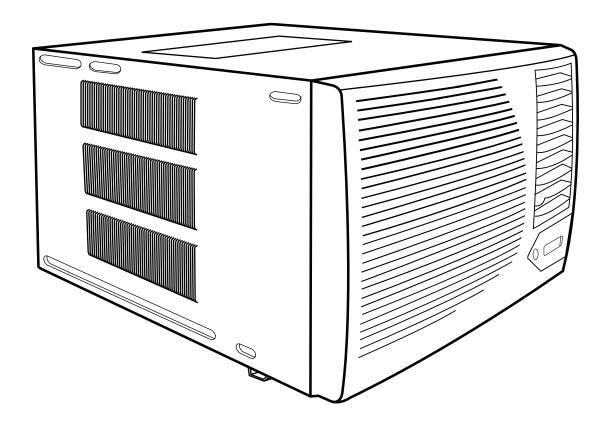


## Service & Parts Manual – R410A Models



## **Compact Programmable**

| Model | 2010

# TECHNICAL SUPPORT CONTACT INFORMATION



## FRIEDRICH

## FRIEDRICH AIR CONDITIONING CO.

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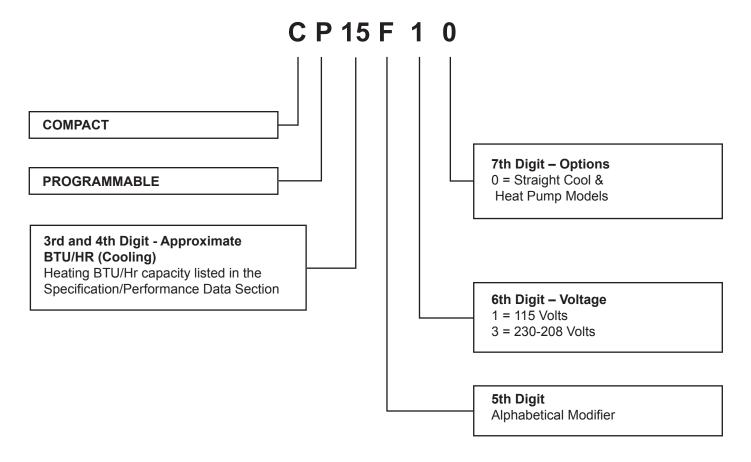
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## **UNIT IDENTIFICATION**

## **Model Number Code**



#### **RAC Serial Number Identification Guide**

Serial Number Decade Manufactured L=0 C=3 F=6 J=9 A=1 D=4 G=7 B=2 E=5 H=8	A	K	A	К	00001  Production Run Number
Year Manufactured A=1 D=4 G=7 K=0 B=2 E=5 H=8 C=3 F=6 J=9					Product Line K = RAC
Month Manufactured A=Jan D=Apr G=Jul K=Oct B=Feb E=May H=Aug L=Nov C=Mar F=Jun J=Sept M=Dec					

#### **ELECTRICAL DATA**

## **AWARNING**

#### **ELECTRIC SHOCK HAZARD**

Turn off electric power before service or installation.



All electrical connections and wiring MUST be installed by a qualified electrician and conform to the National Electrical Code and all local codes which have jurisdiction.

Failure to do so can result in personal injury or death.

## **NOTICE**

#### **FIRE HAZARD**

Not following the above WARNING could result in fire or electically unsafe conditions which could cause moderate or serious property damage.

Read, understand and follow the above warning.

Wire Size Use ONLY wiring size recommended for single outlet branch circuit.

Fuse/Circuit Breaker Use ONLY the correct HACR type and size fuse/circuit breaker. Read electrical ratings on unit's

rating plate. Proper circuit protection is the responsibility of the homeowner.

Grounding Unit MUST be grounded from branch circuit through service cord to unit, or through separate

ground wire provided on permanently connected units. Be sure that branch circuit or general purpose outlet is grounded. Ground wire must be connected to ground screw located in lower

right corner of air conditioner when air conditioner is in cabinet. (CP 14, 18, 24)

Receptacle The field supplied outlet must match plug on service cord and be within reach of service cord.

Do NOT alter the service cord or plug. Do NOT use an extension cord. Refer to the table above

for proper receptacle and fuse type.

### **Plug/Outlet/Circuit Rating**

Model	Circuit Rating Breaker or T-D Fuse	Plug Face (NEMA#)	Power Cord Length (ft.)	Wall Outlet Appearance
CP15	125V - 15A	5 - 15P	6	
CP18	250V - 15A	6 - 15P	4	<b>-</b>
CP24	250V - 20A	6 - 20P	4	<b>4</b>



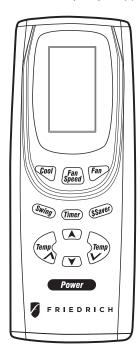
## **SPECIFICATIONS FOR 2010 MODELS**

Model		CP15F10	CP18F30	CP24F30
Product (	Code	CC05103400	CC05103410	CC05103420
Function		COOLING	COOLING	COOLING
Rated Vo	tage	115V	208/230V	208/230V
Rated Fre	quency	60H z	60Hz	60Hz
	acity (W/Btu/h)	14700(Btu/h)	17600/18000 (Btu/h)	23540/24230 (Btu/h)
Power In		1370	1640/1680	2500/2580
Rated Inp	out (W)	1532W	2052W	3295
Rated Cu	rrent (A)	14.9 A	10.64A	15A
	/olume ( CFM ) (H/M/L)**	470/430/410	570/540/510	590/560/510
Dehumic	lifying Volume (Pint/h)	2.5	2.8	4.7
EER / C.O.		3.13	3.13	2.75
EnergyCl		/	/	/
	Fan Type-Piece	Centrifugal flow fan - 1	Centrifugal flow fan - 1	Centrifugal flow fan - 1
	Diameter-Length (inch)	φ8.8 X 4.3	φ8.8 X 4 . 3	φ8.8 X 4.3
	Evaporator	Aluminum fin-copper	Aluminum fin-copper	Aluminum fin-copper
	Pipe Diameter (inch)	φ 0.275	φ 0.275	φ0.275
Indoor	Row-Fin Gap (inch)	2-1/20	2-1/20	3-3/50
Side	Coil length(l) x height(H)x coil width(L)	16.6 X1 5 X1	16.6 X15 X 1	15.4 X15 X1.5
Side	Swing Motor Model	SM020V	SM020B	SM020B
	Output of Swing Motor (W)	4	4	4
	Fuse (A)	/	/	/
	Sound Pressure Level dB (A) (H/M/L)	57/55/54	59/56/54	60/56/54
	Sound Power Level dB (A) (H/M/L)***	67/65/64	69/66/64	70/66/64
	C	LANDA	SHANGHAI HITACHI	LANIDA
	Compressor Manufacturer/trademark	LANDA	ELECTRICAL	LANDA
	Compressor Model	QXA-C129xC030	ASL165RN-C7EG	QXA-F232rK090
	Compressor Type	Rotary	Rotary	Rotary
	L.R.A. (A)	70	39	52
	Compressor RLA(A)	11.7	5.35/5.01	10.5
	Compressor Power Input(W)	1050	1120/1150	2375
	Overload Protector	builtin	built in	built in
	Throttling Method	Capillary	Capillary	Capillary
Outdoor	Starting Method		. ,	, ,
Side	Working Temp Range (℃)	64-110	64-110	64-110
	Condenser	Aluminum fin-copper	Aluminum fin-copper	Aluminum fin-copper
	Pipe Diameter (inch)	Ф0.275	Ф 0.275	Ф 0.275
	Rows-Fin Gap(inch)	2-1/20	2-1/20	2-1/20
	Coil length (I) xheight (H) xcoil width	27.7 X15.75 X 1	34 X 15.75 X 1	34 X 15.75 X 1
	Fan Type-Piece	Axial fan -1	Axial fan -1	Axial fan -1
	Fan Diameter (inch)	φ15.6	φ15.6	φ15.6
	Sound Pressure Level dB (A) (H/M/L)	61/60/58	61/60/58	63/61/60
	Sound Power Level dB (A) (H/M/L)	71/70/68	71/70/68	73/71/70
	Defrosting Method	/	/	/
	r Speed (rpm) (H/W/L)	900/780/730	1000/900/800	1060/970/820
	f Fan Motor (W)	205	297	320
Fan Moto		1.78	1.29	1.39
	r Capacitor (uF)	15	7	7
Climate 1	уре	T1	T1	T1
Isolation		l l	I	I
	Protection	IP24	IP24	IP24
Permissi the Disch	ble Excessive Operating Pressure for large Side (PSI)	500	500	500
the Sucti	ble Excessive Operating Pressure for on Side (PSI)	290	290	290
Dimensi	on (L/W/H)( inch )	26 X 16.8 X 28.5	26 X 16.8 X31.2	26 X 16.8 X31.2
	on of Package (L/W/H)( inch)	31.1 X 29.1 X 20.2	36.2 X29.3 X19.7	36.2 X 29.3 X19.7
	ht/Gross Weight (LBS)	122/151	142/171	167/184
	nt Charge ( OZ )	R410A/29.98	R410A/35.62	R410A/41.98
9514	J- ( /		1111071/3302	1111071/1120

The above data is subject to change without notice. Please refer to the nameplate of the unit.

#### To operate air conditioner with remote control

NOTE: Remote control may vary in appearance.



NOTE: Two AAA batteries (included) power the remote control. Replace batteries after 6 months of use, or when the remote control starts to lose power.

To turn the air conditioner on or off: Press POWER.



To select the mode: Press COOL, FAN or \$ SAVER







To select the fan speed: Press FAN SPEED for High, Medium or Low.



#### To raise the temperature:

Press the plus button to raise the temperature. Each time you press or hold the plus button, the temperature will go up 1° until it reaches 86°F (30°C).



#### To lower the temperature:

Press the minus button to lower the temperature. Each time you press or hold the minus button, the temperature will go down  $1^{\circ}$  until it reaches  $64^{\circ}F$   $(18^{\circ}C)$ .



To set Timer for a 1- to 24-hour delay before air conditioner is turned off (air conditioner must be On):

 Press TIMER. Indicator light on air conditioner control panel will flash.



- 2. Press the plus or minus button to change the delay time from 1 to 24 hours.
- Press TIMER again or wait 10 seconds. Indicator light on air conditioner control panel will remain on.

To set Timer to turn on air conditioner, keeping previous settings:

- 1. Turn off air conditioner.
- Press TIMER. Indicator light on air conditioner control panel will flash.
- 3. Press the plus or minus button to change delay time (1 to 24 hours).
- 4. Press TIMER again or wait 10 seconds. Indicator light on air conditioner control panel will remain on.

To set Timer to turn on air conditioner, changing the previous settings:

- 1. Turn on air conditioner.
- 2. Adjust Mode to Cool, Fan Only, or Power Saver.
- 3. Adjust Fan Speed to High, Medium or Low.
- 4. Adjust temperature between 64°F (18°C) and 86°F (30°C).
- 5. Turn off air conditioner.
- Press TIMER. Indicator light on air conditioner control panel will flash.
- 7. Press the plus or minus button to change delay time (1 to 24 hours).
- 8. Press TIMER again or wait 10 seconds. Indicator light on air conditioner control panel will remain on.

#### **Method Of Charging / Repairs**

The acceptable method for charging the RAC system is the Weighed in Charge Method. The weighed in charge method is applicable to all units. It is the preferred method to use, as it is the most accurate.

The weighed in method should always be used whenever a charge is removed from a unit such as for a leak repair, compressor replacement, or when there is no refrigerant charge left in the unit. To charge by this method, requires the following steps:

- 1. Install a piercing valve to remove refrigerant from the sealedsystem. (Piercing valve must be removed from the system before recharging.)
- 2. Recover Refrigerant in accordance with EPA regulations.

## **AWARNING**

## BURN HAZARD Proper safety pro



Proper safety procedures must be followed, and proper protective clothing must be worn when working with a torch.

Failure to follow these procedures could result in moderate or serious injury.

3. Install a process tube to sealed system.

## **A** CAUTION

#### FREEZE HAZARD



Proper safety procedures must be followed, and proper protective clothing must be worn when working with liquid refrigerant.

Failure to follow these procedures could result in minor to moderate injury.

- 4. Make necessary repairs to system.
- 5. Evacuate system to 200 microns or less.
- Weigh in refrigerant with the property quantity of R-410A refrigerant.
- 7. Start unit, and verify performance.

## **AWARNING**

#### **BURN HAZARD**



Proper safety procedures must be followed, and proper protective clothing must be worn when working with a torch.

Failure to follow these procedures could result in moderate or serious injury.

8. Crimp the process tube and solder the end shut.

#### **COMPRESSOR REPLACEMENT**

## Recommended procedure for compressor replacement

## **WARNING**



#### RISK OF ELECTRIC SHOCK

Unplug and/or disconnect all electrical power to the unit before performing inspections, maintenances or service.

Failure to do so could result in electric shock, serious injury or death.

 Be certain to perform all necessary electrical and refrigeration tests to be sure the compressor is actually defective before replacing.

## **AWARNING**

#### HIGH PRESSURE HAZARD



Sealed Refrigeration System contains refrigerant and oil under high pressure.

Proper safety procedures must be followed, and proper protective clothing must be worn when working with refrigerants.

Failure to follow these procedures could result in serious injury or death.

 Recover all refrigerant from the system though the process tubes. PROPER HANDLING OF RECOVERED REFRIGERANT ACCORDING TO EPA REGULATIONS IS REQUIRED. Do not use gauge manifold for this purpose if there has been a burnout. You will contaminate your manifold and hoses. Use a Schrader valve adapter and copper tubing for burnout failures.

## **AWARNING**

#### **HIGH TEMPERATURES**



Extreme care, proper judgment and all safety procedures must be followed when testing, troubleshooting, handling or working around unit while in operation with high temperature components. Wear protective safety aids such as: gloves, clothing etc.

Failure to do so could result in serious burn injury.

## NOTICE

#### FIRE HAZARD

The use of a torch requires extreme care and proper judgment. Follow all safety recommended precautions and protect surrounding areas with fire proof materials. Have a fire extinguisher readily available. Failure to follow this notice could result in moderate to serious property damage.

- 3. After all refrigerant has been recovered, disconnect suction and discharge lines from the compressor and remove compressor. Be certain to have both suction and discharge process tubes open to atmosphere.
- 4. Carefully pour a small amount of oil from the suction stub of the defective compressor into a clean container.
- Using an acid test kit (one shot or conventional kit), test the oil for acid content according to the instructions with the kit.
- 6. If any evidence of a burnout is found, no matter how slight, the system will need to be cleaned up following proper procedures.
- 7. Install the replacement compressor.

## **WARNING**



#### **EXPLOSION HAZARD**

The use of nitrogen requires a pressure regulator. Follow all safety procedures and wear protective safety clothing etc.

Failure to follow proper safety procedures result in serious injury or death.

8. Pressurize with nitrogen and leak test all connections with an electronic or Halide leak detector. Recover refrigerant and repair any leaks found.

Repeat Step 8 to insure no more leaks are present.

9. Evacuate the system with a good vacuum pump capable of a final vacuum of 300 microns or less. The system should be evacuated through both liquid line and suction line gauge ports. While the unit is being evacuated, seal all openings on the defective compressor. Compressor manufacturers will void warranties on units received not properly sealed. Do not distort the manufacturers tube connections.

## **A** CAUTION



#### FREEZE HAZARD

Proper safety procedures must be followed, and proper protective clothing must be worn when working with liquid refrigerant.

Failure to follow these procedures could result in minor to moderate injury.

10. Recharge the system with the correct amount of refrigerant. The proper refrigerant charge will be found on the unit rating plate. The use of an accurate measuring device, such as a charging cylinder, electronic scales or similar device is necessary.

## **COOLING ONLY ROOM AIR CONDITIONERS: TROUBLESHOOTING TIPS**

Problem	Possible Cause	Action
	Fuse blown or circuit tripped	Replace fuse, reset breaker. If repeats, check fuse or breaker size. Check for shorts in unit
	Dower cord not plugged in	wiring & components
	Power cord not plugged in	Plug it in
Unit does not run	System switch in "OFF" position	Set switch correctly
	Inoperative system switch or open control board	Test for continuity
	Loose or disconnected wiring at switch, control board or other components	Check wiring & connections. Reconnect per wiring diagram

Problem	Possible Cause	Action
	Dirty filter	Clean as recommended in Owner's Manual
	Restricted airflow	Check for dirty or obstructed coil. Use pressure wash or biodegradable cleaning agent to clean
Evaporator coil	Inoperative t-stat or thermistors	Test for continuity
freezes up	Short of refrigerant	De-ice coil & check for leak
	Inoperative fan motor	Test fan motor & replace if inoperative
		De-ice coil. Check temp. differential (delta T)
	Partially restricted capillary tube	across coil. Touch test coil return bends for
		same temp. Test for low running current

Problem	Possible Cause	Action
	Excessive heat load	Unit undersized. Test cooling performance & replace with larger unit if needed
Compressor runs	Restriction in line	Check for partially iced coil & check temperature split across coil
continually & does not cycle off	Refrigerant leak	Check for oil at silver soldered connections. Check for partially iced coil. Check split across coil. Check for low running amperage
	Thermistor shorted	Replace thermistor or electronic control board

Problem	Possible Cause	Action
	Control at coldest point	Turn to higher temp. setting to see if unit cycles off
Control does not	Incorrect wiring	Refer to appropriate wiring diagrams
turn unit off	Unit undersized for area to be cooled	Refer to industry standard sizing chart
	Defective thermistor	Replace thermistor or electronic control board

## **COOLING ONLY ROOM AIR CONDITIONERS: TROUBLESHOOTING TIPS**

Problem	Possible Cause	Action
	Overload inoperative. Opens too	Check operation of unit. Replace overload if
	soon	system operation is satisfactory
	Communication to the state of the state of	Allow a minimum of 2 minutes to allow
	Compressor restarted before system pressures equalized	pressures to equalize before attempting to
	system pressures equalized	restart. Instruct customer of waiting period
		Check voltage with unit operating. Check for
Compressor runs	Low or fluctuating voltage	other appliances on circuit. Air conditioner
for short periods	Low of nactuating voltage	should be in separate circuit for proper voltage
only. Cycles on		& fused separately
overload	Incorrect wiring	Refer to appropriate wiring diagram
	Shorted or incorrect capacitor	Check by substituting a known good capacitor
	Shorted of incorrect capacitor	of correct rating
	Restricted or low air flow through	Check for proper fan speed or blocked
	condenser coil or evaporator coil	coils
	Compressor running abnormally	Check for kinked discharge line or restricted
	hot	condenser. Check amperage

Problem	Possible Cause	Action
T stat days and	Loss of charge in t-stat bulb	Place jumper across t-stat terminals to check if
		unit operates. If unit operates, replace t-stat.
T-stat does not turn unit on	Loose or broken parts in t-stat	Check as above
turn unit on	Incorrect wiring	Refer to appropriate wiring diagram
	Defective thermistor	Replace thermistor or electronic control board

Problem	Possible Cause	Action
	Poorly installed	Refer to Installation Manual for proper installation
	Fan blade striking chassis	Reposition - adjust motor mount
Noisy operation	Compressor vibrating	Check that compressor grommets have not deteriorated. Check that compressor mounting parts are not missing
	Improperly mounted or loose cabinet parts	Check assembly & parts for looseness, rubbing & rattling

Problem	Possible Cause	Action
	Evaporator drain pan overflowing	Clean obstructed drain trough
	Condensation forming on base pan	Evaporator drain pan broken or cracked. Reseal or replace. No chassis gasket installed. Install chassis gasket
	Poor installation resulting in rain	Check installation instructions. Reseal as
Water leaks into	entering the room	required
the room	Condensation on discharge grille louvers	Dirty evaporator coil. Use pressure wash or biodegradable cleaning agent to clean. Environmental phenomena: point supply louvers upward
	Chassis gasket not installed	Install gasket, per Installation manual
	Downward slope of unit is too	Refer to installation manual for proper
	steep inward	installation

## **COOLING ONLY ROOM AIR CONDITIONERS: TROUBLESHOOTING TIPS**

Problem	Possible Cause	Action
Water "spitting"	Sublimation: When unconditioned saturated, outside air mixes with conditioned air, condensation forms on the cooler surfaces	Ensure that foam gaskets are installed in between window panes & in between the unit & the sleeve. Also, ensure that fresh air/exhaust vents (on applicable models) are in the closed position & are in tact
into room	Downward pitch of installation is too steep towards back of unit	Follow installation instructions to ensure that downward pitch of installed unit is no less than 1/4" & no more than 3/8"
	Restricted coil or dirty filter	Clean & advise customer of periodic cleaning & maintenance needs of entire unit

Problem	Possible Cause	Action
Fussasius	Insufficient air circulation thru area to be air conditioned	Adjust louvers for best possible air circulation
Excessive moisture Oversized unit Operate	Operate in "MoneySaver" position	
molecure	Inadequate vapor barrier in building structure, particularly floors	Advise customer

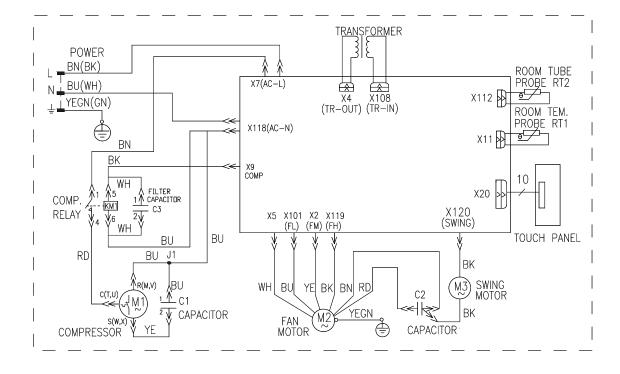
Problem	Possible Cause	Action
	Defective thermistor	Replace thermistor or electronic control board
Thermistor short cycles	Plenum gasket not sealing, allowing discharge air to short cycle unit	Check gasket. Reposition or replace as needed
	Restricted coil or dirty filter	Clean & advise customer of periodic cleaning & maintenance needs of entire unit

Problem	Possible Cause	Action
Prolonged off cycles (automatic operation)	Heat anticipator (resistor) shorted or open	Disconnect plus from outlet. Remove resistor from bracket. Insert plug & depress "COOL" & "FAN AUTOMATIC" buttons. Place t-stat to warmest setting. Feel resistor for temperature. If no heat, replace resistor
	Defective thermistor	Replace thermistor or electronic control board

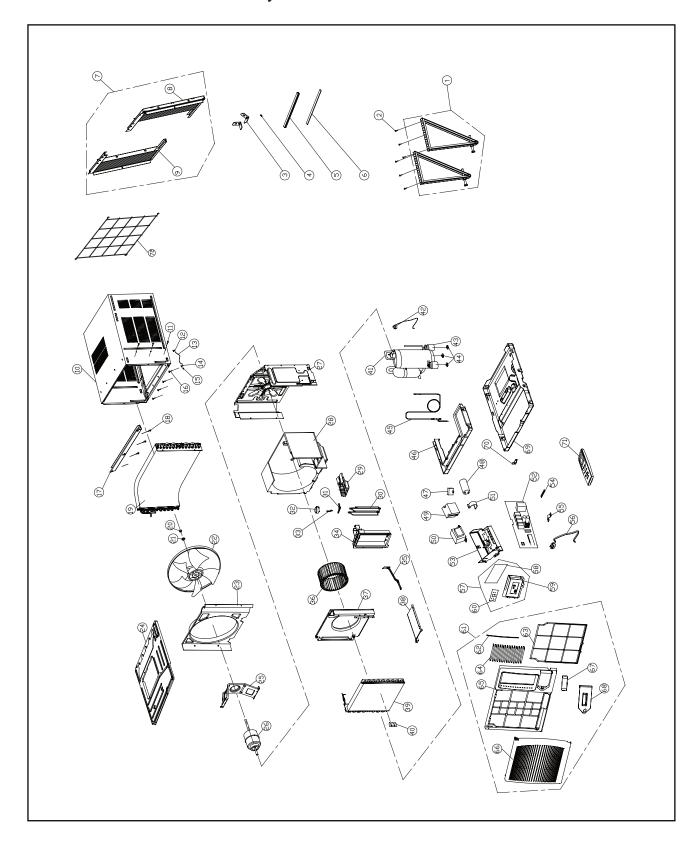
Problem	Possible Cause	Action
	Evaporator drain pan cracked or obstructed	Repair, clean or replace as required
Outside water	Water in compressor area	Detach shroud from pan & coil. Clean & remove old sealer. Reseal, reinstall & check
leaks	Obstructed condenser coil	Use pressure wash or biodegradable cleaning agent to clean
	Fan blade/slinger ring improperly positioned	Adjust fan blade to 1/2" of condenser coil fin pack

# ELECTRONIC CONTROL WIRING DIAGRAM: 2010 MODEL

#### CP15F10 / CP18F30 / CP24F30



# EXPLODED VIEW AND LIST OF PARTS 2010 MODEL: CP15F10, CP18F30 AND CP24F30



## **2010 PARTS**

## Model CP15F10

No	Description	Qty	Friedrich Part#
1	Supporter Assy	1	67700200
2	Screw ST4.2X13	7	67700154
4	Window locking bracket Screw 4X20	2	67700113
5	Seal strip 1	6	67700151 67700128
	Seal strip 2	1	67700128
7	Curtain Assemby Left and Right	1	67700201
8	Right Curtain	1	67700202
9	Left Curtain	1	67700203
10	Cabinet Assy	1	67700204
11	Screw ST4.2X6.5	6	67700155
12	Screw M4X8	1	67700149
	Connect cord	1	67700170
	Screw M4X5	1	67700205
	Washer 4	1 4	67700158
	Screw ST4.2X22 Top Rail Assy	1	67700153 67700206
	Screw ST4X10	4	67700152
_	Condenser Assy	1	67700285
	Nut with Washer M10	1	67700157
	Washer 10	1	67700159
22	Fan Blade	1	67700117
23	Shroud, Fan Blade	1	67700286
24	Top Cover	1	67700110
25	Motor Support	1	67700112
26	Motor CJ100U	1	67700209
	Innerwall	1	67700109
_	Shroud	1	67700127
	Air Outlet Foam	1	67700130
	Swing Louver	2	67700210 67700124
	Swing Linkage Motor, Swing Louver	1	67700124
	Inflectional Axis	1	67700211
	Swing Support	1	67700125
	Fresh Air Door	1	67700212
36	Blower Wheel	1	67700116
37	Orifice (clapboard)	1	67700108
38	Base Plate of Air Flue	1	67700106
39	Evaporator Assy	1	67700103
40	Sensor Holder	1	67700213
	Compressor 44B124HXCEF	1	67700288
	Compressor Grommets	3	67700296
44	Nut with was her M8	1	67700156 67700217
	Capillary Assy	1	
	Water Tray  Capacitor 15uF/300VAC	1	67700131
	Capacitor 50uF/450V	1	67700218
	Relay 841-S-1A-D 110/120V	1	67700220
50	·	1	67700221
51	Capacitor clamp	1	67700114
52	Electronic Control Kit	1	67700259
53	Electric box	1	67700136
54	Isolation Washer D	1	67700223
	Wire Clamp	1	67700160
	Power cord	1	67700224
	Receiver Cover	1	67700225
	Membrane	1	67700226
	Control Panel Cover A Electronic Control Kit	1	67700227 67700259
	Front Panel Assy	1	67700239
	Guide Louver Linkage	1	67700230
	Filter	1	67700231
	Guide Louver	14	67700232
	Front Case	1	67700233
66	Front Panel	1	67700234
67	AS Window Panel	1	67700235
68	Remote Cover Panel	1	67700236
	Basepan (chassis)	1	67700296
70	Chassis Fixer	1	67700105
71	Remote Control	1	67700171

## Model CP18F30

IVI	/lode/ CP18F30				
No	Description	Qty	Friedrich Part#		
	Supporter Assy	1	67700132		
	Self-threading Screw ST4.2x22	7	67700154		
3	Window Locking Bracket	2	67700113 67700151		
4	Screw 4X20	6 1	67700131		
	Seal Strip 1 Seal Strip 2	1	67700128		
	Curtain Assemby Left and Right	1	67700129		
	Right Curtain	1	67700168		
	Left Curtain	1	67700167		
	Cabinet Assy	1	67700271		
11	Self-threading Screw ST4.2X6.5	6	67700155		
12	Screw Assay M4x8	1	67700149		
13	Connect Cord	1	67700170		
14	Screw M4X6	1	67700150		
15	Washer 4	1	67700158		
	Self-threading Screw ST4.2x22	6	67700153		
	Top Rail	1	67700134		
	Self-threading Screw with Gasket ST4X10	4	67700152		
	Condenser Assy	1	67700239		
	Nut with Washer M10	1	67700157 67700159		
	Washer 6 Fan Blade	1	67700139		
	Shroud, Fan Blade	1	67700273		
	Top Cover (Upper Clapboard)	1	67700110		
	Motor Support	1	67700112		
	Motor CJ100B	1	67700241		
27	Innerwall	1	67700109		
28	Blower Front	1	67700127		
29	Air Outlet Foam 1	1	67700130		
30	Swing Louver	2	67700120		
31	Lever of Vertical Guider	2	67700124		
32	Swing Motor SM020B	1	67700133		
	Inflectional Axis	1	67700121		
	Cross Beam	1	67700125		
	Fresh Air Door	1	67700123		
	Blower Wheel	1	67700274		
	Orifice (clapboard) Base Plate of Air Flue	1	67700108 67700106		
39	Evaporator Assy	1	67700100		
_	Insert Block	2	67700141		
	Compressor 2K25S236AHF	1	67700289		
	Compressor Grommets	3	67700292		
44	Nut with Washer M8	3	67700156		
45	Capillary Assay	1	67700294		
46	Water Tray	1	67700131		
47	Capacitor 7uF/450V	1	67700145		
48	Capacitor CBB65 40uF/450V(TUV)	1	67700279		
49	Relay 841-S-1A-D 200V/240V TUV	1	67700147		
50	Power Transformer 41X26.5F	1	67700146		
	Capacitor Clamp	1	67700114		
52	Electronic Control Kit	1	67700260		
53	Electric box	1	67700136		
	Isolation Washer D	1	67700223 67700160		
	Fixed Clamp Power cord	1	67700169		
57	Receiver Cover	1	67700138		
58	Membrane	1	67700148		
	Control Panel Cover	1	67700137		
60	Electronic Control Kit	1	67700260		
61	Front Panel Assy	1	67700229		
62	Guide louver linkage	1	67700122		
63	Filter	1	67700231		
64	Guide louver	8	67700118		
65	Up Filter Guide	1	67700140		
66	Front Panel (Down Filter Guide)	1	67700139		
	AS Window Panel	1	67700135		
69	Basepan	1	67700297		
70	Chassis Fixer	1	67700105		
71	Remote Control	1	67700171		

## **2010 PARTS (Continued)**

## Model CP24F30

No	Description	Qty	Friedrich Part#
1	Supporter Assy	1	67700200
2	Screw ST4.2X13	7	67700154
3	Window locking bracket	2	67700113
4	Screw 4X20	6	67700151
5	Seal strip 1	1	67700128
6	Seal strip 2	1	67700129
7	LT & RT Curtain Assembly	1	67700201
8	Right Curtain	1	67700202
9	Left Curtain	1	67700203
10	Cabinet Assy	1	67700238
11	Screw ST4.2X6.5	6	67700155
12	Screw M4X8	1	67700149
13	Connect cord	1	67700170
14	Screw M4X5	1	67700205
15	Washer 4	1	67700158
16	Screw ST4.2X22	4	67700153
17	Top Rail Assy	1	67700206
18	Screw ST4X10	4	67700152
19	Condenser Assy	1	67700239
20	Nut with Washer M10	1	67700157
21	Washer 10	1	67700159
_	Fan Blade	1	67700117
_	Shroud, Fan Blade	1	67700208
_	Top Cover	1	67700240
25	Motor Support	1	67700112
26		1	67700265
	Innerwall	1	67700109
	Shroud	1	67700242
29		1	67700130
30		2	67700210
	Swing Linkage	2	67700124
	Motor, Swing Louver	1	67700124
	Inflectional Axis	1	67700133
		+	67700121
	Swing Support Fresh Air Door	1 1	
35		1	67700212
36		1	67700243
37		1	67700108
	Base Plate of Air Flue	1	67700106
	Evaporator Assy	1	67700266
40	Sensor Holder	1	67700213
41	Compressor 44B124HXCEF	1	67700290
	Compressor Grommets	3	67700293
_	Nut with washer M8	3	67700156
45	Capillary Assy	1	67700295
	Water Tray	1	67700131
	Capacitor 15uF/300VAC	1	67700145
48	'	1	67700299
_	Relay 841-S-1A-D 110/120V	1	67700147
	Transformer 41X26.5C	1	67700247
51	Capacitor clamp	1	67700172
52	Electronic Control Kit	1	67700261
53	Electric box	1	67700136
54	Isolation Washer D	1	67700223
55	Wire Clamp	1	67700160
56	Power cord	1	67700249
57	Receiver Cover	1	67700225
58	Membrane	1	67700226
59	Control Panel Cover A	1	67700227
60	Electronic Control Kit	1	67700261
61	Front Panel Assy	1	67700229
62	Guide Louver Linkage	1	67700230
63	Filter	1	67700231
64	Guide Louver	14	67700232
65		1	67700233
	Front Panel	1	67700234
67		1	67700235
68		1	67700236
	Basepan (chassis)	1	67700298
J)		-	67700105
70	Chassis Fixer	1	



Friedrich Air Conditioning Company P.O. Box 1540 San Antonio, TX 78295 210.357.4400 www.friedrich.com

## ROOM AIR CONDITIONERS LIMITED WARRANTY

#### **FIRST YEAR**

ANY PART: If any part supplied by FRIEDRICH fails because of a defect in workmanship or material within twelve months from date of original purchase, FRIEDRICH will repair the product at no charge, provided room air conditioner is reasonably accessible for service. Any additional labor cost for removing inaccessible units and/or charges for mileage related to travel by a Service Agency that exceeds 25 miles one way will be the responsibility of the owner. This remedy is expressly agreed to be the exclusive remedy within twelve months from the date of the original purchase.

#### **SECOND THROUGH FIFTH YEAR**

SEALED REFRIGERANT SYSTEM: If the Sealed Refrigeration System (defined for this purpose as the compressor, condenser coil, evaporator coil, reversing valve, check valve, capillary, filter drier, and all interconnecting tubing) supplied by FRIEDRICH in your Room Air Conditioner fails because of a defect in workmanship or material within sixty months from date of purchase, FRIEDRICH will pay a labor allowance and parts necessary to repair the Sealed Refrigeration System; PROVIDED FRIEDRICH will not pay the cost of diagnosis of the problem, removal, freight charges, and transportation of the air conditioner to and from the Service Agency, and the reinstallation charges associated with repair of the Sealed Refrigeration System. All such cost will be the sole responsibility of the owner. This remedy is expressly agreed to be the exclusive remedy within sixty months from the date of the original purchase.

APPLICABILITY AND LIMITATIONS: This warranty is applicable only to units retained within the Fifty States of the U.S.A., District of Columbia, and Canada. This warranty is not applicable to:

- Air filters or fuses.
   Products on which the model and serial numbers have been removed.
- 3. Products which have defects or damage which results from improper installation, wiring, electrical current characteristics, or maintenance; or caused by accident, misuse or abuse, fire, flood, alterations and/or misapplication of the product and/or units installed in a corrosive atmosphere, default or delay in performance caused by war. government restrictions or restraints, strikes, material shortages beyond the control of FRIEDRICH, or acts of God.

OBTAINING WARRANTY PERFORMANCE: Service will be provided by the FRIEDRICH Authorized Dealer or Service Organization in your area. They are listed in the Yellow Pages. If assistance is required in obtaining warranty performance, write to: Room Air Conditioner Service Manager, Friedrich Air Conditioning Co., P.O. Box 1540, San Antonio, TX 78295-1540.

LIMITATIONS: THIS WARRANTY IS GIVEN IN LIEU OF ALL OTHER WARRANTIES. Anything in the warranty notwithstanding, ANY IMPLIED WARRANTIES OF FITNESS FOR PARTICULAR PURPOSE AND/OR MERCHANTABILITY SHALL BE LIMITED TO THE DURATION OF THIS EXPRESS WARRANTY. MANUFACTURER EXPRESSLY DISCLAIMS AND EXCLUDES ANY LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGE FOR BREACH OF ANY EXPRESSED OR IMPLIED WARRANTY.

Performance of Friedrich's Warranty obligation is limited to one of the following methods:

- 1. Repair of the unit
- 2. A refund to the customer for the prorated value of the unit based upon the remaining warranty period of the unit.
- 3. Providing a replacement unit of equal value

The method of fulfillment of the warranty obligation is at the sole discretion of Friedrich Air Conditioning.

NOTE: Some states do not allow limitations on how long an implied warranty lasts, or do not allow the limitation or exclusion of consequential or incidental damages, so the foregoing exclusions and limitations may not apply to you.

OTHER: This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

PROOF OF PURCHASE: Owner must provide proof of purchase in order to receive any warranty related services.

All service calls for explaining the operation of this product will be the sole responsibility of the consumer.

All warranty service must be provided by an Authorized FRIEDRICH Service Agency, unless authorized by FRIEDRICH prior to repairs being made.

(10-08)