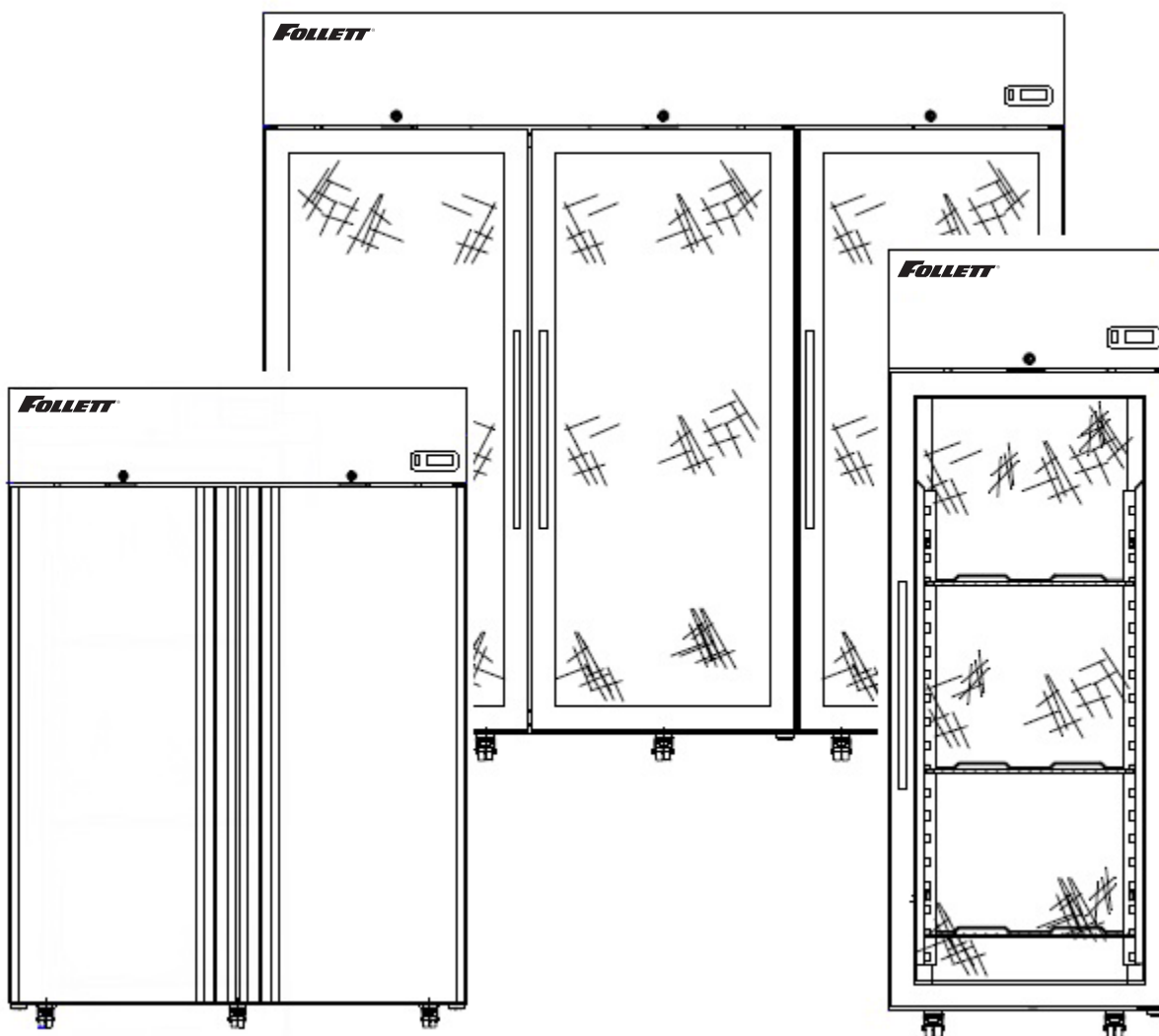


Follett Scientific Refrigerators and Freezers

Operation and Service Manual



**Following installation, please forward this manual
to the appropriate operations person.**

Contents

Before you begin	3
Ambients	4
Clearances	4
Electrical Specifications	4
Refrigeration Specifications	4
Installation	5
Install shelves (if equipped) and power up	5
Power the Unit	5
Stabilizer Bracket Details	6
Remote Alarm Connection	6
Controller Operation	7
Locking/Unlocking of the Keypad	8
Viewing/Adjusting the Set Point	8
Powering the Equipment ON	8
Controller Set Up	8
Defrosting	9
Door Switch	9
Cleaning	11
Interior Cleaning	11
Exterior Cleaning	11
Annual Cleaning	11
Refrigeration System	11
Refrigeration Diagram - Refrigerators	12
Refrigeration Diagram - Freezers	12
Accessing Controls Behind Façade	14
Controller Replacement	14
Controller EV3294 - Programming by programming key	15
Door Gasket Replacement	17
Modular Refrigeration System	17
Chromatography Unit FREFCR30-RGD	18
Operation	21
Wiring Diagram - Glass Door	22
Wiring diagram - Solid Door	23
Replacement parts	24

Welcome to Follett®

Follett equipment enjoys a well-deserved reputation for excellent performance, long-term reliability and outstanding after-the-sale support. To ensure that this product delivers that same degree of service, we ask that you take a moment to review this manual before beginning the installation. Should you have any questions or require technical help at any point, please call our technical service group at (877) 612-5086.

Before you begin

Do not tilt unit further than 30° off vertical during uncrating or installation. After uncrating and removing all packing material, inspect the equipment for concealed shipping damage. If damage is found, notify the shipper immediately and contact Follett so that we can help in the filing of a claim, if necessary.

Check your paperwork to determine which configuration you have. Follett configuration numbers are designed to provide information about the type of refrigerator or freezer you are receiving. Following is an explanation of the different item numbers.

Model Number	Width (inches)	Depth (inches)	Height (inches)	Volume (cu. ft.)	Set Point Temp.	Elec. V/Ph/Hz	Cooling Capacity	Absorbed Power
FREF25-LB-RSD	28 11/32	31 1/2	79 3/16	25	4 C	120/1/60	1467 BTU	290 W
FREF25-LB-RGD FREF25-LB-LGD	28 11/32	31 1/2	79 3/16	25	4 C	120/1/60	1467 BTU	290 W
FFZR25-LB-RSD FFZR25-LB-LSD	28 11/32	31 1/2	79 3/16	25	-20 C	120/1/60	1774 BTU	500 W
FREFCR30-RGD	32 9/32	37 31/64	81 5/32	30	4 C	120/1/60	1774 BTU	500 W
FREF30-LB-RGD FREF30-LB-LGD	32 9/32	37 31/64	81 5/32	30	4 C	120/1/60	1774 BTU	500 W
FFZR49-LB-RSD	56 11/16	31 1/2	79 3/16	49	-20 C	120/1/60	2501 BTU	750 W
FREF49-LB-OSD	56 11/16	31 1/2	79 3/16	49	4 C	120/1/60	1842 BTU	470 W
FREF49-LB-OGD	56 11/16	31 1/2	79 3/16	49	4 C	120/1/60	1842 BTU	470 W
FREF72-LB-RSD	85 3/64	31 1/2	79 3/16	72	4 C	120/1/60	2*1467 BTU	600 W
FREF72-LB-RGD	85 3/64	31 1/2	79 3/16	72	4 C	120/1/60	2*1467 BTU	600 W

Ambients

Intended for indoor use where ambient temperature does not exceed 104 F (40 C) and ambient relative humidity does not exceed 65% RH.

Clearances

The top of the unit must have 15" of clear space above the refrigerator to ensure proper ventilation of the refrigeration system.

The back of the unit should have 2" of clearance to allow for power cord clearance and ventilation on unit.

Electrical Specifications

- 115 V, 60 Hz, 1 phase
- Minimum circuit ampacity: 15A
- Maximum size of branch circuit overcurrent device: 15A circuit
- Follett recommends circuit be protected by GFCI breaker
- Does not require dedicated circuit

Refrigeration Specifications

- Refrigerant R290
- FREF25: 3.2 oz
- FREF30: 3.5 oz
- FREF49: 3.5 oz
- FREF72: 3.2 oz (2 cooling units)
- FFZR25: 3.9 oz
- FFZR49: 3.5 oz

Installation

DANGER



- ***Do not tilt any unit further than 30° off vertical during uncrating or installation***
- ***Refrigeration module area contains mechanical, moving parts. Keep hands and arms clear of this area at all times. If access to this area is required, power to unit must be disconnected first.***

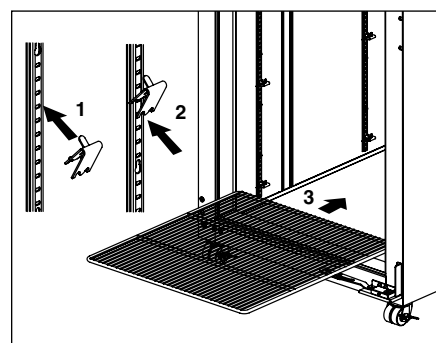
The equipment must be transported and handled exclusively in upright position, in observance of the instructions printed on the packing. This precaution is necessary to avoid contamination of the refrigerant circuit with compressor lube oil with resulting valve and heat exchanger coil failure and problems starting the electric motor or the risk of gas leak. The manufacturer is not responsible for any problems due to transport executed in conditions other than those specified herewith. The equipment is secured to a wooden pallet base, wrapped in a plastic film and packaged into a three waves carton box. The equipment must be handled using a fork lift truck or a pallet truck with suitable forks (fork length at least equal to 2/3 length of unit).

1. Remove packing material.
2. Remove accessories from inside the unit.
3. Carefully slide the cabinet off the skid.
4. Use gloves when handling the carton box or the wooden base to protect the hands from splinters.
5. Position the equipment with the help of a level. Remove the protective PVC film from the external surfaces of the unit.

Install shelves (if equipped) and power up

1. If unit is equipped with shelves, remove bag containing shelf supports and position them in desired locations on each pilaster and insert shelves (**Fig. 1**).
2. Plug unit into a 115 V 60 Hz 15A outlet.

Fig. 1



Power the Unit

1. Plug in unit and press power button located on rear, right-hand corner.

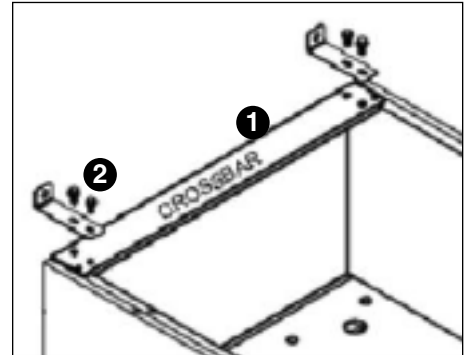
Stabilizer Bracket Details

Warning: To offset any potential for unit tipping, the unit must not be used or loaded for use without being secured to the wall with the wall bracket included. To mount the unit to the bracket and wall, please procure the proper screw and anchor type suitable for the wall material.

Installation

1. Each model has a galvanized iron crossbar at the top rear side (Fig. 2.1).
2. The galvanized iron bracket will be used to attach the unit to the wall.
3. Attach the brackets to the crossbar using the two bolts provided and torque to 3 N-m (Fig. 2.2).
4. Attach wall anchor brackets to wall using appropriate hardware and installation method suitable to application and local codes.

Fig. 2

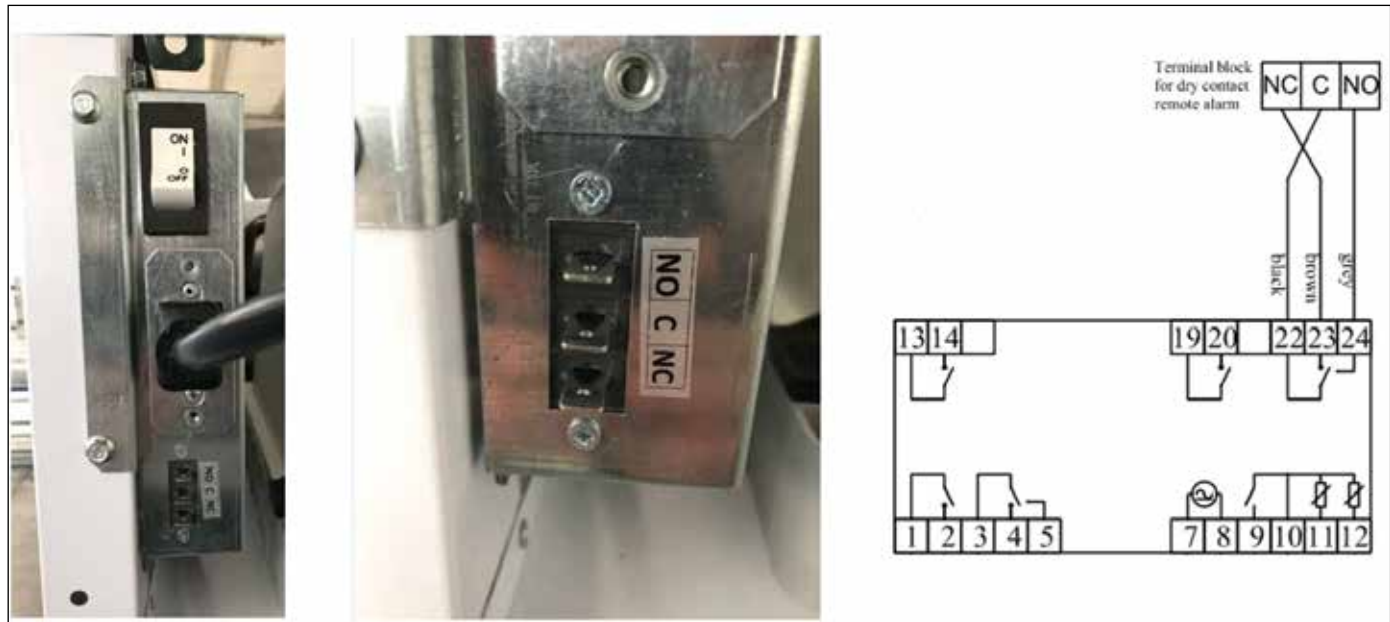


Remote Alarm Connection

These units are equipped with a remote alarm plug for the connection to a remote alarm network.

The remote alarm plug is installed at the back of the cabinet near the main power plug enclosure and is wired through a connection cable to the controller board.

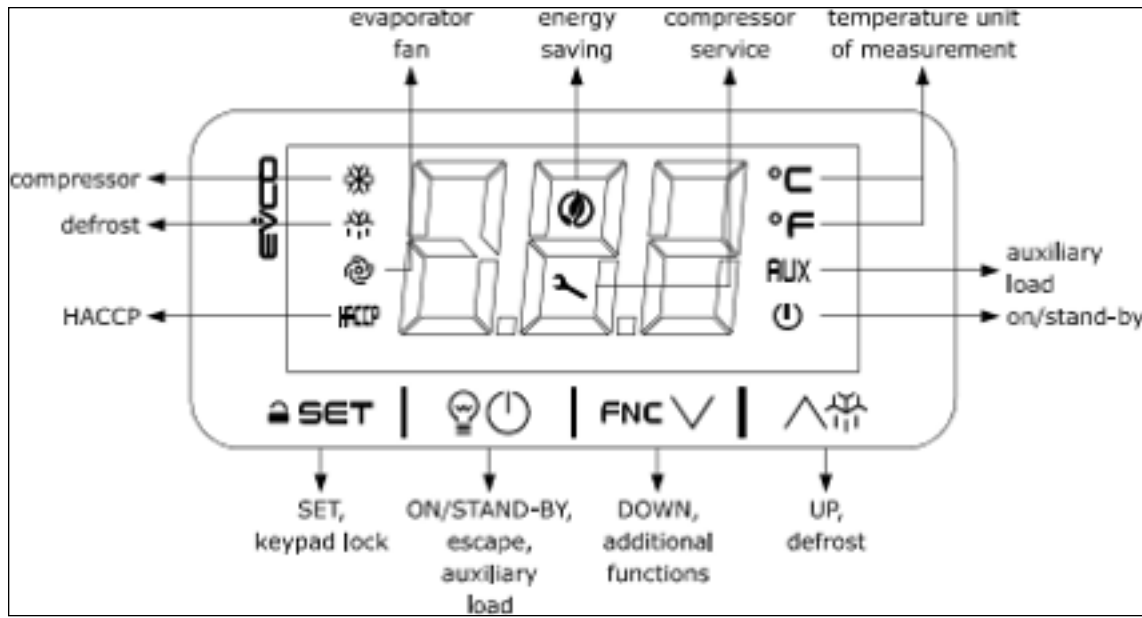
Fig. 3



The Remote alarm contact is a dry contact (low voltage: max 24VAc/VDc, 1A, SELV) and consist of three outputs: C (Common)/N.O. (Normally Opened Circuit)/N.C. (Normally Closed Circuit).

For the external network connection, fasten directly to the pins according to the remote alarm network configuration. When an alarm occurs, the contact relay switches from the N.C. position to N.O.

Controller Operation



In normal operation, the controller will display temperature in degrees Celsius. To change from Celsius to Fahrenheit requires a programming key. Contact Follett at (877) 612-5086 for part numbers and pricing.

CAUTION! Follett does not authorize changing any critical operating parameters as it can cause improper system operation and/or severe mechanical damage. Changing operating parameters may result in Follett voiding equipment warranty.

Refrigerators are pre-programmed with a 4 C (39.2 F) set point. Standard operating temperature at default is 4 C to 6 C (39.2 F to 42.8 F).

If desired, the refrigerator's set point can be adjusted within a 1 C to 12 C (33.8 F to 53.6 F) range.

Freezers are pre-programmed with a -25 C (-13 F) set point. If desired, the freezer's set point can be adjusted within a -23 C to -10 C (-13 F to 14 F) range.

All set points have a +2 C (+3.6 F) differential (r0 setting on the controller). The 2.2 C (3.6 F) differential means that with a 4 C (39.2 F) set point, the compressor will turn off at 4 C (39.2 F) and turn on when it reaches 6 C (42.8 F).

It is important to understand that the set point equals the compressor cut out.

Locking/Unlocking of the Keypad

The temperature controller is defaulted to lock out after 30 seconds without a key being pressed and will display "Loc." To unlock the controller press the SET key for 1 second until "UnL" is displayed. The controller is now unlocked.

Viewing/Adjusting the Set Point

With the controller unlocked, press and release the SET key. The current Set Point will populate. Use the UP & DOWN arrows to the desired Set Point and again press the SET key to store.

Powering the Equipment ON.

Locate the power switch to the left of the controller and place in the ON position (I).

Controller Set Up

Upon power up your controller will alarm RTC. This is instructing you to program the TIME/DATE.

Press and release any key to silence the alarm.

Check that the controller is not locked (LOC). If locked press and hold any key for 1 second and (UNL) will display.

Check that the keypad is not locked.

1.		Touch the DOWN key for 4 s.
2.		Touch the UP or DOWN key within 15 s to select the label "rtc".
3.		Touch the SET key: the display will show the label "yy" followed by the last two figures of the year.
4.		Touch the UP or DOWN key within 15 s to set the year.
5.	Repeat actions 3. and 4. to set the next labels.	
	LAB.	DESCRIPTION OF THE NUMBERS FOLLOWING THE LABEL
	n	month (01... 12)
	d	day (01... 31)
	h	time (00... 23)
	n	minute (00... 59)
6.		Touch the SET key: the display will show the label for the day of the week.
7.		Touch the UP or DOWN key within 15 s to set the day of the week.
	LAB.	DESCRIPTION
	Mon	Monday
	tuE	Tuesday
	UEd	Wednesday
	thu	Thursday
	Fri	Friday
	Sat	Saturday
	Sun	Sunday
8.		Touch the SET key: the device will exit the procedure.
9.		Touch the ON/STAND-BY key to exit the procedure beforehand.

Controllers are preprogrammed to alarm at the following temperatures:

REF: High alarm: 9 C (48.2 F), Low: 2 C (35.6 F)

FZR: High alarm: -15 C (5 F), Low: -35 C (-32 F)

All alarm points are based on a set SP +/- (A1/LOW, A4/HIGH) strategy.

Alarms will automatically clear when the temperature rises above/below the alarm value plus the A11 parameter value (Alarm offset) of 3. In the case of a refrigerator, which low alarms at 2 C, the alarm will clear once the temperature rises to +5 C. Adversely, a refrigerator that enters into a high alarm at 9 C, will have the alarm clear once the temperature reaches 6 C.

AL on the controller screen reports a Low Temperature Alarm.

AH on the controller screen reports a High Temperature Alarm.

Defrosting

Follett Scientific refrigerators and freezers do not require manual defrost as they utilize a hot gas defrost cycle to keep the evaporator coil frost free. The defrost cycle is typically always terminated when the evaporator probe (Pb2) reads 8 C.

If the defrost probe (Pb2) experiences a failure, or is out of spec, the MAX time the unit will stay in a defrost cycle is 15 minutes. If this occurs a dFd alarm will appear.

Upon termination of the defrost cycle, the compressor, condenser fan, and evaporator fan will remain off for 60 seconds to allow the melted frost to drip away from the evaporator coil.

Refrigerators enable an automatic defrost cycle every 10 hours

Freezers enable an automatic defrost every 6 hours.

Because the cooling and defrost system are external to the cabinet, the stored product and cabinet temperature should experience a minimal rise during the defrost cycle.

Door Switch

Each refrigerator and freezer door is equipped with a normally opened mechanical switch that recognizes when the door is opened or closed. When the controller senses an interruption in the continuity of the door switch circuit, the evaporator fan(s) and compressor will power down. If the door remains open for longer than 2 minutes the controller will alternate between the temperature and an audible and visual (id) alarm will appear. Once the circuit is closed the alarm will clear. If an (id) alarm appears with all doors closed troubleshoot the switch circuit.

8 ALARMS

COD.	DESCRIPTION	RESET	REMEDIES
Pr1	cabinet probe alarm	automatic	- check P0
Pr2	evaporator probe alarm	automatic	- check probe integrity
Pr3	auxiliary probe alarm	automatic	- check electrical connection
rtc	clock alarm	manual	set date, time and day of the week
AL	low temperature alarm	automatic	check AA, A1 and A2
AH	high temperature alarm	automatic	check AA, A4 and A5
id	open door alarm	automatic	check i0 e i1
PF	power failure alarm	manual	- touch a key - check electrical connection

COH	high condensation warning	automatic	check C6
CSd	high condensation alarm	manual	- switch the device off and on - check C7
iA	multi-purpose input alarm	automatic	check i5 and i6
Cth	compressor thermal switch alarm	automatic	check i5 and i6
th	global thermal switch alarm	manual	- switch the device off and on - check i5 and i6
dFd	defrost timeout alarm	manual	- touch a key - check d2, d3 and d11

Cleaning

Use non chlorine-based cleaners.

Disconnect power to unit by turning off the power switch, located on the rear, right hand corner, and removing the power cord from the receptacle.

The appliance is designed for medications, vaccines and laboratory product storage so it is important to keep it clean. The equipment is thoroughly cleaned at the factory before being shipped. We recommend, however, to clean the interior cabinet before the first start up of the appliance.

Interior Cleaning

Using a sponge or soft cloth, clean unit with a non-abrasive, non-chlorinated, all-purpose detergent. Note: The air plenum can be removed to clean it, as well as behind it. In addition, the shelves and slides should be cleaned as well.

Exterior Cleaning

Wipe exterior with a soft cloth as needed. The glass door and exterior parts may be cleaned with a soft cloth, window cleaner or other non-abrasive cleaner.

Annual Cleaning

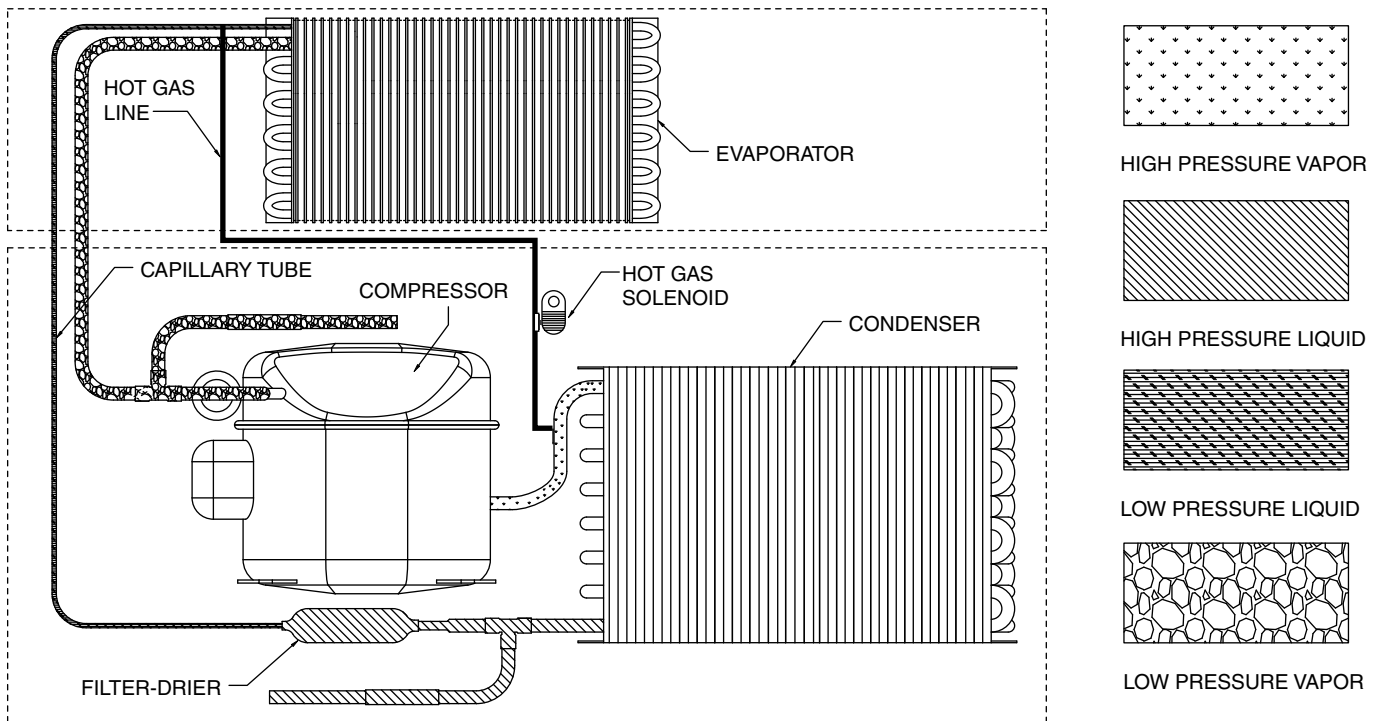
Removal of dust and other particulates from air intake areas and the condenser is important for proper operation. Environments with large amounts of dust may require more frequent cleaning.

1. Disconnect power to unit by turning power switch off and removing power cord from receptacle.
2. The condenser can be accessed from rear for cleaning.
3. Inspect drain pan for any debris or obstruction in condensate pan.
4. Use a vacuum cleaner with brush attachment to clean condenser, compressor and related parts.

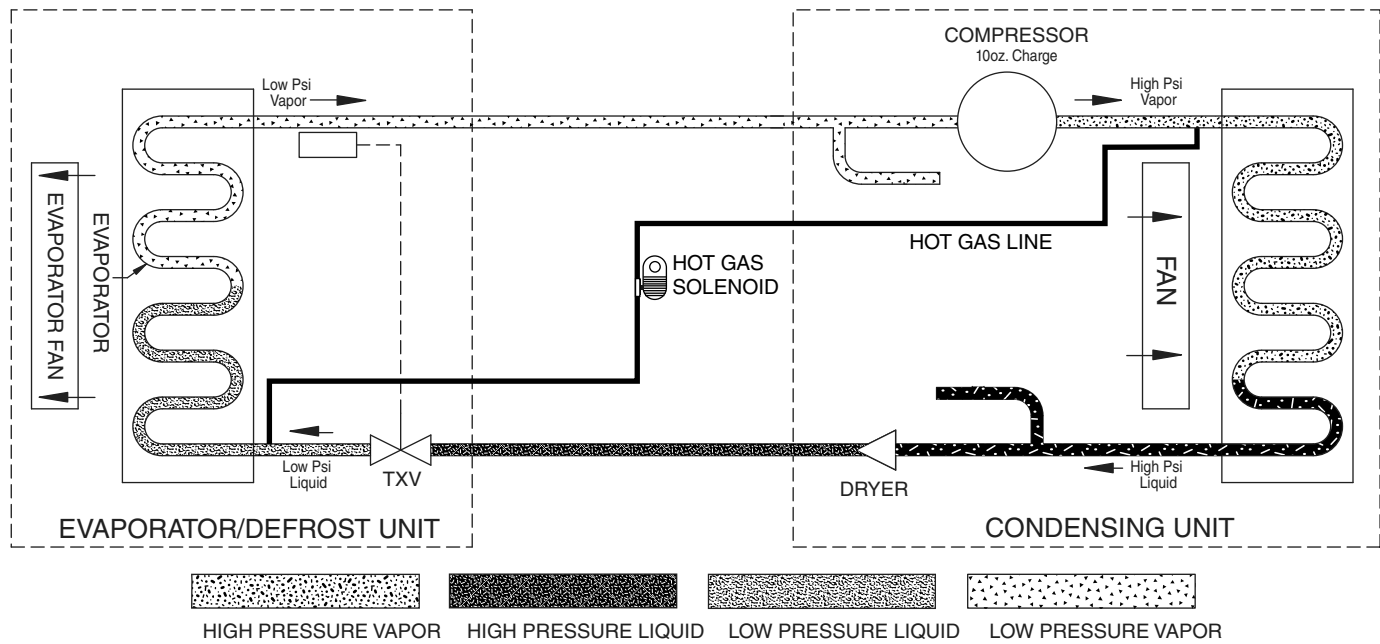
Refrigeration System

The Follett Scientific refrigeration system is designed to give many years of trouble-free service. Except for routine cleaning of the air-cooled condenser and related parts, the refrigeration system requires no service or maintenance. Refrigerators utilize a capillary tube metering device while freezers utilize a thermal expansion valve. Both systems are critically charged. Access fittings are not provided. Temporary piercing valves are required to work on the refrigeration system. Due to the small charge size contained within these products, Follett does not recommend accessing the refrigeration system. If a sealed system failure is suspected, Follett recommends replacing the cooling system in its entirety.

Refrigeration Diagram - Refrigerators



Refrigeration Diagram - Freezers



Component Details

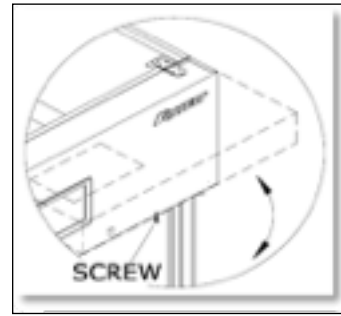
Model	Gas Type	Gas Charge	Low side pressure at 70°F	High side pressure at 70°F	Compressor Windings at 77°F	Locked Rotor (A)
FFZR25-LB-RSD FFZR25-LB-LSD	R290	3.9 oz (0.110 kg)	2.9 psig (0.2 barg)	149.39 psig (10.3 barg)	Start winding = 5.99 Ω Run winding = 1.10 Ω	40
FFZR49-LB-RSD	R290	4.2 oz (0.120 kg)	4.35 psig (0.3 barg)	150.84 psig (10.4 barg)	Start winding = 2.66 Ω Run winding = 0.43 Ω	55
FREF25-LB-RGD FREF25-LB-LGD FREF25-LB-RSD	R290	3.2 oz (0.09 kg)	37.71 psig (2.6 barg)	156.64 psig (10.8 barg)	Start winding = 13.35 Ω Run winding = 4.89 Ω	19.6
FREF30-LB-RGD FREF30-LB-LGD	R290	3.5 oz (0.100 kg)	24.65 psig (1.7 barg)	165.4 psig (11.4 barg)	Start winding = 7.19 Ω Run winding = 1.57 Ω	30
FREFCR30-RGD FREF49-LB-OGD FREF49-LB-OSD	R290	3.5 oz (0.100 kg)	17.40 psig (1.2 barg)	149.39 psig (10.3 barg)	Start winding = 7.19 Ω Run winding = 1.57 Ω	30
FREF72-LB-RSD FREF72-LB-RGD	R290	2 x 3.2 oz (2 x 0.090 kg)	2 x 37.71 (2 x 2.6 barg)	2 x 156.64 psig (2 x 10.8barg)	Start winding = 13.35 Ω Run winding = 4.89 Ω	19.6

Accessing Controls Behind Façade

The controls located behind the façade are accessed by loosening the screws and swinging the front panel upward. If the façade will be completely removed, the electrical plugs should be disconnected.

Note: Be sure to reinstall the ground wire.

Fig. 4



Controller Replacement

CAUTION



• ***Controller is susceptible to electrostatic discharge. Care should be exercised when handling and installing the controller.***

Required equipment:

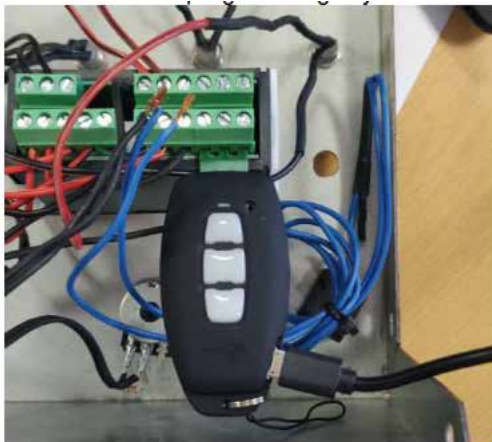
- Replacement EV3294 Controller
 - Programming key (see Replacement Parts section)
 - #2 Phillips screwdriver
 - Flat blade jeweler's screwdriver
 - (6) 6" wire ties
1. Turn off power to unit and unplug.
 2. Remove façade hold down screws, rotate façade, and set safety latch.
 3. Disconnect (+) terminal from back up battery.
 4. Carefully cut wire ties to provide slack in control wires.
 5. Press the release button on controller retainer clips (one on each side) and slide back to remove.
 6. Carefully pull controller through the façade far enough to remove wires.
 7. Removing ONE AT A TIME, transfer wiring from the original controller to the replacement controller ensuring each wire is secured at the same location from which it was removed.
 8. Carefully reinsert controller into façade and reattach retainer clips.
 9. Secure wires with wire ties.
 10. Reconnect (+) terminal to back up battery.
 11. Remove safety latch, rotate façade, and reinstall hold down screws.
 12. Plug in unit, power on, and ensure proper operation.

Controller EV3294 - Programming by programming key



Download the parameters from the programming key to the controller

1. Make sure that the main switch is turned off and the controller is not powered. The controller has removable screw-connection terminal blocks. Fully unscrew the screw connectors n. 11-12-13, where the temperature probes are wired, and remove the cables.
2. Insert the programming key in the controller terminals n.10-11-12:



The programming key must be powered in order to be operational. Use a USB 5V/1A output to feed the key and a typeA USB/male Micro-B USB cable



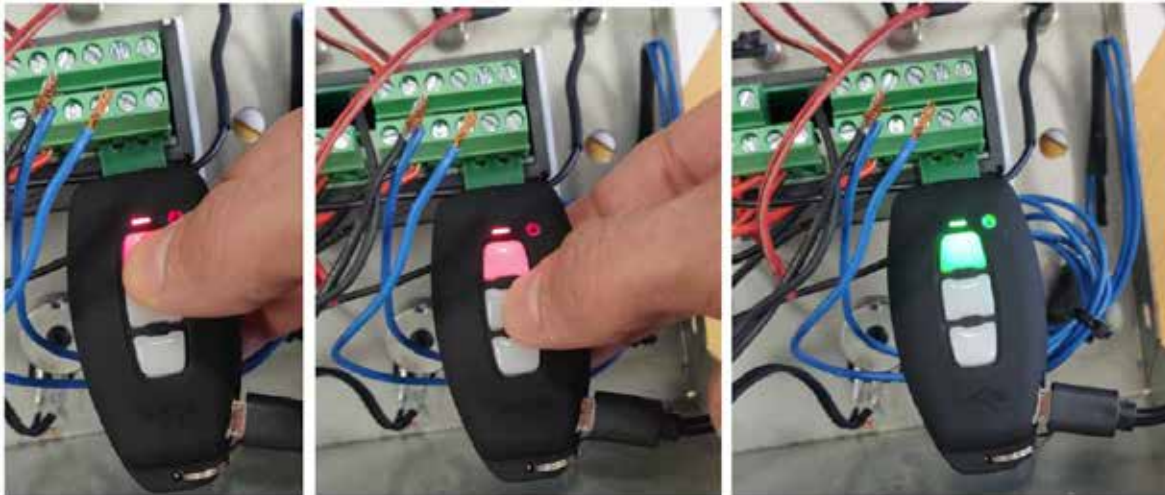
3. Once the programming key is plugged in, press and release the Copy key button. The Signal LEDs will start flashing red for few seconds, then they'll turn green if the programming is successful.



4. If the programming fails, the signal LEDs will turn solid red instead of green. In this case, repeat the procedure and be certain that the programming key is correctly inserted into the controller terminal blocks.

Copy the parameters from the controller to the programming key

1. After completing Step 1 and 2 above, press and hold the Copy key button until the signal LED turn solid red, then press the Enter key. The signal LEDs will start flashing red for few seconds, then turn solid green if the programming has been correctly accomplished.

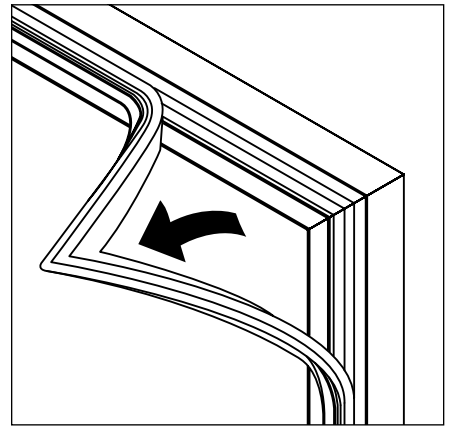


2. If the programming fails, the signal LEDs will turn solid red instead of green. In this case, repeat the procedure, making sure that the programming key is correctly inserted into the controller terminal blocks.

Door Gasket Replacement

1. Remove existing gasket from mounting track (**Fig. 5**).
2. Verify mounting track is free of any remaining gasket material.
3. Align new gasket with mounting track and press firmly in place.
4. Open and close door, checking for proper gasket seal without pinching against unit.

Fig. 5



Modular Refrigeration System

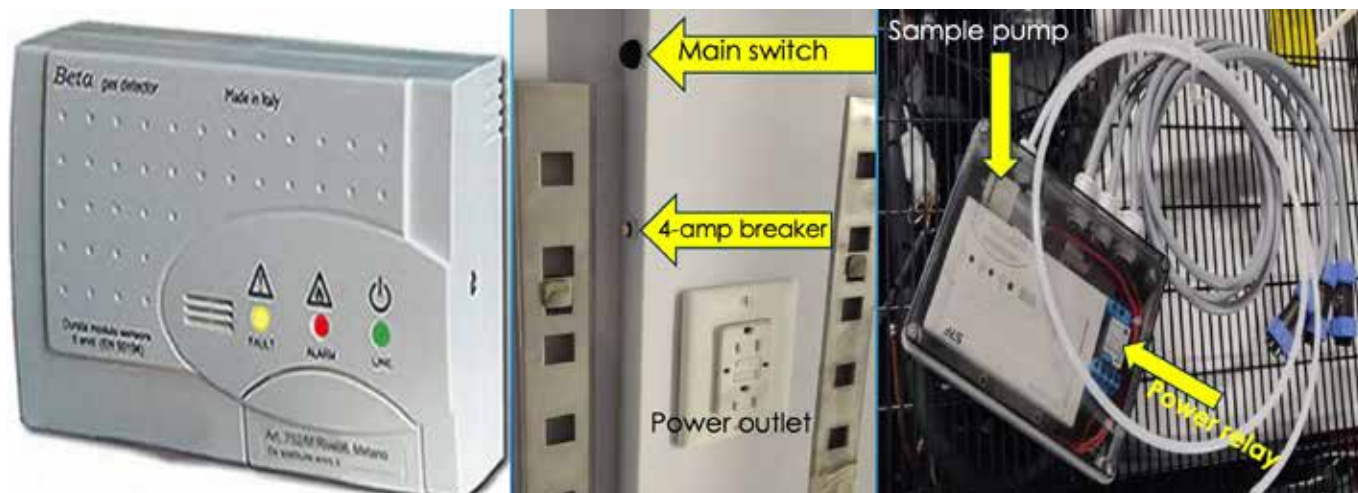
Follett's Modular Refrigeration System allows technicians to remove the entire unit from the unit top.

1. Remove rear support column using 5/16" nut driver.
2. Remove incoming power supply assembly.
3. Remove bolts securing refrigeration system to unit top.
4. Gently lift off refrigeration system.

Chromatography Unit FREFCR30-RGD

Chromatography units provide a 115 V GFCI power outlet to the interior of the cabinet. This allows for the operation of scientific equipment in climate controlled (refrigerated) conditions.

Since the cabinet is a closed environment, we use a R290 gas monitor to ensure that the interior atmosphere is below the Lower Explosive Limit (LEL) PRIOR to energizing the power outlet.



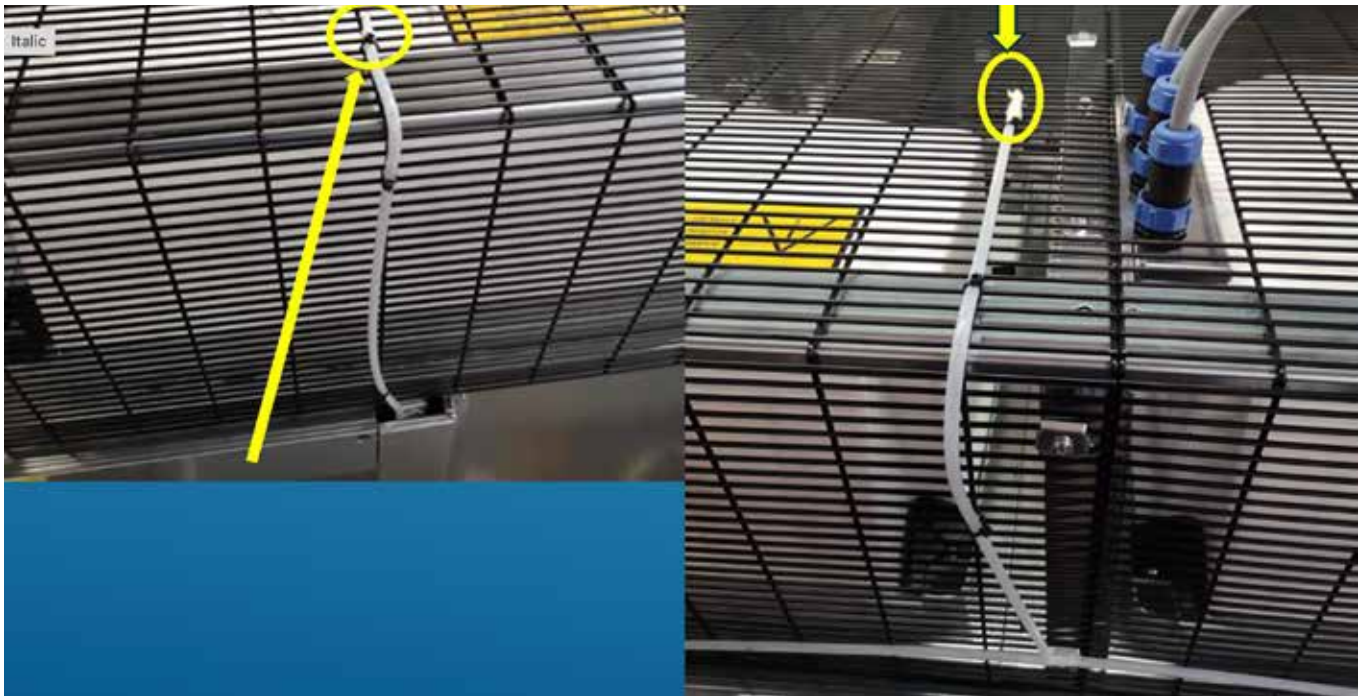
1. To install the gas detector, simply connect each of the three CANNON Plugs to its corresponding mate.

THREE DIFFERENT
STYLE PLUGS

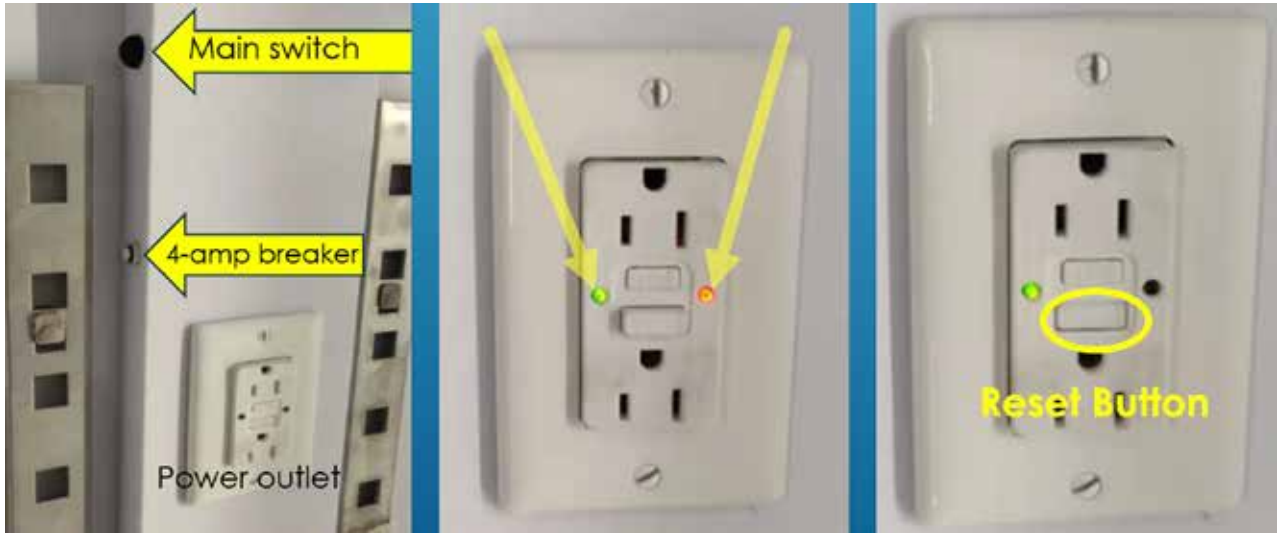
IMPOSSIBLE
TO MIX-UP



2. Connect the air sample tube to the factory installed connection.



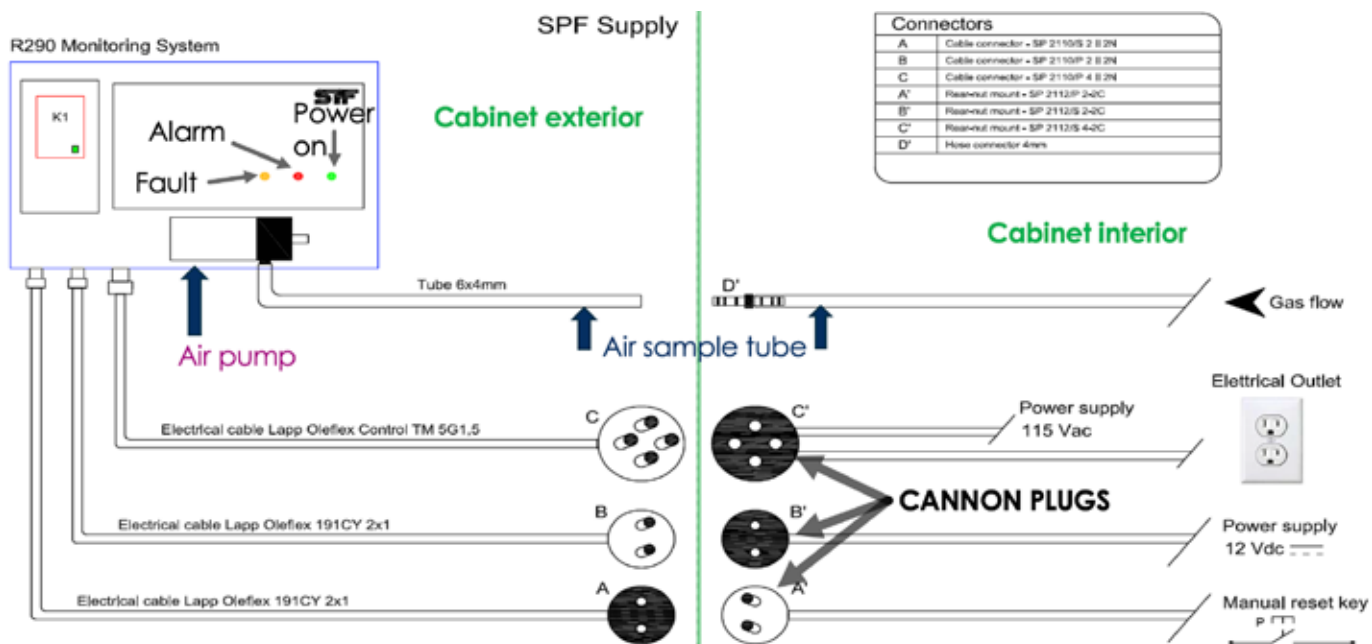
3. To energize the unit, press the main power switch (shown below) and verify the 4A breaker is not tripped.
4. A green and orange indicator will illuminate.
5. Push the reset button and the orange indicator light will turn off. The green light will remain on, signifying power at the outlet.



Operation

A pump draws air samples from the cabinet interior through the sample tube into the gas monitor.

When the sample proves below the LEL, the power outlet is energized. If the sampled air rises above the LEL, power is disconnected and an audible and visual alarm are energized.



When energized (during warmup), a green LED will blink on the detector indicating that the unit is testing for the existence of explosive gasses in the cabinet. This test will take approximately one minute to complete. If no gas is detected, the unit will supply power to the internal power outlet.

There are three LEDs on the front of each detector:



- **GREEN LED (ON):** indicates the instrument is powered.

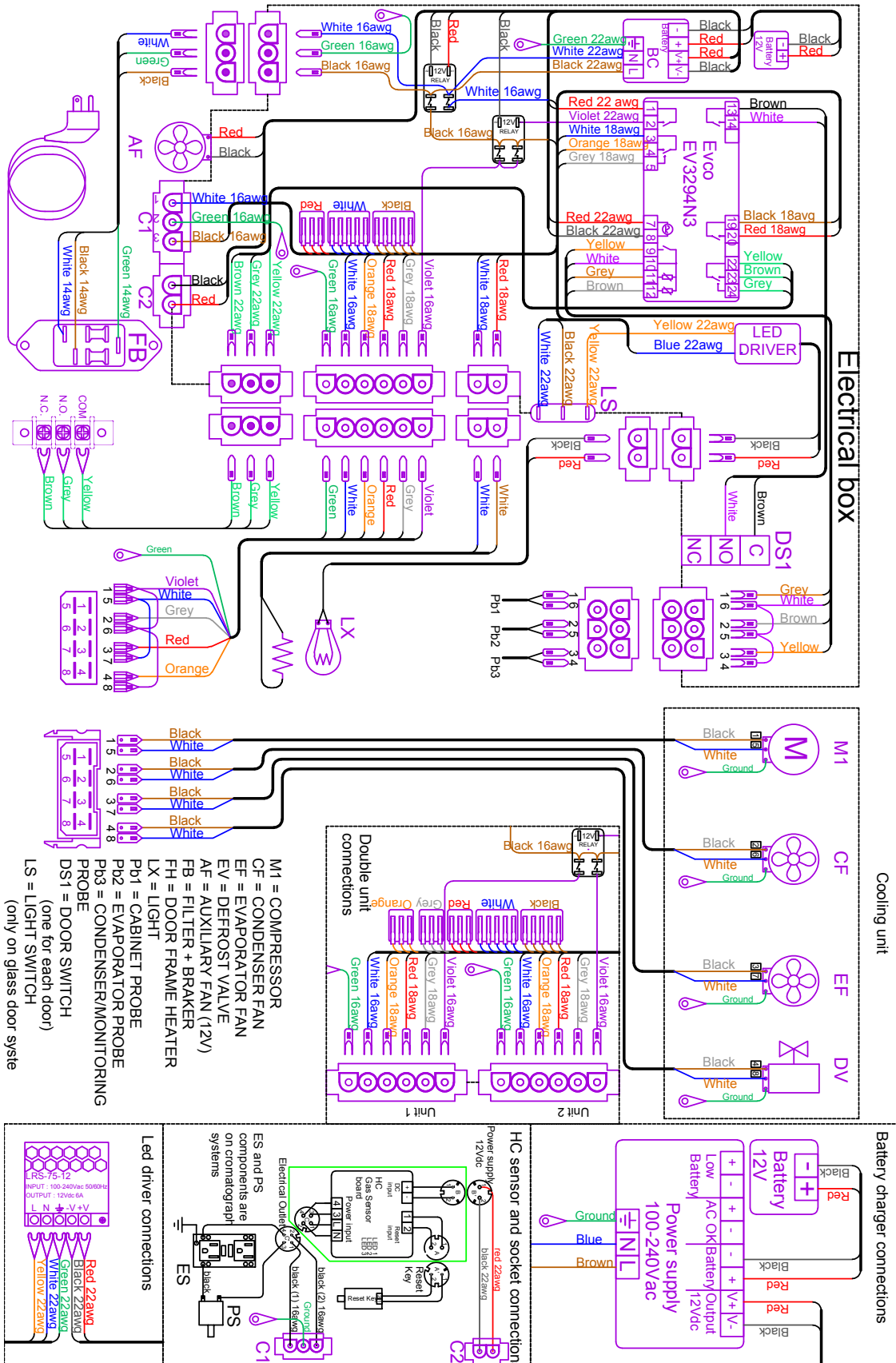


- **YELLOW LED (FAULT) + BUZZER:** Indicates the sensor is broken.
 - **YELLOW LED (FAULT) blinking only:** indicates the CO sensor needs to be replaced.

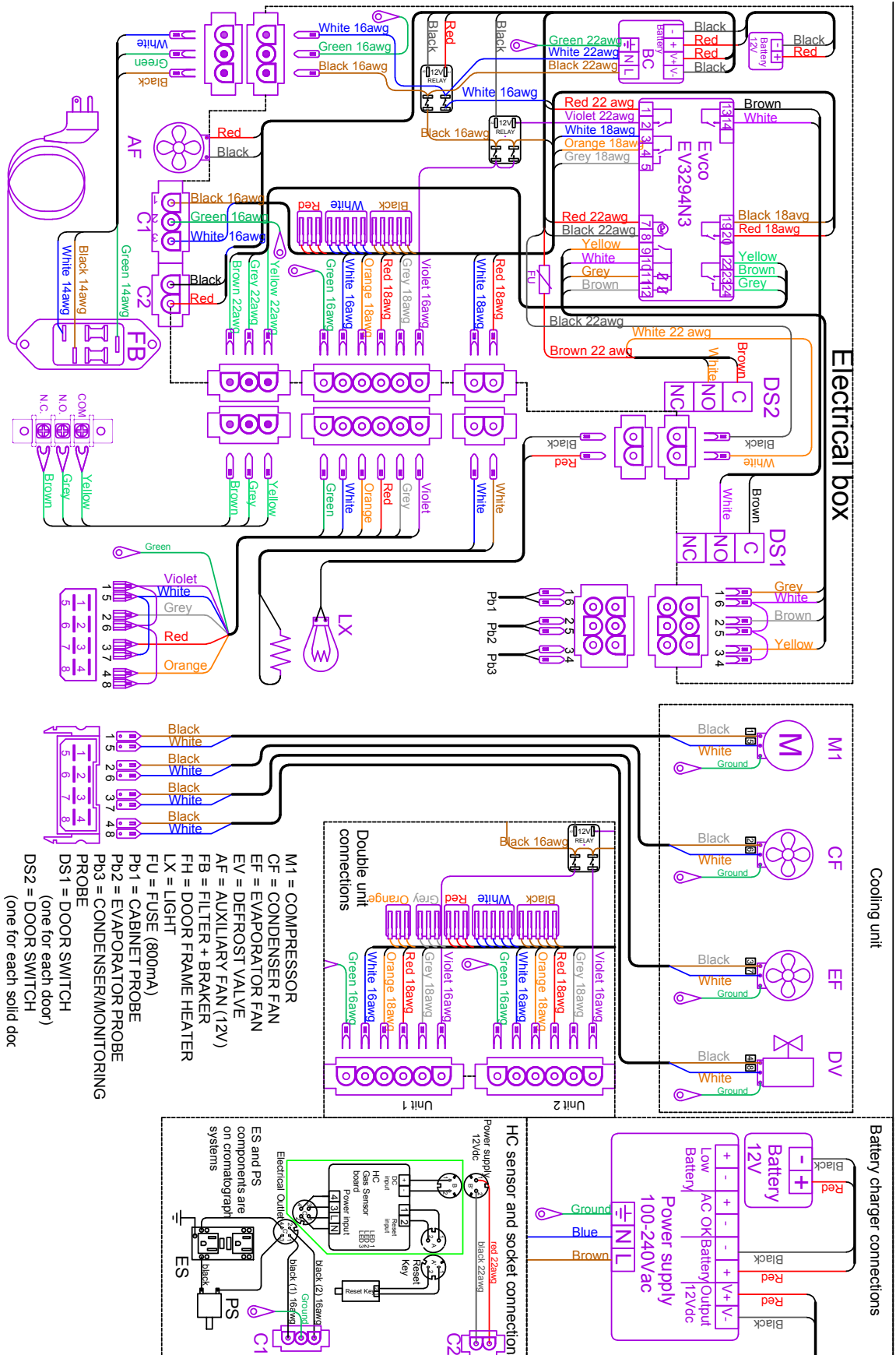


- **RED LED (ALARM):** indicates the concentration of gas in the air is above the alarm threshold.

Wiring Diagram - Glass Door

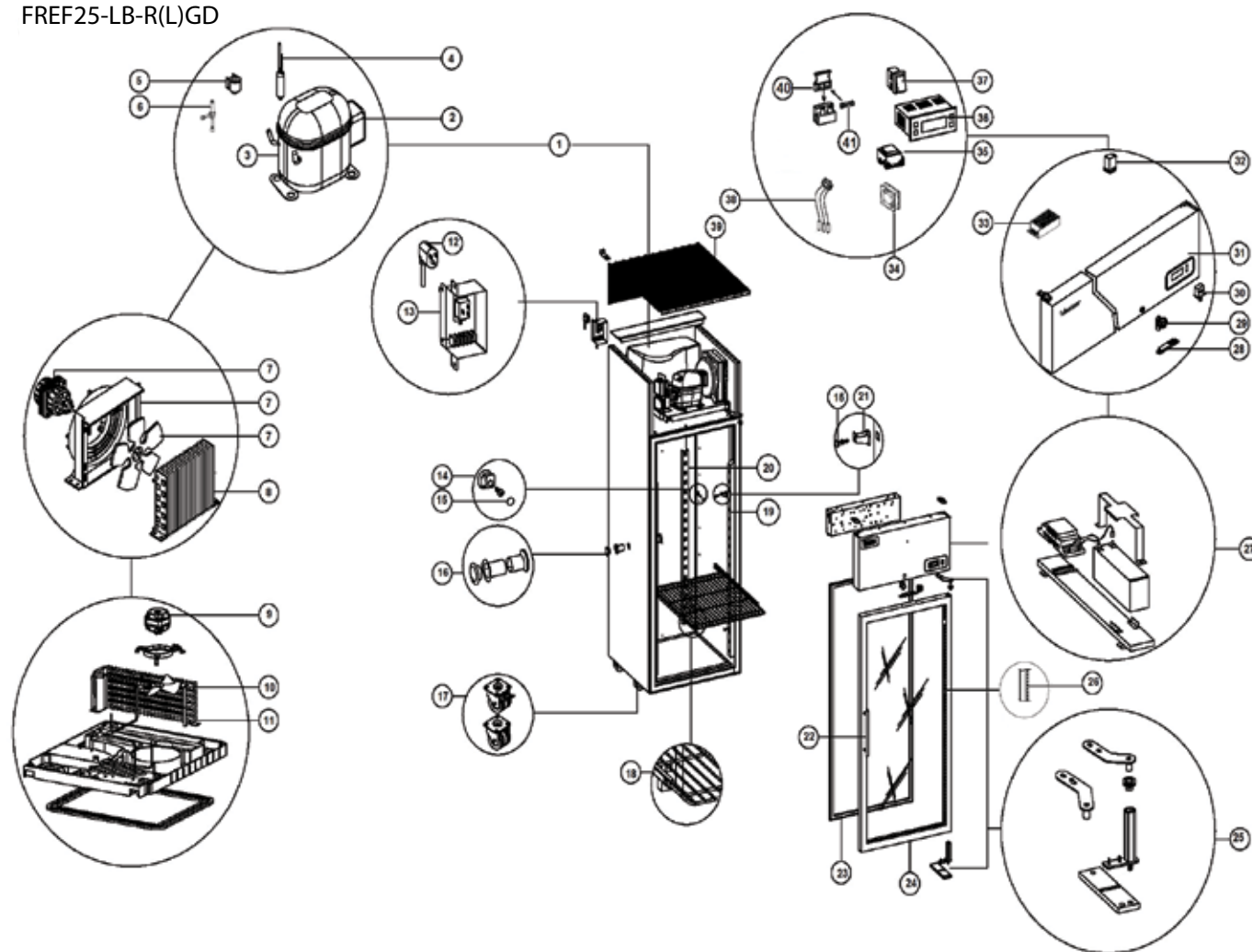


Wiring diagram - Solid Door

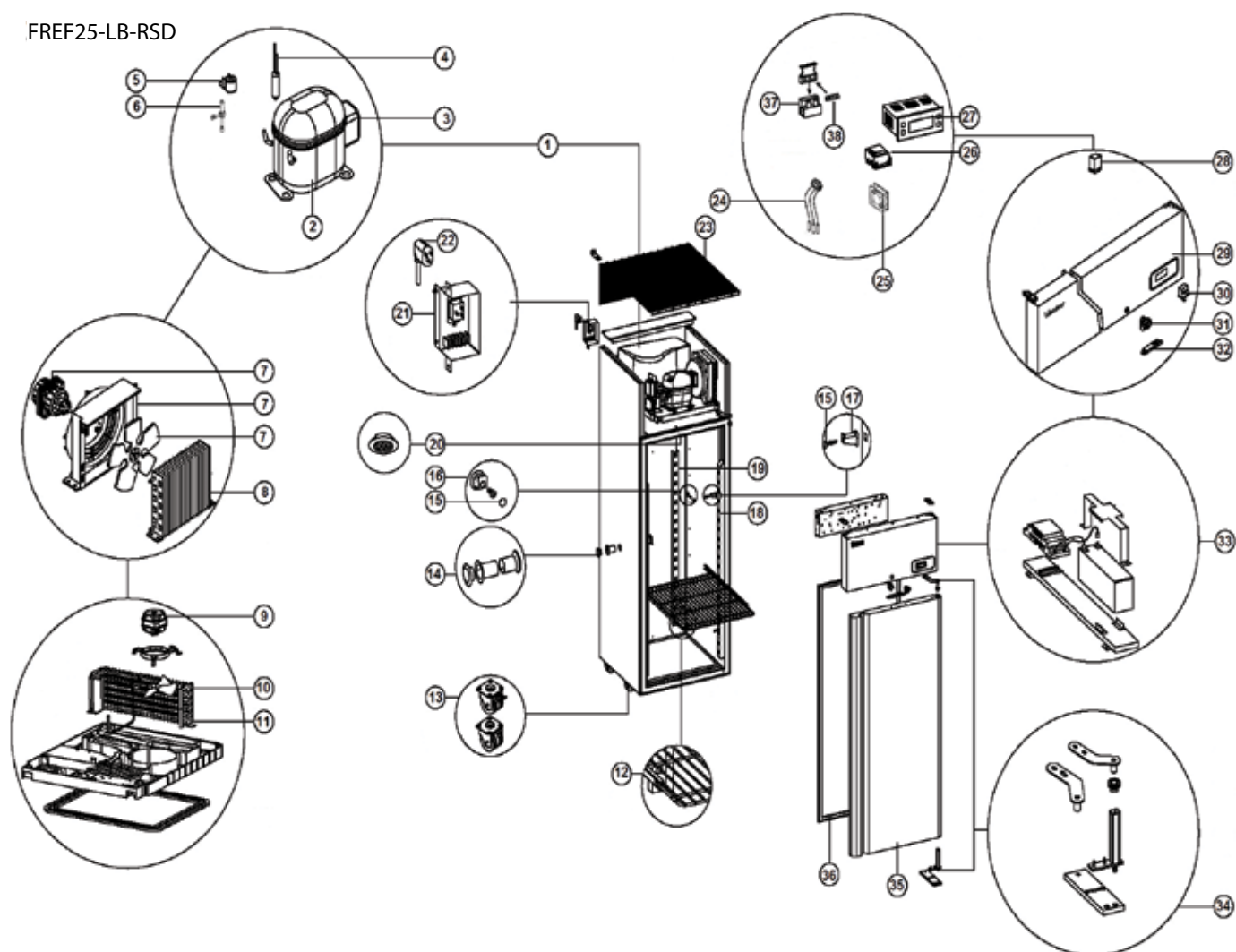


Replacement parts

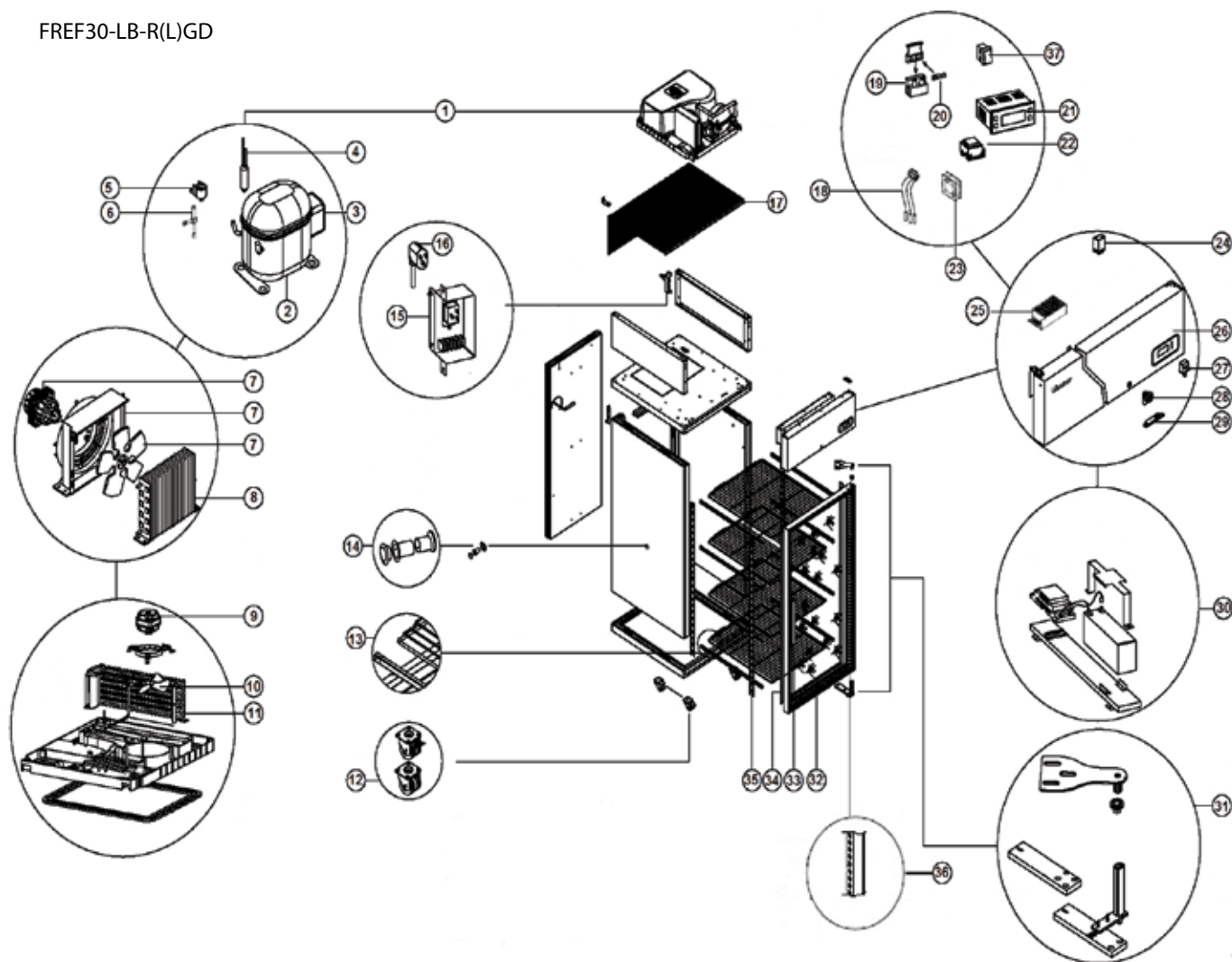
FREF25-LB-R(L)GD



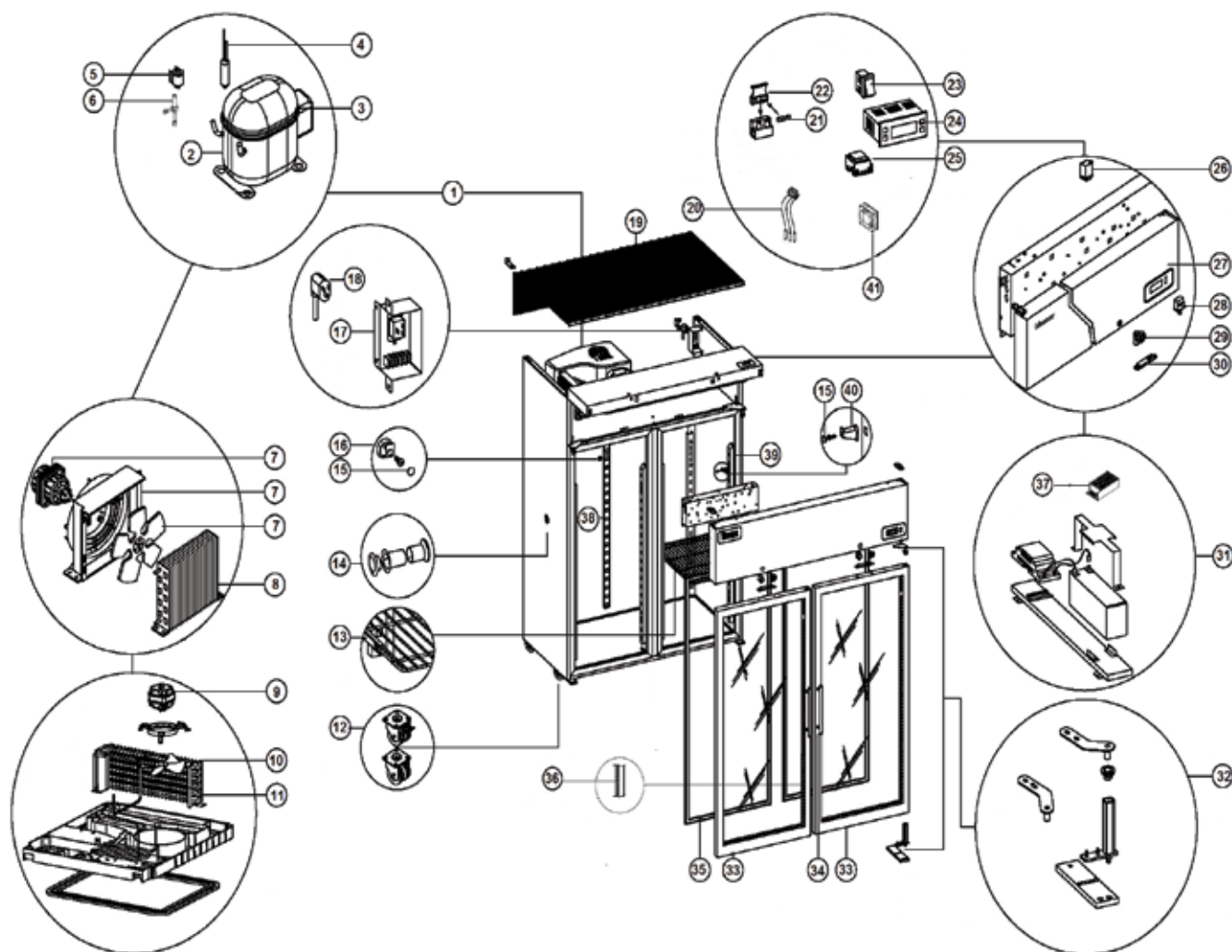
Reference	Description	Part #	Quantity
1	Monoblock	01394469	1
2	Compressor Start Components	01394519	1
5	Valve Coil	01394535	1
6	Hot Gas Valve	01394485	1
7	Condenser Finger Guard & Fan Holder and Motor	01394543	1
9	Evaporator Fan Motor	01394584	1
10	Evaporator Fan Blade	01394568	1
12	Power Cord	01316140	1
13	Main Switch Kit	01394238	1
16	Third Party Probe Kit	01394188	1
17	Castor Kit	01394154	2
18	Shelf Kit	01394030	3
22	Door Handle (500 mm)	01394113	1
22	Door Handle (530 mm)	01595651	1
23	Door Gasket	01394063	1
24	Glass Door	01394287	1
25	Hinge Kit	01394204	2
26	Strip LED	01394659	1
27	Battery Backup Kit	01394212	1
28	Lock Latch	01398148	1
29	Door Lock with Key	01311877	1
30	Door Switch	01394378	1
32	Power Relay	01394402	1
33	LED Driver	01394055	1
34	Safety Fan	01394345	1
35	Battery Backup Protection Relay	01312560	1
36	Controller, Requires Programming Key	01598119	1
	Key, Programming, Celsius, FREF 25	01598127	
	Key, Programming, Fahrenheit, FREF 25	01598135	
37	Lighting Switch	01394360	1
38	Probes Kit	01394220	1
39	Top Protection Grid	01398155	1
Not shown	Kit, Condensation	01401355	1



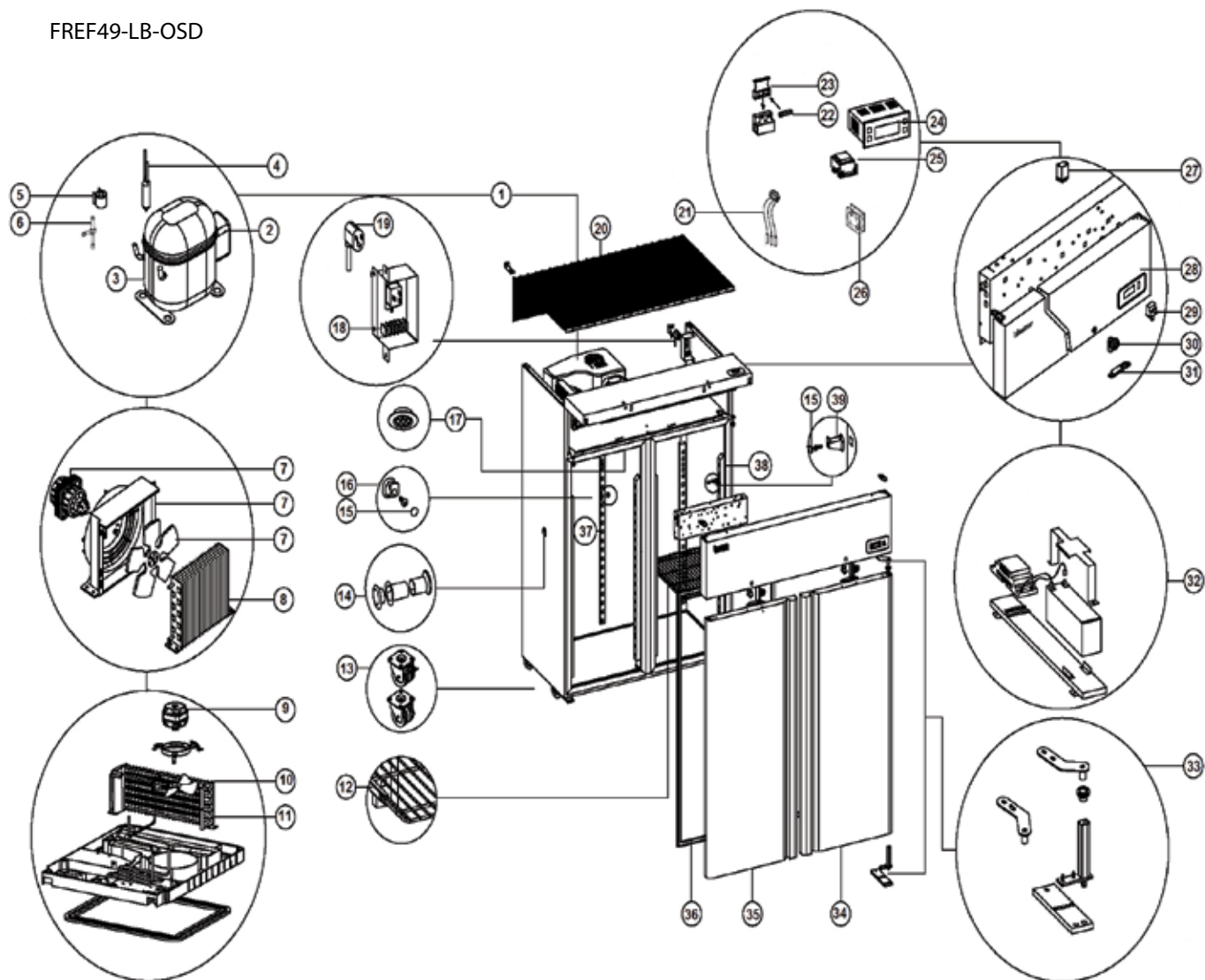
Reference	Description	Part #	Quantity
1	Monoblock	01394469	1
3	Compressor Start Components	01394519	1
5	Valve Coil	01394535	1
7	Condenser Finger Guard & Fan Holder and Motor	01394543	1
9	Evaporator Motor Fan	01394584	3
10	Evaporator Fan Blade	01394568	1
12	Shelf Kit	01394030	3
13	Castor Kit	01394154	2
14	Third Party Probe Kit	01394188	1
20	LED Lighting Kit	01394246	1
21	Main Switch Kit	01394238	1
22	Power Cord	01316140	1
23	Top Protection Grid	01398155	1
24	Probes Kit	01394220	1
25	Safety Fan	01394345	1
26	Battery Backup Protection Relay	01312560	1
27	Controller, Requires Programming Key	01598119	1
	Key, Programming, Celsius, FREF 25	01598127	
	Key, Programming, Fahrenheit, FREF 25	01598135	
28	Power Relay	01394402	1
30	Door Switch	01394378	1
31	Door Lock with Key	01311877	1
32	Lock Latch	01398148	1
33	Battery Backup Kit	01394212	1
34	Hinge Kit	01394162	2
35	Door Panel	01597228	1
36	Door Gasket	01394261	1
Not shown	Kit, Condensation	01401355	1



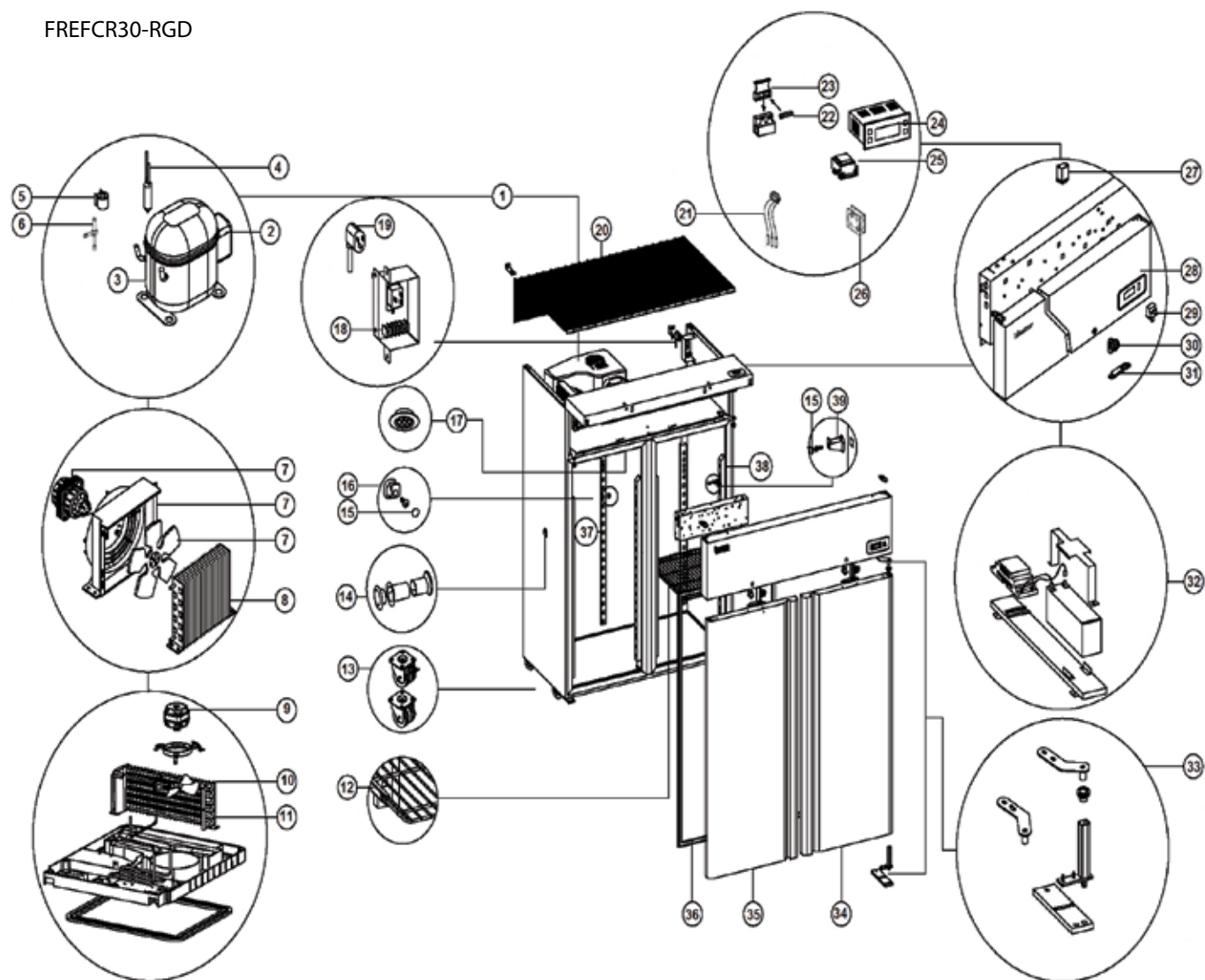
Reference	Description	Part #	Quantity
1	Monoblock	01394451	1
3	Compressor Start Components	01394501	1
5	Valve Coil	01394535	1
7	Condenser Finger Guard & Fan Holder and Motor	01394600	1
9	Evaporator Fan Motor	01394584	1
10	Fan Blade	01394568	1
12	Castor Kit	01394154	4
13	Shelf Kit	01394147	4
14	Third Party Probe Kit	01394188	1
15	Main Switch Kit	01394238	1
16	Power Cord	01316140	1
17	Top Protection Grid	01398171	1
18	Probe Kit	01394220	1
21	Controller, Requires Programming Key	01598119	1
	Key, Programming, Celsius, FREF 30	01598143	
	Key, Programming, Fahrenheit, FREF 30	01598150	
22	Battery Backup Protection Relay	01312560	1
23	Safety Fan	01394345	1
24	Power Relay	01394402	1
25	LED Driver	01394055	1
27	Door Switch	01394378	1
28	Door Lock with Key	01311877	1
29	Lock Latch	01398148	1
30	Battery Backup Kit	01394212	1
31	Hinge Kit	01394121	1
32	Glass Door	01394295	1
33	Door Handle (500 mm)	01394113	1
33	Door Handle (530 mm)	01595651	1
34	Door Gasket	01394089	1
36	Strip Led	01394683	1
37	Lighting Switch	01394360	1
Not shown	Kit, Condensation	01401355	1



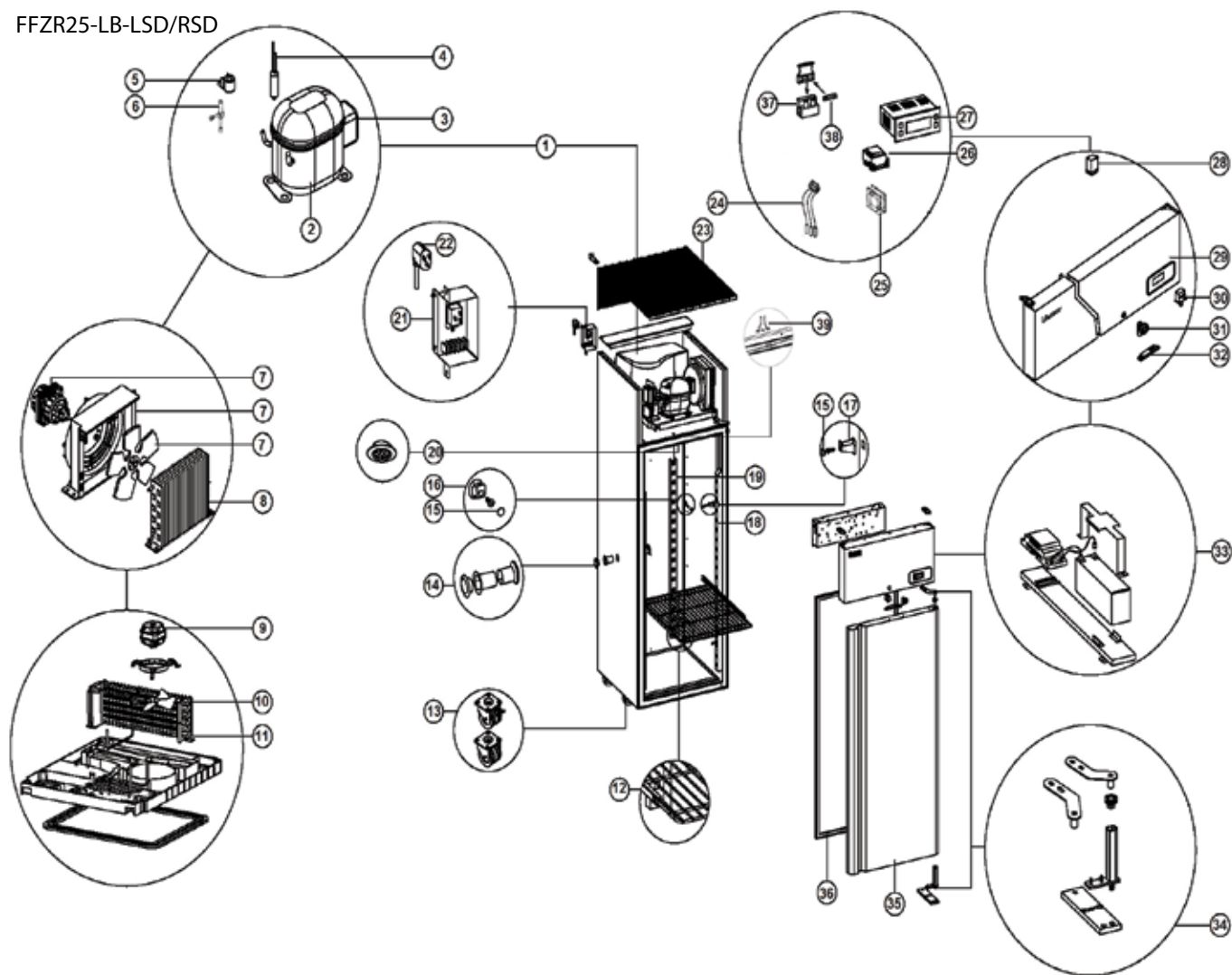
Reference	Description	Part #	Quantity
1	Monoblock	01394451	1
3	Compressor Start Components	01394501	1
5	Valve Coil	01394535	1
7	Condenser Finger Guard & Fan Holder and Motor	01394600	1
9	Evaporator Fan Motor	01394584	1
10	Fan Blade	01394568	1
12	Castor Kit	01394154	4
13	Shelf Kit	01394030	8
14	Third Party Probe Kit	01394188	1
17	Main Switch Kit	01394238	1
18	Power Cord	01316140	1
19	Top Protection Grid	01398197	1
20	Probe Kit	01394220	1
23	Lighting Switch	01394360	1
24	Controller, Requires Programming Key	01598119	1
	Key, Programming, Celsius, FREF 49	01598168	
	Key, Programming, Fahrenheit, FREF 49	01598176	
25	Battery Backup Protection Relay	01312560	1
26	Power Relay	01394402	1
28	Door Switch	01394378	4
29	Door Lock with Key	01311877	2
30	Lock Latch	01398148	2
31	Battery Back-Up Kit	01394212	1
32	Hinge Kit	01394204	2
33	Glass Door	01394287	2
34	Door Handle (500 mm)	01394113	2
34	Door Handle (530 mm)	01595651	2
35	Door Gasket	01394063	2
36	Strip LED	01394659	2
37	LED Driver	01394055	2
41	Safety Fan	01394345	1
Not shown	Kit, Condensation	01401355	1



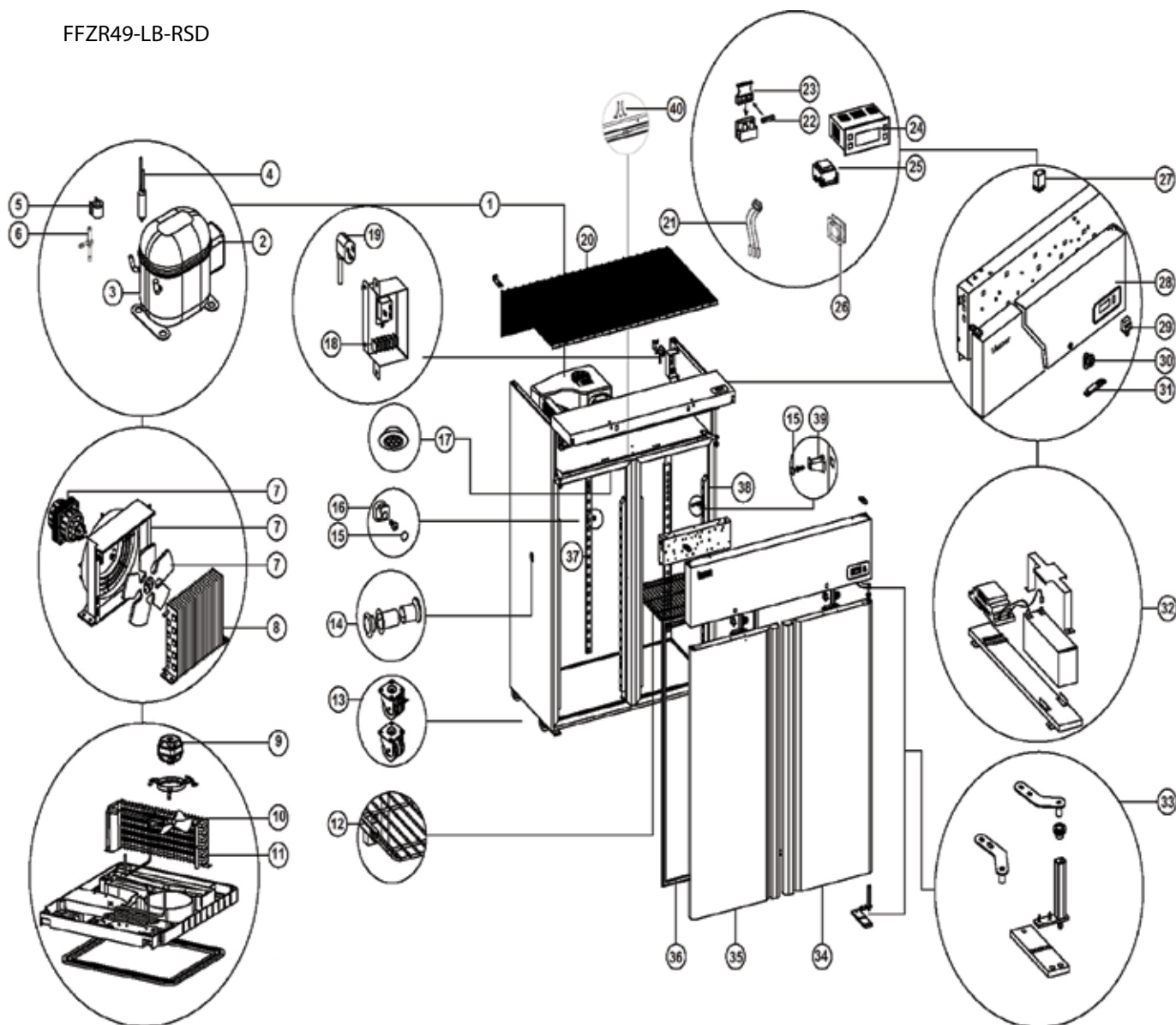
Reference	Description	Part #	Quantity
1	Monoblock	01394451	1
2	Compressor Start Components	01394501	1
5	Valve Coil	01394535	1
7	Condenser Finger Guard & Fan Holder and Motor	01394600	1
9	Evaporator Fan Motor	01394584	1
10	Fan Blade	01394568	1
12	Shelf Kit	01394030	8
13	Castor Kit	01394154	4
14	Third Party Probe Kit	01394188	1
17	LED Lighting Kit	01394246	2
18	Main Switch Kit	01394238	1
19	Power Cord	01316140	1
20	Top Protection Grid	01398197	1
21	Probe Kit	01394220	1
24	Controller, Requires Programming Key	01598119	1
	Key, Programming, Celsius, FREF 49	01598168	
	Key, Programming, Fahrenheit, FREF 49	01598176	
25	Battery Backup Protection Relay	01312560	1
26	Safety Fan	01394345	1
27	Power Relay	01394402	1
29	Door Switch	01394378	4
30	Door Lock with Key	01311877	2
31	Lock Latch	01398148	2
32	Battery Backup Kit	01394212	1
33	Hinge Kit	01394162	2
34	Door Panel	01597228	1
35	Door Panel	01597228	1
36	Door Gasket	01394261	2
Not shown	Kit, Condensation	01401355	1



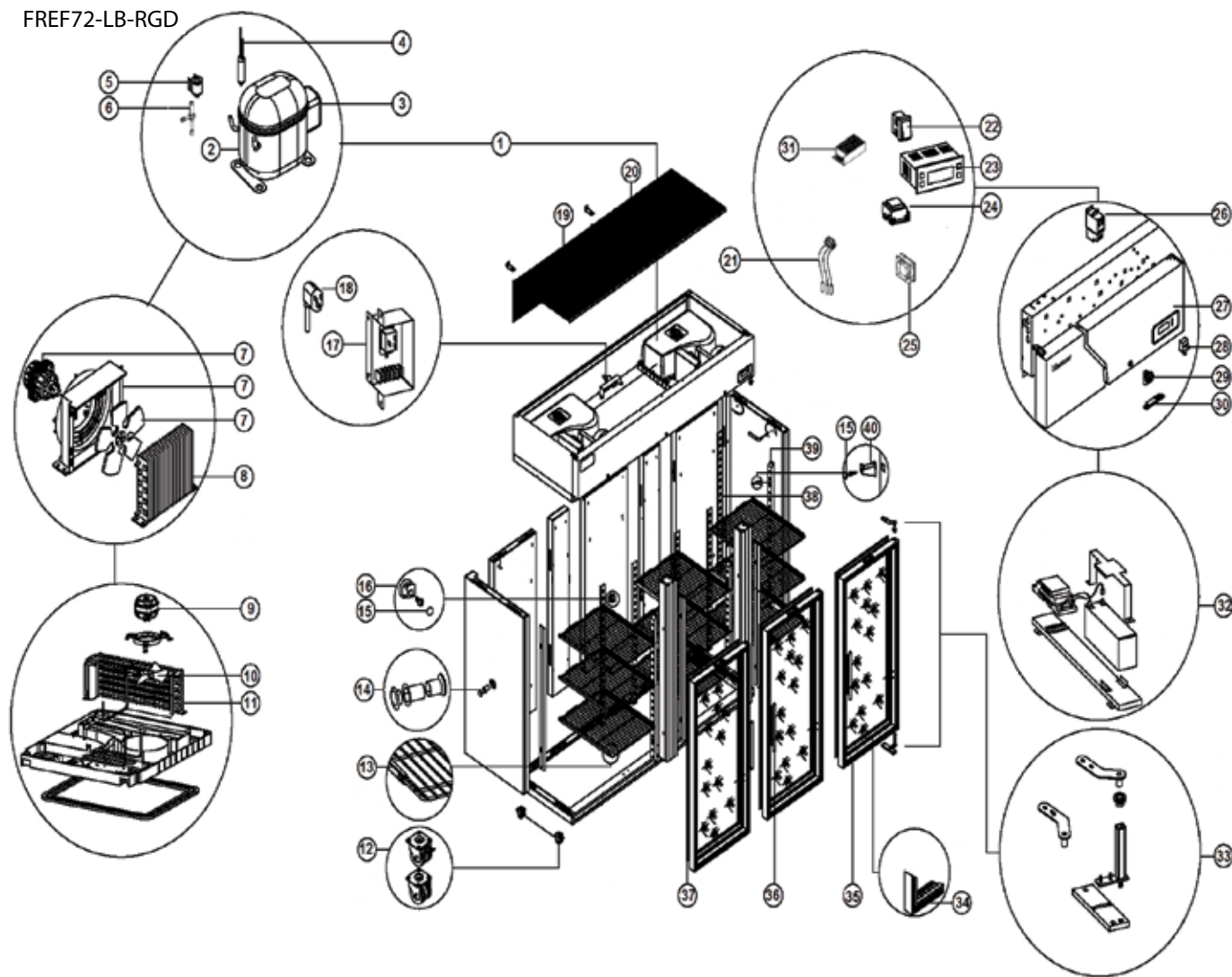
Reference	Description	Part #	Quantity
1	Monoblock	01394451	1
2	Compressor Start Components	01394501	1
5	Valve Coil	01394535	1
7	Condenser Finger Guard & Fan Holder and Motor	01394600	1
9	Evaporator Fan Motor	01394584	1
10	Fan Blade	01394568	1
12	Shelf Kit	01394030	8
13	Castor Kit	01394154	4
14	Third Party Probe Kit	01394188	1
17	LED Lighting Kit	01394246	2
18	Main Switch Kit	01394238	1
19	Power Cord	01316140	1
20	Top Protection Grid	01398197	1
21	Probe Kit	01394220	1
24	Controller, Requires Programming Key	01598119	1
	Key, Programming, Celsius, FREF 30	01598168	
	Key, Programming, Fahrenheit, FREF 30	01598176	
25	Battery Backup Protection Relay	01312560	1
26	Safety Fan	01394345	1
27	Power Relay	01394402	1
29	Door Switch	01394378	4
30	Door Lock with Key	01311877	2
31	Lock Latch	01398148	2
32	Battery Back-Up Kit	01394212	1
33	Hinge Kit	01394162	2
34	Door Panel	01597228	1
35	Door Panel	01597228	1
36	Door Gasket	01394261	2
Not shown	Kit, Condensation	01401355	1
Not shown	Kit, Gas Sensor, Chromotagraphy	01401504	1



Reference	Description	Part #	Quantity
1	Monoblock	01394444	1
3	Compressor Start Components	01395201	1
5	Valve Coil	01394535	1
7	Condenser Finger Guard & Fan Holder and Motor	01394550	1
9	Evaporator Fan Motor	01394584	1
10	Fan Blade	01394568	1
12	Shelf Kit	01394030	3
13	Castor Kit	01394154	2
14	Third Party Probe Kit	01394188	1
20	LED Lighting Kit	01394246	1
21	Main Switch Kit	01394238	1
22	Power Cord	01316140	1
23	Top Protection Grid	01398155	1
24	Probes Kit	01394220	1
25	Safety Fan	01394345	1
26	Battery Backup Protection Relay	01312560	1
27	Controller, Requires Programming Key	01598119	1
	Key, Programming, Celsius, FFZR 25	01598184	
	Key, Programming, Fahrenheit, FFZR 25	01598192	
28	Power Relay	01394402	1
30	Door Switch	01394378	1
31	Door Lock with Key	01311877	1
32	Lock Latch	01398148	2
33	Battery Backup Kit	01394212	1
34	Hinge Kit	01394162	2
35	Door Panel	01597228	1
36	Door Gasket	01394261	1
39	Door Frame Heater	01394386	1



Reference	Description	Part #	Quantity
1	Monoblock	01394436	1
2	Compressor Start Components	01395219	1
5	Valve Coil	01394535	1
7	Condenser Fan Motor	01394592	1
9	Evaporator Fan Motor	01394584	1
10	Fan Blade	01394576	1
12	Shelf Kit	01394030	8
13	Castor Kit	01394154	3
14	Third Party Probe Kit	01394188	1
17	LED Lighting Kit	01394246	2
18	Main Switch Kit	01394238	1
19	Power Cord	01316140	1
20	Top Protection Grid	01398213	1
21	Probe Kit	01394220	1
24	Controller, Requires Programming Key	01598119	1
	Key, Programming, Celsius, FFZR 49	01598200	
	Key, Programming, Fahrenheit, FFZR 49	01598218	
25	Battery Backup Protection Relay	01312560	1
26	Safety Fan	01394345	1
27	Power Relay	01394402	1
29	Door Switch	01394378	4
30	Door Lock with Key	01311877	2
31	Lock Latch	01398148	2
32	Battery Back=up Kit	01394212	1
33	Hinge Kit	01394162	2
36	Door Gasket	01394261	2
40	Door Frame Heater	01394386	2



Reference	Description	Part #	Quantity
1	Monoblock	01394469	2
3	Compressor Start Components	01394519	2
5	Valve Coil	01394535	2
7	Condenser Finger Guard & Fan Holder and Motor	01394543	2
9	Evaporator Motor Fan	01394584	2
10	Evaporator Fan Blade	01394568	2
12	Castor Kit	01394154	5
13	Shelf Kit	01394030	12
14	Third Party Probe Kit	01394188	1
17	Main Switch Kit	01394238	1
18	Power Cord	01316140	1
19	Top Protection Grid	01398239	1
20	Top Protection Grid	01398247	1
21	Probe Kit	01394220	2
22	Lighting Switch	01394360	1
23	Controller, Requires Programming Key	01598119	1
	Key, Programming, Celsius, FREF 72	01598226	
	Key, Programming, Fahrenheit, FREF 72	01598234	
24	Battery Backup Protection Relay	01312560	1
25	Safety Fan	01394345	1
26	Power Relay	01394402	1
28	Door Switch	01394378	3
29	Door Lock with Key	01311877	3
30	Lock Latch	01398148	3
31	LED Driver	01394055	3
32	Battery Backup Kit	01394212	1
33	Hinge Kit	01394170	3
34	Strip Led	01394675	3
35	Glass Door	01597236	2
36	Door Handle (500 mm)	01394113	3
36	Door Handle (530 mm)	01595651	3
37	Door Gasket	01394071	3

FOLLETT is a registered trademark of Follett Products, LLC, registered in the US.



801 Church Lane • Easton, PA 18040, USA
Toll free (877) 612-5086 • +1 (610) 252-7301
www.follettscientific.com

01381983R05
© Follett Products, LLC 8/26