

## **OPERATOR MANUAL**

IMPORTANT INFORMATION, KEEP FOR OPERATOR

888-994-7636, fax 888-864-7636 unifiedbrands.net

THIS MANUAL MUST BE RETAINED FOR FUTURE REFERENCE. UNDERSTAND AND FOLLOW THE INSTRUCTIONS AND WARNINGS CONTAINED IN THIS MANUAL.

FOR YOUR SAFETY Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

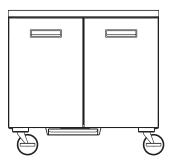
WARNING R290 flammable refrigerant in use. Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Read the installation, operating and maintenance instructions thoroughly before installing or servicing this equipment.

NOTIFY CARRIER OF DAMAGE AT ONCE It is the responsibility of the consignee to inspect the container upon receipt of same and to determine the possibility of any damage, including concealed damage. Randell suggests that if you are suspicious of damage to make a notation on the delivery receipt. It will be the responsibility of the consignee to file a claim with the carrier. We recommend that you do so at once.

Manufacture Service/Questions 888-994-7636.

This manual provides information for:

## 9000-290 SERIES REFRIGERATOR/FREEZERS



### RETAIN THIS MANUAL FOR FUTURE REFERENCE

NOTICE: Due to a continuous program of product improvement, Randell reserves the right to make changes in design and specifications without prior notice.

NOTICE: Please read the entire manual carefully before installation. If certain recommended procedures are not followed, warranty claims will be denied.

MODELNOMBEK	
SERIAL NUMBER	
INSTALLATION DATE	



MODEL NUMBER XXXXXXXXX

DESCRIPTION

The serial number is located in the cabinet left side

under the drawer track.

## **EQUIPMENT DESCRIPTION**

MODEL	LENGTH	DEPTH	HEIGHT	DOORS	STORAGE Cu. Ft.	НР	VOLT	AMPS	NEMA	SHIP WT.
9402-290	27"	30"	36"	(1) 27"	5.7	1/4	115/60/1	2.4	5-15P	185
9404-290	27"	30"	36"	(1) 27"	5.7	1/4	115/60/1	2.4	5-15P	185
9404-32-290	32"	32.75"	36"	(1) 32"	8.6	1/4	115/60/1	2.4	5-15P	252
9404-32D-290	32"	32.75"	36"	(2) 32" DRAWERS	8.6	1/4	115/60/1	2.4	5-15P	252
9802-290	36"	30"	36"	(2) 18"	7.9	1/4	115/60/1	2.4	5-15P	220
9301-290	48"	30"	36"	(2) 24"	10.8	1/4	115/60/1	2.4	5-15P	265
9302-290	48"	30"	36"	(2) 24"	10.8	1/4	115/60/1	2.4	5-15P	265
9602-290	60"	30"	36"	(2) 27"	13	1/4	115/60/1	2.4	5-15P	300
9604-290	72"	30"	36"	(3) 24"	16.8	1/4	115/60/1	2.4	5-15P	330
9401-290	27"	30"	36"	(1) 27"	5.7	1/4	115/60/1	5.3	5-15P	185
9412-32-290	32"	32.75"	36"	(1) 32"	8.6	1/4	115/60/1	5.3	5-15P	252
9412-32D-290	32"	32.75"	36"	(2) 32" DRAWERS	8.6	1/4	115/60/1	5.3	5-15P	300
9801-290	36"	30"	36"	(2) 18"	7.9	1/4	115/60/1	5.3	5-15P 2	
9303-290	48"	30"	36"	(2) 24"	10.8	1/4	115/60/1	115/60/1 5.3		280
9305-290	48"	30"	36"	(2) 24"	10.8	1/4	115/60/1	5.3	5-15P	280
9601-290	60"	30"	36"	(2) 27"	13.8	1/4	115/60/1	5.3	5-15P	300





### INSTALLATION

CAUTION: THIS UNIT CONTAINS R290 FLAMMABLE REFRIGERANT. USE CAUTION WHEN HANDLING MOVING AND USE OF THE REFRIGERATOR OR FREEZER. AVOID DAMAGING THE REFRIGERANT TUBING OR INCREASE THE RISK OF A

WARNING: FAILURE TO FOLLOW INSTALLATION GUIDELINES AND RECOMMENDATIONS MAY VOID THE WARRANTY ON YOUR UNIT.

WARNING: IT IS IMPORTANT THAT YOUR UNIT HAS ITS OWN DEDICATED LINE.

CONDENSING UNITS ARE DESIGNED TO OPERATE WITH A VOLTAGE
FLUCTUATION OF PLUS OR MINUS 10% OF THE VOLTAGE INDICATED ON
THE UNIT DATA TAG. BURN OUT OF A CONDENSING UNIT DUE TO EXCEEDING
VOLTAGE LIMITS WILL VOID THE WARRANTY.

THE DANFOSS CONTROLLER HAS LOW VOLTAGE PROTECTION AND WILL NOT OUTPUT VOLTAGE TO THE COMPRESSOR IF VOLTAGE IS LESS THAN 104V.

WARNING: THIS UNIT IS INTENDED FOR USE IN LABORATORIES IN COMMERCIAL, INDUSTRIAL, OR INSTITUTIONAL OCCUPANCIES AS DEFINED IN THE SAFETY STANDARD FOR REFRIGERATION SYSTEMS, ASHRAE 15.

### **SELECTING A LOCATION FOR YOUR NEW UNIT**

The following conditions should be considered when selecting a location for your unit:

- Floor and Countertop Load: The area on which the unit will rest must be level, free of vibration, and suitably strong enough to support the combined weights of the unit plus the maximum product load weight.
- Clearance: Clearance must be a combined total of at least 1" on back of unit and open clearance at the top. Do not place any object that can block the ventilation exhaust from the machine compartment register. Area of equipment must be free of all combustible materials.
- 3. Ventilation: The air cooled self contained unit requires a sufficient amount of cool clean air. Avoid surrounding your unit around other heat generating equipment and out of direct sunlight. Also, avoid locating in an unheated room or where the room temperature may drop below 70°F or rise above 100°F.

### **INSTALLATION CHECKLIST**

After the final location has been determined, refer to the following checklist prior to start-up:

- Check all exposed refrigeration lines to ensure that they are not kinked, dented, or rubbing together.
- Check that the condenser and evaporator fans rotate freely without striking any stationary members.
- 3. Unit must be properly leveled; check all legs or casters to ensure they all are in contact with the floor while maintaining a level work surface. Adjusting bullet feet heights or shimming casters may be necessary if the floor is not level. NOTE: Damage to equipment may result if not followed. Randell is not responsible for damage to equipment if improperly installed.
- Allow unit time to cool down to temperature. If temperature adjustments are required, the control is located on the front panel. Confirm that the unit is holding the desired temperature.
- Refer to the front of this manual for serial number location. Please record this information in your manual on page 3 now. It will be necessary when ordering replacement parts or requesting warranty service.
- Before putting in food, allow your unit to operate for approximately two (2) hours so that interior of the unit is cooled down to storage temperature.
- 7. Check drawer to ensure the drawer slides freely and fully extends along with seating into the cabinet properly when closed.

### **ELECTRICAL SUPPLY**

Any wiring should be done by a qualified electrician in accordance with all national and local electrical codes. A properly wired and grounded outlet will assure proper operation. Please consult the data tag attached to the compressor to ascertain the correct electrical requirements. Supply voltage and amperage requirements are located on the serial number tag.

### **OPERATION**

Allow unit to operate for approximately two (2) hours before placing in food.

### AMBIENT CONDITIONS

Unit is designed for normal operating temperatures between 70-100°F. Operating outside of those temperatures may cause premature product wear or failure.

Randell has attempted to preset the temperature control to ensure that your unit runs at an optimum temperature, but due to varying ambient conditions, including elevation, food type and your type of operation, you may need to alter this temperature using control adjustment until desired temperature is reached.

#### DANFOSS CONTROLLER OPERATION

LED	FUNCTION
**	Compressor energized & Evaporator fan de-energized
***	Defrost in progress
*	Fans delay after defrost completion
*	Evaporator fan energize
$\triangle$	An alarm is occurring
°C / °F	Temperature unit



CHANGE SET POINT

POWER ON / OFF: Press and hold the power button until LED display turns On / Off

MANUAL DEFROST: Press and hold "Defrost" Button

**CHANGE SET POINT:** To raise temperature

- 1. Press and hold "Λ" to access set point.
- 2. When set point start flashing, Press "Λ" to adjust set point.
- 3. After 30 seconds, the display automatically reverts to showing the current temperature.

#### **CHANGE SET POINT:** To lower temperature

- 1. Press and hold "v" to access set point.
- 2. When set point start flashing, Press "v" to adjust set point.
- After 30 seconds, the display automatically reverts to showing the current temperature.

### CHANGE FROM °F /°C:

- 1. Press the up/down buttons simultaneously for 5 seconds to access the menu.
- 2. Password is requested. Password is 000.
- 3. Press the bottom left button to OK the password.
- 4. Using the up/down buttons, navigate to the "diS" level. Press the bottom left

button to OK the selection.

- Using the up/down buttons, navigate to the "CFu" level. Press the bottom left button to OK the selection.
  - a. "-F" designates Fahrenheit.
  - b. "-C" designates Celsius.
- Press the top left button repeatedly to return to exit and return to the home screen.

DRAWER / DOOR ALARM: Acknowledging Alarms - Visual Display Only

- 1. After 2 minutes the display will flash the alarm message "dor"
- 2. Press any button to acknowledge alarm

**DRAWER / DOOR ALARM:** Door Alarm Activation – If audible alarm is wanted

- 1. Press the up/down buttons simultaneously for 5 seconds to access the menu.
- 2. Password is requested. Password is 000.
- 3. Press the bottom left button to OK the password.
- Using the up/down buttons, navigate to the "ALA" level. Press the bottom left button to OK the selection.
- Using the up/down buttons, navigate to the "Abd" level. Press the bottom left button to OK the selection.
- a. "0" Disables the alarm.
- Any other number is the number of minutes before the buzzer sounds after the drawer is opened.
- Press the top left button repeatedly to return to exit and return to the home screen.

## **MAINTENANCE**

WARNING: DO NOT USE SHARP UTENSILS AND/OR OBJECTS.

WARNING: DO NOT USE STEEL PADS, WIRE BRUSHES, SCRAPERS, OR CHLORIDE

**CLEANERS TO CLEAN YOUR STAINLESS STEEL.** 

CAUTION: DO NOT USE ABRASIVE CLEANING SOLVENTS, AND NEVER USE

HYDROCHLORIC ACID (MURIATIC ACID) ON STAINLESS STEEL.

WARNING: DO NOT PRESSURE WASH EQUIPMENT AS DAMAGE TO ELECTRICAL

COMPONENTS MAY RESULT.

Randell strongly suggests a preventive maintenance program which would include the following monthly procedures:

If a failure of the equipment is a direct result of any of the Preventative Maintenance guidelines being neglected, the repairs and parts replacements will not be covered under warranty.

It is recommended that the customer contact the local Authorized Service Agent to provide a quote to perform periodic Preventative Maintenance.

- 1. Clean fan blades on the condensing unit and evaporator assembly.
- Clean all gaskets on a weekly if not daily basis with a solution of warm water and a mild detergent to extend gasket life.
- 3. Lubricate door hinges with lithium grease.

RECOMMENDED CLEANERS FOR YOUR STAINLESS STEEL INCLUDE THE FOLLOWING:

JOB	CLEANING AGENT	COMMENTS
Routine cleaning	Soap, ammonia, detergent Medallion	Apply with a sponge or cloth
Fingerprints and smears	Arcal 20, Lac-0-Nu, Ecoshine	Provides a barrier film
Stubborn stains and discoloration	Cameo, Talc, Zud, First Impression	Rub in the direction of the polish lines
Greasy and fatty acids, blood, burnt-on foods	Easy-Off, Degrease It, Oven Aid	Excellent removal on all finishes
Grease and Oil	Any good commercial detergent	Apply with a sponge or cloth
Restoration/Preservation	Benefit, Super Sheen	Good idea monthly

Reference: Nickel Development Institute, Diversey Lever, Savin, Ecolab, NAFEM

Proper maintenance of equipment is the ultimate necessity in preventing costly repairs. By evaluating each unit on a regular schedule, you can often catch and repair minor problems before they completely disable the unit and become burdensome on your entire operation.

For more information on preventive maintenance, consult your local service company or CFESA member. Most repair companies offer this service at very reasonable rates to allow you the time you need to run your business along with the peace of mind that all your equipment will last throughout its expected life. These services often offer guarantees as well as the flexibility in scheduling or maintenance for your convenience. For a complete listing of current Randell ASA please visit www.unifiedbrands.net.

Randell believes strongly in the products it manufactures and backs those products with one of the best warranties in the industry. We believe with the proper maintenance and use, you will realize a profitable return on your investment and years of satisfied service.

## REPLACEMENT PARTS

To order parts, contact your Authorized Service Agent. Supply the model designation, serial number, part description, part number, quantity, and when applicable, voltage and phase.

## **CONTACT US**

If you have questions pertaining to the content in this manual, contact Randell at 888-994-7636.

### **TROUBLESHOOTING**

This unit is designed to operate smoothly and efficiently if properly maintained. However, the following is a list of checks to make in the event of a problem. Wiring diagrams are found at the end of this manual. When in doubt, turn unit off and contact service at 888-994-7636.

SYMPTOM	POSSIBLE CAUSE	PROCEDURE
	No power to unit	Plug in unit
Unit does not run	Control in OFF position	Turn controller on
	Faulty control	Call for service at 888-994- 7636
Unit too cold	Incorrect set point	Adjust control set point
	Door / drawer ajar	Ensure door / drawer is fully closed
	Gasket torn or out of place	Inspect the gasket for wear and position
Unit too warm	Incorrect set point	Adjust control set point
	Warm product introduced to cabinet	Pre-chill product 37°F or 3°F degree for freezer
	Ice on the coil	Initiate manual defrost
Unit noisy	Ice on the coil	Initiate manual defrost
Unit does not defrost	Excessive ice on the coil	Initiate manual defrost

### SERVICE

CAUTION: COMPONENT PARTS SHALL BE REPLACED WITH FACTORY OEM PARTS.
SERVICE WORK SHALL BE DONE BY FACTORY AUTHORIZED SERVICE
PERSONNEL, SO AS TO MINIMIZE THE RISK OF POSSIBLE IGNITION DUE TO
INCORRECT PARTS OR IMPROPER SERVICE.

CAUTION: BEFORE MAKING ANY REPAIRS, ENSURE THE UNIT IS DISCONNECTED

FROM ITS POWER SOURCE.

This piece of equipment uses a R290 Refrigeration system. This equipment has been clearly marked on the serial tag the type of refrigerant that is being used. There is also a warning labels stating that the unit contains R290 refrigerant. R290 is safe to use as long as you follow these warning labels and some.

No smoking or open flames when servicing this equipment. If needed, use a CO2 or dry=power type fire extinguisher

Replacement parts used on any R290 Refrigeration system cabinet must have specific UL certification for non-sparking components.

Only authorized service technician, certified in R290 system should service this equipment.

#### MANIFOLD SET

A R134A manifold set can be used for servicing this equipment.

#### REFRIGERANT RECOVERY

Follow all national and local regulations for R-290 refrigerant recovery.

#### **LEAKING CHECKING AND REPAIR**

Leak check an R-290 system the same way you would an R-134a or R-404A system with the following exceptions.

- 1. Do not use a Halid leak detector on a R290 system.
- 2. Electronic leak detector must be designated specifically for combustible gas.

Use of a bubble solution or an ultrasonic leak detector are acceptable.

When repairing a leak, it is recommended using oxygen free dry nitrogen with a trace gas not exceeding 200PSI.

When accessing an R290 system, piercing valves are not to remain on the equipment in a permanent manner. After charge is recovered, Schrader valves are to be installed on the process stubs. Proper charge is to be weighed into the system and the system is to be leak checked afterwards.

The R290 equipment must have red process tubes and other devices through which the refrigerant is serviced, such as any service port. This color marking must remain on the equipment. If marking is removed, it must be replace and extend at least 2.5 centimeters (1") from the compressor.

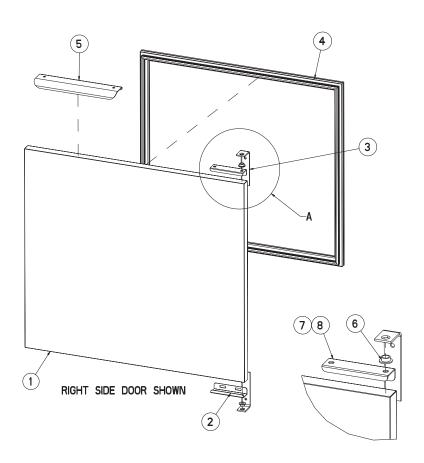
### CHARGING

Follow the charge amount specified on the data tag. It is recommended to use the shortest hoses possible to prevent undercharging.

- Ensure the system is sealed and leak checked
- Evacuate system to a minimum 500 micron
- · Weigh in correct charge
- · Leak check the system again
- Bleed the refrigerant from the high side hose to the low side hose
- Disconnect the hoses
- Remove line taps

WORKTOP/UNDERCOUNTER

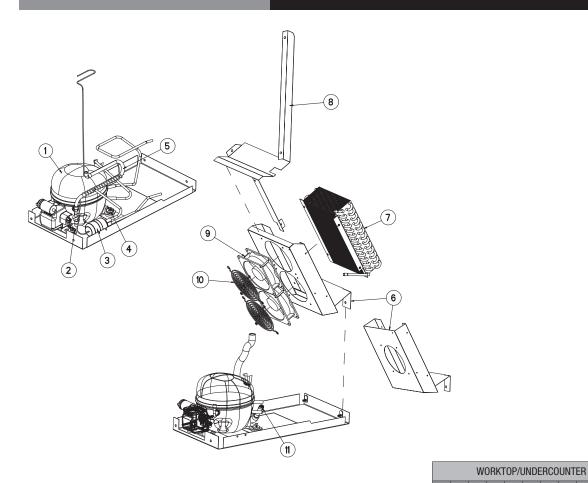
PREP



ITEM	SERVICE PART	DESCRIPTION	9404-290	9404-32-290	9802-290	9301-290	9302-290	9602-290	9604-290	9404F-290	9404F-32-290	9802F-290	9302F-290	9401-290	9412-32-290	9801-290	9303-290	9305-290	9601-290
1	RP DOR101	DOOR - RIGHT - 18"	-	-	Χ	-	-		-	-	-	Χ	-	-	-	Χ	-	-	$\neg$
1	RP DOR102	DOOR - LEFT - 18"	-	-	Χ	-	-		-	-	-	Χ	-	-	-	Χ	-	-	
1	RP DOR103	DOOR - RIGHT - 24"	-	-	-	Χ	Χ		Χ	-	-	-	χ	-	-	-	Χ	Χ	
1	RP DOR104	DOOR - LEFT - 24"	-	-	-	Χ	Χ		Χ	-	-	-	Χ	-	-	-	Χ	Χ	
1	RP DOR105	DOOR - RIGHT - 27"	Χ	-	-	-	-	Χ	-	Χ	-	-	-	Χ	-	-	-	-	Χ
1	RP DOR106	DOOR - LEFT - 27"	Χ	-	-	-	-	Χ	-	Х	-	-	-	Χ	-	-	-	-	Χ
1	RP DOR107	DOOR - RIGHT - 32"	-	Χ	-	-	-	-	-	-	Χ	-	-	-	Χ	-	-	-	-
1	RP DOR108	DOOR - LEFT - 32"	-	Χ	-	-	-	-	-	-	Χ	-	-		Χ	-	-		-
2	RP HNG026	HINGE, STRAP L BRACKET BOTTOM	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ
3	RP HNG9901	HINGE ASSY, SELF CLOSING, RIGHT	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ
3	RP HNG9902	HINGE ASSY, SELF CLOSING, LEFT	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ
4	IN GSK1020	GASKET, PUSH-IN (LEFT/RIGHT DOORS)	-	-	Χ	-	-	-	-	-	-	Χ	-	-	-	Χ	-	-	-
4	IN GSK1025	GASKET, PUSH-IN (LEFT/RIGHT DOORS)	-	-	-	Χ	Χ	-	Χ	-	-	-	Χ	-	-	-	Χ	Χ	-
4	IN GSK1030	GASKET, PUSH-IN (LEFT/RIGHT DOORS)	Χ	-	-	-	-	Χ	-	Χ	-	-	-	χ	-	-	-	-	Χ
4	IN GSK1032	GASKET, PUSH-IN (LEFT/RIGHT DOORS)	-	Χ	-	-	-	-	-	-	Χ	-	-	-	Χ	-	-	-	-
5	RP HDL037	DOOR HANDLE	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ
6	HD BSH050	BUSHING, NYLON DOOR	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ
7	RP HNG035	HINGE, TOP DOOR RH CHANNEL	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ
8	RP HNG034	HINGE, TOP DOOR LH CHANNEL	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ

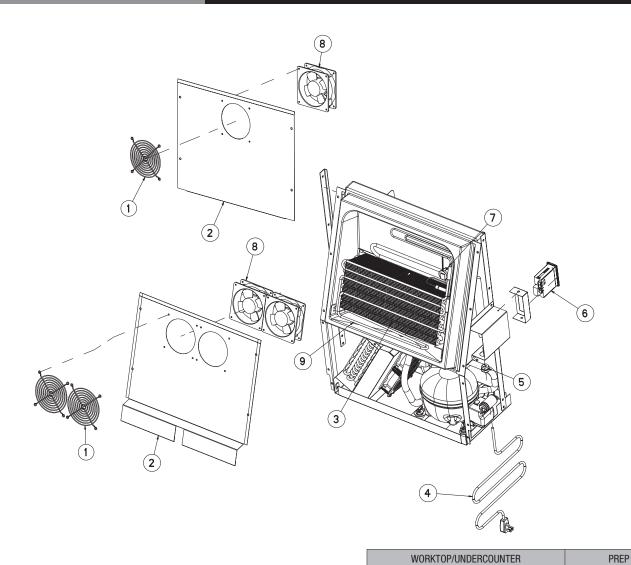
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PREP



			0	9404-32-290	0	0	0	0	0	06	9404F-32-290	06	290	0	9412-32-290	0	0	0	0
			1-29	1-32	2-29	1-29	2-29	2-29	1-29	1F-2	1F-3	2F-2		1-29	2-32	1-29	3-29	5-29	1-290
ITEM	SERVICE PART	DESCRIPTION	9404-290	940	9802-290	9301-290	9302-290	9602-290	9604-290	9404F-290	9407	9802F-290	9302F-	9401-290	941	9801-290	9303-290	9305-290	9601
1	RF CMP1604	COMPRESSOR, EMBRACO	Х	Χ	Х	Χ	Χ	Χ	Χ	Χ	-	-	-	Χ	Χ	Χ	Х	Х	Х
1	RF CMP1701	COMPRESSOR, EMBRACO	-	-	-	-	-	-	-	-	Х	Х	Χ	-	-	-	-	-	-
1	RF CMP1604SC	COMPRESSOR, START PARTS	Х	Χ	Χ	Χ	Χ	Χ	Χ	Χ	-	-	-	Χ	Χ	Χ	Х	Х	Х
1	RF CMP1701SC	COMPRESSOR, START PARTS	-	-	-	-	-	-	-	-	Χ	Χ	Χ	-	-	-	- 1	- 1	- 1
2	HD PIN0601	PIN, HAIR COTTER, WIRE	Х	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ
3	RF FLT9902	DRYER, 1/4 X .042 FILTER	Х	Χ	Х	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Х	Х	Χ
4	RF FLT9902	WASHER, 5/16 FLAT	Х	Χ	Х	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Х	Х	Χ
5	RF WRP1705	HEAT EXCHANGE	-	-	-	-	-	-	-	-	Χ	Χ	Χ	-	-	-	-	-	-
5	RF WRP1706	HEAT EXCHANGE	-	-	-	-	-	-	-	Χ	-	-	-			-	-	-	-
5	RF WRP1707	HEAT EXCHANGE (8-2017)	-	-	-	-	-	-	-	-	Χ	Χ	Χ			-	-	-	-
6	RP SHD1709	SHROUD, CONDENSOR	Х	-	Х	Χ	Χ	Χ	Χ	Χ	-	-	-	Χ	-	Χ	Х	Х	Х
6	RP SHD1710	SHROUD, CONDENSOR	-	-	-	-	-	-	-	-	Χ	Χ	Χ	-	-	-	-	-	-
7	RF COI1604	COIL, CONDENSER	Х	Χ	Х	Χ	Χ	Χ	Χ	χ	Χ	Χ	Χ	Χ	Χ	Χ	X	X	Х
8	RP DIV1701	DIVIDER, AIR	Х	-	-	-	-	-	-	Χ	Χ	Χ	Χ	Χ	-	-	-	-	-
8	RP DIV1702	DIVIDER, AIR (08-2017)	-	Χ	Χ	Χ	Χ	Χ	Χ	-	Χ	Χ	Χ	-	Χ	Χ	Х	Х	Х
9	RF FAN1401	FAN	Х	Х	Х	Χ	Χ	Χ	Χ	χ	-	-	-	Χ	Χ	Χ	X	X	Х
9	RF FAN1701	FAN	-	-						-	Χ	Χ	Χ	-	-	-	-	-	-
10	RF FAN0703	GUARD, FAN	Х	Х	Χ	Χ	Χ	Χ	Χ	χ	Χ	χ	χ	Χ	Χ	Χ	Х	Х	Х
11	PB ELB1002	ELBOW, BARB NYLON 1/2"	Х	Χ	Х	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Х	Х	Χ
*	RP 4044002-290	REFRIGERATION PACKAGE, REPLACEMENT	-	-	-	-	-	-	-	Χ	-	-	-	-	-	-	-	-	-
*	RP 4044002-290A	REFRIGERATION PACKAGE, REPLACEMENT (08-2017)	-	-	-	-	-	-	-	-	Χ	Χ	Χ	-	-	-	-	-	<u> </u>
*	RP 4044000-290	REFRIGERATION PACKAGE, REPLACEMENT	Х	Х	Х	Χ	Χ	Χ	Χ	-	-	-	-	-	-	-	-	-	<u> </u>
*	RP XXXXXX-290	REFRIGERATION PACKAGE, REPLACEMENT	-	-	-	-	-	-	-	-	-	-	-	Χ	Χ	Χ	Х	Х	Х

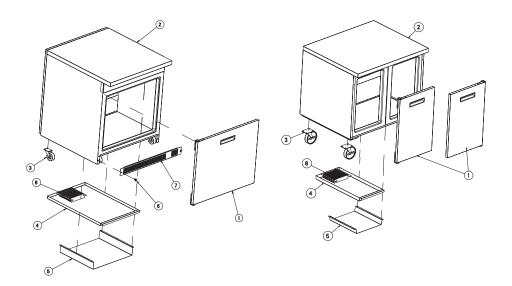
 $<sup>^{\</sup>star} = \mathsf{NOT}\,\mathsf{SHOWN}$ 



			9404-290	9404-32-290	9802-290	9301-290	9302-290	9602-290	9604-290	9404F-290	9404F-32-290	9802F-290	9302F-290	9401-290	12-32-290	9801-290	9303-290	9305-290	9601-290
ITEM	SERVICE PART	DESCRIPTION	94	94	98	93	93	96	96	94	94	98	93	94	941	98	93	93	96
1	RF FAN0703	GUARD, FAN	Χ	Х	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Х
2	RP SHD1707	SHROUD, EVAPORATOR	-	-	-	-	-	-	-	-	Х	Χ	Χ	-	-	-	-	-	-
2	RP SHD1708	SHROUD, EVAPORATOR	-	-	-	-	-	-	-	Χ	-	-	-	-	-	-	- 1	-	[-]
2	T06-0561F-290	SHROUD, EVAPORATOR	Χ	Χ	Χ	Χ	Χ	Χ	Χ	-	-	-	-	Χ	Χ	Χ	Х	Х	-
2	T06-0561G-290	SHROUD, EVAPORATOR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Х
3	RF COI120B	COIL, EVAPORATOR	Х	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Х	Х	Х
4	EL WIR1501	POWER CORD, 9'	-	-	-	-	-	-	-	Χ	Χ	Χ	Χ	-	-	-	-	-	-
4	EL WIR0106	POWER CORD, 9'	Х	Χ	Χ	Χ	Χ	Χ	Χ	-	-	-	-	Χ	Χ	Χ	X	Х	Χ
5	EL GRM300	GROMMET, 7/8"	X	Χ	Х	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	X	Х	Х
6	RP CNT1706	CONTROL, DANFOSS, PREPROGRAMMED, 9404F-290	-	-	-	-	-	-	-	Χ	-	-	-	-	-	-		-	-
6A	RP CNT1710	CONTROL, DANFOSS, PREPROGRAMMED, 9800F,9300F,9404F-32-290	-	-	-	-	-	-	-	-	Х	Χ	Χ	-	-	-	<u>  -  </u>	-	-
6B	RP CNT1713	CONTROL, DANFOSS, PREPROGRAMMED, 9404-290 REF	Х	Χ	Χ	Χ	Χ	Χ	Χ	-	-	-	-	Χ	Χ	Χ	X	Х	Χ
7	RF TRM0501	THERMODISC, 2 WIRE	-	-	-	-	-	-	-	Χ	Χ	χ	χ	-	-	-	-	-	-
8	RF FAN1401	FAN	Χ	Х	Х	Х	Χ	Χ	Χ	Χ	-	-	-	Χ	Χ	Χ	X	X	Х
8	RF FAN1701	FAN	-	-	-	-	-	-	-	-	χ	χ	χ	-	-	-	-	-	-
9	EL WIR1401	COIL, HEATER DEFROST	-	-	-	-	-	-	-	χ	Χ	Χ	Χ	-	-	-	-	-	- ]

 $<sup>^{\</sup>star} = \mathsf{NOT}\,\mathsf{SHOWN}$ 

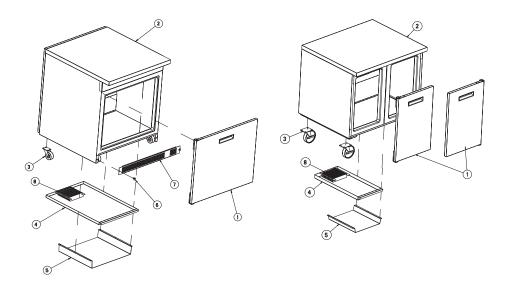
WORKTOP/UNDERCOUNTER



ITEM	SERVICE PART	DESCRIPTION	9404-290	9404-32-290	9802-290	9301-290	9302-290	9602-290	9604-290	9404F-290	9404F-32-29	9802F-290	9302F-290
1	RP DOR101	DOOR - RIGHT - 18"	-	-	Χ	-	-	-	-	-	-	Х	-
1	RP DOR103	DOOR - RIGHT - 24"	-	-	-	Χ	Χ	-	Χ	-	-	-	Χ
1	RP DOR102	DOOR - LEFT - 18"	-	-	Χ	-	-	-	-	-	-	Χ	-
1	RP DOR104	DOOR - LEFT - 24"	-	-	-	Χ	Χ	-	Χ	-	-	-	Χ
1	RP DOR105	DOOR - RIGHT - 27"	Х	-	-	-	-	Χ	-	Χ	-	-	-
1	RP DOR106	DOOR - LEFT - 27"	Х	-	-	-	-	Χ	-	Χ	-	-	-
1	RP DOR107	DOOR - RIGHT - 32"	-	Χ	-	-	-	-	-	-	Χ	-	-
1	RP DOR108	DOOR - LEFT - 32"	-	Χ	-	-	-	-	-	-	Χ	-	-
2	RP T0P9404	TOP ASSY - REPLACEMENT	-	-	-	-	-	-	-	Χ	-	-	-
2	RP T0P9302	TOP ASSY - REPLACEMENT	-	-	-	-	Χ	-	-	-	-	Χ	-
2	RP TOP9802NS	TOP ASSY - REPLACEMENT	-	-	-	-	-	-	-	-	-	-	Χ
2	RP T0P9802	TOP ASSY - REPLACEMENT	-	-	Χ	-	-	-	-	-	-	-	-
2	RP T0P9301	TOP ASSY - REPLACEMENT	-	-	-	Χ	-	-	-	-	-	-	-
2	RP T0P9602	TOP ASSY - REPLACEMENT	-	-	-	-	-	Χ	-	-	-	-	-
2	RP T0P9604	TOP ASSY - REPLACEMENT	-	-	-	-	-	-	Χ	-	-	-	-
3	HD CST060	CASTER	Х	-	Χ	Χ	Χ	Χ	Χ	Χ	-	Х	Χ
3	HD CST061	CASTER	Χ	-	Χ	Χ	Χ	Χ	Χ	Χ	-	Χ	Χ
3	HD CST025	CASTER	-	Χ	-	-	-	-	-	-	Χ	-	-
4	RP CPN1703	PAN, CONDENSATE	-	-	-	-	-	-	-	-	-	Х	Χ
4	RP CPN1705	PAN, CONDENSATE	Х	-	Χ	Χ	Χ	Χ	Χ	Χ	-	-	-
4	RP CPN1707	PAN, CONDENSATE (08-2017)	-	-	-	-	-	-	-	-	-	Χ	Χ
4	RP CPN1708	PAN, CONDENSATE (08-2017)	-	Χ	-	-	-	-	-	-	Χ	-	-
5	RP BRK1704	BRACKET, CONDENSATE PAN	-	-						-	-	Χ	Χ
5	RP BRK1705	BRACKET, CONDENSATE PAN	-	Χ						-	Χ	-	-
5	RP BRK1706	BRACKET, CONDENSATE PAN	Χ	-	Χ	Χ	Χ	Χ	Χ	Χ	-	-	-
5	RP BRK1708	BRACKET, CONDENSATE PAN (08-2017)	-	-	-	-	-	-	-	-	-	Χ	Χ
6	FA SCW0904	THUMBSCREW	-	-	-	-	-	-	-	Χ	-	-	-
7	RP LVR9412	LOUVER, PANEL		Χ	-	-	-	-	-	-	Χ	-	-
8	RP WCK1701	WICKING, CONDENSATE PAN (08-2017)	-	-	-	-	-	-	-	-	Χ	Χ	Χ
*	HD SHL020	SHELF, WIRE	-	-	Χ					-	-	Χ	-
*	HD SHL030	SHELF, WIRE	Χ	-	-	-	-	-	-	Χ	-	-	-
*	HD SHL035	SHELF, WIRE	-	-	Χ	-	-	-	-	-	-	Χ	-
*	HD SHL036A	SHELF, WIRE	-	-	-	-	-	Χ	- [	-	-	-	-
*	HD SHL037	SHELF, WIRE	-	-	-	-	-	Χ	-	-	-	-	]
*	HD SHL040	SHELF, WIRE	-	-	-	Χ	Χ	-	Χ	-	-	-	Χ
*	HD SHL040A	SHELF, WIRE	-	-	-	Χ	χ	-	Χ	-	-	-	Χ
*	HD SHL066	SHELF, WIRE	-	Χ	-	-	-	-	-	-	Χ	-	-

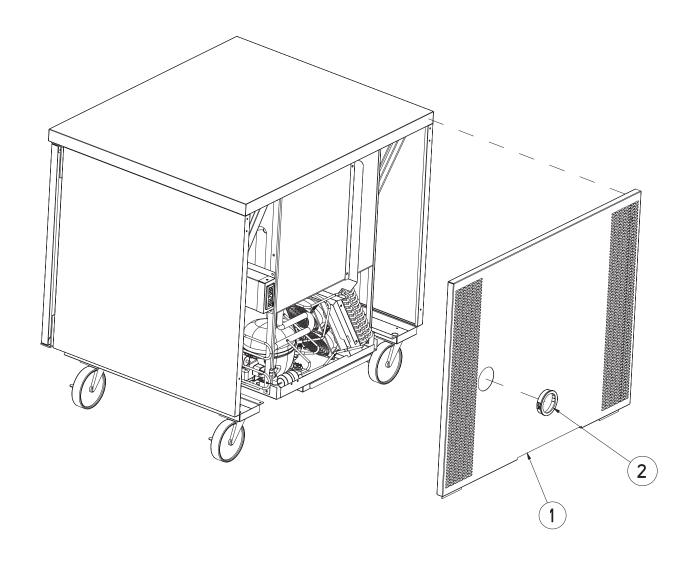
<sup>\* =</sup> NOT SHOWN

PREP



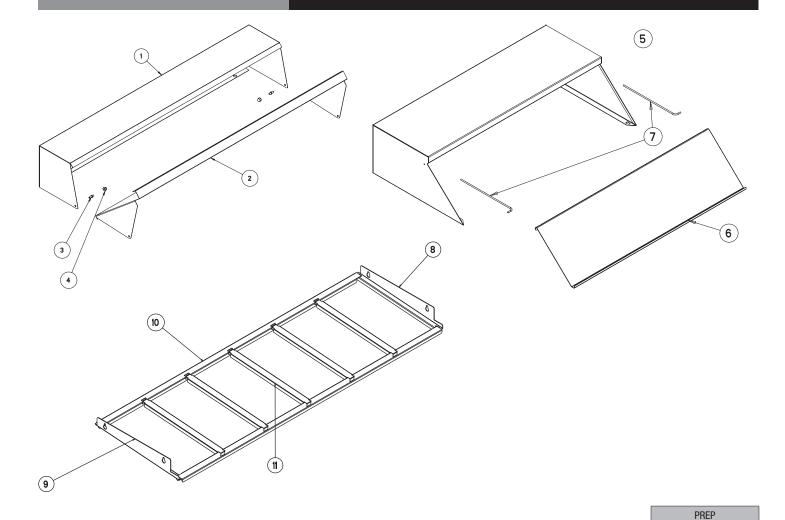
ITEM	SERVICE PART	DESCRIPTION	9401-290	9412-32-29	9801-290	9303-290	9305-290	9601-290
1	RP DOR101	DOOR - RIGHT - 18"	-	-	Χ	-	-	
1	RP DOR102	D00R - LEFT - 18"	-	-	Χ	-	-	
1	RP DOR103	D00R - RIGHT - 24"	-	-	-	X	Х	
1	RP DOR104	D00R - LEFT - 24"	-	-	-	Χ	Χ	
1	RP DOR105	D00R - RIGHT - 27"	Х	-	-	-	-	Χ
1	RP DOR106	D00R - LEFT - 27"	Х	-	-	-	-	Χ
1	RP DOR107	DOOR - RIGHT - 32"	-	Χ	-	-	-	-
1	RP DOR108	D00R - LEFT - 32"	-	Χ	-	-	-	-
2	RP T0P9401	TOP ASSY - REPLACEMENT	Х	-	-	-	-	-
2	RP T0P9412	TOP ASSY - REPLACEMENT	-	Χ	-	-	-	-
2	RP T0P9801	TOP ASSY - REPLACEMENT	-	-	Χ	-	-	-
2	RP T0P9303	TOP ASSY - REPLACEMENT	-	-	-	Χ	-	-
2	RP T0P9305	TOP ASSY - REPLACEMENT	-	-	-	-	Χ	-
2	RP T0P9601	TOP ASSY - REPLACEMENT	-	-	-	-	-	Χ
3	HD CST060	CASTER	Χ	-	Χ	Χ	Χ	Χ
3	HD CST061	CASTER	Χ	-	Χ	Χ	Χ	Χ
3	HD CST025	CASTER	-	Χ	-	-	-	-
4	RP CPN1703	PAN, CONDENSATE	-	-	-	-	-	-
4	RP CPN1705	PAN, CONDENSATE	Χ	-	Χ	Х	Х	Х
4	RP CPN1707	PAN, CONDENSATE (08-2017)	-	-	-	-	-	-
4	RP CPN1708	PAN, CONDENSATE (08-2017)	-	Х	-	-	-	-
5	RP BRK1704	BRACKET, CONDENSATE PAN	-	-	-	-	-	-
5	RP BRK1705	BRACKET, CONDENSATE PAN	-	Х	-	-	-	-
5	RP BRK1706	BRACKET, CONDENSATE PAN	Χ	-	Χ	Χ	Χ	Χ
5	RP BRK1708	BRACKET, CONDENSATE PAN (08-2017)	-	-	-	-	-	-
6	FA SCW0904	THUMBSCREW	-	-	-	-	-	-
7	RP LVR9412	LOUVER, PANEL		Χ	-	-	-	-
8	RP WCK1701	WICKING, CONDENSATE PAN (08-2017)	Χ	Χ	Χ	Χ	Χ	Χ
*	HD SHL020	SHELF, WIRE	-	-	Х	-	-	-
*	HD SHL030	SHELF, WIRE	Х	-	-	-	-	-
*	HD SHL035	SHELF, WIRE	-	-	Χ	-	-	-
*	HD SHL036A	SHELF, WIRE	-	-	-	-	-	χ
*	HD SHL037	SHELF, WIRE	-	-	-	-	-	Χ
*	HD SHL040	SHELF, WIRE	-	-	-	Х	Χ	-
*	HD SHL040A	SHELF, WIRE	-	-	-	Χ	Χ	-
*	HD SHL066	SHELF, WIRE	-	Χ	-	-	-	-

<sup>\* =</sup> NOT SHOWN



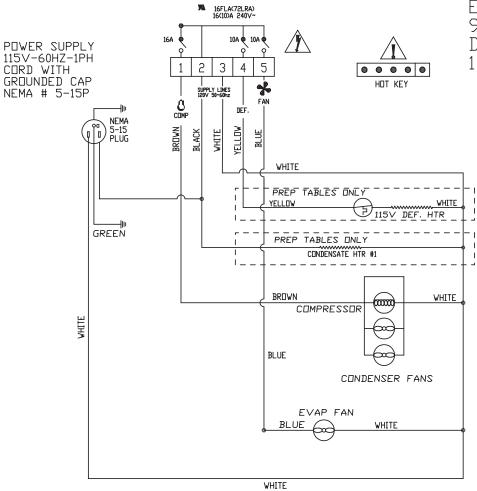
			WORKTOP/UNDERCOUNTER												PREP						
			06	2-290	06	06	90	290	90	290	32-290	290	290	290	-32-290	-290	90	06	-290		
ITEM	SERVICE PART	DESCRIPTION	9404-290	9404-32-	9802-290	9301-290	9302-290	9602-2	9604-290	9404F-;	9404F-;	9802F-;	9302F-;	9401-2	9412-3	9801-2	9303-290	9305-290	9601-2		
1	RP BCK1704	BACK PANEL, SS	Х	-	-	-	-	-	-	Χ	-	-	-	Χ	-	-	-	-	-		
1	RP BCK1705	BACK PANEL, SS	-	Х	-	-	-	-	-	-	Χ	-	-	-	Χ	-	-	-	-		
1	RP BCK1706	BACK PANEL, SS	-	-	-	Χ	Χ	-	-	-	-	-	χ	-	-	-	χ	Χ	-		
1	RP BCK1707	BACK PANEL, SS	-	-	Χ	-	-	-	-	-	-	Χ	-	-	-	Χ	-	-	-		
1	RP BCK1801	BACK PANEL, SS	-	-	-	-	-	Χ	-	-	-	-	-	-	-	-	-	-	Х		
1	RP BCK1802	BACK PANEL, SS	-	-	-	-	-	-	Χ	-	-	-	-	-	-	-	-	-	-		
2	EL GRM1201	GROMMET, 3" BLACK	Х	Х	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Х		

<sup>\* =</sup> NOT SHOWN



ITEM	SERVICE PART	DESCRIPTION	9401-290	9412-32-290	9801-290	9303-290	9305-290	9601-290
1	RQ ROLL6PAN	ROLL COVER ASSEMBLY	Χ	-	-	- 1	-	Х
1	RQ ROLL8PAN	ROLL COVER ASSEMBLY	-	-	Χ	Х	-	-
1	RQ ROL12PAN	ROLL COVER ASSEMBLY	-	-	-	-	Χ	-
2	RP R0L1701	ROLL COVER FRONT - 6 PAN	Χ	-	-	-	-	Χ
2	RP ROL0302	ROLL COVER FRONT - 8 PAN	-	-	Χ	Х	-	-
2	RP ROL1110	ROLL COVER FRONT - 12 PAN	-	-	-	-	Χ	-
3	HD PIN0101	LOCATING PIN	Χ	-	Χ	X	Х	Χ
4	FA NUT0403SS	FASTENER, ACORN NUT	Χ	-	Χ	X	Х	Χ
5	RQ R0L9412	HOOD COVER ASSEMBLY	-	Χ	-	-	-	-
6	RP LID028	HOOD COVER LIDS	-	Χ	-	-	-	-
7	HD ROD110	ROD, SINGLE BEND	-	Χ	-	-	-	-
8	RP BRK1802	SIDE SUPPORT, RIGHT	Х	-	Χ	X	Х	Χ
8	RP BRK1505	SIDE SUPPORT, RIGHT	-	Χ	-	-	-	-
9	RP BRK1801	SIDE SUPPORT, LEFT	Χ	-	Χ	X	Х	Χ
9	RP BRK1504	SIDE SUPPORT, LEFT	-	Χ	-	-	-	-
10	RP BAR1502	PAN SUPPORT	Χ	-	-	-	-	Χ
10	RP BAR1501	PAN SUPPORT	-	-	Χ	Х	-	Χ
10	RP BAR1504	PAN SUPPORT	-	-	-	-	Χ	-
11	RP BAR069	ADAPTOR BARS	Χ	Χ	Χ	Х	Χ	Χ
11	RP BAR1204	ADAPTOR BARS	-	Χ	-	-	-	-

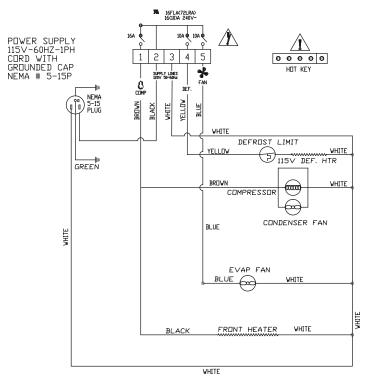
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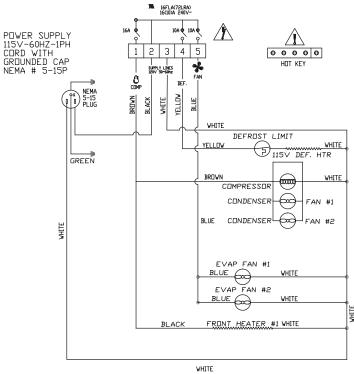
ELECTRICAL DIAGRAM
9000-290 REFRIGERATORS
DANFOSS ERC112C CONTROL
115V W/FAN FUNCTIONS

NOTE: BLUE (EVAP COIL) = S2 BLACK (AIR) = S1

ELECTRICAL DIAGRAM 9404F-290 FREEZER DANFOSS ERC112C CONTROL 115V W/FAN FUNCTIONS



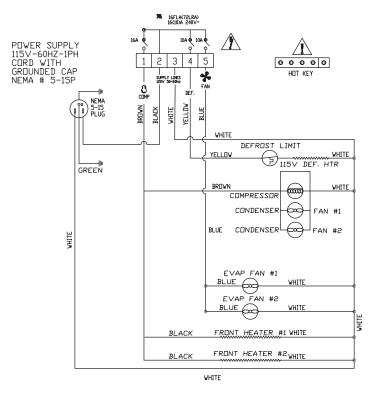
ELECTRICAL DIAGRAM
9404F-32-290 FREEZER
DANFOSS ERC112C CONTROL
115V W/FAN FUNCTIONS



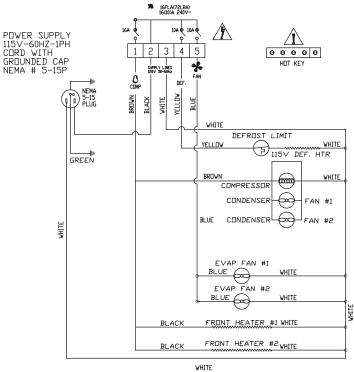
NOTE: BLUE (EVAP COIL) = S2 BLACK (AIR) = S1

NOTE: BLUE (EVAP COIL) = S2 BLACK (AIR) = S1

ELECTRICAL DIAGRAM 9302F FREEZER DANFOSS ERC112C CONTROL 115V W/FAN FUNCTIONS

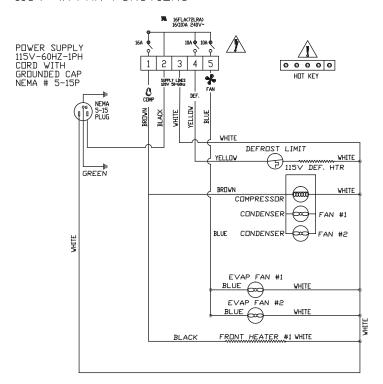


ELECTRICAL DIAGRAM 9802F FREEZER DANFOSS ERC112C CONTROL 115V W/FAN FUNCTIONS



NOTE: BLUE (EVAP COIL) = S2 BLACK (AIR) = S1 NOTE: BLUE (EVAP COIL) = S2 BLACK (AIR) = S1

ELECTRICAL DIAGRAM 9404F-32-290 FREEZER DANFOSS ERC112C CONTROL 115V W/FAN FUNCTIONS



# **Service Log**

Model No:		Purchased From:	
Serial No:		Location:	
Date Purchased:		Date Installed:	
Purchase Order No:		For Service Call:	
Date	Maintenance Perform	ed	Performed By