COMMERCIAL
REFRIGERATOR & FREEZER

SERVICE MANUAL
(CFD Units)

MODEL: CFD-1RR

CFD-2RR

CFD-3RR

CFD-1FF

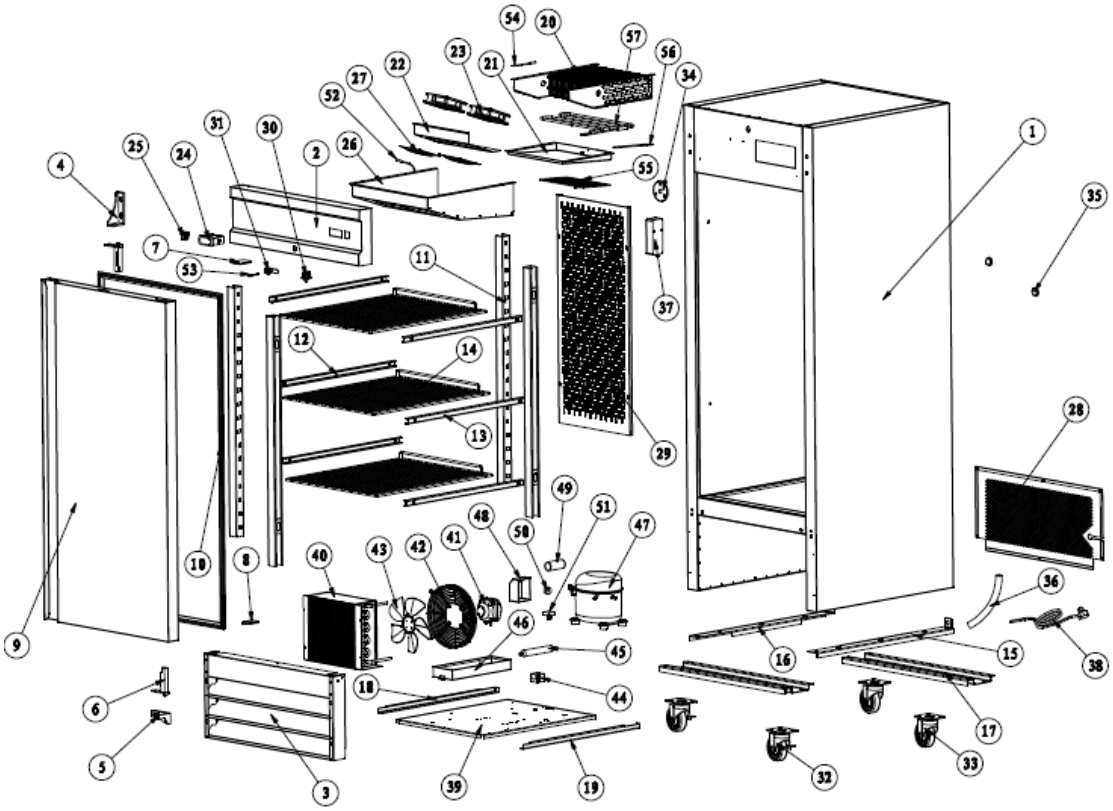
CFD-2FF

CFD-3FF

TABLE OF CONTENTS

1. EXPLODED VIEW AND PARTS LIST

1.1 CFD1 series



1	CABINET: N/A	30	DOOR SWITCH: 17817409
2	CONTROL PANEL ★★	31	LOCK: 17813009
3	FRONT GRILL	32	4" CASTOR WITH BRAKE: 17816412
4	UPPER RIGHT HINGE: 178HINGCFDTR	33	4" CASTOR: 17819301
5	BOTTOM RIGHT HINGE:178HINGCFDBR	34	DRAIN PLUG ★★
6	SPRING HINGE: 178CARTRIDGE	35	FOAMING HOLE COVER: N/A
7	TOP COVER FOR REVERSIBLE DOOR	36	DRAIN HOSE
8	BOTTOM COVER FOR REVERSIBLE DOOR	37	LIGHT COMPONENTS: 17819014
9	DOOR: 17815080	38	POWER CORD: 17810175
10	GASKET: 178GSKT11571	39	COMPRESSOR UNIT INSTALLATION BOARD: N/A
11	BRACKETS: 17818644	40	CONDENSER: 17815157 or (17818779 ★)
12	LEFT SHELF TRACK: 178SHELFRAIL	41	CONDENSER FAN MOTOR: 17814905
13	RIGHT SHELF TRACK: 178SHELFRAIL	42	CONDENSER FAN COVER: 1785467
14	SHELF: 178SHELFCFD	43	CONDENSER FAN MOTOR BLADE: 17811089
15	RIGHT CONNECTING BOARD FOR CASTER ★★	44	FILTER FIXER: N/A
16	LEFT CONNECTING BOARD FOR CASTER ★★	45	FILTER: 970C032CAPT
17	LEG SUPPORTER ★★	46	OUTER DRAIN PAN: 17816356

18	LEFT TRACK FOR ASSEMBLING PANEL	47	COMPRESSOR: Ref – 17817554, Old F – 17811567, New F – 17811460
19	RIGHT TRACK FOR ASSEMBLING PANEL	48	SPLICE BOX ★★
20	EVAPORATOR: 17811872	49	START CAPACITOR ★★
21	INNER DRAIN PAN: 17815065	50	OVERLOAD PROTECTOR ★★
22	FAN MOTOR INSTALLATION PANEL ★★	51	STARTER ★★
23	EVAPORATOR FAN MOTOR: 17813407	52	TEMPERATURE SENSOR OF CABINET INSIDE: 17813890 SF ONLY
24	THERMOSTAT (See Below)	53	KEY: 17811836
25	POWER SWITCH: Old Green – 17810364 New Red-- 17810365	54	EVAPORATOR TEMPERATURE SENSOR ★:17813890 SF ONLY
26	EVAPORATOR COVER: 17818696	55	DRAIN PAN HEATER ★:17815641
27	EVAPORATOR FAN MOTOR COVER: 17815699	56	DRAIN HOSE HEATER ★: 17813722
28	BACK GRILL ★★	57	DEFROST HEATER ★:17813517
29	COMPONENTS FOR BACK SHELF ★★		

★ Freezer only ★★ Consult Factory

Thermostat:

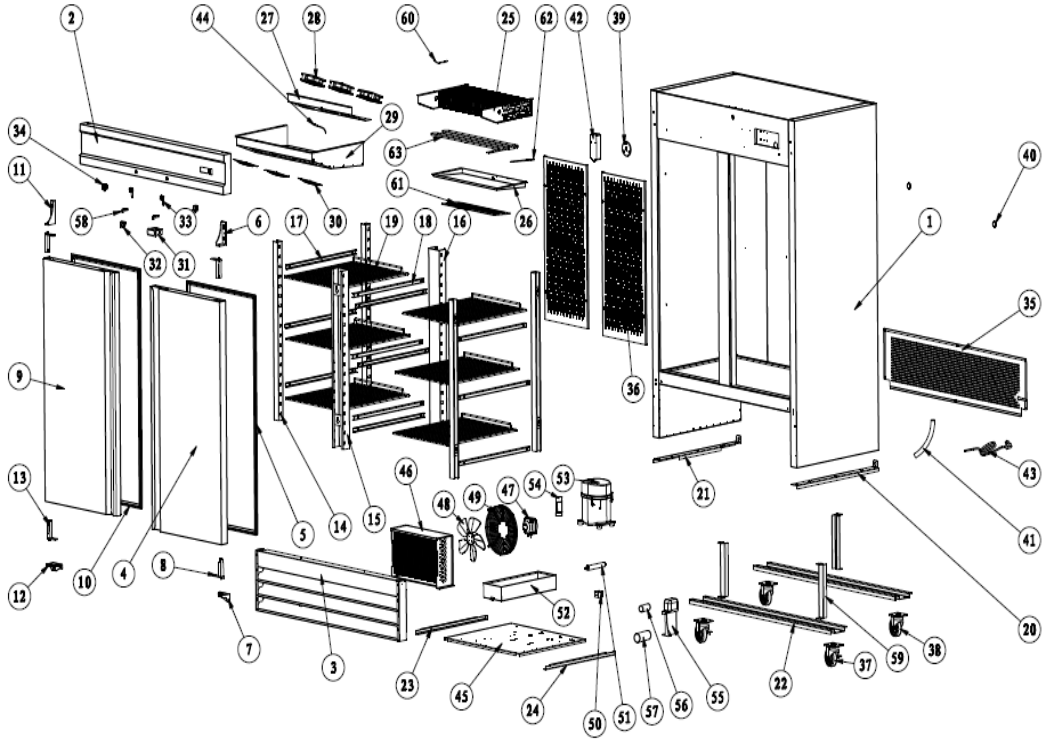
17815350 – Refrigerator

17816023 – with Relays SF102

17818869 – SF104 Freezer ★★

17819471 – Freezer ★★

1.2 CFD2RR/CFD2FF



1	CABINET: N/A	33	LOCK: 17813009
2	CONTROL PANEL	34	DOOR SWITCH: 17817409
3	FRONT GRILL ★★	35	BACK GRILL
4	RIGHT DOOR: 17818904	36	COMPONENTS FOR BACK SHELF
5	GASKET: 178GSKT10521	37	4" CASTOR WITH BRAKE: 17816412
6	UPPER RIGHT HINGE: 178HINGCFDTR	38	4" CASTOR: 17819301
7	BOTTOM RIGHT HINGE: 178HINGCFDBR	39	DRAIN PLUG: 17813588
8	SPRING HINGE: 178CARTRIDGE	40	FOAMING HOLE COVER: N/A
9	LEFT DOOR: 17818904	41	DRAIN HOSE
10	GASKET: 178GSKT10521	42	LIGHT COMPONENTS: 17819014 (Cover For Lights)
11	UPPER LEFT HINGE: 178HINGCFDTL	43	POWER CORD: 17810175
12	LEFT BOTTOM HINGE: 178HINGCFDBL	44	TEMPERATURE SENSOR OF CABINET INSIDE: 17813890 – SF ONLY
13	SPRING HINGE: 178CARTRIDGE	45	COMPRESSOR UNIT INSTALLATION BOARD: N/A
14	BRACKET	46	CONDENSER: 17811539
15	MIDDLE BRACKET: 17815961 Support Rack	47	CONDENSER FAN MOTOR: R – 17810976 F -- 17815815
16	BACK BRACKET	48	CONDENSER FAN MOTOR BLADE: R – 17817114 F -- 17812660
17	LEFT SHELF TRACK: 178SHELFRAIL	49	CONDENSER FAN COVER: 1785467
18	RIGHT SHELF TRACK: 178SHELFRAIL	50	FILTER FIXER: N/A
19	SHELF: 178SHELFCFD	51	FILTER
20	RIGHT CONNECTING BOARD FOR CASTER ★★	52	OUTER DRAIN PAN
21	LEFT CONNECTING BOARD FOR CASTER ★★	53	COMPRESSOR (See Note Below)
22	LEG SUPPORTER ★★	54	SPLICE BOX ★★
23	LEFT TRACK FOR ASSEMBLING PANEL ★★	55	STARTER ★★
24	RIGHT TRACK FOR ASSEMBLING PANEL ★★	56	OVERLOAD PROTECTOR ★★
25	EVAPORATOR: 17816999	57	START CAPACITOR ★★
26	INNER DRAIN PAN: 17817891	58	KEY: 17811836
27	FAN MOTOR INSTALLATION PANEL ★★	59	SUPPORT ROD
28	EVAPORATOR FAN MOTOR: 17813407	60	EVAPORATOR TEMPERATURE SENSOR★ 17813890 (SF Only)
29	EVAPORATOR COVER: 17816883	61	DRAIN PAN HEATER★ 17815642
30	EVAPORATOR FAN MOTOR COVER: 17818696	62	DRAIN HOSE HEATER★ 17813722
31	THERMOSTAT (See Below)	63	DEFROST HEATER★ 17817764
32	POWER SWITCH: Old Green – 17810364 New Red -- 17810365	64	

★Freezer only ★★ Consult Factory

31. Thermostats:

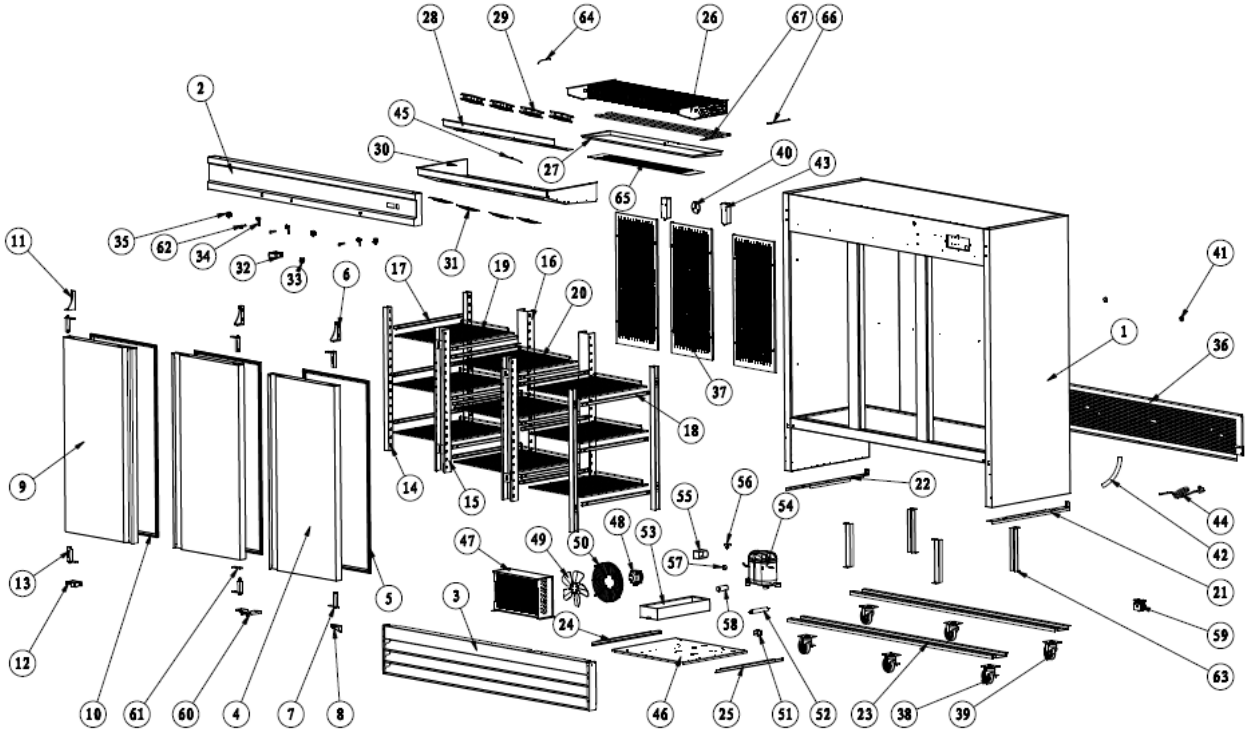
17816023 – SF102 w/ Relays Refrigerator 17818846 – SF104 Freezer ★

17815350 – Refrigerator

53. Freezer Compressor – Old: 17812874, New: 17818018

Refrigerator Compressor – Old: 17817533, New: 17818892

1.3 CFD3RR/ CFD3FF



1	CABINET: N/A	35	DOOR SWITCH: 17817409
2	CONTROL PANEL: 17817125	36	BACK GRILL
3	FRONT GRILL	37	COMPONENTS FOR BACK SHELF ★★
4	RIGHT DOOR: 17818904	38	4" CASTOR WITH BRAKE: 17816412
5	GASKET: 178GSKT10521	39	4" CASTOR: 17819301
6	UPPER RIGHT HINGE: 178HINGCFDTR	40	DRAIN PLUG: 17813588
7	SPRING HINGE: 178CARTRIDGE	41	FOAMING HOLE COVER: N/A
8	BOTTOM RIGHT HINGE: 178HINGCFDBR	42	DRAIN HOSE
9	LEFT DOOR: 17818904	43	LIGHT COMPONENTS: 17819014 (Cover For Lights)
10	GASKET: 178GSKT10521	44	POWER CORD
11	UPPER LEFT HINGE: 178HINGCFDTL	45	TEMPERATURE SENSOR OF CABINET INSIDE:

			17813890 -- SF Only
12	LEFT BOTTOM HINGE: 178HINGCFDBL	46	COMPRESSOR UNIT INSTALLATION BOARD: N/A
13	SPRING HINGE: 178 CARTRIDGE	47	CONDENSER: R-17811539, F-17817943
14	BRACKETS	48	CONDENSER FAN MOTOR: R-17810976, F-17815815
15	MIDDLE BRACKETS	49	BLADE OF CONDENSER FAN MOTOR: R-17817114, F-17812660
16	BACK BRACKETS	50	CONDENSER FAN COVER: 17812098
17	LEFT SHELF TRACK: 178SHELFRAIL	51	FILTER FIXER: N/A
18	RIGHT SHELF TRACK: 178SHELFRAIL	52	FILTER
19	SHELF: Left or Right – 178SHELFCFD	53	CONDENSATE DRAIN PAN: 17812622
20	MIDDLE SHELF: 178SHELFCFD3	54	COMPRESSOR: R-17815901, F-17818299
21	RIGHT CONNECTING BOARD FOR CASTER ★★	55	SPLICE BOX ★★
22	LEFT CONNECTING BOARD FOR CASTER ★★	56	STARTER ★★
23	LEG SUPPORTER ★	57	OVERLOAD PROTECTOR ★★
24	LEFT TRACK FOR ASSEMBLING PANEL ★★	58	START CAPACITOR ★★
25	RIGHT TRACK FOR ASSEMBLING PANEL ★★	59	AC CONTACTOR: 17819644
26	EVAPORATOR: 17810051	60	BOTTOM HINGE FOR MIDDLE DOOR: 178HINGCFDBM
27	INNER DRAIN PAN: 17811448	61	MIDDLE DOOR BLOCK: N/A
28	FAN MOTOR INSTALLATION PANEL ★	62	KEY: 17811836
29	EVAPORATOR FAN MOTOR: 17813407	63	SUPPORT ROD ★★
30	EVAPORATOR COVER: 17818904	64	EVAPORATOR TEMPERATURE SENSOR★ 17813890 – SF Only
31	EVAPORATOR FAN COVER: 17815699	65	DRAIN PAN HEATER: 17815643 ★
32	THERMOSTAT (See Below)	66	DRAIN HOSE HEATER: 17813722 ★
33	POWER SWITCH: Green Old – 17810364 Red New - 17810365	67	DEFROST HEATER: 17817359★
34	LOCK: 13009	68	

★Freezer only ★★ Consult Factory

32. Thermostats:

17816023 – SF 102, Refrigerator Thermostat

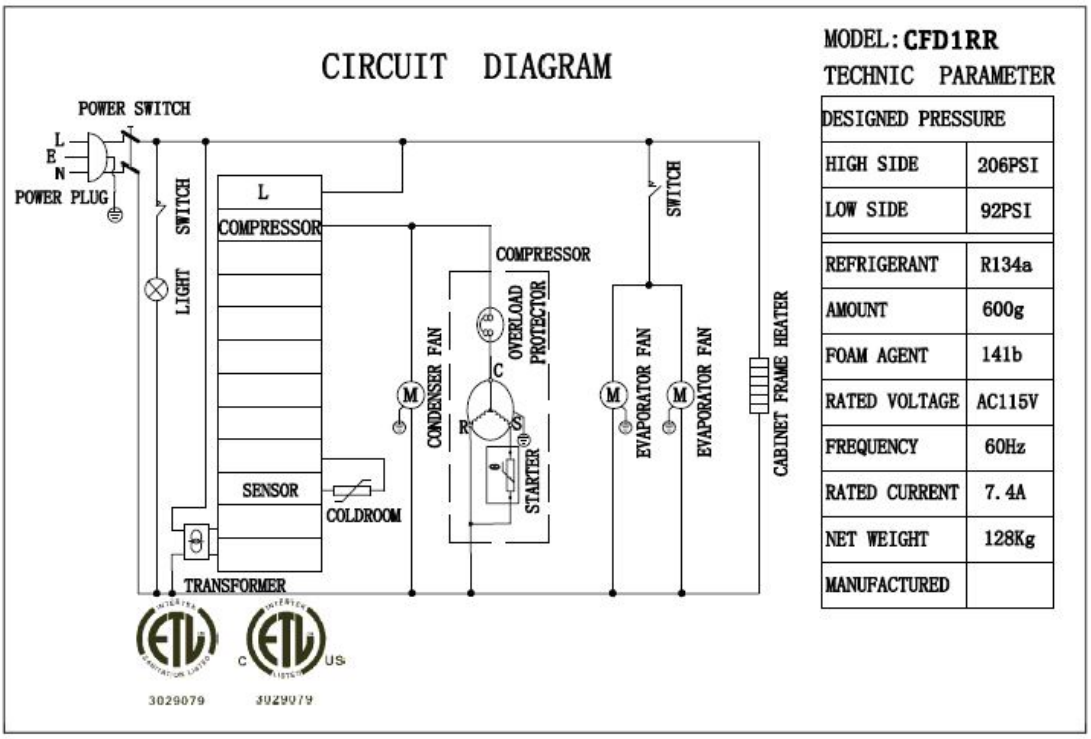
17818846 – SF104, Freezer Thermostat★

17815350 – Carenl Refrigerator Thermostat

17819471 – Carel Freezer Thermostat★

2. WIRING DIAGRAM

2.1 One door refrigerator: CFD1RR

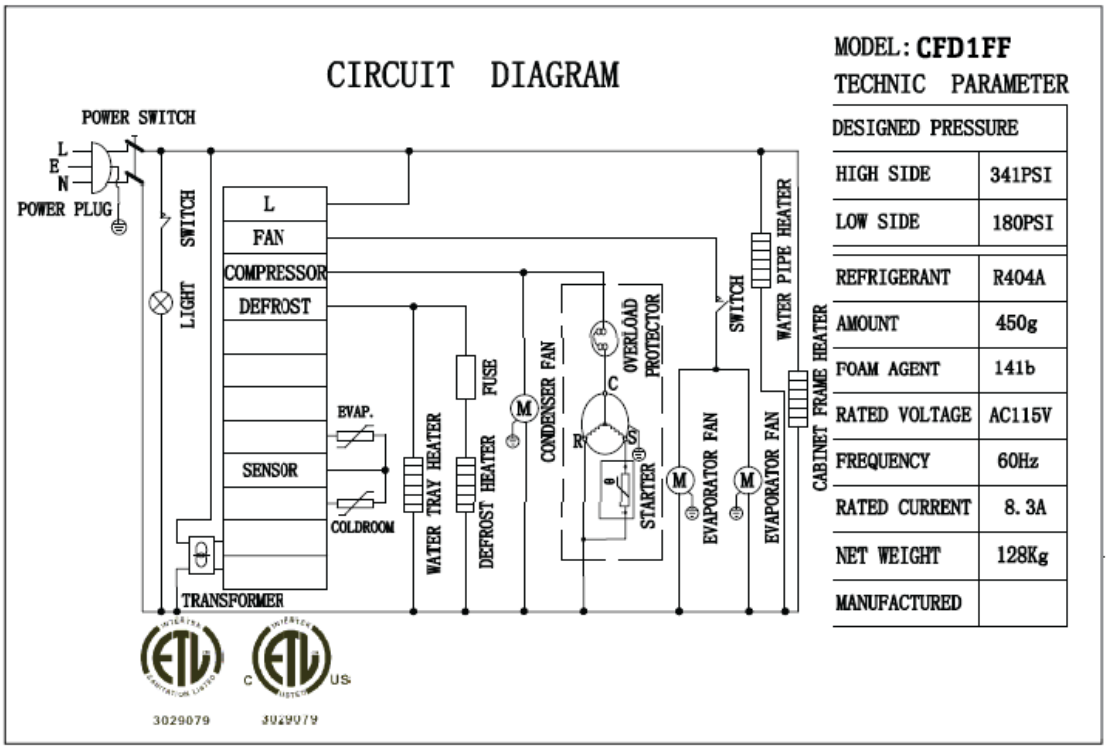


MODEL: **CFD1RR**

TECHNIC PARAMETER

DESIGNED PRESSURE	
HIGH SIDE	206PSI
LOW SIDE	92PSI
REFRIGERANT	R134a
AMOUNT	600g
FOAM AGENT	141b
RATED VOLTAGE	AC115V
FREQUENCY	60Hz
RATED CURRENT	7.4A
NET WEIGHT	128Kg
MANUFACTURED	

2.2 One door freezer: CFD1FF

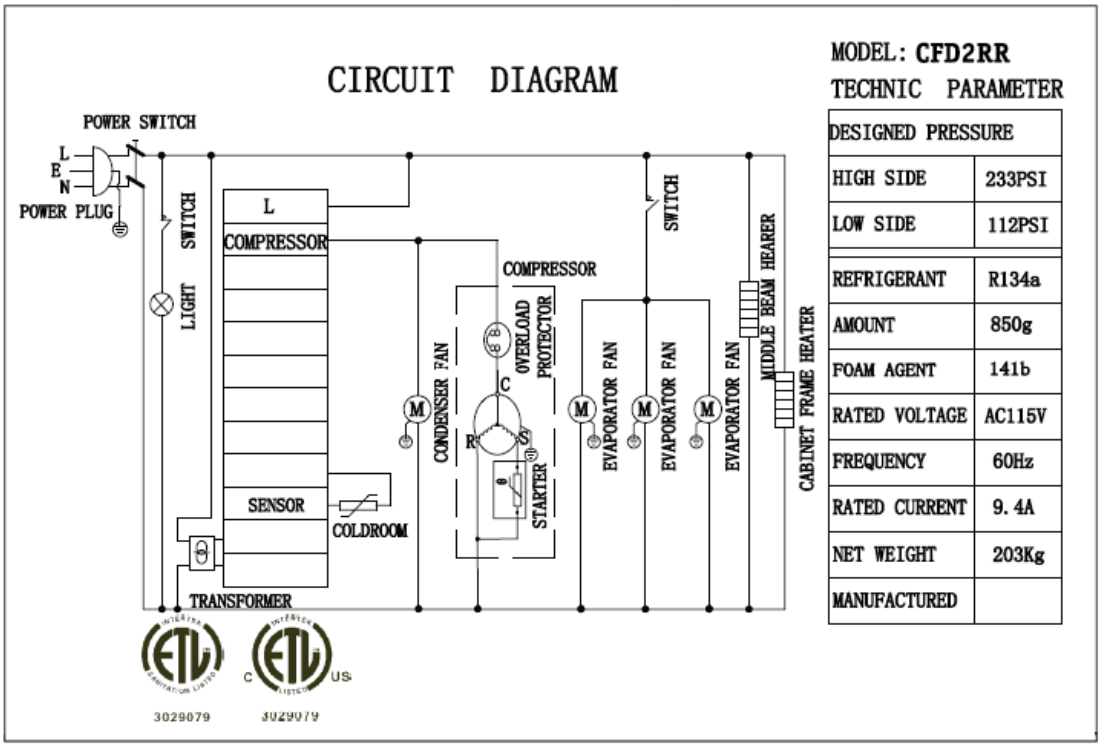


MODEL: **CFD1FF**

TECHNIC PARAMETER

DESIGNED PRESSURE	
HIGH SIDE	341PSI
LOW SIDE	180PSI
REFRIGERANT	R404A
AMOUNT	450g
FOAM AGENT	141b
RATED VOLTAGE	AC115V
FREQUENCY	60Hz
RATED CURRENT	8.3A
NET WEIGHT	128Kg
MANUFACTURED	

2.3 Two door refrigerator: CFD2RR

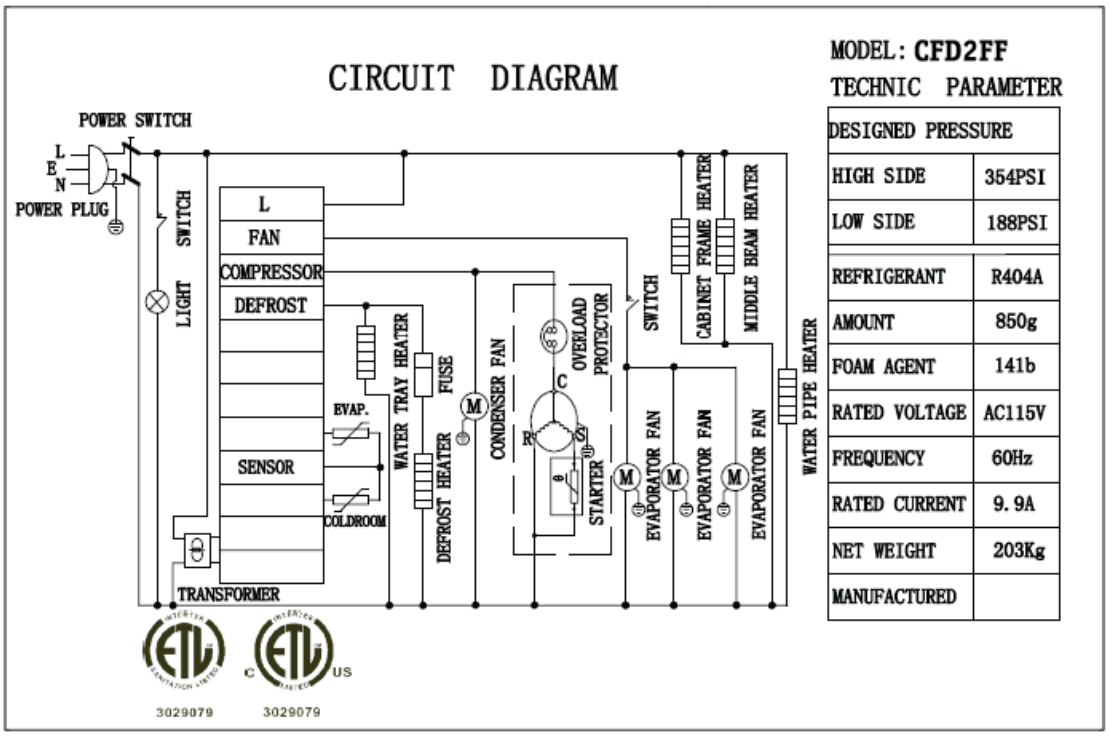


MODEL: **CFD2RR**

TECHNIC PARAMETER

DESIGNED PRESSURE	
HIGH SIDE	233PSI
LOW SIDE	112PSI
REFRIGERANT	R134a
AMOUNT	850g
FOAM AGENT	141b
RATED VOLTAGE	AC115V
FREQUENCY	60Hz
RATED CURRENT	9.4A
NET WEIGHT	203Kg
MANUFACTURED	

2.4 Two door freezer: CFD2FF

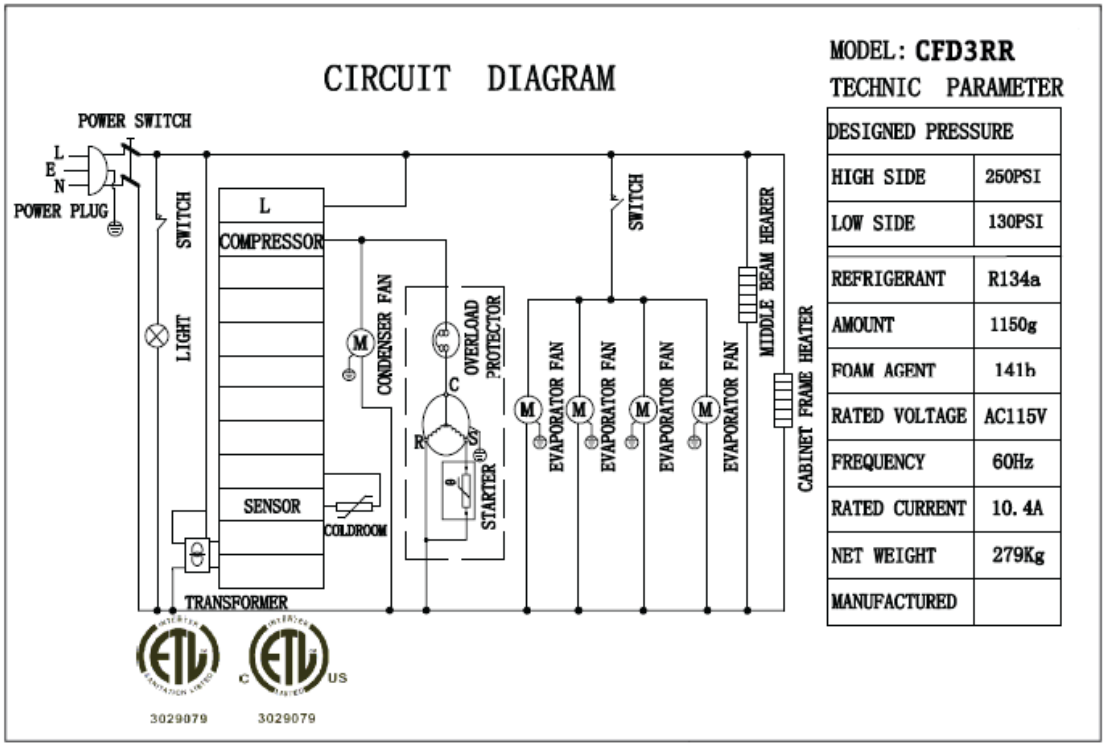


MODEL: **CFD2FF**

TECHNIC PARAMETER

DESIGNED PRESSURE	
HIGH SIDE	354PSI
LOW SIDE	188PSI
REFRIGERANT	R404A
AMOUNT	850g
FOAM AGENT	141b
RATED VOLTAGE	AC115V
FREQUENCY	60Hz
RATED CURRENT	9.9A
NET WEIGHT	203Kg
MANUFACTURED	

2.5 Three door refrigerator: CFD3RR

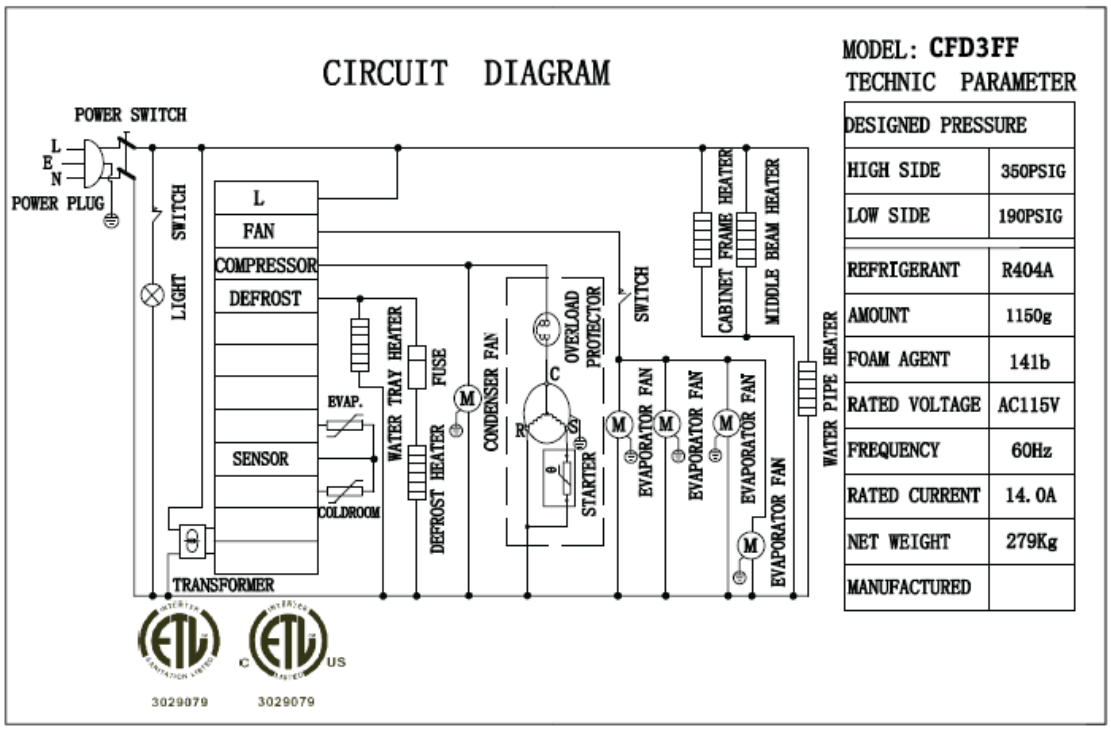


MODEL: **CFD3RR**

TECHNIC PARAMETER

DESIGNED PRESSURE	
HIGH SIDE	250PSI
LOW SIDE	130PSI
REFRIGERANT	R134a
AMOUNT	1150g
FOAM AGENT	141b
RATED VOLTAGE	AC115V
FREQUENCY	60Hz
RATED CURRENT	10.4A
NET WEIGHT	279Kg
MANUFACTURED	

2.6 Three door freezer: CFD3FF



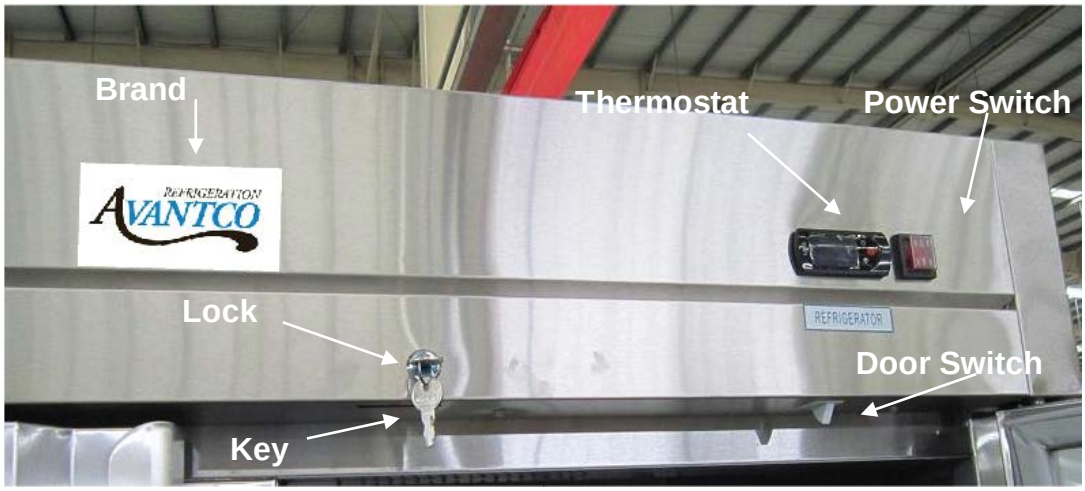
MODEL: **CFD3FF**

TECHNIC PARAMETER

DESIGNED PRESSURE	
HIGH SIDE	350PSIG
LOW SIDE	190PSIG
REFRIGERANT	R404A
AMOUNT	1150g
FOAM AGENT	141b
RATED VOLTAGE	AC115V
FREQUENCY	60Hz
RATED CURRENT	14.0A
NET WEIGHT	279Kg
MANUFACTURED	

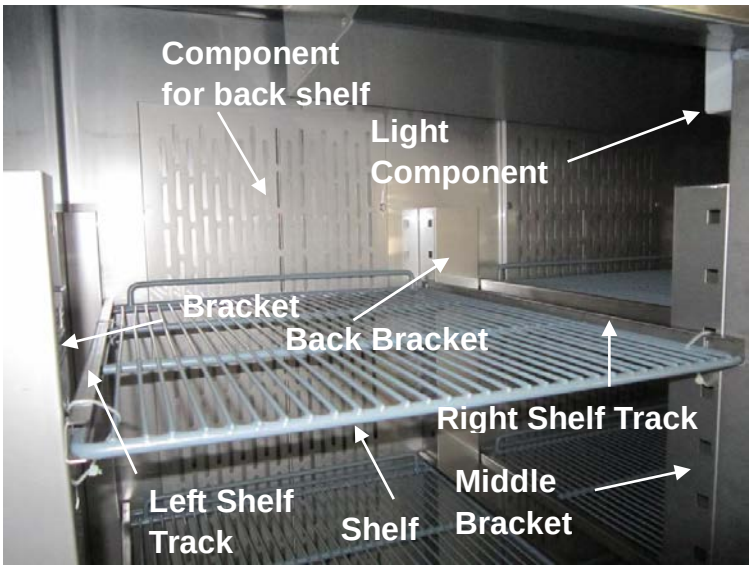
3. PART DETAIL

3.1 Control panel



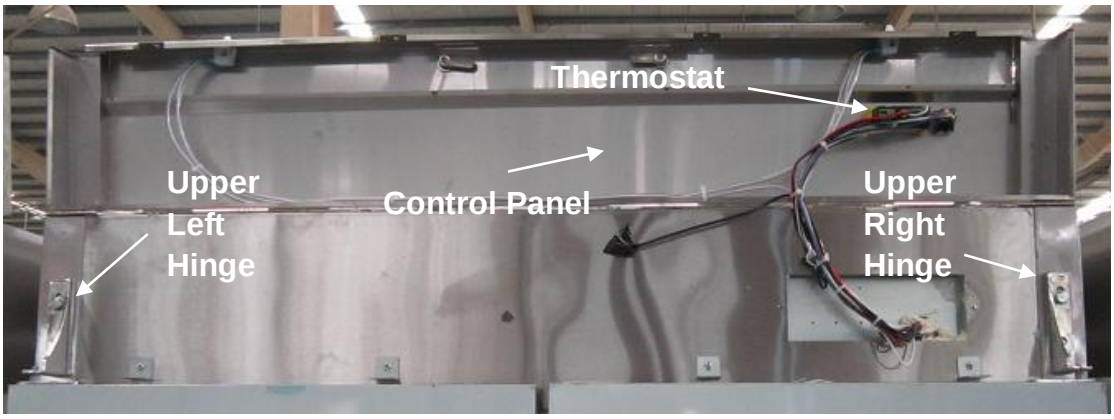
3.2 Door

3.3 Shelf &Track & Bracket

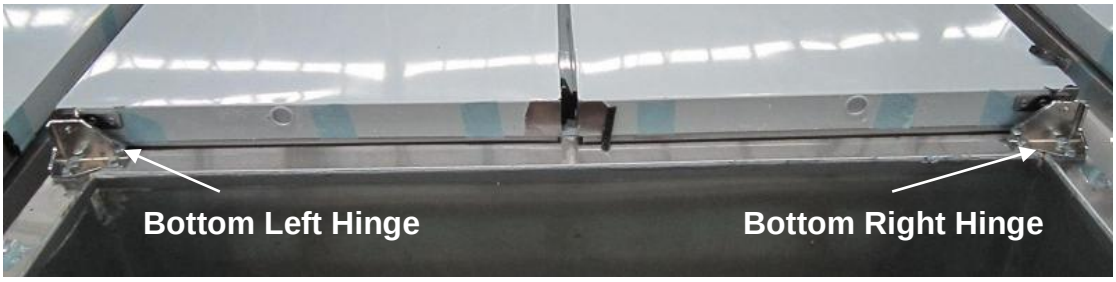


3.4 Hinge

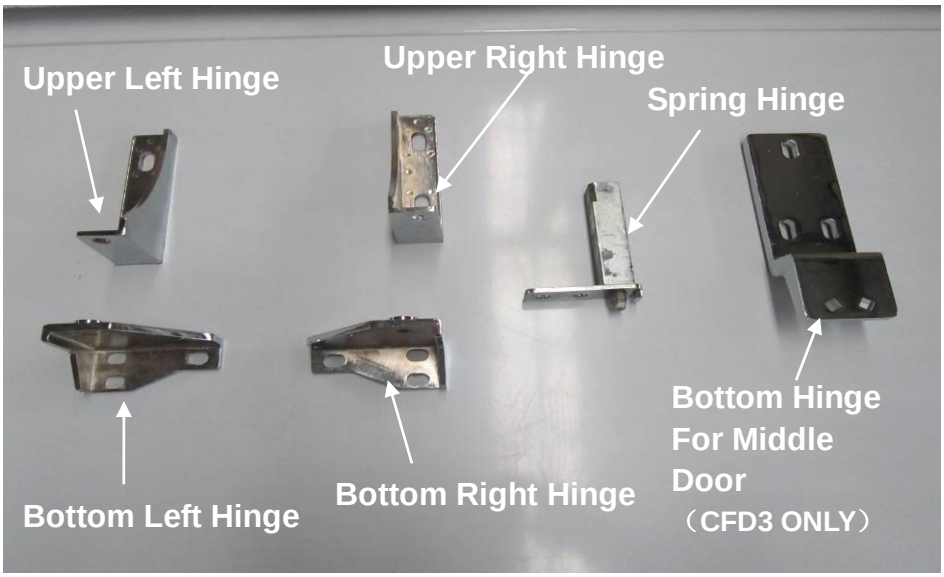
Upper Hinge



Bottom Hinge



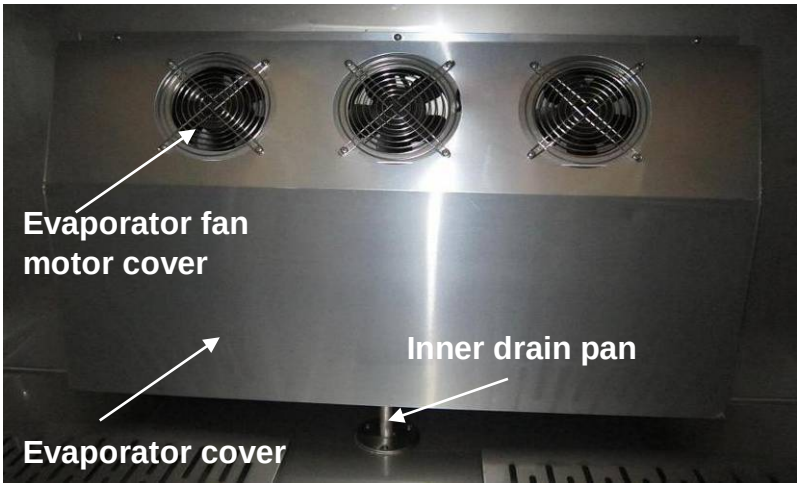
Comparison Of Hinge

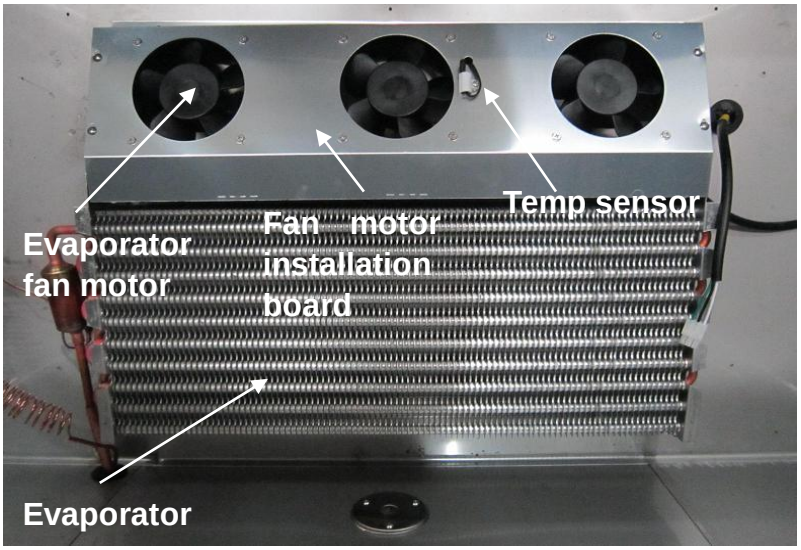


3.5 Refrigeration system

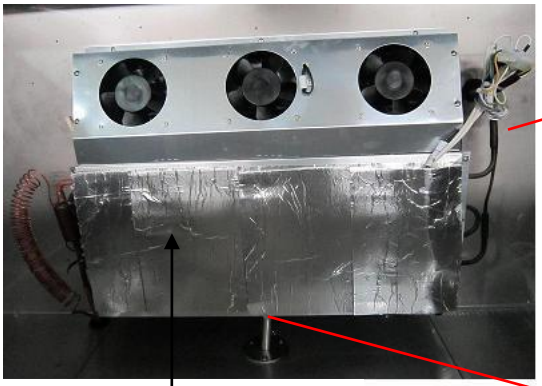
Compressor component

3.6 Cooling system



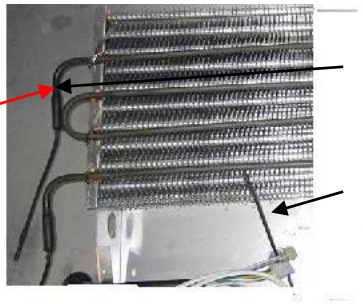


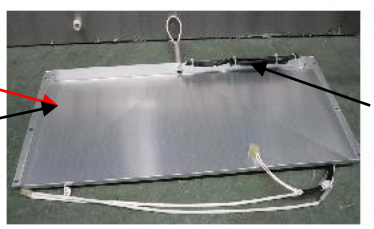
Freezer only: defrost heater, inner drain pan heater, drain hose heater, defrost sensor



Drain pan heater and heater insulator

Inner drain pan





5. CONTROLLER INSTRUCTION

5.1 Refrigerator controller

Digital controller model: PJEZ

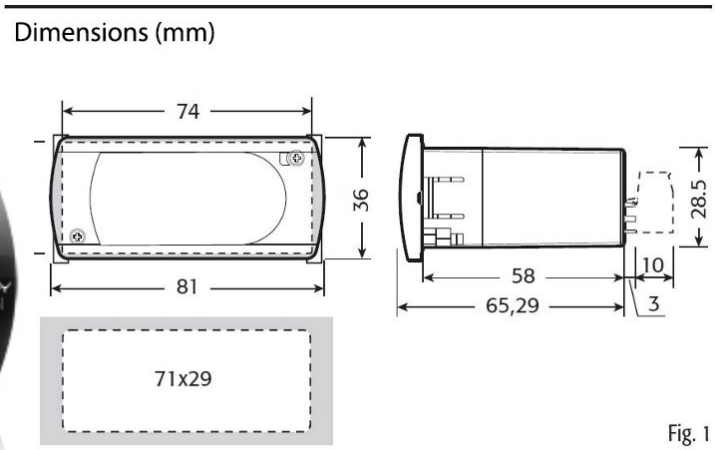


Fig. 1

Display and functions

During normal operation, the controller displays the value of the probe set using parameter/4(=1 ambient probe, default, = 2 second probe, = 3 third probe).In addition, the display has LEDs that indicate the activation of the control functions (see Table 1),while the 3 buttons can be used to activate/deactivate some of the functions (see Table 2).

LEDs and associated functions

icon	function	normal operation			start up
		ON	OFF	blink	
	compressor	on	off	request	ON
	fan	on	off	request	ON
	defrost	on	off	request	ON
AUX	aux	output on	output off	-	ON
	alarm	all	no alarm	-	ON
	clock	RTC fitted and enabled, at least 1 time band set	RTC not fitted or disabled, not even 1 time band set	-	ON if RTC fitted

Tab. 1

Table of functions activated by the buttons - models S, X, Y, C

button		normal operation		start up	
		pressing the button alone	pressed together		
	up ON/OFF	more than 3 s: toggle ON/OFF	Pressed together start/stop continuous cycle	-	
	down defrost	more than 3 s: start/stop defrost		Pressed together start parameter reset procedure	for 1 s display firmware vers. code
set mute	set mute	- 1 s.: display/set the set point - more than 3 s: access parameter setting menu (enter password '22') - mute audible alarm (buzzer)	-		for 1 s RESET current EZY set

Tab. 2

Setting the set point (desired temperature)

1. press **SET** for 1 second, the set value will start flashing after a few moments;
2. increase or decrease the value using **UP** or **DOWN**;
3. press **SET** to confirm the new value.

Switching the device ON/OFF

Press **UP** for more than 3 seconds. The control and defrost algorithms are now disabled and the Instrument displays the message “OFF” alternating with the temperature read by the set probe.

Manual defrost

Press for **DOWN** more than 3 seconds (the defrost starts only if the temperature conditions are valid).

Continuous cycle

Press **UP** and **DOWN** together for more than 3 seconds.

Access and setting type F (frequent) and type C (configuration) parameters

1. Press **SET** for 3 seconds (the display will show ”PS”);
2.To access the type F and C parameter menu, press **SET**, enter the password “22” using **UP/DOWN**, press **SET** to confirm;

   To access the F parameter menu only, press **SET** (without entering the password);
3. Scroll inside the parameter menu using **UP/DOWN**;
4. To display/set the values of the parameter displayed, press **SET**, then **UP/DOWN** and finally **SET** to confirm the changes (returning to the parameter menu).

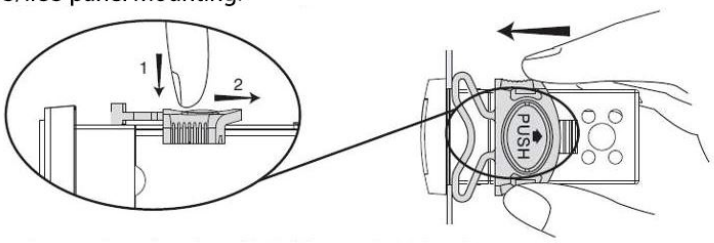
To save all the new values and exit the parameter menu, press **SET** for 3 seconds;

To exit the menu without saving the changed values (exit by timeout) do not press any button for at least 60 seconds.

5.2 Freezer controller

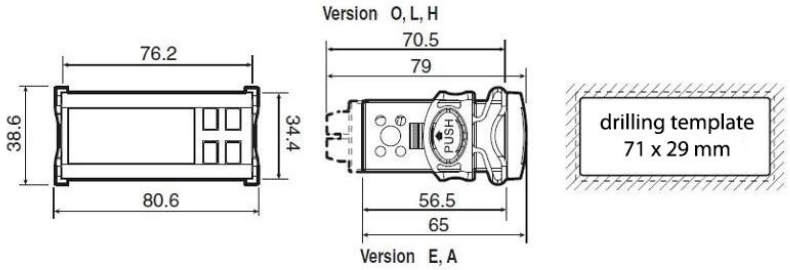
Digital controller model: IR33

ir33/ir33 panel mounting:



Panel mounting by two lateral sliding plastic brackets

Dimensions (mm)



Signals on the display

The blinking status indicates a request for activation that cannot be implemented until the end of the corresponding delay times.

Icon	Function	ON	OFF	blink	Startup
	COMPRESS.	compressor ON	comp. OFF	compressor request	
	FAN	fan ON	fan OFF	fan request	
	DEFROST	defrost in progress	defrost not required	defrost request	
AUX	AUX	auxiliary output AUX active	auxiliary output AUX not active	anti-sweat heater function active	
	ALARM	delayed external alarm (before the expiry of the time 'A7')	no alarm present	alarms in normal operation (eg. high/low temp.) or alarm from ext. digital input immediate or delayed	
	CLOCK	at least one timed defrost has been set	no timed defrost is present	clock alarm	ON if Real-Time Clock pre-
					sent
	LIGHT	auxiliary output LIGHT ACTIVE	auxiliary output LIGHT NOT ACTIVE	anti-sweat heater function active	
	SERVICE		no malfunction	malfunction (eg. EEPROM error or probe fault)	
HACCP	HACCP	HACCP function	HACCP function enabled	HACCP alarm (HA and/or HF) not enabled	
	CONTINUOUS CYCLE	enabled	not enabled	request	

Setting the set point (desired temperature value)

To display or change the set point, proceed as follow:

1. Press the "**Set**" button for more than 1 second to display the set point;
2. Increase or decrease the value of the set point, using the " ▲ aux " and " def ▼ " respectively, until reaching the desired value;
3. Press the "**Set**" button again to confirm the new value.

Alarms with manual reset

Alarms with manual reset can be reset by pressing the " Prg mute " and " ' ▲ aux " for more than 5 seconds.

Manual defrost

As well as the automatic defrost function, a manual defrost can be enabled, if the temperature conditions allow, by pressing the" def ▼ " button for more than 5 seconds.

Continuous cycle

Pressing the buttons " ▲ aux " and " def ▼ " simultaneously for more than 5 seconds enable the continuous cycle function.

During operation in continuous cycle, the compressor continues to operate for the time "cc" and it stops when reaches the "cc" time out or the minimum temperature envisaged (AL = minimum temperature alarm threshold).

Continuous cycle setting: "cc" parameter (continuous cycle duration):"cc"=0 never active;"c6" parameter (by passing the alarm after the continuous cycle):"cc" = 0 never active; it avoid or delays the low temperature alarm after the continuous cycle.

Accessing the configuration parameter (type C)

1. Pressing the " Prg mute " and "**Set"** buttons at the same time for more than 5 seconds, the display will show "00"(password prompt).
2. Press "**Set**"**,** use the " ▲ aux ' " or ' def ▼ " buttons to display the number "22" (parameter access password).
3. Confirm by pressing "**Set**".
4. The display will show the first modifiable "C" parameter.

Accessing the configuration parameter (type F)

1. Hold the " Prg mute " button for more than 5 seconds (if there are active alarms, first mute the buzzer), the display will show the first modifiable "F" parameter.

Modifying the parameters

After having displayed the parameter, either type "C" or type "F", proceed as follows:

1. Use the " ▲ aux " or " def ▼ buttons to scroll the parameters until the parameter to be modified is reached. When scrolling the parameters, an icon is shown on the display that represents the category of the parameter.

2. Alternatively, press the“ Prg/mute “button to display a menu that can be used to quickly access the group of parameters to be modified.
3. Scrolling the menu using the “ ▲/aux “and “ def/▼ “buttons displays the codes of the various categories of parameters, accompanied by the corresponding icon on the display (if present).
4. Once having reached the desired category, press “**Set”** to go directly to the first parameter in the chosen category (if no parameter is visible, pressing the “**Set”** button will have no effect)
5. At this stage, modify the parameters or return to the “Category” menu, using the “Prg/mute “button.
6. Press ”**Set**” to display the value associated with the parameter.
7. Increase or decrease the value using the “ ▲/aux “ or “def/▼ “ buttons respectively.
8. Press “**Set**” to temporarily save the new value and return to the display of the parameter.
9. Repeat the operation from point 1 or point 2.
10. If the parameter has sub-parameters, press “**Set**” to display the first sub-parameter.
11. Press the “▲/aux “or ‘def/▼ “ button to display all the sub-parameters.
12. Press “**Set** “to display the associated value.
13. Increase or decrease the value using the “ ▲/aux “ or “def/▼ “button respectively.
14. Press “**Set**” to temporarily save the new value and return to the display of the sub-parameter code.
15. Press “Prg/mute “ to return to the display of the parent parameter.

Saving the new values assigned to the parameter

To permanently save the new values of the modified parameters, press the “ Prg/mute “ button for more than 5 seconds, thus exiting the parameter setting procedure. All the modifications made to the parameters temporarily saved in the RAM can be canceled and “normal operation” is resumed by not pressing any buttons for 60 seconds. All the modifications made to the parameters that were temporarily saved will be lost.

Correct Settings for CAREL Controllers (115V)

MODE	PJEZ(REFRIG)	IR33(FREEZER)	DISPLAY
/5	1	1	TEMPERATURE UNIT F/C
/c1	0	0	CABINET OFFSET
/c2	0	0	EVAP OFFSET
St	33	-7	USER SET POINT
rd	7	7	DIFFERENTIAL
r1	33	-10	LOW LIMIT
r2	43	10	HIGH LIMIT
c0	2	2	COMPRESSOR DELAY
dI	3	3	DEFROST INTERVAL TIME
dt1	43	58	DEFROST TERMINATION TEMP
dP1	20	20	MAX DEFROST DURATION
F0	N/A	2	FAN OPERATING FUNCTION
F1	N/A	41	FAN STARTING TEMPERATURE
F2	N/A	1	FAN STOPS WHEN COMPRESSOR STOPS
F3	N/A	1	FAN MODE DURING DEFROSTING

6. REPLACEMENT OF THE MAIN PARTS

CAUTION!!!

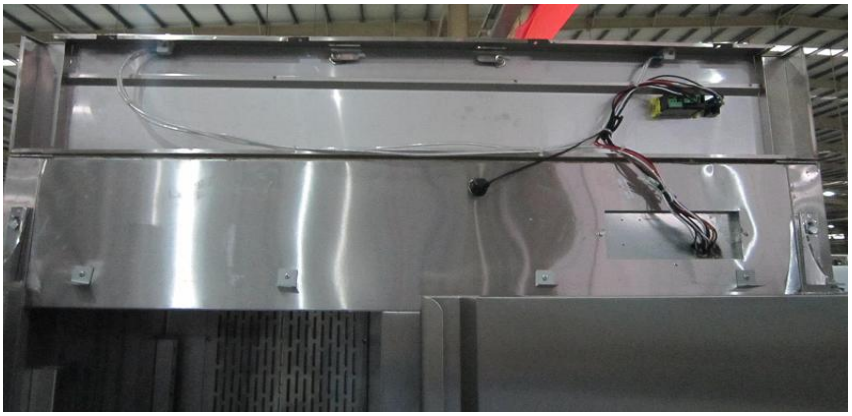
Before beginning, make sure the device has been disconnected from the power socket (pull the power plug) and has been cooled down.

6.1 Control panel components

-Control panel
-Thermostat
-Power switch
-Door switch
-Lock and key

A. Unscrew the screws located on the bottom of the control panel

B. Turn up the control panel and place that on the top of the cabinet. You can replace the controller, power switch, lock, door switch here.



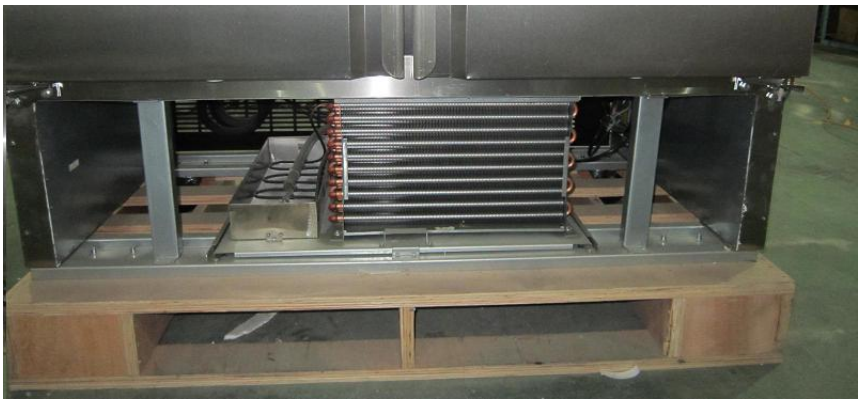
C. You can also unscrew the screws located on the top of the control panel. Remove the control panel from the cabinet to replace the parts: controller, power switch, lock, door switch and the control panel.

CAUTION!!! When screwing in the screw, please hold the control panel to prevent it from falling off and scratching the cabinet.

D. To reassemble, reverse the order of the instructions.

6.2 Door and hinge

A. Disassemble control panel as described above
B. Unscrew the screws located on each side of the front grill and remove the front grill



C. Unscrew the upper hinge. Unscrew the last screw while holding onto the door. You can replace the upper hinge and spring hinge here.

D. Unscrew the lower hinge

CAUTION!!! The door should be lifted by another person when unscrewing the lower hinge to avoid accident.

E. Take off the door and you can replace the upper/lower/spring hinge and door here.

Upper hinge

Lower hinge

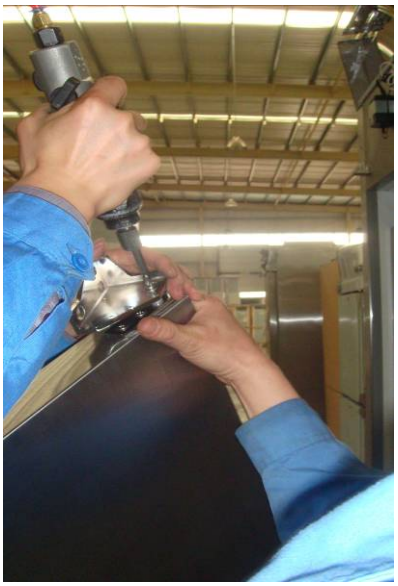
Spring hinge

F. To reassemble the door, reverse the order of instructions. Assemble the lower hinge while lifting the door, and then assemble the upper hinge.
G. If you want to replace the door gasket. Take off the gasket and assemble a new one by using a soft hammer to ensure proper alignment in the channel. Clean the gasket with a damp, soft cloth and then dry with a clean cloth.

◆ **Reversible door, CFD1 Model only.**

A. Disassemble the control panel, front grill, hinges and door as described above.

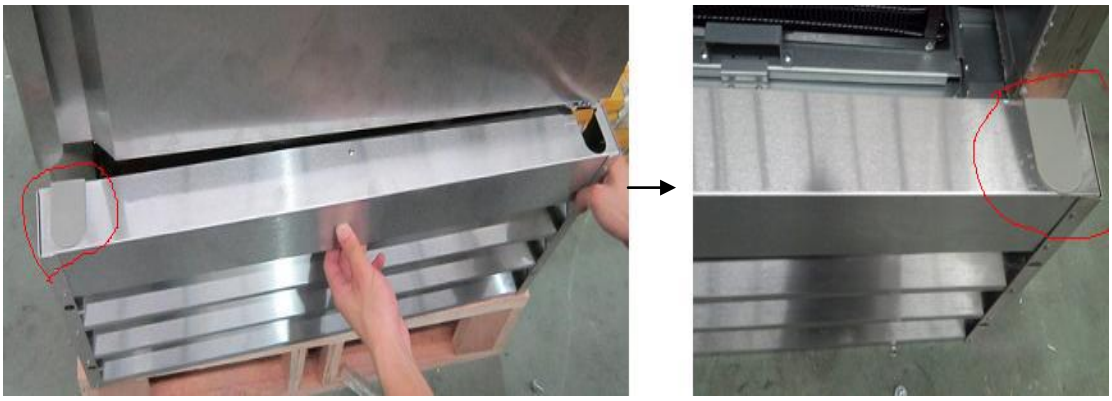
B. Rotate the door 180 degrees, attach the upper and lower hinge to the door. For example: The door was assembled with an upper right hinge and lower right hinge, after removing the hinge and rotating 180 degrees, the door should be assembled with an upper left hinge and lower left hinge.


C. Mount the door onto the cabinet


D. Take the top cover for the reversible door from the left side of the control panel to the right side.

Take the bottom cover for the reversible door from the left side of the front grill to the right side.



E, Assemble the control panel and the front grill. The left-hinged model is now a right-hinged.

Left Hinged

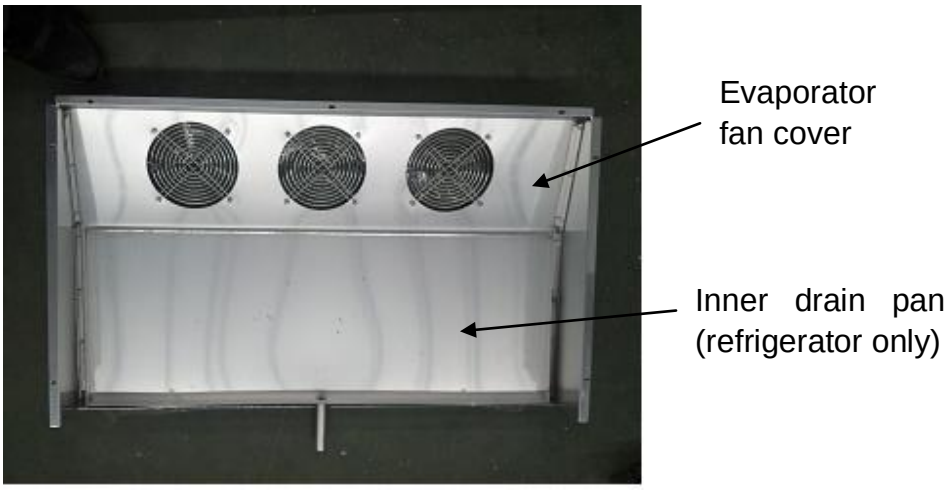
Right Hinged

6.3 Cooling system

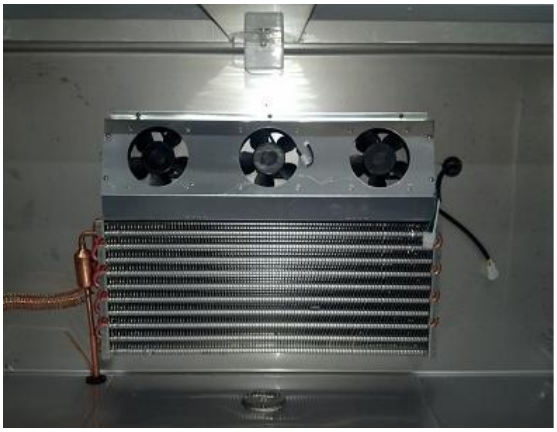
-Evaporator/evaporator cover/Temperature sensor
-Evaporator fan motor/fan motor cover
-Inner drain pan
-Defrost heater/drain pan heater/drain hose heater/defrost sensor (**freezer only**)

A. To replace the evaporator fan motor cover, unscrew the screws and replace with a new cover.

B. Unscrew the screws located on each side of the evaporator fan cover (left, right and front).You can replace the evaporator fan cover and inner drain pan here.



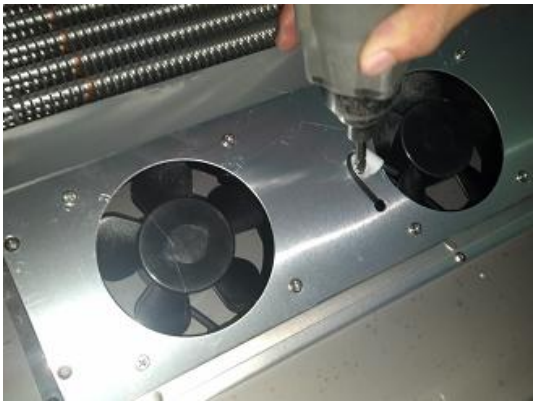
C. The evaporator components are as pictured.



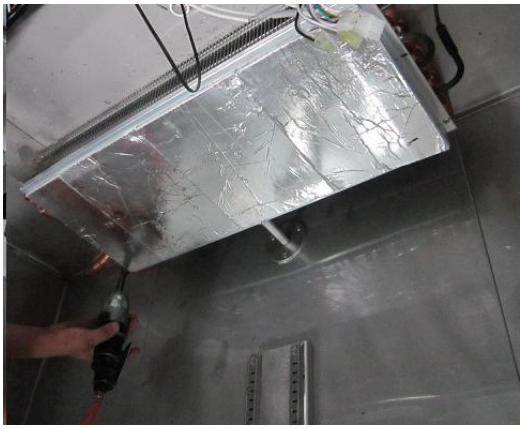
Refrigerator

Freezer

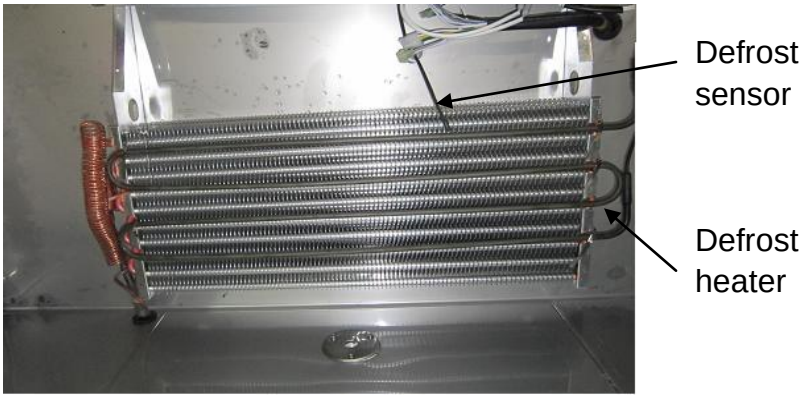
D. Unscrew the screws located on the fan motor installation board and temperature sensor mount. You can replace fan motor and temperature senor here.



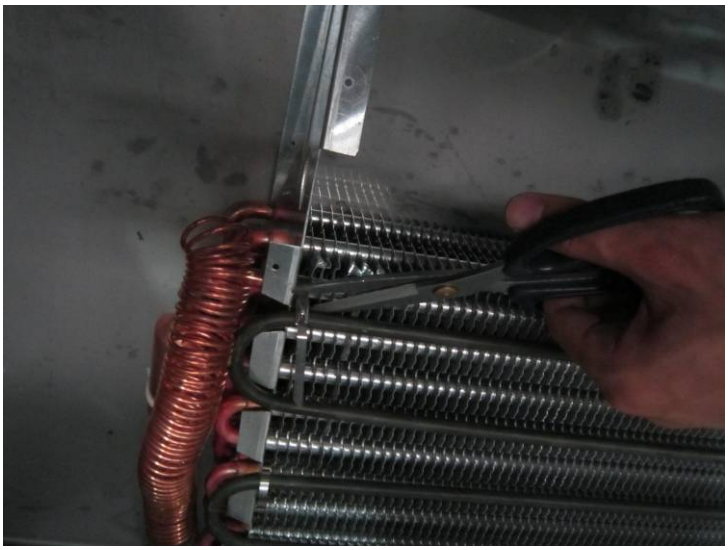
E. Unscrew the screws located on each side of the inner drain pan. Disconnect the cable connectors. You can replace inner drain pan, drain pan heater and drain hose heater here. (**Freezer model only**)



F. Here is the evaporator unit after removing the fan motor and inner drain pan. (**Freezer model only**)



G. Snip the pins used to mount the defrost heater. Disconnect the cable connector. You can replace the defrost heater now. Also use the pins to mount the defrost heater when installing the new one. (**Freezer model only**)



H. Remove evaporator fan motor and fan motor installation board. Unscrew the screws located on each side of the evaporator. You can replace the evaporator here.

I. To reassemble the evaporator component, complete steps in reverse order.

L. If you want to replace the temperature sensor and defrost sensor, the control panel must also be disassembled.

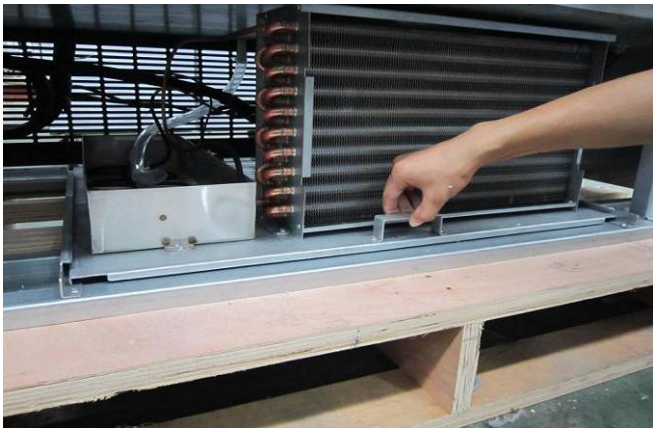
6.4 Refrigeration system

-Compressor/compressor components
-Condenser/condenser fan motor/blade/cover
-Outer drain pan
-Filter

A. Unscrew the screws located on both side of the front grill and remove that.

B. Unscrew the screw used to mount the compressor unit installation board.

C. Pull-out the compressor component, you can replace and clean the parts here.



WARNING! Danger of burns!
The compressor's surface may be very hot during normal use. Never touch it with bare hands.

6.5 Others

-Lamp component
-Power cord/back grill/AC contactor
-Shelf and shelf rail component

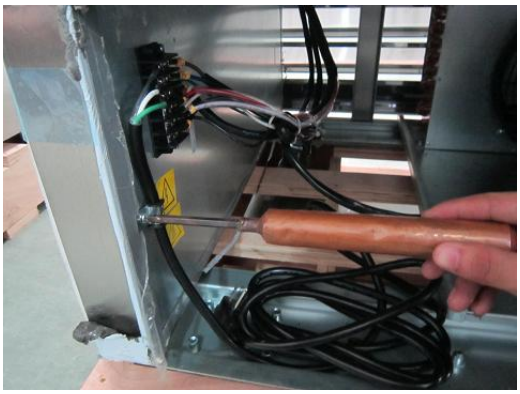
1. Lamp component

Unscrew the screws used to mount the lamp component and install a new one.

2. Power cord & back grill & AC contactor

A. Unscrew the screws located on each side of the back grill.

B. Remove the back grill. Unscrew the screws used to mount the power cord connector. You can install a new power cord here.



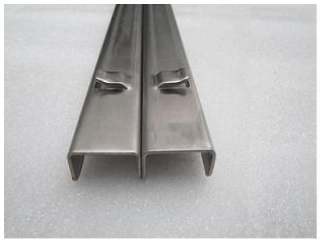
C. Unscrew the screw used to mount the AC contactor (Model **CFD-3FF ONLY**)

CAUTION!!! Please make sure the device is unplugged when you replace the power cord and AC contactor.

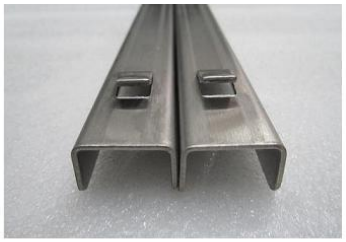
3. Shelf & shelf rail component.

A. Pull the shelf out, you can replace or clean the shelf here or put a full-sized food pan on the rails.

B. Replace and clean the shelf rail. Pull upward and outside the shelf rail.



Front side of the rail



Rear side of the rail

One Pair

C. Lift up on the front bracket (channel), you can replace and clean it here.

D. Unscrew the screws used to mount the back component.

E. Assemble the bracket (channel) by lining up the screw with the mounting bracket and pushing down on the bracket (channel) until secure.

F. Install the shelf rail by lining up the clips on the rail with the holes on the bracket and pushing down.

I. Clean the shelf with an appropriate disinfecting agent.

7. CLEANING AND MAINTENANCE

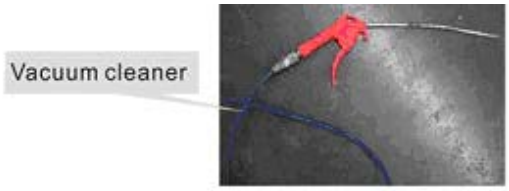
7.1 Cleaning

CAUTION!!! Before cleaning the cabinet, ensure it is disconnected from the main power supply.

A. Clean exterior and interior of the device with a damp and soft cloth. Dry and polish the device with a soft and dry cloth after cleaning.



B. Use a vacuum cleaner and soft brush to carefully clean the surface of the condenser unit.



① Use soft brush to sweep

② Use vacuum cleaner

Tips for cleaning

1. Clean the unit regularly.
2. Never use harsh cleaning substances such as scouring powder or cleaners containing alcohol or solvents that could damage the device’s surface.
3. To prevent cooling problems, clean the condenser regularly.
4. Never use a stiff brush to clean the unit.
5. Do not pressure wash the unit.

7.2 Maintenance

1. Clean the exterior and interior of the unit and condenser unit monthly.
2. Check the main power cable for damage regularly. Never operate the device if the cable is damaged. A damaged cable must immediately be replaced by customer service or a qualified electrician.
3. In case of damage or malfunction, please contact our customer service center at 1-800-678-5517.
4. If the unit is not going to be used for a long period time, unplug the unit and remove the food. Clean and dry the unit thoroughly.
5. Only a qualified technician using OEM replacement parts and accessories should carry out repairs and maintenance of the unit. Do not attempt to repair the unit yourself.