



OPERATOR MANUAL

IMPORTANT INFORMATION, KEEP FOR OPERATOR

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

THIS MANUAL MUST BE RETAINED FOR FUTURE REFERENCE. READ, 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.

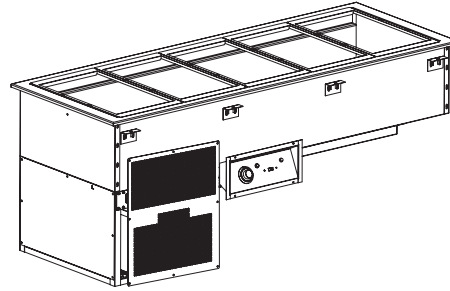
WARNING R290 flammable refrigerant in use. Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Read the installation, operating and maintenance instructions thoroughly before installing or servicing this equipment.

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:

DROP-IN HOT/COLD PAN RCHB SERIES



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.

MODEL NUMBER _____

SERIAL NUMBER _____

INSTALLATION DATE _____



SERIAL NUMBER XXXXXXXXX
MODEL NUMBER XXXXXXXXX
DESCRIPTION

The serial number is located on the underside of the cold pan near the drain.

EQUIPMENT DESCRIPTION

MODEL	LENGTH	WIDTH	PAN CAPACITY 12" X 20"	CUTOUT DIM		CONTROL PANEL		WATTS (HEATED)	HP	AMPS 60/1PH			SHIP WT (LBS)
				L	W	L	W			120V (REFRIG)	208V (HEATED)	240V (HEATED)	
RCHB-2	31-1/16"	26-1/8"	2	29-1/2"	25"	14"	6"	1100	1/4	3.5	5.3	4.5	110
RCHB-3	44-1/16"	26-1/8"	3	42-1/2"	25"	14"	6"	2200	1/4	3.5	10.6	9.2	135
RCHB-4	57-1/16"	26-1/8"	4	55-1/2"	25"	14"	6"	3300	1/4	3.5	15.9	13.8	160
RCHB-5	70-1/16"	26-1/8"	5	68-1/2"	25"	14"	6"	4400	1/4	3.5	21.2	18.3	185



Information contained in this document is known to be current and accurate at the time of printing/creation. Reference our product line website for the most updated product information and specifications. © 2023 Electrolux Professional, Inc. All Rights Reserved.

IMPORTANT - READ FIRST - IMPORTANT

INTERIOR EVAPORATOR COVER

⚠ DANGER	<p>RISQUE D'INCENDIE OU D'EXPLOSION. INFLAMMABLE REFRIGÉRANT UTILISÉ. NE PAS UTILISER DE DISPOSITIFS MÉCANIQUES POUR DÉGIVRER LE RÉFRIGÉRATEUR. NE FAIRE AUCUN TUBE RÉFRIGÉRANT DE PUNCTON.</p> <p>PP.LB1701 REV B</p>	WARNING ⚠ ALERTE
<p>RISK OF FIRE OR EXPLOSION. FLAMMABLE REFRIGERANT USED. DO NOT USE MECHANICAL DEVICES TO DEFROST REFRIGERATOR. DO NOT PUNCTURE REFRIGERANT TUBING.</p> <p>RIESGO DE INCENDIO O EXPLOSIÓN. REFRIGERANTE INFLAMMABLE UTILIZADO. NO UTILICE DISPOSITIVOS MECÁNICOS PARA DESCONGELAR EL REFRIGERADOR. NO PERFORE LA TUBERÍA DEL REFRIGERANTE.</p>	<p>DO NOT REMOVE PANEL - HIGH VOLTAGE - QUALIFIED PERSONNEL ONLY - NE PAS RETIRE LE PANNEAU - HAUTE TENSION - PERSONNEL QUALIFIÉ SEULEMENT - NO RETIRE EL PANEL - ALTA TENSION - CALIFICADO PERSONAL</p> <p style="text-align: center;">CAUTION ⚠ ATTENTION</p> <p>MOVING PARTS. DO NOT OPERATE WITH COVER REMOVED - PIÈCES MOBILES NE PAS FAIRE FONCTIONNER SANS COUVERCLE - LAS PIEZAS DE MOVIMIENTO NO FUNCIONAN CON LA CUBIERTA RETIRADA.</p>	⚠ CAUTION
		<p>MISE EN GARDE RISQUE D'INCENDIE OU D'EXPLOSION EN RAISON DE LA PERFORATION DU TUBE RÉFRIGÉRANT. SUIVEZ ATTENTIVEMENT LES INSTRUCTIONS DE MANIPULATION. RÉFRIGÉRANT INFLAMMABLE UTILISÉ.</p> <p>PRECAUCIÓN RIESGO DE INCENDIO O EXPLOSIÓN DEBIDO A LA PERFORACIÓN DE LA TUBERÍA DE REFRIGERANTE. SIGA CUIDADOSAMENTE LAS INSTRUCCIONES DE MANEJO. REFRIGERANTE INFLAMMABLE UTILIZADO.</p>

EXTERIOR OF UNIT

⚠ CAUTION	<p>MISE EN GARDE RISQUE D'INCENDIE OU D'EXPLOSION. ÉLIMINER (or DISPOSER) CORRECTEMENT CONFORMÉMENT AUX RÉGLEMENTATIONS FÉDÉRALES OU LOCALES. RÉFRIGÉRANT INFLAMMABLE UTILISÉ.</p> <p>PP.LB1704 REV B</p>
<p>RISK OF FIRE OR EXPLOSION. DISPOSE OF PROPERLY IN ACCORDANCE WITH FEDERAL OR LOCAL REGULATIONS. FLAMMABLE REFRIGERANT USED.</p> <p>PRECAUCIÓN RIESGO DE INCENDIO O EXPLOSIÓN. DESECHÉLO ADECUADAMENTE CONFORME A REGLAMENTOS FEDERALES O LOCALES. REFRIGERANTE INFLAMMABLE UTILIZADO.</p>	

NEAR EXPOSED REFRIGERANT TUBING

⚠ CAUTION	<p>RISK OF FIRE OR EXPLOSION DUE TO PUNCTURE OF REFRIGERANT TUBING; FOLLOW HANDLING INSTRUCTIONS CAREFULLY. FLAMMABLE REFRIGERANT USED.</p> <p>PRECAUCIÓN RIESGO DE INCENDIO O EXPLOSIÓN DEBIDO A LA PERFORACIÓN DE LA TUBERÍA DE REFRIGERANTE. SIGA CUIDADOSAMENTE LAS INSTRUCCIONES DE MANEJO. REFRIGERANTE INFLAMMABLE UTILIZADO.</p>	⚠ CAUTION
	<p>MISE EN GARDE RISQUE D'INCENDIE OU D'EXPLOSION EN RAISON DE LA PERFORATION DU TUBE RÉFRIGÉRANT. SUIVEZ ATTENTIVEMENT LES INSTRUCTIONS DE MANIPULATION. RÉFRIGÉRANT INFLAMMABLE UTILISÉ.</p>	

NEAR MACHINE COMPARTMENT AND NAMEPLATE

⚠ DANGER	<p>RISK OF FIRE OR EXPLOSION. FLAMMABLE REFRIGERANT USED. TO BE REPAIRED ONLY BY TRAINED SERVICE PERSONNEL. DO NOT PUNCTURE REFRIGERANT TUBING.</p> <p>PELIGRO RIESGO DE INCENDIO O EXPLOSIÓN. REFRIGERANTE INFLAMMABLE UTILIZADO. DEBE SER REPARADO SOLAMENTE POR PERSONAL DE SERVICIO CAPACITADO. NO PERFORE LA TUBERÍA DEL REFRIGERANTE.</p>	DANGER
⚠ CAUTION	<p>RISK OF FIRE OR EXPLOSION. FLAMMABLE REFRIGERANT USED. CONSULT REPAIR MANUAL / OWNER'S GUIDE BEFORE ATTEMPTING TO INSTALL OR SERVICE THIS PRODUCT. ALL SAFETY PRECAUTIONS MUST BE FOLLOWED.</p> <p>PRECAUCIÓN RIESGO DE INCENDIO O EXPLOSIÓN. REFRIGERANTE INFLAMMABLE UTILIZADO. CONSULTE EL MANUAL DE REPARACIÓN / MANUAL DEL USUARIO ANTES DE INSTALAR O REPARAR ESTE PRODUCTO. DEBEN SEGUIRSE LAS PRECAUCIONES DE SEGURIDAD.</p>	⚠ CAUTION
	<p>MISE EN GARDE RISQUE D'INCENDIE OU D'EXPLOSION. RÉFRIGÉRANT INFLAMMABLE UTILISÉ. CONSULTER LE MANUEL DE RÉPARATION / GUIDE DE L'UTILISATEUR AVANT D'ESSAYER D'INSTALLER OU DE RÉPARER CE PRODUIT. TOUTES LES PRÉCAUTIONS DOIVENT ÊTRE RESPECTÉES.</p>	

INSTALLATION

CAUTION: THIS UNIT CONTAINS R290 FLAMMABLE REFRIGERANT. SEE ABOVE CAUTION.

CAUTION: UNIT MUST BE INSTALLED INTO IT'S OWN COMPARTMENT TO PROPERLY CONTAIN ANY REFRIGERANT LEAK. IT IS REQUIRED THAT NO ARCHING POTENTIAL COMPONENTS (GFCI) OR ELECTRICAL CONNECTIONS ARE BELOW 14.5" FROM THE BOTTOM OF THE CABINET.

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: IT IS IMPORTANT THAT A VOLTAGE READING BE MADE AT THE COMPRESSOR MOTOR ELECTRICAL CONNECTIONS, WHILE THE UNIT IS IN OPERATION TO VERIFY THE CORRECT VOLTAGE REQUIRED BY THE COMPRESSOR IS BEING SUPPLIED. LOW OR HIGH VOLTAGE CAN DETRIMENTALLY AFFECT OPERATION AND THEREBY VOID ITS WARRANTY.

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:

1. 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.
2. Secure and Seal: Once the drop in unit is installed into the counter it can be secured to the countertop by using the brackets supplied from the factory.
 - a. Locate square openings on exterior body of drop unit. Insert securing bracket as shown. Tighten screw to anchor the unit tightly to cabinet top.
 - b. Secure unit to top and seal with "NSF" approved silicone.
 - c. Install inside duct with thumb screws and adjust outside duct to fit between condenser coil and counter's louvered cutout
 - d. Secure outside duct in place with screws through pre-punched holes.

3. Clearance: See installation diagrams for minimum compartment dimension. Do not place any object that can block the ventilation exhaust from the machine compartment register. 20 inch clearance at the louvered end of the unit. Area of equipment must be free of all combustible materials.
4. Ventilation: The air cooled self contained unit requires a sufficient amount of cool clean air.

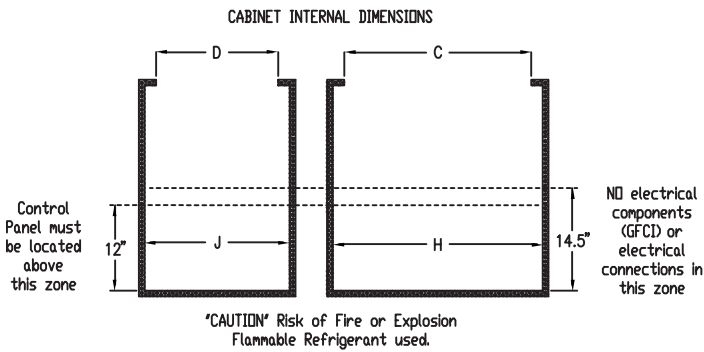
INSTALLATION CHECKLIST

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

1. Units must be installed in a minimum compartment size as indicated in the installation drawing.
2. Provided louver and air funnel must be installed in accordance with the installation drawings to ensure proper ventilation for system operation or in the event of a refrigerant leak. It is required that no arching potential components (GFCI) or electrical connections are below 14.5" from the bottom of the cabinet.
3. Check all exposed refrigeration lines to ensure that they are not kinked, dented, or rubbing together after being installed into the counter.
4. Check that the condenser fans rotate freely without striking any stationary members.
5. After hard wiring unit, switch three way switch located on control panel to hot on or cold on.
6. Allow unit 50-60 min 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.
7. Refer to the front of this manual for serial number location. Please record this information in your manual now. It will be necessary when ordering replacement parts or requesting warranty service.

INSTALLATION INSTRUCTIONS

Minimum 20" clearance required for proper air flow.



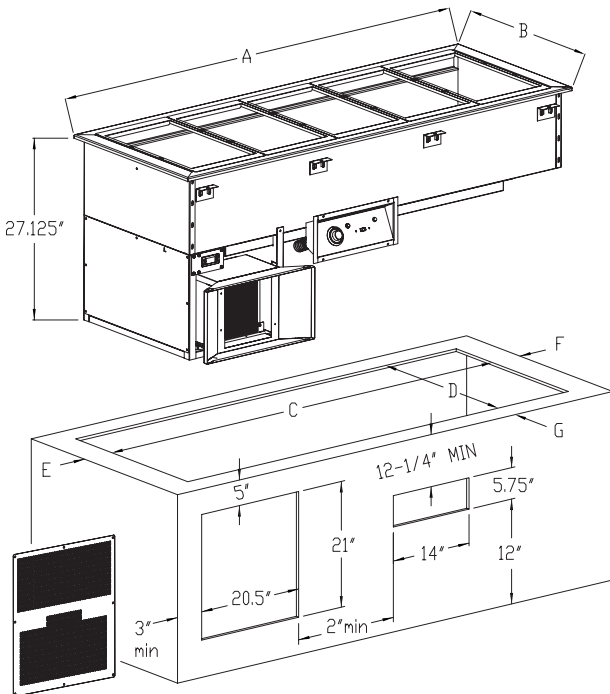
CUT-OUT DIMENSION

STANDARD UNIT FLANGE SIZES AND CUT-OUT DIMENSIONS									
MODEL	A	B	C	D	E	F	G	H	J
RCHB-2	31-1/16"	26-1/8"	29-1/2"	25"	3" min	8" min*	3"-6"	40-1/2"	31"
RCHB-3	44-1/16"	26-1/8"	42-1/2"	25"	3" min	3" min	3"-6"	48-1/2"	31"
RCHB-4	57-1/16"	26-1/8"	55-1/2"	25"	3" min	3" min	3"-6"	61-1/2"	31"
RCHB-5	70-1/16"	26-1/8"	68-1/2"	25"	3" min	3" min	3"-6"	74-1/2"	31"
RCHB-2AF	33-11/16"	26-1/8"	32-1/4"	25"	3" min	6" min*	3"-6"	40-1/2"	31"
RCHB-3AF	46-11/16"	26-1/8"	45-1/4"	25"	3" min	3" min	3"-6"	48-1/2"	31"
RCHB-4AF	59-11/16"	26-1/8"	58-1/4"	25"	3" min	3" min	3"-6"	61-1/2"	31"
RCHB-5AF	72-11/16"	26-1/8"	71-1/4"	25"	3" min	3" min	3"-6"	74-1/2"	31"

Cutout Dimensions for each model are the same for 120V, 208V and 240V.

*Louver and control panel sizes require extended length on the 2 well, as indicated in column F.

CUT-OUT DIAGRAM: 2-5 PAN UNIT



OPERATION - AS COLD FOOD WELL

Switch the master switch, located on the control panel, to cold and the blue indicator light will illuminate. Allow unit to operate for approximately 50-60 min before placing in food.

AMBIENT CONDITIONS

Unit is designed for normal operating temperatures are between 70° F (21°C) and 86°F (32°C). 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.

It is normal for the refrigerated cold well to develop an even layer of frost during operation.

MORNING STARTUP

1. Cold pan cleaning may be performed at this time.
2. Turn on power to unit by either a switch or controller power button.
3. Allow 50-60 minutes for the cold pan to cool down before loading product.
4. Load the product and proceed with food preparation. NOTE: Product entering the cold pan must be at 37°F +/- 2°F or less. All pans should be in position.

EVENING SHUT DOWN

1. Remove product from the cold pan at the end of the day's preparation. The product may be discarded or stored in any commercial refrigerator.
2. Turn off power to unit by either a switch or controller power button. This will allow unit to thaw which allows for better operation when starting up unit for next day operation.
3. Unit cleaning may be performed at this time once the frost has melted off the surface. NOTE: Water may form small pools and have to be pushed to the drain for 100% draining.

DANFOSS CONTROLLER OPERATION

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

MANUAL DEFOST



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.
3. 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.
5. 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.
6. Press the top left button repeatedly to return to exit and return to the home screen.

OPERATION - AS HOT FOOD WELL

CAUTION: MOISTURE COLLECTING FROM IMPROPER DRAINAGE CAN CREATE A SLIPPERY SURFACE ON THE FLOOR AND HAZARD TO EMPLOYEES. WHEN MAKING ELECTRICAL CONNECTIONS REFER TO THE AMPERAGE DATA LISTED ON THE UNIT'S DATA PLATE. REFERENCE YOUR LOCAL CODE OR THE NATIONAL ELECTRICAL CODE HANDBOOK TO ENSURE THE UNITS CONNECTED TO THE PROPER POWER SOURCE.

Switch the master switch, located on the control panel, to hot and the red indicator light will illuminate. All units are design for 145 to 175°F operation or 140 to 170°F product temperature. When used as a hot well the unit must have water in it all all times. Failure to use water or to add water when the unit is heating may cause damage to the unit.

1. Add 1” to 2” of water to holding tank. Hot water is recommended.
2. Turn thermostat to #4
3. Red indicator light will energize to show corresponding well that is heating.
4. Wait 1 hour before adjusting thermostat. Higher number will increase temperature. Lower number will decrease temperature.
5. Turn thermostat to off position when operation is completed. Switch master switch to the off position.

Refilling of wet operation units is required periodically if the water level is lower than 1.” NOTE: Do not add water to an empty hot well that is at holding temperature.

PLUMBING

The units drain must have an outlet to an appropriate drainage area or container.

NOTE: Electric Elements are not submersible.

NOTE: Drains must be plumbed according to all applicable local code requirements.

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.

MONTHLY PROCEDURES

1. Cleaning of all condenser coils. Condenser coils are a critical component in the life of the compressor and must remain clean to assure proper air flow and heat transfer. Failure to maintain this heat transfer will affect unit performance and eventually destroy the compressor. Clean the condenser coils with coil cleaner and/or a vacuum cleaner and brush. NOTE: Brush coil in direction of fins, normally vertically as to not damage or restrict air from passing through condenser.
2. Clean fan blades on the condensing unit.
3. Clean and disinfect drain lines with a solution of warm water and mild detergent.
4. Check silicone seal around drop in flange for peeling and cracks. Reapply with food grade silicone as necessary.

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-O-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 - COLD WELL	POSSIBLE CAUSE	PROCEDURE
Unit does not run	No power to unit	Plug in unit
	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
Unit too warm	Incorrect set point	Adjust control set point
Unit noisy	Vibration in the cabinet	Inspect for loose parts

SYMPTOM - HOT WELL	POSSIBLE CAUSE	PROCEDURE
Unit doesn't heat	No power to unit	Plug in unit
	Temperature control turned off	Check temperature control
	Temperature control faulty	Test temperature control
	Element does not heat	Test element for continuity
Unit too hot	Thermostat not shutting off	Test thermostat
Unit runs constantly	Too much water in tank	1" - 2" of water in the tank
	Thermostat sensing bulb	Check location of sensing bulb
Unit leaking water	Drain	Check drains for leaks
	Pan cracked	Call ASA for repair

DANFOSS CONTROLLER CODES

DISPLAYED ALARM CODE	ALARM	ACTION
Hi	High Temperature Alarm	Inspect door/drawer sealing
		Contact service
Lo	Low Temperature Alarm	Contact service
CON	Condenser Temperature High Limit	Clean condenser coil
		Inspect coil for any objects obstruction hindering airflow
		Contact service
uHi	Line Voltage Too High	Verify voltage of power source, to be performed by qualified technician
		Contact service
uLi	Line Voltage Too Low	Verify voltage of power source, to be performed by qualified technician
		Contact service
LEA	Continuous Compressor Runtime	Inspect door/drawer sealing
		Inspect condenser coil, clean if necessary
		Contact service
E01	S1 Sensor Failure	Contact service
E02	S2 Sensor Failure	Contact service
E03	S3 Sensor Failure	Contact service
E04	S4 Sensor Failure	Contact service

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.

No smoking or open flames when servicing this equipment. If needed, use a CO2 or dry-powder 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.

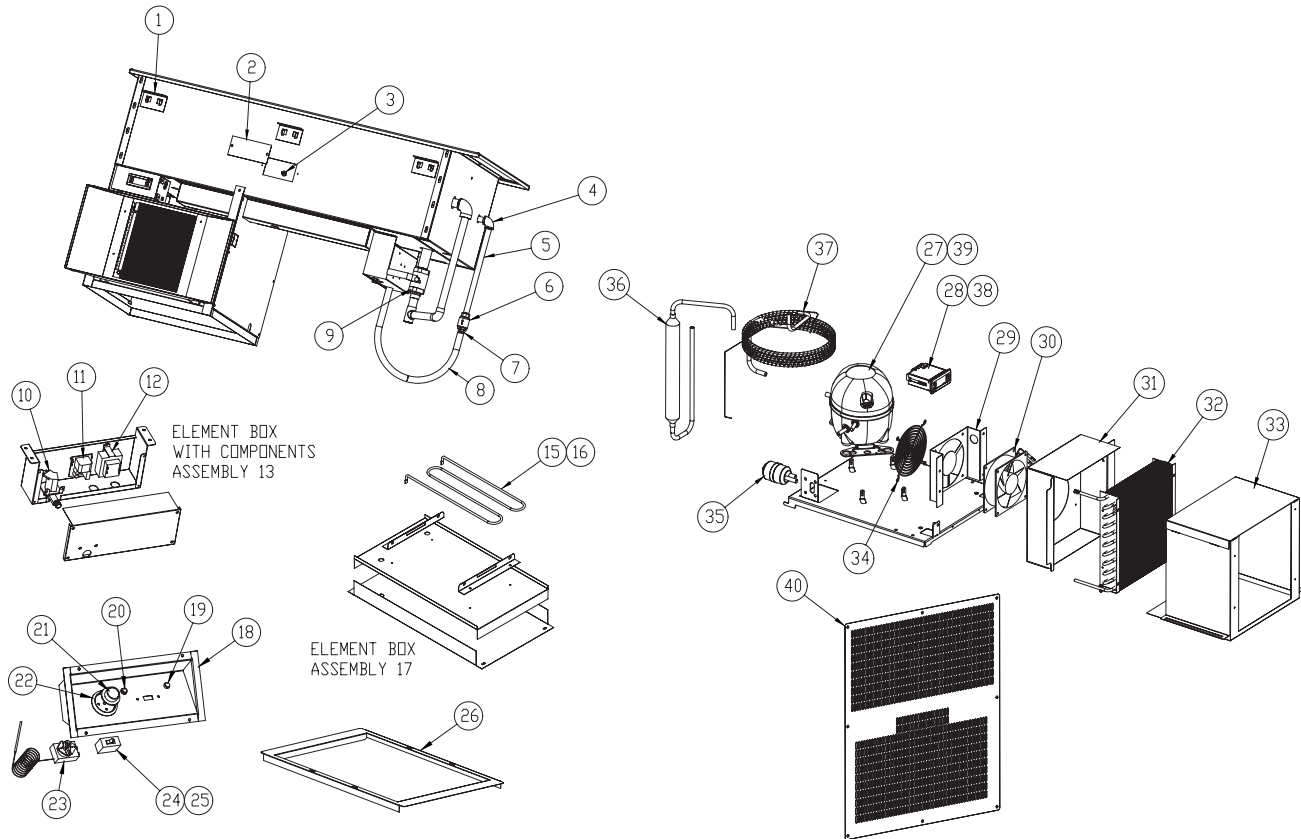
CHARGING

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

CALL FACTORY FOR REPLACEMENT PARTS:
888-994-7636

Parts List

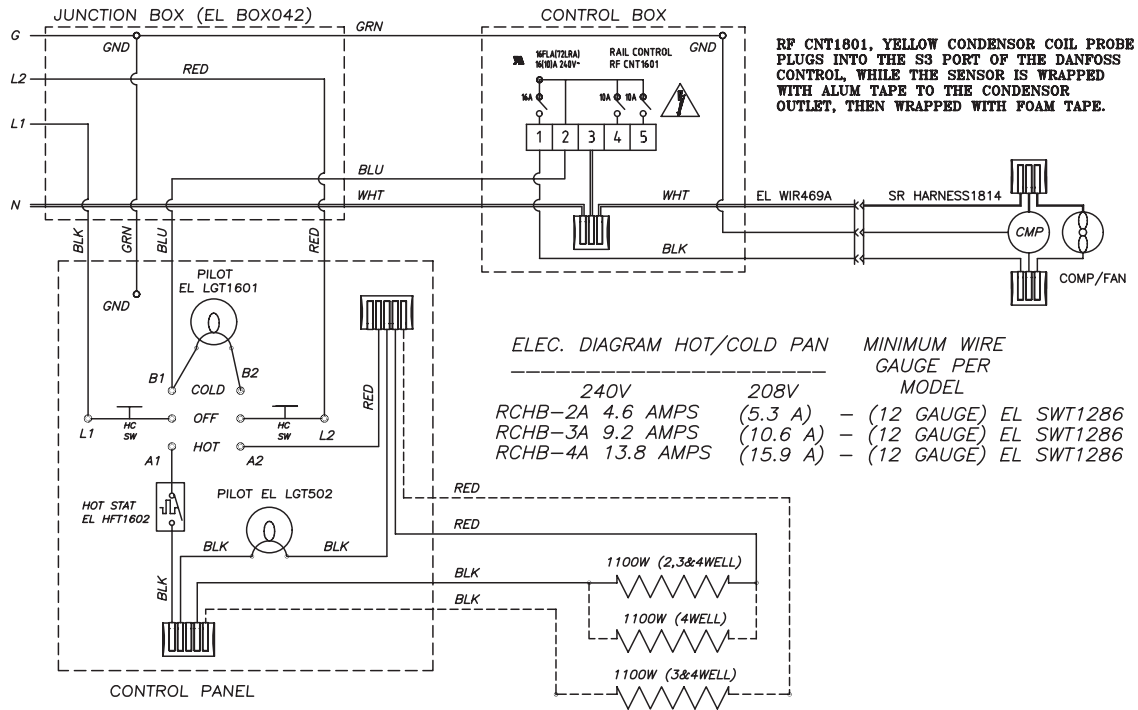


ITEM	DESCRIPTION	PART NUMBER
1	DROP IN HOLD DOWN CLIP (T19-5052A)	RP CLP0102
2	COVER, OPEN THERMOSTAT (T25-0063)	RP CVR1803
3	PROBE, WATER VORTEX UNITS LEVEL GROEN #142689 #15914	HD PRB0502
4	ELBOW, 3/8" 90 DEG S/S	PB ELB0017
5	NIPPLE, 3/8" X 12" SS	PB NIP0201
6	VALVE, 3/8 IPS VERTICAL CHECK T&S# B-CV3-8	HD FLR0313
7	FITTING, 3/8" MPT X 3/8" BARB 125HBL66 BRASS /MSC 79870069	PB FTG9903
8	HOSE, 3/8ID X 1/2OD BRAIDED 0257-0610 NSF, 2 FT LONG	PL HSE038
9	VALVE, 1" THREAD BALL, FULL PORT, 107-905	PB VLV650
10	VALVE, S-30 WATER SOLENOID K-63315-24 .75 GPM 24V/60HZ	PB VLV0502
11	BOARD, WATER LEVEL CONTROL GROEN #142533 # 26C3B0	HD BRD0501
12	TRANSFORMER, 40VA 208/240V WATER LEVEL CONTROL 9-1611454-6	EL TRN0502
13	COMPONENT BOX ASSEMBLY (T25-0061 & T25-0062) WITH COMPONENTS	RB BOX1401
15	ELEMENT 1100 WATT 208 VOLT M SHAPED ENDS BENT DOWN	RP ELM1172B
16	ELEMENT 1100 WATT 240 VOLT M SHAPED ENDS BENT DOWN	RP ELM1124B
17	ELEMENT PAN ASSEMBLY - SHEET METAL (T25-0033, T25-0034, T08-0057)	RP PAN1801
18	CONTROL PANEL ASSEMBLY - SHEET METAL (T25-0035, T25-0036, T18-1008)	RP CNT1810
19	LIGHT, BLUE, PILOT 250V WITH LEADS 2952-1-11-38350	EL LGT1601
20	LIGHT, PILOT 250V WITH LEADS 2952-1-12-38310	EL LGT502

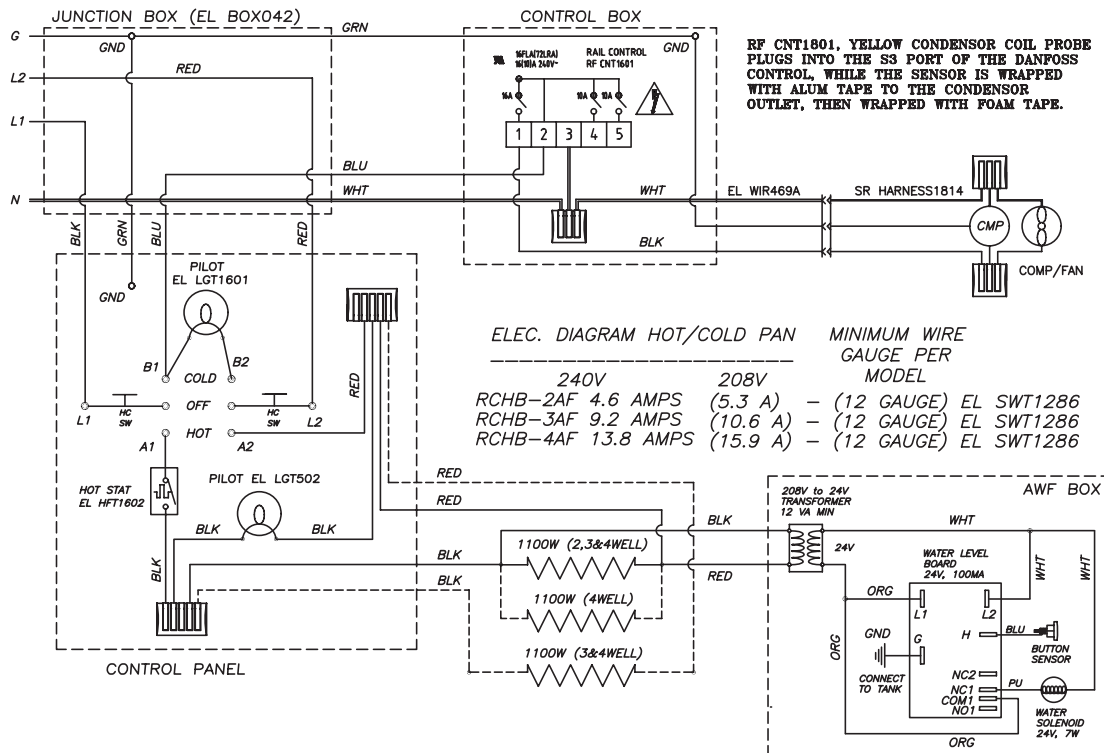
ITEM	DESCRIPTION	PART NUMBER
21	KNOB, HFT CONTROL, 1-7 AND OFF	HD KNB1701
22	GUARD, HFT CONTROL CAP-BEZELS-HFT DRWG. #LP2702A	HD GRD0203
23	CONTROL, 250F TSTAT W. OFF EA5TP-509-48	EL HFT1601
24	SWITCH, TOGGL 20A 120/277V DPDT BRW 1286 HBL1386 3D373 N*	EL SWT1286
25	SWITCH, TOGGLE DBL POL 30A/277VDPDT LEV 1288 HBL 1388 3D375N*	EL SWT1288
26	TEMPLATE, HOT WELL PAN DIVIDER (T25-0025)	RP ADP1806
27	COMPRESSOR, 1/4HP, R290, EMBRACO, 115V-60HZ, EM2X3125U	RF CMP1604
28	CONTROL, DANFOSS ERC112C - PROGRAMMED	RP CNT1803
29	FAN SHROUD, SINGLE FAN SHROUD BRACKET, 123 MM DIA (T28-0043C)	RP HSG1801
30	FAN, AXIAL 127 x 38 MM, 120 CFM MIN, 115V, CONDENSER	RF FAN0601
31	FAN SHROUD, SINGLE FAN, 123 MM DIA. (T28-0043A)	RP SHD1803
32	COIL, LUVATA 160120 - 1/4"	RF COI1603
33	SHROUD, CONDENSING UNIT, RCP-#(N), R290 (T28-0042)	RP SHD1802
34	FAN GUARD, NICKEL CHROME FINISH WIRE, 127MM, RND	RF FAN1602
35	DRYER, 1/4x.042 FILTER EKP-032 SC DBL INL CAP TUBE N*	RF FLT9902
36A	ACCUMULATOR AFTER OCT 2019	RF ACM1801
36	ACCUMULATOR, 3/8 DIA X 12 LONG	RF ACM1701
37	WRAP W/ HEAT EXCHANGE, 9900SC-290 DROP IN	RP WRP1802
38	THERMISTOR, QTI, AIR SENSOR, BLACK, 10	RF CNT1603
39	START COMPONENTS, 1/4HP, R290, EMBRACO, 115V-60HZ, EM2X3125U	RF CMP1604SC
40	Louver, Flat (T28-008)	RP LVR1802
41*	PROBE, COND COIL, YELLOW	RF CNT1801

* Not shown

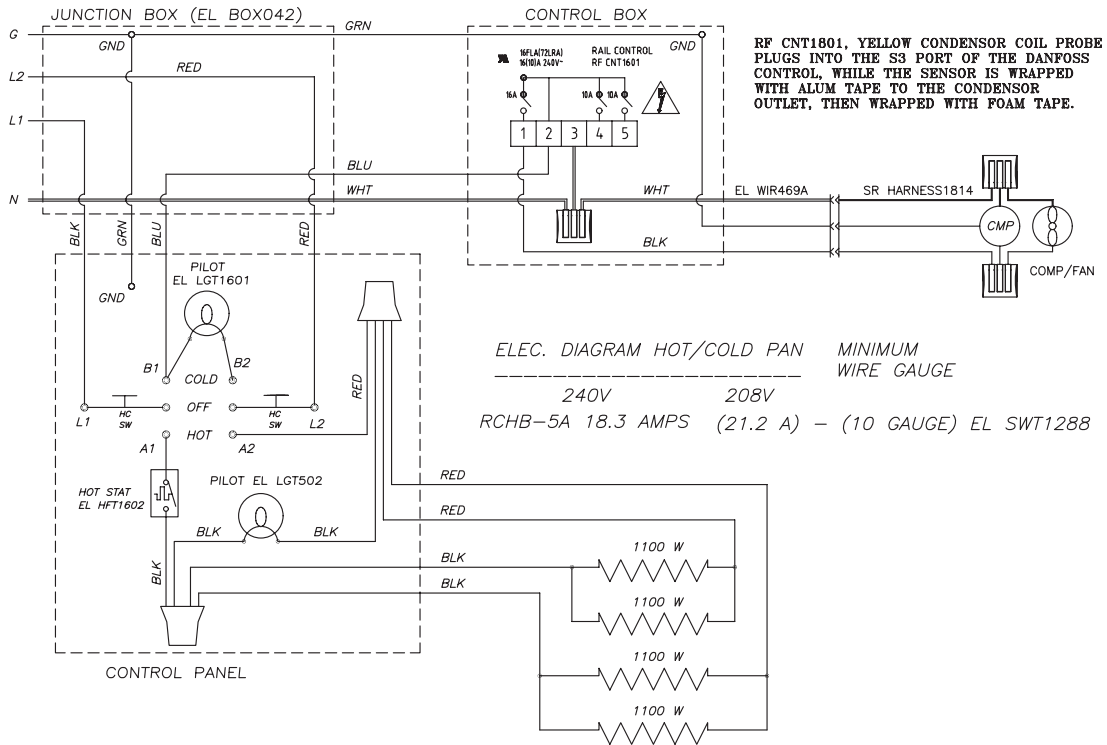
Wiring Diagram



Wiring Diagram



Wiring Diagram



Wiring Diagram

