

COMPRESSOR TECHNICAL AGREEMENT  
 压缩机技术协议书

SHEC/5000.JX.ATH.005-2011

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ATH307RV-C9LU  
 珠海格力电器股份有限公司

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顾客承认签名 CUSTOMER'S APPROVAL	
名字 NAME	
承认日 DATE	
名字 NAME	
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承认日 DATE	
空调器型号 AIR CONDITIONER MODEL	

上海日立电器有限公司  
 Shanghai Hitachi Electrical Appliances Co., Ltd.

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## SUBJECT

Model ATH307RV-C9LU SPECIFICATION  
ATH307RV-C9LU 规格书

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## 1. SCOPE 应用范围

This specification is applied to SHANGHAI HITACHI rotary compressor.  
此规格适用于上海日立电器有限公司生产的旋转式压缩机。

## 2. SPECIFICATION OF COMPRESSOR 压缩机规格

## 2.1 Model

型号 ATH307RV-C9LU

## 2.2 Rated Voltage-Frequency-Phase

额定电压/频率/相数 220~240V/50Hz/单相

## 2.3 Application

应用

Air Conditioning(Including Cooling and Heat Pump,  
Windows, Split and Package Air Conditioner)  
空调机(包括单冷和热泵型,窗式、分体式和柜式空调)

## 2.4 Refrigerant

制冷剂 R—410A

## 2.5 Compressor Cooling

压缩机冷却 强制空冷

## 2.6 Displacement

排气量 30.7ml/rev

## 2.7 Rated capacity(see\*)

额定冷量(见\*) 7330W(6304Kcal/h) (220V) / 7410W(6371Kcal/h) (240V)

## 2.8 Motor input(see\*)

电机输入功率(见\*) 2530W (220V) / 2560W (240V)

## 2.9 COP

能效比

2.9 (220V) / 2.89 (240V) COP=  $\frac{\text{Rated capacity 额定冷量 (W)}}{\text{Motor input 电机输入功率 (W)}}$

## 2.10 Current

电流

11.6A (220V) / 11.0A (240V)

## 2.11 Allowable amount of

refrigerant charge

制冷剂充注允许量

2600g

## 2.12 Amount of oil charge

油充注允许量

880±20 ml(Initial)

880±20 ml(最初)

## 2.13 Oil

油

α 68HES-H or equivalent

## 2.14 Space volume of inner case

壳体内容积

2450ml

## 2.15 Net weight

净重

22.5kg incl.oil

22.5kg 包括油

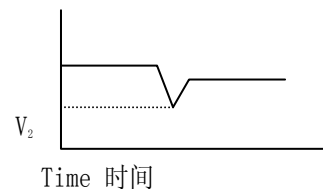
2.16 Hermetic Terminal 密封接线柱	1/4"quick connect type 1/4" 快速连接型	
2.17 Motor		
Type	Permanent Split Capacitor	
Capacitor	50 $\mu$ F/450 Volts	
Locked rotor amps	55A (240V/50Hz)	
Approved voltage range	Rated voltage $\pm$ 10%	
Winding resistance(M/S)	1.09/2.54 $\Omega$ (at 20°C)	
电机		
形式	PSC	
电容器	50 $\mu$ F/450V	
堵转电流	55A( 240V/50Hz)	
电压变动范围	额定电压 $\pm$ 10%	
电阻(主线圈/副线圈)	1.09/2.54 $\Omega$ (at 20°C)	
2.18 Rated conditions	Voltage	220V~240V
	Evaporating temp.	7.2 °C
	Condensing temp.	54.4°C
	Liquid temp. entering expansion valve.	46.1°C
	Return gas temp.	35.0°C
	Ambient temp.	35.0°C
	Wind speed	2m/s
额定工况	电压	220V~240V
	蒸发温度	7.2°C
	冷凝温度	54.4°C
	膨胀阀前液体温度	46.1°C
	回气温度	35.0°C
	周围温度	35.0°C
	风速	2m/s
2.19 Starting performance	(1) The starting voltage should be as follows.	
	(2) The starting pressure should be balanced between the suction and discharge of the compressor and should be adjusted to the following table.	
	(3) The temperatures of the compressor enclosure should be more than 20°Ccontinuously at the following table.	
起动性能	(1) 起动电压如表 1 所示。	
	(2) 起动压力必须在吸气压力及排气压力之间进行平衡，并按下表予以调节。	
	(3) 在起动工况下，压缩机环境温度要保持在 20°C以上。	

TABLE 1 表 1

Starting Conditions 起动工况		Spec 规格
Motor temperature 电机状态	Pressure 平衡压力 MPa {kgf/cm <sup>2</sup> G}	Starting voltage 起动电压 (V <sub>2</sub> )**
Cold-Starting 冷起动 Cold state (room temperature) 冷工况(室温)	1.783 {17.16}	Below 85% of rated voltage 不高 于额定电压的 85%
Hot-Starting(Standard) 热起动(标准) Hot state after operated under standard load condition 在标准负载下运行后的工况	1.706 {16.4}	Below 85% of rated voltage 不高 于额定电压的 85%
Hot-starting(Overload) 热起动(超负荷) Hot state after operated under overload condition 在超负载条件下运行后的工况	1.860 {17.96}	Below 90% of rated voltage 不高 于额定电压的 90%

\*. Rated capacity and motor input are measured by secondary Refrigerant calorimeter Methods of JIS B8606 by Shanghai Hitachi Electrical Appliances Co., Ltd. Allowable capacity should be more than 95% of the rated capacity and Allowable motor input should be less than 107% of rated motor input.  
额定冷量和电机输入功率由本公司根据 JIS B8606 的第二制冷剂法测试。允许冷量应为额定冷量的 95%以上，允许电机输入功率应为额定电机输入功率的 107%以下。

\*\* V<sub>2</sub> means minimum voltage measured between pins of hermetic terminal at the compressor starts.  
V<sub>2</sub> 是指压缩机起动时所测密封接线柱端子间的最小电压。



\*\*\*. The suction pressure is measured on the position above the filter of accumulator.  
吸入压力测定位置在储液器滤网上面。

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3. PARTS AND DRAWING LIST 零件及图纸清单

PARTS NAME 零件名称			QTY/SET 数量/套	DRAWING NO. 图纸号	PARTS NO. 部品号	REMARKS 备注
Compressor 压缩机			1	4CYCH0100	—	Dimensioned sketch 尺寸简图
Mounting parts 安装件	Rubber grommet	橡胶避振脚	3	4CYC00643	3HNC00328A	
	Bolt	固定螺栓	—	4CYC01007	—	*
	Nut	固定螺母	—	(M8)	—	*
Electrical parts 电器部件	Terminal cover	接线盒盖	1	4CYC00987	3HNC00797A	
	Sleeve	螺杆护套	1	4CYC00986	3HNC00796A	
	Gasket	接线盒盖垫片	1	4CYC00788	3HNC00087B	
	Nut	固定螺母	1	3CYC00004	3YNC64230A	
	Rubber washer	固定垫圈	1	4CYC00174	3YNC64229A	
				4CYC00124	Wiring Diagram 接线图 Performance curve 性能曲线	

\* Out of supply, for reference. 不提供, 仅供参考。

4. CHARACTERISTICS 一般特性
- 4.1 Residual moisture 150mg MAX  
残余水分含量 以下
- 4.2 Residual impurities 100mg MAX  
杂质含量 以下



1. SYSTEM DESIGN LIMITATIONS 系统设计限制

1.1 Power source and Voltage 电源及电压

Voltage applied to hermetic terminal should be within the range mentioned in this specification.

In the case of three phase, the phase imbalance should be within 3% among the compressor terminals. The phase imbalance should be calculated according to the follow formula.

密封接线柱的电压应在规格规定的范围内。

如为三相，压缩机终端间的相位不平衡率应在3%以内。相位不平衡率按下式计算：

$$\text{the phase imbalance} = \frac{(V)_{\max} - (V)_{\text{mean}}}{(V)_{\text{mean}}} \times 100\%$$

(V)<sub>max</sub>:Maximum voltage among the three terminals. (V)最大：三终端中最大电压。

(V)<sub>mean</sub>:average voltage among the three terminals. (V)平均：三终端平均电压。

1.2 Operating Temperatures and Pressures 运行温度及压力

The operating temperatures and pressures of the compressor should be within The range shown in the table 2.

压缩机运行温度及压力应与表2中所示规定相符。

1.3 Operating and Shut-off Period 运行及间隔时间

The compressor should be operated continuously at least for 5 minutes after Being turned ON. 3 minutes shut-off time should be ensured at least until restarting.

压缩机通电后，至少要连续运行5分钟，关机后至少停3分钟才可再次起动。

1.4 Leak Test Pressure 4.32MPa[abs]

空压试验压力 4.32MPa[abs]

1.5 Oil Back and height of the oil level 回油以及油面高度

Oil should be returned continuously to the compressor and not kept in the refrigeration system.

Oil level of compressor should be higher than 7.5 mm from the lubricating piece fixed on the end of the crankshaft.

Table 2 表2

Item 项目	Standard load condition 标准条件	*Overload Condition *过负荷条件	Blocked fan condition 风扇堵转时
Discharge pressure 排气压力 MPa {kgf/cm <sup>2</sup> G}	2. 287 {22. 6} 以下 MAX	4. 268 {42. 5} 以下 MAX	5. 0 {50. 0} 以下 MAX
Suction Pressure 吸气压力 MPa {kgf/cm <sup>2</sup> G}	0. 48~1. 22 {4. 48~11.4} 以下 -15~14°C	0. 48~1. 22 {4. 48~11.4} 以下 -15~14°C	
Discharge pipe temperature 排气管温度	**110°C 以下 MAX		
Compressor case bottom temp 壳体底部温度	99°C or below and 6 degrees higher than condensing temperature 99°C或更低并比冷凝温度高6°C		
Motor winding temp. 电机线圈温度	Rated voltage: 额定电压时: 99°C 以下 MAX	R. Voltage(±7. 5%): 额定电压(±7. 5%)时	
	R. Voltage±10%: 额定电压±10%时 127°C以下 MAX	127°C以下 MAX	
Motor winding temp. under locked-rotor condition 堵转时电机线圈温度	under stable condition: 稳定条件时:  Average 165°C以下 MAX Highest 190°C以下 MAX  		
Accumulator temp 储液器温度	Higher than outlet pipe of evaporator 比蒸发器出口高		
Ambient temp. 环境温度	35°C	43°C	

Notes: \* Overload condition should not be continuous.

\*\* Discharge pipe temperature should be less than 110°C at 300mm away from compressor surface.

The end of thermocouple should be soldered on the discharge pipe surface , and the soldered place is covered by urethane foam insulation preventing the influence of air flow, when you measure the discharge pipe temperature.

备注: \* 过负荷条件应是不连续的。

\*\* 排气管温度在离开压缩机表面 300mm 的位置测量。另外, 对排气管温度, 应用钎焊固定热电偶的前端部分, 为了进一步防止吹风的影响, 对钎焊部位用氨基甲酸乙脂泡沫罩着进行测量。



Compressor must not be started operated under a dual-layer separate status.

However, in case of foaming situation, the height of this foam does not mean the height of the oil level.

If you do not keep the oil level, the oil shortage will occur, and influence the reliability of compressor.

(Please check the oil level in the compressor with the sight glass we supply.)

冷冻机油应持续性地向压缩机返回, 而不能停留在制冷系统内。

压缩机内的油面高度应高于供油口 7.5mm 以上。压缩机运转中, 不可让油和冷媒两层分离。

但是, 当产生泡沫状态, 液体变泡沫时, 这部分不属于油面高度。

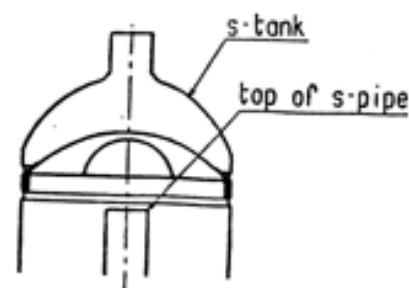
假如不能满足油面高度, 将造成滑动部分的供油不足, 严重影响可靠性。

(可用观察油面用的带视镜压缩机进行确认)

#### 1.6 Liquid refrigerant return limitations

有关液体制冷剂回流的限制

- (1) Liquid refrigerant level in s-tank should be lower than the top of s-pipe in s-tank. (see chart at right)  
储液器的液面应比储液器内 S 管的前端位置低。(参照右图)



- (2) There should not exist noise of the liquid refrigerant compression, current and vibrancy increase. System can append the assistant stank or reduce the amount of refrigerant to prevent from liquid refrigerant compression. Refrigerant system forbid liquid refrigerant from flowing back compressor in any case. In normal condition the overheat gas refrigerant should flow back compressor.

无液压缩音、电流增加和意外振动等情况发生。为了防止液压缩, 可以追加辅助储液器或减少冷媒封入量。无论在何种条件下, 制冷系统都不应有液体向压缩机回流。在正常运行条件下, 应有过热气体向压缩机回流。

#### 1.7 Allowable Incline 倾斜

The allowable incline should be less than  $8^\circ$  during operation.  
运行中可允许的倾斜为小于  $8^\circ$ 。

#### 1.8 Pipe Vibration 管道振动

The displacement of the pipes, which connect from the compressor to other Parts of the refrigerator systems, should be less than 0.8mm(1/32") when the compressor is operating at rated frequency +10Hz/ -10Hz and voltage range of rated  $\pm 10\%$ .

Displacement in excess of 0.8mm(1/32") will require changing tube length and/or routing.

如压缩机在额定频率  $\pm 10\text{Hz}$  及额定电压的  $\pm 10\%$  的范围内运行, 连接压缩机及制冷系统部件的管道的位移应小于  $0.8\text{mm}$  ( $1/32''$ )。  
如上述位移超过  $0.8\text{mm}$ , 则应改变管子的长度或者路径。

### 1.9 Connecting Tube Design 连接管设计

In designing and routing tubing that connect from the compressor to the  
Other parts of the air conditioner, following should be considered.

Moving tubes to the moving parts; minimum clearance  $12.7\text{mm}$  ( $1/2''$ )

Moving tubes to non-moving parts; minimum clearance  $9.5\text{mm}$  ( $3/8''$ )

Moving tubes never touch to lead wire.

在设计及考虑连接压缩机及空调机其它部件的管子路径时, 应考虑以下各因素:

移动管道至移动部件: 最小间隙  $12.7\text{mm}$  ( $1/2''$ )

移动管道至非移动部件: 最小间隙  $9.5\text{mm}$  ( $3/8''$ )

移动管道不得与引线接触。

## 2. PROCESS LIMITATIONS 工艺限制

2.1 The degree of vacuum in the refrigerating system should be less than  $20\text{Pa}$   
{ $150 \times 10^3 \text{mmHg}$ } at room temperature just before charging refrigerant.

The quantity of water should be less than  $0.15\text{ml}$ .

充注制冷剂前, 在室温下, 制冷系统的真空度应小于  $20\text{Pa}$  ( $150 \times 10^3 \text{mmHg}$ )。

含水量应小于  $0.15\text{ml}$ 。

2.2 Prevent moisture from entering into the enclosed unit system . When the moisture entered into the unit with refrigerant R410A , the refrigerant oil and the organic compound material presented in the hermetic motor will possibly decompose on the affecting of water . It will result in the capillary depositing and the reducing of insulation resistance.

应避免水分进入系统。当使用 R410A 冷媒的系统里混入过多的水分时, 冷冻机油和压缩机电机中使用的有机材料将发生加水分解, 从而成为毛细管堵塞、压缩机绝缘不良的原因。

It is necessary to install a dryer to dehumidify the residual moisture mixed in the refrigerant in the cycling system . The specially defined molecular-sieve dryer is advised.

为了除去残存在系统中并与冷媒一起循环的水分, 有必要追加除去系统中水分用的干燥器。请使用指定的分子筛干燥器。

2.3 The weight of foreign particles on the inside surface of the heat exchanger tubes should be less than  $0.08\text{g}/\text{m}^2$ .

Metallic dust should not be permitted to enter the refrigerating system.

This value means the weight of foreign particles filtered after washing inside surface of the heat exchanger tubes with R-11.

附着在热交换器管道内表面的外来含尘量应小于  $0.08\text{g}/\text{m}^2$ ，金属灰尘不得进入制冷系统。

上述数值是指用 R-11 清洗热交换器管道内表面的液体过滤后的含尘量。

Prevent the impurities from entering into the enclosed unit system . When the impurities entered into the enclosed system , it will damage the moving mechanism parts and result in the capillary depositing.

应避免垃圾等进入系统。当使用 R410A 冷媒的系统里混入较多的垃圾等杂质时，将成为促使压缩机的滑动部件发生损伤和毛细管堵塞的原因。

- 2.4 Eliminate all system contaminants such as trichlorethylene, alkalis, soap , acid , oil & washing fluid used at machining the heat exchanger tubes.

清洗所有在加工热交换器管道时残留的污物如三氯乙烯、酸、碱、肥皂液、油和清洗液等。

- 2.5 The quantity and kind of contamination (the process materials) in the cycle should be grasped and managed. Carry on reliability test that input contamination a lot than anticipated contamination quantity.

在制冷循环中，必须掌握和控制污垢物(生产辅助材料)以及垃圾的量。问题发生时，应对产生原因的污垢物的种类和量进行特别指定，换成不会产生问题的种类和量。

- 2.6 Purge parts with dry nitrogen or dry air to remove remains in parts (dust, detergent, etc.)before assembly of system. Time for purging: over one second for pipe; over three seconds for heat exchanger. Purging pressure:  $0.9 \pm 0.1\text{MpaG}$ . Dew point of dry air: Below  $-20^\circ\text{C}$ .

为把部品内的残留物（灰尘，清洗剂等）除去，在组装系统的部品前，要用干燥氮气或干燥空气吹净部品。吹的时间：管件要在 1 秒以上，热交换器要在 3 秒以上。

吹气压力： $0.9 \pm 0.1\text{MpaG}$ ，干燥空气露点： $-20^\circ\text{C}$ 以下。

Dry nitrogen should be charged in compressor before assembly of system.

Welding should be finished within one minute after charge of nitrogen. Dry nitrogen needs to be charged again and weld if over one minute. Always pruge the compressor with dry nitrogen during assembly of system.

在系统组装时，先往压缩机里充入干燥氮气。充入氮气后，在 1 分钟内完成焊接。如果超过 1 分钟，须再次充入干燥氮气焊接。在系统装配时要经常用干燥氮气吹净压缩机。

- 2.7 The motor winding temperatures should be less than  $149^\circ\text{C}$  in process of manufacturing the refrigerating system. The temperature of the hermetic terminal body should be less than  $177^\circ\text{C}$ .

在制造制冷系统时，电机绕线的温度应小于  $149^\circ\text{C}$ ，密封接线柱体温度小于  $177^\circ\text{C}$ 。

2.8 The compressor should be operated for more than 20 seconds within 15 minutes after charging refrigerant into the system so proper lubrication results.

在充注制冷剂之后的15分钟内，压缩机必须运转20秒以上，以保证适当的润滑。

### 3. MISCELLANY 其它

3.1 The pipe and hermetic pins attached to the compressor should not be bent.

与压缩机连接的管道及密封接线柱销子不得弯曲。

3.2 The compressor should never be operated while under vacuum; otherwise, internal arcing can cause damaging parts.

压缩机不得在真空情况下运行，否则内部的弧形电流将损坏内部零件。

3.3 The compressor should not be operated to form a vacuum and to absorb air.

压缩机不得自身抽真空及空运转。

3.4 The compressor should not be left opened in the atmosphere for more than 5 minutes.

压缩机不得在空气中持续打开5分钟以上。

When the air entered into the unit system with refrigerant R410A, it will expedite the deterioration of the oil and result in the capillary depositing and the reducing of insulation resistance.

应避免空气进入系统。当使用R410A冷媒的系统里混入过多的空气时，将促使冷冻机油分解和劣化，从而成为毛细管堵塞和压缩机绝缘不良的原因。

3.5 The electric pulse should not be applied to the hermetic terminals when the compressor is under vacuum.

当压缩机处于真空状态下，不应向密封接线柱上加电脉冲。

3.6 The compressor should be kept in the clean place with low-moisture.

压缩机应保存在清洁、低湿处。

3.7 The compressor must not be applied for transportation equipment, such as automobiles, trains, ships, and others.

压缩机不应直接用于汽车、火车、轮船及其它运输工具上。

3.8 The compressor should not be splashed with water intentionally.

不得有水溅入压缩机。

3.9 Use the refrigerant of specified brand. When the refrigerant not specified used, it will possibly cause trouble of the performance and reliability of the compressor by the impurities in the refrigerant.

请使用指定的冷媒。当使用指定以外的冷媒时，会因不纯物较多而影响压缩机的性能和可靠性的情况。

3.10 Refrigerant should be charged from the end of condenser of refrigerating systems.  
Never charge refrigerant to the compressor directly.

制冷剂应从制冷系统冷凝器的尾端注入，而不能直接注入压缩机。

The refrigerant should always be charged in liquid state. When the refrigerant is charged in gas state, The percent component will possibly be changed. Do not recharge with the remaining refrigerant in the System when leakage happened. Because the percent component of the refrigerant in the unit system had Possibly been changed.

冷媒应在液体状态下进行充填。在气体状态进行充填时冷媒的组分将发生变化。在发生冷媒泄露时请不要追加充填。因为组分有可能发生变化。

3.11 Temperature s within systems during stable compressor operation should not be less than  $-35^{\circ}\text{C}$  to prevent wax precipitation from the oil.

循环系统内的温度必须保证在 $-35^{\circ}\text{C}$ 以上，以免造成冷冻机油形成的蜡成分沉淀。

3.12 Compressor mounting 压缩机防振构造

Rubber grommets are designed soft to provide the noise isolation and To lessen vibration energy Transmission.

Stud bolt should be designed to provide sufficient clearance for noise and vibration isolation and to Prevent compressor from coming off its mount.

橡胶避振脚是采用防止由于噪音引起的振动及振动能量吸收原理设计的。

所设计的固定杆应提供足够的间隙用于噪音及振动隔离，并且防止压缩机从避振脚上滑落。

3.13 The compressor ,if dropped, should not be used.

不可使用跌落的压缩机。

3.14 The first starting voltage supplied to the refrigerating system should be more than the starting voltage mentioned TABLE 1(page 3).

制冷系统的首次起动电压应高于表1(第3页)中的起动电压。

因为油的粘度可能太高而不能使制冷剂在初起动时溶解在冷冻机油里。

3.15 The trouble of refrigeration system components such as the reversing valve, solenoid valve, defrost mechanism, refrigerant control parts, fan motor, etc. may cause failure of the compressor. Reliability of those components should be checked.

A design that insures no leakage during manufacturing and usage should be applied.

制冷循环系统中使用的四通阀、电磁阀、除霜结构、冷媒控制器、风扇电机等的故障将造成压缩机的事。因此，必须确保这些部件的可靠性。

另外，应采用冷媒气体泄漏少的设计、制作以及使用方法。

3.16 The compressor should be kept out of the corrosive atmosphere such as in a chemicals storage, beside a hot spring and so on.

压缩机不得保存在腐蚀性的空气中如化学仓库、温泉旁边。

3.17 The lead wires should be connected to hermetic terminals without being touched on the surface of the compressor.

引线连接至密封接线柱时，不得与压缩机表面相接触。

3.18 The fuse or/and breaker should be equipped in the main circuit.

保险丝、断路器应配备在主电路中。

3.19 There should be adequate clearance between the OD26-under-surface of Bolt-head and the upper surface of rubber grommets.

在固定螺栓头下表面与橡胶避振脚的上表面之间应保留足够的间隙。

3.20 To avoid water and impurity into the refrigeration system and make sure no leakage of refrigerant during the operating course. It's required to direct the erector and maintenance man of air-conditioner.

对预实施空调安装、维修等作业的服务人员，要求对其进行指导和教育，再相关作业时，必须确保冷冻系统中不能进入水分、异物，必须确认无冷媒泄漏事项。

3.21 Compressor can be used when ambient temperature is higher than  $-10^{\circ}\text{C}$ . Confirm the start-up of compressor if the temperature of compressor surface is below  $-10^{\circ}\text{C}$ . Heat up compressor to reach the temperature higher than  $-10^{\circ}\text{C}$  with heater if the ambient temperature is below  $-10^{\circ}\text{C}$ .

环境温度在 $-10^{\circ}\text{C}$ 以上时，压缩机可以使用。当压缩机表面温度低于 $-10^{\circ}\text{C}$ 时，要确认压缩机的启动情况。如果环境温度低于 $-10^{\circ}\text{C}$ ，用加热器将压缩机加热到 $-10^{\circ}\text{C}$ 以上再启动也可以。

3.22 The heater under the compressor should be equipped in the heating system.

制热空调系统应配置压缩机下部加热器。

3.23 Insulation resistance should be more than  $50\text{M}\Omega$  between each of the terminals and the ground ( or the shell ), and between each of the terminals with a 500V megger

用500V的绝缘阻抗计，测定通电部与非通电部的绝缘阻抗，应在 $50\text{M}\Omega$ 以上。

### 1. Basis for Checking upon Delivery 验收依据

The Performance test will be carried out in accordance with this “compressor Specification”.

The Safety Performance in accordance with GB4706.1 Safety of household and Similar electrical appliances General requirements and GB 4706.17 Safety Of household and similar electrical appliances Particular requirements for Motor-compressor.

性能试验方法按本仕様书中有关内容执行。

安全性能按 GB4706.1 家用和类似用途电器的安全通用要求及 GB4706.17 家用和类似用途电器的安全电动机—压缩机的特殊要求。

### 2. Rule for Checking upon Delivery 验收规则

If come across any quality problem, please notify the company in written form Within 30 days after the arrival of the cargo, the company shall exchange Exactly the number of the products, otherwise they shall be regarded as being Up to standard.

若发现质量问题，请在到货后 30 天内向本公司提出书面通知，经确认确属本公司责任，本公司将如数掉换，否则将作自然合格。

### 3. The Term of Valid Preservation 有效保管期

The Term of Valid Preservation of compressors produced by the company shall be one year from the date which were produced to the date which were installed into room air-conditioners. when compressors is preserved in demanded condition ( demand detailed in ROTARY COMPRESSOR CRITERIA FOR LONG LIFE RE -FRIGER SYSTEM 3. ) SHEC guarantee that quality of its compressors remain standard of delivery.

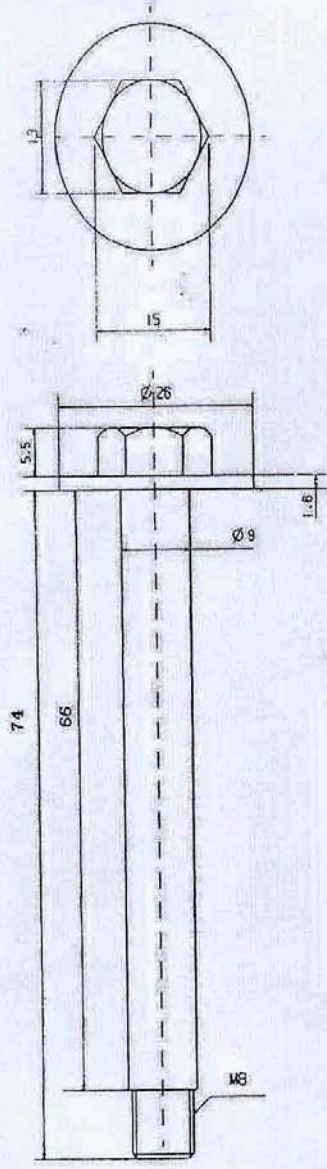
本公司的压缩机有效保管期是指产品生产之日起至空调器装配一年，压缩机在妥善保管的条件下(要求详见旋转式压缩机使用基准 3.)，上海日立确保其制造的压缩机品质达到出厂试验标准。







4CYCO1007					版本标识 A				
①					④				
②					⑤				
③					⑥				

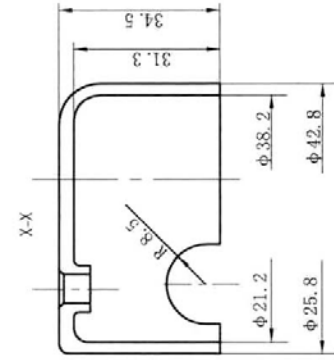
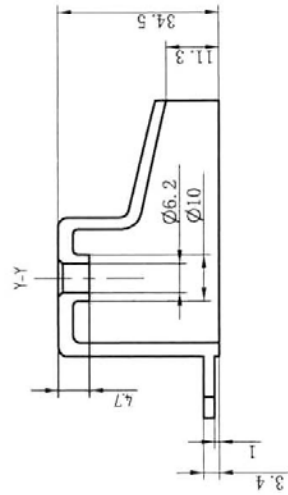
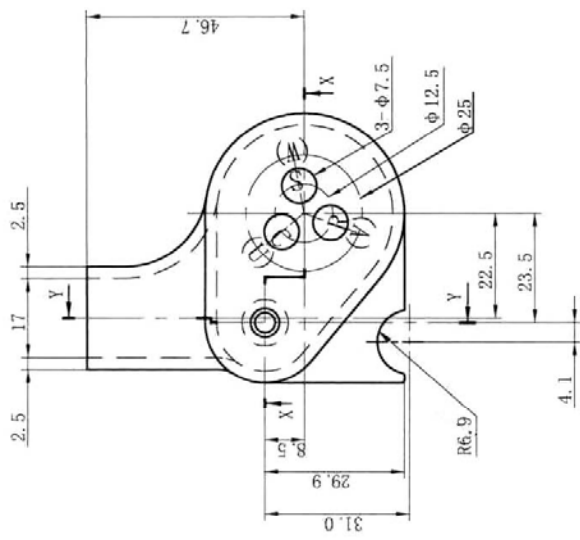


注记  
表面处理：电镀

RE-MARKS			PROJECTION		SCALE	
					NTS	
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	CHKD.	张 09.6.30				
	CHKD.	张 09.6.30				
	APPO.	张 09.6.30				
			DWN. NO.		4CYCO1007	

记号	来历	年月日	订正	审查	记号	来历	年月日	订正	审查
①					④				
②					⑤				
③					⑥				

4CYC00987  
A  
版本标识



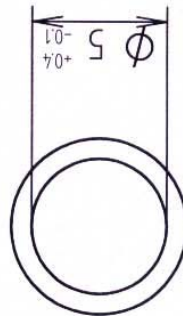
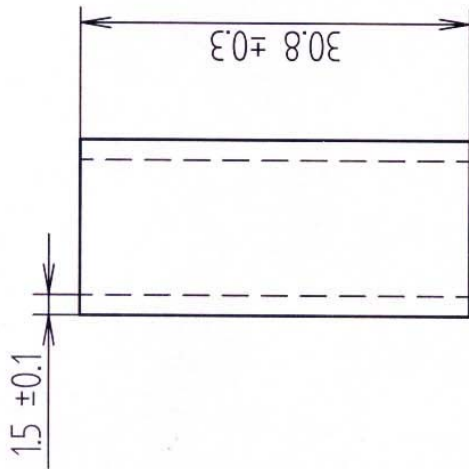
MATERIAL : VALOX 420 SEO BK1066  
 材 料: 聚对苯二甲酸丁二醇酯  
 DIMENSION: mm  
 尺寸单位: mm

REGD	RE. MARKS	PROJECTION	SCALE	DWG NO
		⊕	NTS	4CYC00987
DNV: 丁 杰		Shanghai		
CHKD: 孙 杰		Hitachi Ltd.		
CRWD: 孙 杰				
APPR: 孙 杰				
TITLE		TERMINAL-COVER		

版本标识 A

4CYC00986

记号	来历	年月日	订正	审查	型号	来历	年月日	订正	审查
①					④				
②					⑤				
③					⑥				



注：  
1. 颜色为白色  
2. 材质为硅橡胶

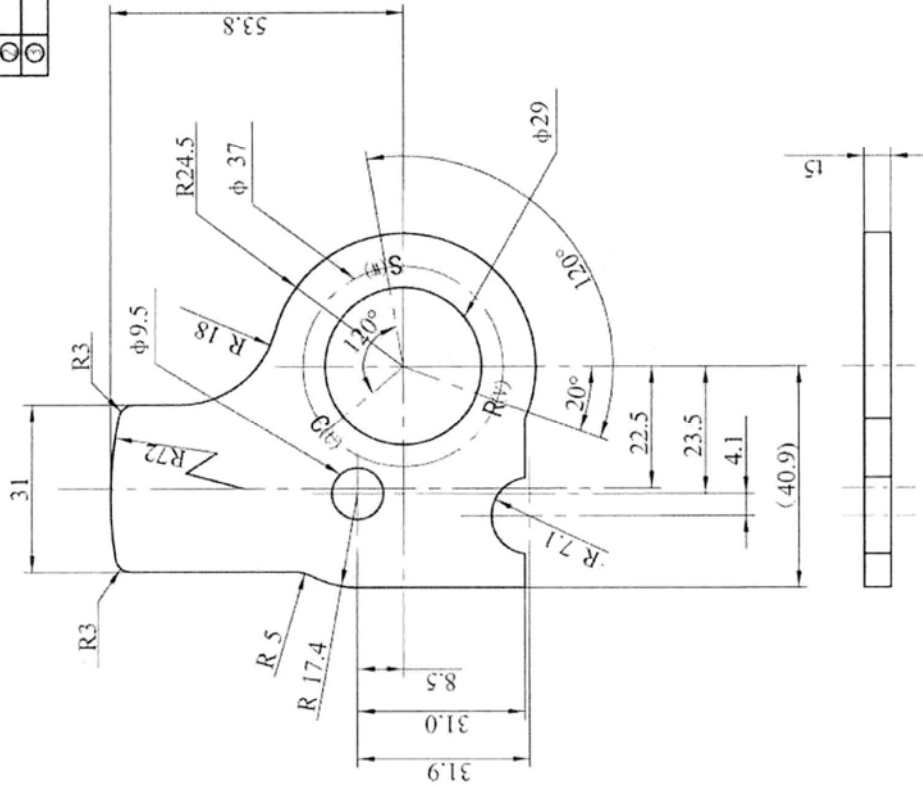
NOTE:  
1. COLOR: WHITE  
2. MATERIAL: SILICONE RUBBER

DIMENSION: mm  
尺寸单位: mm

REGD	RE. MARKS	PROJECTION	SCALE	DWG NO.
		第一角投影	NTS	4CYC00986
OWN.	TITLE	Shanghai		
CHKD.		Hitachi Ltd.		
CHKD.				
APPR.				

记号	来历	年月日	订正	审查	记号	来历	年月日	订正	审查
①					④				
②					⑤				
③					⑥				

4CYC00788  
版本标识 B



DIMENSION : mm  
尺寸单位 : mm

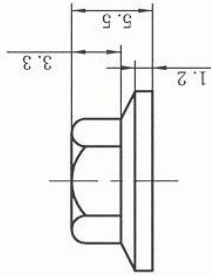
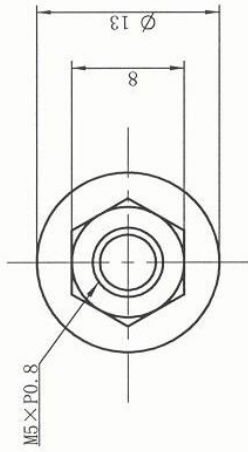
MATERIAL : EPDMFOP-B  
材料 : 三元乙丙胶

PROJECTION	SCALE	DWN NO
第一角投影	NTS	4CYC00788
REGD	TITLE	GASKET
DR. MARKS	DATE	
CHKD.	CHKD.	
APPR.	APPR.	



3CYC000004  
版本标识 B

记号	来历	年月日	订正	审查	记号	来历	年月日	订正	审查
①					④				
②					⑤				
③					⑥				



MATERIAL: 08F

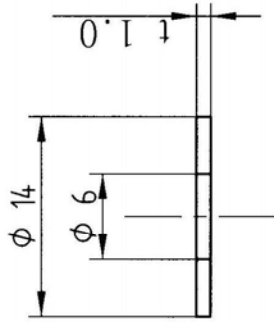
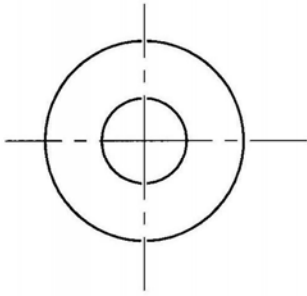
材料：碳素结构钢

DIMENTION: mm  
尺寸单位: mm

REGD	RE. MARKS	PROJECTION	SCALE	DWN. NO.
		第一角投影	NTS	
DWN.	DR. MARKS	TITLE		
曾庆东		NUT		
CHKD.		DWN. NO.		
吴建南		3CYC000004		
CHKD.		Shanghai Hitachi, Ltd.		
APPD.		Hitachi, Ltd.		
李隆清				



4CYC00174	版本标识	A	记号	来历	年月日	订正	审查	记号	来历	年月日	订正	审查		
			①					④						
			②						⑤					
			③						⑥					



MATERIAL: EPDM

材料:三元乙丙胶

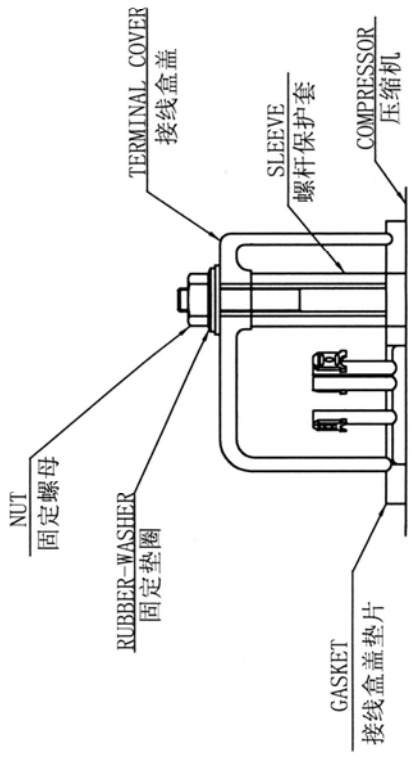
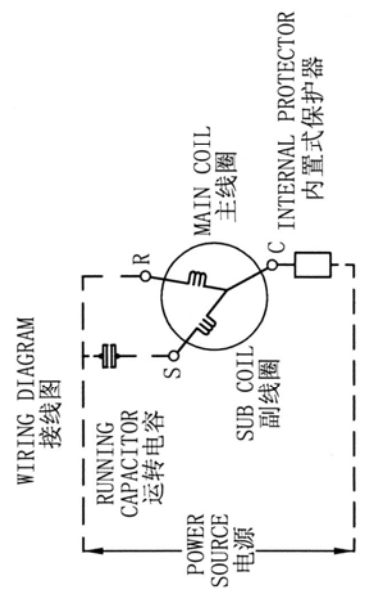
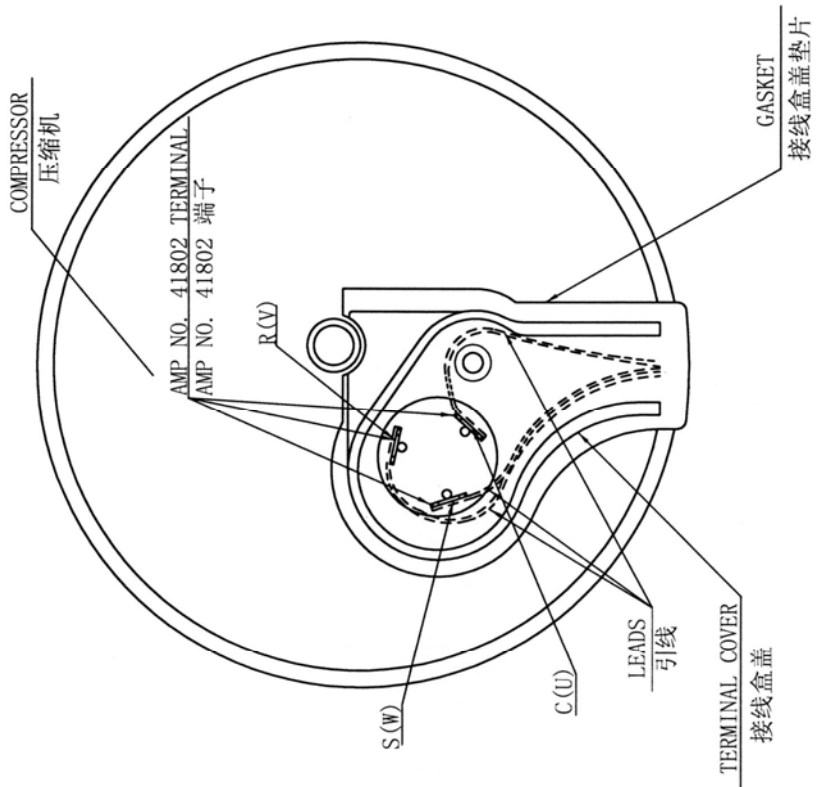
DIMENSION: mm

REGID	RE. MARKS	PROJECTION		SCALE	DWN. NO.	
		第一角	第一角	NTS		
DWN. 吴建勇	2017.7.19	TITLE		Shanghai		
CHKD. 吴建勇	01.7.20	RUBBER WASHER		Hitachi, Ltd.		
CHKD.				4CYC00174		
APPD. 吴建勇	01.7.21					

版本标识 C

4CYC00124

记号	来历	年月日	订正	审查	记号	来历	年月日	订正	审查
①					④				
②					⑤				
③					⑥				



- NOTES:
1. PLEASE PREPARE LEADS BY YOURSELF.
  2. THE LETTER C, R OR S STANDS FOR EACH TERMINAL.
  3. TABS FOR HERMETIC TERMINAL ARE AMP #250.

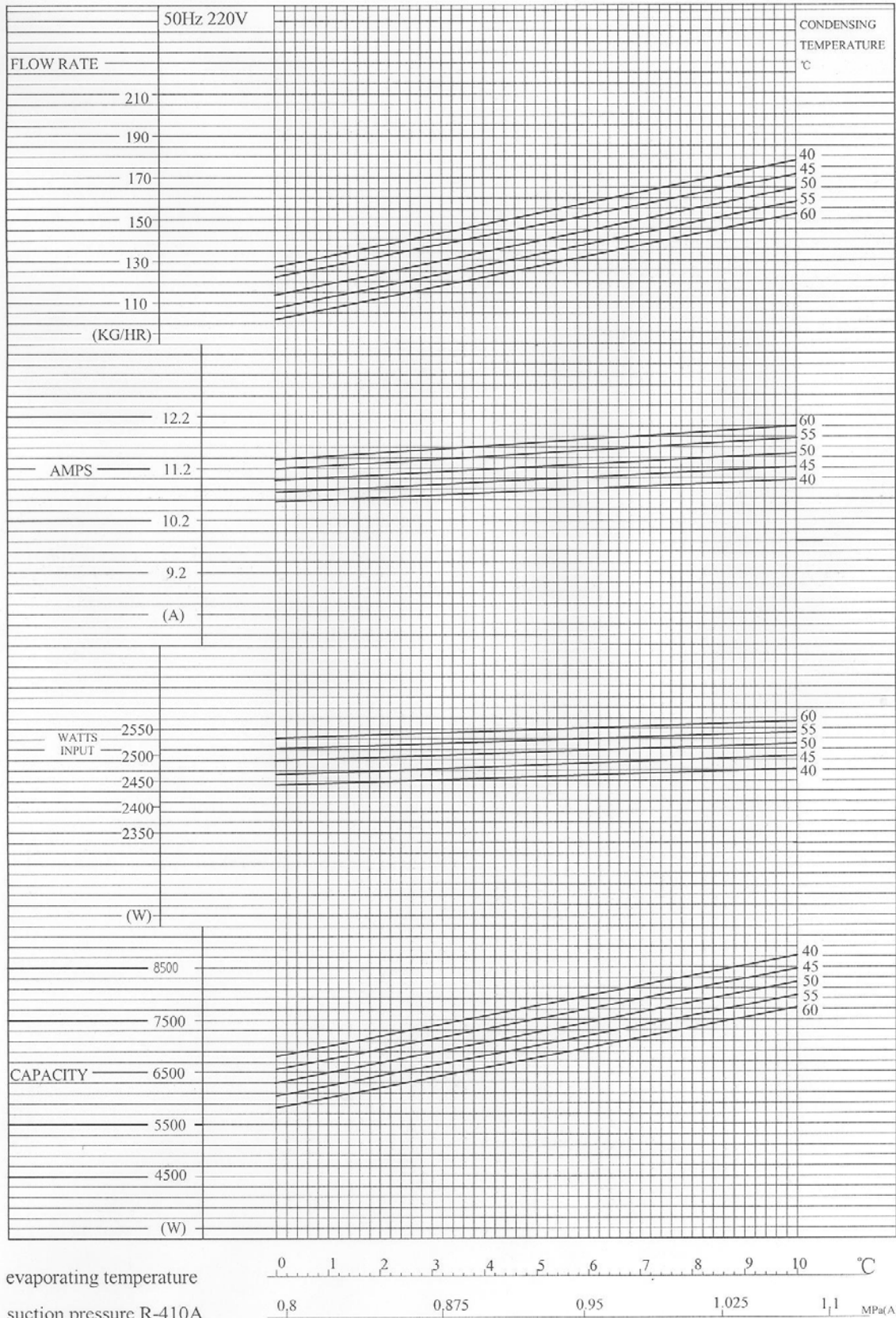
- 注意:
1. 引线自备。
  2. C、R、S表示每个接线端子，与U、V、W分别对应。
  3. 密封接线柱垫片为AMP NO. #250。

REGD	RE. MARKS	PROJECTION	SCALE	DWG. NO.
		第一角	NTS	4CYC00124
		shanghai		
		Hhaich Ltd.		
		TITLE		
		LEAD ROUTING		
		WIRING DIAGRAM		
		DWN. 2007.01.16		
		CHKD. 2007.02.16		
		CHKD. 2007.02.16		
		APPR. 2007.02.16		

SHEC AIR CONDITIONING COMPRESSOR

ATH307RV-C9LU

50Hz 220-240V



evaporating temperature  
suction pressure R-410A

0 1 2 3 4 5 6 7 8 9 10 °C  
0.8 0.875 0.95 1.025 1.1 MPa(A)

ATH307RV-C9LU 附加说明

1、Nameplate diagram:

铭牌示意图:



2、Size of the compressor's suction pipe and exhaust pipe:(unit:mm)

压缩机吸排气管壁厚尺寸说明：（单位：mm）

Wall thickness of suction pipe:  $t1.2\pm0.12$

吸气管壁厚:  $t1.2\pm0.12$

Wall thickness of discharge pipe:  $t1.15\pm0.12$

排气管壁厚:  $t1.15\pm0.12$

3、Protector

过载保护器

Manner: inner protector

方式: 内置保护器

Model: UP3-29 or equivalent

型号: UP3-29 或同等

Parameter: Open temp:  $150\pm5^{\circ}\text{C}$

参数: 动作温度:  $150\pm5^{\circ}\text{C}$

Reset temp:  $90\pm10^{\circ}\text{C}$

复位温度:  $90\pm10^{\circ}\text{C}$

规格书修改经历 Specification Revision Record				
序号 No.	日期 Date	页码 Page in Spec	修订理由 Revision Reason	客户承认日期 Conclusion Date
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