

**BEIJER REF**

**KRC**  
远置式冷凝器  
*Remote Condenser*

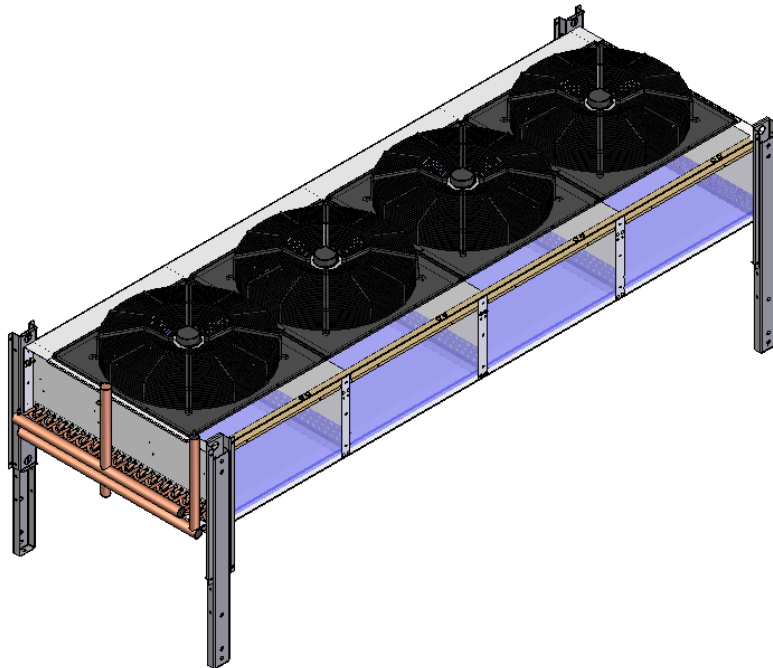
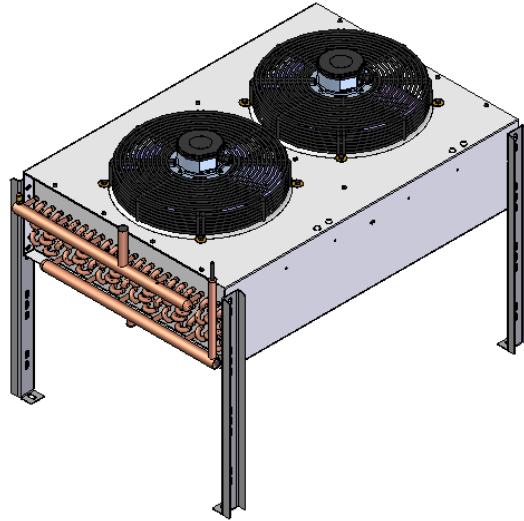
零件号Part No.: YAL0002-43-1

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**KRC**  
**指导手册**  
**Instruction Booklet**



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## 导言Introduction

根据百尔制冷（无锡）有限公司的要求，此手册为远置式冷凝器（KRC）的运输、起吊、安装、调试以及服务等方面提供必要的安全信息。

The information contained in this booklet will provide the necessary safety information to competently transport, lift, install, commission and service the Remote Condenser (KRC) as per Beijer Ref's requirements.

此手册应该存放于干燥处至少十年，保留以备将来使用。请仔细阅读此手册包含的各类信息，特别应注意的是用户指南开始处的“警告”“小心”这类标示。一旦在这些方面出现错误操作，机组、人员以及财产、各方面都将蒙受损失。

**This manual should be kept in a dry place for a period of at least ten years, for possible future reference. Read carefully and thoroughly all the information contained this manual. Pay particular attention to the user instruction that appears and the heading “Warning” or “Caution”. Failure to do so could result in damage to the machine, person or property.**

如果您有任何关于 KRC 性能和使用方面的疑问，请联系我们的客服专线-

电话 0510-85282020

传真 0510-85282242

[www.beijerref.com.cn](http://www.beijerref.com.cn)

If you have any concerns regarding the performance and use of this unit, please contact our Customer Service line on-

Free Phone 0510-85282020.

Free Fax 0510-85282242



[www.beijerref.com.cn](http://www.beijerref.com.cn)

**A 重要的安全信息和用法说明书——保留以备日后使用。**

**A Important safety information and instructions – retain for future use.**

百尔公司在设计和制造这些产品的时候是非常有安全意识的，然而，用户、安装人员及售后服务人员在使用或操作、产品的时候也需要非常小心。

Beijer Ref is very safety conscious when designing and manufacturing these products, but it is essential that the end user, installer or service personnel also exercise care when working with or on the unit.

 <b>警告</b> <b>Warning</b>	<p>此标示表明：如果忽略了这些提示信息而进行错误地操作可能会造成人员的死亡或严重伤害。</p> <p>This indicates contents for which the possibility of human death or severe injury in case of handling under disregard of this indication can be assumed.</p>
 <b>小心</b> <b>Caution</b>	<p>此标示表明：如果忽略了这些提示信息而进行错误地操作可能会造成人员伤害或者材料损失。</p> <p>This indicates contents for which the possibility of human injury or the possibility of material damage in case of handling under disregard of this indication can be assumed.</p>

### 冷凝器The Condenser Unit:

#### **移机Moving Machinery**

KRC机组的某些组件可以自动启动，所以在维修和保养之前所有的电子器件必须与电源分离开。

KRC Units have components that may start up automatically. The KRC must have all electrical items isolated before any services or repairs are carried out.



#### **禁止吸烟No Smoking**

百尔公司建议 KRC 机组 15 米以内禁止吸烟。

Beijer Ref recommends No Smoking within a distance of 15 meters of the KRC Unit.



#### **警告Warning –** **电力危险Electrical Hazard**

所有的电气工作必须由有资质的电工来实施。

A qualified Electrician must carry out all electrical work.

在检查、诊断、移动和更换装配机组风扇的时候，必须确保 KRC 断电。在未断电之前务必要不要进行一切电气操作。

Always isolate the power to the KRC before checking, diagnosing, removing and replacing the fan assembly units. Never work on any electrical item without isolating or disconnecting the power supply.

**小心Caution—机组加压Unit Pressurized**

在制造 WRC 机组的过程中，有必要对其进行加压测试。KRC 机组内部本身有压力，为连接管道和线路启封此机组时务必小心。

In the manufacturing of this product it is essential to pressurize and test the KRC. This unit may have some pressure within. Please take care when unsealing the unit to fit the pipe and line connections.

**小心Caution –制冷剂类型Refrigerant Type**

设计机组都是在氟利昂制冷剂下高效运行的。任何情况机组都不能使用气态氨、气态烃类或 CO<sub>2</sub> 气体。

The Condenser is designed to work effectively using fluorocarbon refrigerants. Under no circumstances can Ammonia based gas, Hydrocarbon based gas, or CO<sub>2</sub> gas, be used in this product.

制冷剂类型：HCFC和HFC（参考“标准工况”经审核的氟利昂制冷剂）

Refrigerant type: HCFC and HFC (refer to “Standard Conditions” for approved fluorocarbon refrigerants)

对于水和乙二醇制冷剂请咨询百尔销售代表处。

For Water and Glycol applications please refer to your [Beijer Ref sales representative](#).

**Caution – Sharp Edges** 小心-锋利的边角

此冷凝器是由钣金制造成的，所以在制造过程中必须保证边缘的隐蔽性。在一些情况下如果不能确保边缘的隐蔽，那么在接近或接触KRC时一定要非常注意安全。

The Condenser is manufactured with sheet metal and in this process all care is taken to ensure the edges are concealed. In some circumstances this cannot occur. Please take care when accessing in or around the KRC.

**Warning – Qualified Personnel** 警告-人员资质

所有为 KRC 安装、调试和服务的人员必须是有资质，训练有素的人员。

Condensers may only be installed, commissioned and serviced by qualified and trained personnel.

**劳保装备 Personal Protective Equipment**

百尔公司建议所有进行 KRC 机组操作或在其周围工作的人员穿着合适的劳保装备（PPE），以此作为次级保护措施。

Beijer Ref recommends as a secondary safety precaution that all personnel working in and around the Condenser wear appropriate Personal Protective Equipment (PPE).

**起重及安装注意事项 Lifting & Installation Precautions**

参考6,7,8页。

Refer to page 6, 7 and 8.

## 目的PURPOSE-

KRC远置式冷凝器是百尔制冷的标准OEM产品，我们目的是为典型的商业制冷应用提供氟制冷剂冷凝器，并适合在室内或室外环境中使用。并不适用于有害的，腐蚀性或易燃环境。如“海洋”的环境条件是有腐蚀性的；在此环境下使用之前请咨询百尔。

KRC remote condensers are standard OEM products of Beijer Ref. They are intended to provide for the condensation of fluorocarbon refrigerant for typical commercial sized refrigeration applications, and are suitable for use in indoor or outdoor environments. They are not intended for environments that may have harmful, corrosive or flammable atmospheres. 'Marine' environments are considered corrosive; please consult Beijer Ref before installing in this environment.

## 标准设计工况Standard Design Conditions

KRCxxx-xPH型号的冷凝器是按3650kPa的最大运行压力，20K的最大KTD，5K的最小KTD的条件设计的（更多的具体建议请参阅相关技术数据文献）。在此范围之外的特殊工况可能需要特殊的循环回路-请咨询当地百尔代表处。

KRCxxx-xPH condensers are designed to operate with a maximum operating pressure of 3650kPag, with a maximum KTD of 20K, and a minimum of 5K (please refer to the relevant technical data literature for more specific recommendations). Special circuiting may be needed to achieve specific conditions outside of these limits- please refer to your Beijer Ref representative.

系统设计必须符合AS/NZS1677.2:1998（修订本）。

System design must conform to AS/NZS1677.2:1998 (as amended).

电机不能长时间运行在空气温度高于风扇制造商所允许的温度，请参考相关技术资料。

Motors must NOT be subject to air-over-motor temperatures greater than allowed by the fan manufacturer(s). Please refer to the relevant technical literature.

### 经审核的制冷剂 APPROVED REFRIGERANTS-

R507/R404A/R22/R134a是经审核的可用于KRC远置式冷凝器的制冷剂

R507/R404A/R22/R134a are approved for use in all KRC remote condensers.

**R410A**是经审核的仅用于从2011年11月制造的KRCxxx-xPH型号的冷凝器。

**R410A is approved for use ONLY in KRCxxx-xPH models from Nov 2011 manufacture.**

更多细节请参考相关技术资料。

For more details, please refer to the relevant technical literature.

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**最大运行压力 MAXIMUM WORKING PRESSURE-**

KRCxxx-xPH最大的运行压力是3650kPag。

KRCxxx-xPH models have a maximum working pressure of 3650kPag.

标准冷凝器不能用氨（NH<sub>3</sub>）作为制冷剂。

Standard condensers cannot use Ammonia (NH<sub>3</sub>) as refrigerant.

对于特殊设计需求（非标工况或乙二醇制冷剂等），请咨询当地百尔代表处或拨打我们的客服专线 0510-85282020为您提供最新的信息资源。

For special design requirements (non-standard conditions and/or refrigerants such as Glycol, etc.), please inquire with your local representatives and/or Beijer Ref local branches, or call our customer service line on 0510-85282020 for your nearest available information resources.

## 图纸Drawings

本手册中所用的图纸是通用性的，可能无法准确显示实际机组的外观。

Drawings used in this manual are general in nature and may not accurately show the appearance of actual units.

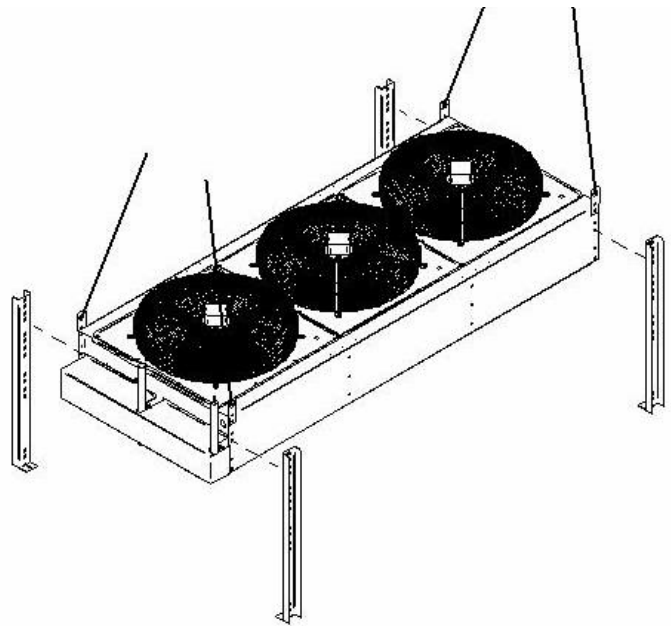


1. 吊装Lifting

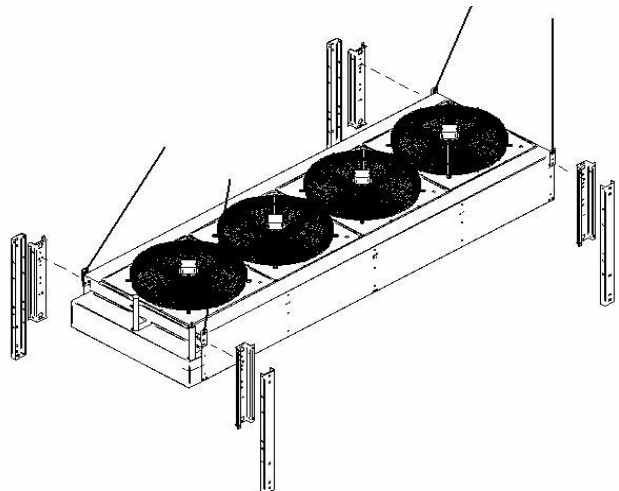
型号 MODEL NUMBER	重量 APPROX WEIGHT kg	
	净重 UNPACKED	毛重 PACKED
KRC80-4PH-C	29	34
KRC107-4PH-C	34	39
KRC134-4PH-C	46	51
KRC137-6PH-C	51	56
KRC181-6PH-C	68	85
KRC254-6PH-C	93	110
KRC164-4PH-C	51	56
KRC213-4PH-C	68	85
KRC317-4PH-C	93	110
KRC389-6PH-C	129	153
KRC457-6PH-C	158	248
KRC574-6PH-C	186	276

推荐吊装位置及大概重量

Recommended lifting points and approx. weights



型号 MODEL NUMBER	大概重量 APPROX WEIGHT kg	
	净重 UNPACKED	毛重 PACKED
KRC693-6PH-C	208	328
KRC861-4PH-C	263	383



**2. 机组规格尺寸 Unit Dimensions**

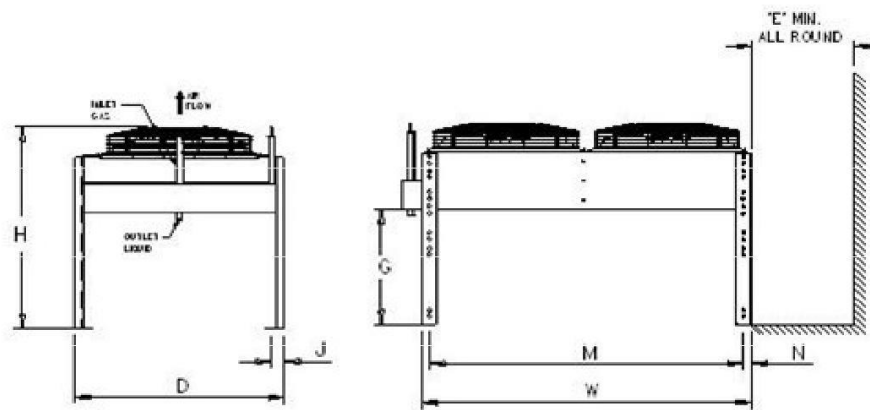
**2.1 KRC尺寸数据 KRC dimensional data**

型号 PRODUCT NUMBER	风扇 FAN Ø X QTY.	A	B	C	D	E	F	G	H	J	K	L	M	N	P	W		
KRC80-4PH-C	Ø350 X 2	452	48	80	470	500	393	390	705	40	165	951	877	25	390	927		
KRC107-4PH-C					570		520											
					670		647										725	
KRC134-4PH-C	Ø500 X 1	452	48	80	670	500	647	390	745	40	165	951	877	25	390	927		
KRC137-6PH-C					849		788										220	
KRC164-4PH-C					954		915										255	
KRC181-6PH-C	Ø500 X 2	766	54	75	849	500	788	605	1020	62	220	1262	1165	38	605	1241		
KRC213-4PH-C					954		915										255	
KRC254-6PH-C					1004		965										605	220
	Ø630 X 2	766	54	75	1004	500	965	605	1050	62	220	1675	1505	38	605	1581		
KRC317-4PH-C					1004		965										605	220
					1004		965										605	220
KRC389-6PH-C	Ø630 X 3	766	54	75	1004	500	965	605	1050	62	220	1675	1505	38	605	1581		
KRC457-6PH-C					1004		965										605	220
					1004		965										605	220
KRC574-6PH-C	Ø630 X 4	840	80	80	1107	750	1065	610	1050	18	440	3205	3003	44	610	3091		
KRC693-6PH-C																	1065	610

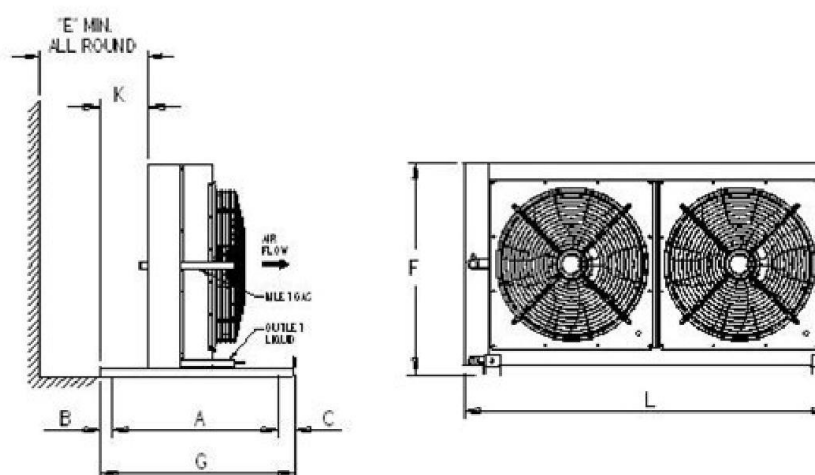
## 2.2 KRC尺寸图 KRC dimensional diagrams

### KRC80到KRC861 KRC80 To KRC861

#### 顶排风式 (图A) VERTICAL AIR FLOW (Diagram A)



#### 侧排风式 (图A) HORIZONTAL AIRFLOW (Diagram A)



注: KRC137-6PH-C和KRC164-4PH-C均是 $\varnothing 500$ 的单风扇型号

Note : Both KRC137-6PH-C and KRC164-4PH-C are single fan  $\varnothing 500$  models

### 3. Electrical Connections 电气接线

**警告Warning:**电压220V ± 10% (标准机组) **Electrical 220Volt ± 10% (standard units)**

所有的电气工作必须由有资质的电工来实施。

A qualified Electrician must carry out all electrical work.

一般接线细节请参考14-16页，参考型号对应的CL图纸

**For general wiring please refer page 14 to 16 for details. Refer model number for corresponding "CL" drawing.**

#### 热过载保护 **MOTORS WITH THERMAL OVERLOAD PROTECTION-**

KRC远置式冷凝器均配有电机过载保护

KRC remote condenser fans are all equipped with thermal overload motor protection.

**警告**—如果触发了过载保护，风扇可能会不正常启动。不要以为风扇在断电的情况下是不运转的，在拆卸接线盒盖或对风扇进行任何操作时，要检查是否存在带电电压。

**Warning-** Non-running fans may restart unexpectedly if the overload has been activated. Do not assume a fan that is not running has been disconnected from the power supply. Always check for the presence of live voltage before removing the junction box lid and/or performing any work on the fans.

电机配有外接过载保护

#### **MOTORS WITH EXTERNALLY WIRED OVERLOADS-**

350mm直径的单相风扇配有内部过载保护，其可直接切断电机供电。

350mm diameter single phase fans are equipped with internally wired overloads, which cut the power supply to the motor directly.

500mm和630mm的单相风扇配有外接过载保护，这些过载保护仅当接到外部控制回路上时才能控制电机供电。

500mm and 630mm single fans are equipped with externally wired overloads. These overloads will only control power to the motor when wired in to an external control circuit.

电气接线依据于风扇数量具体细节请参阅如下电气接线图。

The wiring required depends on how many fans are present. Please refer to the following wiring schematic diagrams for details.

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**KRC**

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外接热过载接线错误在一定程度上可能会导致的电机损坏，将不提供机组保修。  
Failure to wire the externally connected overloads in a suitable manner may lead to unnecessary failure of the motor and voiding of the unit warranty.

请依据冷凝器或风扇的接线排布图来确定机组电机的供电方式，并请参阅以下合适的接线图

PLEASE REFER TO THE SERIAL PLATE OF THE CONDENSER AND/OR FANS TO DETERMINE THE POWER SUPPLY OF THE FANS ON THE SUPPLIED UNIT, AND REFER TO THE APPROPRIATE DIAGRAMS ON THE FOLLOWING PAGES.

**型号MODEL:**

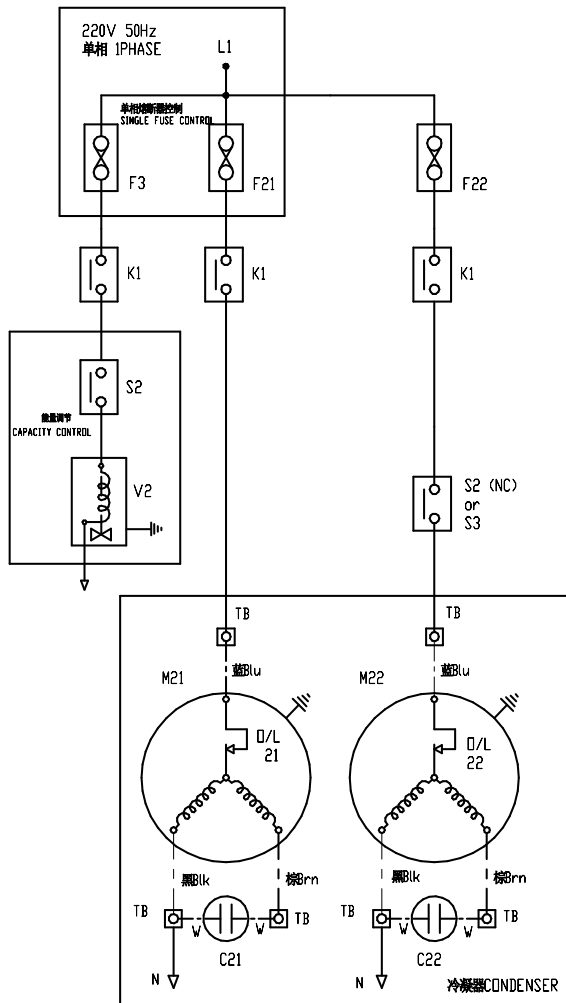
IFAN--- KRC137-6PH-C; KRC164-4PH-C;  
 2FANS--- KRC80-4PH-C; KRC107-4PH-C; KRC134-4PH-C; KRC181-6PH-C;  
 KRC213-4PH-C; KRC254-6PH-C; KRC317-4PH-C; KRC389-6P-C  
 -220V 1Ø 风扇电机 220V 1Ø 1 SPEED PSC FAN MOTORS  
 (内接过载保护 INTERNALLY PROTECTED)  
 冷凝压力调节或能量调节 HEAD PRESSURE OR CAPACITY CONTROL

ISSUE	DATE	DETAILS OF CHANGE	EN No.	BY	CHKD
A	15.05.09	PROD. RELEASE	40079	TN	
B	23.11.11	R410型号升级 MODEL NUMBER UPDATED FOR R410A	50059	TT	

**注意事项NOTES:**

- 按照要求接线  
EARTH ALL NECESSARY ITEMS AS REQUIRED
- 所有的接线必须符合相关的标准和规定  
ALL WIRING MUST BE DONE IN ACCORDANCE WITH RELEVANT STANDARDS AND CODES
- 所有控制器和电磁阀线圈的电压为220V
- 维修时应先切断电源  
FOR SAFE SERVICING.

THIS DIAGRAM INDICATES GENERAL CONTROL REQUIREMENTS ONLY. IT DOES NOT INDICATE A COMPLETE CONTROL SYSTEM, AND AS SUCH ANY FURTHER CONTROL REQUIREMENTS REMAIN THE SOLE RESPONSIBILITY OF THE INSTALLER



**重要事项IMPORTANT NOTE !**

此图仅作为一般性参考，不代表克拉克的任何设计意见或建议  
 所有外部接线由安装人员全权负责

This wiring diagram is for general reference only and does not imply any design recommendation or approval by Heatcraft. All external wiring is the sole responsibility of the installer

**图例LEGEND**

— 外接线 (客户) EXTERNAL WIRING (by others)	D/L 21 = 过载继电器 (M21)
— 内接线 INTERNAL WIRING	D/L 22 = 过载继电器 (M22)
⏏ 常开触点 NORMALLY OPEN CONTACTS	F2 = 控制回路熔断器 CONTROL FUSE
⏏ 常闭触点 NORMALLY CLOSED CONTACTS	F31 = 风扇熔断器 FAN MOTOR FUSE
⏏ TB = 接线端子 TERMINAL BLOCK	F32 = 风扇熔断器 (第二风扇) FAN MOTOR FUSE (2ND FAN)
⏏ 零线 NEUTRAL CONNECTION	V2 = 能量调节阀 (带) CAP. CONTROL SOLENOID (NC VALVE) (电磁阀线圈 ENERGISE TO UNLOAD)
⏏ 接地线 EARTH CONNECTION	C21 = 电容器 (M21)
M21 = 风扇电机 FAN MOTOR	C22 = 电容器 (M22)
M22 = 第二风扇电机 SECOND FAN MOTOR	
K1 = 主接触器 (压缩机) MAIN CONTACTOR (M/C) (压缩机 COMPRESSOR)	
S2 = 能量调节阀 CAPACITY CONTROL DEVICE	
S3 = 冷凝风扇第二风扇控制 (M.T. TO S2)	

设计 DRAWN TN	校核 CHECKED	零件号 PART No. CL263-1
日期 DATE 15.05.09	批准 APPROVED	取件 SUPERSEDES
图号 A4	日期 DATE 15.05.09	下一零件号 NEXT ASSY.
比例 SCALE	图号 A4	零件号 CL263-1
	图号 A4	零件号 CL263-1
	图号 A4	零件号 CL263-1

标题 TITLE	KRC远置式冷凝器 'KRC' REMOTE CONDENSER 通用接线图 GENERAL WIRING DIAGRAM 冷凝风扇电机 CONDENSER FAN MOTORS
设计 DRAWN TN	校核 CHECKED
日期 DATE 15.05.09	零件号 PART No. CL263-1
图号 A4	零件号 CL263-1
比例 SCALE	零件号 CL263-1

型号 MODELS: 2 风扇 220V IPH 风扇电机 2 FANS 220V IPH FANS MOTOR  
 - KRC164-4PH-C, KRC213-4PH-C, KRC317-4PH-C, KRC137-6PH-C,  
 KRC181-6PH-C, KRC254-6PH-C & KRC389-6PH-C  
 外接风扇热过载 EXTERNALLY WIRED FAN OVERLOAD

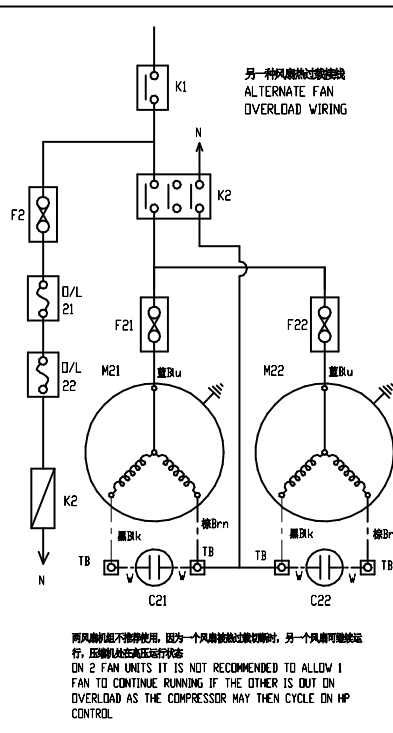
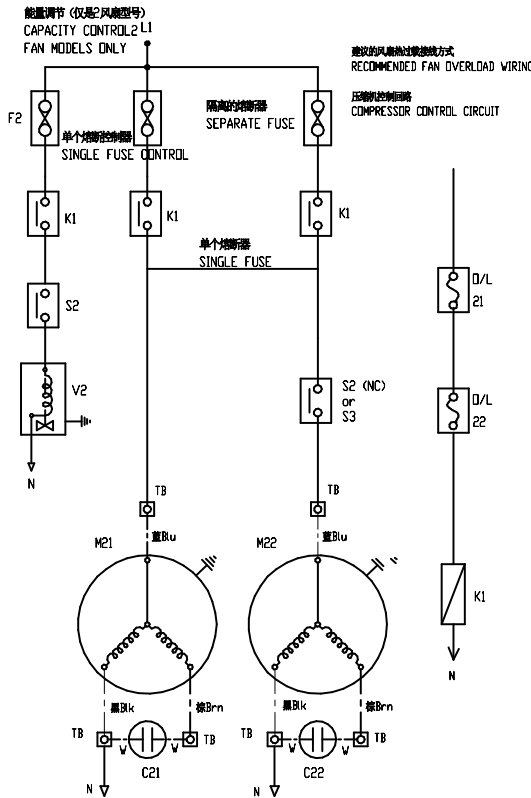
ISSUE	DATE	DETAILS OF CHANGE	EN No.	BY
A	29.10.09	PROD. RELEASE	41129	
B	23.11.11	R410 型号升级 MODEL NUMBER UPDATED FOR R410A	50059	TT

**注意事项 NOTES:**

- 按照要求接线  
EARTH ALL NECESSARY ITEMS AS REQUIRED
- 所有的接线必须符合相关的标准和规范  
ALL WIRING MUST BE DONE IN ACCORDANCE WITH RELEVANT STANDARDS AND CODES
- 所有控制器和电磁阀的电压为220V  
ALL CONTROLS AND SOLENOIDS 220 VOLT COILS.
- 维护时必须断电  
ISOLATION SWITCHES MUST BE USED WHERE NEEDED FOR SAFE SERVICING.
- 此图仅表示一般控制要求, 它没有显示完整的控制系统, 因此进一步的控制要求由安装人员全权负责。  
THIS DIAGRAM INDICATES GENERAL CONTROL REQUIREMENTS ONLY. IT DOES NOT INDICATE A COMPLETE CONTROL SYSTEM, AND AS SUCH ANY FURTHER CONTROL REQUIREMENTS REMAIN THE SOLE RESPONSIBILITY OF THE INSTALLER
- 风扇电机的内部热过载通过接触器或其他控制电路控制风扇供电, 例如压缩机控制电路。  
FAN MOTOR INTERNAL O/L LOADS WILL ONLY CONTROL FAN SUPPLY BY CONTACTOR OR OTHER CONTROL CONNECTION - EG COMPRESSOR CONTROL CIRCUIT.

**重要事项 IMPORTANT NOTE !**

此图仅作为一般性参考, 不代表任何设计意见或建议  
所有外部接线由安装人员全权负责  
This wiring diagram is for general reference only and does not imply any design recommendation or approval by Heatcraft. All external wiring is the sole responsibility of the installer



两风扇的组不建议使用, 因为一个风扇热过载故障时, 另一个风扇可能继续运行, 压缩机在高压下运行。  
ON 2 FAN UNITS IT IS NOT RECOMMENDED TO ALLOW 1 FAN TO CONTINUE RUNNING IF THE OTHER IS OUT ON OVERLOAD AS THE COMPRESSOR MAY THEN CYCLE ON HP CONTROL

**图例 LEGEND**

— 外接接线 (由他人) EXTERNAL WIRING (by others)	— 内部接线 INTERNAL WIRING
常开触点 NORMALLY OPEN CONTACTS	常闭触点 NORMALLY CLOSED CONTACTS
TB = 接线端子 TERMINAL BLOCK	N = 接地中性点 CONNECTION
— 接地 EARTH CONNECTION	
M21 = 风扇电机 FAN MOTOR	M22 = 第二风扇电机 SECOND FAN MOTOR
K1 = 主接触器 MAIN CONTACTOR (M)	(压缩机 COMPRESSOR)
S2 = 容量调节 CAPACITY CONTROL DEVICE	
S3 = 外接风扇过载 FAN CONTROL (M.T. TO S2)	

D/L 21 = 热过载 (M21)	D/L 22 = 热过载 (M22)
F2 = 控制回路熔断器 CONTROL FUSE	F31 = 风扇熔断器 FAN MOTOR FUSE
F32 = 风扇熔断器 (第二风扇) FAN MOTOR FUSE (2ND FAN)	V2 = 容量调节 (常用) CAP. CONTROL SOLENOID (NC VALVE)
	(电磁阀 ENERGISE TO UNLOAD)
C21 = 电容 CAPACITOR (M21)	C22 = 电容 CAPACITOR (M22)

设计 DRAWN	TN	表面处理 FINISH
检查 CHECKED	零件号 PART No.	CL263-4
批准 APPROVED	取代 SUPERSEDES	
日期 DATE 15.05.09	下一零件 NEXT ASSY.	
A4	图号 No.	CL263-4
比例 SCALE	页 SHEET 1	下一页 NEXT 1

型号 MODELS: 220V IPH 风扇电机 220V IPH FANS MOTOR  
 3 FANS - KRC457-6PH-C, KRC574-6PH-C  
 4 FANS - KRC693-6PH-C, KRC861-6PH-C

REV	DATE	DESCRIPTION	EN No.	BY
A	29.10.09	PROD. RELEASE	41129	TN
B	11.11.11	KRC718-6P, KRC778-6P REMOVED	50053	TT
C	23.11.11	MODEL NUMBER UPDATED FOR RA10A	50059	TT

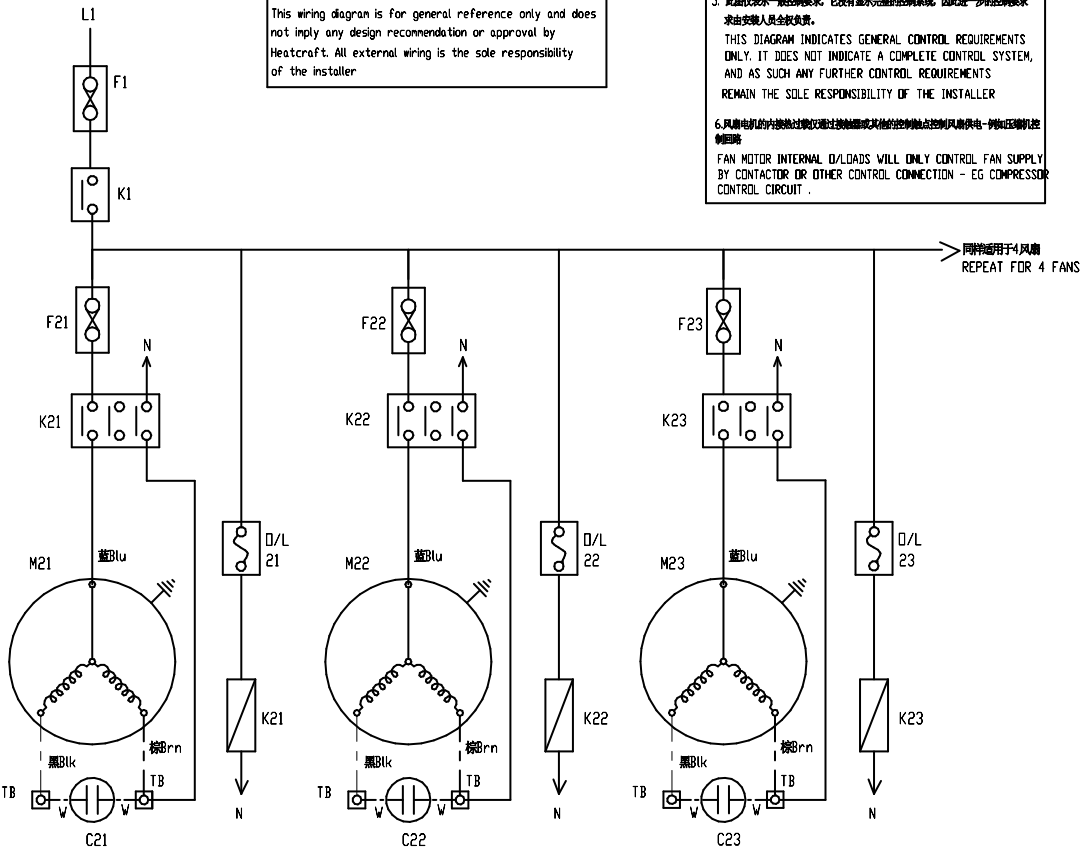
外接风扇热过载  
 EXTERNALLY WIRED FAN OVERLOAD

**重要事项 IMPORTANT NOTE !**

此图仅作为一般性参考，不代表西克的任何设计意见或建议。  
 所有外部接线由安装人员全权负责。  
 This wiring diagram is for general reference only and does not imply any design recommendation or approval by Heatcraft. All external wiring is the sole responsibility of the installer.

**注意事项 NOTES:**

- 按照要求接地线  
 EARTH ALL NECESSARY ITEMS AS REQUIRED
- 所有的接线必须符合相关的标准和规范  
 ALL WIRING MUST BE DONE IN ACCORDANCE WITH RELEVANT STANDARDS AND CODES
- 所有控制器和电磁阀线圈的电压为220V  
 ALL CONTROLS AND SOLENOIDS 220 VOLT COILS.
- 维护时拉断隔离电源  
 ISOLATION SWITCHES MUST BE USED WHERE NEEDED FOR SAFE SERVICING.
- 此图仅表示一般控制要求，它没有显示完整的控制系统，因此进一步的控制要求由安装人员全权负责。  
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- 风扇电机的内部热过载继电器或其他控制触点控制风扇供电，例如压缩机控制电路。  
 FAN MOTOR INTERNAL O/L LOADS WILL ONLY CONTROL FAN SUPPLY BY CONTACTOR OR OTHER CONTROL CONNECTION - EG COMPRESSOR CONTROL CIRCUIT.



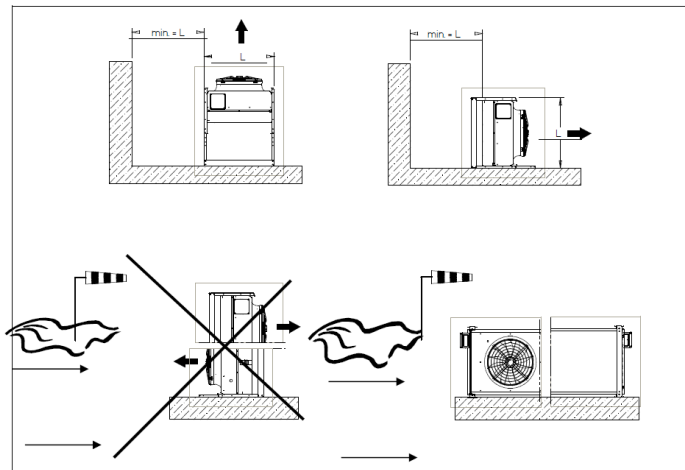
图例 LEGEND	
— 外接线路 (由外) EXTERNAL WIRING (by others)	D/L 21 = 热过载 (OVERLOAD (M21))
— 内部线路 INTERNAL WIRING	D/L 22 = 热过载 (OVERLOAD (M22), ETC)
⊖ 常开触点 NORMALLY OPEN CONTACTS	F2 = 控制回路熔断器 CONTROL FUSE
⊕ 常闭触点 NORMALLY CLOSED CONTACTS	F21 = 风扇电机熔断器 FAN MOTOR FUSE
TB = 接线端子终端块	F22 = 风扇电机熔断器 FAN MOTOR FUSE, ETC
N 中性线 NEUTRAL CONNECTION	V2 = 容量控制 (容量) CAP. CONTROL SOLENOID (O/C VALVE)
⊕ 接地 EARTH CONNECTION	(电磁阀) (HERSE TO UNLOAD)
M21 = 风扇电机 FAN MOTOR	C21 = 电容 CAPACITOR (M21)
M22 = 第二风扇电机 SECOND FAN MOTOR	C22 = 电容 CAPACITOR (M22), ETC
K1 = 主接触器 MAIN CONTACTOR (M/C)	
(压缩机) (COMPRESSOR)	
S2 = 容量控制 CAPACITY CONTROL DEVICE	
S3 = 风扇电机容量控制 FAN CONTROL (A.L.T. TO S2)	

标题	
KRC远置式冷凝器 "KRC" REMOTE CONDENSER	
通用接线图 GENERAL WIRING DIAGRAM	
冷凝器风扇电机 CONDENSER FAN MOTORS	
设计 DRAWN TN	审阅 INSH
校核 CHECKED	零件号 PART No. CL263-5
批准 APPROVED	替代 SUPERSEDES ---
日期 DATE 15.05.09	下一零件 NEXT ASSY. ---
A4	零件号 CL263-5
比例 SCALE	页 SHEET 1
	下一页 NEXT 1



#### 4. 安装场地指导 Lay out considerations (1\*)



(1\*) min. =L: 同时也是独立运行的机组之间的最小距离

Minimum distance advisable between independently operated units as well

#### 5. 电机维修 Motor maintenance

我们选用的轴流风扇是终身润滑，所以是免维修的。定期检查，并在必要时进行清洁，以防止因污垢积聚而造成的不平衡。以定期检查的方式来减少灰尘量，从而实现电动机的稳定运行。

Due to the selection of bearings with “lifetime lubrication”, the axial fan is maintenance-free. Regular inspection, and cleaning where necessary, is required to prevent imbalance due to build-up of dirt. Achieve smooth running by carrying out periodic maintenance to limit level of dirt.

如果风扇在潮湿的空气中长期停机，每月至少启动两小时来驱赶走电动机中的湿气（因为湿气可能会在电机里凝结）。

If a fan is stationary for long periods in a humid atmosphere, it should be switched ON for minimum of two hours every month to remove any moisture that may have condensed within the motor.

维修操作必须由训练有素的维修人员来实施！

Maintenance operation is only to be performed by trained service personnel!

在进行维修和保养的过程中，请遵守安全操作和章程。

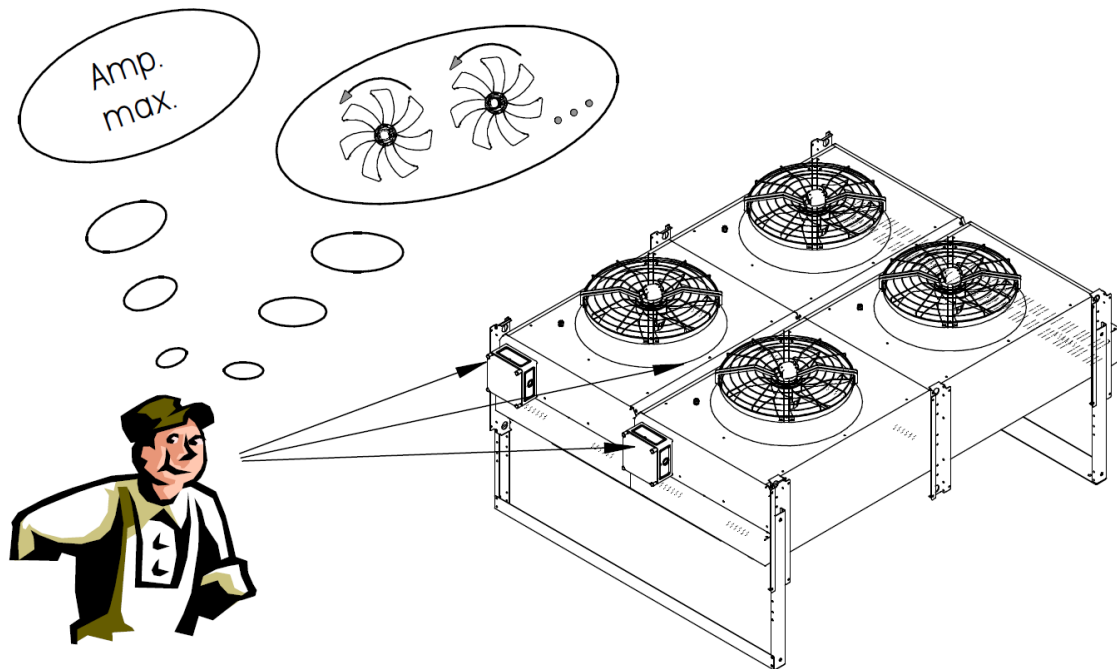
Please observe the appropriate safe operating procedures and safety regulations for all maintenance and service work.

## 6. 启动Start up

**Warning警告****Electrical电力危险**

### 安装步骤Installation Checklist

- 检验引入的电压，电流，温度是否与额定参数相匹配  
Verify that the incoming voltage, amperages and temperatures match the rating plate
- 拉紧所有场地和工厂的配线  
Tighten all field and factory wiring
- 核验远置式冷凝器风扇的转向  
Check rotation of remote condenser fans



## 7. 清洁Cleaning

盘管需要保持清洁，以便充分发挥其换热效率，减少腐蚀的影响，延长风扇的使用寿命。

A coil which is kept cleaning, ensures full benefit of the coil thermal efficiency, reduces the effects of corrosion, and increases the lifetime of the fan assemblies.

如果清洁过程处理不到位（例如喷雾角度错误或压力过大），将会弯曲甚至摧毁翅片从而损坏盘管。清洁过程并不很复杂，但是只有经过训练的人员正确使用清洁器具才可以完成这个任务。

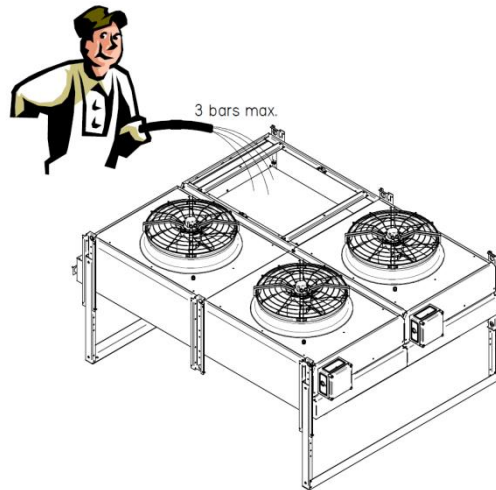
Cleaning, if done improperly (for instance, using the wrong spray angle or excessive pressure), can damage coils by bending the fins or even breaking them. The task isn't very complicated, but only people trained in the proper use of the necessary equipment should do it.

在确定保养计划时，应该根据设备所在位置来考虑保养次数。在接近沿海地区和工业污染物的空气中时可能会改变要求。通常建议每隔三个月清洗一次冷凝器，然而在恶劣环境下需要每月检查和清洁。

Frequency- Consideration should be given to the location of the equipment when determining maintenance schedules. Proximity to coastal areas and industrial contaminants etc. in the atmosphere will change the requirements. It is normally recommended to clean the condenser on a 3 monthly interval, however harsh environments may require monthly inspections and cleaning where indicated.

正确的冷凝器清洁包括详细的检查并通过盘管清洁前后的温差变化来检验冷凝器清洁的效果。这些测试应该以报告的形式给到产品的使用者和检验者。建议保留保养日志簿，以确保正常保修。

Proper condenser cleaning involves detailed inspection and before-and-after measurements of the temperature difference across the coil to verify the effectiveness of the cleaning. These measurements should be included in a report to the owner or supervisor. It is recommended that a maintenance log book should be kept to ensure warranty provisions are maintained.



**BEIJER REF**

**KRC**  
远置式冷凝器  
*Remote Condenser*

零件号Part No.: YAL0002-43-1

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版本Issue: C



**小心Caution**

冷凝器翅片非常锋利，容易被弯曲。机组正常运行时，冷凝器管道比较热，可能会烫伤手，因此务必小心，避免手直接接触管道。

Condenser fins are sharp and can bend easily. Condenser tubing gets hot enough during normal operation to burn your hand. Use care and do not touch the tubing.

在清洁盘管的时候，使用清水，不能使用碱性太强的洗涤剂，不要机械式地清洁翅片

For the cleaning of coils, wash with water and do not use strong alkaline cleaners or do mechanical cleaning of fins.

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调试说明 **COMMISSIONING NOTES**

机组序列号 **UNIT SERIAL NUMBER**

安装/调试日期 **INSTALLATION/COMMISSIONING DATE(S)**