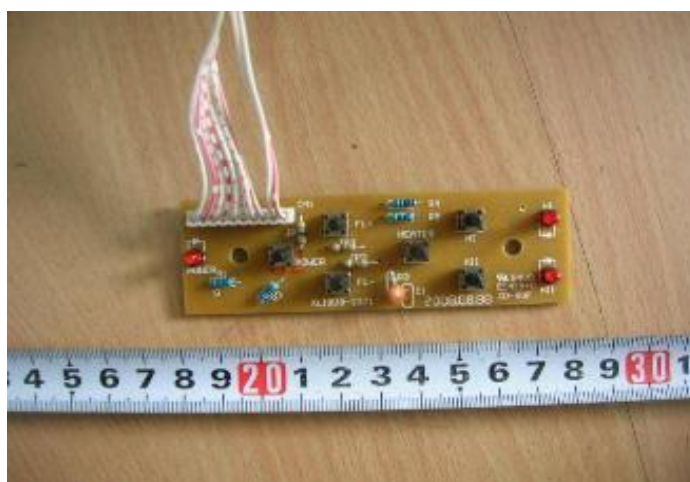
**Photo 13** - main PCB of model ZBI-15SRLT/R16



**Photo 14** - main PCB of model ZBI-15SRLT/R16



**Photo 15** - control PCB of model ZBI-15SRLT/R16



### 3.0 Product Photographs

**Photo 16** - control PCB of model ZBI-15SRLT/R16



**Photo 17** - front view of model ZBI-15SRLT/M18



**Photo 18** - back view of model ZBI-15SRLT/M18/M21 and ZBI-15SRLT/R18/R21





### 3.0 Product Photographs

**Photo 19** - control panel view of model ZBI-15SRLT/M18



**Photo 20** - internal view of model ZBI-15SRLT/M18



**Photo 21** - front view of model ZBI-15SRLT/R18



### 3.0 Product Photographs

**Photo 22** - internal view of model ZBI-15SRLT/R18



**Photo 23** - front view of model ZBI-15SRLT/M21



**Photo 24** - control panel view of model ZBI-15SRLT/M21



### 3.0 Product Photographs

**Photo 25** - control panel view of model ZBI-15SRLT/M21



**Photo 26** - internal view of model ZBI-15SRLT/M21



**Photo 27** - front view of model ZBI-15SRLT/R21



### 3.0 Product Photographs

**Photo 28** - control panel view of model ZBI-15SRLT/R21



**Photo 29** - internal view of model ZBI-15SRLT/R21



**Photo 30** - front view of model ZBI-15SRLT/M13





### 3.0 Product Photographs

**Photo 31** - side view of model ZBI-15SRLT/M13 and ZBI-15SRLT/R13



**Photo 32** - internal view of model ZBI-15SRLT/M13



**Photo 33** - front view of model ZBI-15SRLT/M24





### 3.0 Product Photographs

**Photo 34** - control panel view of model ZBI-15SRLT/M24



**Photo 35** - control panel view of model ZBI-15SRLT/M26



**Photo 36** - internal view of model ZBI-15SRLT/M24 and ZBI-15SRLT/M26



### 3.0 Product Photographs

**Photo 37** - front view of model ZBI-15SRLT/M26



**Photo 38** - front view of model ZBI-15SRLT/R13



**Photo 39** - internal view of model ZBI-15SRLT/R13



### 3.0 Product Photographs

**Photo 40** - front view of model ZBI-15SRLT/MR24



**Photo 41** - internal view of model ZBI-15SRLT/MR24 and ZBI-15SRLT/MR26



**Photo 42** - front view of model ZBI-15SRLT/MR26

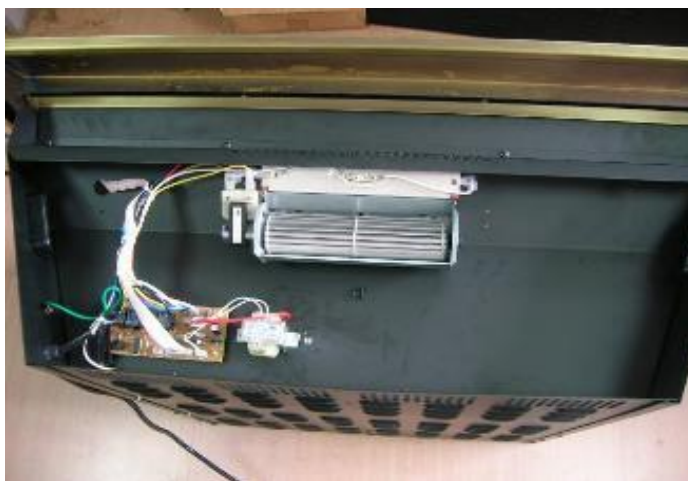


### 3.0 Product Photographs

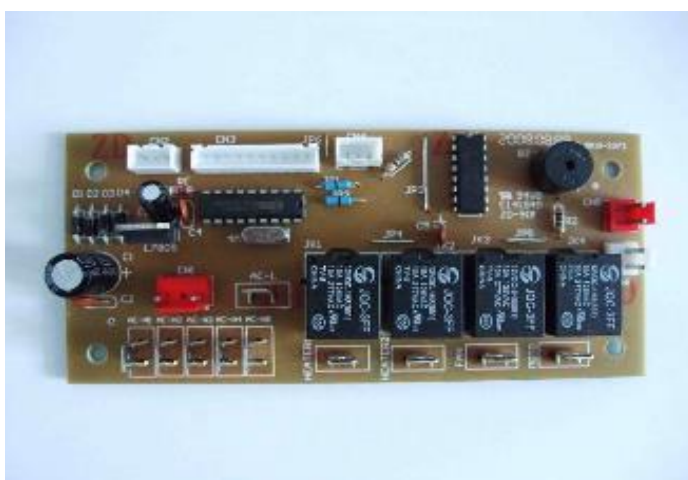
**Photo 43** - front view of model ZBI-15SRLT/MR36



**Photo 44** - internal view of model ZBI-15SRLT/MR36



**Photo 45** - PCB of model ZBI-15SRLT/R13, MR24, MR26, MR36



### 3.0 Product Photographs

**Photo 46** - over view of model RFI-3901LA (as representative, RFI-2601LA, RFI-3001LA, RFI-3301LA, RFI-3601LA and RFI-3901LA are same except for shape size.)



**Photo 47** - over view of model RFI-3901LA



**Photo 48** - over view of model RFI-3901LA





### 3.0 Product Photographs

**Photo 49** - internal view of model RFI-3901LA



**Photo 50** - internal view of model RFI-3901LA



**Photo 51** - internal view of model RFI-3901LA



### 3.0 Product Photographs

**Photo 52** - control PCB view of model RFI-3901LA



**Photo 53** - control PCB view of model RFI-3901LA



**Photo 54** - internal view of model RFI-3901LA



### 3.0 Product Photographs

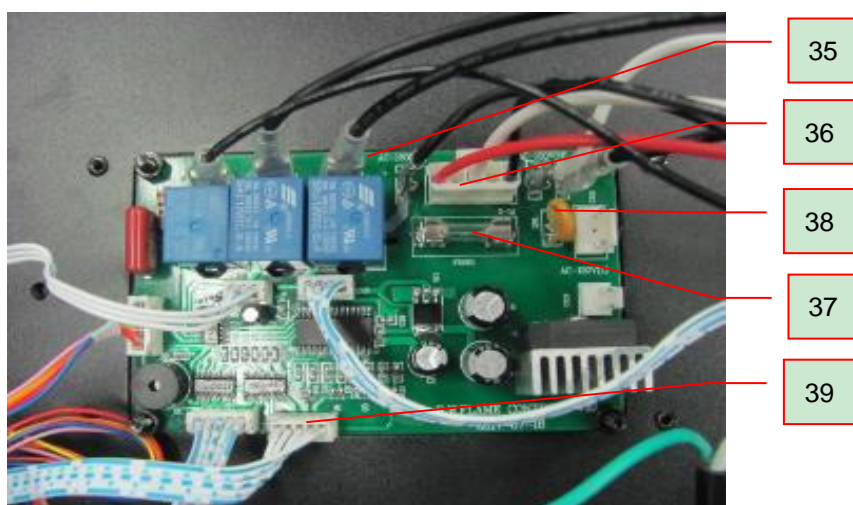
**Photo 55** - internal view of model RFI-3901LA



**Photo 56** - internal view of model RFI-3901LA

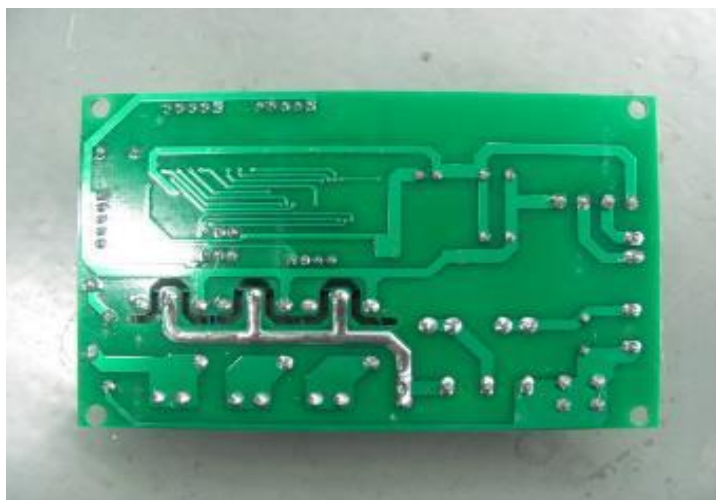


**Photo 57** - power PCB view of model RFI-3901LA



### 3.0 Product Photographs

**Photo 58** - power PCB view of model RFI-3901LA



**Photo 59** - flame simulation PCB view of model RFI-3901LA



**Photo 60** - flame simulation PCB view of model RFI-3901LA



### 3.0 Product Photographs

**Photo 61** - IR receive PCB view of model RFI-3901LA



**Photo 62** - swing motor view of model RFI-3901LA



**Photo 63** - swing motor view of model RFI-3901LA





### 3.0 Product Photographs

**Photo 64** - over view of model RFI-3901LB (as representative, RFI-2601LB, RFI-3001LB, RFI-3301LB, RFI-3601LB, RFI-3901LB are same except shape size.)



**Photo 65** - internal view of model RFI-3901LB

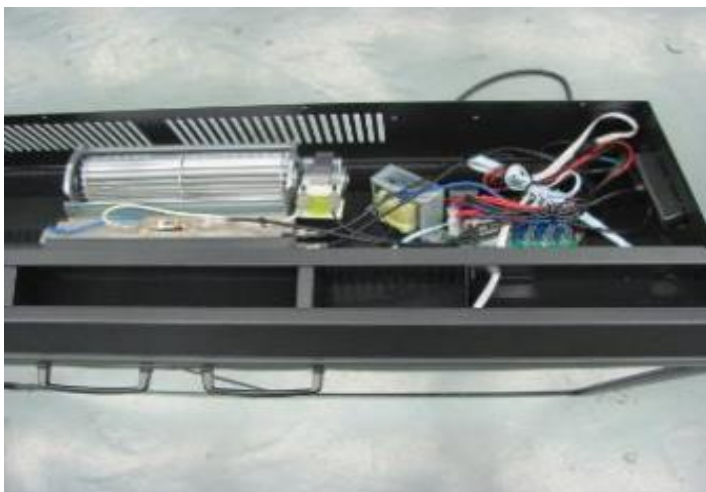


**Photo 66** - internal view of model RFI-3901LB



### 3.0 Product Photographs

**Photo 67** - internal view of model RFI-3901LB



**Photo 68** - over view of model RFH-4201LA (as representative, RFH-3001LA, RFH-3601LA, RFH-4201LA, RFH-5001LA, RFH-6001LA, RFH-7401LA, RFH-10201LA are same except shape size.)



**Photo 69** - over view of model RFH-4201LA



### 3.0 Product Photographs

**Photo 70** - over view of model RFH-4201LA



**Photo 71** - internal view of model RFH-4201LA



**Photo 72** - internal view of model RFH-4201LA



### 3.0 Product Photographs

**Photo 73** - control PCB view of model RFH-4201LA



**Photo 74** - control PCB view of model RFH-4201LA



**Photo 75** - internal view of model RFH-4201LA



### 3.0 Product Photographs

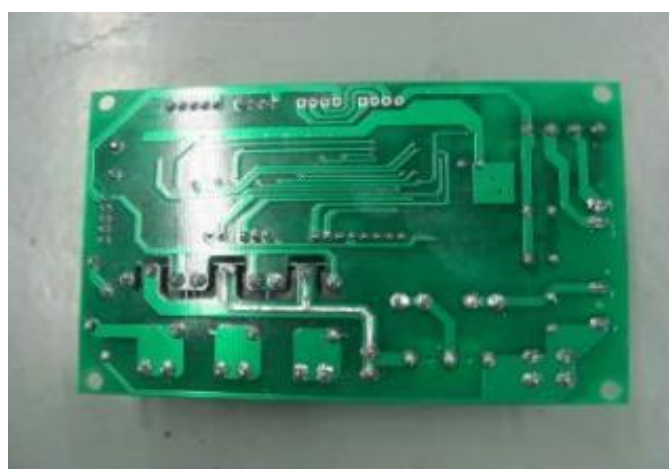
**Photo 76** - internal view of model RFH-4201LA



**Photo 77** - power PCB view of model RFH-4201LA



**Photo 78** - power PCB view of model RFH-4201LA





### 3.0 Product Photographs

**Photo 79** - over view of model RFH-4201LB (as representative, RFH-3001LB, RFH-3601LB, RFH-4201LB, RFH-5001LB, RFH-6001LB, RFH-7401LB, RFH-10201LB are same except shape size.)



**Photo 80** - Infrared controller view for RFH series and RFI series



**Photo 81** - Infrared controller view for RFH series and RFI series

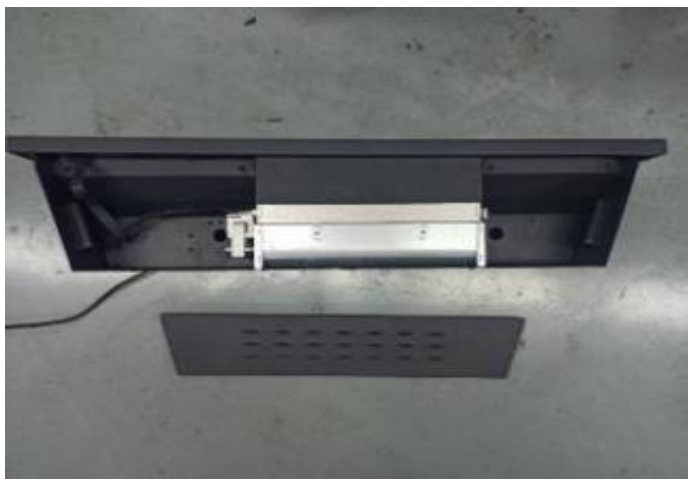


### 3.0 Product Photographs

**Photo 82** - connection view of supply cord to internal wiring for all models



**Photo 83** - internal view of model RFI-3901LA with optional heating element assembly (as representative, RFI-2601LA, RFI-3001LA, RFI-3301LA, RFI-3601LA and RFI-3901LA, are same except for shape size.)



**Photo 84** - internal view of model RFI-3901LB with optional heating element assembly (as representative, RFI-2601LB, RFI-3001LB, RFI-3301LB, RFI-3601LB, RFI-3901LB, are same except shape size.)



### 3.0 Product Photographs

**Photo 85** - optional heating element assembly for RFI series and RFH series



**Photo 86** - internal view of model RFH-3001L with optional heating element assembly (as representative RFH-3001LA, RFH-3601LA, RFH-4201LA, RFH-5001LA, RFH-6001LA, RFH-7401LA, RFH-10201LA are same except shape size).



**Photo 87** - side view for RFH series



### 3.0 Product Photographs

**Photo 88** - side view for RFH series



**Photo 89** - Overview of model S180



**Photo 90** - Overview of model S180



### 3.0 Product Photographs

**Photo 91** - Overview of model S180



**Photo 92** - Overview of model S180



**Photo 93** - Internal view of model S180





### 3.0 Product Photographs

**Photo 94** - Internal view of model S180



**Photo 95** - Internal view of model S180



**Photo 96** - Internal view of model S180

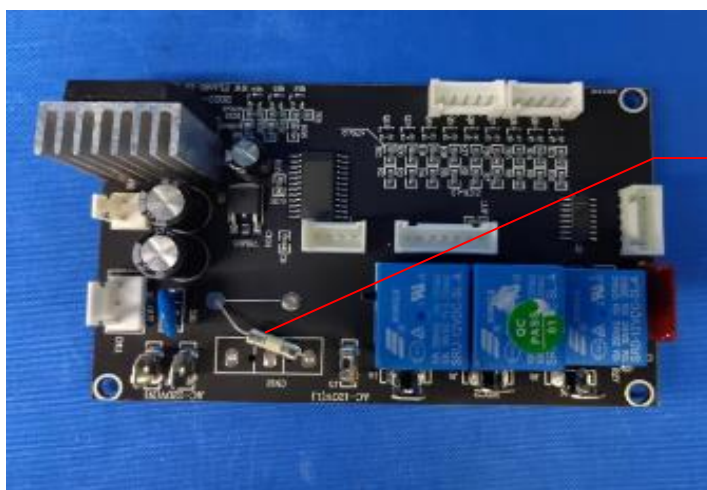


### 3.0 Product Photographs

**Photo 97** - Internal view of model S180

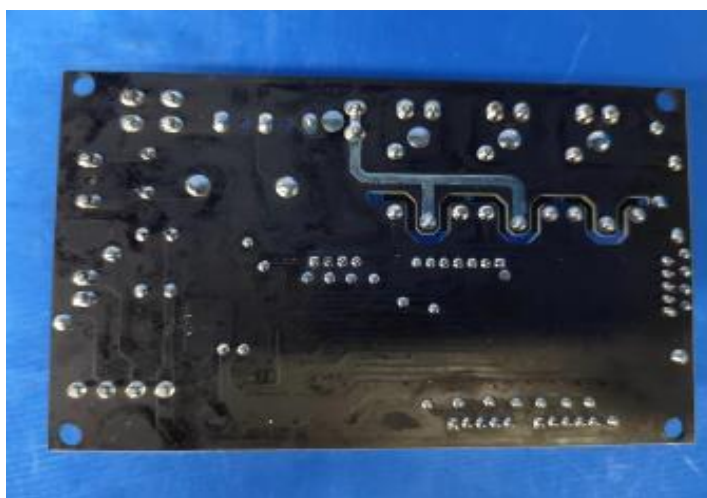


**Photo 98** - Power PCB view of model S180, S230B, S280



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**Photo 99** - Power PCB view of model S180, S230B, S280



### 3.0 Product Photographs

**Photo 100** - Lamp PCB, receive PCB view of model S180



**Photo 101** - Lamp PCB, receive PCB view of model S180

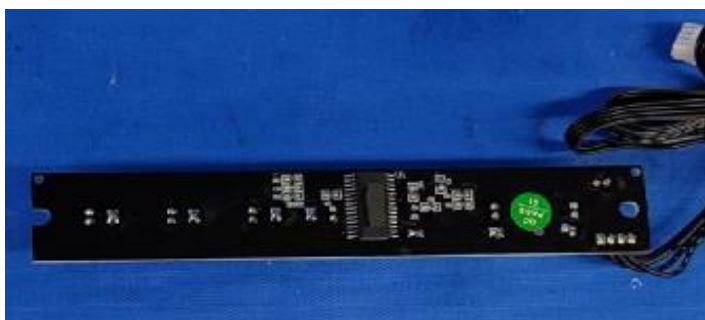


**Photo 102** - Control PCB-1 view of model S180, S230B, S230C, S280



### 3.0 Product Photographs

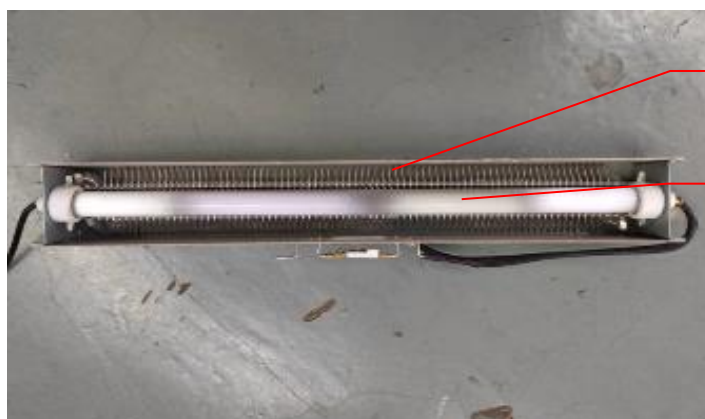
**Photo 103** - Control PCB-1 view of model S180, S230B, S230C, S280



**Photo 104** - Heating element view of model S180, S230, S280



**Photo 105** - Heating element view of model S180, S230, S280



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### 3.0 Product Photographs

**Photo 106** - Overview of model S230A, S230B, S230C (S180, S230A, S230B, S230C and S280 are similar except for shape size and light effect.)



**Photo 107** - Internal view of model S230A



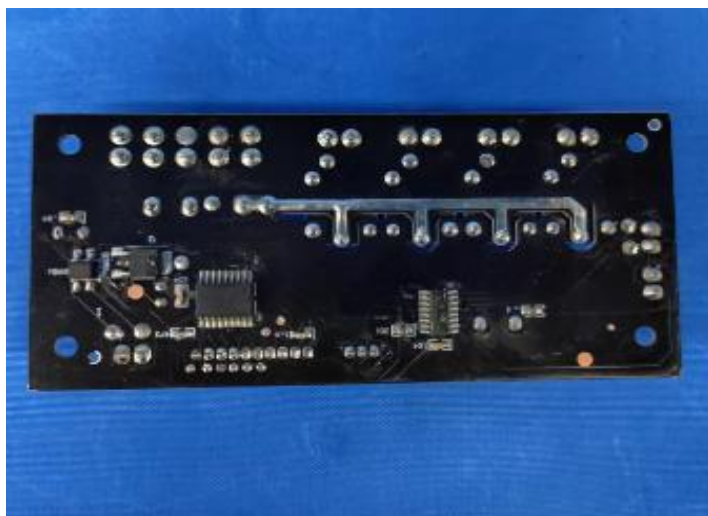
**Photo 108** - Power PCB view of model S230A





### 3.0 Product Photographs

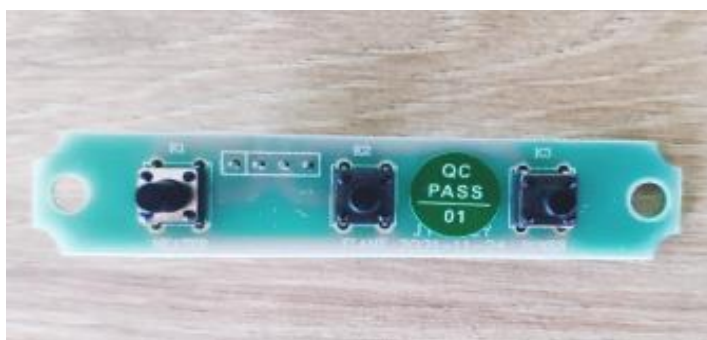
**Photo 109** - Power PCB view of model S230A



**Photo 110** - Internal view of model S230A

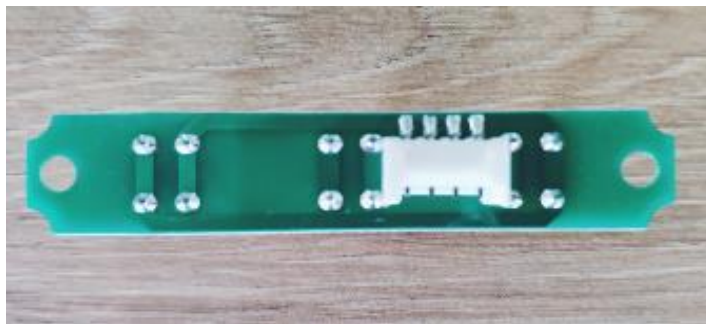


**Photo 111** - Control PCB view of model S230A



### 3.0 Product Photographs

**Photo 112** - Control PCB view of model S230A



**Photo 113** - Lamp PCB view of model S230A



**Photo 114** - Lamp PCB view of model S230A



### 3.0 Product Photographs

**Photo 115** - Lamp PCB, receive PCB view of model S230B



**Photo 116** - Lamp PCB, receive PCB view of model S230B

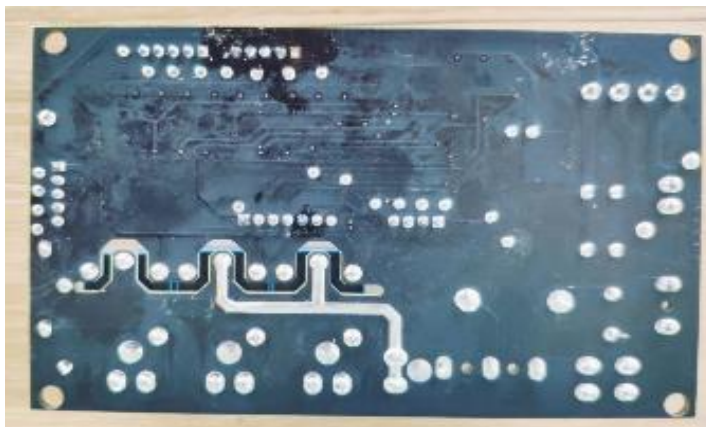


**Photo 117** - Power PCB view of model S230C



### 3.0 Product Photographs

**Photo 118** - Power PCB view of model S230C



**Photo 119** - Lamp PCB, receive PCB view of model S230C



**Photo 120** - Lamp PCB, receive PCB view of model S230C





### 3.0 Product Photographs

**Photo 121** - Lamp PCB, receive PCB view of model S280



**Photo 122** - Lamp PCB, receive PCB view of model S230C



**Photo 123** - Overview of model L250



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### 3.0 Product Photographs

**Photo 124** - Overview of model L250



**Photo 125** - Overview of model L250



**Photo 126** - Overview of model L250



### 3.0 Product Photographs

**Photo 127** - Overview of model L250



**Photo 128** - Internal view of model L250



**Photo 129** - Internal view of model L250



### 3.0 Product Photographs

**Photo 130** - Internal view of model L250



**Photo 131** - Internal view of model L250

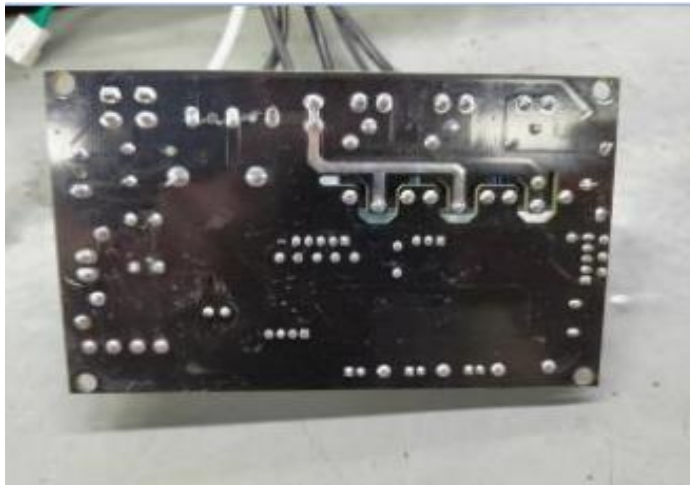


**Photo 132** - Power PCB view of model L250, C280



### 3.0 Product Photographs

**Photo 133** - Power PCB view of model L250, C280



**Photo 134** - Lamp PCB view of model L250, C280

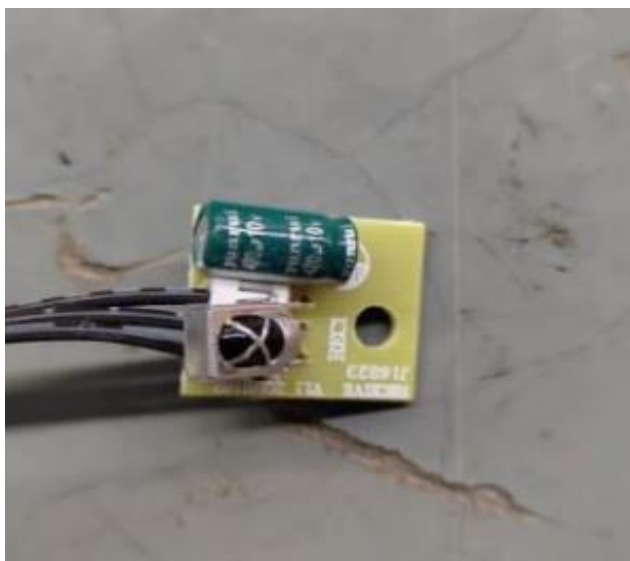


**Photo 135** - Lamp PCB view of model L250, C280

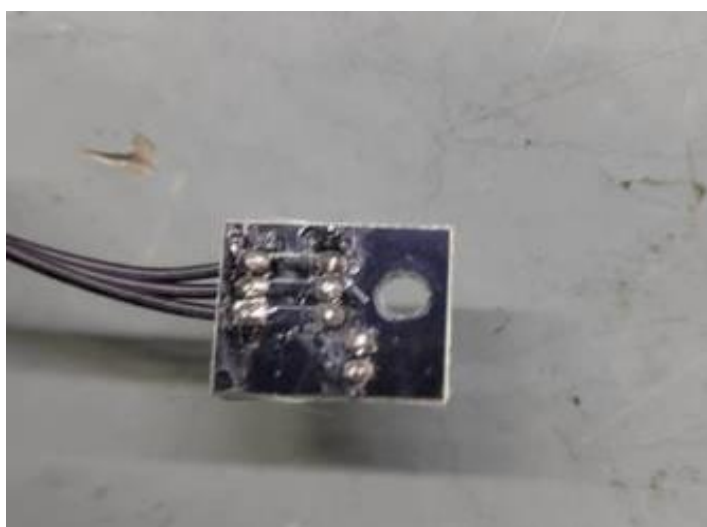


### 3.0 Product Photographs

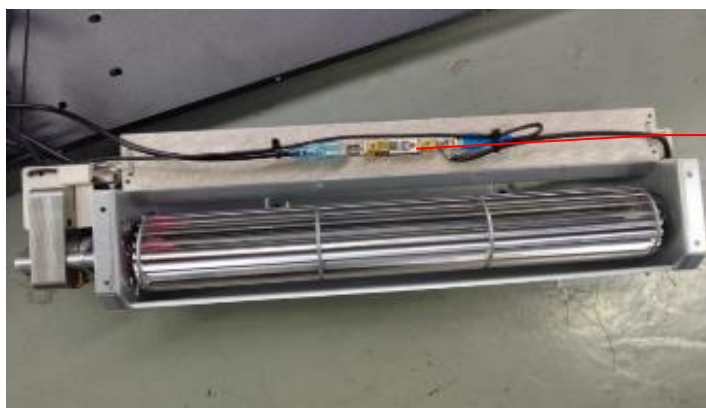
**Photo 136** - Receive PCB view of model L250, C280



**Photo 137** - Receive PCB view of model L250, C280



**Photo 138** - Heating element view of model L250, C280



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### 3.0 Product Photographs

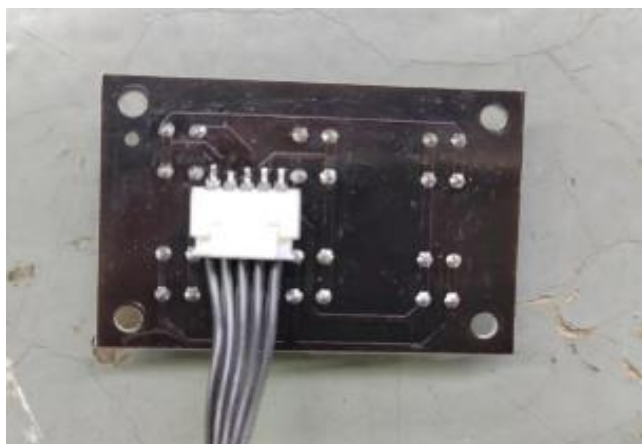
**Photo 139** - Heating element view of model L250, C280



**Photo 140** - Control PCB view of model L250, C280

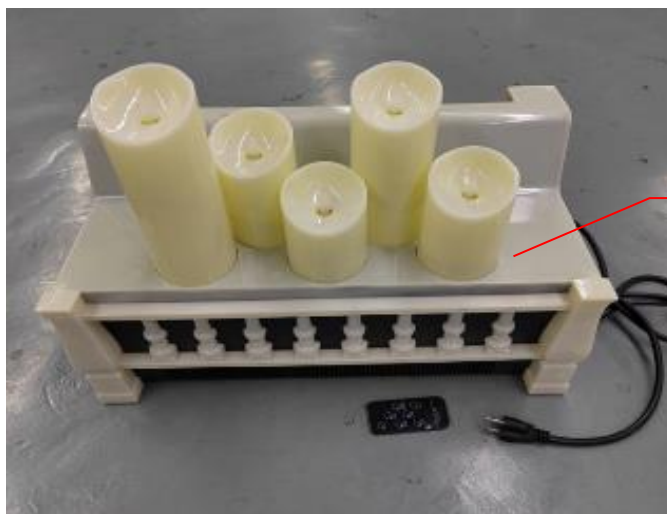


**Photo 141** - Control PCB view of model L250, C280



### 3.0 Product Photographs

**Photo 142** - Overview of model C280



**Photo 143** - Overview of model C280



**Photo 144** - Overview of model C280



### 3.0 Product Photographs

**Photo 145** - Internal view of model C280



**Photo 146** - Internal view of model C280



**Photo 147** - Lamp PCB view of model C280



### 3.0 Product Photographs

**Photo 148** - Lamp PCB view of model C280



**Photo 149** - Lamp PCB-1 view of model C280



**Photo 150** - Lamp PCB-1 view of model C280



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	Power plug	Various	5-15P	Rated: 125V 15A. Connected with flexible cord.	UL, CSA, ETL
1	2	Power Cord	Various	SJT-R HPN-R	16AWG x 3C, 105°C, VW-1, 300V, Length: 1.8-2.4m, Fitted with the attachment a grounding plug.	UL, CSA, ETL
1	3	Glass panel	NINGBO NILILAI GLASS PRODUCTS CO., LTD	Toughed Glass	minimum 2.5mm thick, secured to the Metal bracket by slotting in.	NR
2	4	Handle Plastic	FORMOSA CHEMICALS & FIBRE CORP PLASTICS DIV (E162823)	ANC120	ABS, V-0, RTI (95,65,65), Minimum 2.3mm thick, secured to Metal Housing by snap-in.	cURus
2	5	Metal Housing	Various	Painted steel	minimum 0.8mm thick.	NR
5	6	Power Switch 1	NINGBO MASTER SOKEN ELECTRICAL CO LTD (E218957)	RK1-01	125V, 60Hz, 16A, 6000 Cycles, T85, secured to metal housing by snap in. (for ZBI-15SRLT/M16/M18/M21/M24/M26/R16/R18/R21/R13)	cURus
			ZHEJIANG CHANGDECHEN G ELECTRIC APPLIANCES CO LTD (E239938)	HCKD-044	125V, 60Hz, 20A, 6000 Cycles, T85, secured to metal housing by snap in.	cURus
			DEFOND COMPONENTS LTD (E72989)	DRH-04-A DRH-04-B	125V, 60Hz, 20A, 6000 Cycles, T65 for DRH-04-A, T105 for DRH-04-B	cURus
5	7	Power Switch 2	NINGBO MASTER SOKEN ELECTRICAL CO LTD (E218957)	RK1-15	125V, AC, 16A, T85, 6000 cycles, secured to metal housing by snap in. (for ZBI-15SRLT/M16/M18/M21/M24/M26/M13)	cURus
			ZHEJIANG CHANGDECHEN G ELECTRIC APPLIANCES CO LTD (E239938)	HCKD-045	125V, 60Hz, 15A, 6000 Cycles, T105.	cURus
			DEFOND COMPONENTS LTD (E72989)	DRH-1215	125V, 60Hz, 15A, 6000 Cycles, T105.	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>
5	8	Knob Plastic	FORMOSA CHEMICALS & FIBRE CORP PLASTICS DIV (E162823)	ANC120	ABS,V-0, RTI (95,65,65), Minimum 2.3mm thick, snap-in.	cURus
6	9	Transformer 1	ZHEJIANG DECHUANG TRANSFORMER MANUFACTURING CO LTD (E311389)	DCU06158	Rated input 120V, 60Hz, output 12V 500mA, Class 2, secured to metal housing by 2 screws. (for ZBI-15SRLT/M16/M18/M21/M24/M26/M13)	cURus
			YUYAO CITY JINGTUO ELECTRONICS CO LTD (E315657)	JTU06173	Rated input 120V, 60Hz, output 12V, 500mA, Class 2.	cURus
6	10	PCB	YAT TAO CHEMICAL HOLDINGS (HK) LTD (E167840)	KH-111F	FR1, 94V-0, 130 °C, minimum 1.6mm thick, secured to metal housing by screws.	cURus
			SHANDONG JINBAO ELECTRONICS CO LTD (E141940)	ZD-90F	FR1, 94V-0, 130 °C, minimum 1.6mm thick.	cURus
			KINGBOARD LAMINATES HOLDINGS LTD (E123995)	KB-3151	FR1, 94V-0, 130 °C, minimum 1.6mm thick	cURus
6	11	Fan Motor	CHANGZHOU W&W MOTOR CO LTD (E353654)	YJF48/16WE	120V, 60Hz, Class A	cURus
			FANGZHAN ELECTRICAL APPLIANCES CO LTD (E303766)	FZ4815	120V, 60Hz, Class B	cURus
6	12	Cable Tie	HUA WEI INDUSTRIAL CO LTD (E75050)	GT-140M	85°C,used for fixed internal wiring	cURus
			CHANGHONG PLASTICS GROUP IMPERIAL PLASTICS CO LTD (E359184)	CHS-2.5X100	80°C,used for fixed internal wiring	cURus
				CHS-2.5X120		
				CHS-2.5X150		
				CHS-3X100		
				CHS-3X120		
				CHS-3X150		
				CHS-3.5X150		
				CHS-3.5X180		

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>
6	13	Fan blade	ZHEJIANG FUTENG ELECTRIC APPLIANCE CO., LTD	3A21	Aluminium, Minimum 0.3mm thickness	NR
6	14	Internal Wire	Various	3122	300V~, 200°C, 16AWG for > 10A and ≤16A, 18AWG for > 3A and ≤10A, 20AWG for > 0.2A and ≤3A, 22-24AWG for other connector. (Internal Wire For Heating Connection)	cURus
			Various	1015	600V~, 105°C, 16AWG for > 10A and ≤16A, 18AWG for > 3A and ≤10A, 20AWG for > 0.2A and ≤3A, 22-24AWG for other connector. (Internal Wire For Other Connection)	cURus
			Various	1007	300V~, 80°C, 18AWG for > 3A and ≤10A, 20AWG for > 0.2A and ≤3A, 22-24AWG for other connector. (Internal Wire only for PCB Connection)	cURus
7	15	Synchronous Motor 1	NINGBO JIULING MOTOR CO LTD (E221710)	49TYJ	AC110V-120V 50/60Hz, 4W, secured to metal housing by 2 screws (except for RFH series and RFI series)	cURus
			WUXI DEXUN FUDA MOTOR CO LTD (E174872)	50TYZ-A	AC110V-120V 50/60Hz, 4W	cURus
8	16	Manual resetting thermal cut out	MICROTHERM GMBH (E48909)	A70	125V, 16A, 105°C, 100000cycles (for all models except for S180, S230, S280)	cURus
			AUONE ELECTRONIC MFG LTD (E179137)	AUT-105-P	125V, 16A, 105°C, 100000cycles (for all models except for S180, S230, S280)	cURus
			CHUNG SHUN INDUSTRIAL CO (E221650)	CH-005-H	125V, 16A, 105°C, 100000cycles (for all models except for S180, S230, S280)	cURus
8	17	Heating Element	ZHEJIANG FUTENG ELECTRIC APPLIANCE CO., LTD	0Gr25Al5	Rated 120V, Min. 0.5mm <sup>2</sup> , 20 Ω+20 Ω. (22°C)	NR
8	18	Heating element support	E I DUPONT DE NEMOURS & CO INC (E41938)	FR50	Rated PA66, 5VA, RTI(130,115,120), Minimum 2.0mm thick. Fixed on the metal base by screws.	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>
8	19	Mica Plate	HUBEI ZHONGTIAN MICA PRODUCTS CO LTD (E248686)	HP5	V-0, RTI (200,200,200), Minimum 0.9mm thick. Fixed on the support plastic by slot in.	cURus
			ZHEJIANG RONGTAI ELECTRIC MATERIAL CO LTD. (E231452)	R-5660-X	V-0, RTI (200,200,200), Minimum 0.7mm thick.	cURus
10	20	Panel cover	NINGBO FUTIAN NEW MATERIAL TECHNOLOGY CO LTD (E152381)	C110	PC, V-0, HWI=0, HAI=0, RTI (80, 80, 80) color:all, min.thickness:1.5mm. Snapped the enclosure.	cURus
11	21	Transformer 2	ZHEJIANG DECHUANG TRANSFORMER MANUFACTURING CO LTD (E311389)	DCU06160	Rated input 120V, 60Hz, output 12V, 700mA, Class 2. secured to metal housing by 2 screws (for ZBI-15SRLT/R16, ZBI-15SRLT/R18, ZBI-15SRLT/R21, ZBI-15SRLT/R13, ZBI-15SRLT/MR24, ZBI-15SRLT/MR26, ZBI-15SRLT/MR36.)	cURus
			YUYAO CITY JINGTUO ELECTRONICS CO LTD (E315657)	JTU06175	Rated input 120V, 60Hz, output 12V, 700mA, Class 2. (for ZBI-15SRLT/R16, ZBI-15SRLT/R18, ZBI-15SRLT/R21, ZBI-15SRLT/R13, ZBI-15SRLT/MR24, ZBI-15SRLT/MR26, ZBI-15SRLT/MR36, S180, S230A, S230B, S230C, S280, L250, C280.)	cURus
12	22	Flame cover	NINGBO FUTIAN NEW MATERIAL TECHNOLOGY CO LTD (E152381)	C110	PC, V-0, HWI=0, HAI=0, RTI (80, 80, 80) color:all, min.thickness:1.5mm. Fixed on the metal base by screws.	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>
13	23	Relay for heating element	HSIN DA PRECISION CO LTD (E162117)	953-1A-12DB	277V AC, 30A, 12V DC, soldered on the PCB	cURus
			GOOD SKY ELECTRIC CO LTD (E141060)	GU-SH-112DMQ	250V AC, 25A, 12V DC, soldered on the PCB	cURus
			XIAMEN HONGFA ELECTROACOUSTIC CO LTD (E133481)	HF-2160	240V AC, 30A, 12V DC, soldered on the PCB	cURus
			SANYOU CORPORATION LIMITED (E190598)	SLI-S-112DM	240V AC, 30A, 12V DC, soldered on the PCB	cURus
			NINGBO SONGLE RELAY CO LTD (E179944)	SRU-12VDC-SL-A	120V AC, 15A, 12V DC, soldered on the PCB	cURus
			NINGBO SONGLE RELAY CO LTD (E167996)	SRU-12VDC-SL-A	120V AC, 15A, 12V DC, soldered on the PCB	cURus
			NINGBO SONGLE RELAY CO LTD (E179944)	SLI-12VDC-SL-A	240V AC, 30A, 12V DC, soldered on the PCB	cURus
13	24	Relay for motor	GOOD SKY ELECTRIC CO LTD (E141060)	RWH-SH-112D RW-SH-112D	125V AC, 10A, 12V DC, soldered on the PCB	cURus
			XIAMEN HONGFA ELECTROACOUSTIC CO LTD (E133481)	JQC-3FF	125V AC, 12A, 12V DC, soldered on the PCB	cURus
			NINGBO SONGLE RELAY CO LTD (E179944)	SRD-12VDC-SL-C SRD-12VDC-SL-A	125V AC, 10A, 12V DC, soldered on the PCB	cURus
			SANYOU CORPORATION LIMITED (E190598)	SRD-S-112DM	125V AC, 10A, 12V DC, soldered on the PCB	cURus
			HSIN DA PRECISION CO LTD (E162117)	943-1A-12D	125V AC, 10A, 12V DC, soldered on the PCB	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>
13	25	Quick-connect	XIN SHENG TERMINAL MFG LTD (E177315)	704-BS	Copper, min. thickness 0.4mm.	cURus
				707-BS		
				709-BS		
			ZHEJIANG ZUCH TECHNOLOGY CO LTD (E237058)	TP18732A-3	Copper, min. thickness 0.4mm.	cURus
				TF25031A-3		
				TP25031A-3		
				TP25032A-3		
				TP25033A-3		
			ZHEJIANG ZUCH TECHNOLOGY CO LTD (E235677)	T043752K-2	Copper, min. thickness 0.4mm.	cURus
13	26	Flat Cable Connector (2 pin)	BOOM PRECISION ELECTRONICS CO LTD ZHEJIANG (E309635)	XH-2A	250V, 3A, T85. Soldered on PCB board.	cURus
				XH-2Y		
13	27	Flat Cable Connector (8 pin)	ZHEJIANG HONGXING ELECTRICAL CO LTD (E228500)	HX25037	250V, 3A, T85. Soldered on PCB board.	cURus
13	28	Flat Cable Connector (4 pin)	ZHEJIANG HONGXING ELECTRICAL CO LTD (E228500)	HX25037	250V, 3A, T85. Soldered on PCB board.	cURus
14	29	Heat Shrinkable	SHENZHEN WOER HEATSHRINKABL E MATERIAL CO LTD. (E203950)	RSFR-H	125°C, 600V, VW-1, Used as insulation of bare terminal.	cURus
			DONGGUAN SALIPT CO LTD (E209436)	SALIPTS-901- 600	125°C, 600V, VW-1, Used as insulation of bare terminal.	cURus
			SHENZHEN WOLIDA TRADING CO LTD (E329530)	RSFR-H	125°C, 600V, VW-1, Used as insulation of bare terminal.	cURus
20	30	Adjustable thermostat	SHAOXING ZHONGXIN ELECTRIC APPLIANCES CO LTD (E243487)	KST 220	125V, AC, 15A, operating temperature: 90°C, 100000cycles,T300, secured to metal housing by 2 screws (for ZBI-15SRLT/M16, ZBI- 15SRLT/M18, ZBI- 15SRLT/M21, ZBI-15SRLT/M13, ZBI-15SRLT/M24, ZBI- 15SRLT/M26)	cURus
			CHUNG SHUN INDUSTRIAL CO (E221650)	CH-002	125V, AC, 15A, operating temperature:90°C,100000 cycles,T300	cURus
				CH-002-H		



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>
20	31	Wire connector	HEAVY POWER CO LTD (E113650)	CE1	Rated 300V, 150°C.	cURus
				CE2		
				CE5		
20	32	Strain relief	HEAVY POWER CO LTD (E107293)	7N-2	Bushings, incorporating a strain relief. Snapped to metal enclosure.	cURus
56	33	Transformer 3	YUYAO CITY JINGTUO ELECTRONICS CO LTD (E315657)	JTU06158	Rated input 120V, 60Hz, output 12V 1.5A (for JTU06158) /1.0A (for JTU06258), Class 2, secured to metal housing by 2 screws (for RFH series and RFI series)	cURus
				JTU06258		
56	34	Synchronous Motor 2	Changzhou Wujin Jiaxin Electric Co., Ltd.	28BYJ48	DC 12V, Class A	See 5.0
57	35	Tubing	FOSHAN FANGPU PVC DIPPING CO LTD (E185679)	PVC	Rated VW-1, 600V, 105°C.	cURus
57	36	Flat Cable Connector (3 pin)	ZHEJIANG HONGXING ELECTRICAL CO LTD (E228500)	HX25037	250V, 3A, T85. Soldered on PCB board.	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>
57	37	Fuse	DONGGUAN HONGDA ELECTRONIC TECHNOLOGY CO LTD (E318938)	31F	250V, 15A. Soldered on PCB board. (for RFH series and RFI series)	cURus
			DONGGUAN BETTER ELECTRONIC TECHNOLOGY CO LTD (E300003)	522	250V, 15A. Soldered on PCB board.	cURus
			XC ELECTRONICS (SHENZHEN) CORP LTD (E249609)	5G	250V, 15A. Soldered on PCB board.	cURus
			SHENZHEN LANSON ELECTRONICS CO LTD (E221465)	5K	250V, 15A. Soldered on the PCB.	cURus
57	38	Varistor	BESTBRIGHT ELECTRONICS CO LTD (E315524)	10D471K	471K, Soldered on PCB board. (for RFH series and RFI series)	cURus
			SHANTOU HIGH-NEW TECHNOLOGY DEVELOPMNT ZONE SONGTIAN ENTERPRISE CO LTD (E330837)	10D471K	471K, Soldered on PCB board.	cURus
			JYA-NAY CO LTD (E333951)	10D471K	471K, Soldered on PCB board.	cURus
			HONGZHI ENTERPRISES LTD (E324904)	HEL10D271	271K, Soldered on PCB board. Only for S180, S230B, S230C, S280, L250, C280	cURus
			CERGLASS MFG INC (E317616)	10D271	271K, Soldered on PCB board. Only for S180, S230B, S230C, S280, L250, C280	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>
57	39	Flat Cable Connector (5 pin)	ZHEJIANG HONGXING ELECTRICAL CO LTD (E228500)	HX25037	250V, 3A, T85. Soldered on PCB board.	cURus
1	40	Marking(not shown)	SUZHOU YONG CHENG PACKING & PRINT CO LTD (MH25146)	KL-TYL50	rated 125 °C. Adhered to plastic housing by adhesive.	cURus
			HANG ZHOU IDEA LABEL CO LTD (MH28439)	NI01	rated 150 °C	cURus
98	41	Fuse 1	ZHONGSHAN CITY KAIXU ELECTRICAL CO LTD (E321134)	3TL 3FL 3HL	250V, 2A. Soldered on PCB board. (for S180, S230B, S230C, S280, L250, C280)	cURus
105	42	Heating Element 1	ZHEJIANG FUTENG ELECTRIC APPLIANCE CO., LTD	0Gr25Al5	Rated 120V, Min. 0.5mm <sup>2</sup> , 16 Ω. (22°C) for S180, S230A, S230B, S230C, S280.	NR
105	43	Heating Element 2	ZHEJIANG FUTENG ELECTRIC APPLIANCE CO., LTD	S230	Rated 120V, 29 Ω. 480W. for S180, S230A, S230B, S230C, S280.	See 5.0
123	44	Simulate Charcoal	LG CHEMICAL LTD (E67171)	GP-3156F(#)	PP, 5VA, RTI (125, 120, 120), Min. thickness 1,5mm. Secured to base by screws.	cURus
			NINGBO FUTIAN NEW MATERIAL TECHNOLOGY CO LTD (E152381)	C110	PC, V-0, HWI=0, HAI=0, RTI (80, 80, 80) color:all, min.thickness:1.5mm. Fixed on the metal base by screws. Only for US.	cURus
124	45	Cover	LG CHEMICAL LTD (E67171)	GP-3156F(#)	PP, 5VA, RTI (125, 120, 120), Min. thickness 1,5mm. Secured to base by screws.	cURus
			NINGBO FUTIAN NEW MATERIAL TECHNOLOGY CO LTD (E152381)	C110	PC, V-0, HWI=0, HAI=0, RTI (80, 80, 80) color:all, min.thickness:1.5mm. Fixed on the metal base by screws. Only for US.	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>
138	46	Manual resetting thermal cut out 1	MICROTHERM GMBH (E48909)	A70	125V, 16A, 125° C,100000cycles (for S180, S230, S280)	cURus
			AUONE ELECTRONIC MFG LTD (E179137)	AUT-125-P	125V, 16A, 125°C,100000cycles (for S180, S230, S280)	cURus
			CHUNG SHUN INDUSTRIAL CO (E221650)	CH-005-H	125V, 16A, 125°C,100000cycles (for S180, S230, S280)	cURus
142	47	Enclosure	LG CHEMICAL LTD (E67171)	GP-3156F(#)	PP, 5VA, RTI (125, 120, 120), Min. thickness 1,5mm. Secured to base by screws.	cURus
			NINGBO FUTIAN NEW MATERIAL TECHNOLOGY CO LTD (E152381)	C110	PC, V-0, HWI=0,HAI=0,RTI (80, 80, 80) color:all, min.thickness:1.5mm. Fixed on the metal base by screws. Only for US.	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

INSULATED COIL						
Photo #	Item no.	Name	Manufacturer/Trademark	Type / model		
56	34	Synchronous Motor 2	Changzhou Wujin Jiaxin Electric Co., Ltd.	28BYJ48		
Electrical Rating: DC 12V				Insulation class A		
Component Standard used: UL 1004-1 / UL 1004-2 & CSA C22.2 No. 77						
MATERIALS LIST (refer to illustration 6 for assembly drawing)						
Component	Manufacturer	Type/model	Dimensions/thickness/assembly			
Bracket	KINGFA SCI & TECH CO LTD (E171666)	PBT-RG301	PBT, V-0 ,HWI(2), HAI(3), RTI(130,125,140), min thickness: 3.5mm.			
Bobbin	CHI MEI CORPORATION (E56070)	PC-110U(f1)	PC, rated V-2, HWI=4, HAI=1, RTI(125,105,125),color:all, min. thickness: 1.0mm.			
PCB	SHUNDE JUNDA ELECTRONIC (E173873)	JD-B1	V-0 ,130°C 1.0mm.			
Lead wire	Various	1007	300V, 80°C, 26AWG.			
Winding	ZHEJIANG GREATWALL ELECTRIC SCIENCE & TECHNOLOGY CO LTD (E206121)	PEW-N/180	Nylon film coated magnet wire. Rated 180°C. Assemble in rotor.			
WINDING(S) RESISTANCE						
Winding Designation	Wire Size (AWG or mm <sup>2</sup> )	Wire Type	Turns	Volts	Amps	DC resistance (Ω) +/- 10%:
winding	0.105	PEW-N/180	2400	12(DC)	-	200
VERIFICATION PROCESS						
Frequency: Annual	Test Site: CEC			Number of samples to test: 1		
Test Name	Test Parameters					
Winding resistance	See resistance per winding above.					
Dielectric Strength	Apply voltage Between			Test Voltage		Test Time
	Terminal to cover			500		1 min



## 5.0 Critical Unlisted CEC Components

HEATER ELEMENT				
Photo #	Item no.	Name	Manufacturer/Trademark	Type / model
105	43	Heating Element 2	ZHEJIANG FUTENG ELECTRIC APPLIANCE CO., LTD	S230
Electrical Rating: 120V, 480W				Insulation class /
Component Standard used: UL 1030 & CSA-C22.2 No. 72-10				
MATERIALS LIST (refer to illustration 7 for assembly drawing)				
Component	Manufacturer	Type/model	Dimensions/thickness/assembly	
Sheath	ZHEJIANG	Glass	Diameter 12mm	
Resistance	FUTENG	0Cr25Al5	29.0Ω (ambient: 22°C)	
Sealing	ELECTRIC APPLIANCE CO., LTD	Ceramic	thickness: over 1.5mm	
VERIFICATION PROCESS				
Frequency:	Annual	Test Site:	CEC	Number of samples to test: 1
Test Name		Test Parameters		
Winding resistance		See resistance per element above.		
Dielectric Strength	Apply voltage Between	Test Voltage	Test Time	
	Live parts and sheath	1000V	1 minute	
	Live parts and housing	1200V	1 second	

## 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, minimum spacing 6.4mm are maintained through air and 12.7mm over surfaces of insulating material between live parts and a conductive enclosure.  
Minimum spacing 1.6mm are maintained through air and over surfaces of insulating material between live parts of opposite polarity and between live parts and non-current-carrying conductive parts other than the 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 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 or the equipment grounding terminal.
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. All wiring is minimum 24 AWG, with a minimum rating of 300V, 80°C.
7. Markings - The product is marked on as labeling system as described in item no. 40 of Section 4.0 as follows:  
applicant's name/brand name  
model number  
date of manufacturer  
electrical ratings  
Refer to Illustration No. 2 for details.
8. Cautionary Markings - The following are required: The following are required: The following are required: refer to Illustration No. 2 to 5 for details
9. Installation, Operating and Safety Instructions - Instructions for installation and use of this product are provided by the manufacturer.  
Refer to Illustration No. 1, 1a to 1u for details.

## 7.0 Illustrations

### Illustration 1-Electric Fireplace Instruction Manual

Electric Fireplace Instruction Manual

MODEL:

ZBI-15SRLT/M13,M16,M18,M21,M24,M26,R13,R16,R18,R21,  
R24,R26,R36



Ningbo Rowan Electric Appliance Co., Ltd.  
Room 1305, No. 755 Liyuan North Road, Haishu District, Ningbo, P.R. China

**Before operating your electric fireplace, please read the  
instruction manual carefully, and keep it for future reference.**

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## 7.0 Illustrations

### Illustration 1a -continued

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**Caution:** BEFORE OPERATING THIS UNIT PLEASE READ THESE INSTRUCTIONS CAREFULLY AND KEEP IT FOR FUTURE REFERENCE.

## 7.0 Illustrations

### Illustration 1b -continued

## SECTION 1 WARNING & PRECAUTIONS

### 1.1 IMPORTANT SAFETY INSTRUCTIONS



This symbol alert you to potential hazards that can kill or hurt you and/or others.



**DANGER**



**WARNING**

All safety information will tell you what the potential hazard is, tell you how to reduce the chance of injury, and tell you what can happen if the instructions are not followed.

Important:

Read all instructions and warnings carefully before starting installation. Failure to follow these instructions may result in a possible electric shock, fire hazard and will void the warranty.



### IMPORTANT INSTRUCTIONS



When using electrical appliances, basic precautions should always be followed to reduce the risk of fire,

Electrical shock, and injury to persons, 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. If provided, use handles when moving this heater. Keep combustible materials, such as furniture, pillows, bedding, papers, clothes, and curtains at least 3 feet (0.9 meters) from the front of the heater and keep them away from the sides and rear.
3. Extreme caution is necessary when any heater is used by or near children or invalids and whenever the heater is left operating and unattended.
4. Always unplug heater when not in use.
5. Do not operate any heater with a damaged cord or plug or after the heater malfunctions, has been dropped or damaged in any manner. Return heater to authorized service facility for examination, electrical or mechanical adjustment, or repair.



## 7.0 Illustrations

### Illustration 1c -continued

6. Do not use outdoors.
7. This heater is not intended for use in bathrooms, laundry areas and similar indoor locations. Never locate heater where it may fall into a bathtub or other water container.
8. Do not run power cord under carpeting. Do not cover power cord with throw rugs, runners, or the like. Arrange power cord away from traffic area and where it will not be tripped over.
9. To disconnect heater, turn controls to off, then remove plug from outlet.
10. Connect to properly grounded outlets only.
11. Do not insert or allow foreign objects to enter any ventilation or exhaust openings as this may cause an electric shock or fire, or damage the heater.
12. To prevent a possible fire, do not block firebox air intakes or exhaust in any manner. Do not operate firebox on soft surfaces, like a bed, where openings may become blocked.
13. A heater has hot and arching or sparking parts inside. Do not use in areas where gasoline, paint, or flammable liquids are used or stored.
14. Use this heater only as described in this manual. Any other use not recommended by the manufacturer may cause fire, electrical shock, or injury to persons.
15. Avoid the use of an extension cord because the extension cord may overheat and cause a risk of fire.
16. Always plug heaters directly into a wall outlet/receptacle.  
Never use with an extension cord or relocatable power tap (outlet/power strip).
17. **"SAVE THESE INSTRUCTIONS"**

Important: Lisez toutes les instructions et les avertissement avant de commencer l'installation. Défaut de ces instructions peut résulter un choc électrique, risque d'incendie et entraînera la nullité du garantie.



#### IMPORTANT INSTRUCTIONS



Lorsque vous utilisez des appareils électriques, des précautions de base devraient toujours être suivies pour réduire les risques d'incendie, de choc électrique ou des blessures aux personnes, notamment les suivantes:

1. Lisez toutes les instructions avant d'utiliser cet appareil de chauffage.
2. Ce foyer est chaud lorsqu'il fonctionne. Pour éviter les brûlures, ne laissez pas toucher les surfaces chaudes. Si cela est prévu, utiliser les poignées pour le déplacer. Garder les matériaux combustibles, tels que meubles, oreillers, literie, papiers, vêtements et rideaux à au moins 3 pieds (0,9 mètres) de l'avant de l'appareil et des côtés et à l'arrière.
3. Une extrême prudence est nécessaire lorsque tout appareil est utilisé par ou près des enfants ou des personnes handicapées et à chaque fois l'appareil est laissé sans surveillance.

## 7.0 Illustrations

### Illustration 1d -continued

4. Toujours débrancher le foyer lorsqu'il n'est pas utilisé .
5. Ne pas utiliser un appareil avec un cordon ou une fiche endommager ou après un dysfonctionnement , tombé ou endommagé de quelque façon . Retour à la chauffe centre de service autorisé pour examiner , électrique ou mécanique d'ajustement ou de réparation .
6. Ne pas utiliser à l'extérieur .
7. Ce radiateur n'est pas destiné à être utilisé dans les salles de bains, la buanderie et autres pièces similaires. Ne jamais placer le foyer où il pourrait tomber dans une baignoire ou autre récipient d'eau .
8. Ne pas passer le cordon d'alimentation sous un tapis. Ne pas couvrir le cordon d'alimentation avec des tapis, ou analogue . Placer le cordon d'alimentation loin des endroits passants où il ne sera pas trébuché .
9. Pour débrancher l'appareil, fermer l'interrupteur , puis retirer la fiche de la prise.
10. Connectez à des prises correctement mise à la terre.
11. Ne pas insérer ou laisser des objets étrangers dans les ouvertures de ventilation ou d'évacuation car cela pourrait provoquer un choc électrique ou un incendie, ou endommager l'appareil.
12. Pour éviter un incendie , ne pas boucher les entrées d'air du foyer ou de l'échappement de quelque manière . Ne pas faire fonctionner foyer sur des surfaces molles, comme un lit, où les ouvertures pourraient être bloquées.
13. Des pièces chaudes et arquées ou des étincelles à l'intérieur . Ne pas utiliser dans les zones où l'essence , de peinture ou des liquides inflammables sont utilisés ou entreposés.
14. Utilisez l'appareil tel que décrit dans ce manuel. Toute autre utilisation non recommandée par le fabricant peut provoquer un incendie, un choc électrique ou de blessures.
15. Éviter l'utilisation d'une rallonge à cause de la rallonge peut surchauffer et causer un risque d'incendie .
16. Chauffe branchez toujours directement dans une prise murale / réceptacle. Ne pas utiliser avec une rallonge ou une prise électrique relogables (sortie / puissance de bande)
17. **"CONSERVER CES INSTRUCTIONS"**

## 7.0 Illustrations

### Illustration 1e -continued

#### 1.2 TECHNICAL SPECIFICATION

Model	ZBI-15SRLT/M(R)13,16, 18,21,24,26,36
Voltage, Frequency, Phase	AC~120V/60Hz/1PH
Total Rated Input	1500W

#### ELECTRICAL REQUIREMENT

##### Electrical Shock Hazard

Plug into a grounded (3-prong) outlet.  
Do not remove ground prong.  
Do not use an extension cord.  
Failure to follow these instructions can result in death,  
fire, or electrical shock.

It is mandatory that the grounded path is adequate.

Check with a qualified electrician if you are not sure if the electrical fireplace is grounded.  
A three-wire, single-phase, 60Hz AC only, electrical supply is required on a separate circuit. See model and serial nameplate label for circuit amperage required for your specific model.

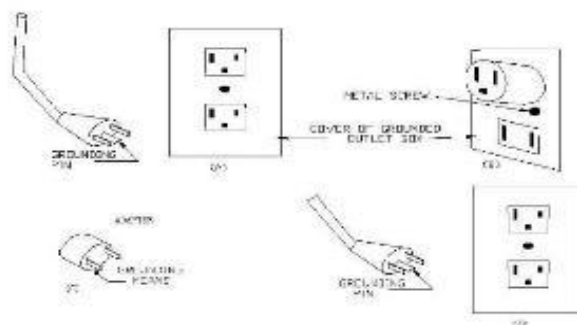
We strongly suggested that your electrical fireplace should have its own fuse or circuit breaker, and no other device or unit would be operated on this fuse or circuit breaker.

This heater is for use on 120 volts. For USA, The cord has a plug as shown at (A) in following Figure. An adapter 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.

If a mating 3-prong type outlet is not available, it is the consumer's responsibility to have a properly grounded, 3-prong outlet installed by a licensed installer.

## 7.0 Illustrations

### Illustration 1f -continued



It is the customer's responsibility:

- To contact a qualified electrical installer.
- To assure that the electrical installation is adequate and in conformance with National Electrical code, ANSI/NFPA 70-latest edition, and all local codes and ordinances.

#### The outlet should be:

120 volt (112.8V min. – 127.2V max.), min.15Ampere capacity

Protected by a 15Ampere fuse or circuit breaker

14 gauge copper wiring

## 1.3 TESTING THE UNIT

Carefully remove the unit from the packing box. Prior to installing the unit, test to make sure the unit operates properly by plugging the unit's power cord into a conveniently located 120V grounded outlet.



**Caution:** The unit's power cord must be connected to properly grounded and protected 120V outlet. Please always use ground fault protection where required by the electrical code.



**Warning:** Do not operate the unit if it is damaged or it has malfunctioned. Please call the customer service telephone number.

Refer to operating instructions regarding the various controls and features of the unit.

## SECTION 2 QUICK REFERENCE GUIDE

### READ ALL INSTRUCTIONS BEFORE USING THIS APPLIANCE

1. Before permanently placing your fireplace, plug it into a convenient outlet to verify that the circuit breaker for the outlet is on.
2. The electric fireplace may emit a slight, harmless odor when first used. This

## 7.0 Illustrations

### Illustration 1g -continued

odor is normal and it is caused by the initial heating of internal fireplace and will not occur again.

3. If your electrical fireplace does not emit heat, consult your Instruction Manual for further information.



CAUTION  
RISK OF ELECTRIC SHOCK  
DO NOT OPEN  
NO USER-SERVICEABLE PARTS INSIDE  
HIGH TEMPERATURE



**CAUTION-HIGH TEMPERATURE, KEEP ELECTRICAL CORDS, DRAPERY, AND OTHER FURNISHINGS AT LEAST 3 FEET (0.9M) FROM THE FRONT OF THE HEATER AND AWAY FROM THE SIDE AND REAR**

#### **WARNING:**

2. RISK OF FIRE-KEEP COMBUSTIBLE MATERIAL AWAY FROM THE FRONT OF THE ELECTRICAL FIREPLACE.
3. SERVICING SHOULD BE DONE ONLY WHILE THE ELECTRICAL FIREPLACE IS DISCONNECTED FROM THE POWER SUPPLY.

## 2.1 SPECIAL CHARACTERISTICS

- A) The glow of the embers hard to distinguish from that of a real wood burning fireplace. This heater is ideal for use all year round, for supplemental heating or for the ambience of the fire in warm weather.
- B) This fireplace produces a simulative fire and hot airflow.

## 2.2 UNPACKING AND INSTALLING THE ELECTRIC FIREPLACE

Open the packing carefully and remove the fireplace.

- Remove and discard the plastic bag.
- BE RESPONSIBLE WHEN HANDLING THE PACKING MATERIAL.
- WARNING: KEEP PLASTIC WRAPPING AWAY FROM CHILDREN.
- Keep the original packing for future transport and/or storage.
- Keep the front of the unit, through which the heat is radiated, at least 3feet/0.9m away from furniture, curtains and other flammable objects/materials at all times.

## 7.0 Illustrations

### Illustration 1h -continued

Ensure there is a grounded outlet nearby (back of the appliance).

#### Note:

A dedicated power circuit is recommended for the unit. Additional electrical appliances on the same circuit may exceed the current (amperage) rating for that circuit. If after the installation of your unit, the circuit breaker trips or the fuse open repeatedly, then a dedicated circuit must be required.

Any new wiring must be done in compliance with local and national codes and other applicable regulations in order to reduce the risk of the fire, electric shock or other injuries. It is strongly recommended that you hire a licensed electrician to complete any such work.

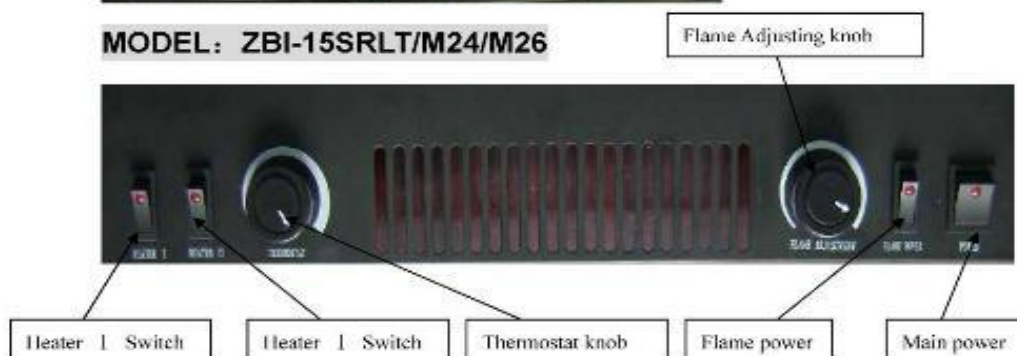
#### MODEL:ZBI-15SRLT/M16



#### MODEL:ZBI-15SRLT/M18



#### MODEL: ZBI-15SRLT/M24/M26





## 7.0 Illustrations

### Illustration 1i -continued

#### HOW TO OPERATE

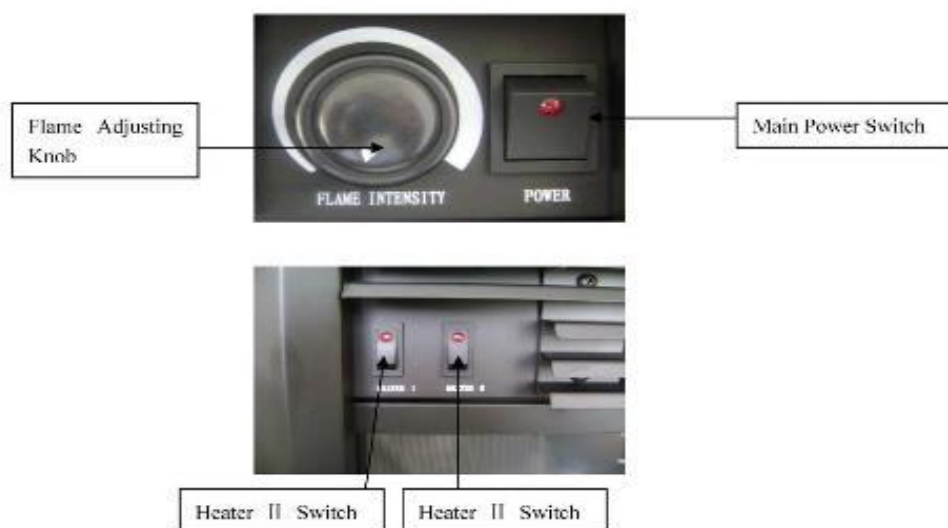
##### First. Flame Operation

1. To switch on the flame effect of your fireplace, flip the "POWER" rocker power switch on. You will know that you have power to the flame effect when the red LED light on the switch is lit.
2. To adjust the brightness of the flame effect, turn the right-hand dial marked with "FLAME ADJUSTMENT", from "LOW" to "HI", until it reaches the brightness you desire.

##### Second. Heater Operation

1. To switch on the heater, first flip the "POWER" rocker switch to the on position, you will know that you have power to the heater when the red LED light on the switch turns on.
2. Flip the second rocker switch marked with "HEATER" This switch is for heating, and the red LED light on this switch will be lit. This will give you approx. 1500W of heater.
- \*: If the appliance have "HEATER I" and "HEATER II" switch, Flip the rocker switch marked with "HEATER I". This switch is for low-level heating, and the red LED light on this switch will be lit. This switch gives you approx. 750W of heat. For high-level heating, make sure that the "POWER", "HEATER I" and "HEATER II" switches are all turned on. Make sure the red LED light on three switches are all lit. This will give you approx. 1500W of heat.
3. To adjust the temperature, turn the right-hand dial marked with "THERMOSTAT", from "LOW" to "HI", until it reaches the temperature you desire. This function only for ZBI-15SRLT/M18/M24/M26

#### MODEL:ZBI-15SRLT/M21



## 7.0 Illustrations

### Illustration 1j -continued

#### HOW TO OPERATE

##### 1. Flame Operation

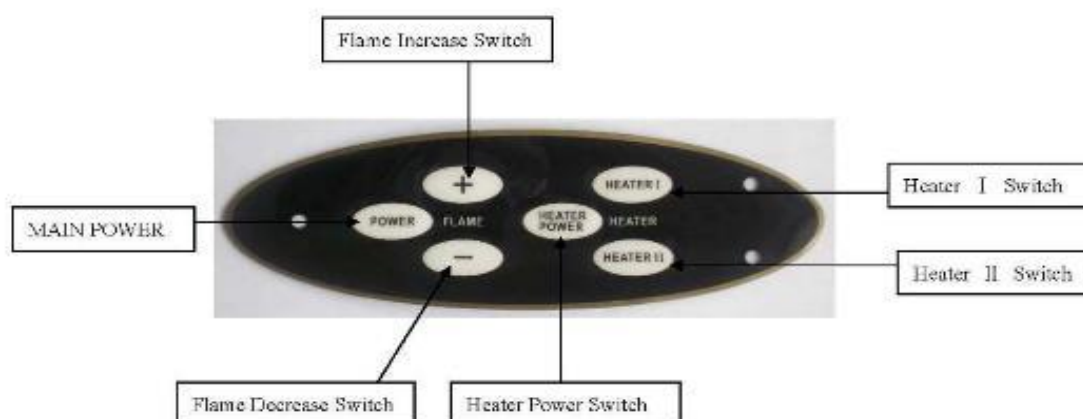
1. To switch on the flame effect of your fireplace, flip the "POWER" rocker power switch on. You will know that you have power to the flame effect when the red LED light on the switch is lit.
2. To adjust the brightness of the flame effect, turn the right-hand dial marked with "FLAME ADJUSTMENT", from "LOW" to "HI", until it reaches the brightness you desire.

##### 2. Heater Operation

1. To switch on the heater, first flip the "POWER" rocker switch to the on position. You will know that you have power to the heater when the red LED light on the switch turns on.
2. Flip the second rocker switch marked with "HEATER I". This switch is for low-level heating, and the red LED light on this switch will be lit. This switch gives you approx. 750W of heat. For high-level heating, make sure that the "POWER", "HEATER I" and "HEATER II" switches are all turned on. Make sure the red LED light on three switches are all lit. This will give you approx. 1500W of heat.

#### CONTROL PANEL FOR

**MODEL:ZBI-15SRLT/R16,18,24,26,36**



## 7.0 Illustrations

### Illustration 1k -continued

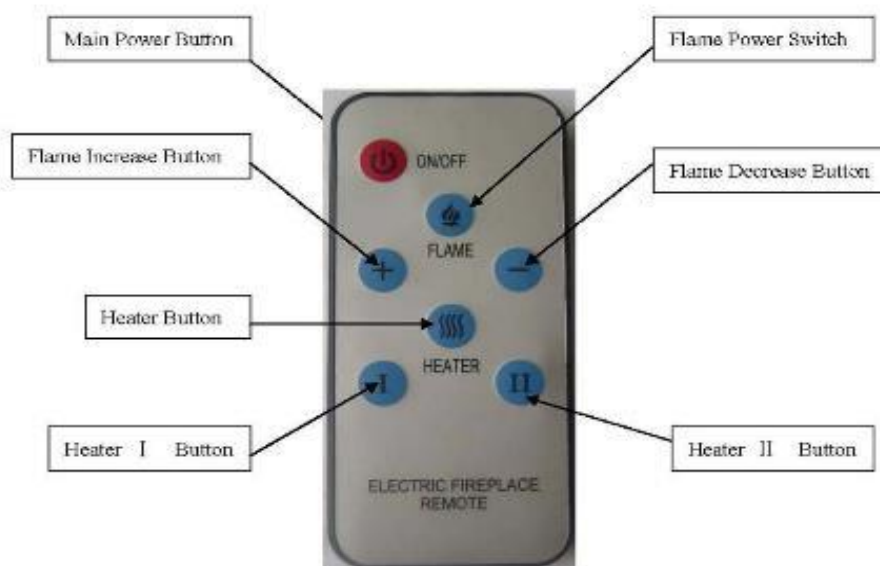
#### HOW TO OPERATE

1. Press the "POWER" Button to start the unit. The complete system including the flame and log system and the heating element will start to work immediately. The flame and log system will be lit to the default brightness.
2. Press the flame brightness increase "+" Button or the flame brightness decrease "-" button to adjust to your desired brightness.

#### Heater operation:

1. Press the power "POWER" button to start the unit. The complete system including the flame and log system and the heating element will start to work immediately. The flame and log system will be lit to the default brightness.
2. Press the "HEATER POWER" button to on or off the unit heater.
3. Press the "HEATER I" button or the "HEATER II" button to on or off the two heater 750W each other.

#### REMOTE (ONLY USE FOR R13,16,18,21,24,26,36)



## 7.0 Illustrations

### Illustration 1I -continued

#### HOW TO OPERATE:

Point the remote control toward the receiver on the fireplace (main unit).

1. Press the power "POWER" button to start the unit. The complete system including the flame and log system and the heating element will start to work immediately. The flame and log system will be lit to the default brightness.
2. Press the flame brightness increase "+" button or the flame brightness decrease "-" button to adjust to your desired brightness.
3. if you only want the flame and the log to work and you don't want the heating, press the "HEATER" button to switch the heating element off.
4. if you only want one of the heater work, press the "HEATER I" button or "HEATER II" button to choose.

#### SECTION 5 CARE & MAINTENANCE

##### 5.1 CLEANING YOUR FIREPLACE



**Warning:** Before cleaning the exterior of the appliance, disconnect the unit from the power supply first and leave the unit cooled off.

You can clean the exterior of the heater with a soft, damp, lint-free cloth. Do not use cleaning or polishing parts on the heater.

**Caution:** Do not expose electrical parts to water. Failure to do so, may increase the risk of shock.

Do not apply water to your unit.

Do not use volatile liquids such as paint, thinner or benzene, since these liquids will damage the finish of the unit.

##### 5.2 CLEANING THE FRONT GLASS PANEL



**Warning:** Before cleaning the exterior of the appliance, disconnect the unit from the power supply first and leave the unit cooled off.

Over time, the front glass panel may become dirty or dusty. Dust can be removed by lightly rubbing the glass surface with a clean, lint-free cloth or paper towel. To remove fingerprints or other marks, use a soft, damp, lint-free cloth with a good quality household glass cleaner. The front glass panel should always be completely dried with a clean, lint-free cloth or paper towel.

##### 5.3 STORAGE

When not in use, unplug the unit from the power supply and store in a dry, dust free location.

## 7.0 Illustrations

### Illustration 1m -continued



**Caution:** Do not use abrasive cleaners on the glasse panel. Do not spray liquids directly onto any surface of the unit.



**Warning:** An authorized service representative should perform any other servicing.

## SECTION 6 TROUBLESHOOTING

<b>Heater doesn't turn on with the power switch.</b>	Main power supply switch is off.	Turn the main power supply switch to "ON" position.
	Circuit breaker has tripped	Too many appliances on this circuit be sure that electrical supply for this unit is an individual circuit.
	Heater is unplugged from wall outlet.	Plug the cord into an outlet.
	Power cord or power plug are damaged.	Contact a qualified electrician to replace power cord.
	Power outlet for power plug prong is loose.	Check the power outlet and replace with a new one.
	Loose wiring.	Check all wiring for loose connections. Contact a qualified electrician.
<b>Heater is on, but no flame or low flame intensity.</b>	Heater switches in on, but Flame power switch is not on.	Turn the flame power switch.
	Flame Adjusting knob is at low setting.	Turn the knob to maximum setting.
	Loose wiring.	Check all wiring for loose connections. Contact a qualified electrician.
<b>Flame are frozen</b>	Flame element is not attached to the motor.	Call customer service
	Rotation motor is defective.	Call customer service
<b>Excessive noise in the</b>	Flame element isn't seated properly	Call customer service

## 7.0 Illustrations

### Illustration 1n -continued

lower portion of the heater.	Motor is defective.	Call customer service
<b>Heater system doesn't come on</b>	Heater power switch is off.	Turn the heater power switch to the "ON" position.
	Heater system is overheated.	Maybe the heater is covered or air inlet or air outlet is blocked; remove the clothes or the blockage and turn off the power switch and unplug it. Wait five minutes, and then turn the heater on again.
	Loose wiring.	Check all wiring for loose connections. Contact a qualified electrician.
	The air inlet or air outlet is blocked completely.	Leave adequate space around the unit. Remove the blockage, on or in front of the air outlet.
<b>"HEATER POWER" switch has been flipped in the on position, but there is no airflow.</b>	The heater system is overheated. Temperature Limit thermostat is cutoff.	Check the air inlet and outlet. Turn off the power switch and unplug it. Wait five minutes, and then turn the heater on again.
	Fan motor is defective.	Call customer service
	Fan blower is balanced badly.	Call customer service
	The "POWER" and the "HEATER" switches are not turned on.	Turn these two switches on.
<b>Fan runs but no heat is coming out.</b>	Loose wiring.	Call customer service
	Bad heating element.	Call customer service
	Build up of dirt on the fans	clean all fans
	Heater fan is defective.	Call customer service
<b>There is an odor coming from the heater.</b>	The heater may emit a slight, harmless odor when first used. This is a normal condition caused by initial heating of the internal parts and will not occur again.	







## 7.0 Illustrations

### Illustration 1o -continued

## Electric Fireplace

Ningbo Rowan Electric Appliance Co., Ltd.

Room 1305, No. 755 Liyuan North Road, Haishu District, Ningbo, P.R. China

RFH-3001LA, RFH-3601LA, RFH-4201LA, RFH-5001LA, RFH-6001LA, RFH-7401LA, RFH-10201LA	RFI-2601LA, RFI-3001LA, RFI-3301LA, RFI-3601LA, RFI-3901LA
	
RFH-3001LB, RFH-3601LB, RFH-4201LB, RFH-5001LB, RFH-6001LB, RFH-7401LB, RFH-10201LB	RFI-2601LB, RFI-3001LB, RFI-3301LB, RFI-3601LB, RFI-3901LB
	

120V, 1500W, 60Hz for all models

Made in China

## 7.0 Illustrations

### Illustration 1p -continued

#### INTENDED USE

This product is intended **ONLY** for indoor household or office use.  
It is **NOT** intended for industrial or commercial use. Do not use outdoors.

#### IMPORTANT INSTRUCTION

**PLEASE READ AND SAVE THESE IMPORTANT SAFETY INSTRUCTIONS** When using electrical appliances, basic precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons, 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. 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 heater.
3. Extreme caution is necessary when any heater is used near children, pets or the disabled. NEVER leave heater unattended while operating.
4. Use your heater only in dry environments. This heater is not intended for use in bathrooms, laundry areas and similar indoor locations. Never locate heater where it may fall into bathtub or other water container. Do not use your heater outdoors. Do not use near sinks, swimming pools, or other damp areas such as flooded basements, garages, etc. or anyplace where the heater could come in contact with water.
5. A heater has hot and arcing or sparking parts inside. Do not use it in the areas where gasoline, paint, or flammable liquids are used or stored.
6. To disconnect heater, first turn controls to off, then remove plug from outlet.
7. Always unplug heater by removing the plug end from the outlet when not in use. Never unplug by pulling on the cord as this can damage the power cord.
8. Do not operate any heater with a damaged cord or plug or after the heater malfunctions, has been dropped or damaged in any manner. Return heater to authorized service facility for examination, electrical or mechanical adjustment, or repair.
9. **Always plug heaters directly into a wall outlet/receptacle. Never use with an extension cord or relocatable power tap (outlet/power strip).**
10. Do not run cord under carpeting. Do not cover cord with throw rugs, runners, or similar coverings. Arrange cord away from traffic area and where it will not be tripped over.
11. It is normal for the plug to feel warm to the touch; however, a loose fit between the AC outlet (receptacle) and plug may cause overheating and distortion of the plug. Contact a qualified electrician to replace loose or worn outlet.
12. 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 heater.
13. To prevent a possible fire, do not block air intakes or exhaust in any manner. Do not use on soft surfaces, like a bed, where openings may become blocked.
14. Do not operate heater with any safety guards removed.
15. Use this heater only as described in this manual. Any other use not recommended by the manufacturer may cause fire, electric shock, or injury to persons.
16. This heater draws 12.5 amps during operation. To prevent overloading a circuit, do not plug the heater into a circuit that already has other appliances working.
17. The output of this heater may vary and its temperature may become intense enough to burn exposed skin. Use of this heater is not recommended for persons with reduced sensitivity to heat or an inability to react to avoid burns.

**“SAVE THESE INSTRUCTIONS”**

## 7.0 Illustrations

### Illustration 1q -continued

#### INSTRUCTIONS IMPORTANTES

S'IL VOUS PLAÎT LIRE ET CONSERVER CES INSTRUCTIONS IMPORTANTES SAFET Lors de l'utilisation d'appareils électriques, précautions de base doivent toujours être suivies pour réduire le risque d'incendie, d'électrisme et de blessures aux personnes, y compris les suivantes:

1. Lire tous les instructions avant d'utiliser cet appareil.
2. Ce radiateur est chaud lorsqu'il est utilisé. Pour éviter les brûlures, ne laissez pas toucher les surfaces chaudes. Si fourni, utiliser les poignées pour le transfert de cet appareil. Gardez les matériaux combustibles, tels que fumerie, oreillers, la literie, papiers, vêtements et rideaux à au moins 3 pieds (0,9 m) de l'élément chauffant.
3. Une extrême prudence est nécessaire lorsque le réchauffeur est utilisé par ou près des enfants, des animaux domestiques ou des personnes âgées et quand le chauffage est laissé sans surveillance et d'exploitation.
4. Utilisez votre chauffe uniquement dans des environnements secs. Cet appareil est destiné à être utilisé dans les salles de bains, buanderie et autres endroits à l'intérieur. Ne jamais placer chauffants où il pourrait tomber dans une baignoire ou autre contenant d'eau. Ne pas utiliser votre appareil de chauffage extérieur. Ne pas utiliser près évier, des piscines, ou d'autres zones humides comme les sous-sols inondés, garages, etc ou anplace où le réchauffeur pourrait entrer en contact avec l'eau.
5. Un chauffe comporte des pièces chaudes et des arcs électriques ou des étincelles. Ne pas utiliser dans les zones où de l'essence, la peinture, ou inflammables sont utilisées ou stockées.
6. Pour débrancher l'appareil, les commandes tournent d'abord vers éteint, puis retirez la fiche de sortie.
7. Emporter débranchez radiateur en enlevant le bouchon d'extrémité de la prise lorsqu'il n'est pas utilisé. Ne jamais débrancher en tirant sur le cordon, car cela peut endommager le cordon d'alimentation.
8. Ne pas utiliser un appareil de chauffage avec un cordon endommagé ou le Plug ou après la malfunctions chauffage, a été échappé ou endommagé de quelque chauffe manner. Return au centre de service autorisé pour examen, un réglage électrique ou mécanique, ou une réparation.
9. Toujours brancher chauffe directement dans une prise murale / receptacle. Never utiliser avec une rallonge ou une prise électrique relogables (sortie / puissance de bande).
10. Ne pas passer le cordon sous la moquette, Ne pas couvrir le cordon de tapis, coureurs, ou similaire coverings. Arrange cordon loin de la zone de circulation et où il ne sera pas trébucher.
11. Il est normal que la fiche de se sentir au chaud au toucher, mais un ajustement lâche entre la prise secteur (prise) et la fiche peut provoquer une surchauffe et une distorsion de l'plug. Contact un électricien qualifié pour remplacer la prise lâche ou usée.
12. Ne pas insérer de corps étrangers d'entrer dans un système de ventilation ou d'ouverture d'échappement, car cela pourrait provoquer un choc électrique ou d'incendie ou d'endommager l'appareil.
13. Pour éviter un incendie, ne bloquez pas les entrées d'air ou d'évacuation de quelque manière. Ne pas utiliser sur les surfaces molles, comme un lit, où les ouvertures pourraient être bloquées.
14. Do pas fonctionner avec n'importe quel appareil de chauffage gardes de sécurité enlevés.
15. Use appareil tel que décrit dans ce manuel, toute autre utilisation non recommandée par le fabricant peut causer un incendie, choc électrique, ou de blessures.
16. Pour éviter de surcharger un circuit, ne pas brancher le chauffe dans un circuit qui a déjà d'autres appareils de travail.
17. La sortie de cet appareil de chauffage peut varier et sa température peut devenir suffisamment intense pour une sensibilité réduite à la chaleur ou une incapacité à réagir pour éviter les clochards.

**“CONSERVER CES INSTRUCTIONS”**

## 7.0 Illustrations

### Illustration 1r -continued

#### 1.0 ELECTRICAL INSTALLATION NOTES

##### 1.1 GENERAL INSTRUCTIONS



**CAUTION** - Some parts of this product can become very hot and cause burns. Particular attention has to be given where children and vulnerable people are present.

- A. Prior to plugging your appliance into an electrical outlet, verify that the house circuit breakers for the outlet are on.
- B. The appliance may emit a slight, harmless odor when first used. This odor is normal and it is caused by the initial heating of internal appliance elements and will not occur again.
- C. If your appliance does not emit heat, consult the operation section of this manual for further information.



**RISK OF FIRE! THE POWER CORD MUST NOT BE PINCHED AGAINST A SHARP EDGE. SECURE CORD TO AVOID TRIPPING OR SNAGGING TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR PERSONAL INJURY. DO NOT RUN CORD UNDER CARPETING. DO NOT COVER CORD WITH THROW RUGS, RUNNERS, ETC. ARRANGE CORD AWAY FROM CLUTTERED AREAS AND WHERE IT WILL NOT BE TRIPPED OVER.**

**RISK OF FIRE. TO PREVENT A POSSIBLE FIRE, DO NOT BLOCK AIR INTAKE OR EXHAUST IN ANY MANNER. DO NOT USE ON SOFT SURFACES WHERE OPENINGS MAY BECOME BLOCKED.**

**RISK OF FIRE. DO NOT BLOW OR PLACE INSULATION AGAINST THE APPLIANCE.**

**THIS ELECTRIC APPLIANCE IS TESTED AND LISTED FOR USE ONLY WITH THE APPROVED OPTIONAL ACCESSORIES. USE OF OPTIONAL ACCESSORIES NOT SPECIFICALLY TESTED FOR THIS ELECTRIC APPLIANCE COULD VOID THE WARRANTY AND/OR RESULT IN A SAFETY HAZARD.**

**IF THE INFORMATION IN THESE INSTRUCTIONS IS NOT FOLLOWED EXACTLY, A FIRE MAY RESULT CAUSING PROPERTY DAMAGE, PERSONAL INJURY OR DEATH. DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE. THIS APPLIANCE IS HEAVY. IT IS HIGHLY RECOMMENDED THAT TWO PEOPLE INSTALL THIS APPLIANCE.**

**HEATER VENTS ON THE ELECTRIC APPLIANCE CANNOT, IN ANY WAY, BE COVERED. AS IT MAY CREATE A FIRE HAZARD.**

##### **Follow all National and local electrical codes.**

1. The heaters should be installed only using the mounting brackets we provided if you want to mount it.
2. The heater must not be recessed in the ceiling. There must be enough space around the top of the heater to ensure adequate ventilation.
3. The heater should be at least 60 cm away from any surrounding walls.
4. A distance of at least 90 cm should always be left in front of the heaters to ensure safety.
5. The Heater should be mounted at a minimum of 20 cm above ground level.
6. The Heater must not be located either directly below, or in front of a socket-outlet.
7. To prevent any control switches being able to be touched by anyone who is in the shower or bath.
8. Make sure that there is no possibility of inflammable material, combustible material or curtains coming into contact with the heater, there is a risk of fire if this happens.
9. **DO NOT LEAVE THE HEATER UNATTENDED DURING USE.**

#### **ELECTRICAL REQUIREMENT**

##### **Electrical Shock Hazard**

Plug into a grounded (3-prong) outlet.  
Do not remove ground prong.  
Do not use an extension cord.  
Failure to follow these instructions can result in death,  
fire, or electrical shock.

It is mandatory that the grounded path is adequate.

Check with a qualified electrician if you are not sure if the electrical fireplace is grounded. A three-wire, single-phase, 60Hz AC only, electrical supply is required on a separate circuit. See model and serial nameplate label for circuit amperage required for your specific model.

We strongly suggested that your electrical fireplace should have its own fuse or circuit breaker, and no other device or unit would be operated on this fuse or circuit breaker.

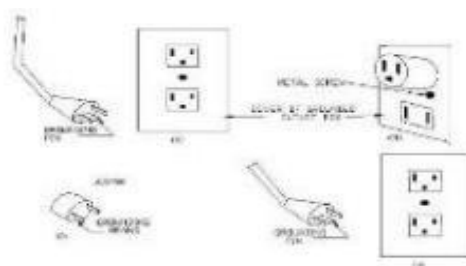
This heater is for use on 120 volts. For USA, The cord has a plug as shown at (A) in following Figure. An adapter shown at (C) is available for connecting three-blade grounding-type plugs to two-slot receptacles. The green grounding lug extending from the adapter must be connected to a permanent ground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

If a mating 3-prong type outlet is not available, it is the consumer's responsibility to have a properly grounded, 3-prong outlet installed by a licensed installer.



## 7.0 Illustrations

### Illustration 1s -continued



It is the customer's responsibility:

- To assure that the electrical installation is adequate and in conformance with National Electrical code, ANSI/NFPA 70-latest edition, and all local codes and ordinances.

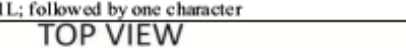
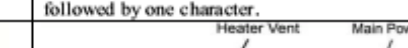
The outlet should be:

120 volt (112.8V min. – 127.2V max.), min.15Ampere capacity  
Protected by a 15Ampere fuse or circuit breaker  
14 gauge copper wiring

## 2.0 Operation

## 2.1 MAIN POWER BUTTON

The Main Power Button is located on the right top of the fireplace as illustrated. Press indicator to turn on the appliance, press the other side turns it off.

<p>For RFH-3001L, RFH-3601L, RFH-4201L, RFH-5001L, RFH-6001L, RFH-7401L or RFH-10201L; followed by one character</p> <p><b>TOP VIEW</b></p>  <p>Main Power Button</p>	<p>For RFI-2601L, RFI-3001L, RFI-3301L, RFI-3601L or RFI-3901L; followed by one character.</p> <p>Heater Vent Main Power Button</p>  <p><b>TOP VIEW</b></p>
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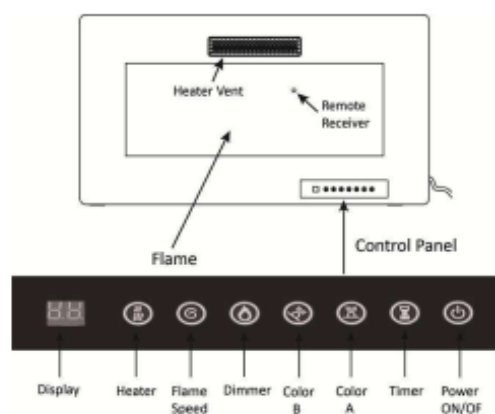
**Note: Make sure the Main Power Switch is turned on before operating.**

## 2.2 CONTROL PANEL / REMOTE CONTROL OPERATION

(Main Power Switch must be turned ON before using remote control.)

The touch display panel is shown on the bottom right of the front of the appliance.

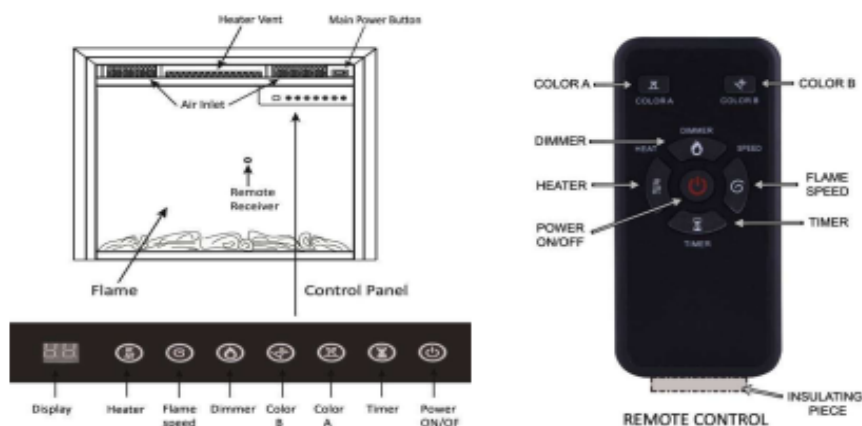
For RFH-3001L, RFH-3601L, RFH-4201L, RFH-5001L, RFH-6001L, RFH-7401L or RFH-10201L; followed by one character



## 7.0 Illustrations

### Illustration 1t -continued

For RFI-2601L, RFI-3001L, RFI-3301L, RFI-3601L or RFI-3901L; followed by one character.



<b>POWER</b>		Turn the appliance ON/OFF. <b>NOTE:</b> Make sure the main switch on the top of fireplace is turned on before operating.
<b>DIMMER</b>		Control Flame brightness. 5 Settings: (L1-L2-L3-L4-L5) Flame dims from L1 to L5. L5 is the brightest setting. <b>NOTE:</b> Long-press the "DIMMER" button for 6 seconds, the appliance will go into sleep mode. All the lights off, the heating function goes on. Long-press for 6 seconds again, the appliance will back to normal mode.
<b>TIMER</b>		Control the Timer. 8 Settings: (1h, 2h, 3h, 4h, 5h, 6h, 7h, 8h) Press button until reach desired setting.
<b>FLAME SPEED</b>		Control Flame speed. 5 Settings: (V1-V2-V3-V4-V5) Flame speed from V1 to V5. V5 is the fastest setting.
<b>HEATER</b>		Control the Heater. Press button to initiate the heater. (OFF) no heater or blower. (-), heater blows warm air(750W) (-), heater blows hot air(1500W) <b>NOTE:</b> Heater functions cycle from (OFF) (- X -)
<b>COLOR A</b>		Control the flame color. 12 Settings: 1.red 2.yellow 3.blue 4.white 5.red & yellow 6.red & blue 7.red & white 8.yellow & blue 9. yellow & white 10.blue & white 11.red & yellow & blue 12.multicolor <b>NOTE:</b> When you press the button for 6 seconds until you hear a beep, the indicator will show digital "0", the flame color and brightness will be changed automatically.
<b>COLOR B</b>		Control the flame bed color. 12 Settings: 1.red 2.gentian blue 3.green 4.pink 5.yellow 6.cyan 7.purple 8.white 9.saffron 10.sky blue 11.verdant 12.capri blue <b>NOTE:</b> When you press the button for 6 seconds until you hear a beep, the indicator will show digital "0", the flame color and brightness will be changed automatically.



## 7.0 Illustrations

### Illustration 1u -continued

**WARNING:** Do not move or remove the mesh trim panel, when the appliance is plugged in and operating. This will cause the remote control and touch panel to no longer function.

**NOTICE:** When the heater is first turned on, a slight odor may be present. This is normal and should not occur again unless the heater is not used for a long period of time.

**NOTICE:** To improve operation, aim the remote control at the front of the fireplace. **DO NOT** press the buttons too quickly. Give the unit time to respond to each command.

### 3.0 TROUBLESHOOTING GUIDE

PROBLEM	SOLUTION
There is no power to the fireplace, or it does not turn on.	1. Make sure the power cord is plugged into a functioning and properly grounded 15 Amp 120V AC electrical outlet. 2. Make sure the Power Switch on the right top of the fireplace is turned on. 3. Check for damage to the power cord or plug. If damaged, DO NOT USE. 4. If the problem is still not solved, please contact us via e-mail us at: <a href="mailto:rwflame@hotmail.com">rwflame@hotmail.com</a> or call customer serve Phone:213-4467172.
The control panel functions do not work.	1. Make sure the Power Switch on the control panel is turned on before operation. 2. Make sure you have reconnected the data cable which was pull out when you removed the glass frame. 3. If the problem is still not solved, please contact us via e-mail us at: <a href="mailto:rwflame@hotmail.com">rwflame@hotmail.com</a> or call customer serve Phone:213-4467172.
Sudden power outage during the heating process	1. Don't cover the air outlet. 2. Unplug the plug, wait for 10 minutes and try to open it again. 3. If the problem is still not solved, please contact us via e-mail us at: <a href="mailto:rwflame@hotmail.com">rwflame@hotmail.com</a> or call customer serve Phone:213-4467172.
The remote control does not work.	1. Make sure the battery is properly installed. Move the battery's transparent insulating piece away before using. 2. Aim the remote control at the receiver (middle of the fireplace). 3. Remove objects that may be in the way. Items between the remote control and the remote control receiver will block the signal. 4. Don't press the remote control buttons too quickly. Give the unit time to respond to your commands. 5. If the problem is still not solved, please contact us via e-mail us at: <a href="mailto:rwflame@hotmail.com">rwflame@hotmail.com</a> or call customer serve Phone:213-4467172.

**NOTE:** For the most of functional problems, you can unplug the plug, wait for 10 minutes and plug it again, the machine will reset to the initial status (product originals).

### 4.0 MAINTENANCE



DISCONNECT POWER AND ALLOW HEATER TO COOL BEFORE ATTEMPTING ANY MAINTENANCE OR CLEANING TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR DAMAGE TO PERSON.

THE FIREPLACE SHOULD NOT BE OPERATED WITH AN ACCUMULATION OF DUST OR DIRT ON OR IN THE UNIT, AS THIS CAN CAUSE A BUILD UP OF HEAT AND SUBSEQUENT EVENTUAL DAMAGE. FOR THIS REASON THE HEATER MUST BE INSPECTED REGULARLY, DEPENDING ON CONDITIONS AND AT LEAST AT YEARLY INTERVALS.

#### 4.1 PARTIALLY REFLECTIVE GLASS CLEANING

The partially reflective glass is cleaned in the factory during the assembly operation. During shipment, installation, handling, etc., the partially reflective glass may collect dust particles; these can be removed by dusting lightly with a clean dry cloth.

To remove fingerprints or other marks, the partially reflective glass can be cleaned with a damp cloth. The partially reflective glass should be completely dried with a lint-free cloth to prevent water spots. To prevent scratching, do not use abrasive cleaners.

## 7.0 Illustrations

### Illustration 2 -marking

(representative)



## 7.0 Illustrations

### Illustration 3 -marking

**Warning marking-1: attached to the back of enclosure that may be serviced.**



Remark: The height of symbols (SA1965A) should more than 25.4mm.

**Warning marking-2: attached to the front of heater**

**CAUTION – High temperature, keep electrical cords, drapery, and other furnishings at least 3 feet(0.9m) from the front of the heater and away from the side and rear.”**

### **PRECAUCIÓN – ALTA TEMPERATURA.**

**Mantenga cables eléctricos, cortinas y otros muebles al menos a 3 pies (0.9 m) de distancia del frente del calentador y lejos de los costados y la parte trasera.**

Remark: The lettering shall not be less than 3.2 mm in height.

## 7.0 Illustrations

### Illustration 4 -marking

#### Carton information

Voltage: 120VAC

Wattage: **1500W**

1) Always plug heaters directly into a wall outlet/receptacle. Never use with an extension cord or relocatable power tap (outlet/power strip).

Appareils de chauffage doit toujours être branché directement dans une prise murale / réceptacle.  
Ne jamais utiliser une rallonge ou du robinet d'alimentation amovibles (sortie multiprise /).

2) Always use on a dry, level surface. Use on floor only. 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.

Toujours utiliser sur des surfaces seches et horizontals. Ce réchauffeur est chaud au moment d'utilisation. Pour éviter des brûlures, ne laissez pas la peau nue toucher les surfaces chaudes. S'il est nécessaire, utiliser les poignées pour déplacer le réchauffeur. Gardez les matériaux combustibles, tels que des meubles, les oreillers, les papiers de literie, les vêtements, et les rideaux au moins 3 pieds (0.9m) de l'avant du réchauffeur et loin des côtés et de l'arrière de réchauffeur.

3) The heater is not to be used in wet or moist locations.

Ce réchauffeur ne peut pas être utilisé dans les endroits humides ou moites.

## 7.0 Illustrations

### Illustration 5 -cord tag marking

#### WARNING - TO REDUCE THE RISK OF FIRE:

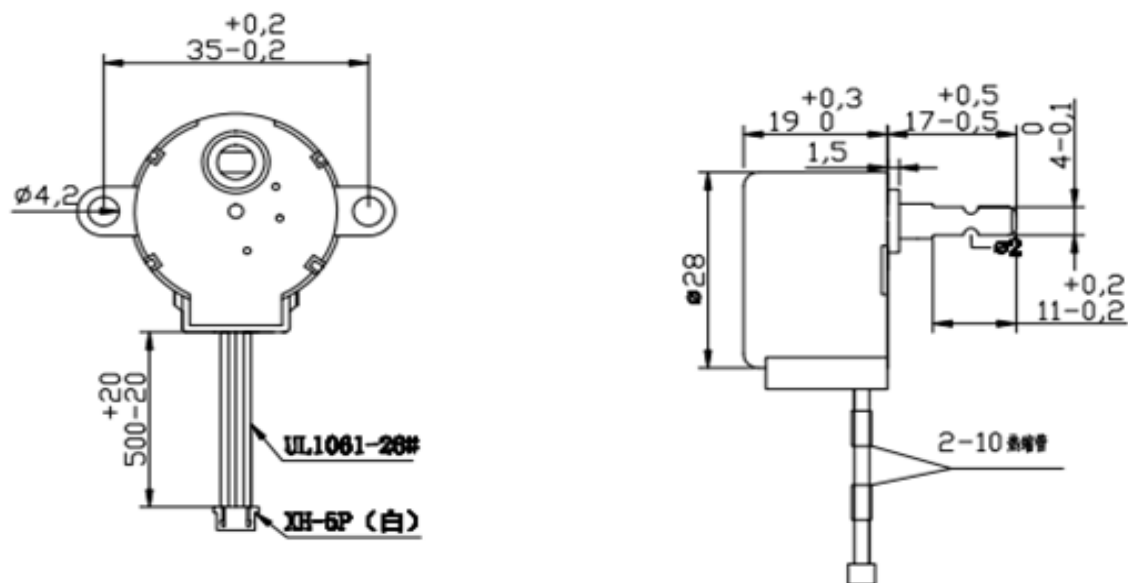
- 1) Always plug heaters directly into a wall outlet/receptacle. Never use with an extension cord or relocatable power tap (outlet/power strip).
  - 2) Check your heater cord and plug connections. A loose fitting outlet can cause the plug to overheat and a or cause a fire. Be sure plug fits tight in the outlet. Check frequently during use to make sure plug and outlet are not hot. If so, discontinue using heater and have outlet replaced by a qualified electrician.
  - 3) Always unplug heater when not in use.
  - 4) Do not operate heater with a damaged cord or plug or after the heater malfunctions, has been dropped or damaged in any manner. Discard heater or return to an authorized service facility for examination and/or repair.
  - 5) Do not run cord under carpeting. Do not cover cord with throw rugs, runners, or similar coverings. Do not route cord under furniture or appliances. Arrange cord away from traffic area and where it will not be tripped over.
- DO NOT REMOVE THIS TAG!**

#### AVERTISSEMENT – POUR RÉDUIRE LES RISQUES D'INCENDIE:

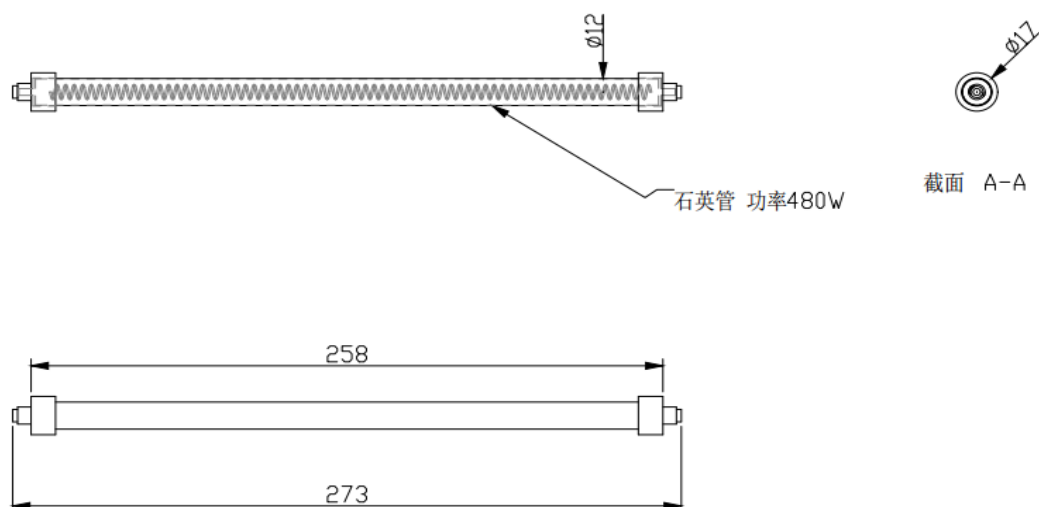
- 1) **Appareils de chauffage doit toujours être branché directement dans une prise murale / réceptacle. Ne jamais utiliser une rallonge ou du robinet d'alimentation amovibles (sortie multiprise /).**
  - 2) **Vérifiez votre cordon chauffant et connexions.**  
Des connexions détectueuses prise murale ou bouchons lâche peut provoquer la prise ou la fiche de surchauffer. Assurez-vous que la fiche est bien serrée dans la prise.  
Lors de l'utilisation vérifier fréquemment pour déterminer si votre prise de prise ou de la façade est CHAUD!  
Si c'est le cas, cesser l'utilisation du chauffe-eau et ont un contrôle électricien qualifié et / ou remplacer la prise défectueuse (s).
  - 3) **Toujours débrancher le radiateur lorsqu'il n'est pas utilisé.**
  - 4) **Ne pas fonctionner le radiateur avec un cordon ou une fiche endommagé ou après un dysfonctionnement, a été échappé ou endommagé de quelque façon. Chauffe Jeter ou retourner à un centre de service autorisé pour examen et / ou réparation.**
  - 5) **Ne pas passer le cordon sous un tapis. Ne pas couvrir le cordon avec des tapis, ni de tout autre. Ne pas passer sous des meubles ou des appareils. Placez le cordon loin des aires de circulation et où il ne sera pas trébucher.**
- NE PAS RETIRER LE PRÉSENT TAG!**

## 7.0 Illustrations

**Illustration 6 - Synchronous Motor 2**



**Illustration 7 - Heating Element 2**





8.0 Test Summary					
Evaluation Period	2017-12-07 to 2018-05-31		Project No.	171200144HZH	
Sample Rec. Date	7-Dec-2017	Condition	Prototype	Sample ID.	0171207-092-001~029
Test Location	16 No. 1 Ave., Xiasha Economic Development District, Hangzhou 310018, 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 1278:2014 Ed.4+R:14Sep2017 /Clause		
Power Input Test			38		
Leakage Current Test			39		
Normal Temperature Tests			40		
Abnormal Operation Tests			42		
Component Failure Test			47		
Dielectric Voltage-Withstand Test			48		
Insulation Resistance Test			49		
Stability of Movable Heaters			51		
Element Support Impact Tests			52		
Test for Permanence of Cord Tag			54		
Protection Against Injury to Persons Test			55		
Knob Securement Test			56		
Strength of Adjustable Stop Test			57		
Strain Relief Test			59		
Test Description			CSA C22.2#46 Issued: 2013/08/01 Ed: 9 /Clause		
Rating			7.2		
Test Voltage			7.3		
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		
Stability			7.17		

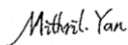

Test Description	UL 1004-1:2012 Ed.2+R:24Aug2017 & UL 1004-2:2014 Ed.2+R:06Feb2015 /Clause	CSA C22.2#77:2014 Ed.8+E1 / Clause
Locked-Rotor Temperature Test	3	5.4
Dielectric Voltage-Withstand Test	37	5.5
		UL 746C:2004 Ed.6+R:19May2017 /Clause
Resistance to Impact Test	—	56
Mold Stress-Relief Distortion Test	—	61

8.0 Test Summary					
Evaluation Period	2020-06-03 to 2020-07-21		Project No.	200600133HZH	
Sample Rec. Date	3-Jun-2020	Condition	Prototype	Sample ID.	0200603-052-001~028
Test Location	16 No. 1 Ave., Xiasha Economic Development District, Hangzhou 310018, 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 1278:2014 Ed.4+R:20Aug2018 /Clause		
Power Input Test			38		
Normal Temperature Tests			40		
Abnormal Operation Tests			42		
Stability of Movable Heaters			51		
Test Description			CSA C22.2#46 Issued: 2013/08/01 Ed: 9 /Clause		
Rating			7.2		
Test Voltage			7.3		
Temperature (Normal)			7.4		
Temperature (Abnormal)			7.6		
Extreme Operating Voltage (Maximum) Test			7.7		
Stability			7.17		

Evaluation Period	2022-03-23 to 2022-05-06			Project No.	220300751HZH
Sample Rec. Date	23-Mar-2022	Condition	Prototype	Sample ID.	0220323-025
Test Location	4th Floor, Building 4#, No. 22, 22nd Street, Qiantang District Hangzhou, China 310018				
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 1278:2014 Ed.4+R:10Sep2020 /Clause		
Power Input Test			38		
Leakage Current Test			39		
Normal Temperature Tests			40		
Abnormal Operation Tests			42		
Component Failure Test			47		
Dielectric Voltage-Withstand Test			48		
Insulation Resistance Test			49		
Stability of Movable Heaters			51		
Element Support Impact Tests			52		
Test for Permanence of Cord Tag			54		
Protection Against Injury to Persons Test			55		
Knob Securement Test			56		
Strength of Adjustable Stop Test			57		
Strain Relief Test			59		
Test Description			CSA C22.2#46 Issued: 2013/08/01 Ed: 9 /Clause		
Rating			7.2		
Test Voltage			7.3		
Temperature (Normal)			7.4		
Dielectric Strength			7.5		
Temperature (Abnormal)			7.6		
Extreme Operating Voltage (Maximum) Test			7.7		
Strain Relief			7.8		

8.0 Test Summary	
Physical abuse tests	7.11
Leakage Current	7.12
Stability	7.17

Test Description		UL 746C:2004 Ed.6+R:19May2017 /Clause
Resistance to Impact Test	—	56
Mold Stress-Relief Distortion Test	—	61

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:	Mithril Yan	Reviewed by:	Wayle Chen
Title:	Engineer	Title:	Reviewer
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	Ningbo Rowan Electric Appliance Co., Ltd.
Address	Room 1305, No. 755 Liyuan North Road, Haishu District, Ningbo
Country	P. R. 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 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.

**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**

Managing CEC Location:  
Intertek Testing Services Shanghai Limited  
ETL Component Evaluation Center  
Building No. 86, 1198 Qinzhou Road (North)  
Shanghai 200233, China  
Attn: Ms. Emiliana Zhou

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  
Grounding Continuity Test

## 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, contractors, 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	60 s
	or	
	1200V	1 s

## 11.2 Grounding Continuity Test

### Method

Each product listed below shall be subjected to a test to determine that there is continuity between accessible dead-metal parts of the product and the grounding pin or blade of the attachment plug.

If all accessible dead metal is connected, only a single test need be performed. A visual or audible device (ohmmeter, buzzer, etc.) may be used to indicate grounding continuity.

### Products Requiring Grounding Continuity Test:

All products covered by this Report.

12.0 Revision Summary				
The following changes are in compliance with the declaration of Section 8.1:				
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change
21-Jul-2020	Mithril Yan	1.0	-	Standard updated from "Movable And Wall- Or Ceiling-Hung Electric Room Heaters [UL 1278:2014 Ed.4+R:14Sep2017]" to "Movable and Wall-or-Ceiling Hung Electric Room Heaters [UL 1278:2014 Ed.4+R:20Aug2018]".
200600133H ZH	Wayle Chen	2.0	-	Add new brand name of "Antarctic Star", "R.W.FLAME", "XBEAUTY", "Kismile" and "AGLUCKY".
		3.0	47	Replace photo due to reduce the width between the front and back surface and changing the supply cord inlet position.
		3.0	83 to 86	Add photo due to add an optional heating element assembly for RFI series and RFH series.
		3.0	87	Add an optional side photo due to remove the opening of top and buttom surface to side surface for RFH series, reduce the width between the front and back surface and change the supply cord inlet position.
		3.0	88	Add an optional side photo due to remove the opening of top and buttom surface to side surface for RFH series and reduce the width between the front and back surface.
		4.0	9, 21, 33	Change the manufacturer from "YUYAO CITY JINGCHUANG ELECTRONICS CO LTD" to "YUYAO CITY JINGTUO ELECTRONICS CO LTD" (E315657)
		4.0	10	Change the manufacturer from "SHANDONG JINBAO TECH-INNOV CORPORATION" to "SHANDONG JINBAO ELECTRONICS CO LTD" (E141940)
		4.0	11	Add an optional fan motor (E303766)
		4.0	12	Change the manufacturer from "CHANGHONG PLASTIC CO LTD" to "CHANGHONG PLASTICS GROUP IMPERIAL PLASTICS CO LTD" (E359184)
		4.0	25	Change the manufacturer from "WENZHOU ZHUCHENG ELECTRICAL CO LTD" to "ZHEJIANG ZUCH TECHNOLOGY CO LTD" (E235677)
		4.0	38	Change the manufacturer from "LIEN SHUN ELECTRONICS CO LTD" to "BESTBRIGHT ELECTRONICS CO LTD" (E315524)
		7.0	2	Delete ETL logo size information
		8.0	8.0 & 8.1	New test block added and re-signed

## 12.0 Revision Summary

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

[illegible]