1.0 Reference and Address			
Report Number	221102919SHA-001	Original Issued: 3-Mar-2023	Revised: 16-Dec-2024
Standard(s)	Household And Similar Electrical Appliances, Part 1: General Requirements [UL 60335-1:2016 Ed.6] Safety Of Household And Similar Appliances - Part 1: General Requirements [CSA C22.2#60335-1:2016 Ed.2] Household and Similar Electrical Appliances - Part 2 - 40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners, and Dehumidifiers [UL 60335-2-40:2019 Ed.3] Household And Similar Electrical Appliances – Safety – Part 2-40: Particular Requirements For Electrical Heat Pumps, Air-Conditioners And Dehumidifiers [CSA C22.2#60335-2-40:2019 Ed.3]		

Applicant	Nantong Ningpu Electrical Appliance Co., Ltd.	Manufacturer	**Nantong Ningpu Electrical Appliance Co., Ltd.**
Address	No.139, Huanghe Road, Rudong Economic Development Zone, Nantong, Jiangsu Province, 226400	Address	No.139, Huanghe Road, Rudong Economic Development Zone, Nantong, Jiangsu Province, 226400
Country	P.R. China	Country	P.R. China
Contact	Mr. Qilin	Contact	Mr. Qilin
Phone	86-513-8196 9611	Phone	86-513-8196 9611
FAX	86-513-8196 8003	FAX	86-513-8196 8003
Email	qilin@ningpu.com.cn	Email	qilin@ningpu.com.cn

2.0 Product Description	
Product	Room Air Conditioner
Brand name	Ningpu, NEPO, ZAFRO, R.W.FLAME, COWSAR, Joy Pepple, Rintuf, COSTWAY, Soleusair, OSLO, Joy Pebble, Auseo, Acekool, Upstreman, Garvee, Fornido, Kndko, Xbeauty, Electactic, KISSAIR, Antarctic Star, Kismile, WAA, YODOLLA.
Description	This unit is a cord-connected window type air conditioner that is intended for indoor use only. Unit employs a hermetically sealed self-contained refrigeration system. Unit employs R32 refrigerant and no means for reverse cycle or electric resistance heat.
Models	NCA, NCA1, NCA2, NCD, NCD1, NCD2, NCE, NCE1, NCE2, NCAA followed by -06C, -08C; followed by /X1E; maybe followed by -W. A5406-10K, A5406W-10K, A5406W-10K-RW, A5406W-10K-ZA, A5406W-10K-WAL-AU, A5406W-10K-JP, A5408W-12K, A5408W-12K-RW, A5408W-12K-ZA, A5408W-12K-WAL-AU, A5408W-12K-JP, FP10271US-WH, FP10271CA-WH, FP10247US-WH, FP10247CA-WH. WS3-08EW-201, WS3-08EW-301, WS4-08EW-201, WS4-08EW-301. WS3-08E-201, WS3-08E-301, WS4-08E-201, WS4-08E-301. OSHB-08W, OSHB-08, N1, N2. A5406W-10K-EL, A5408W-12K-EL, A5416W-10K-EL, A5418W-12K-EL, A5406W-10K-AS, A5408W-12K-AS, SS-N2, SMAO001WH, SS14165WH.
	For convenience, abbreviate NCA, NCA1, NCA2, NCD, NCD1, NCD2, NCE, NCE1, NCE2, NCAA followed by -06C; followed by /X1E; maybe followed by -W to 06 series; abbreviate NCA, NCA1, NCA2, NCD, NCD1, NCD2, NCE, NCE1, NCE2, NCAA, followed by -08C; followed by /X1E; maybe followed by -W to 08 series. Models with prefix NCA, NCA1, NCA2 are identical with models with prefix NCE, NCE1, NCE2, NCD, NCD1, NCD2 except for the installation gap. Model with NCA is identical with model with NCA1, NCA2 except for the control pannel. NCA-06C/X1E is identical with NCA-08C/X1E except for the compressor and refrigerant charge. NCA-06C/X1E-W, NCA-08C/X1E-W are identical with NCA-06C/X1E, NCA-08C/X1E except for the WIFI module. Models WS3-08EW-201, WS3-08EW-301, WS4-08EW-201, WS4-08EW-301 are identical with NCA1-08C/X1E-W except for the model name and brand name. WS3-08EW-201, WS3-08EW-301, WS4-08EW-201, WS4-08EW-301 are for brand name "Soleusair" only. Models WS3-08E-201, WS3-08E-301, WS4-08E-201, WS4-08E-301 are identical with NCA-08C/X1E except for model name and brand name. WS3-08E-201, WS3-08E-301, WS4-08E-201, WS4-08E-301 are for brand name "Soleusair" only. Model OSHB-08W is identical with NCA1-08C/X1E-W except for the model name and brand name. OSHB-08W is for brand name "OSLO" only. Model OSHB-08 is identical with NCA-08/X1E except for the model name and brand name. OSHB-08 is for brand name "OSLO" only. **For band: Costway**

2.0 Product Description	
Model Similarity	FP10271US-WH, FP10271CA-WH are identical with NCA-06C/X1E except for the model name. FP10247US-WH, FP10247CA-WH are identical with NCA-08C/X1E except for the model name. **For brand: R.W.FLAME** A5406W-10K, A5406W-10K-RW are identical with NCA-06C/X1E except for the model name. A5408W-12K, A5408W-12K-RW are identical with NCA-08C/X1E except for the model name. **For brand: ZAFRO** A5406W-10K, A5406W-10K-ZA are identical with NCA-06C/X1E except for the model name. A5408W-12K, A5408W-12K-ZA are identical with NCA-08C/X1E except for the model name. **For brand: Auseo** A5406W-10K, A5406W-10K-WAL-AU are identical with NCA-06C/X1E except for the model name. A5408W-12K, A5408W-12K-WAL-AU are identical with NCA-08C/X1E except for the model name. **For brand: Joy Pebble** A5406W-10K, A5406W-10K-JP are identical with NCA-06C/X1E except for the model name. A5408W-12K, A5408W-12K-JP are identical with NCA-08C/X1E except for the model name. **For brand: Acekool** For models NCA-06C/X1E-W, NCA-08C/X1E-W only. **For brand: Upstreman** N1, N2 are identical with NCA1-06C/X1E, NCA1-08C/X1E accordingly except for the model name. **For brand: GARVEE** For models NCA-06C/X1E-W, NCA-08C/X1E-W only. **For brand: Electactic** A5406W-10K-EL are identical with NCA-06C/X1E except for the model name. A5408W-12K-EL are identical with NCA-08C/X1E except for the model name. A5416W-10K-EL are identical with NCAA-06C/X1E except for the model name. A5418W-12K-EL are identical with NCAA-08C/X1E except for the model name. **For brand: Antarctic Star** A5406W-10K-AS are identical with NCA-06C/X1E except for the model name. A5408W-12K-AS are identical with NCA-08C/X1E except for the model name. **For brand: YODOLLA** SS-N2, SMAO001WH, SS14165WH are identical with NCA-08C/X1E except for the model name.

2.0 Product Description					
Ratings	115V, 60Hz, R32				
	Model	Total Input Current	RLA of Compressor	LRA of Compressor	Fan Motor indoor/outdoor
	NCA, NCA1, NCA2, NCD, NCD1, NCD2, NCE, NCE1, NCE2 followed by -06C; followed by /X1E; maybe followed by -W.	5.1A	4.3A	24A	0.37A/0.76A
	NCA, NCA1, NCA2, NCD, NCD1, NCD2, NCE, NCE1, NCE2 followed by -08C; followed by /X1E; maybe followed by -W.	6.1A	5.1A	29.0A	0.5A/0.76A
Other Ratings	Model	Refridgerant Mass		Max. High/Low Pressure	
	NCA, NCA1, NCA2, NCD, NCD1, NCD2, NCE, NCE1, NCE2 followed by -06C; followed by /X1E; maybe followed by -W.	R32/8.82 OZ		620/360 psig	
	NCA, NCA1, NCA2, NCD, NCD1, NCD2, NCE, NCE1, NCE2 followed by -08C; followed by /X1E; maybe followed by -W.	R32/9.88 OZ		620/360 psig	

3.0 Product Photographs

Photo 1 - Front view of NCA-08C

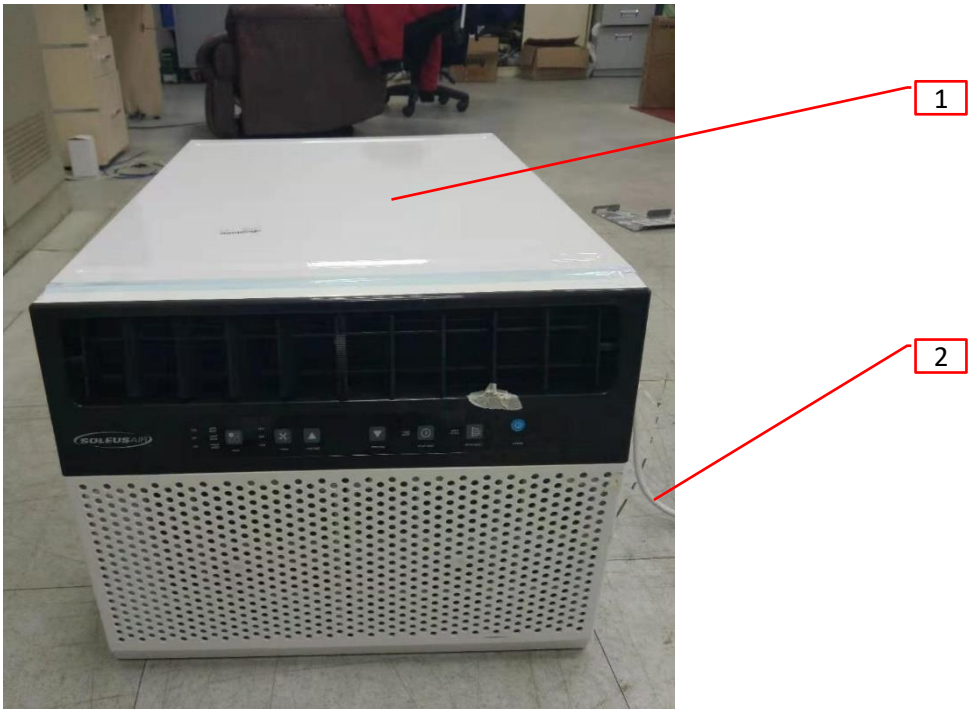


Photo 2 - Side view of NCA-08C

3.0 Product Photographs

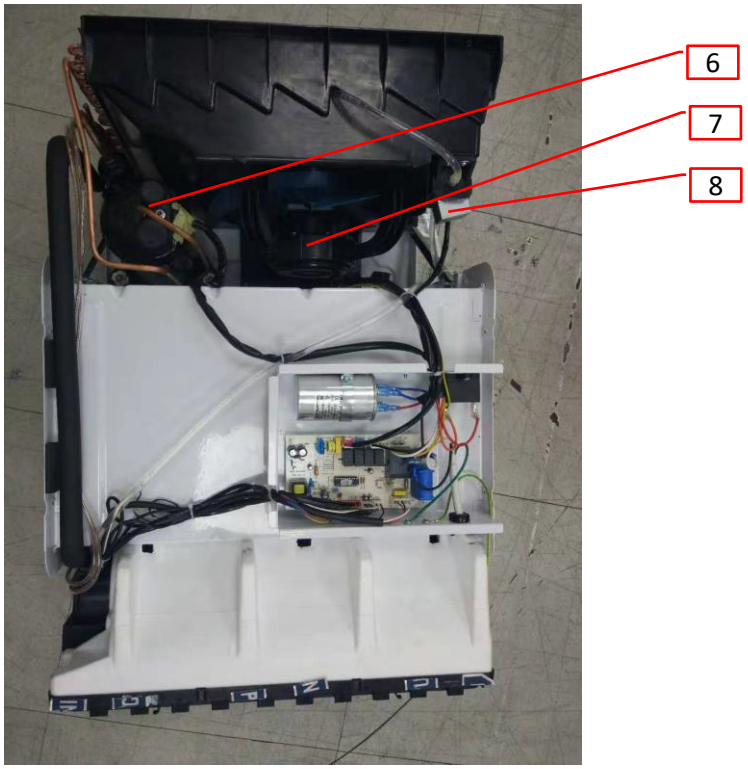
Photo 3 - Rear view of NCA-08C

Photo 4 - Internal view of NCA-08C

3.0 Product Photographs

Photo 5 - Internal view of NCA-08C

Photo 6 - Internal view of NCA-08C



3.0 Product Photographs

Photo 7 - Internal view of NCA-08C

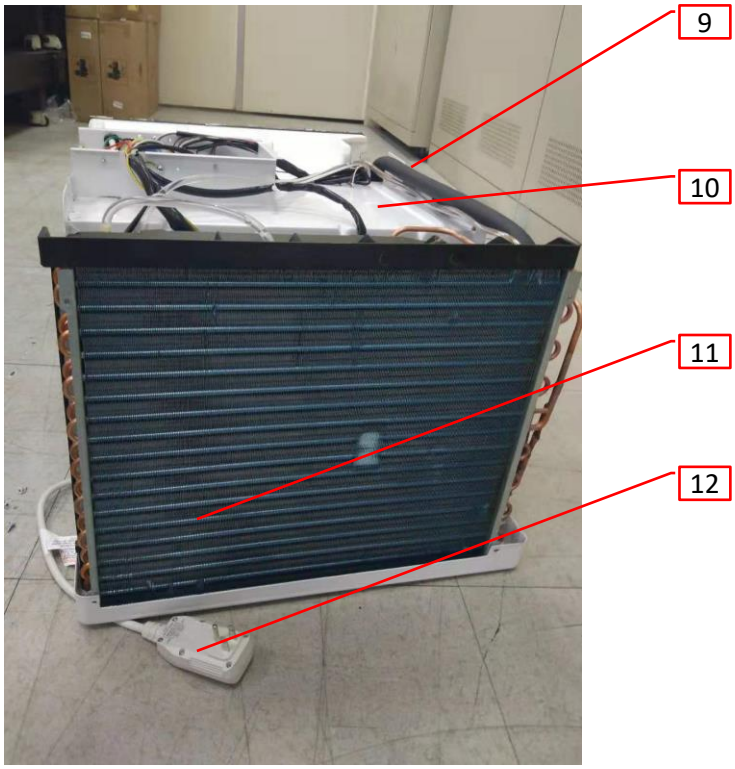
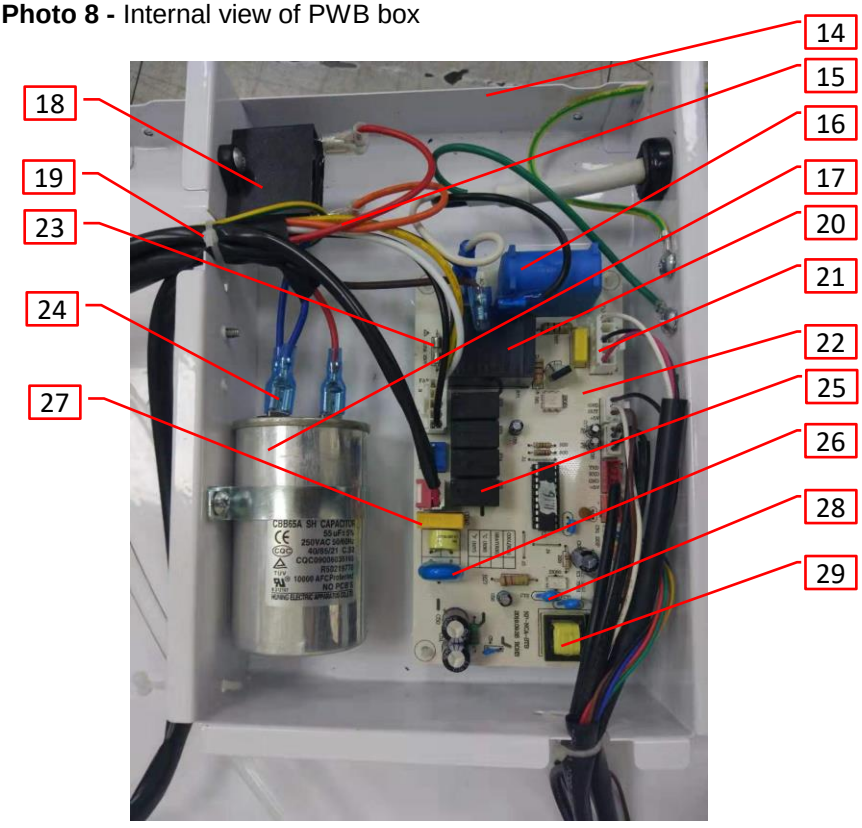


Photo 8 - Internal view of PWB box



3.0 Product Photographs

Photo 9 - Front view of PWB

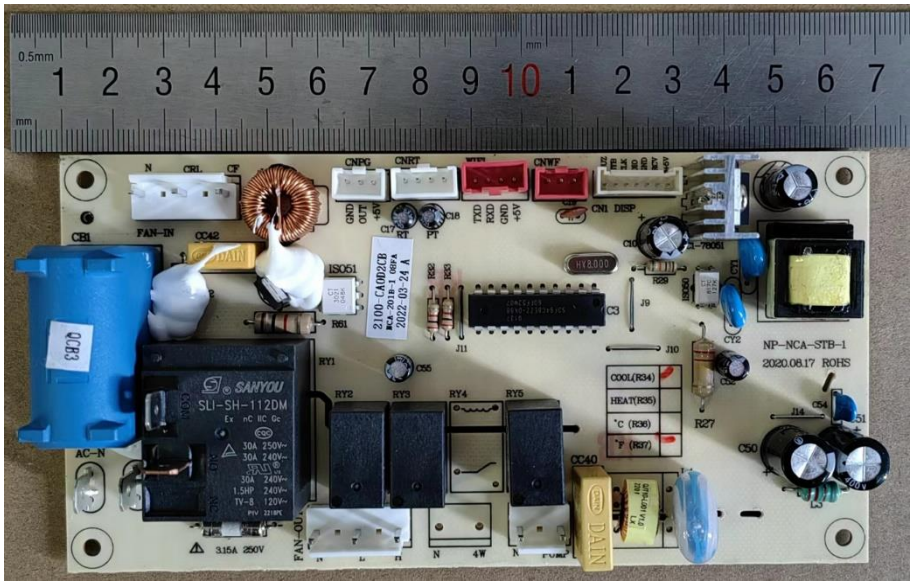
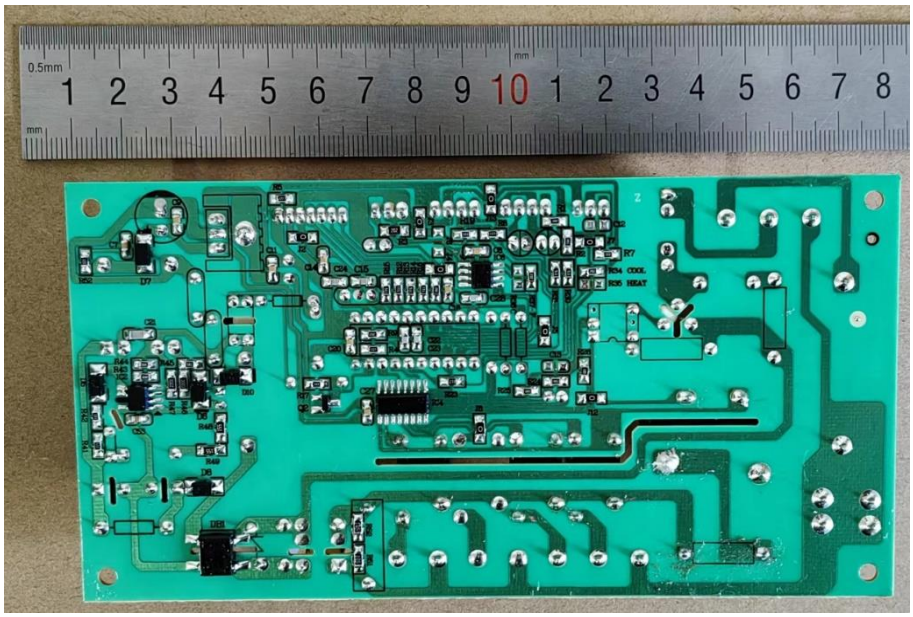


Photo 10 - Rear view of PWB



3.0 Product Photographs

Photo 11 - Control pannel for NCA1, NCE1, NCD1

Photo 12 - Control pannel for NCA2, NCE2, NCD2

3.0 Product Photographs

Photo 13 - Installation gap for models with NCE, NCE1, NCE2

Photo 14 - Installation gap for models with NCD, NCD1, NCD2

3.0 Product Photographs

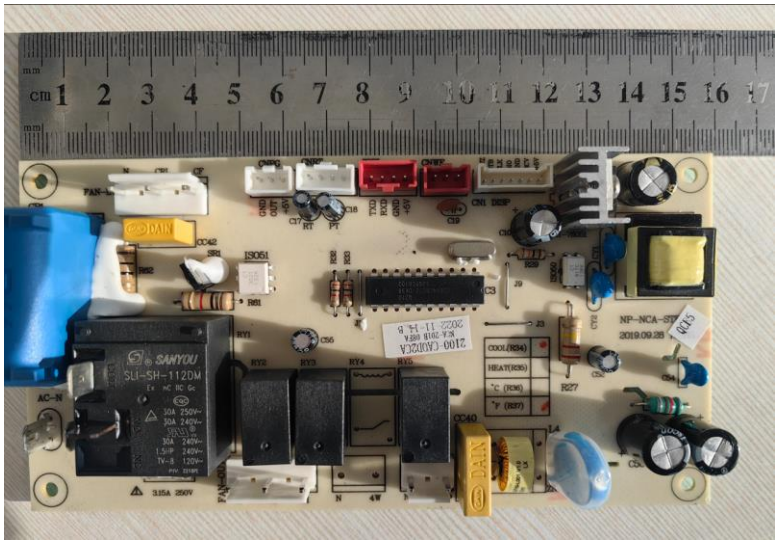
Photo 15 - Compressor

Photo 16 - Outdoor fan motor

3.0 Product Photographs

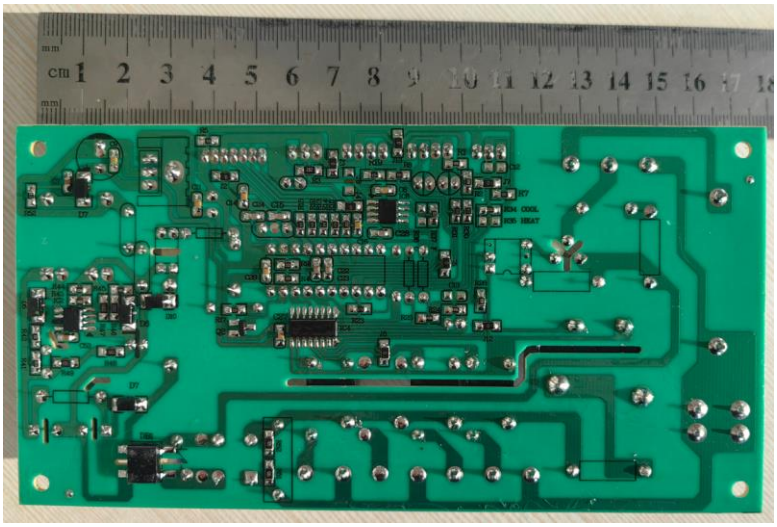
Photo 17 - Outdoor fan motor

Photo 18 - Front view of alternative PWB



3.0 Product Photographs

Photo 19 - Rear view of alternative PWB



4.0 Critical Components						
Photo #	Item no.[1]	Name	Manufacturer/ trademark[2]	Type / model[2]	Technical data and securement means	Mark(s) of conformity [3]
1	1	Enclosure	Various	Various	Coated steel. Minimum 0.8mm thick, assembled to internal frame with screws.	NR
1	2	Supply cord	SUZHOU ELE WIRE & CABLE CO LTD (E316671)	JLL301	Rated 300V, 105ºC, VW-1, 16-18AWG, terminated with LCDI	cULus cETLus
			TOWER MFG CORP (E257683)	21571	Rated 300V, 105ºC, 16 or 18AWG for all model, terminated with LCDI, factory ID: blank, T3 or T4.	cURus
			Zhongshan Kaper Electrical Co., Ltd. (E488435)	KPL301	Rated 300V, 105ºC, 16 or 18AWG for all model, terminated with LCDI.	cURus
			Various	Various	Rated 300V, 105ºC, VW-1, 16 or 18AWG for all model, terminated with LCDI.	cURus
1	3	Label (not shown)	ZHONGSHAN KING LABEL ADHESIVE PRODUCTS CO LTD	KL-TLT	80ºC, suitable for ABS, pasted on the side panel of enclosure.	cURus
5	4	Evaporator coil	Various	Various	Copper tube, thickness 0.32mm, Outside diameter 7mm.	NR
5	5	Indoor fan motor	JIANGSU SANJIANG ELECTRIC GROUP CO LTD	YDKS-25-4(NCA-203B)	115V, 60Hz, 0.5A, thermally protected, marked as class B tested as class A. For 08 series.	See 5.0
			NANGTONG NINGPU ELECTRICAL APPLIANCE CO LTD	YDKS-25-4(NCA-203B)	115V, 60Hz, 0.5A, thermally protected, marked as class B tested as class A. For 08 series.	See 5.0
			JIANGSU SANJIANG ELECTRIC GROUP CO LTD	YDKS-25-4(NCA-203B-1)	115V, 60Hz, 0.37A, thermally protected, marked as class B tested as class A. For 06 series.	See 5.0
			NANGTONG NINGPU ELECTRICAL APPLIANCE CO LTD	YDKS-25-4(NCA-203B-1)	115V, 60Hz, 0.37A, thermally protected, marked as class B tested as class A. For 06 series.	See 5.0

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]
6	6	Compressor	GUANGDONG MEIZHI COMPRESSOR LTD (SA12105)	KSK52E11VZZA	115V, 60Hz, R32, LRA: 24.0A	cURus
			GUANGDONG MEIZHI COMPRESSOR LTD (SA12105)	KSN66E11VBZC1	115V, 60Hz, R32, LRA: 29.0A	cURus
6	7	Outdoor Fan motor	JIANGSU CHANGJIA ELECTRIC CO LTD	YDK95-50-4B	110-120V, 60Hz, 0.76A, thermally protected, marked as class B tested as class A.	See 5.0
			NANGTONG NINGPU ELECTRICAL APPLIANCE CO LTD	YDK95-50-4B	110-120V, 60Hz, 0.76A, thermally protected, marked as class B tested as class A.	See 5.0
6	8	Drainage pump	ET TECHNOLOGY LTD	M7	AC120V, 60Hz	cURus
7	9	Foam	WUXI XINGDA NEW FOAM PLASTICS MATERIALS CO LTD	ZKF	HF-1.	UR
7	10	Internal frame	Various	Various	Coated steel. Minimum 0.8mm thick	NR
7	11	Condenser coil	Various	Various	Copper tube, thickness 0.28mm, Outside diameter 5mm.	NR
7	12	LCDI	SUZHOU ELE MFG CO LTD (E250451)	L15515	120V, 10A or 13A.	UR
				L22515	120V, 10A or 13A.	cURus
			TOWER MFG CORP (E242788)	30386	120V, 10A	cURus
				30385	120V, 13A.	cURus
			Zhongshan Kaper Electrical Co., Ltd. (2308A1555SHA-001)	KP-LC10	120V, 10A	cURus
			Zhongshan Kaper Electrical Co., Ltd. (2308A1555SHA-001)	KP-LC13	120V, 13A.	cURus
			Various	Various	120V, 13A, 10A	cURus

4.0 Critical Components						
Photo #	Item no.[1]	Name	Manufacturer/ trademark[2]	Type / model[2]	Technical data and securement means	Mark(s) of conformity [3]
7	13	Fan blade (not shown)	CHI MEI CORPORATION.	PA-747	ABS, rated HB, RTI (85, 80, 85)ºC. Minimum 2.6mm thick.	cURus
			ZHEN JIANG CHI MEI CHEMICAL CO LTD	PA-757K	ABS, rated HB, RTI (85, 80, 85)ºC. Minimum 2.6mm thick.	cURus
8	14	Electrical box	Various	Various	Steel. Minimum 0.8mm thick, assembled to internal frame with screws.	NR
8	15	Internal wiring	Various	1015	600V, 105ºC, 16-22 AWG, VW-1, Wrapped with PVC tubing.	cURus
				1017		cURus
8	16	Capacitor for indoor fan motor	GUANGDONG FENGMING ELECTRONIC TECH CO LTD (E307429)	CBB61	250VAC, 50/60Hz, 5µF	cURus
8	17	Compressor capacitor	WUXI HONGGUANG CAPACITOR CO LTD (E235355)	CBB65	250VAC, 50/60Hz, min 70℃ 35µF for KSK52E11VZZA, 50µF for KSN66E11VBZC1.	cURus
			GUANGDONG FENGMING ELECTRONIC TECH CO LTD (E307429)	CBB65		cURus
			FOSHAN SHUNDE DAHUA ELECTRIC CO LTD (E221217)	CBB65		cURus
				CBB6-5		cURus
			NINGGUO HUNING ELECTRIC APPARATUS CO LTD (E312167)	CBB65		cURus
				CBB65A		cURus
			FOSHAN CITY SHUNDE DISTRICT SHENG YE ELECTRICAL CO LTD (E237947)	C65R		cURus

4.0 Critical Components						
Photo #	Item no.[1]	Name	Manufacturer/ trademark[2]	Type / model[2]	Technical data and securement means	Mark(s) of conformity [3]
			ANHUI XINTIANDI ELECTRICAL APPLIANCES CO LTD	CBB65		cURus
			Ningguo Huili Electric CO., LTD (E315669)	CBB65		cURus
8	18	Capacitor for outdoor fan motor	WUXI HONGGUANG CAPACITOR CO LTD (E189613)	CBB61	250VAC, 50/60Hz, 10µF, min70ºC	cURus
			GUANGDONG FENGMING ELECTRONIC TECH CO LTD (E307429)	CBB61	250VAC, 50/60Hz, 10µF, min70ºC	cURus
			FOSHAN SHUNDE BEIJIAO HUA DA ELECTRIC INDUSTRIAL CO LTD (E221217)	CBB61	250VAC, 50/60Hz, 10µF, min70ºC	cURus
				CBB6-1	250VAC, 50/60Hz, 10µF, min70ºC	cURus
			FOSHAN CITY SHUNDE DISTRICT SHENG YE ELECTRICAL CO LTD (E237947)	C61-P2	250VAC, 50/60Hz, 10µF, min70ºC	cURus
			SHENG YE ELECTRIC CO., LTD (E185116)	C61	250VAC, 50/60Hz, 10µF, min70ºC	cURus
				CBB61	250VAC, 50/60Hz, 10µF, min70ºC	cURus
				C61A	250VAC, 50/60Hz, 10µF, min70ºC	cURus
			FOSHAN SHUNDE BEIJIAO HUA DA ELECTRIC INDUSTRIAL CO LTD (E162459)	CBB61	250VAC, 50/60Hz, 10µF, min70ºC	cURus
				CBB6-1	250VAC, 50/60Hz, 10µF, min70ºC	cURus
			Ningguo Huili Electric CO., LTD (E313438)	CBB61	250VAC, 50/60Hz, 10µF, min70ºC	cURus

4.0 Critical Components						
Photo #	Item no.[1]	Name	Manufacturer/ trademark[2]	Type / model[2]	Technical data and securement means	Mark(s) of conformity [3]
8	19	Cable tie	HUA WEI INDUSTRIAL CO LTD (E75050)	GT-100M	V-2, 85ºC	cURus
			SUZHOU HUIHUA ELECTRONICS TECH CO LTD	GT-100M	V-2, 85ºC	cURus
8	20	Relay for compressor	XIAMEN HONGFA ELECTROACOUSTIC CO LTD	HF2160-1A-12DE(310)	240/250VAC, 30A, min70ºC, 10E4. Ex nC IIC Gc Cert. CNEx17.1774U.	cURus
			SANYOU CORPORATION LIMITED (E190598)	SLI-SH-112DM	240/250VAC, 30A, min70ºC, 10E4. Ex nC IIC Gc Cert. CNEx19.5423U.	cURus
			WANGRONG ELECTRONICS (SHENZHEN) CO LTD (E345228)	RA2-112LM-S	240/250VAC, 30A, min70ºC, 10E4. Ex nC IIC Gc Cert. CNEx17.1774U.	cURus
			DONGGUAN GOLDEN ELECTRICAL APPLIANCE CO LTD (E321783)	GK-C-1A-12DS	240/250VAC, 30A, min70ºC, 10E4. Ex nC IIC Gc Cert. CNEx17.1774U.	cURus
8	21	Wire connector	Various	Various	R/C (RFWV2, 8), suitable for size and type of wires used.	cURus
8	22	PWB	SHANDONG JINBAO ELECTRONICS CO LTD (E141940)	ZD series	Rated V-0, min. thickness 1.4mm, T130.	cURus
			KINGBOARD LAMINATES HOLDINGS LTD (E123995)	KB series	Rated V-0, min. thickness 1.4mm, T130.	cURus
8	23	Fuse	Various	Various	R/C (JDYX2, 8), rated 250V, 3.15A.	cURus
8	24	Quick connector	Various	Various	R/C (RFWV, 7), suitable for size and type of wires used. Wrapped with PVC insulation, R/C(YDTU2), rated 600V, 105ºC, VW-1.	cURus

4.0 Critical Components						
Photo #	Item no.[1]	Name	Manufacturer/ trademark[2]	Type / model[2]	Technical data and securement means	Mark(s) of conformity [3]
8	25	Relay for others	XIAMEN HONGFA ELECTROACOUSTIC CO LTD (E134517)	HF32FV series	240/250VAC, 5A, min70ºC, 10E4. Ex nC IIC Gc Cert. CNEx20.1178U.	cURus
			SANYOU CORPORATION LIMITED (E179745)	SJ-SH-112DM2	240/250VAC, 5A, min70ºC, 10E4. Ex nC IIC Gc Cert. CNEx15.1506U.	cURus
			WANGRONG ELECTRONICS (SHENZHEN) CO LTD (E345228)	RJ-SS-112DM-S	240/250VAC, 5A, min70ºC, 10E4. Ex nC IIC Gc TUV: D 105370 004 Rev. 01.	cURus
8	26	Surge-protective Device	Various	Various	R/C (VZCA2, 8), Rated min. 270V.	cURus
8	27	X2 capacitor	Various	Various	R/C (FOWX2, 8), Rated 250/275V, 0.01uF/0.1uF/0.22uF, min. 100ºC.	cURus
8	28	Y capacitor	Various	Various	R/C(fowx2,8), rated 250/400V, 1000/4700pF, Y1 or Y2 type	cURus
8	29	Switching Transformer	FOSHAN SHUNDE QIANGLI ELECTRICAL CO LTD	QJEE16A	115V, 60Hz, output 12V	See 5.0
				QLK-EE16	115V, 60Hz, output 12V	See 5.0
8	30	Float switch (not shown)	DONGGUAN EXIN ELECTRONIC TECHNOLOGY CO LTD	LS-1A-30	DC 5V	NR
			NEWCONT ELE CO LTD	FLS-031S1-1100	DC 5V	NR
			DONGGUAN XINYUTENG ELECTRONICS CO LTD	SKY-MF-30I-1A1-GW190523	DC 5V	NR

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 perio

5.0 Critical Unlisted CEC Components

INSULATED COIL				
Photo #	Item no.	Name	Manufacturer/Trademark	Type / model
5	5	Indoor fan motor	JIANGSU SANJIANG ELECTRIC GROUP CO LTD	YDKS-25-4(NCA-203B)
Electrical Rating:		115V, 60Hz, 0.5A, thermally protected		Insulation class A
Component Standard used:		UL 1004-1:2012 Ed.2+R:24Aug2017 UL 1004-3:2015 Ed.2 CSA C22.2#77:2014 Ed.8+E1		

MATERIALS LIST

Component	Manufacturer	Type/model	Dimensions/thickness/assembly information
Rotor	WUHAN IRON AND STEEL CO., LTD	50W1300	Si-steel. Diameter: 89mm; Air gap: 0.2mm; Lamination: thickness 21.5mm
Slot insulation	JINGJIANG TAIRUI PLASTIC PRODUCTS FACTORY	Various	PBT+15%GF
Sheath	JINGJIANG TAIRUI PLASTIC PRODUCTS FACTORY	Various	PBT+15%GF
Lead wire	JIANGSU CHANGSHENG ELECTRIC APPLIANCE CO LTD	3266	PVC connecting fiexible cable, VW-1, 300V, 22AWG, 125℃
	LS CABLE& SYSTEM	3266	PVC connecting fiexible cable, VW-1, 300V, 22AWG, 125℃
Insulation tape	JINGJIANG BEILI INSULATINGMATERIAL MFG.CO. LTD	JD-65	Non-woven tape.
Winding	WUXI HUANENG CABLE CO LTD	Q(A/X)-2/155	155℃
	JIANGYIN SHUANGYUN CABLE CO LTD	Q(A/X)-2/155	155℃
Protective device	JIANGSU CHANGSHENG ELECTRIC APPLIANCE CO LTD	BR-B3D	automatically reset, operate temperature 90 ºC

5.0 Critical Unlisted CEC Components						
WINDING(S) RESISTANCE						
Winding Designation	Wire Size (AWG or mm^2)	Wire Type	Turns	Volts	Amps	DC resistance (Ω) +/- 10 %:
Main winding	0.35	-	-	115	-	25.5
Aux. winding	0.31	-	-	115	-	40.5

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
	Primary to core	1560 V	60 s

5.0 Critical Unlisted CEC Components

INSULATED COIL				
Photo #	Item no.	Name	Manufacturer/Trademark	Type / model
5	5	Indoor fan motor	NANGTONG NINGPU ELECTRICAL APPLIANCE CO LTD	YDKS-25-4(NCA-203B)
Electrical Rating:		115V, 60Hz, 0.5A, thermally protected		Insulation class A
Component Standard used:		UL 1004-1:2012 Ed.2+R:24Aug2017 UL 1004-3:2015 Ed.2 CSA C22.2#77:2014 Ed.8+E1		

MATERIALS LIST

Component	Manufacturer	Type/model	Dimensions/thickness/assembly information
Rotor	WUHAN IRON AND STEEL CO., LTD	50W1300	Si-steel. Diameter: 89mm; Air gap: 0.2mm; Lamination: thickness 21.5mm
Slot insulation	JINGJIANG TAIRUI PLASTIC PRODUCTS FACTORY	Various	PBT+15%GF
Sheath	JINGJIANG TAIRUI PLASTIC PRODUCTS FACTORY	Various	PBT+15%GF
Lead wire	JIANGSU CHANGSHENG ELECTRIC APPLIANCE CO LTD	3266	PVC connecting fiexible cable, VW-1, 300V, 22AWG, 125℃
	LS CABLE& SYSTEM	3266	PVC connecting fiexible cable, VW-1, 300V, 22AWG, 125℃
Insulation tape	JINGJIANG BEILI INSULATINGMATERIAL MFG.CO. LTD	JD-65	Non-woven tape.
Winding	WUXI HUANENG CABLE CO LTD	Q(A/X)-2/155	155℃
	JIANGYIN SHUANGYUN CABLE CO LTD	Q(A/X)-2/155	155℃
Protective device	JIANGSU CHANGSHENG ELECTRIC APPLIANCE CO LTD	BR-B3D	automatically reset, operate temperature 90 ºC

5.0 Critical Unlisted CEC Components						
WINDING(S) RESISTANCE						
Winding Designation	Wire Size (AWG or mm^2)	Wire Type	Turns	Volts	Amps	DC resistance (Ω) +/- 10 %:
Main winding	0.35	-	-	115	-	25.5
Aux. winding	0.31	-	-	115	-	40.5

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
	Primary to core	1560 V	60 s

5.0 Critical Unlisted CEC Components

INSULATED COIL				
Photo #	Item no.	Name	Manufacturer/Trademark	Type / model
6	7	Outdoor Fan motor	JIANGSU CHANGJIA ELECTRIC CO LTD	YDK95-50-4B
Electrical Rating:		110-120V, 60Hz, 0.76A, thermally protected		Insulation class A
Component Standard used:		UL 1004-1:2012 Ed.2+R:24Aug2017 UL 1004-3:2015 Ed.2 CSA C22.2#77:2014 Ed.8+E1		

MATERIALS LIST

Component	Manufacturer	Type/model	Dimensions/thickness/assembly information
Slot liners	JIANGSU YUXING FILM TECHNOLOGY CO LTD	CY30G	VTM-2, RTI (105 105 105)ºC, thickness 0.188mm
	CHANGZHOU RUIFENG INSULATING MATERIAL CO LTD	6641 DMD	Class 155, thickness 0.2mm
		6640 NMN	Class 155, thickness 0.2mm
	SICHUAN DONGFANG INSULATING MATERIAL CO LTD	6630	Class 155, thickness 0.2mm
		6641	Class 155, thickness 0.2mm
		DF6025	VTM-2, RTI (105 105 105)ºC, thickness 0.188mm
		D801	VTM-2, RTI (105 105 105)ºC, thickness 0.188mm
		DS10C	VTM-2, RTI (105 105 105)ºC, thickness 0.188mm
		DS10	VTM-2, RTI (105 105 105)ºC, thickness 0.188mm
		DS11	VTM-2, RTI (105 105 105)ºC, thickness 0.188mm
	JIANGSU YUXING FILM TECHNOLOGY CO LTD	6020	VTM-2, RTI (105 105 105)ºC, thickness 0.188mm
		6021	VTM-2, RTI (105 105 105)ºC, thickness 0.188mm
		6023D	VTM-2, RTI (105 105 105)ºC, thickness 0.188mm
	DUPONT HONGJI FILMS FOSHAN CO LTD	EM	VTM-2, RTI (105 105 105)ºC, thickness 0.188mm
		EP	VTM-2, RTI (105 105 105)ºC, thickness 0.188mm
		EM1	VTM-2, RTI (105 105 105)ºC, thickness 0.188mm
		BP	VTM-2, RTI (105 105 105)ºC, thickness 0.188mm
		M041	VTM-2, RTI (105 105 105)ºC, thickness 0.188mm
	CHANGZHOU ISOVOLTA TECHNICAL COMPOSITE CO LTD	Voltaflex 2598	Class 130 or 155, thickness 0.2mm
		Voltaflex F	Class 130 or 155, thickness 0.2mm
		6641	Class 130 or 155, thickness 0.2mm

5.0 Critical Unlisted CEC Components			
Insulation tape	JINGJIANG JINGYANG INSULATING PRODUCT CO LTD	JY-133 JY-233 JY-200 JY-201	PET film tapes with acrylic adhesive, 130ºC, VW-1.
	JINGJIANG JINGYI ADHESIVE PRODUCT CO LTD	JY25-A WF310 J16	PET film tapes with acrylic adhesive, 130ºC, VW-1.
	FOSHAN INDER ADHESIVE PRODUCTS CO LTD	Cat. No. 24D	PET films, rated 130ºC
	SUZHOU MAILADUONA ELECTRIC MATERIAL CO LTD	JY313#	PET films, rated 130ºC
	3M COMPANY ELECTRICAL MARKETS DIV (EMD)	1350-1(b) 1350-2(c) 1350F-1(b) 1350F-2(c)	PET films, rated 130ºC
Magnet Wire	JIANGYIN DOUBLE FEATHER CABLE CO LTD	xUEW/130, QA-x/130	130°C
		xUEW/155, QA-x/155, QZ-2/155	155°C
		xEIW, EIW, QZY-x/180	180°C
	ZHEJIANG HONGBO TECHNOLOGY CO LTD	xEIW/130, xPEW/130, QZ-x/130L	130°C
		xUEW/130, QA-x/130	130°C
		xEIW/155, xPEW/155, QZ(G)-x/155 QZ-x/155	155°C
		xUEW/155, QA-x/155	155°C
		xEIW/180, xPEW/180, QZY-x/180	180°C
		xUEW/180, QA-x/180	180°C
	WUXI HUANENG CABLE CO LTD	QZ-x/130	130°C
		QZY-x/180	180°C
	NINGBO JINTIAN NEW MATERIAL CO LTD	xUEW/130, QA-x/130	130°C
		xPEW, QZL-x/130	130°C
		xPEW/155, QZ-x/155	155°C
		xEIW/180, QZY-x/180	180°C

5.0 Critical Unlisted CEC Components			
Protective device	CHANG ZHOU CITY TONG LI ELECTRONICS CO LTD	KW	Rated 125V, 10A, automatically reset, operate temperature 125 or 130ºC
		18AM	Rated 125V, 10A, automatically reset, operate temperature 125 or 130ºC
	JIANGSU CHANGSHENG ELECTRIC APPLIANCE CO LTD	BR-A2D	Rated 125V, 10A, automatically reset, operate temperature 125 or 130ºC
		BRA1D	Rated 125V, 10A, automatically reset, operate temperature 125 or 130ºC
		18AM	Rated 125V, 10A, automatically reset, operate temperature 125 or 130ºC
		KW	Rated 125V, 10A, automatically reset, operate temperature 125 or 130ºC
		BW	Rated 125V, 10A, automatically reset, operate temperature 125 or 130ºC
	CHANGZHOU XINDU ELECTRONIC CO LTD	KW	Rated125V, 10A, automatically reset, operate temperature 125 or 130ºC
		BW	Rated 125V, 10A, automatically reset, operate temperature 125 or 130ºC
		BR	Rated125V, 10A, automatically reset, operate temperature 125 or 130ºC
		CW-II	Rated125V, 10A, automatically reset, operate temperature 125 or 130ºC
	CHANGZHOU ANRAN ELECTRIC APPLIANCE CO., LTD	KW	Rated 125V, 8A, automatically reset, operate temperature 125 or 130ºC
	CHANGZHOU AINUO ELECTRONICS TECHNICAL CO LTD	KW	125V, 8A, automatically reset, operate temperature 125 or 130ºC
		TB05	125V, 8A, automatically reset, operate temperature 125 or 130ºC
		BR	125V, 8A, automatically reset, operate temperature 125 or 130ºC
	YANGZHOU BAOZHU ELECTRIC APPLIANCE CO LTD	TB05-BB1D	115V, 8A, automatically reset, operate temperature 125 or 130ºC
		17AM	Rated 125V, 10A, automatically reset, operate temperature 125 or 130ºC
		KW	Rated 125V, 10A, automatically reset, operate temperature 125 or 130ºC
		BW	Rated 125V, 10A, automatically reset, operate temperature 125 or 130ºC
	DONGYANG HENGDIAN THERMAL PROTECTOR FACTORY (GENERAL PARTNERSHIP) (E213246)	KSD	120V, 10A, automatically reset, operate temperature 125 or 130ºC
	SENSATA TECHNOLOGIES (E15962)	8CML	125V, 10A, automatically reset, operate temperature 125 or 130ºC

5.0 Critical Unlisted CEC Components			
	SHENGZHOU GANLIN WANGSHI THERMAL PROTECTOR FACTORY (E247988)	JW-2T	125V, 10A, automatically reset, operate temperature 125 or 130ºC
	CHANGZHOU CITY CHANGLIAN RADIO CO LTD	KW	125V, 12A, automatically reset, operate temperature 125 or 130ºC
		CR-KW	125V, 12A, automatically reset, operate temperature 125 or 130ºC
		18AM	125V, 12A, automatically reset, operate temperature 125 or 130ºC

WINDING(S) RESISTANCE

Winding Designation	Wire Size (AWG or mm^2)	Wire Type	Turns	Volts	Amps	DC resistance (Ω) +/- 10 %:
Main winding	0.38	-	-	115	-	34
Aux. winding	0.4	-	-	115	-	25

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
	Primary to core	1240 V	60 s

5.0 Critical Unlisted CEC Components

INSULATED COIL				
Photo #	Item no.	Name	Manufacturer/Trademark	Type / model
6	7	Outdoor Fan motor	NANGTONG NINGPU ELECTRICAL APPLIANCE CO LTD	YDK95-50-4B
Electrical Rating:		110-120V, 60Hz, 0.76A, thermally protected		Insulation class A
Component Standard used:		UL 1004-1:2012 Ed.2+R:24Aug2017 UL 1004-3:2015 Ed.2 CSA C22.2#77:2014 Ed.8+E1		

MATERIALS LIST

Component	Manufacturer	Type/model	Dimensions/thickness/assembly information
Slot liners	JIANGSU YUXING FILM TECHNOLOGY CO LTD	CY30G	VTM-2, RTI (105 105 105)ºC, thickness 0.188mm
	CHANGZHOU RUIFENG INSULATING MATERIAL CO LTD	6641 DMD	Class 155, thickness 0.2mm
		6640 NMN	Class 155, thickness 0.2mm
	SICHUAN DONGFANG INSULATING MATERIAL CO LTD	6630	Class 155, thickness 0.2mm
		6641	Class 155, thickness 0.2mm
		DF6025	VTM-2, RTI (105 105 105)ºC, thickness 0.188mm
		D801	VTM-2, RTI (105 105 105)ºC, thickness 0.188mm
		DS10C	VTM-2, RTI (105 105 105)ºC, thickness 0.188mm
		DS10	VTM-2, RTI (105 105 105)ºC, thickness 0.188mm
		DS11	VTM-2, RTI (105 105 105)ºC, thickness 0.188mm
	JIANGSU YUXING FILM TECHNOLOGY CO LTD	6020	VTM-2, RTI (105 105 105)ºC, thickness 0.188mm
		6021	VTM-2, RTI (105 105 105)ºC, thickness 0.188mm
		6023D	VTM-2, RTI (105 105 105)ºC, thickness 0.188mm
	DUPONT HONGJI FILMS FOSHAN CO LTD	EM	VTM-2, RTI (105 105 105)ºC, thickness 0.188mm
		EP	VTM-2, RTI (105 105 105)ºC, thickness 0.188mm
		EM1	VTM-2, RTI (105 105 105)ºC, thickness 0.188mm
		BP	VTM-2, RTI (105 105 105)ºC, thickness 0.188mm
		M041	VTM-2, RTI (105 105 105)ºC, thickness 0.188mm
	CHANGZHOU ISOVOLTA TECHNICAL COMPOSITE CO LTD	Voltaflex 2598	Class 130 or 155, thickness 0.2mm
		Voltaflex F	Class 130 or 155, thickness 0.2mm
		6641	Class 130 or 155, thickness 0.2mm

5.0 Critical Unlisted CEC Components			
Insulation tape	JINGJIANG JINGYANG INSULATING PRODUCT CO LTD	JY-133 JY-233 JY-200 JY-201	PET film tapes with acrylic adhesive, 130ºC, VW-1.
	JINGJIANG JINGYI ADHESIVE PRODUCT CO LTD	JY25-A WF310 J16	PET film tapes with acrylic adhesive, 130ºC, VW-1.
	FOSHAN INDER ADHESIVE PRODUCTS CO LTD	Cat. No. 24D	PET films, rated 130ºC
	SUZHOU MAILADUONA ELECTRIC MATERIAL CO LTD	JY313#	PET films, rated 130ºC
	3M COMPANY ELECTRICAL MARKETS DIV (EMD)	1350-1(b) 1350-2(c) 1350F-1(b) 1350F-2(c)	PET films, rated 130ºC
Magnet Wire	JIANGYIN DOUBLE FEATHER CABLE CO LTD	xUEW/130, QA-x/130	130°C
		xUEW/155, QA-x/155, QZ-2/155	155°C
		xEIW, EIW, QZY-x/180	180°C
	ZHEJIANG HONGBO TECHNOLOGY CO LTD	xEIW/130, xPEW/130, QZ-x/130L	130°C
		xUEW/130, QA-x/130	130°C
		xEIW/155, xPEW/155, QZ(G)-x/155 QZ-x/155	155°C
		xUEW/155, QA-x/155	155°C
		xEIW/180, xPEW/180, QZY-x/180	180°C
		xUEW/180, QA-x/180	180°C
	WUXI HUANENG CABLE CO LTD	QZ-x/130	130°C
		QZY-x/180	180°C
	NINGBO JINTIAN NEW MATERIAL CO LTD	xUEW/130, QA-x/130	130°C
		xPEW, QZL-x/130	130°C
		xPEW/155, QZ-x/155	155°C
		xEIW/180, QZY-x/180	180°C

5.0 Critical Unlisted CEC Components			
Protective device	CHANG ZHOU CITY TONG LI ELECTRONICS CO LTD	KW	Rated 125V, 10A, automatically reset, operate temperature 125 or 130ºC
		18AM	Rated 125V, 10A, automatically reset, operate temperature 125 or 130ºC
	JIANGSU CHANGSHENG ELECTRIC APPLIANCE CO LTD	BR-A2D	Rated 125V, 10A, automatically reset, operate temperature 125 or 130ºC
		BRA1D	Rated 125V, 10A, automatically reset, operate temperature 125 or 130ºC
		18AM	Rated 125V, 10A, automatically reset, operate temperature 125 or 130ºC
		KW	Rated 125V, 10A, automatically reset, operate temperature 125 or 130ºC
		BW	Rated 125V, 10A, automatically reset, operate temperature 125 or 130ºC
	CHANGZHOU XINDU ELECTRONIC CO LTD	KW	Rated125V, 10A, automatically reset, operate temperature 125 or 130ºC
		BW	Rated 125V, 10A, automatically reset, operate temperature 125 or 130ºC
		BR	Rated125V, 10A, automatically reset, operate temperature 125 or 130ºC
		CW-II	Rated125V, 10A, automatically reset, operate temperature 125 or 130ºC
	CHANGZHOU ANRAN ELECTRIC APPLIANCE CO., LTD	KW	Rated 125V, 8A, automatically reset, operate temperature 125 or 130ºC
	CHANGZHOU AINUO ELECTRONICS TECHNICAL CO LTD	KW	125V, 8A, automatically reset, operate temperature 125 or 130ºC
		TB05	125V, 8A, automatically reset, operate temperature 125 or 130ºC
		BR	125V, 8A, automatically reset, operate temperature 125 or 130ºC
	YANGZHOU BAOZHU ELECTRIC APPLIANCE CO LTD	TB05-BB1D	115V, 8A, automatically reset, operate temperature 125 or 130ºC
		17AM	Rated 125V, 10A, automatically reset, operate temperature 125 or 130ºC
		KW	Rated 125V, 10A, automatically reset, operate temperature 125 or 130ºC
		BW	Rated 125V, 10A, automatically reset, operate temperature 125 or 130ºC
	DONGYANG HENGDIAN THERMAL PROTECTOR FACTORY (GENERAL PARTNERSHIP) (E213246)	KSD	120V, 10A, automatically reset, operate temperature 125 or 130ºC
	SENSATA TECHNOLOGIES (E15962)	8CML	125V, 10A, automatically reset, operate temperature 125 or 130ºC

5.0 Critical Unlisted CEC Components			
	SHENGZHOU GANLIN WANGSHI THERMAL PROTECTOR FACTORY (E247988)	JW-2T	125V, 10A, automatically reset, operate temperature 125 or 130ºC
	CHANGZHOU CITY CHANGLIAN RADIO CO LTD	KW	125V, 12A, automatically reset, operate temperature 125 or 130ºC
		CR-KW	125V, 12A, automatically reset, operate temperature 125 or 130ºC
		18AM	125V, 12A, automatically reset, operate temperature 125 or 130ºC

WINDING(S) RESISTANCE

Winding Designation	Wire Size (AWG or mm^2)	Wire Type	Turns	Volts	Amps	DC resistance (Ω) +/- 10 %:
Main winding	0.38	-	-	115	-	34
Aux. winding	0.4	-	-	115	-	25

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
	Primary to core	1240 V	60 s

5.0 Critical Unlisted CEC Components

INSULATED COIL				
Photo #	Item no.	Name	Manufacturer/Trademark	Type / model
8	29	Switching Transformer	FOSHAN SHUNDE QIANGLI ELECTRICAL CO LTD	QJEE16A
Electrical Rating:		115V, 60Hz, output 12V		Insulation class A
Component Standard used:		UL 1310:2018 Ed.7+R:09Jun2022 CSA C22.2#223:2015 Ed.3		

MATERIALS LIST

Component	Manufacturer	Type/model	Dimensions/thickness/assembly information
Lead wires	Various	1015, 1007	22AWG, 1015 for primary and 1007 for secondary.
Bobbin	CHANG CHUN PLASTICS CO LTD	T375J	PMC, V-0, RTI(150,150,150) ºC, Minimum thichness:0.8mm.
Insulation tape	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	CT-280B, PZ-280	PET film tapes with acrylic adhesive, 130ºC, VW-1.
Winding (Pri.)	GUANGZHOU WANBAO ENAMELLED WIRE CO LTD	2UEW-130	Polyurethane, MW75-C, Class 130
Winding (Sec.)	TEAMWORK INTERNATIONAL CORPORATION	TIWW-B	Reinforcedinsulation, Class 130
	DAH JIN TECHNOLOGY CO LTD	TLW-B	Reinforcedinsulation, Class 130
	FUYANG YOUHENG CABLE CO LTD	YH-B	Reinforcedinsulation, Class 130
PTFE tubing	CHANGYUAN ELECTRONICS GROUP CO LTD	CB-TT	PTFE, 150V, 200℃, VW-1.

VERIFICATION PROCESS

Frequency: **Annual**	Test Site: **CEC**	Number of samples to test: **1**

Test Name	Test Parameters		
	Apply voltage Between	Test Voltage	Test Time
Dielectric Strength	Primary to core	1000V	60s
	Primary to secondary	2500V	60s
	Secondary to core	500V	60s

5.0 Critical Unlisted CEC Components

INSULATED COIL				
Photo #	Item no.	Name	Manufacturer/Trademark	Type / model
8	29	Switching Transformer	FOSHAN SHUNDE QIANGLI ELECTRICAL CO LTD	QLK-EE16
Electrical Rating:		115V, 60Hz, output 12V		Insulation class A
Component Standard used:		UL 1310:2018 Ed.7+R:09Jun2022 CSA C22.2#223:2015 Ed.3		

MATERIALS LIST

Component	Manufacturer	Type/model	Dimensions/thickness/assembly information
Lead wires	Various	1015, 1007	22AWG, 1015 for primary and 1007 for secondary.
Bobbin	CHANG CHUN PLASTICS CO LTD	T375J	PMC, V-0, RTI(150,150,150) ºC, Minimum thichness:0.8mm.
Insulation tape	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	CT-280B, PZ-280	PET film tapes with acrylic adhesive, 130ºC, VW-1.
Winding (Pri.)	GUANGZHOU WANBAO ENAMELLED WIRE CO LTD	2UEW-130	Polyurethane, MW75-C, Class 130
Winding (Sec.)	TEAMWORK INTERNATIONAL CORPORATION	TIWW-B	Reinforcedinsulation, Class 130
	DAH JIN TECHNOLOGY CO LTD	TLW-B	Reinforcedinsulation, Class 130
	FUYANG YOUHENG CABLE CO LTD	YH-B	Reinforcedinsulation, Class 130
PTFE tubing	CHANGYUAN ELECTRONICS GROUP CO LTD	CB-TT	PTFE, 150V, 200℃, VW-1.

VERIFICATION PROCESS

Frequency: **Annual**	Test Site: **CEC**	Number of samples to test: **1**

Test Name	Test Parameters		
	Apply voltage Between	Test Voltage	Test Time
Dielectric Strength	Primary to core	1000V	60s
	Primary to secondary	2500V	60s
	Secondary to core	500V	60s

5.0 Critical Unlisted CEC Components

INSULATED COIL				
Photo #	Item no.	Name	Manufacturer/Trademark	Type / model
5	5	Indoor fan motor	JIANGSU SANJIANG ELECTRIC GROUP CO LTD	YDKS-25-4(NCA-203B-1)
Electrical Rating:		115V, 60Hz, 0.37A		Insulation class A
Component Standard used:		UL 1004-1:2012 Ed.2+R:24Aug2017 UL 1004-3:2015 Ed.2 CSA C22.2#77:2014 Ed.8+E1		

MATERIALS LIST

Component	Manufacturer	Type/model	Dimensions/thickness/assembly information
Rotor	WUHAN IRON AND STEEL CO., LTD	50W1300	Si-steel. Diameter: 89mm; Air gap: 0.2mm; Lamination: thickness19.5mm
Slot insulation	JINGJIANG TAIRUI PLASTIC PRODUCTS FACTORY	Various	PBT+15%GF
Sheath	JINGJIANG TAIRUI PLASTIC PRODUCTS FACTORY	Various	PBT+15%GF
Lead wire	JIANGSU CHANGSHENG ELECTRIC APPLIANCE CO LTD	3266	PVC connecting fiexible cable, VW-1, 300V, 22AWG, 125℃
	LS CABLE& SYSTEM	3266	PVC connecting fiexible cable, VW-1, 300V, 22AWG, 125℃
Insulation tape	JINGJIANG BEILI INSULATINGMATERIAL MFG.CO. LTD	JD-65	Non-woven tape.
Winding	WUXI HUANENG CABLE CO LTD	Q(A/X)-2/155	155℃
	JIANGYIN SHUANGYUN CABLE CO LTD	Q(A/X)-2/155	155℃
Protective device	JIANGSU CHANGSHENG ELECTRIC APPLIANCE CO LTD	BR-B3D	automatically reset, operate temperature 90 ºC

5.0 Critical Unlisted CEC Components						
WINDING(S) RESISTANCE						
Winding Designation	Wire Size (mm^2)	Wire Type	Turns	Volts	Amps	DC resistance (Ω) +/- 10%:
Main winding	0.27	/	/	/	/	48.8
Aux. winding	0.27	/	/	/	/	48.8

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
	Primary to enclosure	1230V	60s

5.0 Critical Unlisted CEC Components

INSULATED COIL				
Photo #	Item no.	Name	Manufacturer/Trademark	Type / model
5	5	Indoor fan motor	NANGTONG NINGPU ELECTRICAL APPLIANCE CO LTD	YDKS-25-4(NCA-203B-1)
Electrical Rating:		115V, 60Hz, 0.37A		Insulation class A
Component Standard used:		UL 1004-1:2012 Ed.2+R:24Aug2017 UL 1004-3:2015 Ed.2 CSA C22.2#77:2014 Ed.8+E1		

MATERIALS LIST

Component	Manufacturer	Type/model	Dimensions/thickness/assembly information
Rotor	WUHAN IRON AND STEEL CO., LTD	50W1300	Si-steel. Diameter: 89mm; Air gap: 0.2mm; Lamination: thickness19.5mm
Slot insulation	JINGJIANG TAIRUI PLASTIC PRODUCTS FACTORY	Various	PBT+15%GF
Sheath	JINGJIANG TAIRUI PLASTIC PRODUCTS FACTORY	Various	PBT+15%GF
Lead wire	JIANGSU CHANGSHENG ELECTRIC APPLIANCE CO LTD	3266	PVC connecting fiexible cable, VW-1, 300V, 22AWG, 125℃
	LS CABLE& SYSTEM	3266	PVC connecting fiexible cable, VW-1, 300V, 22AWG, 125℃
Insulation tape	JINGJIANG BEILI INSULATINGMATERIAL MFG.CO. LTD	JD-65	Non-woven tape.
Winding	WUXI HUANENG CABLE CO LTD	Q(A/X)-2/155	155℃
	JIANGYIN SHUANGYUN CABLE CO LTD	Q(A/X)-2/155	155℃
Protective device	JIANGSU CHANGSHENG ELECTRIC APPLIANCE CO LTD	BR-B3D	automatically reset, operate temperature 90 ºC

5.0 Critical Unlisted CEC Components						
WINDING(S) RESISTANCE						
Winding Designation	Wire Size (mm^2)	Wire Type	Turns	Volts	Amps	DC resistance (Ω) +/- 10%:
Main winding	0.27	/	/	/	/	48.8
Aux. winding	0.27	/	/	/	/	48.8

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
	Primary to enclosure	1230V	60s

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.

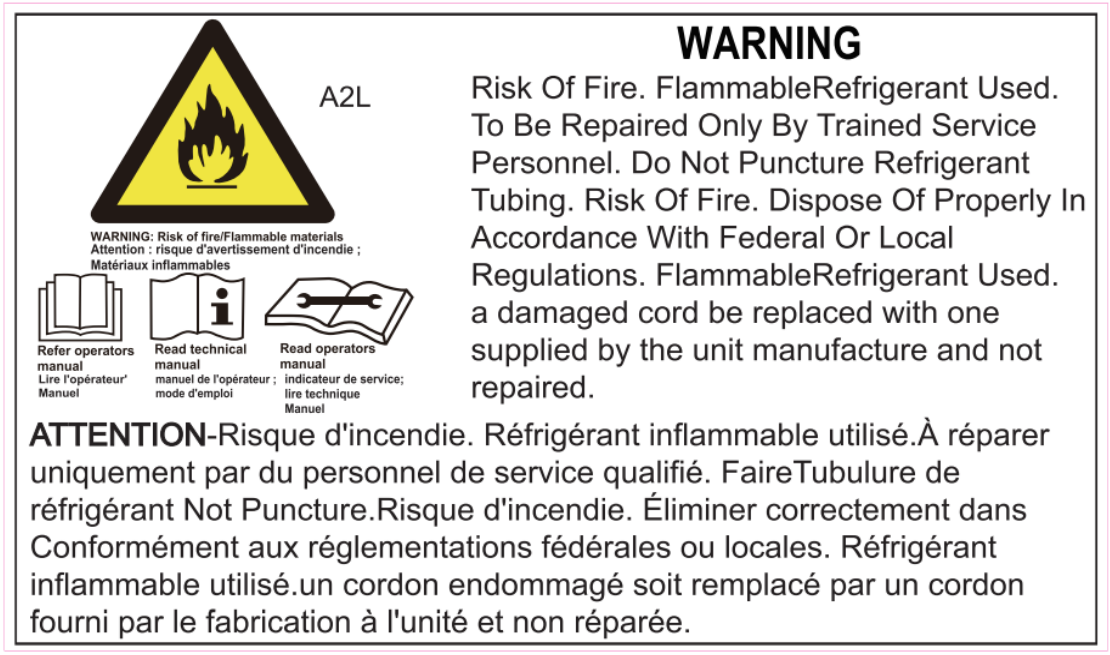
Critical Features/Components - An essential part, material, subassembly, system, software, or accessory of a product that has a direct bearing on the product's conformance to applicable requirements of the product standard.

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 3.2mm spacing through air and 6.4mm spacing over surface of insulating material are maintained through air and over surfaces between current-carrying parts of opposite polarity and between such current-carrying parts and dead-metal parts in refrigerated and/or air-handing compartments. Minimum 1.6mm spacing through air and 1.6mm spacing over surface of insulating material are maintained through air and over surfaces between current-carrying parts of opposite polarity and between such current-carrying parts and dead-metal parts in non-refrigerated and/or non-air-handing compartments
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 equipment grounding terminal. All panels are bounded together with serrated type screws.
6. Polarized 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 22 AWG, with a minimum rating of 600V, 105 °C.
8. Schematics - NA
9. Markings - The product is marked on a labeling system as described in item no. 3 of Section 4.0 as follows:
   - applicant's name or brand name
   - model number
   - date of manufacture
   - electrical ratings (rated voltage, total input current, frequency, FLA of motors, RLA/LRA)
   - the kind and amount of refrigerant in pounds, ounces, or both
   - the high and low side design pressures
10. Cautionary Markings - Refer to Illustration No. 1 for details.
11. Installation, Operating and Safety Instructions - Instructions for installation and use of this product are provided by the applicant. Refer to Illustration No. 2-2d. All necessary warning sentences required by standards are contained by provided manual, only partial literature is pasted in sec. 7.

7.0 Illustrations

Illustration 1 - Cautionary marking



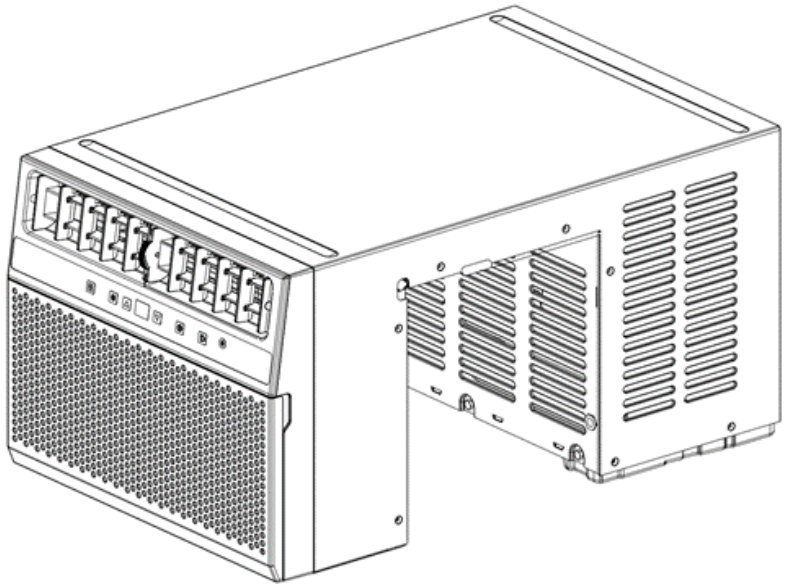
7.0 Illustrations

Illustration 2 - Instruction

WINDOW AIR CONDITIONER

USER MANUAL

MODEL: NCA series



7.0 Illustrations

Illustration 2a - Instruction

SAFETY INSTRUCTION

Your safety and the safety of others are very important.

We have provided many important safety messages in this manual and on your appliance. Always read and obey all safety messages.

This is the safety alert symbol.
This symbol alerts you to potential hazards that can kill or hurt you and others. All safety messages will follow the safety alert symbol and either the word "DANGER," "WARNING" or "CAUTION."
These words mean:

All safety messages 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.

⚠ DANGER	An imminently hazardous situation. You could be killed or seriously injured if you don't immediately follow instructions.
⚠ WARNING	A potentially hazardous situation which, if not avoided, could result in death or serious bodily injury.
⚠ CAUTION	A potentially hazardous situation which, if not avoided, may result in moderate or minor injury.

IMPORTANT SAFETY INSTRUCTIONS

Caution: risk of fire warning; Flammable materials Attention : risque d'avertissement d'incendie ; Matériaux inflammables

Read operator' Manual Lire l'opérateur' Manuel

operator' manual; operating instructions manuel de l'opérateur ; mode d'emploi

service indicator; read technical manual indicateur de service; lire technique Manuel

WARNING: To reduce the risk of fire, electrical shock, injury to persons, or damage when using the air conditioner, follow basic precautions, including the following:

- Appliance shall be stored in a well-ventilated area where the room size is not less than 4 m^2.
- Read all of the instructions before using this appliance.
- Plug into a grounded 3 prong outlet.
- Do not remove ground prong.
- Do not use an adapter.
- Do not use an extension cord.
- Do not operate the air conditioner if it has a damaged cord or plug, if it is not working properly, or if it has been damaged or dropped.
- The air conditioner should be serviced only by qualified service personnel. Call an authorized service company for examination, repair, or adjustment.
- Disconnect power before servicing.

7.0 Illustrations

Illustration 2b - Instruction

- Disconnect power before cleaning.
  NOTE: Turning off power by pressing the Power button does NOT disconnect the appliance from the power supply.
- Do not install or use the air conditioner in any area where the atmosphere contains combustible gases or where the atmosphere is contaminated. Avoid any chemicals coming in contact with your air conditioner.
- Do not store anything directly on top of the air conditioner.
- The appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and maintenance shall not be made by children without supervision.
- This appliance is not intended for people(including children)with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.
- Use two or more people to move and install air conditioner.
- Never operate the air conditioner without the filters in place.
- Do not use the air conditioner near a bathtub, shower or wash basin or other wet area.
- Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer.
- The appliance shall be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater. Do not pierce or burn.
- Be aware that refrigerants may not contain an odor.
  - the maximum refrigerant charge amount: NCA-06C/X1E-8.82Oz
  - the maximum refrigerant charge amount: NCA-08C/X1E-9.88Oz
- The appliance shall be stored so as to prevent mechanical damage from occurring.
- Any person who is involved with working on or breaking into a refrigerant circuit should hold a current valid certificate from an industry-accredited assessment authority, which authorizes their competence to handle refrigerants safely in accordance with an industry recognized assessment specification. Servicing shall only be performed as recommended by the equipment manufacturer. Maintenance and repair requiring the assistance of other skilled personnel shall be carried out under the supervision of the person competent in the use of flammable refrigerants.
- Prior to beginning work on systems containing flammable refrigerants, safety checks are necessary to ensure that the risk of ignition is minimized. Work shall be undertaken under a controlled procedure so as to minimize the risk of a flammable gas or vapor being present while the work is being performed. All maintenance staff and others working in the local area shall be instructed on the nature of work being carried out. Work in confined spaces shall be avoided. The area around the workspace shall be sectioned off. Ensure that the conditions within the area have been made safe by control of flammable material.
- The area shall be checked with an appropriate refrigerant detector prior to and during work, to ensure the technician is aware of potentially flammable atmospheres. Ensure that the leak detection equipment being used is suitable for use with flammable refrigerants, i.e. no sparking, adequately sealed or intrinsically safe.
- If any hot work is to be conducted on the refrigeration equipment or any associated parts, appropriate fire extinguishing equipment shall be available to hand. Have a dry powder or CO^2 fire extinguisher adjacent to the charging area.
- No person carrying out work in relation to a refrigeration system which involves exposing any pipe work that contains or has contained flammable refrigerant shall use any sources of ignition in such a manner that it may lead to the risk of fire or explosion. All possible ignition sources, including cigarette smoking, should be kept sufficiently far away from the site of installation, repairing, removing and disposal, during which flammable refrigerant can possibly be released to the surrounding space. Prior to work taking place, the area around the equipment is to be surveyed to make sure that there are no flammable hazards or ignition risks. “No Smoking” signs shall be displayed.
- Ensure that the area is in the open or that it is adequately ventilated before breaking into the system or conducting any hot work. A degree of ventilation shall continue during the period that the work is carried out. The ventilation should safely disperse any released refrigerant and preferably expel it externally into the atmosphere.

7.0 Illustrations

Illustration 2c - Instruction

- Do not apply any permanent inductive or capacitance loads to the circuit without ensuring that this will not exceed the permissible voltage and current permitted for the equipment in use. Intrinsically safe components are the only types that can be worked on while live in the presence of a flammable atmosphere. The test apparatus shall be at the correct rating. Replace components only with parts specified by the manufacturer. Other parts may result in the ignition of refrigerant in the atmosphere from a leak.
- Check that cabling will not be subject to wear, corrosion, excessive pressure, vibration, sharp edges or any other adverse environmental effects. The check shall also take into account the effects of aging or continual vibration from sources such as compressors or fans.
- Under no circumstances shall potential sources of ignition be used in the searching for or detection of refrigerant leaks. A halide torch (or any other detector using a naked flame) shall not be used.
- Electronic leak detectors shall be used to detect flammable refrigerants, but the sensitivity may not be adequate, or may need re-calibration. (Detection equipment shall be calibrated in a refrigerant-free area.) Ensure that the detector is not a potential source of ignition and is suitable for the refrigerant used. Leak detection equipment shall be set at a percentage of the LFL of the refrigerant and shall be calibrated to the refrigerant employed and the appropriate percentage of gas (25 % maximum) is confirmed. Leak detection fluids are suitable for use with most refrigerants but the use of detergents containing chlorine shall be avoided as the chlorine may react with the refrigerant and corrode the copper pipe-work. If a leak is suspected, all naked flames shall be removed/extinguished. If a leakage of refrigerant is found which requires brazing, all of the refrigerant shall be recovered from the system, or isolated (by means of shut off valves) in a part of the system remote from the leak. Oxygen free nitrogen (OFN) shall then be purged through the system both before and during the brazing process.
- When breaking into the refrigerant circuit to make repairs – or for any other purpose – conventional procedures shall be used. However, it is important that best practice is followed since flammability is a consideration. The following procedure shall be adhered to:
  - remove refrigerant;
  - purge the circuit with inert gas;
  - evacuate;
  - purge again with inert gas;
  - open the circuit by cutting or brazing.
- The refrigerant charge shall be recovered into the correct recovery cylinders. The system shall be "flushed" with OFN to render the unit safe. This process may need to be repeated several times. Compressed air or oxygen shall not be used for this task. Flushing shall be achieved by breaking the vacuum in the system with OFN and continuing to fill until the working pressure is achieved, then venting to atmosphere, and finally pulling down to a vacuum. This process shall be repeated until no refrigerant is within the system. When the final OFN charge is used, the system shall be vented down to atmospheric pressure to enable work to take place. This operation is absolutely vital if brazing operations on the pipe-work are to take place. Ensure that the outlet for the vacuum pump is not close to any ignition sources and there is ventilation available.
- In addition to conventional charging procedures, the following requirements shall be followed.
  - Ensure that contamination of different refrigerants does not occur when using charging equipment. Hoses or lines shall be as short as possible to minimize the amount of refrigerant contained in them.
  - Cylinders shall be kept upright.
  - Ensure that the refrigeration system is earthed prior to charging the system with refrigerant.
  - Label the system when charging is complete (if not already).
  - Extreme care shall be taken not to overfill the refrigeration system.
- Prior to recharging the system it shall be pressure tested with OFN. The system shall be leak tested on completion of charging but prior to commissioning. A follow up leak test shall be carried out prior to leaving the site.
- Before carrying out this procedure, it is essential that the technician is completely familiar with the equipment and all its detail. It is recommended good practice that all refrigerants are recovered safely. Prior to the task being carried out, an oil and refrigerant sample shall be taken in case analysis is required prior to re-use of reclaimed refrigerant. It is essential that electrical power is available before the task is commenced.
  a) Become familiar with the equipment and its operation.
  b) Isolate system electrically.

7.0 Illustrations

Illustration 2d - Instruction

c) Before attempting the procedure ensure that:
--mechanical handling equipment is available, if required, for handling refrigerant cylinders;
--all personal protective equipment is available and being used correctly;
--the recovery process is supervised at all times by a competent person;
--recovery equipment and cylinders conform to the appropriate standards.

d) Pump down refrigerant system, if possible.

e) If a vacuum is not possible, make a manifold so that refrigerant can be removed from various parts of the system.

f) Make sure that cylinder is situated on the scales before recovery takes place.

g) Start the recovery machine and operate in accordance with manufacturer's instructions.

h) Do not overfill cylinders. (No more than 80 % volume liquid charge).

i) Do not exceed the maximum working pressure of the cylinder, even temporarily.

j) When the cylinders have been filled correctly and the process completed, make sure that the cylinders and the equipment are removed from site promptly and all isolation valves on the equipment are closed off.

k) Recovered refrigerant shall not be charged into another refrigeration system unless it has been cleaned and checked.

- Equipment shall be labelled stating that it has been de-commissioned and emptied of refrigerant. The label shall be dated and signed. Ensure that there are labels on the equipment stating the equipment contains flammable refrigerant.
- When removing refrigerant from a system, either for servicing or decommissioning, it is recommended good practice that all refrigerants are removed safely. When transferring refrigerant into cylinders, ensure that only appropriate refrigerant recovery cylinders are employed. Ensure that the correct number of cylinders for holding the total system charge are available. All cylinders to be used are designated for the recovered refrigerant and labelled for that refrigerant (i.e. special cylinders for the recovery of refrigerant). Cylinders shall be complete with pressure relief valve and associated shut-off valves in good working order. Empty recovery cylinders are evacuated and, if possible, cooled before recovery occurs. The recovery equipment shall be in good working order with a set of instructions concerning the equipment that is at hand and shall be suitable for the recovery of flammable refrigerants. In addition, a set of calibrated weighing scales shall be available and in good working order. Hoses shall be complete with leak-free disconnect couplings and in good condition. Before using the recovery machine, check that it is in satisfactory working order, has been properly maintained and that any associated electrical components are sealed to prevent ignition in the event of a refrigerant release. Consult manufacturer if in doubt.
  The recovered refrigerant shall be returned to the refrigerant supplier in the correct recovery cylinder, and the relevant Waste Transfer Note arranged. Do not mix refrigerants in recovery units and especially not in cylinders. If compressors or compressor oils are to be removed, ensure that they have been evacuated to an acceptable level to make certain that flammable refrigerant does not remain within the lubricant. The evacuation process shall be carried out prior to returning the compressor to the suppliers. Only electric heating to the compressor body shall be employed to accelerate this process. When oil is drained from a system, it shall be carried out safely.

8.0 Test Summary					
Evaluation Period	2022-12-12 to 2022-12-20			Project No.	221102919SHA
Sample Rec. Date	9-Dec-2022	Condition	Prototype	Sample ID.	0221209-68
Test Location	Intertek Testing Services Shanghai Limited				
Test Procedure	Testing Lab				
Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria.					
The following tests were performed:					

Test Description	UL 60335-1:2016 Ed.6 CSA C22.2#60335-1:2016 Ed.2 UL 60335-2-40:2019 Ed.3 CSA C22.2#60335-2-40:2019 Ed.3 Clause
Starting of motor-operated appliances	9
Power input and current	10
Heating	11
Leakage current and electric strength at operating temperature	13
Moisture resistance	15
Leakage current and electric strength	16
Overload protection of transformers and associated circuits	17
Abnormal operation	19
Stability and mechanical hazards	20
Mechanical strength	21
Construction	22
Internal wiring	23
Components	24
Supply connection and external flexible cords	25
Terminals for external conductors	26
Provision for earthing	27
Screws and connections	28
Resistance to heat and fire	30
Resistance to rusting	31

Test Description	UL 1004-1:2012 Ed.2+R:24Aug2017 UL 1004-3:2015 Ed.2 / Clause	CSA C22.2#77:2014 Ed.8+E1/ Clause
Locked-Rotor Temperature Test	8	6.4
Dielectric Voltage-Withstand Test	37	6.5
Locked-Rotor Endurance Test	9	6.6

8.0 Test Summary		
Test Description	UL 1310:2018 Ed.7+R:09Jun2022 / Clause	CSA C22.2#223:2015 Ed.3/ Clause
Maximum Output Voltage Test	28	6.3.1
Maximum Input Test	29	6.3.2
Output Current and Power Test	30	6.3.4
Full-Load Output Current Test	32	6.3.3
Dielectric Voltage-Withstand Test	34	6.5
Abnormal Test	39	--

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:	Michael Jin	Reviewed by:	Jack Tang
Title:	Engineer	Title:	Mandated Reviewer
Signature:	*Signature on file*	Signature:	*Signature on file*

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	Nantong Ningpu Electrical Appliance Co., Ltd.
Address	No.139, Huanghe Road, Rudong Economic Development Zone, Nantong, Jiangsu Province, 226400
Country	P.R. China
Product	Room Air Conditioner

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.

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

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

MANUFACTURING AND PRODUCTION TESTS

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

FOLLOW-UP SERVICE

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

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

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

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

10.1 Evaluation of Unlisted Components

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

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

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

Managing CEC Location:
Intertek Testing Services (Shanghai FTZ) Co., Ltd
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

Electric Strength Test
Earth Continuity Test
Pressure Tests For Leakage and Strength

11.1 Electric Strength Test

Method

One hundred percent of production of the products covered by this Report shall be subjected to a routine production line electric strength 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 as required.

Test Equipment

The test equipment shall incorporate a transformer with an essentially sinusoidal output, a means to indicate the applied test potential, and an audible and/or visual indicator of dielectric breakdown.
The test equipment shall incorporate a voltmeter in the output circuit to indicate directly the applied test potential if the rated output of the test equipment is less than 500VA.
If the rated output of the test equipment is 500VA or more, the applied test potential may be indicated by either:
1 - a voltmeter in the primary circuit;
2 - a selector switch marked to indicate the test potential; or
3 - a marking in a readily visible location to indicate the test potential for test equipment having a single test potential output.
In cases 2 and 3, the test equipment shall include a lamp or other visual means to indicate that the test potential is present at the test equipment output. All test equipment shall be maintained in current calibration.

Products Requiring Electric Strength Test:

Product	Test Voltage	Test Time
All products covered by this Report.	800V	1 s

11.2 Earth Continuity Test

Method

Each product listed below shall be subjected to a test to determine that there is continuity between accessible earthed metal parts of the product and the earthing terminal.

A current of at least 10 A, derived from a source having a no-load voltage not exceeding 12 V (a.c. or d.c.), is passed between accessible earthed metal parts of the product and the earthing terminal.
The voltage drop is measured and the resistance is calculated and shall not exceed 0.1Ω.

Products Requiring Grounding Continuity Test:

All products covered by this Report.

11.3 Pressure Tests for Leakage and Strength

Method

Each air conditioner shall be tested and proved tight at not less than the design pressure(s) marked on the appliance.

If the final assembly is completed with flare-type fittings or telescoped tubing joints which are sealed with sliver solder, brazing, or the equivalent, the pressure test of the complete system may be at the low-side design pressure provided that the high-side parts are individually tested either by the room air conditioner manufacturer or by the manufacturer of the part at not less than the high-side design pressure.

At least once each year, a strength test shall be conducted on refrigerant-containing components of the shell-type which have an inside diameter greater than 3 inches (76.2mm) including motor-compressor enclosures. The test shall be conducted on at least one sample of each size and type. The part shall comply with requirements of Strength Tests. Such tests may be conducted either by the room air conditioner manufacturer or by the manufacturer of the component.

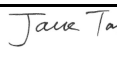
Products Requiring Pressure Tests for Leakage and Strength:

All products covered by this Report.
High side pressure 620 psig, Low side pressure 360 psig

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
16-May-2023	Michael Jin	2.0	-	Add new brand name " Soleusair, OSLO, Joy Pebble". Add new models WS3-08EW-201, WS3-08EW-301, WS4-08EW-201, WS4-08EW-301, WS3-08E-201, WS3-08E-301, WS4-08E-201, WS4-08E-301, OSHB-08W, OSHB-08. Update relevant model similarity.
230500147STX	Jack Tang	4.0	12	Add alternative LCDI L22515 by SUZHOU ELE MFG CO LTD.
		4.0	28	Revise the technical data of Y capacitor from "R/C(fowx2,8), rated 250/400V, 1000/4700pF, Y1 type" to "R/C(fowx2,8), rated 250/400V, 1000/4700pF, Y1 or Y2 type".
		5.0	7	Add alternative protective device KSD by DONGYANG HENGDIAN THERMAL PROTECTOR FACTORY (GENERAL PARTNERSHIP) for outdoor fan motor YDK95-50-4B by JIANGSU CHANGJIA ELECTRIC CO LTD.
		5.0	7	Add alternative protective device 8CML by SENSATA TECHNOLOGIES for outdoor fan motor YDK95-50-4B by JIANGSU CHANGJIA ELECTRIC CO LTD.
		5.0	7	Add alternative protective device JW-2T by SHENGZHOU GANLIN WANGSHI THERMAL PROTECTOR FACTORY for outdoor fan motor YDK95-50-4B by JIANGSU CHANGJIA ELECTRIC CO LTD.
		5.0	7	Add alternative protective device KSD by DONGYANG HENGDIAN THERMAL PROTECTOR FACTORY (GENERAL PARTNERSHIP) for outdoor fan motor YDK95-50-4B by NANGTONG NINGPU ELECTRICAL APPLIANCE CO LTD.
		5.0	7	Add alternative protective device 8CML by SENSATA TECHNOLOGIES for outdoor fan motor YDK95-50-4B by NANGTONG NINGPU ELECTRICAL APPLIANCE CO LTD.
		5.0	7	Add alternative protective device JW-2T by SHENGZHOU GANLIN WANGSHI THERMAL PROTECTOR FACTORY for outdoor fan motor YDK95-50-4B by NANGTONG NINGPU ELECTRICAL APPLIANCE CO LTD.

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
4-Dec-2023	Michael Jin	2.0	-	Add new brand name "Auseo, Acekool, Upstreman"
2311A1179SHA	Jack Tang	2.0	-	Add new models "A5406W-10K, A5406W-10K-RW, A5406W-10K-ZA, A5406W-10K-WAL-AU, A5406W-10K-JP, A5408W-12K-RW, A5408W-12K-ZA, A5408W-12K-WAL-AU, A5408W-12K-JP, FP10271CA-WH, FP10247CA-WH, N1, N2" Update relevant ratings and other ratings.
		3.0	18	Add photo for front view of alternative PWB.
		3.0	19	Add photo for rear view of alternative PWB.
		4.0	2	Add alternative supply cord 21571 by TOWER MFG CORP
		4.0	12	Delete LCDI 0651510LY by SUZHOU ELE MFG CO LTD
		4.0	12	Add alternative LCDI 30386 by TOWER MFG CORP
		4.0	12	Add alternative LCDI 30385 by TOWER MFG CORP
		5.0	7	Correct the resistance value of aux. winding for YDK95-50-4B by JIANGSU CHANGJIA ELECTRIC CO LTD and NANGTONG NINGPU ELECTRICAL APPLIANCE CO LTD from "27.4" to "25".
25-Jan-2024	Michael Jin	4.0	2	Revise the technical data of supply cord 21571 by TOWER MFG CORP from "Rated 300V, 105ºC, 16 or 18AWG for all model, terminated with LCDI." to "Rated 300V, 105ºC, 16 or 18AWG for all model, terminated with LCDI, factory ID: blank, T3 or T4.".
2401B1385SHA	Jack Tang	4.0	5	Revise the technical data of indoor fan motor YDKS-25-4(NCA-203B) by JIANGSU SANJIANG ELECTRIC GROUP CO LTD from "115V, 60Hz, 0.5A, thermally protected. For 08 series." to "115V, 60Hz, 0.5A, thermally protected, marked as class B tested as class A. For 08 series.".
		4.0	5	Revise the technical data of indoor fan motor YDKS-25-4(NCA-203B) by NANGTONG NINGPU ELECTRICAL APPLIANCE CO LTD from "115V, 60Hz, 0.5A, thermally protected. For 08 series." to "115V, 60Hz, 0.5A, thermally protected, marked as class B tested as class A. For 08 series.".

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
		4.0	5	Revise the technical data of indoor fan motor YDKS-25-4(NCA-203B-1) by JIANGSU SANJIANG ELECTRIC GROUP CO LTD from "115V, 60Hz, 0.37A, thermally protected. For 06 series." to "115V, 60Hz, 0.37A, thermally protected, marked as class B tested as class A. For 06 series.".
		4.0	5	Revise the technical data of indoor fan motor YDKS-25-4(NCA-203B-1) by NANGTONG NINGPU ELECTRICAL APPLIANCE CO LTD from "115V, 60Hz, 0.37A, thermally protected. For 06 series." to "115V, 60Hz, 0.37A, thermally protected, marked as class B tested as class A. For 06 series.".
		4.0	7	Revise the technical data of outdoor fan motor YDK95-50-4B by JIANGSU CHANGJIA ELECTRIC CO LTD from "110-120V, 60Hz, 0.76A, thermally protected" to "110-120V, 60Hz, 0.76A, thermally protected, marked as class B tested as class A.".
		4.0	7	Revise the technical data of outdoor fan motor YDK95-50-4B by NANGTONG NINGPU ELECTRICAL APPLIANCE CO LTD from "110-120V, 60Hz, 0.76A, thermally protected" to "110-120V, 60Hz, 0.76A, thermally protected, marked as class B tested as class A.".

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
16-Dec-2024	Michael Jin 	2.0	-	Add new brand name "NEPO, Garvee, Fornido, Kndko, Xbeauty, Electactic, KISSAIR, Antarctic Star, Kismile, WAA, YODOLLA". Add new models NCAA followed by -06C, -08C; followed by /X1E; maybe followed by -W. Add new modesl A5406W-10K-EL, A5408W-12K-EL, A5416W-10K-EL, A5418W-12K-EL, A5406W-10K-AS, A5408W-12K-AS, SS-N2, SMAO001WH, SS14165WH. Update relevant model similarity.
2412B0903SHA	Jack Tang	4.0	2	Add alternative supply cord KPL301 by Zhongshan Kaper Electrical Co., Ltd.
		4.0	12	Add alternative lcdi KP-LC10 by Zhongshan Kaper Electrical Co., Ltd.
		4.0	12	Add alternative lcdi KP-LC13 by Zhongshan Kaper Electrical Co., Ltd.
		4.0	17	Add alternative compressor capacitor CBB65 by Ningguo Huili Electric CO., LTD
		4.0	18	Add alternative capacitor for outdoor fan motor CBB61 by Ningguo Huili Electric CO., LTD