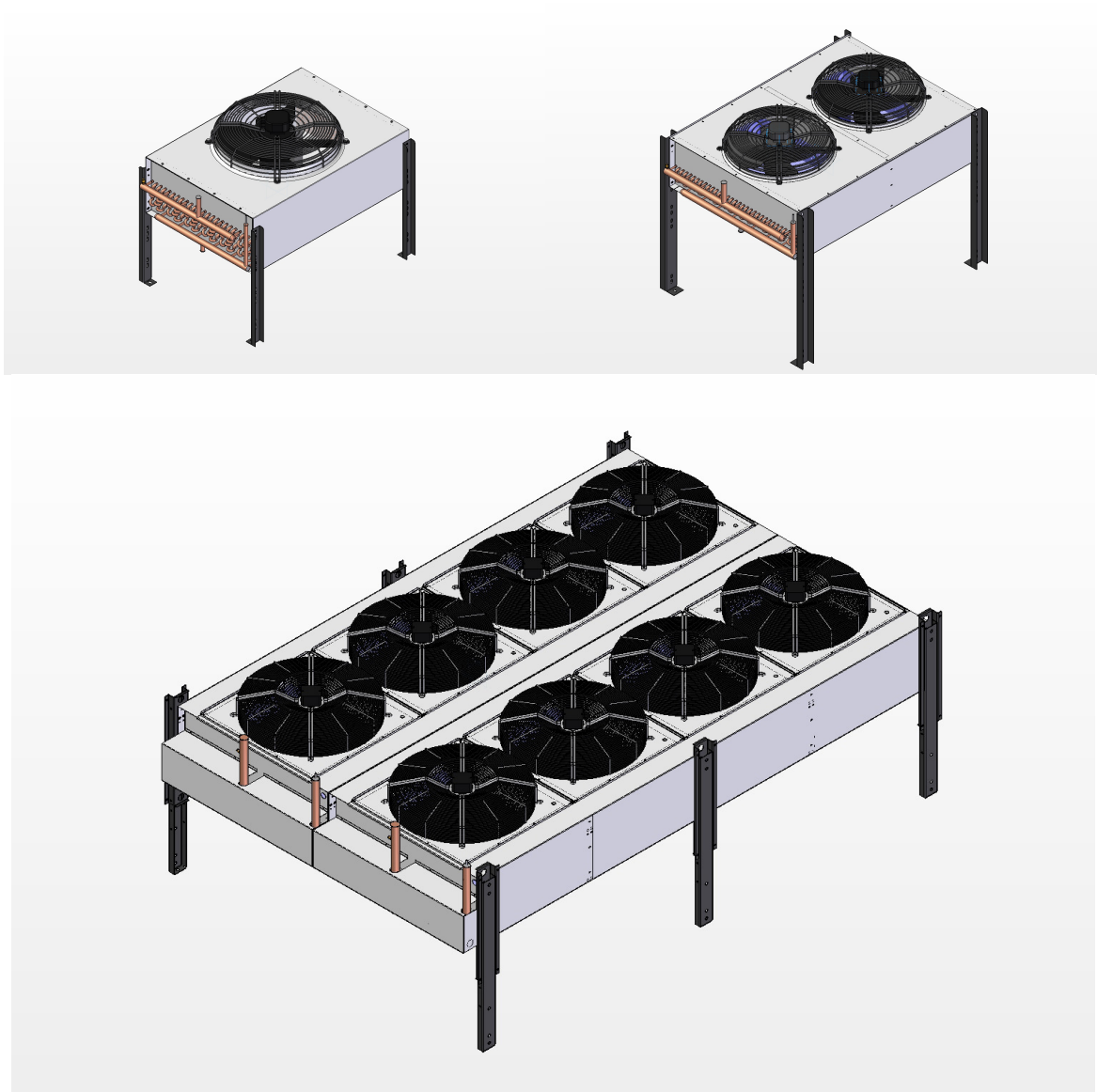


KRC

Instruction Booklet



CONTENTS	PAGE
Introduction	3
A Important safety information and instructions	4
PURPOSE-	6
Standard Design Conditions.....	6
1. Lifting	7
Tilt over to ground for twin coils unit	8
2. Unit Dimensions	9
2.1 KRC dimensional data	9
2.2 KRC dimensional diagrams.....	10
3. Electrical Connections.....	13
4. Lay out considerations	22
5. Motor maintenance	22
6. Start up.....	23
7. Cleaning	24

Introduction



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 Kirby requirements.

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.

If you have any concerns regarding the performance and use of this unit, please contact Kirby.

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

Kirby 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.

 <p>Warning</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>
 <p>Caution</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>

The Condenser unit:

 **Moving Machinery**

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



No Smoking

Kirby recommends No Smoking within a distance of 15 metres of the KRC Unit.



Warning –



Electrical Hazard

A qualified Electrician must carry out all electrical work.

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.



Caution – Unit Pressurised

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.



Caution – Refrigerant Type

The Condenser is designed to work effectively using fluorocarbon refrigerants. Under no circumstances can Ammonia based gas, Hydrocarbon based gas, or CO2 gas, be used in this product.

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

For Water and Glycol applications please refer to your Kirby technical representative.



Caution – Sharp Edges

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

Condenser's may only be installed, commissioned and serviced by qualified and trained personnel .



Personal Protective Equipment

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

Lifting & Installation Precautions

Refer to page 6, 7 and 8.



Installation Instructions.

This product must be installed and maintained in accordance with the following:

- AS/NZS5149:2016 – Parts 3 & 4 (as applicable)
- AS4041:1998 – Pressure Piping
- Refrigerant Handling Code of Practice, Part 2
- Useful information-
- Ozone Protection and Synthetic Greenhouse Gas Management Act 1989 (and amendments) and Regulations 1995
- [AIRAH DA12 – Energy Efficient Coolrooms](#)
- AIRAH, DA19 – HVAC&R Maintenance
- CIBSE Code M - Commissioning Management

NOTE- There may be other applicable Codes and Standards that must be considered. It is the responsibility of the Installer and Owner to ensure all requirements are considered and complied with.

PURPOSE-

KRC remote condensers are standard OEM products of Kirby. 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 Kirby before installing in this environment.

Standard Design Conditions

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 Kirby representative.

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.

APPROVED REFRIGERANTS-

R404A/R448A/R449A/R134a/R513A/R450A and R410A are approved for use in all **KRCxxx-xPH models.**

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

MAXIMUM WORKING PRESSURE-

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

KRCxxx-xxH condensers cannot use Ammonia (NH₃, R717), Carbon dioxide (R744), or hydrocarbons, as refrigerant.

For special design requirements such as non standard conditions and/or fluid coolers (Glycol, oil, etc), please inquire with your local representatives and/or Kirby local branches

MAXIMUM ALLOWABLE PRESSURE (PS/PSS)

UNIT DATA	
PS (kPag)	PSS (kPag)
3650	n/a

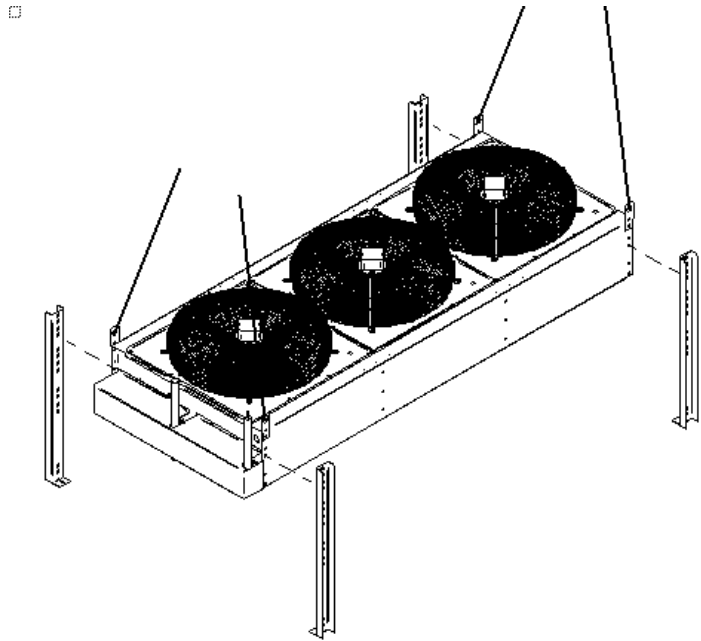
Drawings

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

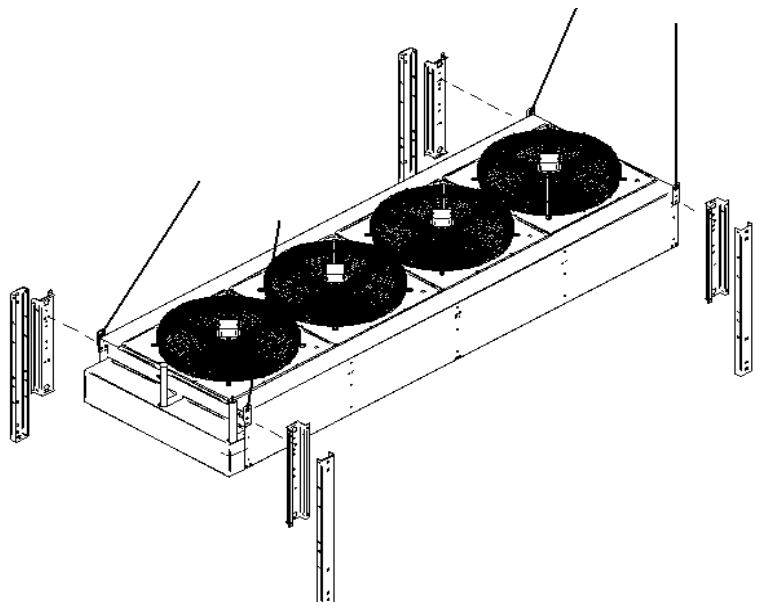
1. Lifting

Recommended lifting points and approx. weights

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

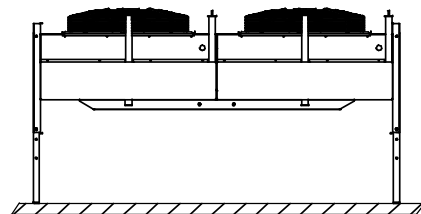
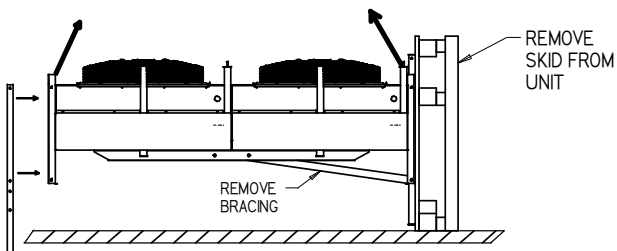
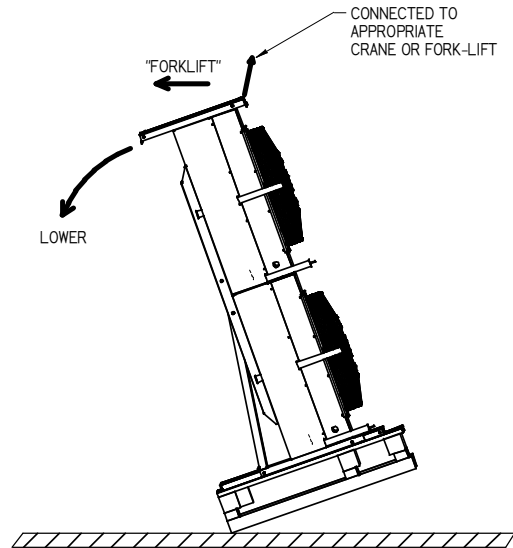
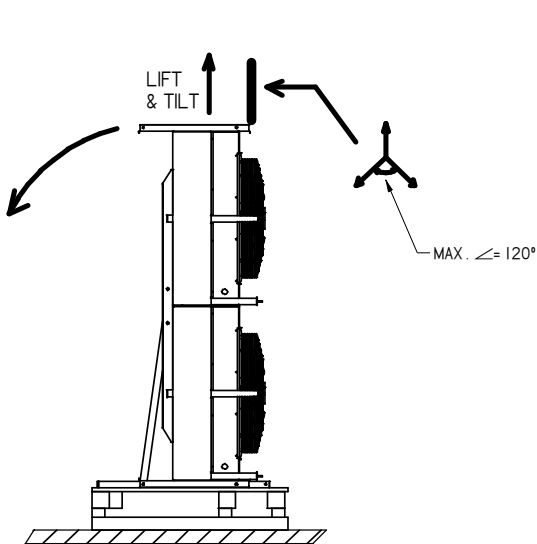


MODEL NUMBER	APPROX WEIGHT kg	
	UN-PACKED	PACKED
KRC693-6PH	208	328
KRC861-4PH	263	383



Tilt over to ground for twin coils unit vertical airflow only

MODEL NUMBER	APPROX WEIGHT kg	
	UN-PACKED	PACKED
KRC778-6PH	271	311
KRC914-6PH	309	369
KRC1148-6PH	365	425
KRC1386-6PH	501	581
KRC1722-6PH	612	692



FINAL RESTING POSITION

2. Unit Dimensions

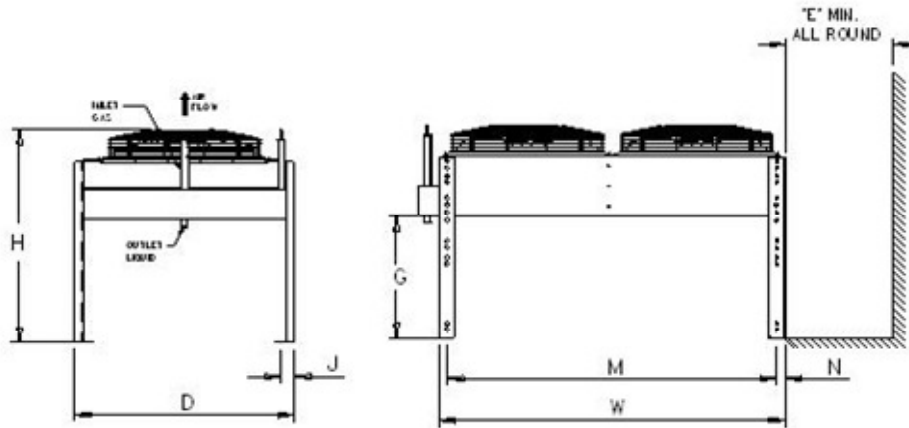
2.1 KRC dimensional data

PRODUCT NUMBER	FAN Ø X QTY.	A	B	C	D	E	F	G	H	J	K	L	M	N	P	W
SINGLE CIRCUIT																
KRC80-4PH	Ø350 X 2	452	48	80	470	500	393	390	705	40	165	951	877	25	390	927
KRC107-4PH					570		520		725							
KRC134-4PH	Ø500 X 1	766	54	75	670	788	605	1020	745	62	220	1262	1165	38	605	1241
KRC137-6PH					647											
KRC164-4PH	Ø500 X 2	766	54	75	849	750	965	605	1050	18	440	3205	3003	44	610	3091
KRC181-6PH					954											
KRC213-4PH	Ø630 X 2	840	80	80	1004	1200	1933	695	1145	18	365	695	1505	44	695	1581
KRC254-6PH					954											
KRC317-4PH	Ø630 X 3	840	80	80	1107	1200	1933	695	1145	18	365	695	2240	44	695	2316
KRC389-6PH					1004											
KRC457-6PH	Ø630 X 4	840	80	80	1107	1200	1933	695	1145	18	365	695	2240	44	695	2316
KRC574-6PH					1065											
KRC693-6PH	Ø630 X 4	840	80	80	1107	1200	1933	695	1145	18	365	695	2240	44	695	2316
KRC861-6PH					1065											
TWIN CIRCUIT																
KRC778-6PH	Ø630 X 4	Diagram B			1929	1200	1933	695	1145	18	365	695	1505	44	695	1581
KRC914-6PH	Ø630 X 6												2240			2316
KRC1148-6PH		Ø630 X 8	Refer Diagram C for dimensions													
KRC1386-6PH																
KRC1722-6PH																

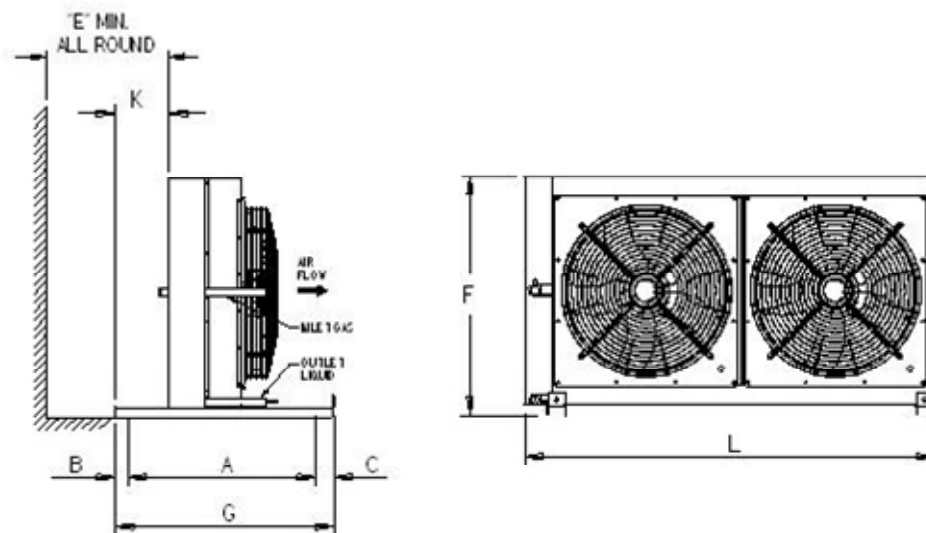
2.2 KRC dimensional diagrams

KRC80 TO KRC861 (single coil)

VERTICAL AIR FLOW (Diagram A)



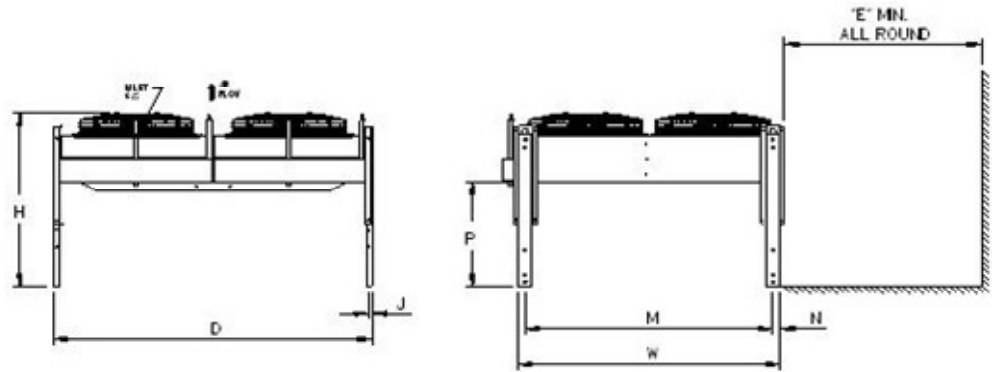
HORIZONTAL AIRFLOW (Diagram A)



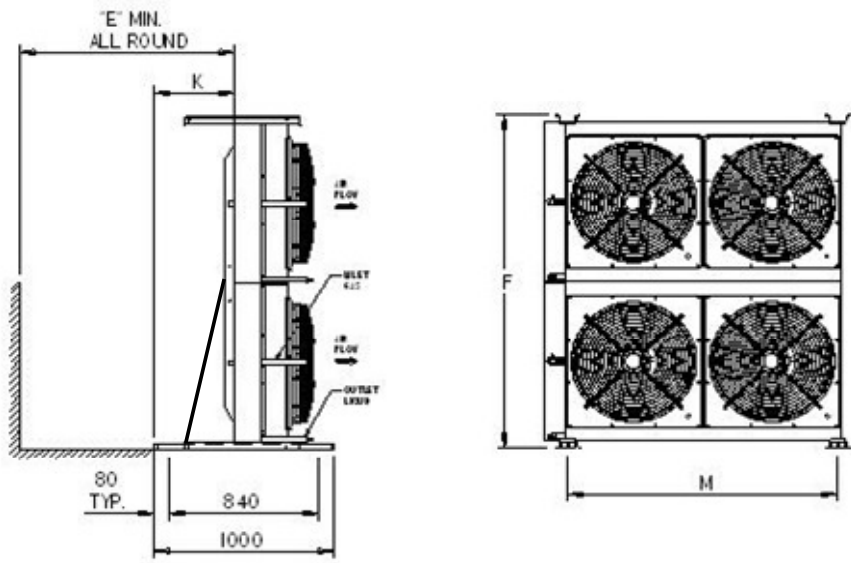
Note : Both KRC137-6P and KRC164-4P are single fan Ø500 models

KRC718 TO KRC1148 (twin coil)

VERTICAL AIR FLOW (Diagram B)

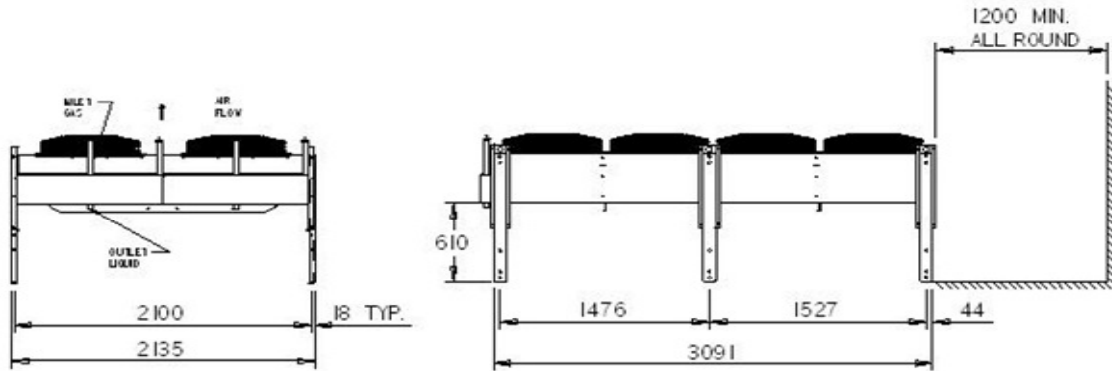


HORIZONTAL AIRFLOW (Diagram B)

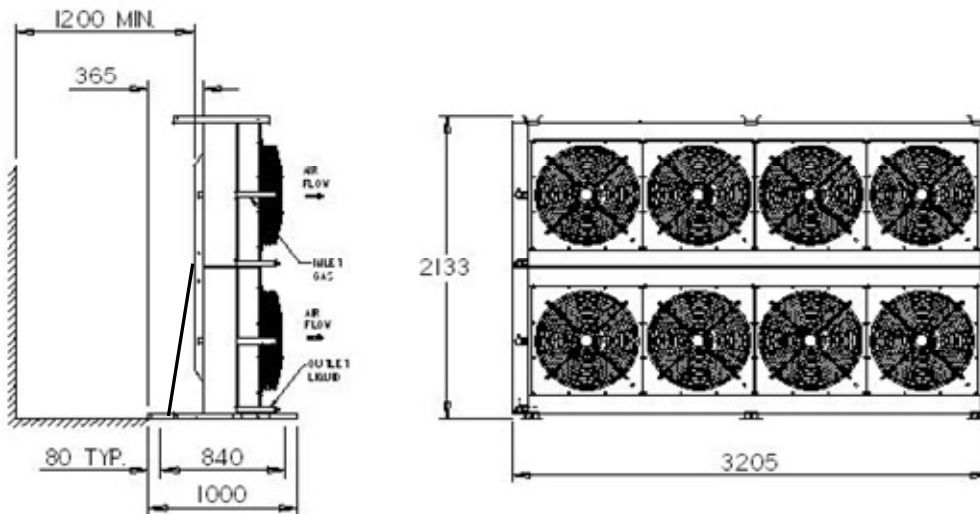


KRC1386 TO KR1722 (twin coil)

VERTICAL AIR FLOW (Diagram C)



HORIZONTAL AIRFLOW (Diagram C)



3. Electrical Connections



Warning  **Electrical 240Volt ± 10% (standard units)**

or



Warning  **Electrical 415Volt ± 10% (optional units)**

A qualified Electrician must carry out all electrical work.

**For general wiring please refer page 15 to 21 for details.
Refer model number for corresponding “CL” drawing.**

MOTORS WITH THERMAL OVERLOAD PROTECTION-

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

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.

MOTORS WITH EXTERNALLY WIRED OVERLOADS-

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

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

The wiring required depends on how many fans are present and whether the unit is a single or twin coil model. Please refer to the following wiring schematic diagrams for details.

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.

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.

FAN SPEED CONTROL-

Single and three phase AC fans may be controlled using a voltage reducing fan speed control based on pressure sensing. Due to the large variety of controls available, only a few general observations can be made.

Settings- Refer to the Recommended control settings on p14 for FVS setpoints, other settings will be dependent on the individual controller selected.

Minimum voltage-

Fan manufacturers data should be referred to, however in general-

1 Ph- 130V (all fan types).

3 Ph- 230V (all fan types)

EC FANS-

EC fans are available on KRC condensers under the KP606- series options kits for 350mm, 500mm, and 630mm fan sizes.

The fans are 0-10V controlled, using a Saginomiya XGE-4SE controller and high pressure transducer mounted on the gas header.

Please refer to Technical Bulletin TB146 for details of the controller.

EC fans have built-in overload protection. If an EC fan does not start, please check the temperature and allow to cool before diagnosing a faulty fan. The circumstances of the cut-out should be investigated.

EC FAN KITS (0-10V with Saginomiya control)

Ø350 KRC COND.	KP606-7F	KIT KRC 2X350MM EC SAGI EC FSC	KRC80	KRC107
			KRC134	
Ø500 KRC COND.	KP606-8F	KIT KRC 1X500MM EC SAGI EC FSC	KRC164-	
	KP606-9F	KIT KRC 2X500MM EC SAGI EC FSC	KRC213-	KRC317-
Ø630 KRC COND. (1 COIL)	KP606-10F	KIT KRC 2X630MM EC SAGI EC FSC	KRC389-	
	KP606-11F	KIT KRC/CENTURION 3X630MM EC SAGI EC FSC	KRC457-	KRC574-
	KP606-12F	KIT KRC/CENTURION 4X630MM EC SAGI EC FSC	KRC693-	KRC861-
Ø630 KRC COND. (2 COIL)	KP606-12F	KIT KRC/CENTURION 4X630MM EC SAGI EC FSC	KRC778-	
	KP606-13F	KIT KRC/CENTURION 6X630MM EC SAGI EC FSC	KRC914-	KRC1148-
	KP606-14F	KIT KRC 8X630MM EC SAGI EC FSC	KRC1386-	KRC1722-

OPTIONAL EC FAN MODELS WILL HAVE A SERIAL PLATE WITH MODEL NUMBER WITH -ECH SUFFIX BUT ARE NOT SET UP IN THE MANUFACTURING SYSTEM.

UNITS ARE ORDERED USING THE "CTO" SYSTEM.

Recommended control settings-

Refrigerant	R404A, R407F, R448A, R449A,	R134a, R513A, R450A	R410A
Setting (FVS)	19 bar (Factory setting)	13 bar	N/A
Adjusting range	10-25 bar		
Proportional band	6 bar		
Operational range	4-25 bar		
Setting control	approx. 1.5 bar / 22 psi : 1 turn = 360 °		

The Saginomiya control MUST NOT be used with R410A refrigerant.

Condenser must be sized to prevent pressure exceeding the design pressure, and the air over motor temperature from exceeding the allowable value. Refer to technical literature CL250 and CL287 for details.

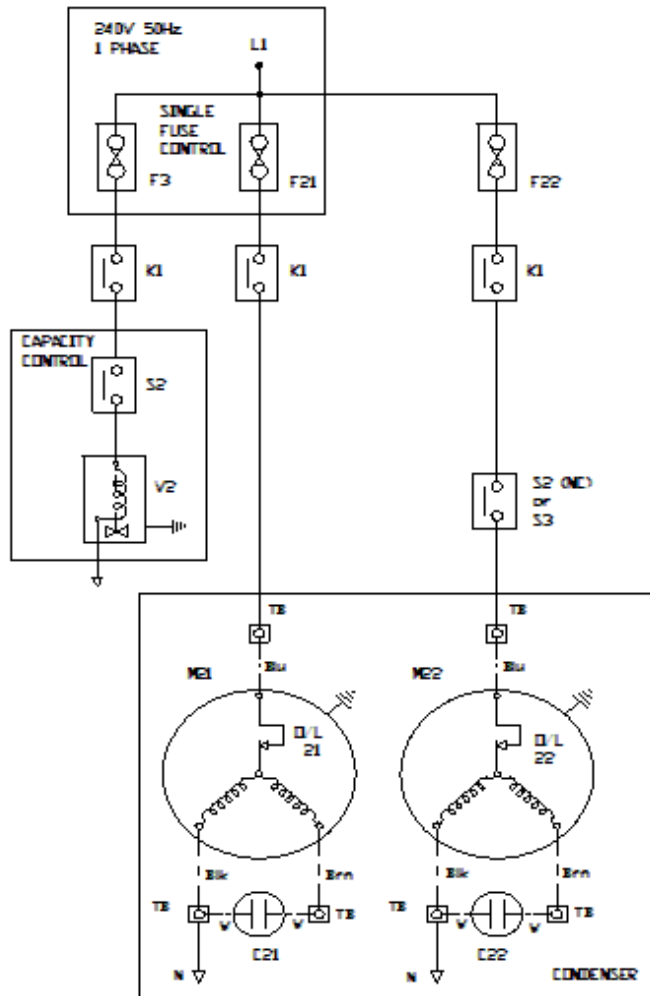
For wiring details please see page 19.

MODEL :
 - KRC 80-4PH, KRC 107-4PH, KRC 123-4PH & KRC 134-4PH
 - 240V 1Ø 1S FEED PSC FAN MOTORS
 (INTERNALLY PROTECTED)
 HEAD PRESSURE OR CAPACITY CONTROL

NO.	DATE	DETAILS OF CHANGE	BY	BY	CHKD
1	18/08/08	PROD. RELEASE	HOOTER	TK	
2	23/11/11	MODEL NUMBER UPDATED FOR R410A	HOOTER	TT	

NOTES:

1. EARTH ALL NECESSARY ITEMS AS REQUIRED
2. ALL WIRING MUST BE DONE IN ACCORDANCE WITH RELEVANT STANDARDS AND CODES
3. ALL CONTROLS AND SOLENOIDS 230 240 VOLT COILS.
4. ISOLATION SWITCHES MUST BE USED WHERE NEEDED FOR SAFE SERVICING.
5. 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



IMPORTANT NOTE !

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

LEGEND

—	EXTERNAL WIRING (by others)	D/L 21 - OVERLOAD (M21)
---	INTERNAL WIRING	D/L 22 - OVERLOAD (M22)
	NORMALLY OPEN CONTACTS	F2 - CONTROL FUSE
	NORMALLY CLOSED CONTACTS	F21 - FAN MOTOR FUSE
	TB = TERMINAL BLOCK	F22- FAN MOTOR FUSE (2ND FAN)
	NEUTRAL CONNECTION	V2 - CAP. CONTROL SOLENOID (NC VALVE) (ENERGISE TO UNLOAD)
	EARTH CONNECTION	C21 - CAPACITOR (M21)
M21 - FAN MOTOR		C22 - CAPACITOR (M22)
M22 - SECOND FAN MOTOR		
K1 - MAIN CONTACTOR (M1) (COMPRESSOR)		
S2 - CAPACITY CONTROL DEVICE		
S3 - COND. FAN CONTROL (ALT. TO S2)		

Refer to CL263-1

MODELS : 2 FANS 240V 1PH FANS MOTOR
 - KRC164 4FH, KRC213 4FH, KRC271 4FH, KRC317 4FH
 KRC137 6FH, KRC181 6FH, KRC225 6FH, KRC254 6FH
 KRC359 6FH & KRC389 6FH
 EXTERNALLY WIRED FAN OVERLOAD

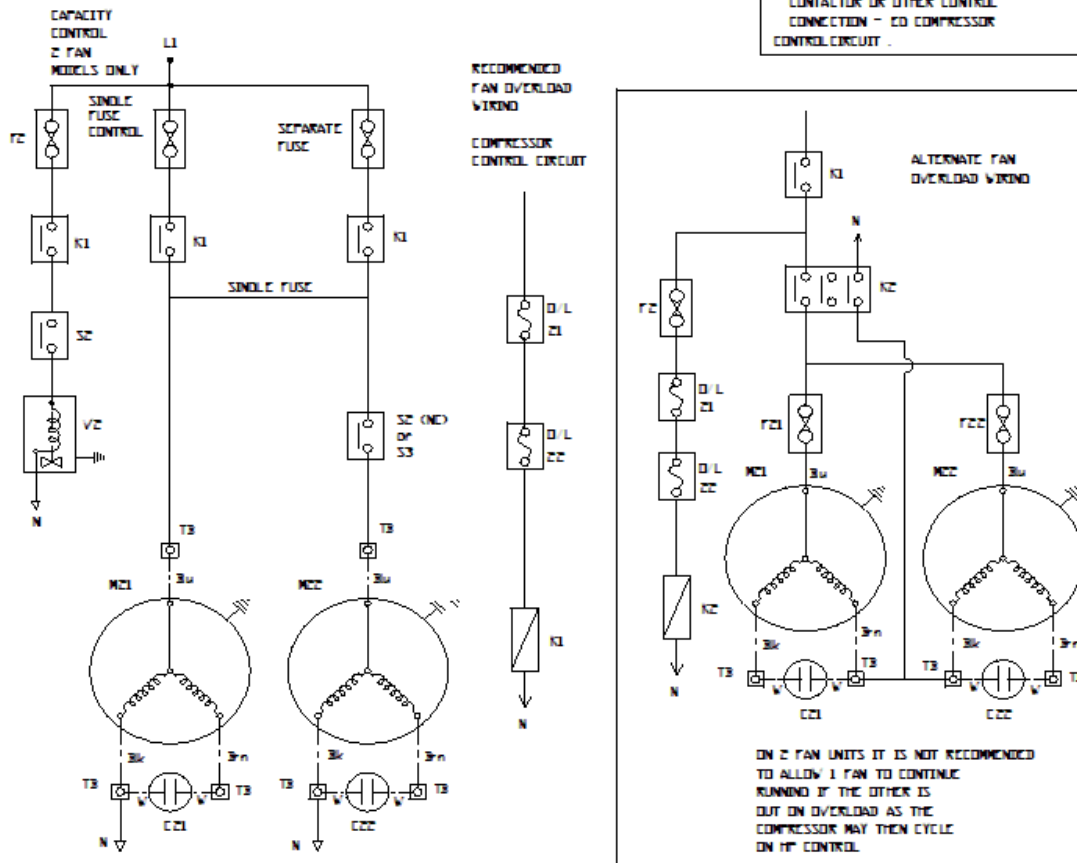
ISSUE	DATE	DETAILS OF CHANGE	EN No	BY
A	29 01 22	PROD RELEASE	41129	TH
B	22 01 22	MODEL NUMBER UPDATED FOR RAIDA	50059	TT

NOTES:

1. EARTH ALL NECESSARY ITEMS AS REQUIRED
2. ALL WIRING MUST BE DONE IN ACCORDANCE WITH RELEVANT STANDARDS AND CODES
3. ALL CONTROLS AND SOLENOIDS 230/240 VOLT COILS.
4. ISOLATION SWITCHES MUST BE USED WHERE NEEDED FOR SAFE SERVICING.
5. 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.
6. FAN MOTOR INTERNAL O LOADS WILL ONLY CONTROL FAN SUPPLY BY CONTACTOR OR OTHER CONTROL CONNECTION - NO COMPRESSOR CONTROL CIRCUIT.

IMPORTANT NOTE !

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



LEGEND

—	EXTERNAL WIRING (by others)	D/L 21 - OVERLOAD (M21)
---	INTERNAL WIRING	D/L 22 - OVERLOAD (M22)
	NORMALLY OPEN CONTACTS	F2 - CONTROL FUSE
	NORMALLY CLOSED CONTACTS	F21 - FAN MOTOR FUSE
	TB = TERMINAL BLOCK	F22 - FAN MOTOR FUSE (2ND FAN)
	N → NEUTRAL CONNECTION	V2 - CAP. CONTROL SOLENOID (NO VALVE) (ENERGISE TO UNLOAD)
	— — EARTH CONNECTION	C21 - CAPACITOR (M21)
M21	- FAN MOTOR	C22 - CAPACITOR (M22)
M22	- SECOND FAN MOTOR	
K1	- MAIN CONTACTOR (M1) (COMPRESSOR)	
S2	- CAPACITY CONTROL DEVICE	
S3	- COND. FAN CONTROL (ALT. TO S2)	

Refer to CL263-4

MODELS : 240V 1PH FANS MOTOR
 3 FANS - KRC457 6PH, KRC530 6PH, KRC574 6PH
 4 FANS - KRC693 6PH, KRC793 6PH, KRC861 6PH.

ISSUE	DATE	DETAILS OF CHANGE	EN No	BY
A	29/10/09	PROD. RELEASE	41129	TH
B	11/11/11	KRC710-09 KRC720-09 REMOVED	50052	TT
C	22/11/11	MODEL NUMBER UPDATED FOR R410A	50059	TT

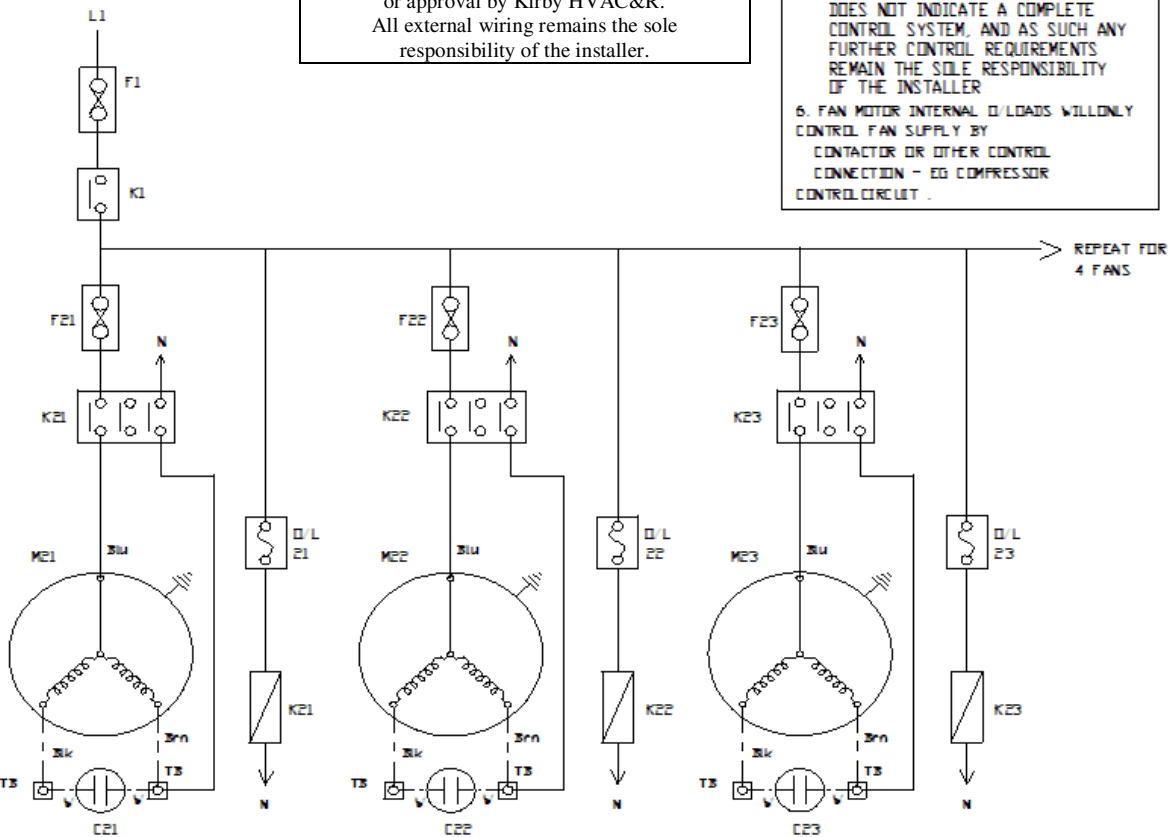
EXTERNALLY WIRED FAN OVERLOAD

IMPORTANT NOTE !

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

NOTES:

1. EARTH ALL NECESSARY ITEMS AS REQUIRED
2. ALL WIRING MUST BE DONE IN ACCORDANCE WITH RELEVANT STANDARDS AND CODES
3. ALL CONTROLS AND SOLENOIDS 230/240 VOLT COILS
4. ISOLATION SWITCHES MUST BE USED WHERE NEEDED FOR SAFE SERVICING
5. 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
6. FAN MOTOR INTERNAL O LOADS WILL ONLY CONTROL FAN SUPPLY BY CONTACTOR OR OTHER CONTROL CONNECTION - EG COMPRESSOR CONTROL CIRCUIT .



LEGEND

—	EXTERNAL WIRING (by others)	D/L 21 - OVERLOAD (M21)
—	INTERNAL WIRING	D/L 22 - OVERLOAD (M22), ETC
⏏	NORMALLY OPEN CONTACTS	F2 - CONTROL FUSE
⏏	NORMALLY CLOSED CONTACTS	F21 - FAN MOTOR FUSE
⏏	TS = TERMINAL BLOCK	F22- FAN MOTOR FUSE, ETC
N	NEUTRAL CONNECTION	V2 - CAP. CONTROL SOLENOID (NC VALVE) (ENERGISE TO UNLOAD)
⏏	EARTH CONNECTION	
M21	- FAN MOTOR	C21 - CAPACITOR (M21)
M22	- SECOND FAN MOTOR, ETC.	C22 - CAPACITOR (M22), ETC
K1	- MAIN CONTACTOR (M) (COMPRESSOR)	
S2	- CAPACITY CONTROL DEVICE	
S3	- COND. FAN CONTROL (ALT. TO S2)	

Refer to CL263-5.

MODELS :
 - KRC718 6PH, KRC778 6PH - 2X2 FANS

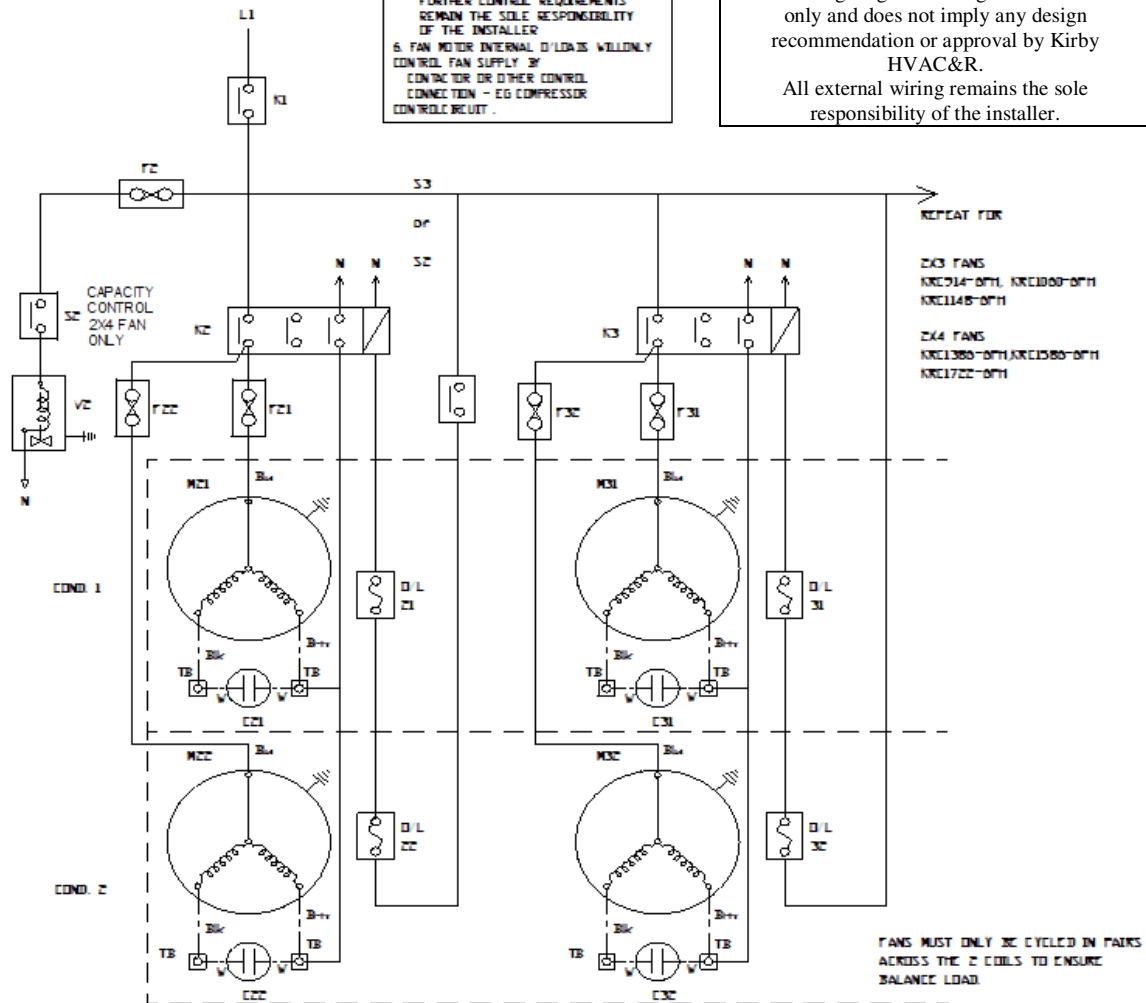
NOTES:

1. EARTH ALL NECESSARY ITEMS AS REQUIRED
2. ALL WIRING MUST BE DONE IN ACCORDANCE WITH RELEVANT STANDARDS AND CODES
3. ALL CONTROLS AND SOLENOIDS 230/240 VOLT COILS.
4. ISOLATION SWITCHES MUST BE USED WHERE NEEDED FOR SAFE SERVICING.
5. 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.
6. FAN MOTOR INTERNAL OVERLOADS WILL ONLY CONTROL FAN SUPPLY BY CONTACTOR OR OTHER CONTROL CONNECTION - EG COMPRESSOR CONTROL CIRCUIT.

ISSUE	DATE	DETAILS OF CHANGE	EN NO.	BY
A	29/03/08	PROD. RELEASE	40247	TH
B	22/11/11	MODEL NUMBER UPDATED FOR #410A	50029	TT

IMPORTANT NOTE !

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

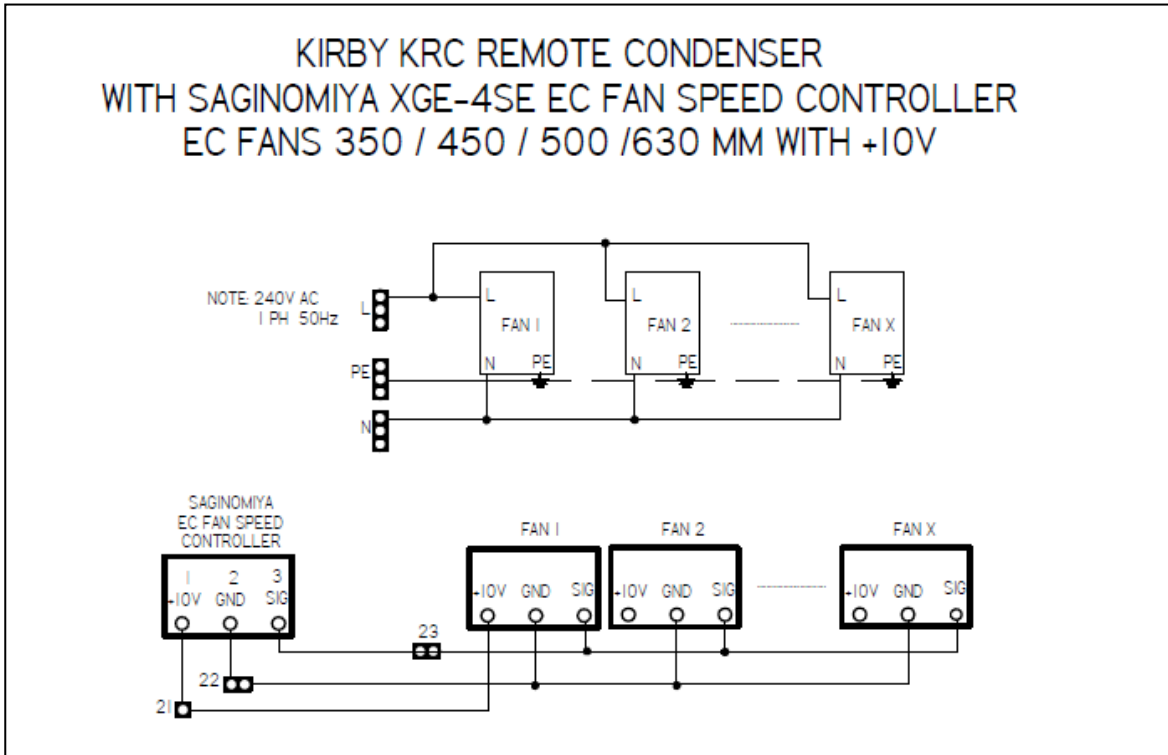


LEGEND

—	EXTERNAL WIRING (by others)	D/L 21 - OVERLOAD (M21)
---	INTERNAL WIRING	D/L 22 - OVERLOAD (M22)
	NORMALLY OPEN CONTACTS	F2 - CONTROL FUSE
	NORMALLY CLOSED CONTACTS	F21 - FAN MOTOR FUSE, ETC
	TB = TERMINAL BLOCK	F31 - FAN MOTOR FUSE, ETC
	NEUTRAL CONNECTION	V2 - CAP. CONTROL SOLENOID (NC VALVE) (ENERGISE TO UNLOAD)
	EARTH CONNECTION	M21 - FAN MOTOR
		M22 - SECOND FAN MOTOR, ETC
		C21 - CAPACITOR (M21)
		C22 - CAPACITOR (M22), ETC
	K1 - MAIN CONTACTOR (M) (COMPRESSOR)	
	S2 - CAPACITY CONTROL DEVICE	
	S3 - COND. FAN CONTROL (ALT. TO S2)	

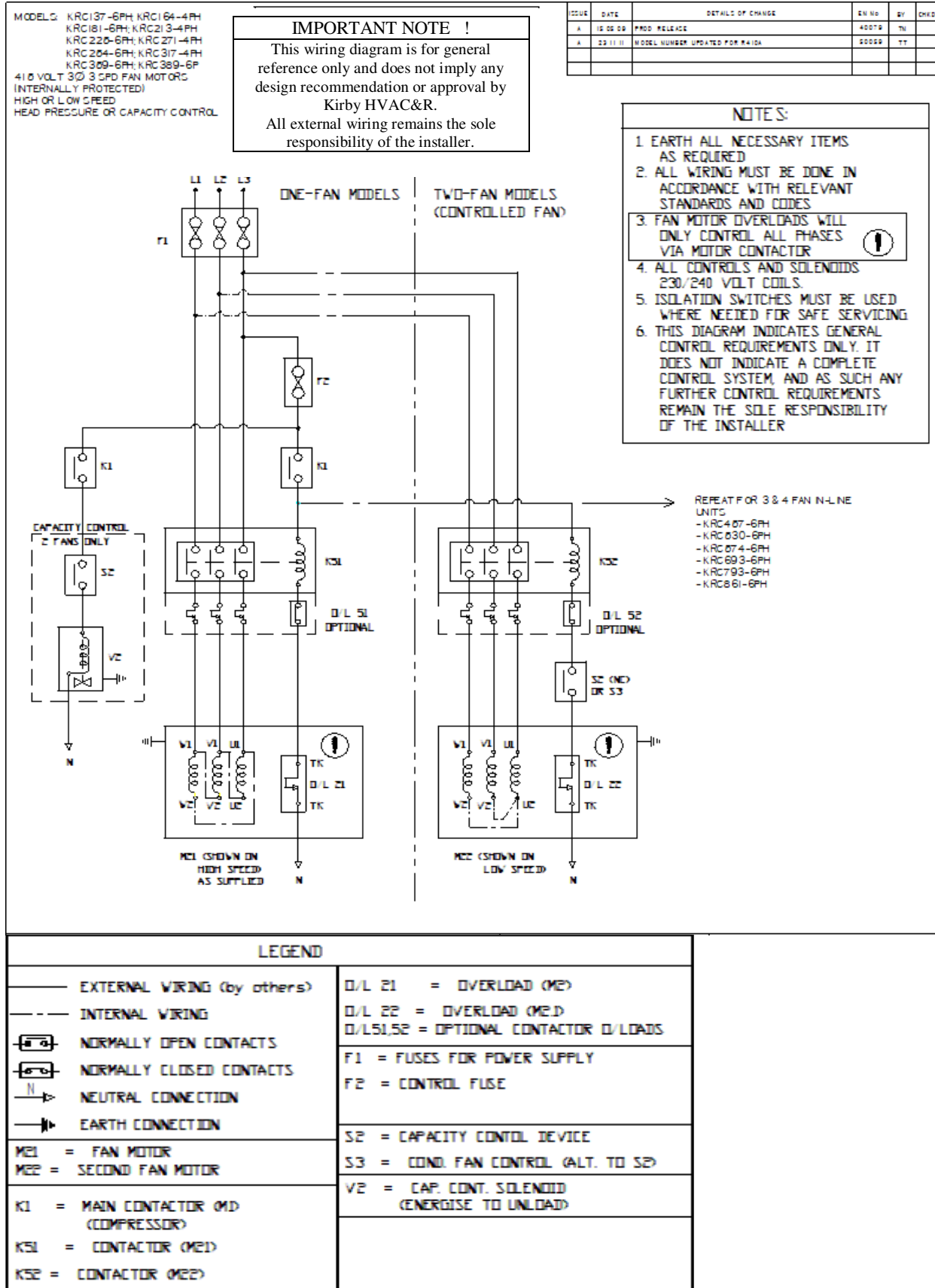
Refer to CL263-6

Optional EC Fan wiring-

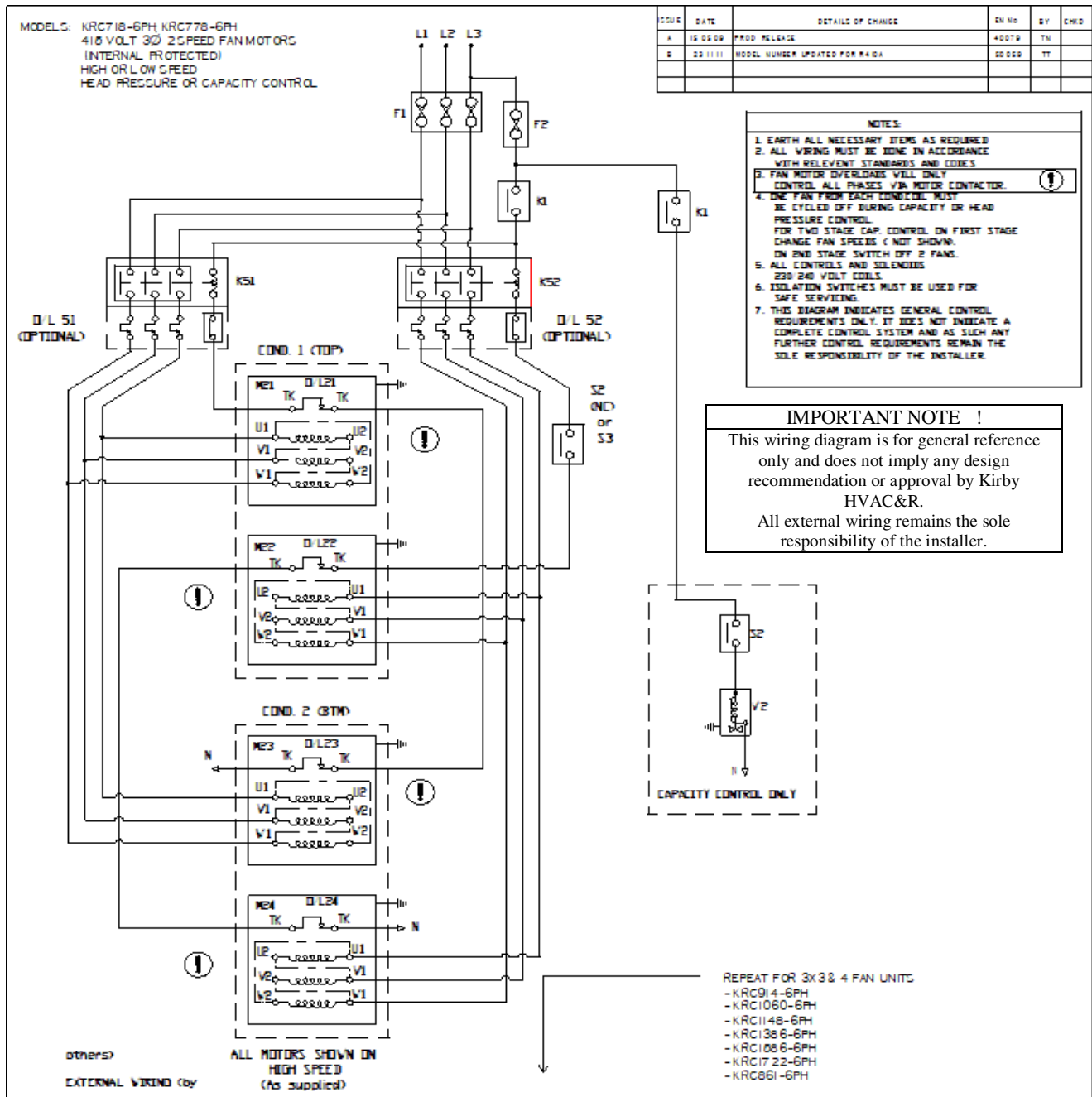


Refer to Schematic diagram MS804-63

Optional 3 Phase fan wiring



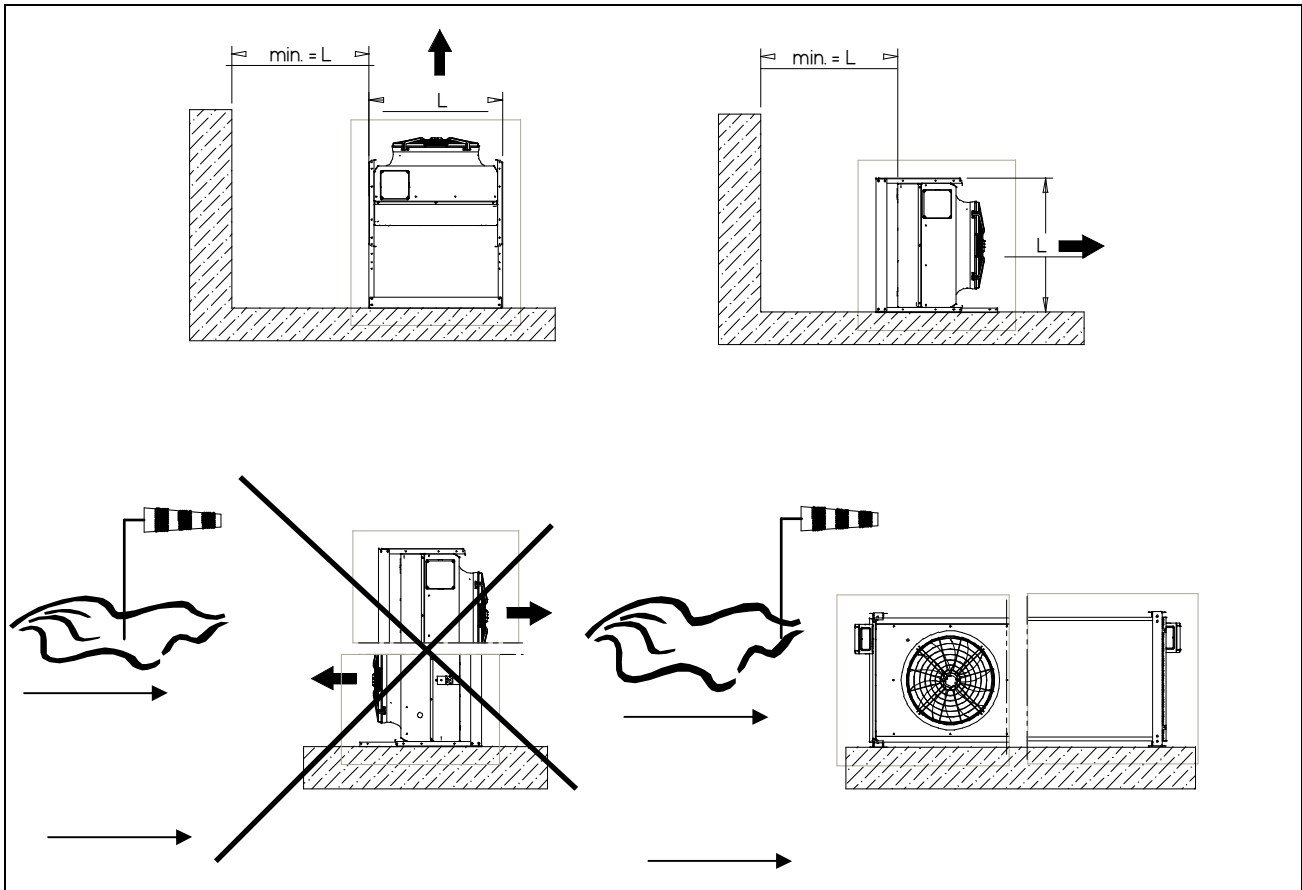
Refer to CL263-2



LEGEND		
<p>— INTERNAL WIRING</p> <p>⏏ NORMALLY OPEN CONTACTS</p> <p>⏏ NORMALLY CLOSED CONTACTS</p> <p>→ NEUTRAL CONNECTION</p> <p>⏏ EARTH CONNECTION</p>	<p>K1 = MAIN CONTACTOR (MD (COMPRESSOR)</p> <p>K51 = CONTACTOR (ME1, ME3)</p> <p>K52 = CONTACTOR (ME2, ME4)</p> <p>D/L 21 = OVERLOAD (ME1)</p> <p>D/L 22 = OVERLOAD (ME2)</p> <p>D/L 23 = OVERLOAD (ME3)</p> <p>D/L 24 = OVERLOAD (ME4)</p> <p>V2 = CAP CONTROL SOLENOID (ENERGISE TO UNLOAD)</p>	<p>S2 = CAPACITY CONTROL DEVICE (ND)</p> <p>S3 = CONDENSER FAN CONTROL</p> <p>F1 = FUSES FOR POWER SUPPLY</p> <p>F2 = FUSE FOR CONTROLS</p> <p>D/L 51, 52 OPTIONAL CONTACTOR D LOADS.</p>
<p>ME1 = COND. FAN MOTOR (Coil 1)</p> <p>ME2 = 2nd COND. FAN MOTOR (Coil 1)</p> <p>ME3 = COND.FAN MOTOR (Coil 2)</p> <p>ME4 = 2nd COND.FAN MOTOR (Coil 2)</p>		

Refer to CL263-3

4. Lay out considerations ^(1*)



(1*) min.=L: minimum distance advisable between independently operated units as well

5. Motor maintenance

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.

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.

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

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

6. Start up



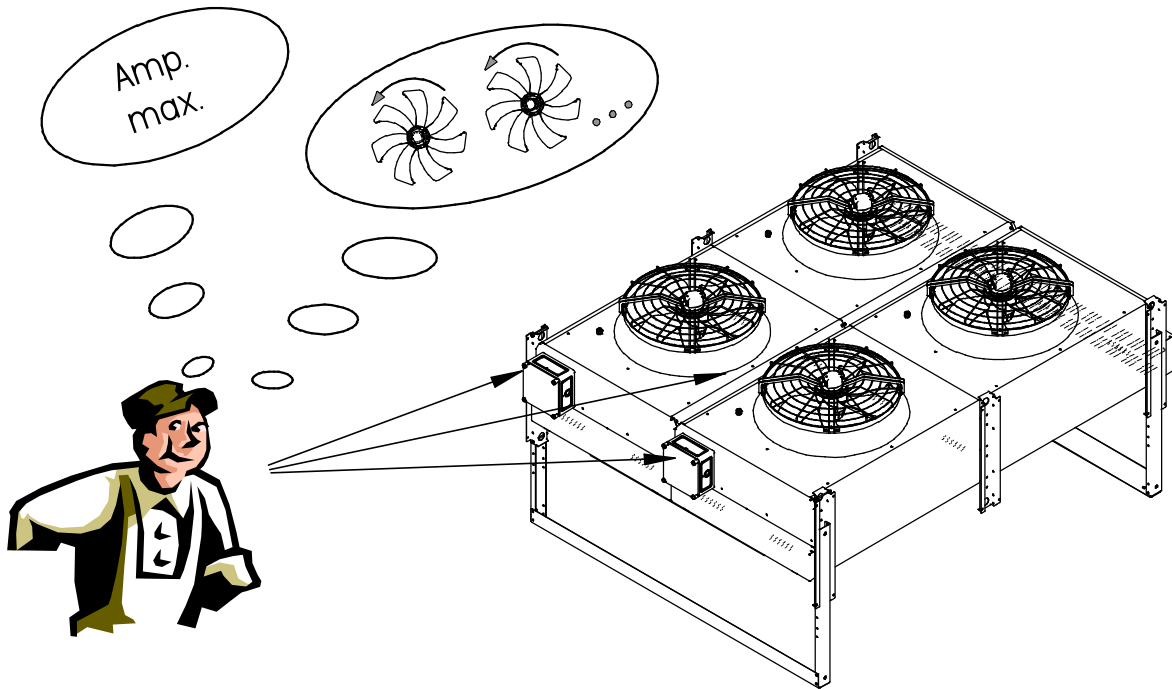
Warning



Electrical

Installation Checklist

- Verify that the incoming voltage, amperages and temperatures match the rating plate
- Tighten all field and factory wiring
- Check rotation of remote condenser fans



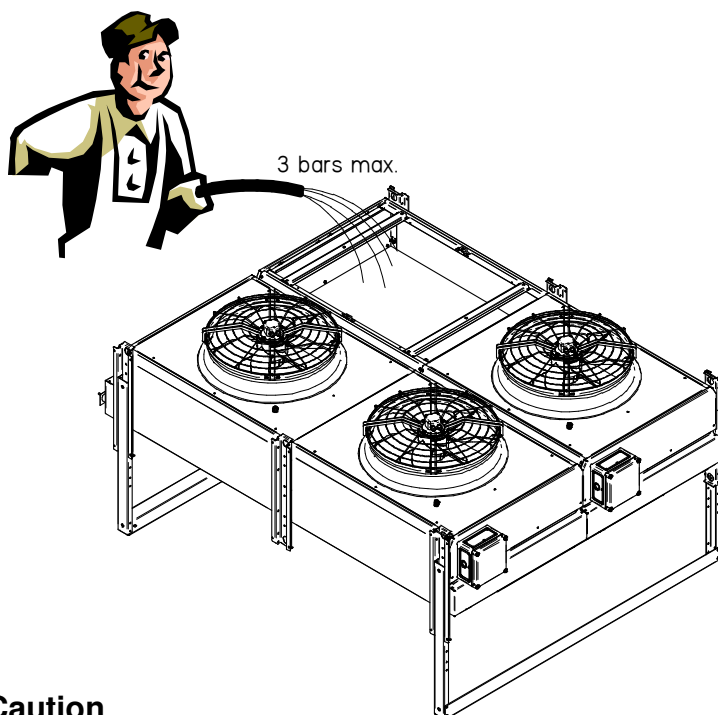
7. Cleaning

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

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.

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.

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.



Caution

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.

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