

1.0 Reference and Address			
Report Number	106330354CRT-001	Original Issued: 26-Sep-2025	Revised: 21-Nov-2025
Standard(s)	Movable and Wall- or Ceiling-Hung Electric Room Heaters [ANSI/UL 1278:2014 Ed.4+R:08Mar2024] Electric Air-Heaters (R2018) [CSA C22.2#46:2013 Ed.9]		
Entirely Replaces Report Number	106131164CRT-001		
Applicant	Lasko Products LLC	Manufacturer 1	PT SUMA ARTHA PERKASA
Address	820 Lincoln Ave West Chester, PA 19380-4469	Address	JALAN MILLENIUM RAYA F 02/02, Desa/Kelurahan Peusar, Kec. Panongan, Kab.Tangerang, Provinsi Banten, Kode Pos: 15710
Country	USA	Country	Indonesia
Contact	Parvathi Kodandaraman	Contact	Cain Chen
Phone	610-719-8949	Phone	(86)757-87389266
FAX	610-692-9325	FAX	NA
Email	pkodandaraman@laskoproducts.com	Email	cain@gdzjddq.com

2.0 Product Description	
Product	Portable PTC type electric heater
Brand name	Lasko
Description	The products covered by this report are household, indoor use, cord connected, movable heaters.
Models	CS12350 may be followed by C. CS12380.
Model Similarity	CS12350 and CS12350C only differ in their enclosure plastic. CS12350C is identical to CS12350 except for 5VA materials and utilizes a different control/display pcb, defaults to Celsius. CS12380 is identical to CS12350 except for the color, power cord, and it utilizes a different control/display PCB.
Ratings	120V, 60Hz, 1500W or 120V, 60Hz, 1500W @25°C 120V, 60Hz, 1500W @0°C Refer to Illustration 1 for specific use.
Other Ratings	NA

3.0 Product Photographs

Photo 1 - Overall exterior view, front face



3.0 Product Photographs

Photo 2 - Heater element view

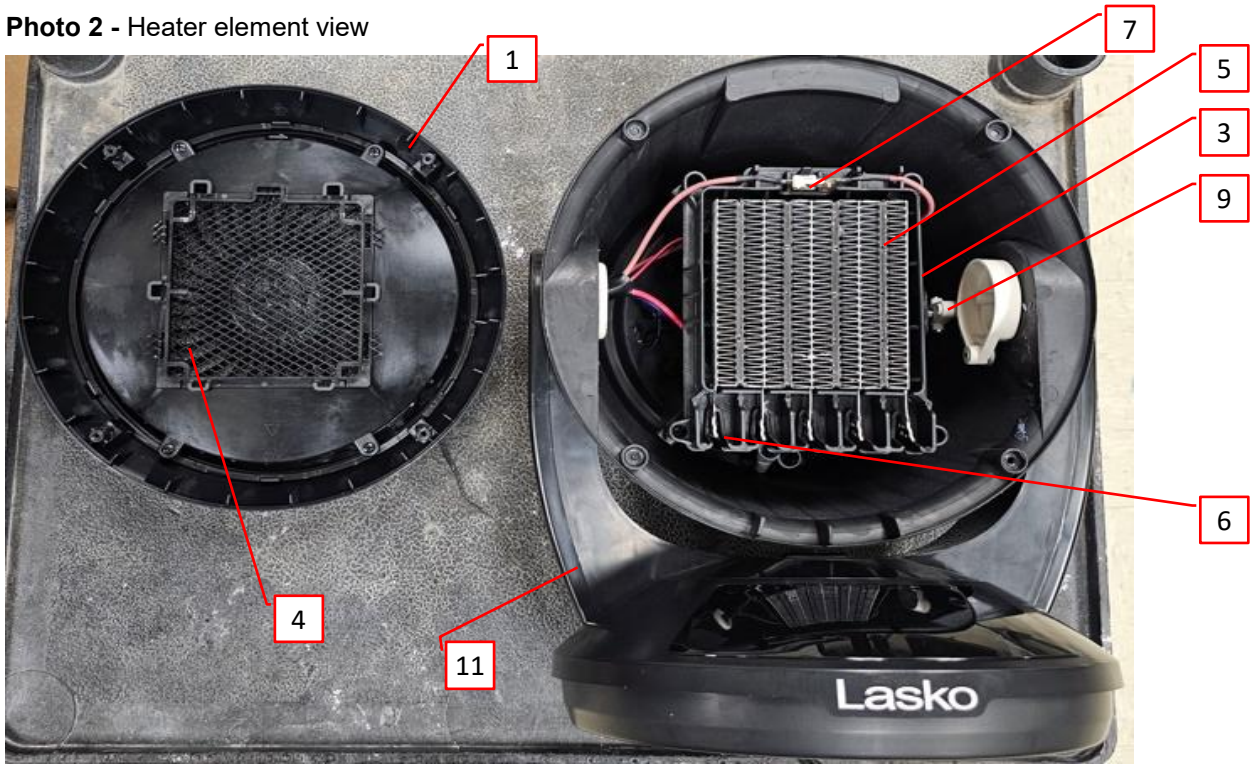
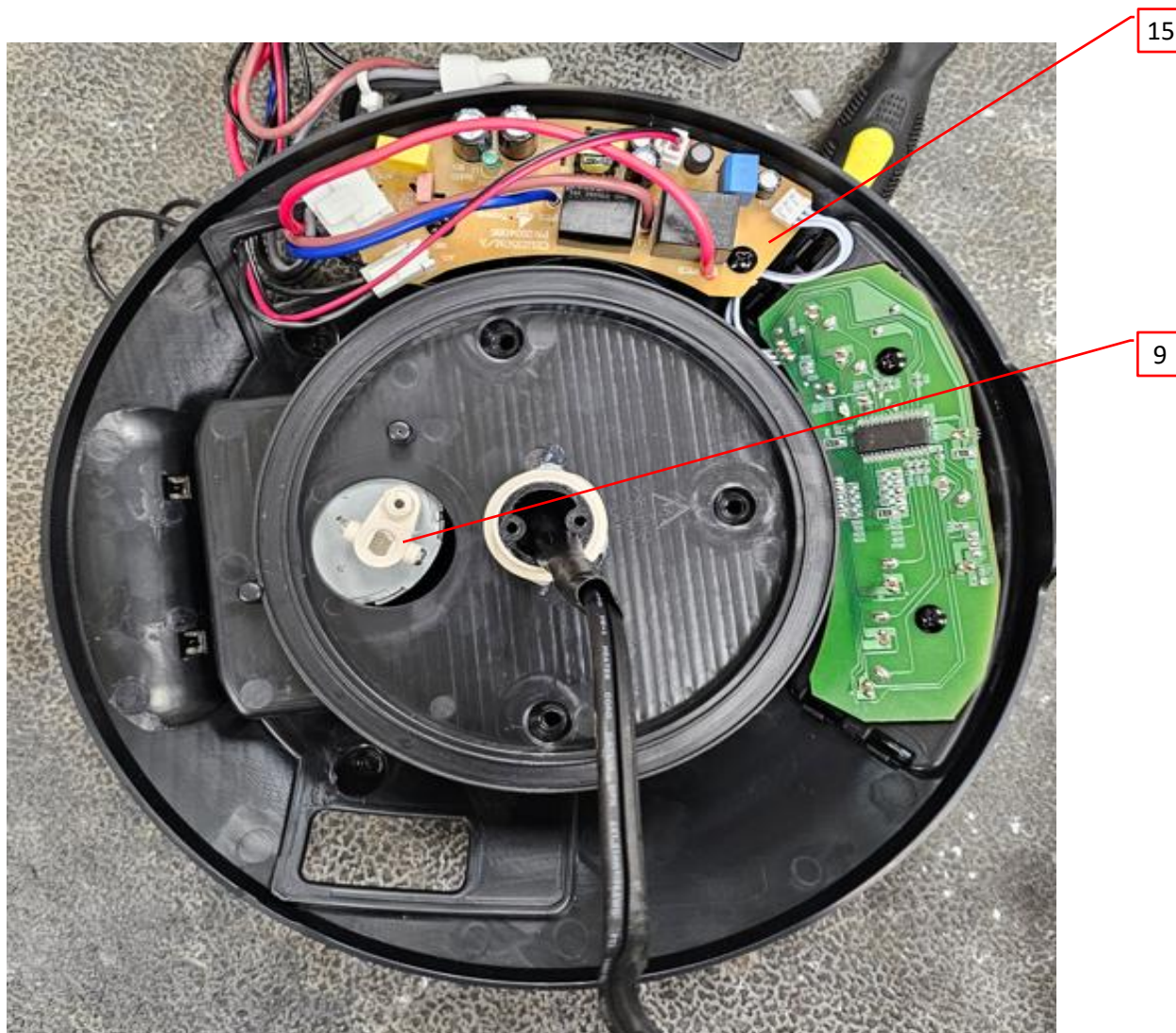


Photo 3 - Supply cord strain relief means



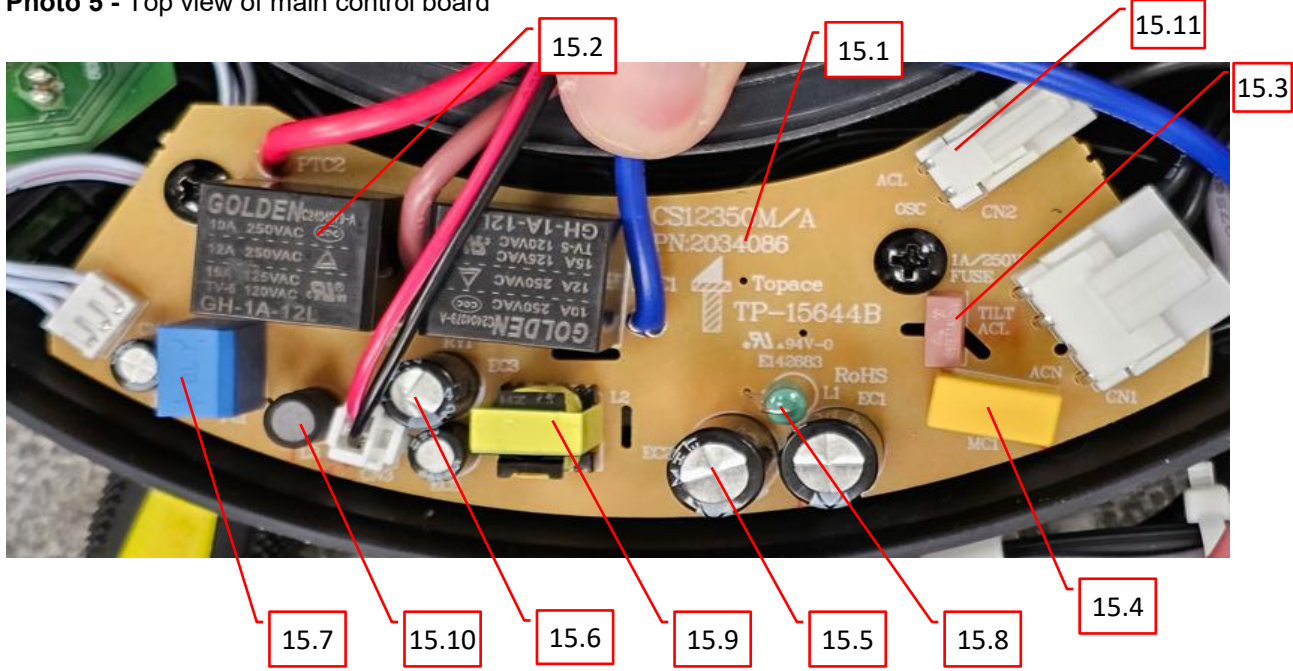
3.0 Product Photographs

Photo 4 - Internal view of PCB's and base rotation motor



3.0 Product Photographs

Photo 5 - Top view of main control board



3.0 Product Photographs

Photo 5.1 - Top view of main control board (sounds)

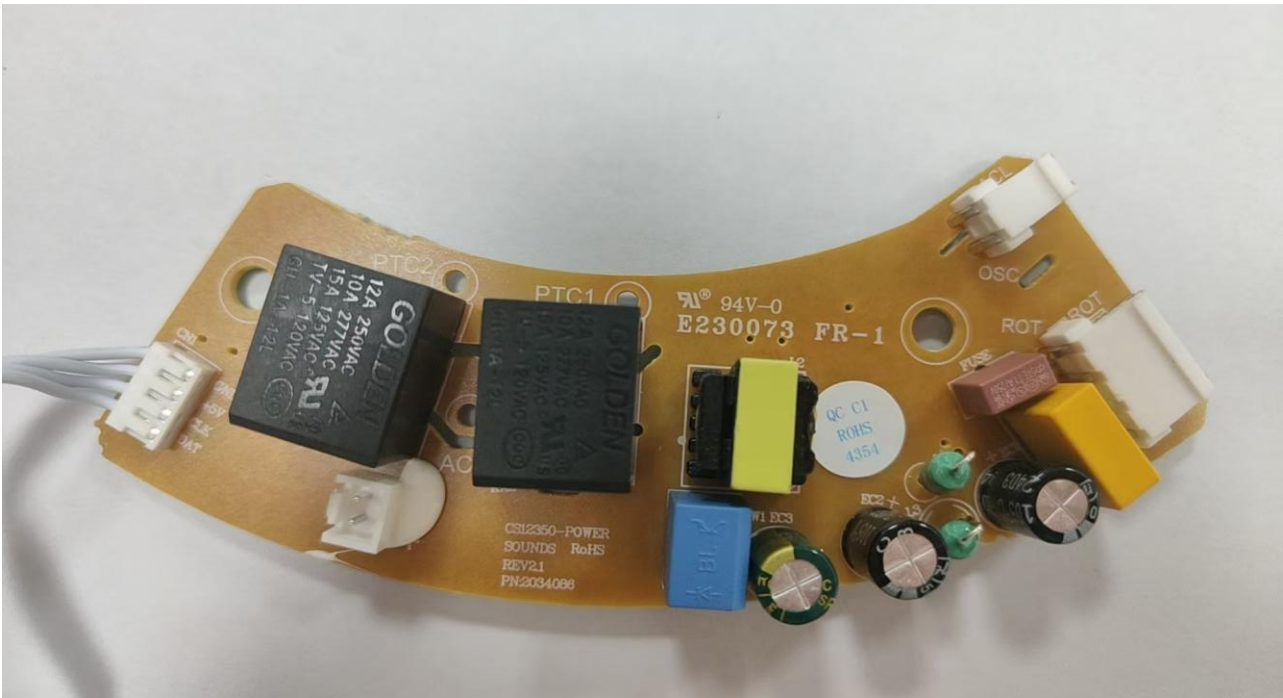
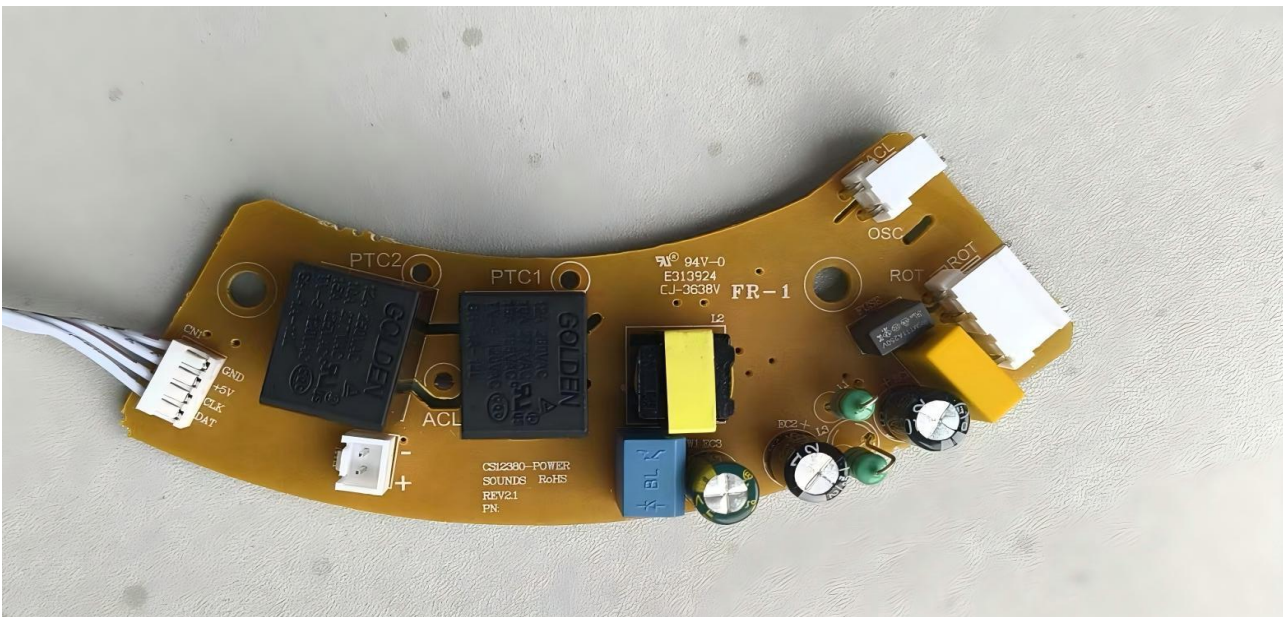


Photo 5.2 - Top view of main control board for CS12380 (sounds)



3.0 Product Photographs

Photo 6 - Bottom view of main control board

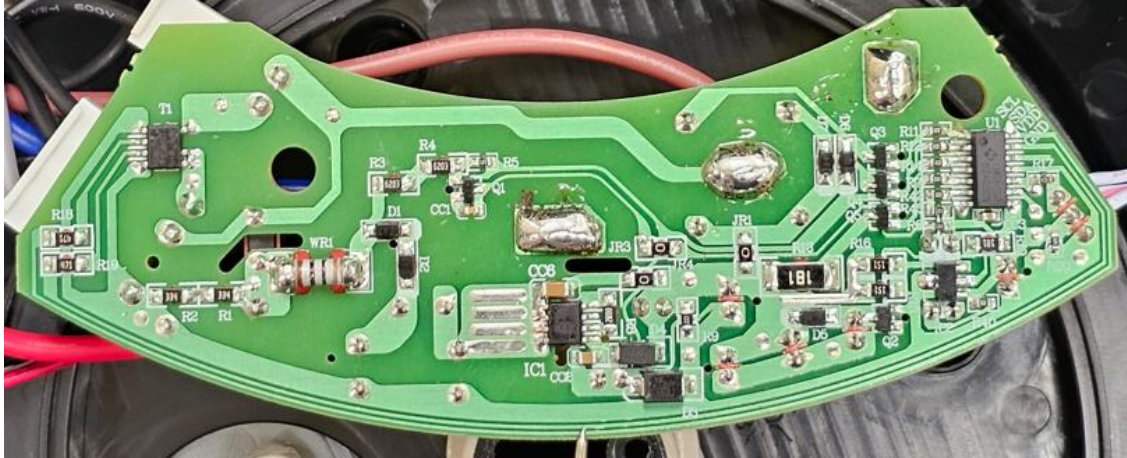
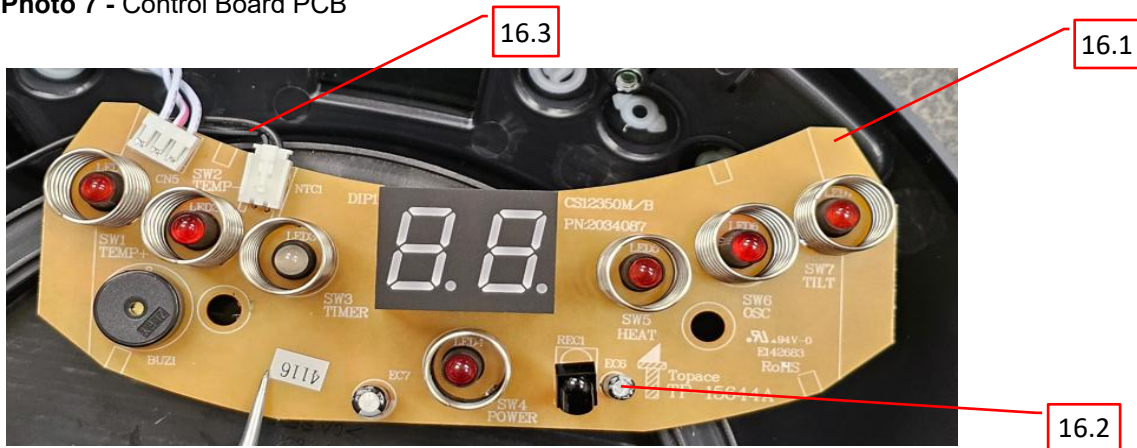
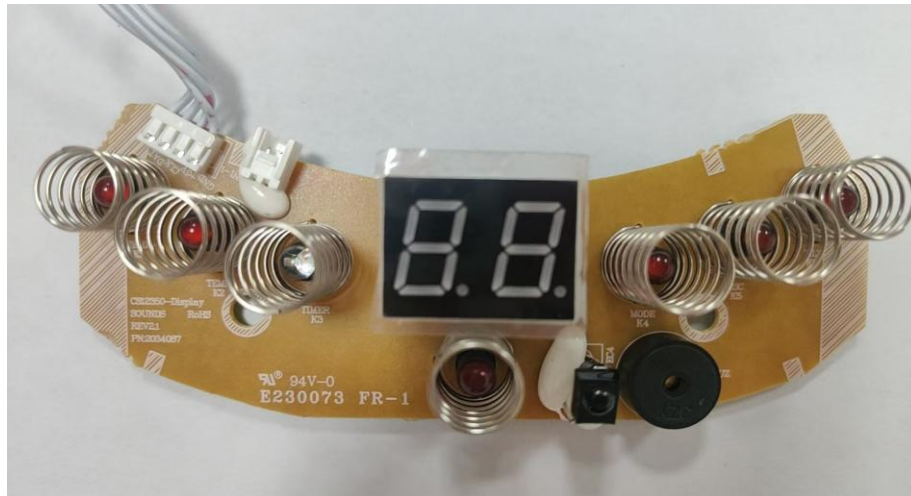


Photo 7 - Control Board PCB



3.0 Product Photographs

Photo 7.1 - Control Board PCB (Sounds)

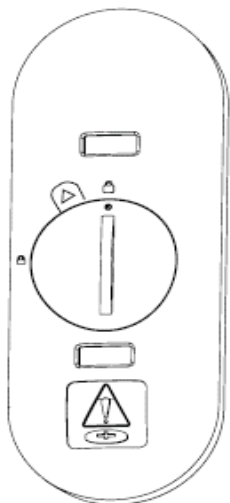


3.0 Product Photographs

Photo 8 - Remote with coin cell battery



Photo 9 - Depiction of back side of remote



3.0 Product Photographs

Photo 10 - Billion Plus boards (top is power, bottom is control)

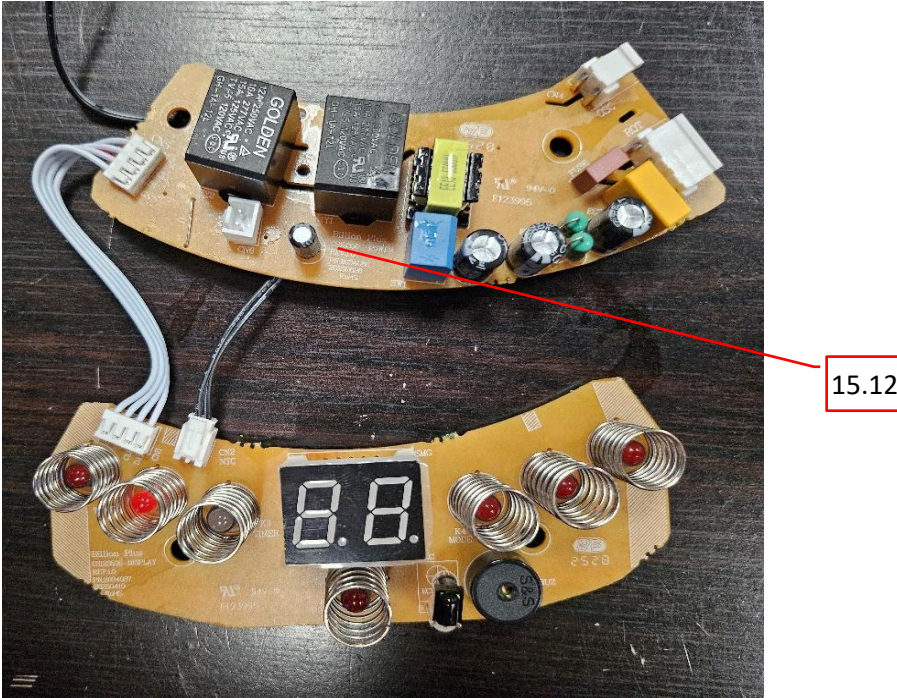
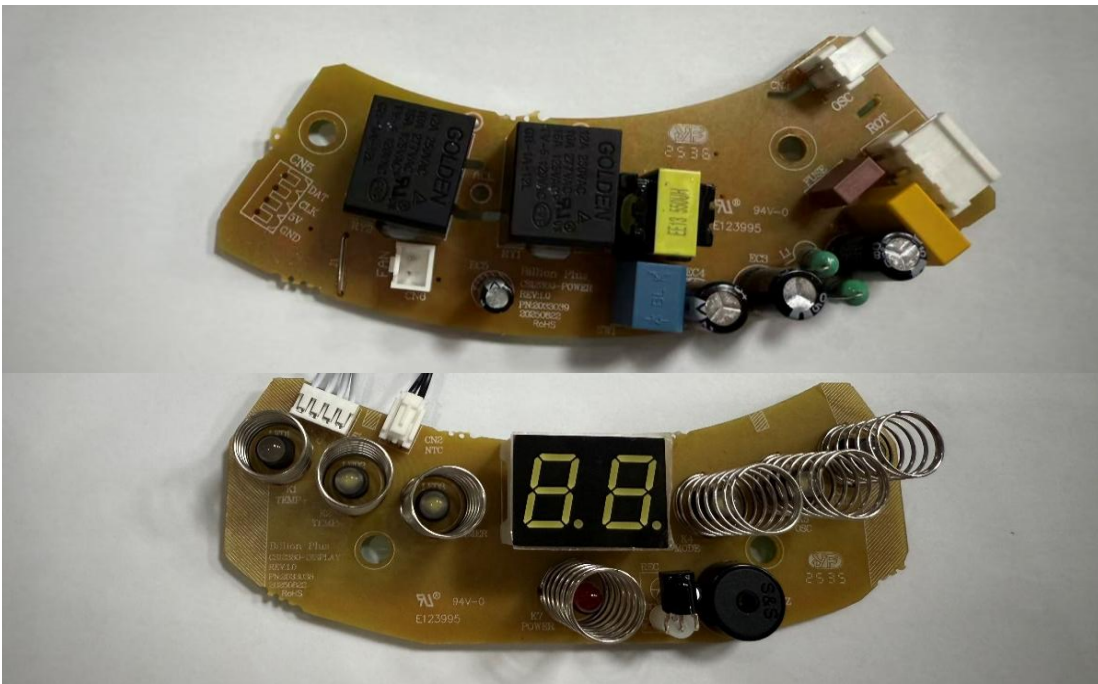
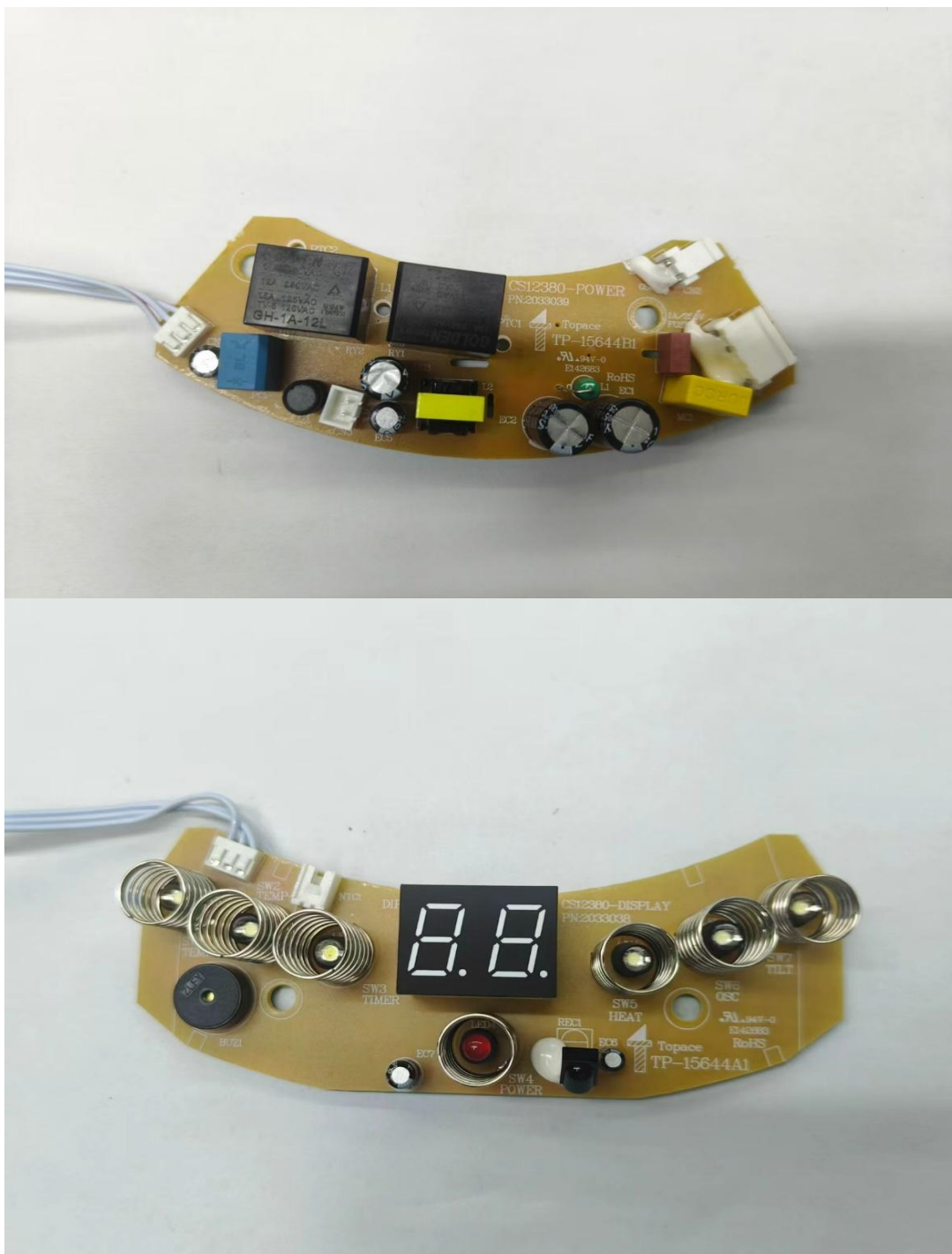


Photo 10.1 - Billion Plus boards for CS12380 (top is power, bottom is control)



3.0 Product Photographs

Photo 11 - Topace boards for CS12380 (top is power, bottom is control)



4.0 Critical Components						
Photo #	Item no. ¹	Name	Manufacturer/ trademark ²	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
2	1	Front Body	Lg Chem Ltd	AF305D	ABS RATED 85°C 94V-0 min 1.5mm thick, all colors.	cURus
			Polyrocks Chemical Co., Ltd	7001(+)	ABS RATED 60°C 94V-0 min 1.5mm thick, all colors.	
			Polyrocks Chemical Co., Ltd (E340831)	7001(+)	ABS, minimum 2.0mm thick, V-0, 5VA, 60°C	cURus
1	2	Front Grill	Lg Chem (Tianjin) Engineering Plastics Co.,Ltd	LUPOY GP-1006F(m)(#)(f1)	PC, min 2.5mm thick, V-0 (All), rated 110°C . Refer to illustration 9 for size dimensions.	cURus
			Formosa Chemicals & Fibre Corp Plastics Div	AC3600-H	PC, min 1.5mm thick, V-0 (All), rated 130°C . Refer to illustration 9 for size dimensions.	
			Lg Chem (Guangzhou) Engineering Plastics Co., Ltd (E248280)	LUPOY GP-1006F(f1)	PC. Minimum 2.5mm thick. Rated V-0, 5VA, 60°C	cURus
2	3	Front Cover and Heater Element Holder	Lg Chem Ltd.	LUPOX GP1006FD	PBT, Rated 130°C 94V-0 min 1.5mm thick, all colors.	cURus
			Lg Chem (Tianjin) Engineering Plastics Co.,Ltd	LUPOX GP-2306F(#)	PBT, Rated 140°C , 94-V0, Min 1.5mm thick.	
			Kingfa Sci & Tech Co., Ltd (E171666)	PBT-RG301(r1)	PBT, Rated 130°C, 5VA, Min 1.0mm thick.	cURus
2	4	Metal Mesh	Various	Steel	Steel mesh approx 111.5mm x 106mm with perforations approximately 6mm x 4mm, min 0.6mm thick	NR
2	5	Heater Element (PTC type)	Dongguan Longyang Electronic Technology Co Ltd.	LYB-120-1500	120VAC, 60Hz, 1500W max Longyang	cURus
			Dongguan Longyang Electronic Technology Co Ltd.	LYB-120-1500	120VAC, 60Hz, 1500W max, Longyang (KY)	
			Dongguan City Longkey Electronic Co Ltd.	RFB-120-1500	120VAC, 60Hz, 1500W max	

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2	6	Heater Element Terminal	Taiyang Electronic (Dongguan) Co.,Ltd.	TYDK021	10.0mm wide x0.5mm thick, 16-20AWG, H62 Brass	NR
			Dongguan Cityyouji Electronic Technology Co., Ltd	Various		
2	7	Thermal Cut-Off	Auone Electronic Mfg Ltd.	AUT-70-P	125VAC 16A 70°C	cURus
			Foshan Eagle Technology Co Ltd.	AMT-P2		
			Consummate Electrical Co Ltd	A01P	125VAC 15A 70°C	
2	8	DC Fan (Not Shown)	Shenzhen Yongyihao Electronic Co Ltd	YY9225L12S	DC 12V, 0.35A, Located behind item 4.Refer to illustration 3 for location.	cURus
			Shen Zhen Ambeyond Technology Co., Ltd	AV-F9225HS	DC 12V, 0.30A, Located behind item 4. Refer to illustration 3 for location.	
2,4	9	Oscillation Motors	Foshan Shunde Hengxing Micro Motor Co Ltd.	TYJ50-8A	120VAC, 60Hz, 4W, 3RPM (Impedance protected)	cURus
			Zhaoqing City Gaoyao District Hengjun Electrical Appliance Co Ltd	TY-50		
1	10	Rear Body, Lower Base, and Base Cover	Lg Chem Ltd.	Lupol GP-1000F(#)	PP, V-0, 120°C max, min 1.5mm thick	cURus
			Kingfa Sci & Tech Co., Ltd	PP-R0508	PP, V-0 (at 1.5mm) or V-0, 5VA (at 2.0mm), 120°C max, min 1.5mm or 2.0mm thick	
2	11	Arm Stand and Left/Right Arm Stand Covers	Chi Mei Corporation	PA-765A	UL94 V-0, 85°Cmax, min 2.5mm thick	cURus
			Lg Chem Ltd	AF305D	ABS RATED 85°C 94V-0 min 2.0mm thick, all colors.	
			Polyrocks Chemical Co. Ltd (E340831)	7001(+)	ABS, V-0, 5VA, 60°C max, min 2.0mm thick	
1	12	Upper Base	Lg Chem Ltd	AF364(&)	ABS RATED 60°C 94V-0 min 1.5mm thick,	cURus
			Polyrocks Chemical Co., Ltd (E340831)	7001(+)	ABS, V-0, 5VA, 60°C max, min 2.0mm thick 1.5mm thick. All Colors.	cURus

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Photo #	Item no. ¹	Name	Manufacturer/ trademark ²	Type / model ²	Technical data and securement means	Mark(s) of conformity ³	
1	13	Supply Cord	Winhand Industry(Hk) Co.,Ltd	HPN-R	2x16AWG, 300V max, 105°C max, 6-8ft long. Strain relief means provided in photo 3.	cETLus	
			Unirise Electric Wire & Cable Co Ltd.			cURus	
			Various	HPN-R		cURus, cULus, cETLus	
1	14	Plug (molded to power supply cord)	Winhand Industry(Hk) Co.,Ltd	TA-001	NEMA 1-15P, 125V max, 15A	cETLus	
			Unirise Electric Wire & Cable Co Ltd	UE-221		cURus	
			Various	Various		cURus, cULus, cETLus	
4	15	Power Board	Sounds Electric Co Ltd.	CS12350-Power (PN: 2034086)	120VAC, 60Hz, made of components 15.1-15.11. Note that Sounds and Topace manufacturers use different components, as denoted in each component's technical data.	NR	
				CS12350C-Power (PN: 2034086)			
				CS12380-Power (PN:2033039)			
			Shenzhen Topace Technology Co Ltd.	CS12350M/A-Power (PN: 2034086)			120VAC, 60Hz, made of components 15.1-15.13. Note that Sounds and Topace manufacturers use different components, as denoted in each component's technical data
				CS12350C-Power (PN: 2034086)			
				CS12380-Power (PN: 2033039) (TP-15644B1)			
			Guangdong Billion Plus Electrical Technology Limited	CS12350-Power (PN: 2034086)			120VAC, 60Hz, made of components 15.1-15.12.
				CS12350C-Power (PN: 2034086)			
				CS12380-Power (PN:2033039)			

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Photo #	Item no. ¹	Name	Manufacturer/ trademark ²	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
5	15.1	PCB	Zhongshan Lixin Chain-Board Co Ltd	Various	UL94 V-0, DSR-ALL, 130°C max (Sounds)	cURus
			Kingboard Laminates Holdings Ltd	KB Series	UL94 V-0, DSR-ALL, 130°C max (Topace & Billion Plus)	
			Various	Various	UL94 V-0, DSR-ALL, min rated 130°C (Sounds, Topace and Billion Plus)	
5	15.2	Relay (Sounds: KA1,KA2; Topace, Billion Plus: RY1, RY2)	Shenzhen Golden Electrical Appliance Co Ltd	GH-1A-12L	Switched ratings: 15A/125V (Sounds, Topace & Billion Plus)	cURus
			Zhejiang Meishuo Electric Technology Co Ltd	MPA-S-112-A	Switched ratings: 15A/125V (Sounds, Topace & Billion Plus)	cURus
			Shenzhen Yuanze Electric Co Ltd	Y3F-SS-112DM	Switched ratings: 15A/125V; (Sounds)	cURus
			Zhongshan Xiaolan Guoke Relay Factory	GK3FF-12VDC-S-A	Switched ratings: 15A/125V; (Sounds)	cURus
			Ningbo Zettler Electronics Co Ltd	JQC-3FF/012-1HS (551)	Switched ratings: 15A/125V; (Topace & Billion Plus)	cURus
			Sanyou Corporation Limited	SRD-S112DM	Switched ratings: 15A/125V; (Topace & Billion Plus)	cURus
5	15.3	Fuse (FUSE 1)	Shenzhen Lanson Electronics Co Ltd	SMT	Micro fuse type, 1A, 250VAC max (Sounds)	cURus
			Xc Electronics (Shenzhen) Corp Ltd	5TE	Micro fuse type, 1A, 250V max (Topace & Billion Plus)	cURus
			Various	Various	Micro fuse type, 1A, min rated 120VAC (Sounds, Topace & Billion Plus)	cURus
5	15.4	X2 capacitor (Sounds, Billion Plus: CX1; Topace: MC1)	Dongguan Weiqing Electronic Co.,Ltd.	MPX Series	0.1µF±10%, 275V max, 110°C max (Sounds)104K	cURus
			Suretop Technology Co Ltd	MPX Series	0.1µF±10%, min rated 275VAC, 110°C max (Topace) 104K	
			Guangdong Fengming Electronic Tech. Co. Ltd.	MKP	0.1µF±10%, min rated 275V, min rated 105°C max (Sounds & Topace) 104K	
			Guangdong Jingang Electronic Technology Co Ltd	MKP	0.1µF±10%, min rated 310V max, min rated 110°C (Sounds & Topace) 104K	
			Guangdong Fengming Electronic Tech Co., Ltd (E345487)	MKP-X2	0.1µF±10%, 275V max, 105°C max (Billion Plus)	
			Various	Various	0.1µF±10%, min rated 250V-310V, min rated 85°C (Sounds, Topace & Billion Plus)	

4.0 Critical Components						
Photo #	Item no. ¹	Name	Manufacturer/ trademark ²	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
5	15.5	Aluminum Electrolytic Capacitor (Sounds, Topace: EC1, EC2, Billion Plus: EC2, EC3)	Suqian Huhong Electronic Industrial Co.Ltd	CD110	10µF±20%, 250V max, 105°C max (Sounds)	NR
			Yiyang Wanjingyuan Electronic Co.,Ltd			
			Shenzhen Ruikang Electronics Limited Company			
			Chengdu Dasen Electronic Co.,Ltd			
			Dongguan E-Tak Electronic Co.,Ltd			
			Dongguan Chuanghui Electronics Co.,Ltd,			
			Shenzhen Dafu Electronic Technology Co., Ltd.	Various	10µF±20%, 250V max, 105°C; max (Billion Plus)	NR
			Nantong Tongrong Electronic Co.,Ltd.			
			Shenzhen City Ketuo Electronic Component Co., Ltd			
			Kang Cheng Da Electronic Co.,Ltd			
Suqian Huahong Electronic Industrial Co,Ltd	Various	10µF±20%, 400V max, 105°C; max (Topace)	NR			
Guangdong Ketuo Electronic Components						

4.0 Critical Components						
Photo #	Item no. ¹	Name	Manufacturer/ trademark ²	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
5	15.6	Aluminum Electrolytic Capacitor (Sounds, Topace: EC3, Billion Plus: EC4)	Suqian Huhong Electronic Industrial Co.Ltd	CD288H	470µF±20%, 25V max, 105°C max (Sounds)	NR
			Yiyang Wanjingyuan Electronic Co.,Ltd			
			Shenzhen Ruikang Electronics Limited Company			
			Chengdu Dasen Electronic Co.,Ltd,			
			Dongguan E-Tak Electronic Co.,Ltd .			
			Dongguan Chuanghui Electronics Co.,Ltd,			
			Shenzhen Dafu Electronic Technology Co., Ltd.			
			Kang Cheng Da Electronic Co.,Ltd	GH	470µF±20%, 25V max, 105°C max (Topace)	NR
			Suqian Huahong Electronic Industrial Co,Ltd	SZ		
			Guangdong Ketuo Electronic Components	SK		
Nantong Tongrong Electronic Co.,Ltd.	Various	470µF±20%, 25V max, 105°C; max (Billion Plus)	NR			
Shenzhen City Ketuo Electronic Component Co., Ltd	Various					

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Photo #	Item no. ¹	Name	Manufacturer/ trademark ²	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
5	15.7	Optical Tilt Switch (Sounds, Billion Plus: SW1; Topace: PC1)	Dongguan Bailing Electron Co.,Ltd	BL-3030X	5V, 10mA, UL94 V-0 (Sounds & Billion Plus)	NR
			Bai Ling Electronics Co.,Ltd.	BL-3030X-45	5V, 10mA, UL94 V-0 (Topace)	
5	15.8	Inductor (L1)	Zhuhai Qingda Electronics Technology Co.,Ltd	Various	1W, 3.3MH ±10% (Sounds)	NR
			Fen Yi County Suntop Electronics Co., Ltd			
			Shenzhen Tong Kai Yuan Technology Co., Ltd	Various	3.3MH ±10% (Billion Plus)	
			Dongguan Kunhua Electronic Technology Co., Ltd	Various	1mH±10%, 105°C max (Topace)	
5	15.9	Inductor (L2)	Guangdong Fenghua Advanced Technology (Holding) Co.,Ltd	EE13	550µH±8% (Sounds)	NR
			Fen Yi County Suntop Electronics Co., Ltd			
			Shenzhen Tong Kai Yuan Technology Co., Ltd	Various	3.3MH ±10% (Billion Plus)	
			Guang Dong Guoci Electronics Limited	EE10	0.27mH±10%, 125°C max (Topace)	

4.0 Critical Components						
Photo #	Item no. ¹	Name	Manufacturer/ trademark ²	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
5	15.10	Inductor (L3)	Zhuhai Qingda Electronics Technology Co.,Ltd	Various	1W, 3.3MH ±10% (Sounds)	NR
			Fen Yi County Suntop Electronics Co., Ltd			
			Shenzhen Tong Kai Yuan Technology Co., Ltd	EE13	550µH±10% (Billion Plus)	
			Shenzhen Tengqi Electronics Co., Ltd	47UH	47µH±20%, 125°C max (Topace)	
			Guang Dong Guoci Electronics Limited	Various	47µH±10%, 105°C max (Topace)	
Shenzhen Tengqi Electronics Co., Ltd Guang Dong Guoci Electronics Limited						
5	15.11	PCB Connector	Yueqing Hongyi Electronics Co Ltd	VH-2AW	250V max, 7.5A max, 85°C max (Sounds, Topace and Billion Plus)	UR
				VH-4AW		
			Yueqing Jiade Electronics Co Ltd	VH-2AW		
				VH-4AW		
			Zhejiang Chengming Electroncs Technologyco Ltd	VH-2AW		
				VH-4AW		
			Yueqing Hongyi Electronics Co., Ltd	XH-2A		
Various	Various	Min rated 120VAC, min rated 3A, min rated 85°C (Sounds, Topace and Billion Plus)				
10	15.12	Aluminum Electrolytic Capacitor (Billion plus, Topace: EC5)	NanTong TongRong Electronics Co., LTD	Various	100µF±20%, 16V; 105°C max (Billion Plus)	NR
			Shenzhen City Ketuo Electronic Component Co., Ltd	Various	100µF±20%, 25V; 105°C max (Topace)	
			Various	Various		

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Photo #	Item no. ¹	Name	Manufacturer/ trademark ²	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
10	15.13	Aluminum Electrolytic Capacitor (Topace: EC4)	Kang Cheng Da Electronic Co.,Ltd	Various	220µF±20%, 16V; 105°C max (Topace)	NR
			Suqian Huahong Electronic Industrial Co.,Ltd	Various		
			Guangdong Ketuo Electronic Components	Various		
			Various	Various		
7	16	Control Board Display (Not shown)	Sounds Electric Co Ltd.	CS12350-Display (PN: 2034087)	Made of components 16.1-16.3. Note that Sounds and Topace manufacturers use different components, as denoted in each component's technical data.	NR
				CS12350C-Display (PN: 2034087)		
				CS12380-Display (PN: 2033038)		
			Shenzhen Topace Technology Co Ltd.	CS12350M/B (PN: 2034087)	Made of components 16.1-16.4. Note that Sounds and Topace manufacturers use different components, as denoted in each component's technical data.	
				CS12350C-Display (PN: 2034087)		
				CS12380-Display (PN: 2033038) (TP-15644A1)		
			Guangdong Billion Plus Electrical Technology Limited	CS12350-Display (PN: 2034087)	Made of components 16.1-16.3.	
				CS12350C-Display (PN: 2034087)		
				CS12380-Display (PN:2033038)		
7	16.1	PCB	Zhongshan Lixin Chain-Board Co Ltd	Various	UL94 V-0, DSR-ALL, 130°C max (Sounds)	cURus
			Yee King International Sourcing Ltd	YK2	UL94 V-0, DSR-ALL, 130°C max (Topace)	
			Kingboard Laminates Holdings Ltd	KB Series	UL94 V-0, DSR-ALL, 130°C max (Billion Plus)	
			Various	Various	UL94 V-0, DSR-ALL, min rated 130°C (Sounds, Topace & Billion Plus)	

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Photo #	Item no. ¹	Name	Manufacturer/ trademark ²	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
7	16.2	Aluminum Electrolytic Capacitor (Sounds: EC4; Topace: EC6, Billion Plus: EC1)	Suqian Huhong Electronic Industrial Co.Ltd	CD110	47μF±20%, 16V max, 105°C max (Sounds)	NR
			Chengdu Dasen Electronic Co.,Ltd			
			Dongguan E-Tak Electronic Co.,Ltd .			
			Yiyang Wanjingyuan Electronic Co.,Ltd			
			Shenzhen Ruikang Electronics Limited Company			
			Dongguan Chuanghui Electronics Co.,Ltd,			
			Shenzhen Dafu Electronic Technology Co., Ltd.			
			Nantong Tongrong Electronic Co.,Ltd.	Various	47μF±20%, 16V max, 105°c max (Billion Plus)	NR
			Shenzhen City Ketuo Electronic Component Co., Ltd			
			Kang Cheng Da Electronic Co.,Ltd	Various	47μF±20%, 16V max, 105°c max (Topace)	NR
Suqian Huahong Electronic Industrial Co,Ltd	Various					
Guangdong Ketuo Electronic Components	Various					

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7	16.3	NTC Cable	Zhongshan City Boyu Electric Wire Co.,Ltd.	Type 2468	26AWG, 300V max, 80°C max (Sounds & Topace)	cURus
			Various	Type 2468	Min 26AWG, min 300V, min 80°C (Sounds, Topace and Billion Plus)	
7	16.4	Capacitor (Topace: EC7)	Kang Cheng Da Electronic Co.,Ltd	Various	100µF±20%, 16V; 105°C max (Topace)	NR
			Suqian Huahong Electronic Industrial Co.,Ltd	Various		
			Guangdong Ketuo Electronic Components	Various		
8	17	Remote	Pt Suma	02055089PT	IR remote for controlling heater. Made using components 17.1-17.3	NR
8	17.1	Remote Enclosure	Lg Chem Ltd.	HI121H	ABS, UL94-HB, min 1.5mm thick, 95°C max	cURus
			Ningbo Lg Yongxing Chemical Co., Ltd	HI-121H	ABS, UL94-HB, min 1.5mm thick, 80°C max	
8	17.2	Coin Type Battery	Maxell Asia, Ltd.	CR2025	Lithium, 3V, 170mAh, -20 to 85°C	cURus
			Guangdong Tianqiu Electronics Technology Co Ltd		Lithium, 3V, 150mAh, -10 to 60°C	
8	17.3	Remote Back Enclosure	Lg Chem Ltd.	HI121H	ABS, UL94-HB, min 1.5mm thick, 95°C max	cURus
			Ningbo Lg Yongxing Chemical Co., Ltd	HI-121H	ABS, UL94-HB, min 1.5mm thick, 80°C max	
1	18	Internal Conductors (Not shown)	Various	1015	16-24AWG, 600V max, UL94 VW-1, 105°C max	cURus
				1007	22-24AWG, 300V max, UL94, 80°C max. for DC fan.	
1	19	Closed End Connector (not shown)	Various	Various	22-14AWG, 300V max, 150°C max	cURus
			Heavy Power Co Ltd.	CE5	22-14AWG, 300V max, 150°C max	

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Photo #	Item no. ¹	Name	Manufacturer/ trademark ²	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
1	20	Label (not shown)	Zhongshan Zhantu Printing Factory	ZT969-1	At least suitable for application on polymeric, indoor/outdoor use, 100°C when applied to polymeric surface	cURus
			Various	Various	At least suitable for application on polymeric and a least rated for indoor use, min 100°C	cURus
1	21	Power Cord Tag	Guangdong Tianyue Printing Tech. Co., Ltd.	TY669A-125	Indoor use. Suitable for use on HPN/HPN-R types and min 18AWG cords.	cURus
			Dong Guan Zhang Mu Tou Xin Rong Printing Factory	GM011		
			Lian Yi Printing Co., Ltd	LY-06		
<p>NOTES:</p> <p>1) Not all item numbers are indicated (called out) in the photos, as their location is obvious.</p> <p>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.</p> <p>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.</p>						

5.0 Critical Unlisted CEC Components

No Unlisted CEC components are used in this report.

6.0 Critical Features

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

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

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

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

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

1. Spacing - In primary circuits, 1.6mm minimum spacing is maintained between current carrying parts of opposite polarity. On the PCB, 1.6mm minimum spacing is maintained between current carrying parts of opposite polarity.
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 non-metallic enclosure constructed with no openings.
5. Grounding - This product is not provided with a means of grounding as it is not required to be grounded as it is provided with a polarized plug, has a polymeric construction, and is rated less than 150V.
6. Polarized Connection - This product is provided with a polarized power supply connection. All single pole switches and fuses are connected only to the ungrounded supply circuit conductor.
7. Internal Wiring - Internal wiring is routed away from sharp or moving parts. Internal wiring leads terminating in soldered connections are made mechanically secure prior to soldering. Recognized Component separable (quick disconnect) connectors of the positive detent type, closed loop connectors, or other types specifically described in the text of this report are also acceptable as internal wiring terminals. At points where internal wiring passes through metal walls or partitions, the wiring insulation is protected against abrasion or damage by plastic bushings or grommets. All wiring is minimum 26 AWG, with a minimum rating of 300V, 80°C.
8. Schematics - Refer to Illustration No. 2, 2.1 and 2.2 for schematics requiring verification during Field Representative Inspection Audits.
9. Markings - The product is marked on a labeling system as described in item no. 20 of Section 4.0 as follows: applicant's name or brand name, factory ID, model number, date or date code of manufacture, input voltage and frequency, and current or wattage.

Marked on the carton:

- Input voltage, frequency, and current (or wattage)
- Specific location of use: on table or floor

6.0 Critical Features

10. Cautionary Markings - The following are required:

Marked on the product:

- "CAUTION - High temperature, keep electrical cords, drapery, and other furnishings at least 3 feet (0.9 m) from the front of the heater and away from the side and rear. WARNING - Risk of Hyperthermia."
- Figure 67.2 from UL 1278, as shown in illustration 5
- DO NOT LOCATE AGAINST WALLS OR BEHIND DRAPES OR FURNITURE

Marked on the remote:

- Figure 7C.2 6 from UL 1278, as shown in illustration 7

On cord tag:

- "WARNING – TO REDUCE THE RISK OF FIRE AND HYPERTHERMIA" and "DO NOT REMOVE THIS TAG!"
- Always plug heaters directly into a wall outlet/receptacle. Never use with an extension cord or relocatable power tap (outlet/power strip).
- Check your heater cord and plug connections. A loose fitting outlet can cause the plug to overheat 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. Note: Heaters draw more current than small appliances, overheating of the outlet may occur even if it has not occurred with the other appliances.
- Always unplug heater when not in use.
- 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.
- 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.
- Hyperthermia can result in death. Use caution when operating the heater to avoid overheating that can occur in infants, or individuals with reduced physical, sensory, or mental capabilities.

Marked on the carton:

- Heater must be plugged directly into outlet/receptacle and to never use with an extension cord
- Minimum clearances to combustibles (with examples provided): 3ft
- Figure 7B.1 from UL 1278, as shown in illustration 6.

6.0 Critical Features

11. Installation, Operating and Safety Instructions - Instructions for installation and use of this product are provided by the manufacturer (CS12350ES NEW05/24) and must include at least the following:

- "IMPORTANT INSTRUCTIONS" and "SAVE THESE INSTRUCTIONS"
- Figure 67.1 from UL 1278, as shown in illustration 4
- Figure 67.2 from UL 1278, as shown in illustration 5
- Figure 7B.1 from UL 1278, as shown in illustration 6
- UL 4200A Illustration 7 - Text Size Guidelines for Principle Display Panel Area
- Read all instructions before using this heater.
- 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 a 3 feet from the front of the heater and keep them away from the sides and rear.
- Extreme caution is necessary when any heater is used by or near children or invalids and whenever the heater is left operating and unattended.
- Always unplug heater when not in use.
- Do not operate any 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 authorized service facility for examination and/or repair.
- Do not use outdoors.
- 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.
- 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.
- To disconnect heater, turn controls to off, then remove plug from outlet.
- 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.
- 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.
- A heater has hot and arcing or sparking parts inside. Do not use it in areas where gasoline, paint, or flammable liquids are used or stored.
- 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.
- Always plug heaters directly into a wall outlet/receptacle. Never use with an extension cord or relocatable power tap (outlet/power strip).
- Hyperthermia can result in death. Symptoms of hyperthermia include high body temperature, headache, nausea, vomiting, tiredness, dizziness, fainting, and rapid pulse. If you begin to experience symptoms related to hyperthermia, turn off the heater and seek medical attention.
- To avoid excessive room temperatures which can cause hyperthermia: DO NOT leave product running unattended in a confined space around infants, or individuals with reduced physical, sensory, or mental capabilities.
- "SAVE THESE INSTRUCTIONS"

Additional instructions markings:

- "Remove and immediately recycle or dispose of used batteries according to local regulations and keep away from children. Do NOT dispose of batteries in household trash or incinerate."
- "Even used batteries may cause severe injury or death."
- "Call a local poison control center for treatment information."
- "Uses 1 - 3V CR2025 battery."
- "Non-rechargeable batteries are not to be recharged."
- "Do not force discharge, recharge, disassemble, heat above (manufacturer's specified temperature rating) or incinerate. Doing so may result in injury due to venting, leakage or explosion resulting in chemical burns."
- "Ensure the batteries are installed correctly according to polarity (+ and -)."
- "Do not mix old and new batteries, different brands or types of batteries, such as alkaline, carbon-zinc, or rechargeable batteries."
- "Remove and immediately recycle or dispose of batteries from equipment not used for an extended period of time according to local regulations."
- "Always completely secure the battery compartment. If the battery compartment does not close securely, stop using the product, remove the batteries, and keep them away from children."

6.0 Critical Features

12. Logo Dependent Marking - The required marking is dependent on the specific ETL logo applied to the product as authorized by the Authorization to Mark. In addition to the required marking of items 9 and 10 above, all products bearing the cETLus or cETL logo must also be marked in letters no less than 1.6 mm high with:

NE PAS ADOSSER AU MUR OU PLACER DERRIÈRE LES RIDEAUX OU LES MEUBLES.

ATTENTION : POUR ÉVITER LES CHOCS ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

"AVERTISSEMENT - POUR RÉDUIRE LE RISQUE D'INCENDIE:

Toujours brancher les chauffeuses directement dans une prise de courant /

1. un réceptacle mural. Ne jamais utiliser avec un cordon d'extension ou avec une barre d'alimentation amovible (prise de courant / barre d'alimentation).

2. Vérifiez le cordon d'alimentation de votre chauffeuse ainsi que les connexions de la fiche. Une connexion à une prise de courant dont l'ajustement est lâche peut causer la surchauffe de la fiche et/ou causer un incendie. Assurez-vous que la fiche s'ajuste solidement dans la prise de courant. Vérifiez fréquemment durant l'utilisation pour vous assurer que la fiche et la prise de courant ne sont pas chaudes. Si l'une ou l'autre est chaude, cessez d'utiliser la chauffeuse et faites remplacer la prise de courant par un électricien qualifié.

Remarque : Les chauffeuses consomment plus de courant qu'un petit électroménager, la surchauffe de la prise peut survenir même si cela n'est pas survenu avec d'autres appareils.

3. Toujours débrancher la chauffeuse lorsqu'elle n'est pas utilisée.

4. Ne pas opérer chauffeuse avec une fiche ou un cordon endommagé ou après une défaillance de la chauffeuse, après qu'elle ait fait une chute ou qu'elle ait été endommagée de quelque manière. Jeter la chauffeuse.

5. Ne pas faire courir le cordon d'alimentation sous les tapis. Ne pas recouvrir le cordon d'alimentation avec des tapis, des tapis d'escalier ou autres couvre planchers semblables. Ne pas faire courir le cordon d'alimentation sous des meubles ou des appareils. Placer le cordon d'alimentation éloigné de la région du trafic et là où on ne peut passer par-dessus.

6. L'hyperthermie peut entraîner la mort. Utiliser avec prudence lors du fonctionnement de la chauffeuse afin d'éviter une surchauffe qui pourrait se produire à proximité d'enfants en bas âge, ou de personnes avec des capacités physiques, sensorielles ou mentales réduites.

NE PAS ENLEVER CETTE ÉTIQUETTE !"

AVERTISSEMENT

"Spécifications nominales : 120 V c.a., 12,5 A, 60 Hz

Utiliser uniquement avec une prise de courant polarisée standard à 120 V c.a.

Elle est conçue pour usage au plancher ou sur une table. Toujours brancher les chauffeuses directement dans une prise de courant/un réceptacle mural. Ne jamais utiliser avec un cordon d'extension ou avec une barre d'alimentation amovible (prise multiple/barre d'alimentation). Cette chauffeuse est chaude lorsqu'elle est en service. Pour éviter des brûlures, ne pas laisser la peau nue entrer en contact avec des surfaces chaudes. Si comprises, utiliser les poignées lors du déplacement de cette chauffeuse. Garder tout matériau combustible, comme l'ameublement, coussins, literie, papier, vêtements et rideaux à au moins 0.9 mètre (3 pieds) de l'avant de la chauffeuse et éloignés des côtés et de l'arrière de la chauffeuse. Le produit ne doit pas être utilisé dans les salles de bain, salles de lavage ou autres emplacements similaires."

13. Production Control - Separate production lines for different models. There will be a quality check before production and before shipment to make sure the product complies with the listing report. The Quality checks will be performed for correspondence between Rating label logo and the specific differences, according to Illustration 1.

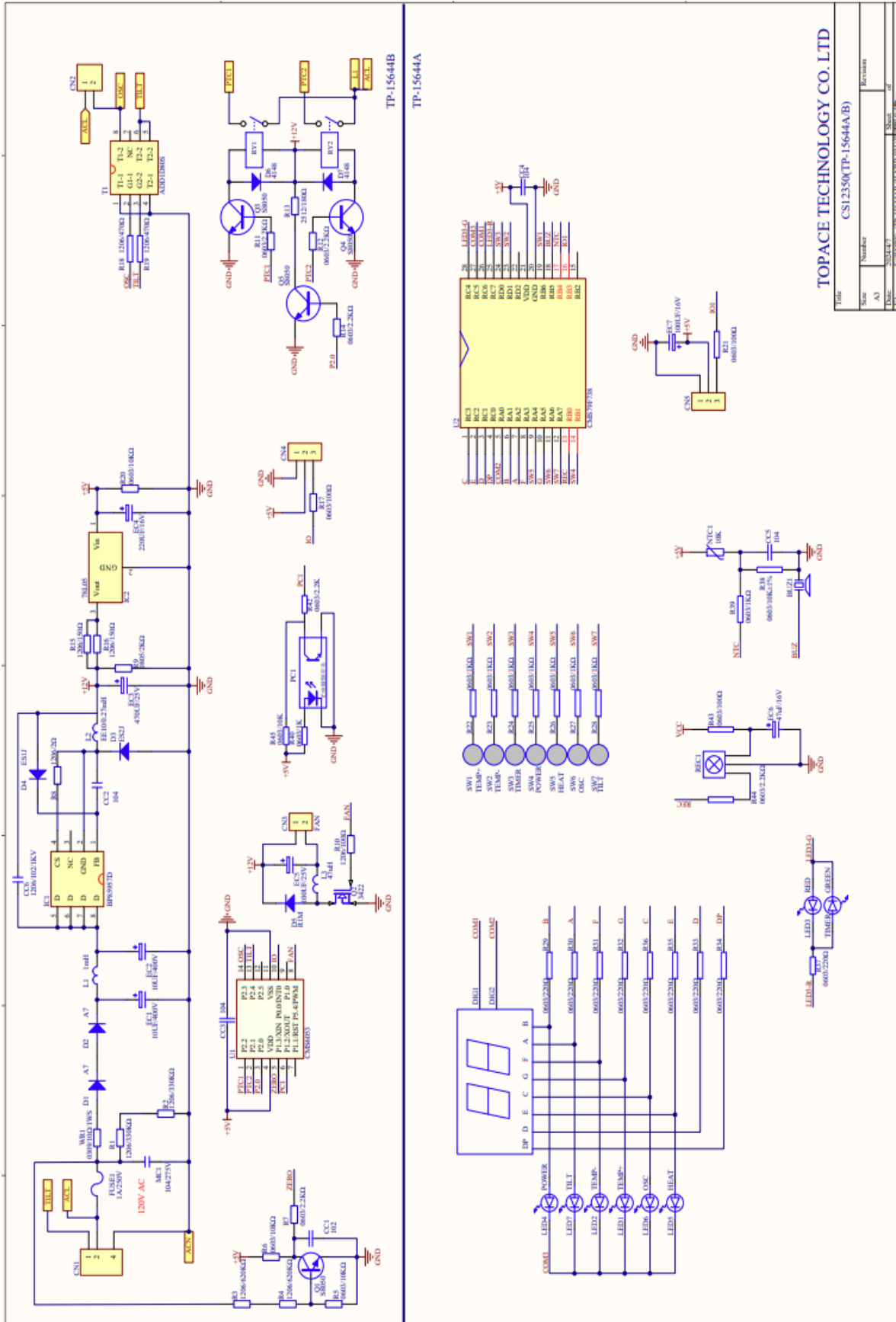
7.0 Illustrations

Illustration 1 - Table of version differences per model number.

Section	Item No.	Part/Model No.	Specific Differences	Logo Restrictions
2	Ratings	--	120V, 60Hz, 1500W	ETLus only
2	Ratings	--	120V, 60Hz, 1500W @25°C 120V, 60Hz, 1500W @0°C	None
4	1	AF305D	Rated V-0	ETLus only
4	1	7001(+)	Rated V-0	ETLus only
4	1	7001(+)	Rated 5VA, V-0	None
4	2	LUPOY GP-1006F(m)(#)(f1)	Rated V-0	ETLus only
4	2	AC3600-H	Rated V-0	ETLus only
4	2	LUPOY GP-1006F(f1)	Rated 5VA, V-0	None
4	3	LUPOX GP1006FD	Rated V-0	ETLus only
4	3	LUPOX GP-2306F(#)	Rated V-0	ETLus only
4	3	PBT-RG301(r1)	Rated 5VA, V-0	None

7.0 Illustrations

Illustration 2.1 - PCB Spacings for Topace board (Verify Polarity L-N)

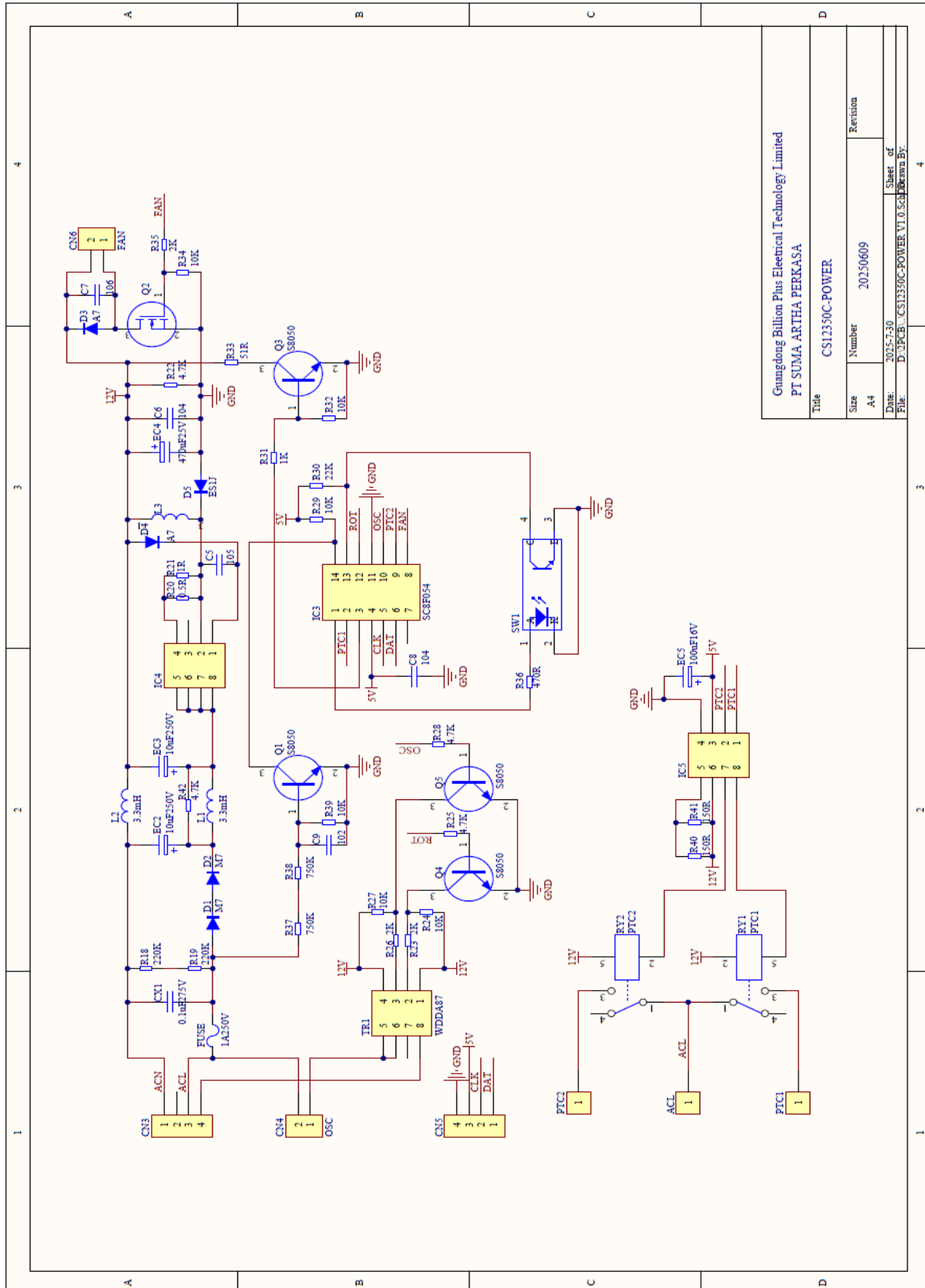


TOPACE TECHNOLOGY CO. LTD
 CSI2350(TP-15644A.B)

Title	Revision
Size	Number
A3	000001
Author	000001
Drawn	000001
Checked	000001
Approved	000001
File	E:\WORK\TP-15644A\TP-15644A.DWG

7.0 Illustrations

Illustration 2.2 - PCB Spacings for Billion Plus board (Verify Polarity L-N)



7.0 Illustrations

Illustration 3 - Exploded diagram of heater

REV.	DESCRIPTION	DATE	CHECKED-BY	APPROVED-BY

Serial NO	Name	Quantity
1	FRONT BODY (前壳)	1
2	FRONT GRILL (前网)	1
3	METAL MESH (前网)	1
4	ELEMENT, PTC 发热体	1
5	FRONT COVER (前盖)	1
6	SCREW 3.5*12 螺帽, 4*4, 十字, 环 (自攻大扁平组)	40
7	MANUAL RESET TCO 手动复位TCO	1
8	ELEMENT HOLDER (PTC支架)	1
9	DC fan (DC风扇)	1
10	RIGHT ARM COVE (脚身右盖)	1
11	LEFT ARM COVER (脚身左盖)	1
12	ARM STAND (脚身)	1
13	OUTER BUSHING (外护套)	1
14	AXLE (轴脚)	1
15	SHROUD (风机后支架)	1
16	LINK (连杆) 臂板, C. R. S. 25*14*2mm	1
17	WASHER HEAD (带介自攻平扁螺柱)	2
18	BUSHING LINK (连接套)	1
19	OSCILLATION MOTOR (同步电机)	1
20	CAM (上凸轮)	1
21	SCREW (自攻圆头尖咀) 3*20环保镀锌	2
22	REAR BODY (后壳)	1
23	REMOTE (SEE Drawing EM030) 遥控器 (灯片)	1
24	DISPLAY LENS	1
25	CONTROL PCB (控制板)	1
26	UPPER BASE (上底座)	1
27	BOTTOM BUSHING (衬套)	1
28	OSCILLATION MOTOR (同步电机)	1
29	CAM (下凸轮)	1
30	LINK SCREW (连杆螺钉)	2
31	LINK (连杆) NILON-V0	1
32	GASKET (垫圈)	1
33	HIGH VOLTAGE PCB (电源板)	1
34	WASHER (垫片)	1
35	LOWER BASE (下底座)	1
36	BASE COVER (底座盖)	1
37	POWER CORDSET 电源线, 带专用粘贴	1
38	FOOT 脚垫	4

Guangdong Billion Plus Electrical Technology Limited		PART NAME	MODEL C12350
TOLERANCE	UNIT	PART NO.	****
SCALE	mm	DWG NO.	NF2401000
DRW BY	Li Guo Qiang	REV NO.	2.3
CHK BY	Zhang Cao	DATE	2024-12-16
APPV BY		DATE	2024-12-16
			1 OF 1
			A0

7.0 Illustrations

Illustration 4 - UL 1278, figure 67.1

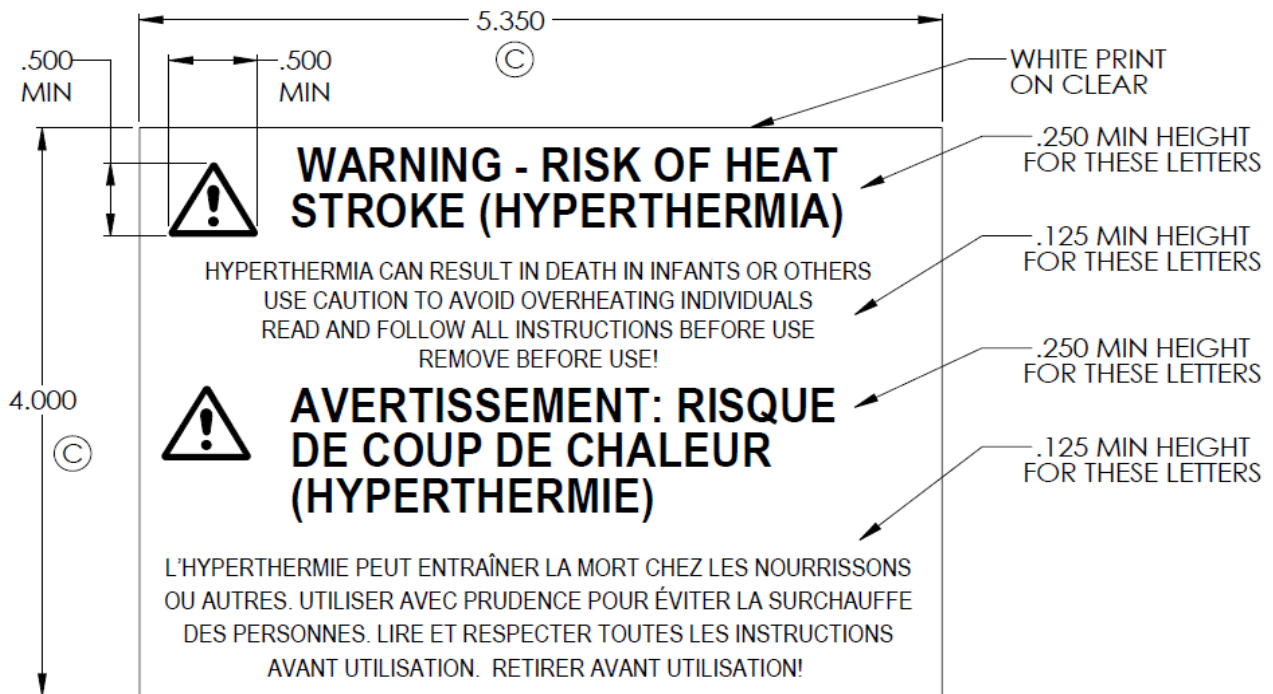
Cautionary marking



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




Illustration 5 - UL 1278, figure 67.2



7.0 Illustrations

Illustration 6 - Packaging for Coin Cell and Voltage Information (box product comes in).

The principle display panel shall contain the warning label below. The icon text shall be at least 7mm in width and 9mm in height. See Ill 7 for text height requirement on box.

⚠ WARNING	
<ul style="list-style-type: none">• INGESTION HAZARD: This product contains a button cell or coin battery.• DEATH or serious injury can occur if ingested.• A swallowed button cell or coin battery can cause Internal Chemical Burns in as little as 2 hours.• KEEP new and used batteries OUT OF REACH of CHILDREN• Seek immediate medical attention if a battery is suspected to be swallowed or inserted inside any part of the body.	

Requires 1 CR2025
3V Coin Cell Battery
(Battery included)

Illustration 7 - Remote Marking

This icon must be at least 7mm in width and 9mm in height and must be on the Product display panel.



7.0 Illustrations

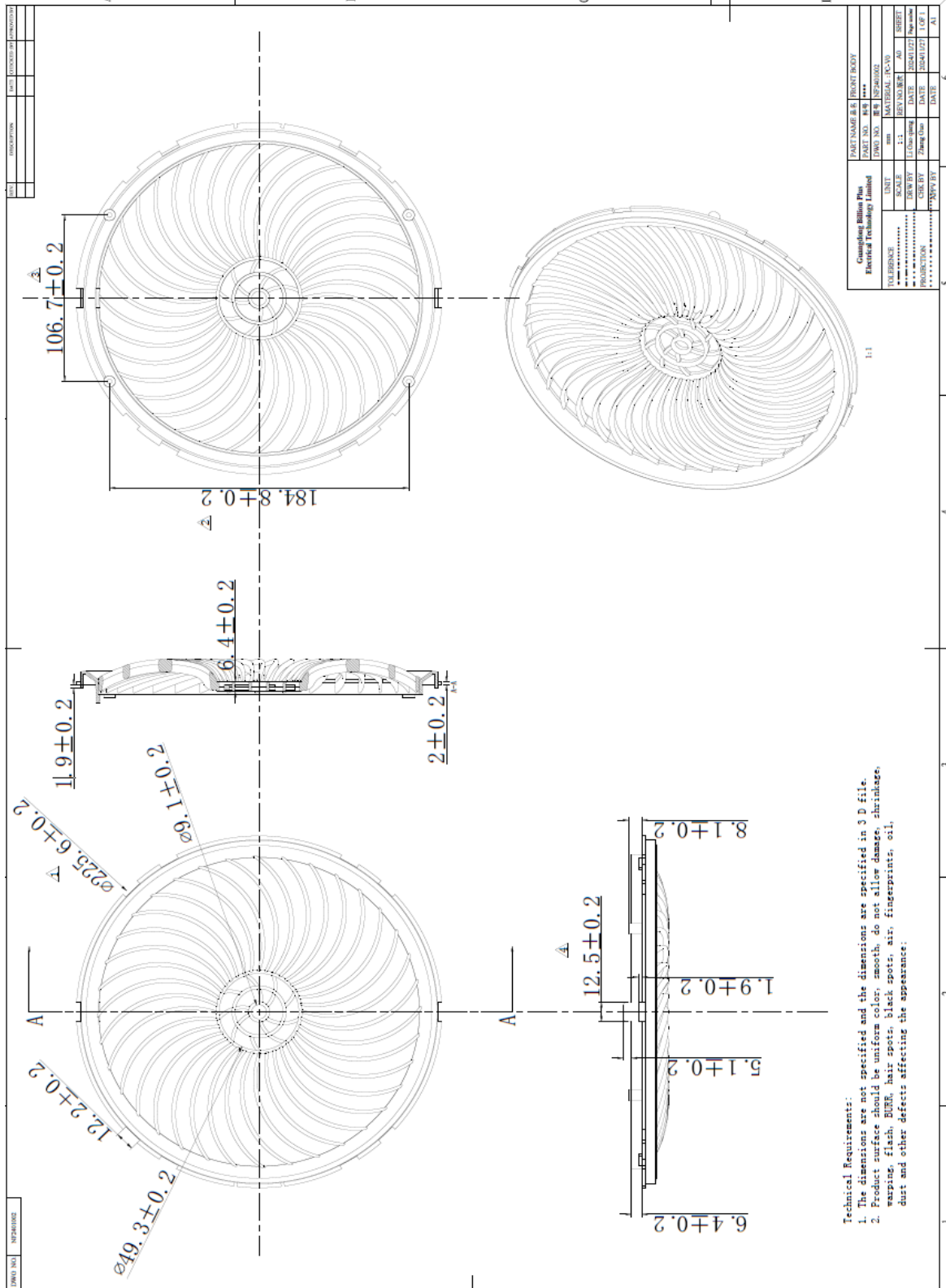
Illustration 8 - Text Size Guidelines for Principle Display Panel Area

Letter Size for Warning Labels

Letter Size Measurements in Inches								
Display Area: inches ²	0 – 2	+2 – 5	+5 – 10	+10 – 15	+15 – 30	+30 – 100	+100 – 400	+400
Signal word (WARNING)	3/64	1/16	3/32	7/64	1/8	5/32	1/4	1/2
Statement of Hazard	3/64	3/64	1/16	3/32	3/32	7/64	5/32	1/4
Other Text	1/32	3/64	1/16	1/16	5/64	3/32	7/64	5/32
Letter Size Measurements in cm (For Reference Only)								
Display Area: cm ²	0-13	+13 – 32	+32 – 65	+65 – 97	+97 – 194	+194 – 645	+645 – 2,581	+2,581
Signal word (WARNING)	0.119	0.159	0.238	0.278	0.318	0.397	0.635	1.27
Statement of Hazard	0.119	0.119	0.159	0.238	0.238	0.278	0.397	0.635
Other Text	0.079	0.119	0.159	0.159	0.198	0.238	0.278	0.397

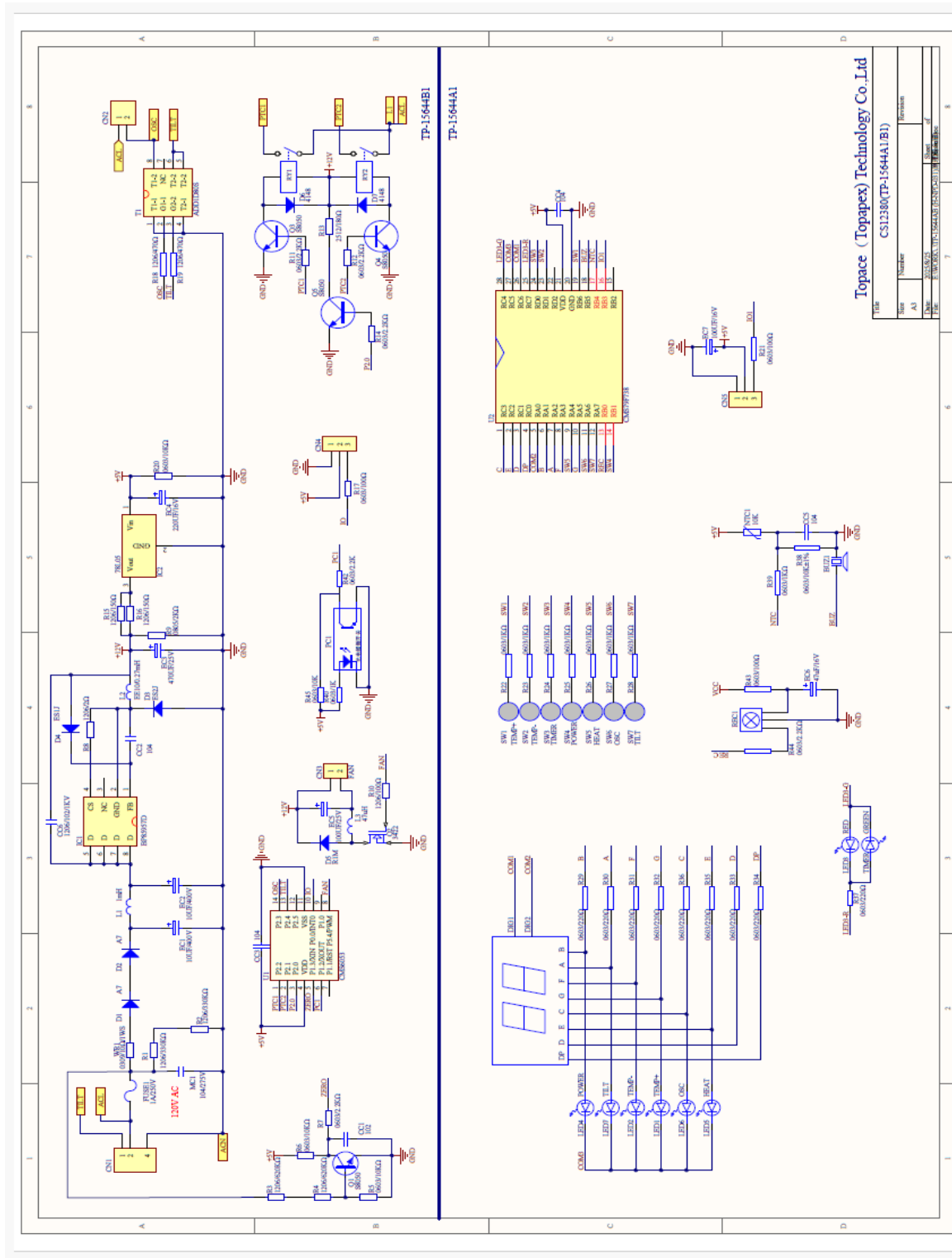
7.0 Illustrations

Illustration 9 - Front Grill Dimensions



7.0 Illustrations

Illustration 10 - Schematics for CS12380 - Topace

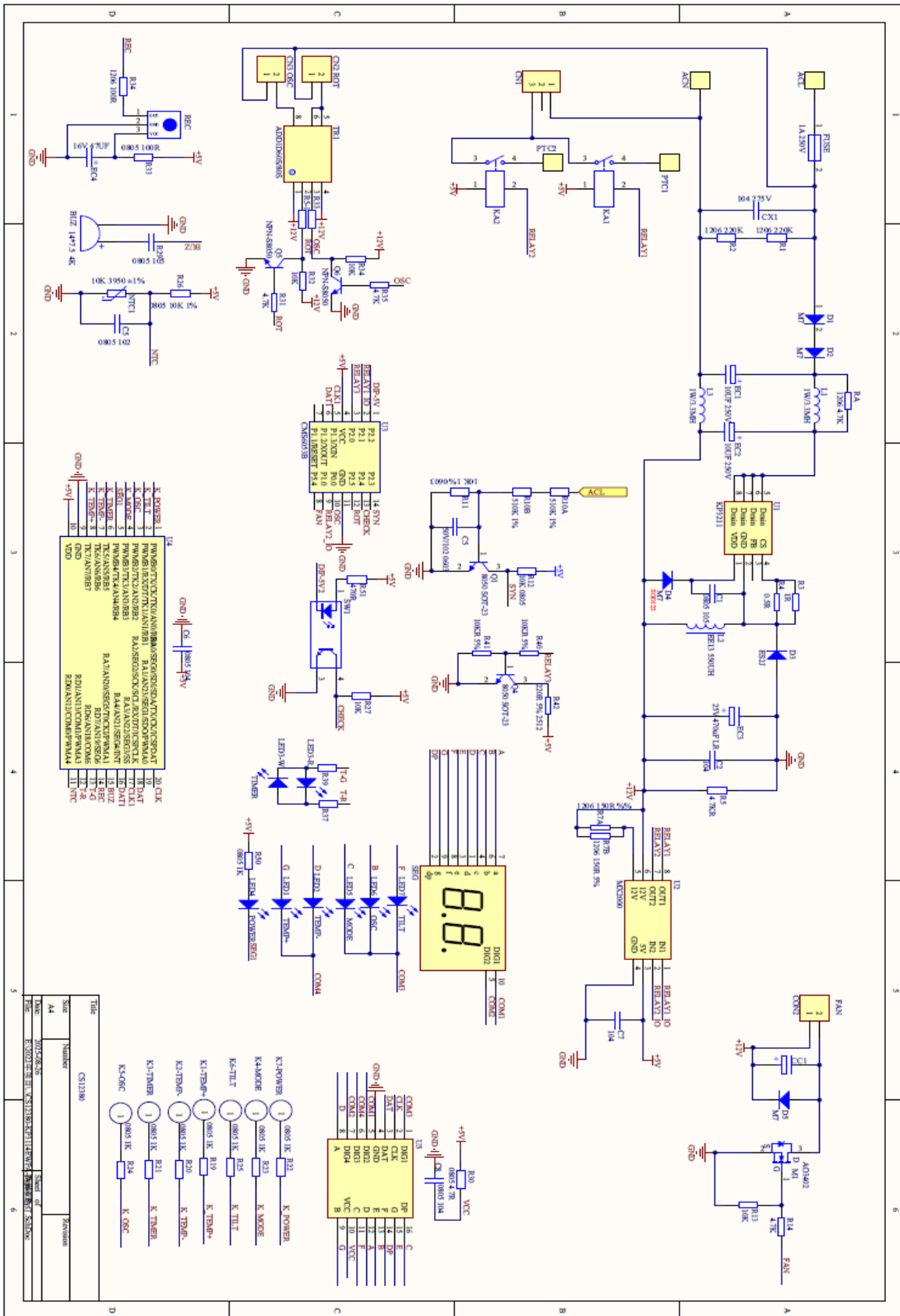


Topace (Topapex) Technology Co., Ltd
 CS13380(TP-15644A1.B1)

Rev	Number	Revision
1	15644A1	1
2	15644A1	2
3	15644A1	3
4	15644A1	4
5	15644A1	5
6	15644A1	6
7	15644A1	7
8	15644A1	8
9	15644A1	9
10	15644A1	10

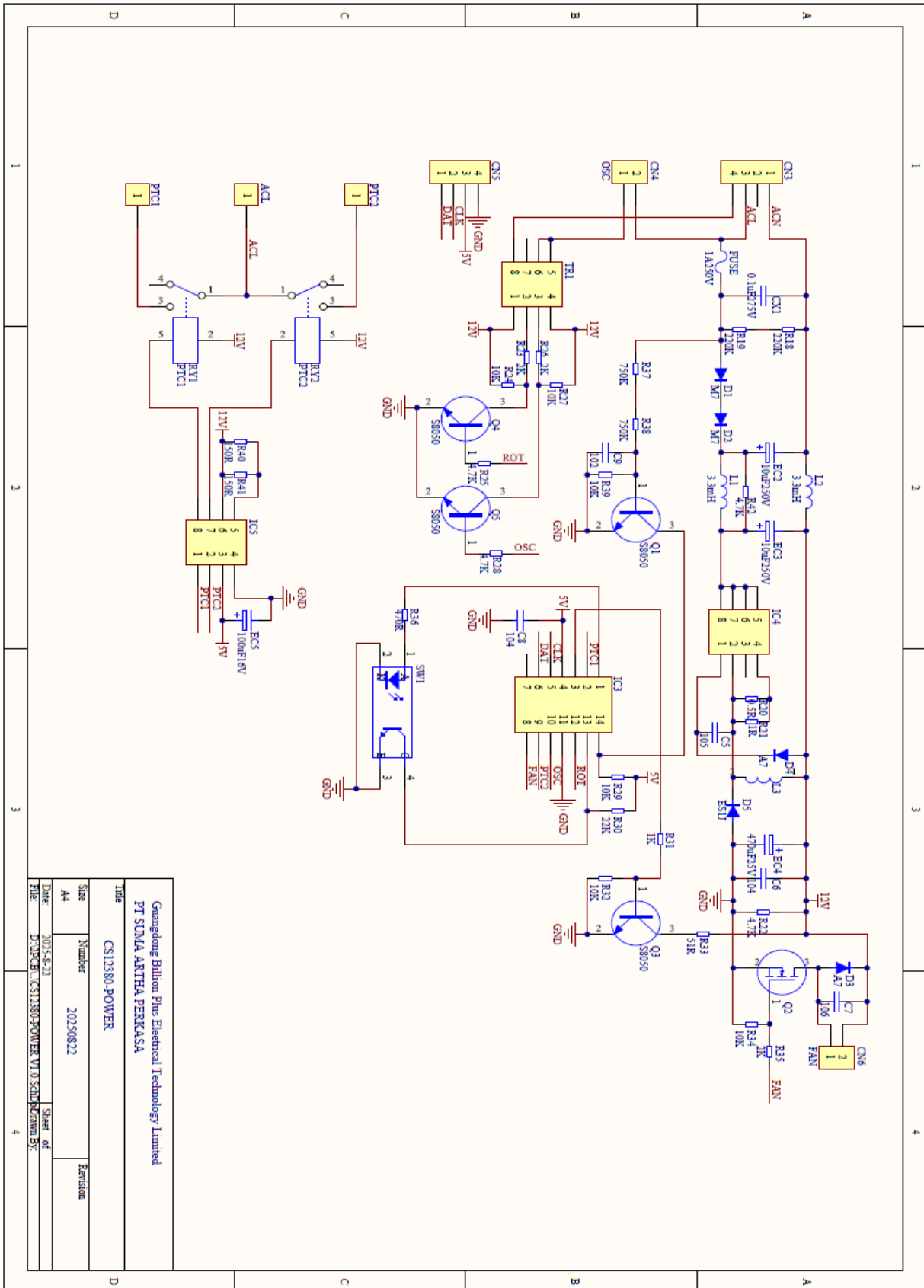
7.0 Illustrations

Illustration 10.1 - Schematics for CS12380 - Sounds



7.0 Illustrations

Illustration 10.2 - Schematics for CS12380 - Billion Plus



8.0 Test Summary			
Evaluation Period	September 10, 2025		Project No. G106330354
Sample Rec. Date	4-Sep-2025	Condition Production	Sample ID. CRT2509041030-001
Test Location	Lasko Products LLC - 820 Lincoln Avenue, West Chester, PA 19380 USA		
Test Procedure	Test Data Acceptance - Level 3		
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.			
Because of the testing performed under report 106131164CRT-001 only the following tests were performed under this update:			
Test Description	UL 1278 Clause	CSA C22.2#46 Clause	
Input Test	--	5.1.3, 7.2.2	
Abnormal Operation - Tip Over Test	--	7.6.4.3	
Abnormal Operation - Vertical Wall Test	--	7.6.4.5	
Abnormal Operation - Cheesecloth Drape Test	--	7.6.4.8	
Abnormal Input and Starting Test	--	7.6.7, 7.6.8, 7.6.9	
Push Back Strain Relief Test	16.13	7.8 (b)	
Strain Relief Test	59	7.8 (a)	
Mold Stress Relief Distortion Test	9.4	--	
Strain Relief Test Following Mold Stress Relief Distortion	59	--	
Physical Abuse: Thermal Shock	--	7.11.4	
Evaluation Period	September 10, 2025		Project No. G106330354
Sample Rec. Date	4-Sep-2025	Condition Production	Sample ID. CRT2509041030-001
Test Location	Intertek, 3933 US Rt. 11, Cortland, NY 13045		
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.			
Because of the testing performed under report 106131164CRT-001 only the following tests were performed under this update:			
Test Description	UL 1278 Clause	CSA C22.2#46 Clause	
Physical Abuse Test	--	7.11.1	
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:	Nicholas Dentes	Reviewed by:	Derrek Root
Title:	Engineering Team Leader	Title:	Staff Engineer
Signature:	<i>Signature on file</i>	Signature:	<i>Signature on file</i>

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	Lasko Products LLC
Address	820 Lincoln Ave West Chester, PA 19380-4469
Country	USA
Product	Portable PTC type electric heater

MULTIPLE LISTEE 1	None
Address	
Country	
Brand Name	
ASSOCIATED MANUFACTURER	
Address	
Country	
MULTIPLE LISTEE 1 MODELS	BASIC LISTEE MODELS

MULTIPLE LISTEE 2	None
Address	
Country	
Brand Name	
ASSOCIATED MANUFACTURER	
Address	
Country	
MULTIPLE LISTEE 2 MODELS	BASIC LISTEE MODELS

MULTIPLE LISTEE 3	None
Address	
Country	
Brand Name	
ASSOCIATED MANUFACTURER	
Address	
Country	
MULTIPLE LISTEE 3 MODELS	BASIC LISTEE MODELS

10.0 General Information

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

COMPONENTS

Components used shall be those itemized in this Intertek report covering the product, including any amendments

LISTING MARK

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

The mark must include the following four items:

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

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

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

Can be used together when both standards are used.

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

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

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

MANUFACTURING AND PRODUCTION TESTS

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

FOLLOW-UP SERVICE

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

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

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

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

10.1 Evaluation of Unlisted Components

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

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

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

Managing CEC Location:
Intertek Testing Services NA Inc.
ETL Component Evaluation Center
1717 Arlingate Ln.
Columbus, Ohio 43228 USA
Attn: CEC Safety

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, Tip Over 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, contactors, relays, etc., should be closed so that all primary circuits are energized by the test potential. If all primary circuits cannot be tested at one time, then separate applications of the test potential shall be made.

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

Test Equipment

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

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

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

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

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

Products Requiring Dielectric Voltage Withstand Test:

<u>Product</u>	<u>Test Voltage</u>	<u>Test Time</u>
All products covered by this Report.	1000V or 1200V	60 s 1 s

11.2 Tip Over Test

One hundred percent of production of the products covered by this Report shall be subjected to the test. The manufacturer shall test each heater that employs a tip-over switch to determine that the switch functions as intended after assembly in the heater. The heater shall be energized during this test.

Products Requiring Tip Over Test:

All products covered by this Report.

