

**Keen Ocean Industrial Ltd.**

**侨洋实业有限公司**

OFFICE : Room 3405, 34/F., Cable TV Tower,  
9 Hoi Shing Road, Tsuen Wan, N.T., Hong Kong.

办公室地址: 香港九龙新界荃湾海盛路 9 号  
有线电视大楼 34 楼 5 室

Tel(电话): (852) 3102-9700 / (852) 2490-6110

Fax(传真): (852) 3102-9710

**He Yuan Sky Wealth Electronic and Plastic Co., Ltd.**

**河源天裕电子塑胶有限公司**

FACTORY : The South Side of Keqi Road, The East Side of  
Xinggong Road of Heyuan, Hi-Tech Development Zone,  
Heyuan City, Guangdong Province, China.

工厂地址: 中国广东省河源市高新技术开发区兴工大道东面  
科七路南边

Tel(电话): 86-762-2203101

Fax(传真): 86-762-2203100

**SPECIFICATION FOR APPROVAL**

**承 认 书**

CUSTOMER (客户) : 杭州三坛医疗科技有限公司  
PRODUCT (产品) : TOROIDAL TRANSFORMER( 环形变压器)  
DESCRIPTION (描述) : I/P: AC 220V/50Hz  
OUR MODEL (产品型号) : T8BFN-85419 (TTO-85419-00L)  
CUSTOMER MODEL (客户型号) : 1000VA

**Keen Ocean Engineering Department (侨洋实业有限公司工程部)**

**Sky Wealth Engineering Department (河源天裕电子塑胶有限公司工程部)**

**Date of Issue (发行日期): 28-APR-2022(2022年04月02日)**

**Drawn by(制作):**

**Checked by (审核):**

**Approved by(承认):**

**XYH**

**刘祖超**

**Zhangsl**

APR.28,2022

(2022年04月28日)

APR.28,2022

(2022年04月28日)

APR.28,2022

(2022年04月28日)

**Please kindly sign back for approval (客户签字) .**

**Accepted by Customer (客户承认人):**

**Signed and chopped (签名和盖章)**

**Date(日期)**

## 电气性能 (ELECTRICAL PROPERTIES)

产品型号(OUR MODEL)	: T8BFN-85419 (TTO-85419-00L)
客户型号(CUST. MODEL)	: 1000VA
标准(STANDARD)	: <b>UL 60601-1 class B insulation system(130Deg.C) E213684</b>
产品重量 (WEIGHT)	: 8.22KGS(REF)

初级 (PRIMARY)	编号 (NO.)	抽头编号 (TAP.NO.)	输入电压及频率 (VOLTAGE)	空载电流 (EXCITING CURRENT OPEN CIRCUIT)
	P	1-2	AC 220V 50Hz	90mA Max
次级 (SECONDARY)	编号 (NO.)	抽头编号 (TAP.NO.)	空载电压 (OPEN CIRCUIT VOLTAGE +/- 5%)	负载电压 (LOADING VOLTAGE +/- 5%)
	S	4-5	AC 230.5V	AC 220V 4.55A
额定连续输出功率 (RATED CONTINUOUS OUTPUT POWER)				1000VA(AC)
绝缘电阻 (INSULATION RESISTANCE)	初级对次级(PRIMARY - SECONDARY)			100M OHM @ DC 500V
电气强度 (DIELECTRIC STRENGTH)	初级对次级(PRIMARY - SECONDARY)			AC 4000V 5mA FOR 1 MINUTE
	初级对屏蔽 (PRIMARY - SCN)			AC 2500V 5mA FOR 1 MINUTE
	次级对屏蔽 (SECONDARY-SCN)			AC 2500V 5mA FOR 1 MINUTE
温升 (TEMPERATURE RISE)	额定连续负载 (RATED CONTINUOUS LOADING) : 1000VA(AC)			85Deg.Cmax AT Ta = 25Deg.C (输入Input: AC 220V/50Hz)

## 保护装置 (PROTECTIVE DEVICE)

初级(PRIMARY)	A4-10A-F 130Deg.C THERMAL CUTOFF (10A/250V)
次级(SECONDARY)	*****

## 出线 (LEAD OUT)

线号 LEAD NO.	引线型号 TYPE	长度 LENGTH	剥皮和上锡 STRIP&TIN
1	UL 1015 AWG#18 蓝色(BLUE)	300+/-10 mm	10+/-2 mm
2	UL 1015 AWG#18 棕色(BROWN)	300+/-10 mm	10+/-2 mm
3	UL 1015 AWG#18 黄绿(YELLOW/GREEN)	300+/-10 mm	10+/-2 mm
4	UL 1015 AWG#18 黑色(BLACK)	300+/-10 mm	10+/-2 mm
5	UL 1015 AWG#18 红色(RED)	300+/-10 mm	10+/-2 mm

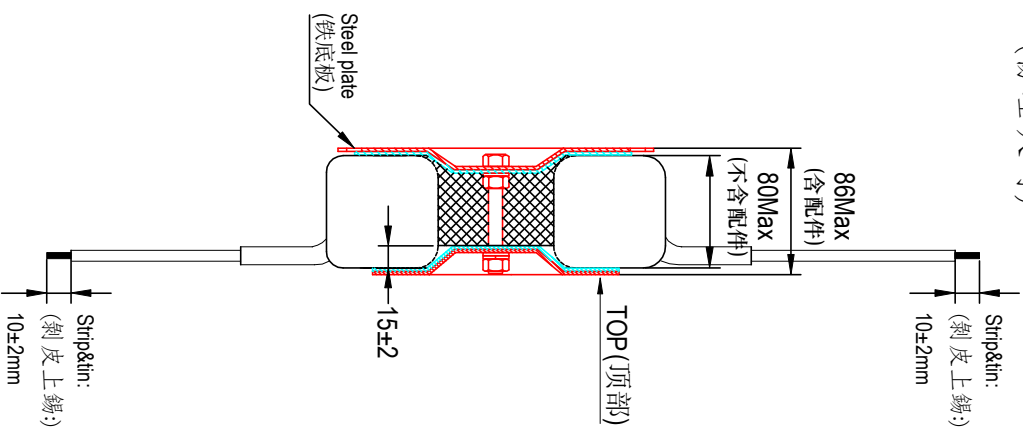
## 配件 (MOUNTING)

铁介(STEEL DISHED WASHER)	I.D.:8.5±0.5 mm O.D.:120±2.0 mm THK :1.5±0.3 mm	1 个(PC)	黑色 (BLACK)
胶介(NEOPRENE WASHER)1	I.D.:9.0±0.5 mm O.D.:148±2.0 mm THK :1.5±0.3 mm	1 个(PC)	黑色 (BLACK)
胶介(NEOPRENE WASHER)2	I.D.:35±0.5 mm O.D.:150±2.0 mm THK :1.5±0.3 mm	1 个(PC)	黑色 (BLACK)
平介(FLAT WASHER)	M8	1 个(PC)	黑色 (BLACK)
弹介(SPRING WASHER)	M8	1 个(PC)	黑色 (BLACK)
螺丝(SCREW)	M8x80mm	1 个(PC)	黑色 (BLACK)
螺母(NUT)	M8	1 个(PC)	黑色 (BLACK)

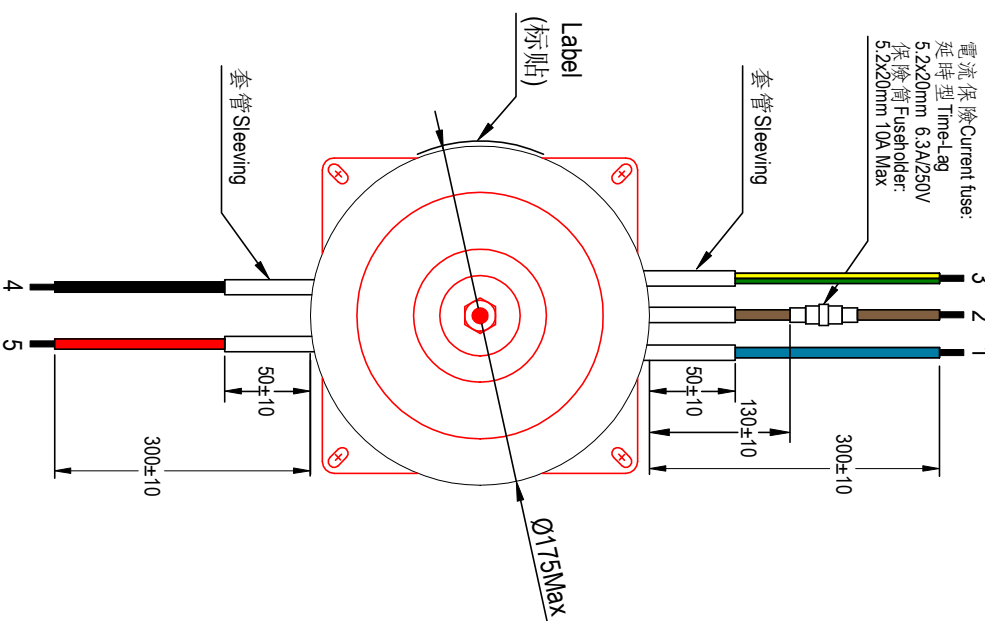
## 说明(REMARKS)

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(物理尺寸)



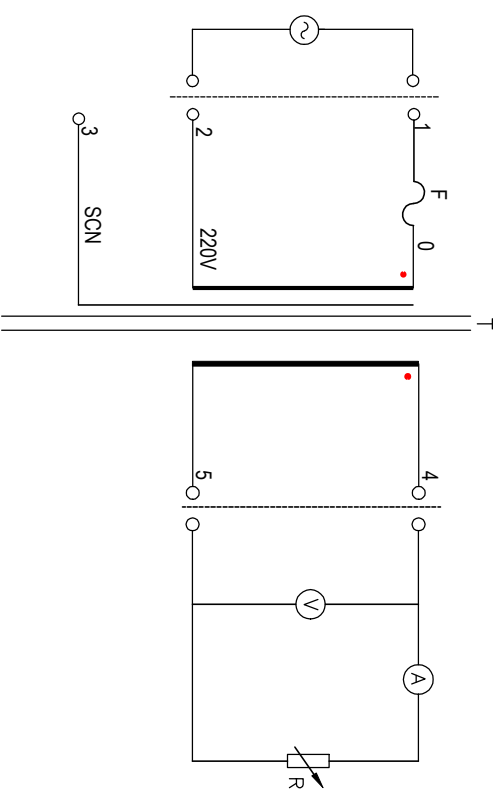
(顶视图)





REVISIONS (修正)				
ISSUE (序号)	DESCRIPTION (描述)	REV. BY (编制)	APPROVED. BY (认可)	DATE (日期)

LABELS:(标签)

R-RHEOSTAT (可变电阻器)  
F-THERMAL CUTOFF (热熔断器)



(输入AC 220V/50Hz, 输出参考规格书)

3rd ANGLE PROJECTION			Keen Ocean Industrial Ltd.			
			桥洋实业有限公司			
DO NOT SCALE			He Yuan Sky Wealth Electronic and Plastic Co., Ltd.			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETRES			河源天裕电子塑胶有限公司			
TOLERANCE: LINEAR ANGULAR:			MODEL NAME: TOROIDAL TRANSFORMER (环形变压器)			
± 1 mm ± 0.5 °			CUST. MODEL: (客户型号)		1000VA	
			T8BFN-85419		(TTO-85419-00L)	

**Keen Ocean Industrial Ltd. (侨洋实业有限公司)**  
**He Yuan Sky Wealth Electronic and Plastic Co. Ltd. (河源天裕电子塑胶有限公司)**

产品型号(OUR MODEL): T8BFN-85419 (TTO-85419-00L)

客户型号(CUST. MODEL): 1000VA

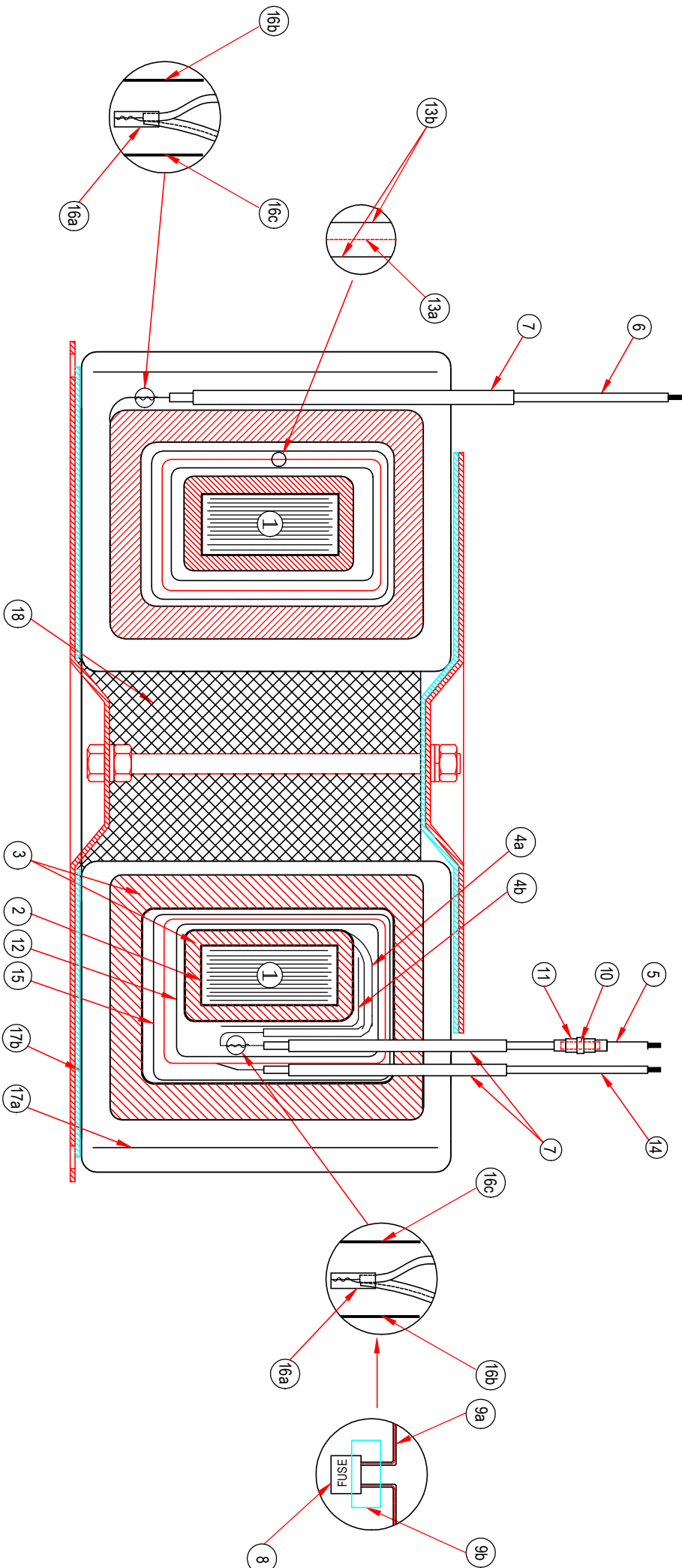
物料表(MATERIAL LIST)				
	物料(MATERIAL)	描述(DESCRIPTION)	UL标准(STANDARD)	制造商/供应商(MANUFACTURERS / SUPPLIERS)
1	铁心(Core)	硅钢片(Silicon Steel) 尺寸(Size): HxLxD=50x75x155mm 厚度(Thickness): 0.20~0.35mm		新日铁(Nippon Steel) 或同等的(or equivalent)
2	初级绕组与铁心之间的绝缘 (Insulation between Core and Primary Winding)	聚酯薄膜(Polyethylene Terephthalate Film) 型号( Type): EL 或(OR) WC MYLAR 厚度( Thickness): 0.125mm 67%重叠 1层 总厚度: 0.375mm ( 67% overlap 1 layer total thickness: 0.375mm)	UL:E93687	杜邦(Dupont Teijin Films U S L P) 或同等的(or equivalent)
3	初次级电磁金属线 Magnet Wire (Primary & Secondary)	漆包铜线Polyester-Imide Enameled Wire(EIAI/U,HA1/U) MW-35C Thermal Endurance Class H (180Deg.C) PEWH/U 或 漆包铜线Polyester-imide overcoat Polyamide-imide (EIAI/U,HA1/U) Thermal Endurance Class C ( 200 Deg.C) MW35 或 漆包铜线Polyester Enameled Wire (PEW) MW 5-C Thermal Endurance Class F (155Deg.C) 或(OR) 漆包铜线Polyester-imide Wire (EIW) MW 30-C Thermal Endurance Class H (180Deg.C) 或(OR) 漆包铜线Polyester-imide overcoat Polyamide-imide (XEAIW/200) Thermal Endurance Class C ( 200 Deg.C) MW35-C Primary(初级): 2xdia1.00mm 376 圈(turns) Secondary(次级): 2xdia0.95mm 394 圈(turns)	UL:E201757 UL:E201757 UL:E234896 UL:E234896 UL:E258125	*深圳太平洋Pacific Electric Wire&Cable(shenzhen)Co.,Ltd. 或同等的(or equivalent) 深圳太平洋(Pacific-Thai Electric Wire & Cable Co.,Ltd.) 或同等的(or equivalent) 台一铜业TAI-H Copper (GuangZhou) Co Ltd 或同等的(or equivalent) 台一铜业TAI-H Copper (GuangZhou) Co Ltd 或同等的(or equivalent) 河源天裕(He Yuan Sky Wealth Electronic And Plastic Co Ltd.) 或同等的(or equivalent)
4	交叉绝缘(初级绕组头线和尾线) Crossover Insulation (start and end)	a).PVC套管 (PVC TUBE 2P300) 300V 105Deg.C 或(OR) 套质纤维管 (Silicone Resin 500) 155Deg.C 600V 或(OR) 套质纤维管Silicone Coated Fiberglass 2R-SG 600V 155Deg.C OR 套质纤维管 (Silicone fiberglass Tube) SGS-25/40 2500/4000V 200Deg.C b).聚酯胶纸1P802 Polyester tape(used for attachment) 厚度 (Thickness): 0.05mm 3层 (3 layers)	UL:E176865 UL:E53690 UL:E176865 UL:E233804 UL:E126174	彼利奥集团有限公司(P.LEO & CO(B C) Ltd.) 或同等的(or equivalent) VARFLEX CORP 或同等的(or equivalent) 彼利奥集团有限公司(P.LEO & CO(B C) Ltd.) 或同等的(or equivalent) 深圳华创威ShenZhen Wahchangwei Industrial Co Ltd 或同等的(or equivalent) 彼利奥集团有限公司(P.LEO & CO(B C) Ltd.) 或同等的(or equivalent)
5	初级引线 (Primary leads)	UL-1015 AWG #18 VW-1; 600V 105Deg.C	UL:E189674	深圳东聚Shenzhen Dong Ju Wire & Cable Co.,Ltd. 或同等的(or equivalent)
6	次级引线 (Secondary leads)	UL-1015 AWG #18 VW-1; 600V 105Deg.C	UL:E189674	深圳东聚Shenzhen Dong Ju Wire & Cable Co.,Ltd. 或同等的(or equivalent)
7	所有引线保护 (Protection of all leads)	PVC套管 (PVC TUBE 2P300) 300V 105Deg.C 或(OR) 套质纤维管 (Silicone Resin 500) 155Deg.C 600V 或(OR) 套质纤维管Silicone Coated Fiberglass 2R-SG 600V 155Deg.C OR 套质纤维管 (Silicone fiberglass Tube) SGS-25/40 2500/4000V 200Deg.C	UL:E176865 UL:E53690 UL:E176865 UL:E233804	彼利奥集团有限公司(P.LEO & CO(B C) Ltd.) 或同等的(or equivalent) VARFLEX CORP 或同等的(or equivalent) 彼利奥集团有限公司(P.LEO & CO(B C) Ltd.) 或同等的(or equivalent) 深圳华创威ShenZhen Wahchangwei Industrial Co Ltd 或同等的(or equivalent)
8	初级保险丝 (Primary thermal cutoff)	型号( Type): A4-10A-F 130 Deg.C (250V/10A)	UL:E140847	雅宝电子Aupo Electronics Inc. 或同等的(or equivalent)
9	初级热熔断器绝缘 (Insulation of primary thermal cutoff)	a).PVC套管 (PVC TUBE 2P300) 300V 105Deg.C 或(OR) 套质纤维管 (Silicone Resin 500) 155Deg.C 600V 或(OR) 套质纤维管Silicone Coated Fiberglass 2R-SG 600V 155Deg.C OR 套质纤维管 (Silicone fiberglass Tube) SGS-25/40 2500/4000V 200Deg.C b).聚酯胶纸1P802 Polyester tape(used for attachment) 厚度 (Thickness): 0.05mm 3层 (3 layers)	UL:E176865 UL:E53690 UL:E176865 UL:E233804 UL:E126174	彼利奥集团有限公司(P.LEO & CO(B C) Ltd.) 或同等的(or equivalent) VARFLEX CORP 或同等的(or equivalent) 彼利奥集团有限公司(P.LEO & CO(B C) Ltd.) 或同等的(or equivalent) 深圳华创威ShenZhen Wahchangwei Industrial Co Ltd 或同等的(or equivalent) 彼利奥集团有限公司(P.LEO & CO(B C) Ltd.) 或同等的(or equivalent)
10	初级电流保险 Primary current fuse	型号(Type): T6.3A L 6.3A/250V 5x20mm 延时型Time-lag	UL:E221465	深圳良朋Shenzhen Lanson Electronics Co Ltd 或同等的(or equivalent)
11	电流保险丝盒 Fuseholder	保险盒材料: PA66 101	UL:E41938	杜邦 E I Dupont De Nemours & Co Inc 或同等的(or equivalent)
12	初级绕组与屏蔽间绝缘 (Insulation between Primary winding and Screen Shielding)	聚酯薄膜Polyethylene Terephthalate (PET) Film 型号( Type): EL 或(OR) WC 厚度( Thickness): 0.075mm 50%重叠 3层 总厚度: 0.45mm (50% overlap 3 layers total thickness: 0.45mm)	UL:E93687	杜邦(Dupont Teijin Films U S L P) 或同等的(or equivalent)
13	屏蔽与它自己的绝缘 (Screen Shielding and its own insulation)	a).铜箔Copper Foil 厚度( Thickness): 0.05mm 1层(1 layer) b).聚酯胶纸1P802 Polyester tape 厚度(Thickness): 0.05mm 1层 (1 layer)	UL:E126174	河源飞兴达(Heyuan Feixingda) 或同等的(or equivalent) 彼利奥集团有限公司(P.LEO & CO(B C) Ltd.) 或同等的(or equivalent)
14	屏蔽引线 (Lead of Screen Shielding)	UL-1015 AWG #18 VW-1; 600V 105Deg.C	UL:E189674	深圳东聚Shenzhen Dong Ju Wire & Cable Co.,Ltd. 或同等的(or equivalent)
15	屏蔽与次级绕组间绝缘 (Insulation between Screen Shielding and Secondary winding)	聚酯薄膜Polyethylene Terephthalate (PET) Film 型号( Type): EL 或(OR) WC 厚度( Thickness): 0.075mm 50%重叠 3层 总厚度: 0.45mm (50% overlap 3 layers total thickness: 0.45mm)	UL:E93687	杜邦(Dupont Teijin Films U S L P) 或同等的(or equivalent)
16	所有引线连接绝缘 (Insulation of all Leads Connections)	a).PVC套管 (PVC TUBE 2P300) 300V 105Deg.C 或(OR) 套质纤维管 (Silicone Resin 500) 155Deg.C 600V 或(OR) 套质纤维管Silicone Coated Fiberglass 2R-SG 600V 155Deg.C OR 套质纤维管 (Silicone fiberglass Tube) SGS-25/40 2500/4000V 200Deg.C b).聚酯胶纸1P802 Polyester tape 厚度(Thickness): 0.05mm 3层 (3 layers) c).聚酯薄膜Polyethylene Terephthalate (PET) Film 型号( Type): MYLAR S 或(OR) MO41 厚度(Thickness): 0.25mm	UL:E176865 UL:E53690 UL:E176865 UL:E233804 UL:E126174 UL:E93687	彼利奥集团有限公司(P.LEO & CO(B C) Ltd.) 或同等的(or equivalent) VARFLEX CORP 或同等的(or equivalent) 彼利奥集团有限公司(P.LEO & CO(B C) Ltd.) 或同等的(or equivalent) 深圳华创威ShenZhen Wahchangwei Industrial Co Ltd 或同等的(or equivalent) 彼利奥集团有限公司(P.LEO & CO(B C) Ltd.) 或同等的(or equivalent) 杜邦(Dupont Teijin Films U S L P) 或同等的(or equivalent)
17	外层绝缘(Outer Insulation)	a).聚酯胶纸1P802 Polyester tape 厚度(Thickness): 0.05mm 1圈 (1 turn) b).聚酯薄膜Polyethylene Terephthalate (PET) Film 型号( Type): EL OR WC MYLAR 厚度( Thickness): 0.05mm 50%重叠 2层 总厚度: 0.20mm (50% overlap 2 layers total thickness: 0.20mm)	UL:E126174 UL:E93687	彼利奥集团有限公司(P.LEO & CO(B C) Ltd.) 或同等的(or equivalent) 杜邦(Dupont Teijin Films U S L P) 或同等的(or equivalent)
18	环氧树脂(Epoxy)	环氧树脂9002G A(RESIN) 固化剂9002G B(HARDENER) 或者(OR) 环氧树脂3300 A(RESIN) 固化剂3300B(HARDENER)	UL:E222812 UL:E218090	广州惠利 Wells Electronic Material(GUANGZHOU)Co Ltd 或同等的(or equivalent) 东莞力多DongGuan Eatto Electronic Material Co.,Ltd 或同等的(or equivalent)

说明Remark: 所有物料都符合RoHS要求 All the materials meet the requirements of RoHS.


页码PAGE: 4/6

CONSTRUCTION SKETCH

(构造图)



REVISIONS (修正)			
ISSUE (序号)	DESCRIPTION (描述)	REV BY (编制)	APPROVED BY (认可)
		DATE	DATE

3rd ANGLE PROJECTION  DO NOT SCALE	Keen Ocean Industrial Ltd. 乔洋实业有限公司				MATERIAL: 加工FINISH: 比例SCALE: 不适合N.T.S	SIGNATURE(署名) DATE(日期)
	He Yuan Sky Wealth Electronic and Plastic Co., Ltd. 河源天裕电子塑胶有限公司					
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETRES TOLERANCE: LINEAR ANGULAR: ± 1 mm ± 0.5 °	MODEL NAME: TOROIDAL TRANSFORMER (环形变压器)		CUST. MODEL: (客户型号) 1000VA		APPROVED(认可): ZSH APR.28.2022	MODEL NO.:(型号) T8BFN-85419 (TTO-85419-00L)

Keen Ocean Industrial Ltd. (侨洋实业有限公司)

He Yuan Sky Wealth Electronic and Plastic Co. Ltd. (河源天裕电子塑胶有限公司)

产品型号(OUR MODEL): T8BFN-85419 (TTO-85419-00L)

客户型号(CUST. MODEL): 1000VA

标贴(LABEL)

Model No.: T8BFN-85419 Cust. Ref.:1000VA  
Input: AC 220V 50Hz BLU-BRN  
WI. 130 Deg.C THERMAL CUTOFF  
SCREEN SHIELDING: YEL/GRN  
Output: AC 220V 4.55A BLK-RED  
**Keen Ocean** (TTO-85419-00L) [ ww/yy ]



Remark:

ww: week

yy: year

样品差异(SAMPLE DEVIATION)

编号(NO.)	描述(DESCRIPTION)	日期(DATE)
01	临时没有样品(No sample temporarily).	2022.04.02

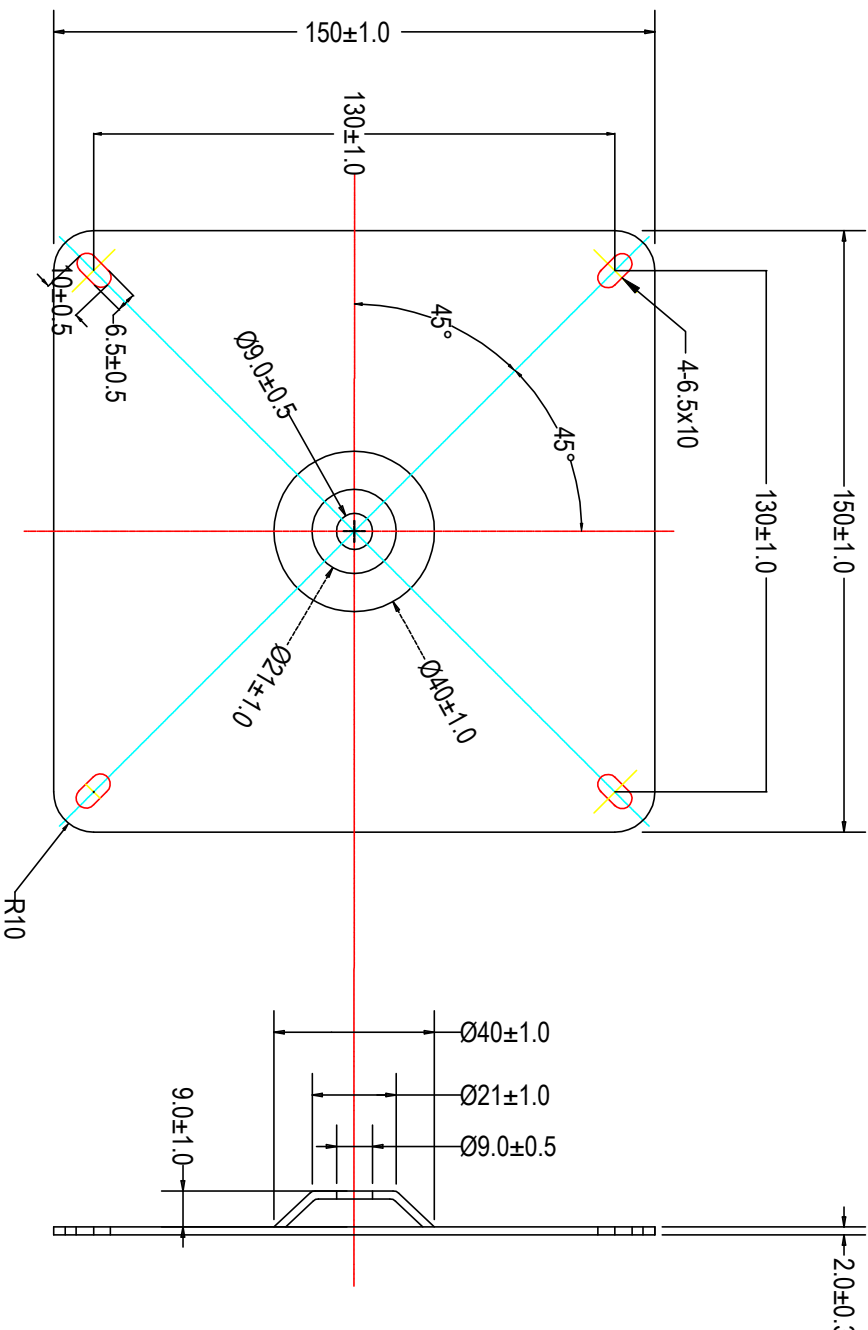
修正(REVISION)

编号(NO.)	描述(DESCRIPTION)	日期(DATE)
00	做样品更新规格书 (Build the sample and update the spec.)	2022.04.28

PHYSICAL DIMENSION

(物理尺寸)

- 材質 (Materials): 冷軋鋼板 (Cold rolled steel sheet)
- 顏色 (Colour): 黑色 (black)
- 尺寸 (Size): 見右圖 (單位: mm)
- 符合 RoHS 要求 (Meet to requirement of RoHS)。



REVISIONS (修正)

ISSUE (序号)	DESCRIPTION (描述)	REV. BY (编制)	APPROVED BY (认可)	DATE (日期)

3rd ANGLE  
PROJECTION



DO NOT SCALE

UNLESS OTHERWISE SPECIFIED

DIMENSIONS ARE IN MILLIMETRES

TOLERANCE: LINEAR  $\pm 1$  mm

ANGULAR:  $\pm 1^\circ$

Keen Ocean Industrial Ltd.

乔洋实业有限公司

He Yuan Sky Wealth Electronic and Plastic Co., Ltd.

河源天裕电子塑胶有限公司

MODEL NAME:

鐵底板

MATERIAL:

FINISH:

SCALE: N.T.S

PAGE: 1 / 1

CUST. MODEL (客户型号)

1000VA

SIGNATURE (署名)

DATE (日期)

DRAWN (编制): Xyh

CHECKED (审核): LZC

APPROVED (认可): ZSH

MODEL NO.: (型号)

T8BFN-85419 (TTO-85419-00L)