Thru-the-Wall Comfort

Heating & Cooling

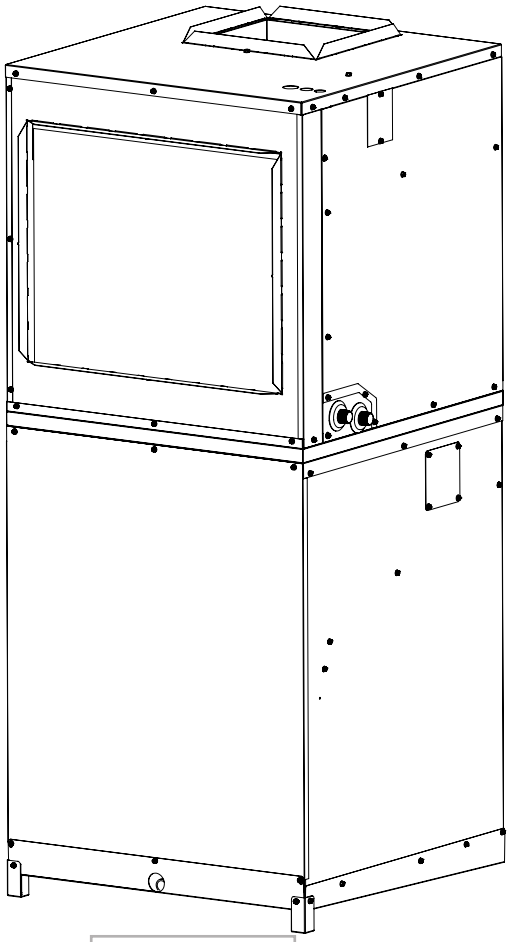
Installation Guide

Comfort Pack Flex Package Heat Pump

This unit should be installed in an

Outside Wall For Thru-The-Wall Installation Only!

Read Installation Manual
Prior To Starting The Installation.



Please fill in the following information and file it for future reference.

MODEL NO._____

SERIAL NO._____

INSTALL DATE _____

This manual must be left with the homeowner for future reference.

5 YEAR WARRANTY ON PARTS

5 YEAR WARRANTY COMPRESSOR

AHRI CERTIFIED® www.ahridirectory.org
Unitary Small HP
AHRI Standard 210/240
Certification applies only when the complete system is listed with AHRI.

C ETL LISTED US
Intertek
53533

National Comfort Products
A Division of AeriTek
539 Dunksferry Road · Bensalem, PA 19020-5908
(800) 523-7138
www.nationalcomfortproducts.com

Go Thru-the-Wall

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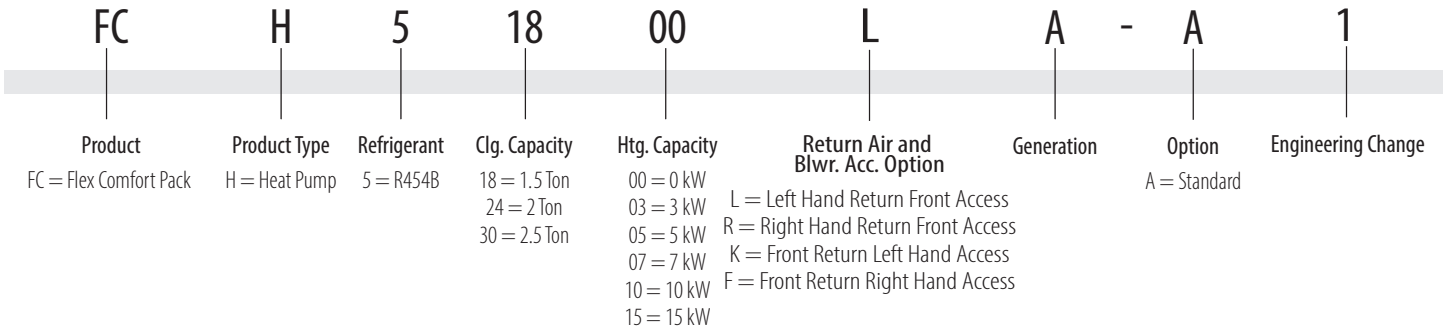
IMPORTANT NOTE: DO NOT DESTROY OR THROW AWAY THIS MANUAL.
IT SHOULD BE KEPT IN A SAFE PLACE FOR FUTURE REFERENCE.

Thru the Wall Heat Pump Nomenclature



Note: Comfort Pack Flex Heat Pumps can be configured as Left Hand, Right Hand, or Front Return.

Product Features

- **The Comfort Pack Flex Heat Pump offers Left Hand, Right Hand, and Front return air options.**
- **Stainless Steel Drain Pan with 3/4" MPT Primary and Secondary Connections and additional PVC 3/4" FPT connection on condenser drain.**
- **208/230 VAC Operation**
- **Slide in/out Blower assembly**
- **Multi-speed Direct Drive Constant Torque ECM Blower**
- **Factory installed Thermal Expansion Valves for both heating and cooling operation**

Additional Accessories

- **3, 5, 7, 10, and 15 kW Single-Phase heat kits (Circuit Breakers standard on all single phase electric heat kits) (Optional)**
- **Wall Sleeves come in 6, 8, 10, and 12 inches depending on wall depth (Required)**
- **Exterior louver for wall sleeve (Required)**
- **Custom decorative grilles (Optional)**

Section 1: Safety Warnings!

This appliance is not intended for use by those (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instructions concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

This appliance is intended to be installed up to 10,000 ft (3,000 m) above sea level.

This appliance only uses **R454B** refrigerant which is part of A2L refrigerant safety group.

⚠This is a safety alert symbol. When you see this symbol on labels or in manuals, be alert to the potential for personal injury.

Pay particular attention to words such as **DANGER, WARNING** or **CAUTION**.

DANGER indicates an imminently hazardous situation, which will result in **serious injury or death.**

WARNING indicates a potentially hazardous situation, which could potentially result in **serious injury or death.**

CAUTION indicates a potentially hazardous situation, which may result in **minor or moderate injury.** It is also used to alert against practices that are unsafe and can result in property damage.

⚠ WARNING

HIGH VOLTAGE! Disconnect ALL power before servicing. Multiple power sources may be present. Failure to do so may result in property damage, personal injury or death.

⚠ AVERTISSEMENT

HAUTE TENSION! Débranchez TOUTE l'alimentation avant l'entretien. Plusieurs sources d'alimentation peuvent être présentes. Le non-respect de cette consigne peut entraîner des dommages matériels, des blessures corporelles ou la mort.

⚠ WARNING

These instructions are intended as an aid to qualified, licensed service personnel for proper installation, adjustment and operation of this unit. **Read these instructions thoroughly before attempting installation or operation.** Failure to follow these instructions may result in improper installation, adjustment, service or maintenance possibly resulting in fire, electrical shock, property damage, personal injury or death.

⚠ AVERTISSEMENT

Ces instructions sont destinées à aider le personnel de service qualifié et agréé pour l'installation, le réglage et le fonctionnement corrects de cet appareil. **Lisez attentivement ces instructions avant de tenter l'installation ou l'utilisation.** Le non-respect de ces instructions peut entraîner une installation, un réglage, un entretien ou un entretien incorrects, ce qui peut entraîner un incendie, un choc électrique, des dommages matériels, des blessures corporelles ou la mort.

⚠ WARNING

All working personnel for maintenance, service, and repair operations must be certified from a national training organization or manufacturer that is accredited to teach the relevant national competency standards. Attempting to install or repair this unit without such background may results in product damage, personal injury or death

⚠ AVERTISSEMENT

Tout le personnel de travail pour les opérations d'entretien, de service et de réparation doit être certifié par un organisme de formation national ou un fabricant accrédité pour enseigner les normes de compétence nationales pertinentes. Tenter d'installer ou de réparer cette unité sans un tel arrière-plan peut entraîner des dommages au produit, des blessures corporelles ou la mort.

⚠ CAUTION

Use care when handling compressor. Some temperatures could be hot!

⚠ PRUDENCE

Soyez prudent lorsque vous manipulez des compresseurs. Certaines températures peuvent être chaudes!

⚠ CAUTION

Compressor should NEVER be used to evacuate the air conditioning system. Vacuums this low can cause internal electrical arcing resulting in a damaged or failed compressor.

⚠ PRUDENCE

Les compresseurs ne doivent JAMAIS être utilisés pour évacuer le système de climatisation. Des vides aussi bas peuvent provoquer un arc électrique interne entraînant un compresseur endommagé ou défaillant.

⚠ WARNING

The unit must be permanently grounded. **Failure to do so can cause electrical shock resulting in severe personal injury or death.**

⚠ AVERTISSEMENT

L'unité doit être mise à la terre en permanence. **Le défaut de le faire peut provoquer un choc électrique entraînant des blessures graves ou la mort.**

"USE COPPER SUPPLY WIRES ONLY"

⚠ WARNING

Do not use oxygen to purge lines or pressurize system for leak test. Oxygen reacts violently with oil, which can cause an explosion resulting in severe personal injury or death.

⚠ AVERTISSEMENT

N'utilisez pas d'oxygène pour purger les conduites ou pressuriser le système pour l'essai d'étanchéité. L'oxygène réagit violemment avec l'huile, ce qui peut provoquer une explosion entraîne des blessures graves ou la mort

⚠ CAUTION

The indoor heat exchanger of this unit should never be operated without air filter.

⚠ PRUDENCE

L'échangeur de chaleur intérieur de cette unité ne doit jamais fonctionner sans filtre à air.

⚠ WARNING

Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer.

The appliance shall be stored in a room without continuously operating ignition sources (for example:open flames, an operating gas appliance or an operating electric heater.

Do not pierce or burn.

Be aware that refrigerants may not contain an odor.

⚠ AVERTISSEMENT

Nutilisez pas de moyens pour accélérer le processus de dégivrage ou pour nettoyer, autres que ceux recommandés par le fabricant.

Lappareil doit être stocké dans une pièce sans sources dinflammation fonctionnant en continu (par exemple : flammes nues, un appareil à gaz en fonctionnement ou un radiateur électrique en fonctionnement.

Ne pas percer ou brûler.

Sachez que les réfrigérants peuvent ne pas contenir dodeur.

Section 2: Before You Start

ALL phases of this installation must comply with NATIONAL, STATE AND LOCAL CODES. The manufacturer assumes no responsibility for equipment installed in violation of any code requirements.

Be sure that the electrical data specified on the unit rating plate corresponds to what is available at the installation site and NEC for installation requirements.

This unit MUST be installed in an outside wall for thru-the-wall installation ONLY. No pad mounts.

Be sure that the electrical service provided to the building can handle the load imposed by the unit.

The area shall be checked with an appropriate refrigerant detector prior to and during work, to ensure the technician is aware of potentially toxic or flammable atmospheres. Ensure that the leak detection equipment being used is suitable for use with all applicable refrigerants, i.e. non-sparking, adequately sealed or intrinsically safe.

Appropriate leak detection methods include an electronic leak detection device or liquid soap bubble method on chassis weld joints.Under no circumstances shall potential sources of ignition be used in the searching for or detection of refrigerant leaks. A halide torch (or any other detector using a naked flame) shall not be used.

IMPORTANT — This Document is customer property and is to remain with this unit. Please refer to service information pack upon completion of work to register the unit's warranty. These instructions do not cover all variations in systems or provide for every possible contingency to be met in connection with the installation. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's purposes, the matter should be referred to your installing dealer or local distributor before contacting the manufacturer.

Section 2.1: Unit Inspection

As soon as the unit is received, the installer needs to inspect the unit for possible damages during transit. If damages are evident, the extent of the damage should be noted on the carrier's freight bill. For proper inspection, a separate request for inspection by the carrier's agent should be sent in writing. The indoor section of this unit contains a foam block inside to keep the fan blower in place during transit. Make sure to remove the foam block before installing the unit.

Section 2.2: Accessories

These units are required to be installed with factory approved wall sleeve and louver. Refer to product specification sheet for approved wall sleeve options.

Section 2.3: Limitations

The package heat pump uses a flammable refrigerant that is part of A2L refrigerant safety group. In order to ensure proper safety, all limitations and warnings from this section must be considered.

Section 2.4: Minimum Room Area Requirement

⚠ WARNING

The area where the appliances is installed shall be constructed that should any refrigerant leak, it will not stagnate so as to create a fire or explosion hazard.

If appliances are installed in a room with an area less than the value determined using 'Minimum room area table' that room shall be without continuously operating open flames (i.e. an operating gas appliance) or other potential ignition sources (i.e an operating electric heater, hot surfaces). A flame-producing device may be installed in the same space if the device is provided with an effective flame arrest.

Auxiliary devices which may be a potential ignition source shall not be installed in the duct work. Examples of such potential ignition sources are hot surfaces with a temperature exceeding 1292°F (700°C) and electric switching devices.

⚠ AVERTISSEMENT

La zone où les appareils sont installés doit être construite de manière à ce qu'en cas de fuite de réfrigérant, il ne stagne pas de manière à créer un risque d'incendie ou d'explosion.

Si des appareils sont installés dans une pièce dont la surface est inférieure à la valeur déterminée à l'aide de la 'table de surface minimale', cette pièce doit être dépourvue de flammes nues (par exemple un appareil à gaz de fonctionnement) ou d'autres sources d'inflammation potentielles (par exemple, un appareil de chauffage électrique en état de fonctionnement, des surfaces chaudes). Un dispositif produisant des flammes peut être installé dans le même espace si le dispositif est muni d'un pare-flammes efficace.

Les dispositifs auxiliaires qui peuvent être une source d'inflammation potentielle ne doivent pas être installés dans les conduits. Des exemples de telles sources d'inflammation potentielles sont les surfaces chaudes avec une température supérieure à 1292°F (700°C) et les dispositifs de commutation électrique.

Ensure the total conditioned room area is greater than the corresponding value in the table. The altitude of installed unit must also be taken into account. To properly determine minimum room area first find the respective "Altitude Adjustment Factor" based on the table below. Then multiply the Altitude Adjustment Factor by the value determined in the minimum room area table below.

The Altitude Adjustment Factor is based on the building site ground level altitude (H_{alt}) in meters.

Table 1: Altitude Adjustment Factor

H_{alt} (m)	0	200	400	600	800	1000	1200	1400	1600
H_{alt} (ft)	0	656	1312	1969	2625	3281	3937	4593	5249
Adj. Factor	1.00	1.00	1.0	1.00	1.02	1.05	1.07	1.10	1.12
H_{alt} (m)	1600	1800	2000	2200	2400	2600	2800	3000	3200
H_{alt} (ft)	5249	5906	6562	7218	7874	8530	9186	9843	10499
Adj. Factor	1.12	1.15	1.18	1.21	1.25	1.28	1.32	1.36	1.40

Table 2: Minimum Room Area

MINIMUM ROOM AREA			
		Ft²	m²
Tonnage	1.5T	64.7	6.0
	2.0T	64.7	6.0
	2.5T	79.7	7.4

2.5 Minimum Ventilation Airflow Volume

Ensure the ventilation airflow volume is greater than the corresponding value in the table.

Table 3: Minimum Ventilation Airflow Volume

MINIMUM VENTILATION AIRFLOW VOLUME			
		m³/hr	CFM
Tonnage	1.5T	198.3	116.7
	2.0T	198.3	116.7
	2.5T	244.2	143.7

Section 3: Electrical Connections

⚠ CAUTION

All wiring for this unit must comply with the local and national electrical codes and requirements. Failure to comply with the electrical requirements can cause serious property damage.

⚠ PRUDENCE

Tout le câblage de cet appareil doit être conforme aux codes et exigences locaux et nationaux en matière d'électricité. Le non-respect des exigences électriques peut causer de graves dommages matériels.

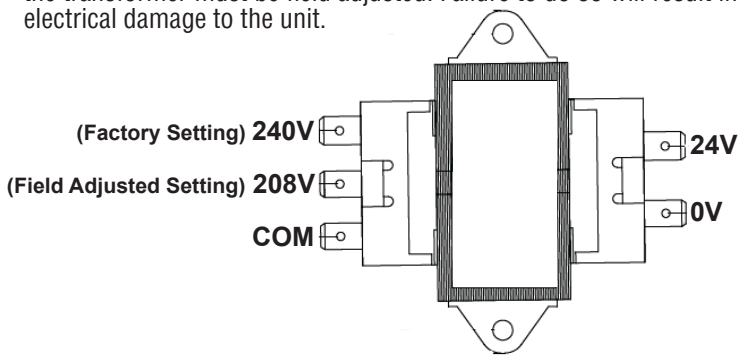
Note: Make certain that the volts, hertz, and phase correspond to that specified on the unit rating plate, and that the service provided by the utility is sufficient to handle the additional load imposed by this equipment.

Make all electrical connections in accordance with the National Electrical Code and any pertinent local codes or ordinances. Use a separate branch electrical circuit for this unit. Locate a disconnecting means within sight of and readily accessible to the unit.

Please follow the instructions below for proper field power wire connections

- Power wires will be routed through the conduit opening on the top panel of the Comfort Pack Flex.
- In the absence of a heat kit, connect the field power wires to the 12 AWG power wires supplied inside the cabinet.
- When an electric heat kit is to be installed, verify the proper wire and breaker size by referring to the specifc MCA and MOP rating listed in Table 6 on page 16.
- All wiring and electrical connections for this unit must be made with copper conductors.

The control board is supplied 24V power by an internal low voltage transformer. The transformer is factory wired to 230V incoming supply voltage, if the incoming supply voltage is 208V then wiring to the transformer must be field adjusted. Failure to do so will result in electrical damage to the unit.



The thermostat wires can be routed through the 1" diameter opening on the top panel.

For additional air-leakage prevention, seal the wiring entry point at the outside of the unit.

Use the seven (7) thermostat wires from the unit to connect to room thermostat.

Thermostat Wire Key:

Black - C	White - AUX (W1)
Yellow - Y	Orange - O
Green - G	Red - R
Blue - E (W2)	

When locating the room thermostat, it should be in the natural circulating path of room air. Avoid locations where the thermostat would be exposed to cold air infiltration; drafts from windows, doors or other openings leading to the outside; exposure to air currents from warm-or-cold air registers or to exposure where the natural circulation of the air is cut off, such as behind doors, above or below mantels, shelves, etc.

Electrical - Low Voltage

Low Voltage Maximum Wire Length:

Table defines the maximum total length of low voltage wiring from the heat pump to the indoor unit and to the thermostat.

24 VOLTS	
WIRE SIZE	MAX. WIRE LENGTH
18 AWG	150 Ft.
16 AWG	225 Ft.
14 AWG	300 Ft.

Electrical - High Voltage

NOMINAL VOLTAGE	MINIMUM VOLTAGE	MAXIMUM VOLTAGE
208-230	**196**	**244**

High Voltage Power Supply

⚠ WARNING

LIVE ELECTRICAL COMPONENTS!

During installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury.

⚠ AVERTISSEMENT

COMPOSANTS ÉLECTRIQUES SOUS EN DIRECT!

Lors de l'installation, des tests, de l'entretien et du dépannage de ce produit, il peut être nécessaire de travailler avec des composants électriques en direct. Le non-respect de toutes les précautions de sécurité électrique pourrait entraîner des blessures graves ou la mort.

The high voltage power supply must agree with the equipment nameplate.

OR

Make certain that the volts, hertz, and phase correspond to that specified on the unit rating plate, and that the service provided by the utility is sufficient to handle the additional load imposed by this equipment.

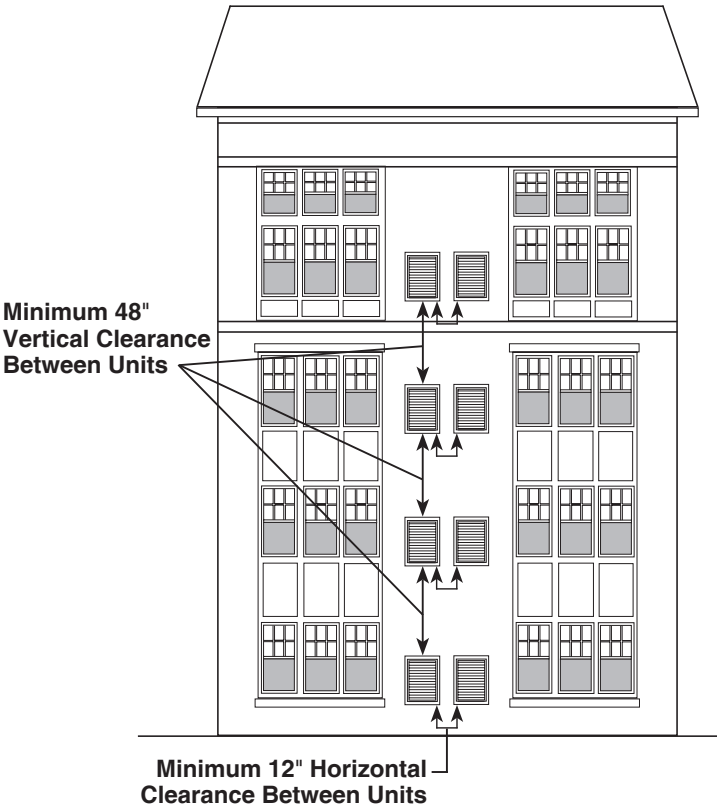
Power wiring must comply with national, state, and local codes.

Follow instructions on unit wiring diagram located on the inside of the access door, or cabinet and in the wiring diagrams included with the unit.

Section 4: Unit Installation

The unit must **never** be placed on its side or upside down as the compressor oil will run in the cooling circuit and seriously damage the unit. Base pan must always be on the bottom of the install.

Section 4.1: Check for Clearances



WARNING: Warranty will be void on all units installed behind brick facades (e.g. pigeon holes) or connected to ductwork (See Note 1 below). All obstacles added to impede air flow of the heat pump will decrease performance, cause premature equipment failure, and void all warranties. Consult factory with any questions.

Note 1: No ducts are permitted to be connected to the intake or discharge of the unit.

WARNING: The area where the appliances is installed shall be constructed that should any refrigerant leak, it will not stagnate so as to create a fire or explosion hazard.

Section 4.2: Unit Location Considerations

In thru-the-wall installation, due to the various types of wall construction, it is not possible to provide detailed instructions. The following is a list of general requirements and cautions for installing these units. **The unit must be installed level, both - top front to back and left to right.**

1. Masonry walls must have a lintel to support the wall.
2. The wall sleeve should be installed so that the wall sleeve base pan is flush or extend beyond the outside finished wall to prevent water entry. Ensure wall sleeve is flashed on all 4 sides to prevent water entry.
3. The wall opening across the top and bottom must be flashed. Bottom flashing to cover the full footprint of unit and extend up 2" on 3 sides. **All openings around the top, sides and bottom must be caulked and sealed. Completely fill the clearance between the unit and the wall sleeve with a polyurethane foam sealant.**
4. Clearances to air inlets and outlets must be adequate to ensure no air flow obstructions or recirculation of condenser air flow. Care must be taken to locate the coil side of the unit away from loose debris that may clog airflow inlet or outlet.
5. **5.** Some architectural designs of buildings will require the unit to be mounted behind a custom decorative grille. Outdoor grilles provided by others **must be** approved by NCP to maintain unit performance and warranty.
6. The unit must not be mounted in dead-end hallways or areas where there is no fresh outside air circulation. Cool fresh outside air **must be** provided for best unit operation. Thru-the-wall units may not be located where hot exhausts from clothes dryer vents, kitchen vents, steam vents or corrosive fumes could come in contact with coil side of unit.
7. 30" clearance is required for service accessibility on the inside service panel.
8. A minimum 48" of vertical clearance and 12" of horizontal clearance between units is required to minimize recirculation of condenser exhaust air. For horizontal clearances less than 12", please consult National Comfort Products.
9. Care must be taken when locating the unit. Locate away from bedrooms as operational sounds may be objectionable.
10. The Comfort Pack Flex heat pump is provided with a condensate pan including a 3/4" PVC FPT drain connection and 3/4" MPT primary and secondary connections. Provisions must be made for field piping to the building drain system for condensate disposal in accordance with local codes. Field piping to the drain connections must be pitched down.
11. A minimum 4" clearance between unit base pan and floor is required when installing unit.

Section 4.3: Wall Sleeve & Grille Installation

STOP

Unit requires wall sleeve and grille. Refer to the wall sleeve and grille installation guide for guidance in assembling and installation.

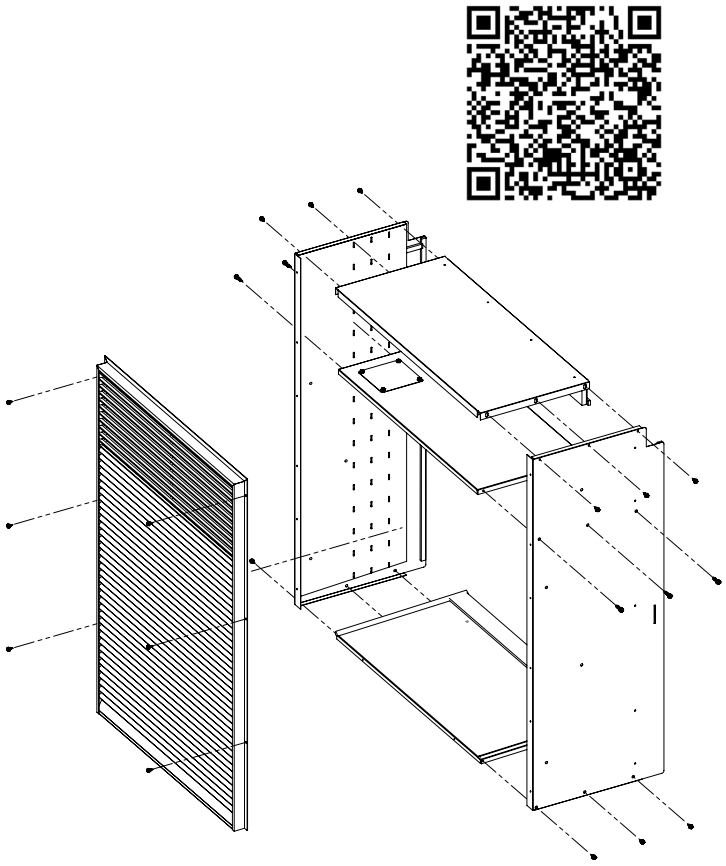
Before installation continues, you **MUST** have the following components:

1) Wall Sleeve

2) Grille

3) Minimum 4" Platform

The unit can only be installed into an FCWS. The wall sleeve **MUST** be installed first through the wall before the unit can be installed into the wall sleeve. The platform should be flush with the sill for the unit to be installed into wall sleeve.



Section 4.4: Install Unit

After unboxing the unit and completing the inspection, follow the instruction step by step as follows:

1. Use metal snipping tool to cut out the square piece from return and supply air side as shown in figures 1 & 2.
2. Use a sheet metal hand to brake tool to bend the supply and return air duct flanges as shown in figures 3 & 4.
3. The base pan of the unit must be placed on top of the base of the wall sleeve and the side of the unit pressed flush against the gaskets on the wall sleeve. The unit and wall sleeve must form a tight seal to prevent water and debris from entering the closet.
4. The unit leveler which sticks underneath the unit base pan must always be secured to the base pan. This leveler allows the unit to stay pitched down so the rain water can be drained out through wall sleeve outside of the building.
5. If ducted, the installer must ensure the supply and return ducts are secured and sealed with the supply and return flanges of the unit.

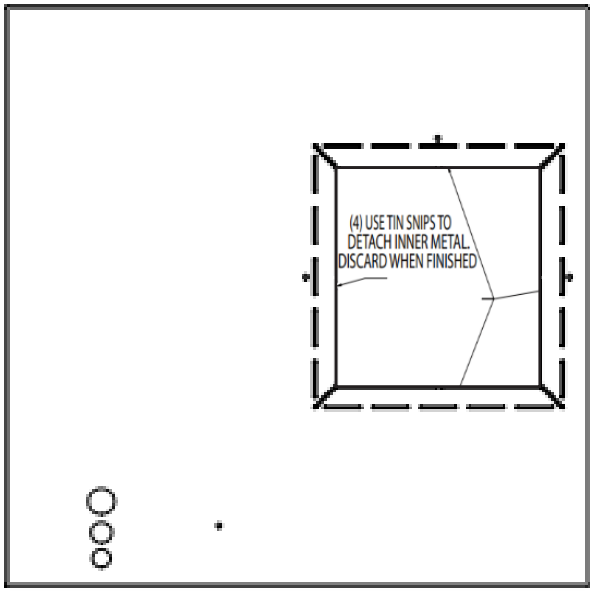


Figure 1

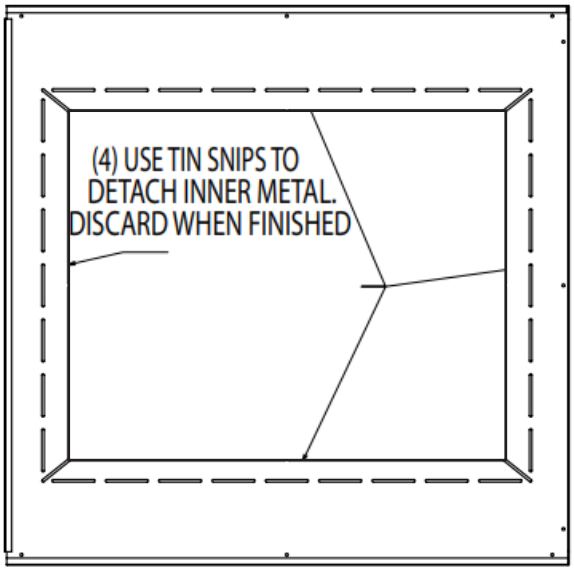


Figure 2

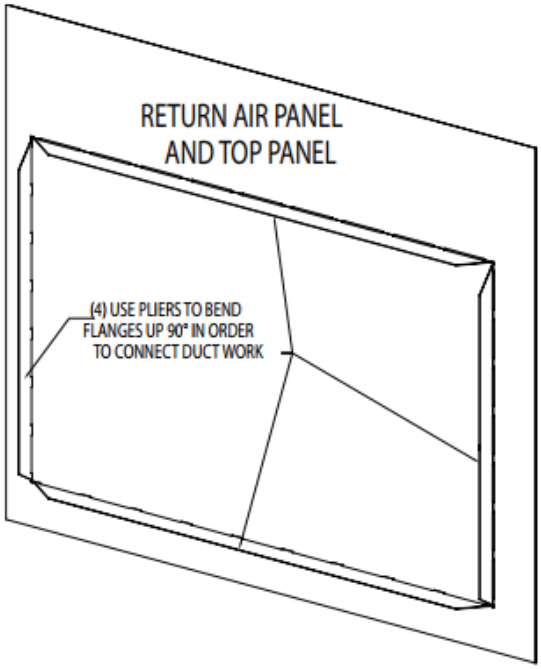


Figure 3

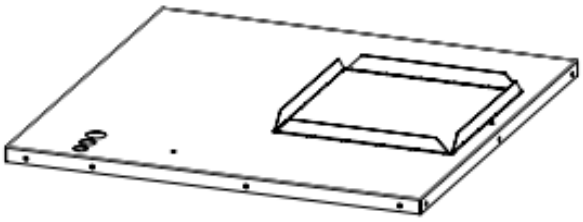
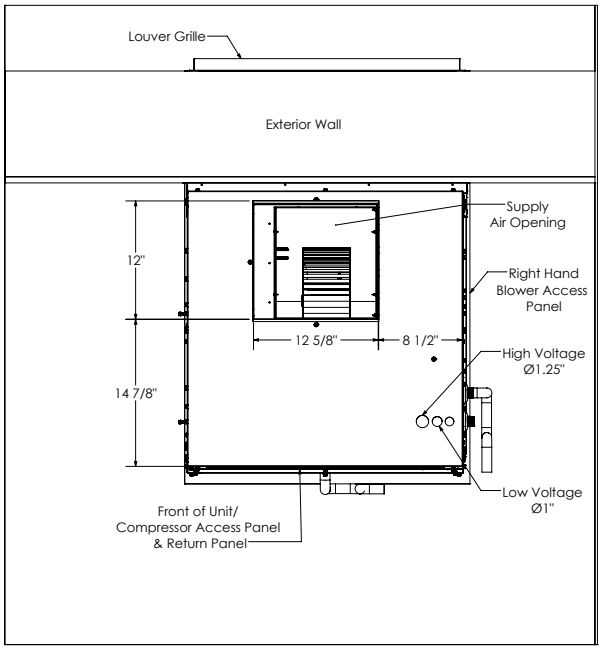
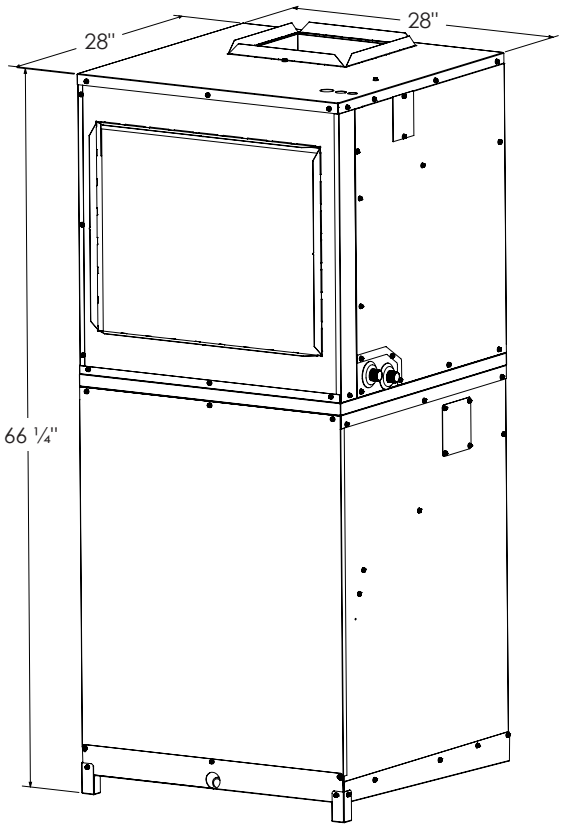
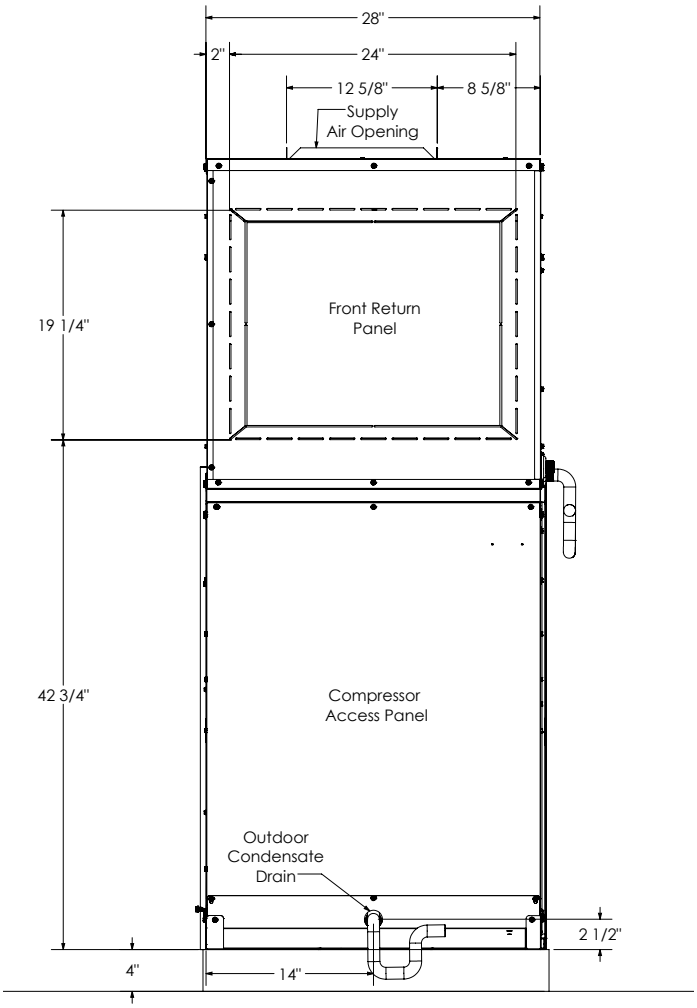


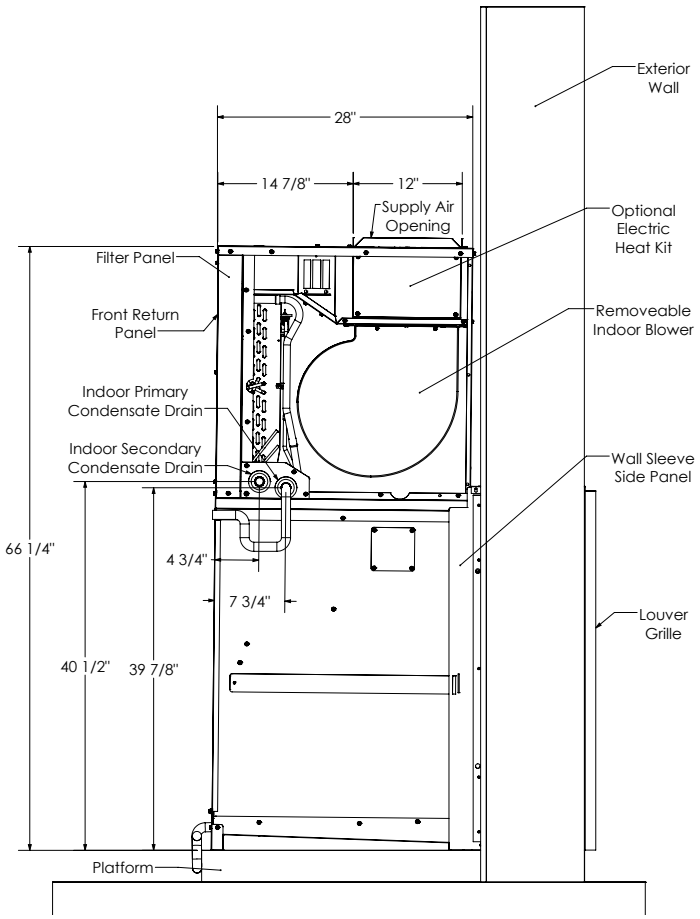
Figure 4

Section 4.5: Unit Dimensions









Note: Comfort Pack Flex F model shown. Please refer to Comfort Pack Flex Specification Sheet for model specific dimensions.

Note: Comfort Pack Flex F model shown. Please refer to Comfort Pack Flex Specification Sheet for model specific dimensions.

Section 4.6: Closet Clearances

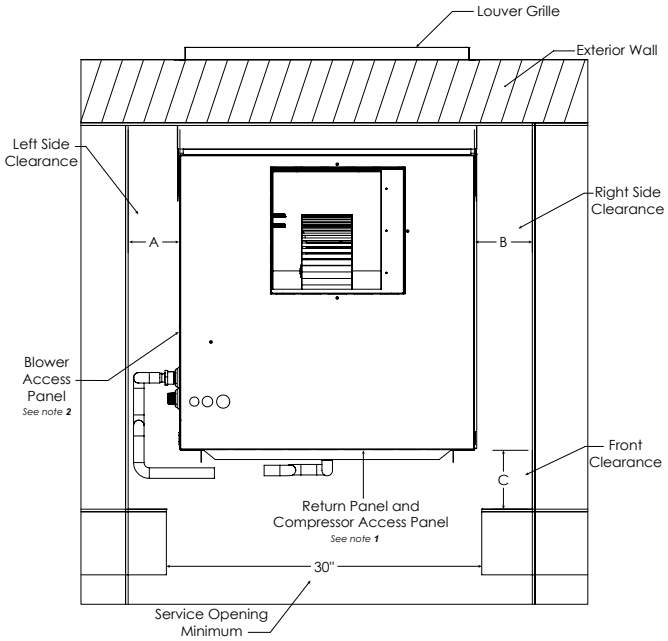
Front Return Left Hand Access Service Clearance (K Option)

Rear Installation

A	B	C
5 ¼"[2]	1"	4"[1]

[1] **If ductwork is attached to the return opening, additional clearance is necessary. Local codes must be adheared to.**

[2] **For servicing and maintenance, leave a minimum of 29" of unobstructed open area in front of the blower access panel.**

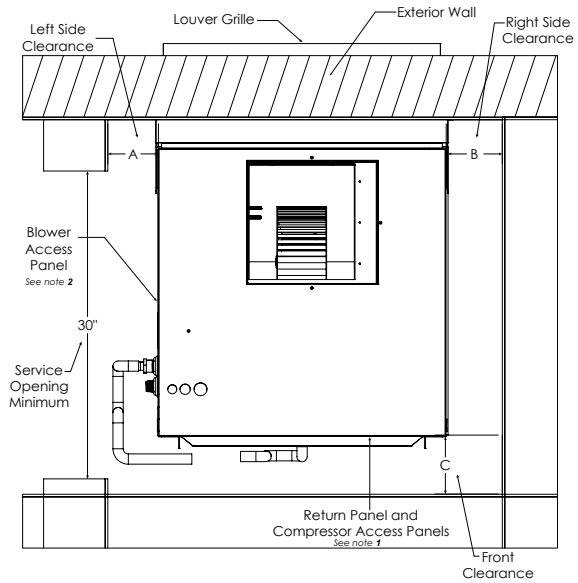


Side Installation

A	B	C
5 ¼"[2]	1"	12"[1]

[1] **If ductwork is attached to the return opening, additional clearance is necessary. Local codes must be adheared to. For servicing and maintenance for compressor, leave a minimum of 30" of unobstructed open area in front of the compressor access panel.**

[2] **For servicing and maintenance, leave a minimum of 29" of unobstructed open area in front of the blower access panel.**



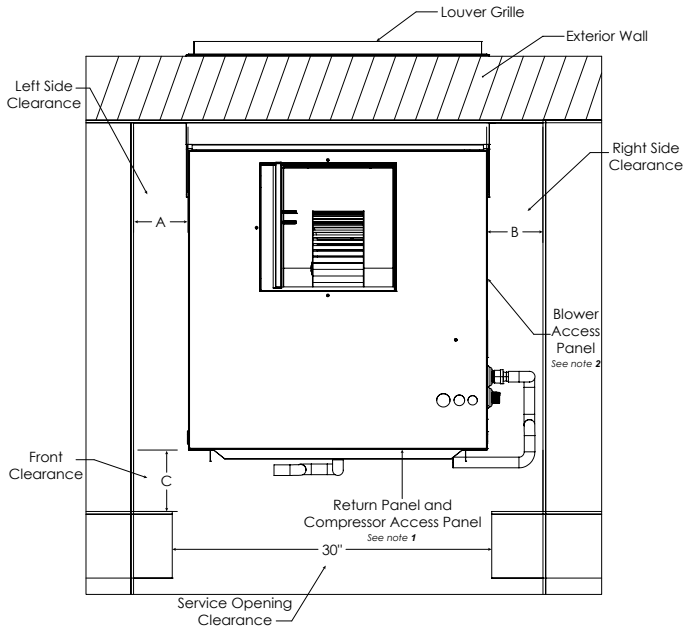
Front Return Right Hand Access Service Clearance (F Option)

Rear Installation

A	B	C
1"	5 ¼"[2]	4"[1]

[1] **If ductwork is attached to the return opening, additional clearance is necessary. Local codes must be adheared to.**

[2] **For servicing and maintenance, leave a minimum of 29" of unobstructed open area in front of the blower access panel.**

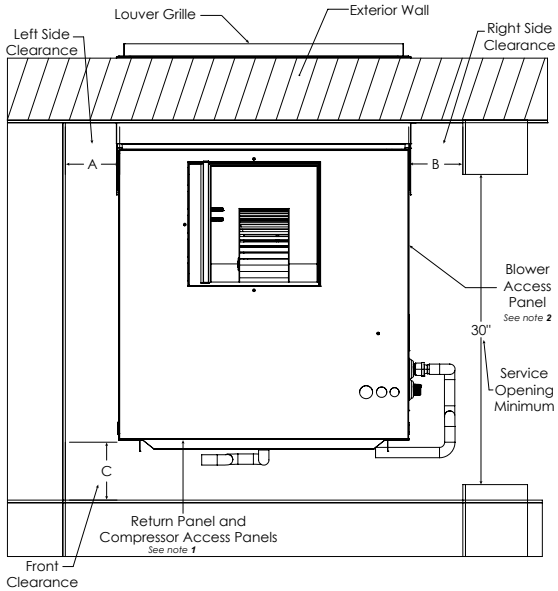


Side Installation

A	B	C
1"	5 ¼"[2]	12"[1]

[1] **If ductwork is attached to the return opening, additional clearance is necessary. Local codes must be adheared to. For servicing and maintenance for compressor, leave a minimum of 30" of unobstructed open area in front of the compressor access panel.**

[2] **For servicing and maintenance, leave a minimum of 29" of unobstructed open area in front of the blower access panel.**



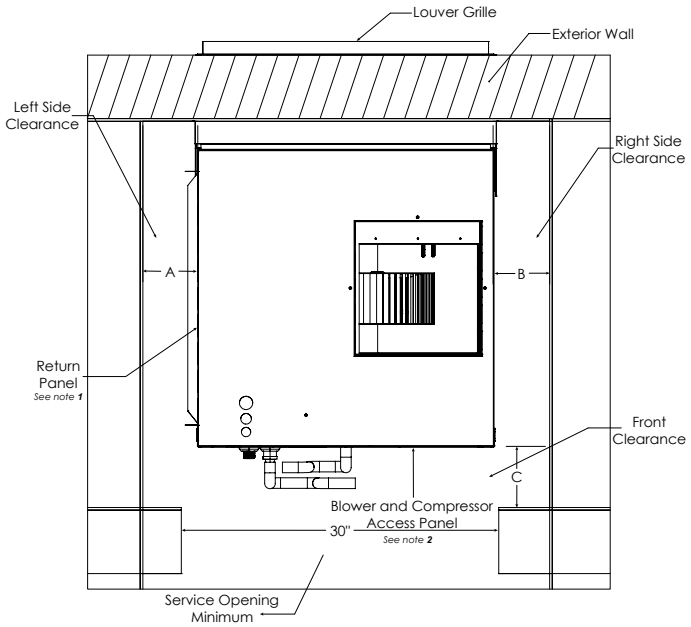
Left Hand Return Front Access Service Clearance (L Option)

Rear Installation

A	B	C
4"[1]	1"	5 ¼"[2]

[1] If ductwork is attached to the return opening, additional clearance is necessary. Local codes must be adheared to.

[2] For servicing and maintenance, leave a minimum of 29" of unobstructed open area in front of the blower access panel.

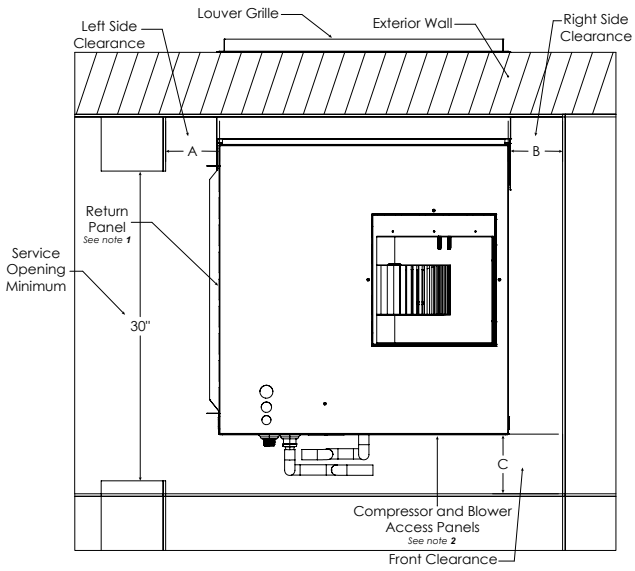


Side Installation

A	B	C
4"[1]	1"	12"[2]

[1] If ductwork is attached to the return opening, additional clearance is necessary. Local codes must be adheared to.

[2] For servicing and maintenance, leave a minimum of 30" of unobstructed open area in front of the compressor access panels.



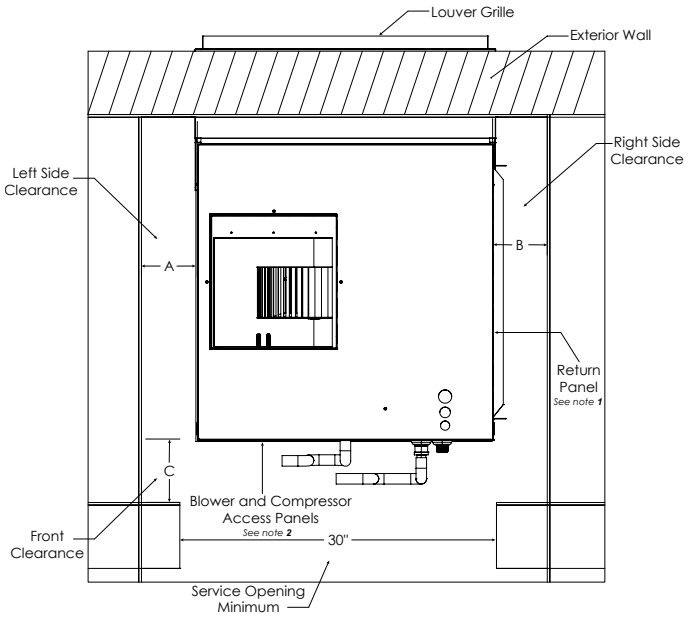
Right Hand Return Front Access Service Clearance (R Option)

Rear Installation

A	B	C
1"	4"[1]	5 ¼"[2]

[1] If ductwork is attached to the return opening, additional clearance is necessary. Local codes must be adheared to.

[2] For servicing and maintenance, leave a minimum of 29" of unobstructed open area in front of the blower access panel.

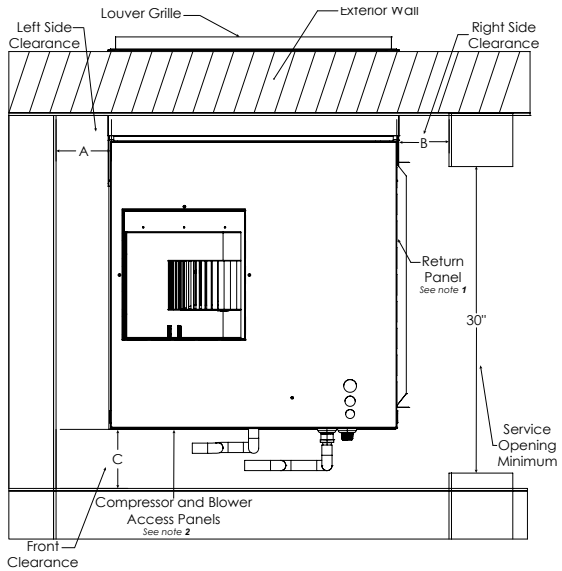


Side Installation

A	B	C
1"	4"[1]	12"[2]

[1] If ductwork is attached to the return opening, additional clearance is necessary. Local codes must be adheared to.

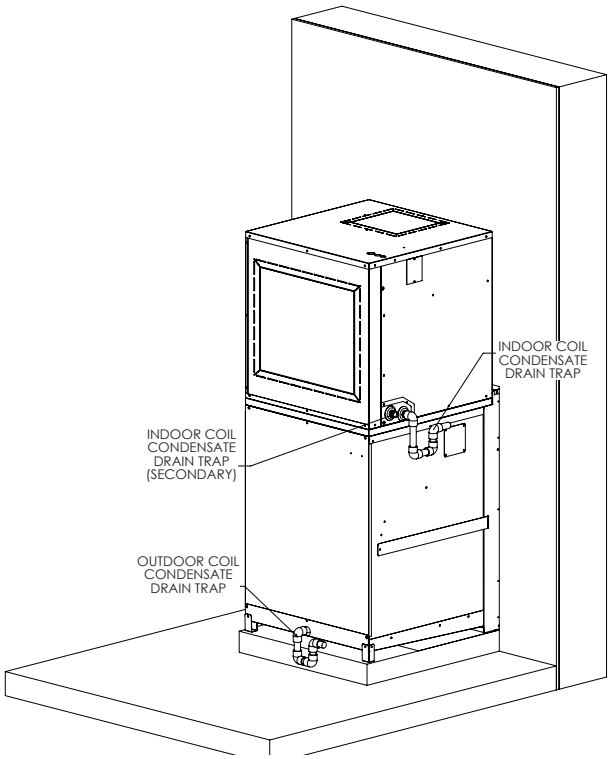
[2] For servicing and maintenance, leave a minimum of 30" of unobstructed open area in front of the compressor access panels.



Section 4.7: Drain Connections

The Comfort Pack Flex comes standard with a condensate drain for the outdoor coil as well as a primary and secondary drain for the indoor coil. The outdoor coil drain has a 3/4 inch PVC FPT couple for convenient drain connections. The indoor coil drain has two 3/4 inch stainless steel MPT connections, a primary and a secondary. The drain connections must include a P-trap of at least 3 inches in height and must be pitched away from the drain pans. The drain tubes should not be smaller than drain connections. Use sealant for the threaded connections to ensure drain will not leak at joints. Install fittings by hand and do not over torque the fittings. For proper condensate drainage follow the instructions below.

1. Route the drain line in such a way that it does not interfere with the front access panel or air filter
2. The top section is provided with a secondary drain connection that should be trapped and piped to a location that will provide a warning that the primary drain is clogged
3. If the recommended secondary drain is not utilized during installation, it should be capped and sealed water tight.



Comfort Pack Flex F Model shown above with indoor coil drains on right hand side. For other models, the indoor coil drains will be in the front or on the left hand side.

Section 5: Optional Electric Heater Installation

If the Comfort Pack Flex requires electric heat, install the electric heat kit by following the instructions provided with the electric heat kit.

1. After installing the kit, check mark the appropriate option on the Comfort Pack Flex data tag to identify the heater kit that was installed.
2. In the absence of a heat kit, mark the data tag to indicate that no heat kit was installed.
3. When electric heat is present, disconnect the line voltage terminal block high voltage wires from the field wire harness that came with the Comfort Pack Flex and connect the terminal block to the branched black Molex connector coming out of electric heat kit circuit breaker (follow the wiring diagram on pages 22-24 for connection details).
4. Use only CPEHK-** electric heat kits as listed on the Comfort Pack Flex data tag and in this instruction manual. Use the data from Table 5 through 9 on pages 16-18 for information on heating airflow, MOP and wiring size requirements.
5. When installing the electric heat kit, affix the appropriate electric heat wiring diagram to the Comfort Pack Flex wiring diagram label within the dotted region. The Comfort Pack Flex wiring diagram label can be found on the front access panel.

⚠ WARNING

LIVE ELECTRICAL COMPONENTS!

During Installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. Failure to follow all electrical safety precautions could result into serious injury or death.

⚠ AVERTISSEMENT

COMPOSANTS ÉLECTRIQUES SOUS EN DIRECT!

Lors de l'installation, des tests, de l'entretien et du dépannage de ce produit, il peut être nécessaire de travailler avec des composants électriques en direct. Le non-respect de toutes les précautions de sécurité électrique pourrait entraîner des blessures graves ou la mort.

⚠ WARNING

The unit must be permanently grounded. **Failure to do so can cause electrical shock resulting in severe personal injury or death.**

⚠ AVERTISSEMENT

L'unité doit être mise à la terre en permanence. **Le défaut de le faire peut provoquer un choc électrique entraînant des blessures graves ou la mort.**

Section 6: Blower Motor Speed Connections

The blower motor control has five speed options. For auxiliary heat, the desired airflow can be different from cooling airflow based on the heat kit installed. Make sure to select the appropriate speed tap for heating airflow if the desired heating airflow is different than cooling airflow. See Table 7 on page 16 for proper blower speed and desired airflow.

Note: In the case where cooling and heating motor speeds are the same, a terminal splitter and jumper wire will be required. A jumper wire and terminal splitter can be found in the accessories bag

Section 7: Refrigerant Detection System

This unit is manufactured with a refrigerant detection system which includes the following:

-A2L Gas Sensor

-Control Board for A2L Mitigation

Function

The purpose of the refrigerant detection system is to identify refrigerant leaks within the indoor section of the unit. If a leak is detected, the system will stop normal operation and disperse the leak to ensure the safety of those in the affected area. Immediate service of unit is required after fault state.

Mode of Operation

At power-up, the control enters the configuration state, a 5-second window in which the control identifies active sensor ports. If there are no active sensor ports, the control enters the communication fault state. If a sensor is detected, the control enters the sensor warm-up state. Once the detected sensor reports Run mode, the control enters normal operation and constantly monitors the mode and %LFL status of the sensor. See the A2L Board Table below for all respective outputs for each state.

Once an active sensor port is established, it is required for all future operation, and cannot be substituted by connecting a sensor on the other port. Loss of communication with an active sensor will result in the communication fault state, which can only be cleared by resuming communication with a sensor on that specific port.

In the event that 2 sensors are connected and reporting different modes/statuses, the following priority will take place: LFL Fault -> Communication Fault -> Warm-up -> Run.

Table 4: A2L Board Table

Current State	Outputs		State-change conditions	Next state
Configuration	**CC:** Off **Fan:** On	**Alarm:** Off **Status LED:** Off	• At least 1 sensor port is active • No sensor ports are active	• Sensor Warm-up • Communication Fault
Sensor Warm-up	**CC:** Off **Fan:** Off	**Alarm:** Off **Status LED:** Off	• Sensor reports Run mode • Sensor reports Error mode	• Sensor Warm-up • Communication Fault
Normal Operation	**CC:** On **Fan:** Off	**Alarm:** Off **Status LED:** Off	• %LFL ≥ Trip point • Loss of sensor communication	• %LFL Fault • Communication Fault
Communication Fault	**CC:** Off **Fan:** On	**Alarm:** Off **Status LED:** 2 blinks	• Valid data on required sensor port(s) and lockout timer expired	• Sensor Warm-up
%LFL Fault	**CC:** Off **Fan:** On	**Alarm:** Off **Status LED:** 1 blink	• %LFL < Recovery point and lockout timer expired • Reset button actuated*	• Normal operation

Troubleshooting Fault Codes

Status LED	Mode
Off	Normal operation
On	Sensor “warm up”
1-blink	LFL Fault
2-blink	Communication Fault

During installation pay close attention to the Status LED to determine if the A2L board and sensor have been installed accordingly. It is essential that the A2L board and sensor are functioning properly for normal operation of the unit.

The A2L board will enter the ‘Sensor Warm-Up’ state after the 5-second configuration window. During the ‘Sensor Warm-Up’ state the LED status will produce a steady ON light. From this state, the board will enter either the ‘Normal Operation’ state (Status LED will turn OFF) or ‘Communication Fault’ state (Status LED will produce 2 BLINKS). If ‘Communication Fault’ state is entered, ensure all connections are made between components. Verify sensor is properly connected to A2L board. If leak is detected the board will enter a ‘%LFL Fault’ State (Status LED will produce 1 BLINK).

DURING A ‘%LFL FAULT’ STATE, NO OPEN FLAME OR POTENTIAL IGNITION SOURCE WILL BE USED. RECOVER AS MUCH REFRIGERANT AS POSSIBLE. AREA MUST BE CLEAR OF REFRIGERANT BEFORE ATTEMPTING TO REPAIR LEAK.

Once the '%LFL Fault' state is entered, the system will have a lockout timer of 500 seconds. During this time the unit will only power the indoor blower to disperse refrigerant to a safe %LFL level. Follow proper servicing techniques to recover refrigerant, identify leak, repair leak, and charge unit to appropriate amount before resetting system.

To reset the system, ensure the 500 second lockout timer is complete. Once timer is finished a manual reset is required. Press the "Reset" button located on the "mitigation board" in the controls section.

Replacement

If 'Communication Fault' state is entered, ensure all connections are made between sensor and A2L board. If all connections are verified and the board has not exited the 'Communication Fault' state, the sensor is indicating end-of-life. Sensor replacement is necessary for normal operation. The sensor shall only be replaced by NCP approved A2L Gas Sensor (NCP P/N: 142-60-031). Contact National Comfort Products for replacement sensor.

Section 8: Sequence of Operations

Section 8.1: Fan Operation

When the thermostat signals a need to operate the fan only, the R-G circuit is engaged. Energizing the G terminal on the blower control board. When only the G terminal is energized the HEAT LED will illuminate on the blower control board signaling that the fan output has been energized starting the blower in HEAT speed.

Section 8.2: Cooling Operation

When the thermostat signals a need for cooling, the R-Y and R-O circuits are engaged. The R-Y circuit energizes the Y terminal on the blower control board. The Y LED will illuminate signaling that the compressor output has been energized sending power to the Y terminal on the defrost board. The defrost board will send power to the compressor contactor starting the compressor and condenser fan motor after verifying that both high and low pressure switches are closed. After a 5 second delay the COOL LED will illuminate on the blower control board signaling the fan output has been energized starting the blower in COOL speed. The R-O circuit energizes the O terminal on the defrost board, the defrost board will send power to the reversing valve coil energizing the reversing valve.

At this time the system will be running in cooling mode with the compressor, condenser fan motor, reversing valve and blower motor energized. Once the temperature setpoint is reached and the thermostat contacts opens the compressor contactor and reversing valve circuits shut down. The blower control will operate the blower motor on COOL speed for the set delay as identified in the blower delay section. After the delay expires the blower motor will shut down.

Section 8.3: Heating Operation

When the thermostat signals a need for heating, the R-Y circuit is engaged. The R-Y circuit energizes the Y terminal on the blower control board. The Y LED will illuminate signaling that the compressor output has been energized sending power to the Y terminal on the defrost board. The defrost board will send power to the compressor contactor starting the compressor and condenser fan motor after verifying that both high and low pressure switches are closed. After a 5 second delay the COOL LED will illuminate on the blower control board signaling the fan output has been energized starting the blower in COOL speed. Since the R-O circuit has not been engaged the defrost board will recognize the system is running in heating mode and the reversing valve will not energize. At this time the system will be running in heating mode with the compressor, condenser fan motor, and blower motor energized.

Once the temperature setpoint is reached and the thermostat contacts opens the compressor contactor and reversing valve circuits shut down. The blower control will operate the blower motor on COOL speed for the set delay as identified in the blower delay section. After the delay expires the blower motor will shut down.

Section 8.4: Defrost Operation

While heating is active (with a 24 VAC signal at the Y terminal), the defrost board monitors the temperature difference between the outdoor air thermistor (OAT) and the outdoor coil thermistor (OCT) to determine when to initiate a demand defrost cycle.

The defrost board will initiate a timed defrost every 4 hours if running in heating mode, regardless of whether OAT and OCT reach their respective curves. This timed defrost will occur only while the system is running in heating mode. Once the defrost board calls for defrost a time inhibitor will actively prevent another defrost for 30 minutes. During a demand defrost cycle, the board will shut down the condenser fan by opening the NC and C terminals on the CFM relay and will energize the reversing valve via the O terminal. The defrost cycle will terminate when the OCT temperature satisfies before 10 minutes expires. When the defrost cycle terminates the board will de-energize the reversing valve and close the NC and C terminal to the CFM relay.

Each heat pump model may require a specific defrost curve, which can be set using DIP switches on the board;

The demand defrost curve setting is important for system performance and equipment protection. During heating operation, the outdoor coil accumulates frost. Each system can accumulate frost on the outdoor coil at different rates. It is NECESSARY for the installer to check that the appropriate recommended defrost curve is selected for your system. For defrost curve adjustments refer to the dip switch table below to make necessary changes. A defrost test can be initiated by pressing the button provided on the defrost control board. Once the button is pressed the system will go into a 60 second timed defrost.

Note: Adjustment of the defrost curve may be necessary to provide complete defrost for your climate zone. Refer to the defrost curve plot below to select the appropriate defrost settings for your climate zone.

*If outdoor temperatures drop low enough to cause icing (around 34°F), the condensate heater is powered via the heater thermostat in the control box. This heater remains active during cold weather, preventing refreezing of defrosted water in the pan. Proper piping for the condensate pan under the coil is required ("see Section 3.7: Drain Connections").

Section 8.5: Auxiliary Heat Operation

When the thermostat signals a need for auxiliary heating during heating operation, the R-Aux circuit is engaged. The R-Aux energizes the W1 input to activate the first stage of electric heat on the blower control board. After 3 seconds the W1A LED will illuminate signaling the first heater relay has been energized and after 28 seconds the W1B LED will illuminate signaling the second heater relay has been energized. The blower will operate in COOL speed after a 5-second delay.

Section 8.6: Emergency Heat Operation

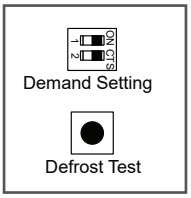
When the thermostat signals a need for emergency heating during heating operation, the R-Aux and R-E circuits are engaged. The R-Aux circuit energizes the W1 input to activate the first stage of electric heat on the on the blower control board. After 3 seconds the W1A LED will illuminate signaling the first heater relay has been energized and after 28 seconds the W1B LED will illuminate signaling the second heater relay has been energized. The blower will operate in COOL speed after a 5-second delay.

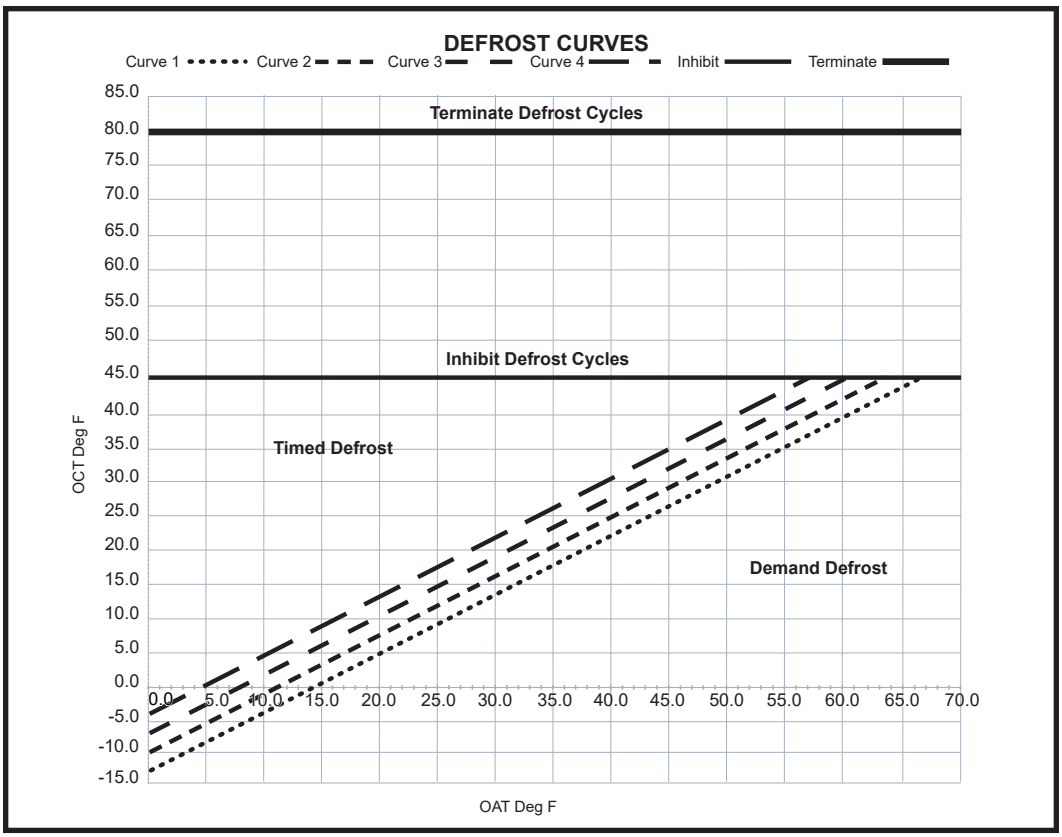
The R-E circuit energizes the W2 input to activate the second stage of electric heat on the on the blower control board. After 45 seconds the W2 LED will illuminate signaling the second stage heater relay has been energized. The blower continues to run in COOL speed after a 5-second delay. The fault light will illuminate to indicate Emergency Heat operation if the control board is still receiving power at the Y terminal. If power is removed from the Y terminal in emergency heat operation the fan will operate in the HEAT speed and will energize at the same time as the first heat relay.

Demand Defrost Setting	
Model	**Defrost Curve Setting[1]**
Comfort Pack Flex	
FCH518******-**	2
FCH524******-**	2
FCH530******-**	2

1. Demand defrost curve setting is determined based on 35°F OD Ambient test

Dip Switch setting On Defrost Board		
Defrost Curve	**Dip Switch 1**	**Dip Switch 2**
1	Off	Off
2	On	Off
3	Off	On
4	On	On



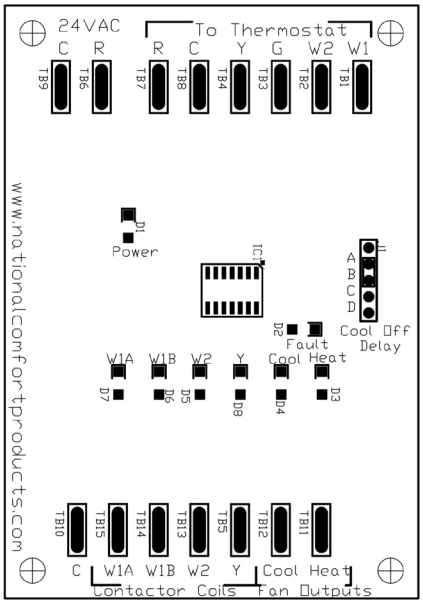


Section 9: Indicator Lights

L.E.D. illumination indicates the following:

Sequencing Board

- Power – control has 24 VAC control power
- Fault – Emergency Heat Operation
- W1A – Power supplied to heat bank relay 1 (Auxiliary heat)
- W1B – Power supplied to heat bank relay 2
- W2 – Power supplied to heat bank relay 3 (Emergency heat)
- Y – Power supplied cooling input on defrost board
- COOL – Power supplied to COOL fan speed
- HEAT – Power supplied to HEAT fan speed



Defrost Board

- Pwr – control has 24 VAC control power
- Def – defrost operation active
- HPC Open – High pressure switch open circuit
- LPC Open – Low pressure switch open circuit

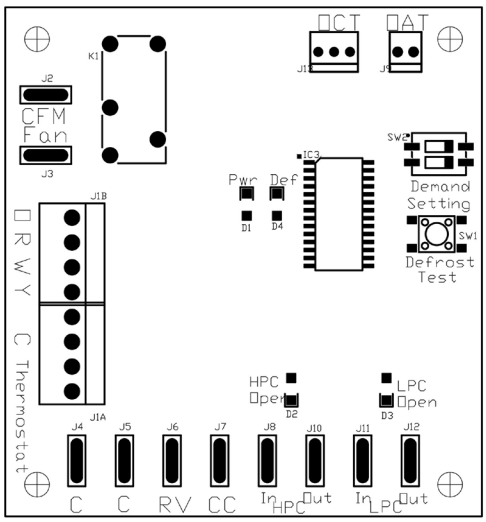


Table 5: Performance Data

Up to 14.3 SEER2 & 7.5 HSPF2														
Model	**Nominal Cooling Tons**	**Cooling Btu/h**	**Heating Btu/h**	**SEER2**	**HSPF2**	**Charge R-454B (Oz.)**	**Heat Kit**	**Electric Heat Btu/h**		**Heating kW**		**Heating Amps**		**Shipping Weight (lbs.)**
								208V	**230V**	**208V**	**230V**	**208V**	**230V**	
FCH51800*A	1.5	18,000	17,000	14.3	7.5	69	N/A	N/A	N/A	N/A	N/A	N/A	N/A	250
							CPEHK-03	8,900	10,900	2.62	3.20	12.60	13.91	
							CPEHK-05	13,100	16,000	3.83	4.68	18.41	20.35	
							CPEHK-07	18,400	22,400	5.37	6.58	25.82	28.61	
							CPEHK-10	26,000	32,000	7.64	9.35	36.73	40.65	
							CPEHK-15	39,200	47,800	11.47	14.02	36.76	40.64	
												18.38	20.32	
FCH52400*A	2.0	24,000	23,000	14.0	7.5	69	N/A	N/A	N/A	N/A	N/A	N/A	N/A	250
							CPEHK-03	8,900	10,900	2.62	3.20	12.60	13.91	
							CPEHK-05	13,100	16,000	3.83	4.68	18.41	20.35	
							CPEHK-07	18,400	22,400	5.37	6.58	25.82	28.61	
							CPEHK-10	26,000	32,000	7.64	9.35	36.73	40.65	
							CPEHK-15	39,200	47,800	11.47	14.02	36.76	40.64	
												18.38	20.32	
FCH53000*A	2.5	28,400	27,000	13.5	7.5	85	N/A	N/A	N/A	N/A	N/A	N/A	N/A	250
							CPEHK-03	8,900	10,900	2.62	3.20	12.60	13.91	
							CPEHK-05	13,100	16,000	3.83	4.68	18.41	20.35	
							CPEHK-07	18,400	22,400	5.37	6.58	25.82	28.61	
							CPEHK-10	26,000	32,000	7.64	9.35	36.73	40.65	
							CPEHK-15	39,200	47,800	11.47	14.02	36.76	40.64	
												18.38	20.32	

Table 6: Electrical Data

Model	**Heat Kit**	**Voltage**	**Compressor**		**Condenser Motor**		**Blower Motor**		**Total Amps**		**MCA**		**MOP**	
			RLA	**LRA**	**HP**	**FLA**	**HP**	**FLA**	**208V**	**230V**	**208V**	**230V**	**208V**	**230V**
FCH51800*A	N/A	208/230-1-60	7.18	47.0	1/4	2.0	1/2	3.8	13.0	13.8	14.8	14.8	20	20
	CPEHK-03	208/230-1-60	7.18	47.0	1/4	2.0	1/2	3.8	14.5	15.9	20.4	22.1	25	25
	CPEHK-05	208/230-1-60	7.18	47.0	1/4	2.0	1/2	3.8	20.5	22.4	27.8	30.2	30	35
	CPEHK-07	208/230-1-60	7.18	47.0	1/4	2.0	1/2	3.8	27.8	30.5	37.0	40.4	40	45
	CPEHK-10	208/230-1-60	7.18	47.0	1/4	2.0	1/2	3.8	38.6	42.8	50.5	55.7	60	60
	CPEHK-15	208/230-1-60	7.18	47.0	1/4	2.0	1/2	3.8	40.6	44.4	49.1	54.0	50	60
									22.2	24.1	24.6	27.0	25	30
FCH52400*A	N/A	208/230-1-60	8.97	63.0	1/4	2.0	1/2	3.8	14.8	14.8	17.0	17.0	25	25
	CPEHK-03	208/230-1-60	8.97	63.0	1/4	2.0	1/2	3.8	14.8	15.9	20.4	22.1	25	25
	CPEHK-05	208/230-1-60	8.97	63.0	1/4	2.0	1/2	3.8	20.5	22.4	27.8	30.2	30	35
	CPEHK-07	208/230-1-60	8.97	63.0	1/4	2.0	1/2	3.8	27.8	30.5	37.0	40.4	40	45
	CPEHK-10	208/230-1-60	8.97	63.0	1/4	2.0	1/2	3.8	38.6	42.8	50.5	55.7	60	60
	CPEHK-15	208/230-1-60	8.97	63.0	1/4	2.0	1/2	3.8	40.6	44.4	49.1	54.0	50	60
									22.2	24.1	24.6	27.0	25	30
FCH53000*A	N/A	208/230-1-60	12.50	67.0	1/4	2.0	1/2	3.8	18.3	18.3	21.4	21.4	30	30
	CPEHK-03	208/230-1-60	12.50	67.0	1/4	2.0	1/2	3.8	18.3	18.3	21.4	22.1	30	30
	CPEHK-05	208/230-1-60	12.50	67.0	1/4	2.0	1/2	3.8	20.5	22.4	27.8	30.2	30	35
	CPEHK-07	208/230-1-60	12.50	67.0	1/4	2.0	1/2	3.8	27.8	30.5	37.0	40.4	40	45
	CPEHK-10	208/230-1-60	12.50	67.0	1/4	2.0	1/2	3.8	38.6	42.8	50.5	55.7	60	60
	CPEHK-15	208/230-1-60	12.50	67.0	1/4	2.0	1/2	3.8	40.6	44.4	49.1	54.0	50	60
									22.2	24.1	24.6	27.0	25	30

Table 7: Airflow Data[1, 2]

Model	**Blower Speeds**	**0 in. wc**	**0.1 in. wc.**	**0.2 in. wc**	**0.3 in. wc.**	**0.4 in. wc.**	**0.5 in. wc.**
ALL CP FLEX MODELS	**Orange (Low)**	753	707	655	596	529	455
	Black (Med. Low)	796	758	711	656	592	519
	Blue (Med.)	982	944	903	860	815	769
	Yellow (Med. High)	1085	1046	1007	968	929	890
	Red (High)	1115	1079	1042	1004	965	926

1. This airflow data is conducted with a filter at dry coil conditions. Refer to the installation guide of the matching outdoor unit for appropriate blower speed to obtain factory recommended airflow.
2. Cooling fan delay is 5 seconds on a call for cooling or heating. The duration of the fan delay can be adjusted as needed by selecting the jumpers on the air-handler control board (A = 5 sec., B = 30 sec., C = 60 sec. & D = 90 sec.)

Table 8: Electric Heat Airflow and Temperature Rise (208V)[1]

Model	Blower Speeds	0.1 in. wc.	ΔT	0.2 in. wc	ΔT	0.3 in. wc.	ΔT	0.4 in. wc.	ΔT	0.5 in. wc.	ΔT
CPEHK-03-A	Orange	707	11.7	655	12.6	596	13.9	529	15.6	455	18.2
	Black	758	10.9	711	11.6	656	12.6	592	14.0	519	15.9
	Blue	944	8.8	903	9.2	860	9.6	815	10.1	769	10.8
	Yellow	1046	7.9	1007	8.2	968	8.5	929	8.9	890	9.3
	Red	1079	7.7	1042	7.9	1004	8.2	965	8.6	926	8.9
CPEHK-05-A	Orange	707	17.1	655	18.5	596	20.3	529	22.9	455	26.6
	Black	758	16.0	711	17.0	656	18.4	592	20.4	519	23.3
	Blue	944	12.8	903	13.4	860	14.1	815	14.8	769	15.7
	Yellow	1046	11.6	1007	12.0	968	12.5	929	13.0	890	13.6
	Red	1079	11.2	1042	11.6	1004	12.0	965	12.5	926	13.1
CPEHK-07-A	Orange	707	24.0	655	25.9	596	28.5	529	32.1	455	37.3
	Black	758	22.4	711	23.8	656	25.8	592	28.6	519	32.7
	Blue	944	18.0	903	18.8	860	19.7	815	20.8	769	22.1
	Yellow	1046	16.2	1007	16.8	968	17.5	929	18.2	890	19.1
	Red	1079	15.7	1042	16.3	1004	16.9	965	17.6	926	18.3
CPEHK-10-A	Orange	707	34.1	655	36.8	596	40.5	529	45.6	455	53.0
	Black	758	31.8	711	33.9	656	36.8	592	40.8	519	46.5
	Blue	944	25.6	903	26.7	860	28.0	815	29.6	769	31.4
	Yellow	1046	23.1	1007	23.9	968	24.9	929	26.0	890	27.1
	Red	1079	22.4	1042	23.2	1004	24.0	965	25.0	926	26.0
CPEHK-15-A	Orange	707	51.2	655	55.3	596	60.8	529	68.5	455	n/a
	Black	758	47.8	711	50.9	656	55.2	592	61.2	519	69.8
	Blue	944	38.4	903	40.1	860	42.1	815	44.4	769	47.1
	Yellow	1046	34.6	1007	36.0	968	37.4	929	39.0	890	40.7
	Red	1079	33.6	1042	34.8	1004	36.1	965	37.5	926	39.1

1. The grey highlighted cells are not recommended.

Table 9: Electric Heat Airflow and Temperature Rise (230V)[1]

Model	Blower Speeds	0.1 in. wc.	ΔT	0.2 in. wc	ΔT	0.3 in. wc.	ΔT	0.4 in. wc.	ΔT	0.5 in. wc.	ΔT
CPEHK-03-A	Orange	707	14.3	655	15.4	596	17.0	529	19.1	455	22.2
	Black	758	13.3	711	14.2	656	15.4	592	17.1	519	19.5
	Blue	944	10.7	903	11.2	860	11.7	815	12.4	769	13.1
	Yellow	1046	9.7	1007	10.0	968	10.4	929	10.9	890	11.4
	Red	1079	9.4	1042	9.7	1004	10.1	965	10.5	926	10.9
CPEHK-05-A	Orange	707	20.9	655	22.6	596	24.8	529	27.9	455	32.5
	Black	758	19.5	711	20.8	656	22.5	592	25.0	519	28.5
	Blue	944	15.7	903	16.4	860	17.2	815	18.1	769	19.2
	Yellow	1046	14.1	1007	14.7	968	15.3	929	15.9	890	16.6
	Red	1079	13.7	1042	14.2	1004	14.7	965	15.3	926	16.0
CPEHK-07-A	Orange	707	29.4	655	31.7	596	34.9	529	39.3	455	45.7
	Black	758	27.4	711	29.2	656	31.7	592	35.1	519	40.0
	Blue	944	22.0	903	23.0	860	24.2	815	25.5	769	27.0
	Yellow	1046	19.9	1007	20.6	968	21.5	929	22.4	890	23.3
	Red	1079	19.3	1042	19.9	1004	20.7	965	21.5	926	22.4
CPEHK-10-A	Orange	707	41.7	655	45.1	596	49.6	529	55.8	455	64.9
	Black	758	38.9	711	41.5	656	45.0	592	49.9	519	56.9
	Blue	944	31.3	903	32.7	860	34.3	815	36.2	769	38.4
	Yellow	1046	28.2	1007	29.3	968	30.5	929	31.8	890	33.2
	Red	1079	27.4	1042	28.3	1004	29.4	965	30.6	926	31.9
CPEHK-15-A	Orange	707	62.6	655	67.6	596	n/a	529	n/a	455	n/a
	Black	758	58.4	711	62.2	656	67.5	592	n/a	519	n/a
	Blue	944	46.9	903	49.0	860	51.5	815	54.3	769	57.6
	Yellow	1046	42.3	1007	43.9	968	45.7	929	47.6	890	49.7
	Red	1079	41.0	1042	42.5	1004	44.1	965	45.9	926	47.8

1. The grey highlighted cells are not recommended.

Section 10: Operational Checkout and Maintenance

10.1: Operational Checkout & Troubleshooting

After installation has been completed, it is recommended to check the following to ensure appropriate system operation:

- ☐ Leak check the entire unit including all refrigerant components and connecting lines.
- ☐ Ensure both TXV bulbs are properly insulated and secured.
- ☐ Observe outdoor fan during on cycle for clearance and smooth operation.
- ☐ Ensure that the A2L sensor is properly secured and connected to the Mitigation control board.
- ☐ Be sure that the supply register and return grilles are open and unobstructed.
- ☐ Be sure that the correct indoor airflow setting is used. Refer to the wiring diagram to select appropriate indoor fan speed.
- ☐ The unit is secured to the wall appropriately and there are no tools or loose debris in, around or top of the unit.
- ☐ Both copper tubes going from bottom section to the top section are properly insulated.
- ☐ All electrical connections are tight and none of the wires are exposed or in contact with any metal parts. Ensure that the Comfort Pack Flex unit is grounded properly.
- ☐ Supply and return air ducts are connected properly with no air leakages or with any restriction.
- ☐ All drain connections are secured and tight and the drain pipes don't have any restrictions. Be sure that the condensate lines drain freely. Pour water into both drain pans.
- ☐ On the return air section, air-filter is properly installed.
- ☐ Operate complete system in each mode to verify proper performance.
- ☐ In presence of electric heat kit, verify the operation of supplementary electric heater
- ☐ For Heat pump systems, while running heating mode verify the defrost operation by pressing the push button on the defrost board.
- ☐ Make sure the transformer is set for the appropriate line voltage (208V or 230V).
- ☐ Confirm the fuses or breaker sizes match Table 6 based on the electric heater size.

10.2: Refrigerant Evacuation

When evacuating refrigerant, charge shall be recovered into the correct recovery cylinders if venting is not allowed by local and national codes.

1. Connect the vacuum pump to the service ports of the liquid line and vapor line service valves. If the vacuum pump lines do not contain shut-off valves, hook up the vacuum pump through a manifold gauge set, as the vacuum pump lines must be closed for step 4.
2. Following the vacuum pump manufacturers instructions, allow the pump to operate until the system has been evacuated down to 300 microns.

Note: Check for leaks if unable to get to 300 microns.

3. Allow the pump to continue running an additional 15 minutes. Turn off the pump and leave connections secured. After 10 minutes if system fails to hold 500 microns or less, check all connections for tight fit and repeat evacuation procedure.
4. Isolate the vacuum pump by closing the shut-off valves on vacuum pump lines or test gauge manifold.

10.3: Maintenance

The system air filter should be inspected on a monthly basis and cleaned or replaced if needed to avoid excessive restriction in the air stream. Once maintenance is completed, reinstall the filter access panel. If the access panel is opened for maintenance, make sure to replace it before placing the unit back in operation. Periodic maintenance should be scheduled and conducted by trained professional service personnel. System maintenance should be conducted at least annually and must include inspection of all electrical and refrigeration components. Inspect wires are not subject to wear, corrosion, excessive pressure, vibration, sharp edges or any other adverse environmental effects. Take into account the effects of aging or continual vibration from sources such as compressors or fans. The heat transfer surfaces should be cleaned.

All pipe-work shall include protection from physical damage in operation and service, and be in compliance with national and local codes and standards, such as ASHRAE 15, ASHRAE 15.2, IAPMO Uniform Mechanical Code, ICC International Mechanical Code, or CSA B52. All field made joints shall be accessible for inspection prior to being covered or enclosed.

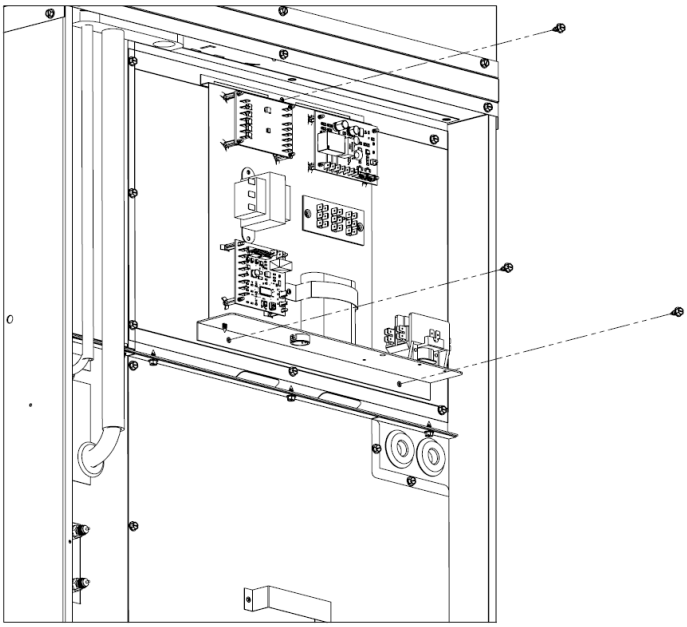
At all times, NCP maintenance and service guidelines shall be followed. If in doubt, consult NCP's technical department for assistance.

The following safety checks must be performed prior to conducting work on the system to minimize the risk of ignition of the refrigerant:

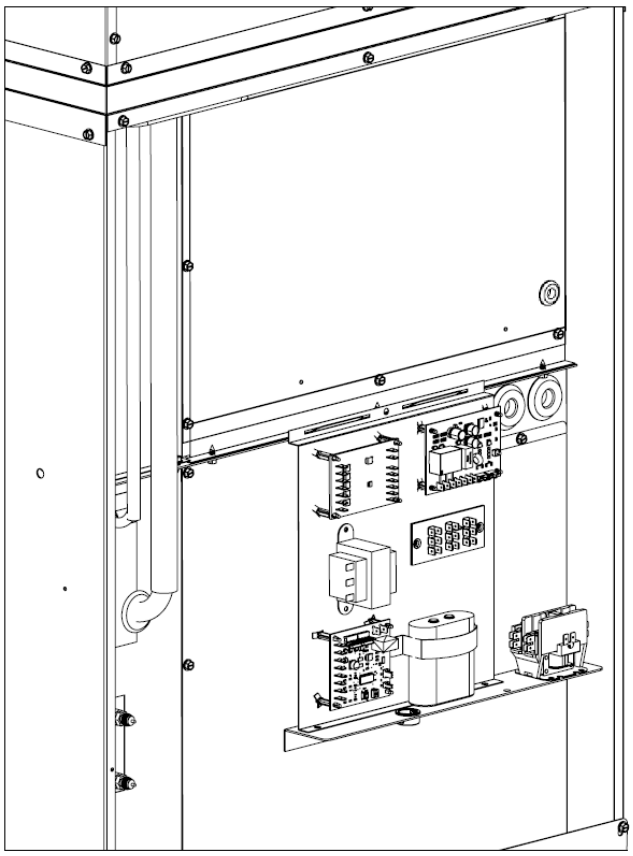
1. Work shall be undertaken under a controlled procedure so as to minimize the risk of a flammable gas or vapor being present while the work is being performed.
2. All maintenance staff and others working in the local area shall be instructed on the nature of work being carried out. Work in confined spaces shall be avoided.
3. The area shall be checked with an appropriate refrigerant detector prior to and during work, to ensure the technician is aware of potentially toxic or flammable atmospheres. Ensure that the leak detection equipment being used is suitable for use with all applicable refrigerants, i.e. non-sparking, adequately sealed or intrinsically safe.
4. If any hot work is to be conducted on the refrigerating equipment or any associated parts, appropriate fire extinguishing equipment shall be available to hand. Have a dry powder or CO2 fire extinguisher adjacent to the charging area.
5. No person carrying out work in relation to a REFRIGERATING SYSTEM which involves exposing any pipe work shall use any sources of ignition in such a manner that it may lead to the risk of fire or explosion. All possible ignition sources, including cigarette smoking, should be kept sufficiently far away from the site of installation, repairing, removing and disposal, during which refrigerant can possibly be released to the surrounding space. Prior to work taking place, the area around the equipment is to be surveyed to make sure that there are no flammable hazards or ignition risks. “No Smoking” signs shall be displayed.
6. Ensure that the area is in the open or that it is adequately ventilated before breaking into the system or conducting any hot work. A degree of ventilation shall continue during the period that the work is carried out. The ventilation should safely disperse any released refrigerant and preferably expel it externally into the atmosphere.
7. The following safety checks must be performed prior to conducting work on the refrigerating equipment
   a. the actual REFRIGERANT CHARGE is in accordance with the room size within which the refrigerant containing parts are installed.
   b. the ventilation machinery and outlets are operating adequately and are not obstructed.
   c. Marking to the equipment continues to be visible and legible. Markings and signs that are illegible shall be corrected or replaced.
   d. refrigerating pipe or components are installed in a position where they are unlikely to be exposed to any substance which may corrode refrigerant containing components, unless the components are constructed of materials which are inherently resistant to being corroded or are suitably protected against being so corroded.
8. The following safety checks must be performed prior to conducting electrical work on the system to minimize the risk of ignition and electrocution.
   a. Capacitors are discharged: this shall be done in a safe manner to avoid possibility of sparking.
   b. No live electrical components and wiring are exposed while charging, recovering or purging the system.
   c. Ensure there is continuity of earth bonding.
9. Annually clean the inside of the unit to keep the weep holes in the base pan open to assure proper drainage of water from the unit.
10. Keep the condenser coil clean and free of anything that restricts free air flo For sea coast applications the condenser coil should be washec eriodically to remove salt accumulation.
11. Reduced indoor air flow through a duct system will cause the indoor coil to ice up in cooling. If this condition is not corrected, premature system failure will result. Indoor air filters should be cleaned and changed regularly.
12. Annually check units mounting to structure to ensure integrity. Seal between cabinet and/or sleeve for air or water leakage. Check exposed surfaces for corrosion. Replace or paint parts as required. This maintenance is critical to prevent stains and damage to exterior surface of building.
13. Inspect refrigerant piping for leaks and suction line insulation for deterioration and damage. Improper insulation can cause condensate water damage.
14. Check motor amperage to nameplate value, inspect the motor mounting and prop fan hub for tightness and rust or corrosion. Observe the prop fan blade for balance.
15. Inspect the wire connections and contactor dry contacts for evidence of arcing, over heating, or deterioration. Inspect wires are not subject to wear, corrosion, excessive pressure, vibration, sharp edges or any other adverse environmental effects. Take into account the effects of aging or continual vibration from sources such as compressors or fans.
16. Sealed electrical components shall be replaced.
17. Intrinsically safe components must be replaced.
18. If refrigerant system was recovered, the proper amount of charge according to the data tag must be added before operating the system again. Ensure that contamination of different refrigerants does not occur when using charging equipment. Hoses or lines shall be as short as possible to minimize the amount of refrigerant contained in them. Cylinders shall be in an upright position, kept firmly on a flat and stable surface while charging. Extreme care shall be taken not to overfill the refrigerant system.

19. If technician requires access to the condenser fan section follow the following steps to move the control panel out of the way and remove the fan baffle.

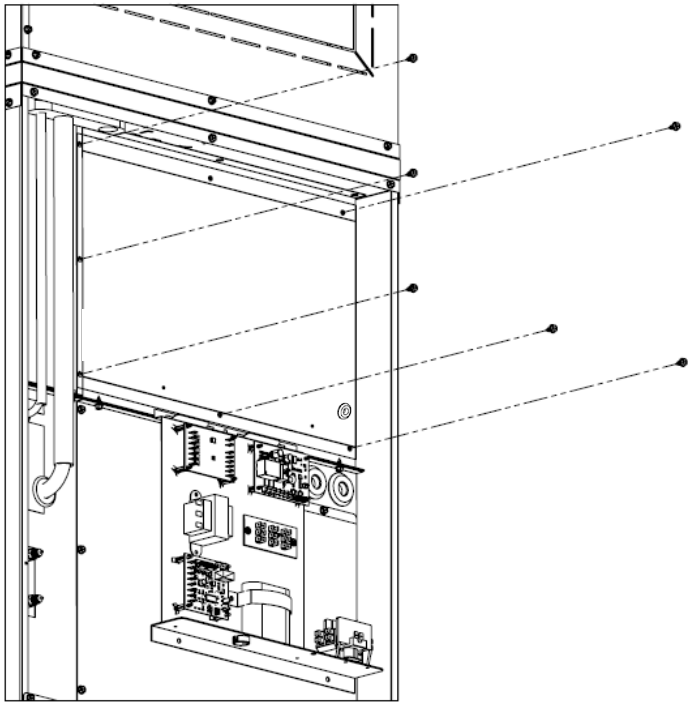
a. Remove the 3 screws securing the control panel to fan baffle as shown in the Figure below. Cut the wire tie that is holding the wires together.



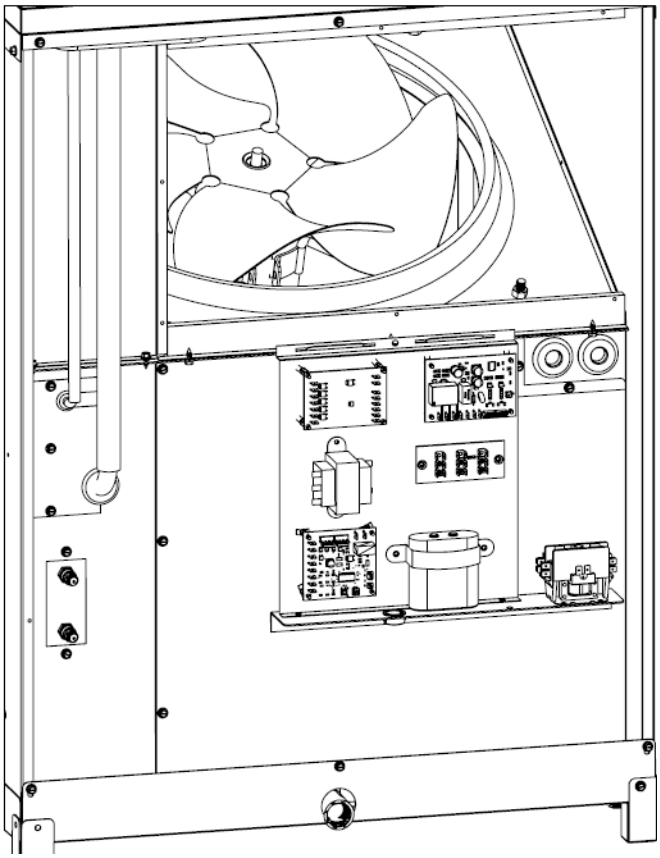
b. Detach control panel and hook the flanges of the lower panel into the slots as shown in the figure below. OAT sensor may need to be detached from defrost board to properly remove fan baffle.



c. Remove remaining 6 fasteners from the fan baffle and remove carefully to not damage the insulation on the other side of the baffle.



d. Once work is done and access to condenser fan is no longer needed repeat the above steps in reverse order.



Section 11: Decommissioning/Recovery

Note: Before carrying out this procedure, it is essential that the technician is completely familiar with the equipment and all its detail. It is recommended good practice that all refrigerants are recovered safely. Prior to the task being carried out, an oil and refrigerant sample shall be taken in case analysis is required prior to re-use of recovered refrigerant. It is essential that electrical power is available before the task is commenced.

1. Become familiar with the equipment and its operation.
2. Isolate system electrically.
3. Before attempting the procedure, ensure that:
   - **a.** mechanical handling equipment is available, if required, for handling refrigerant cylinders;
   - **b.** all personal protective equipment is available and being used correctly;
   - **c.** he recovery process is supervised at all times by a competent person;
   - **d.** recovery equipment and cylinders conform to the appropriate standards.

Note: When transferring refrigerant into cylinders, ensure that only appropriate refrigerant recovery cylinders are employed. Recovery equipment shall be in good working order with a set of instructions concerning the equipment that is at hand and shall be suitable for the recovery of the flammable refrigerant. Ensure that the correct number of cylinders for holding the total system charge is available. All cylinders to be used are designated for the recovered refrigerant and labelled for that refrigerant (i.e. special cylinders for the recovery of refrigerant). Cylinders shall be complete with pressure-relief valve and associated shut-off valves in good working order. Empty recovery cylinders are evacuated and, if possible, cooled before recovery occurs. In addition, a set of calibrated weighing scales shall be available and in good working order. Hoses shall be complete with leak-free disconnect couplings and in good condition.

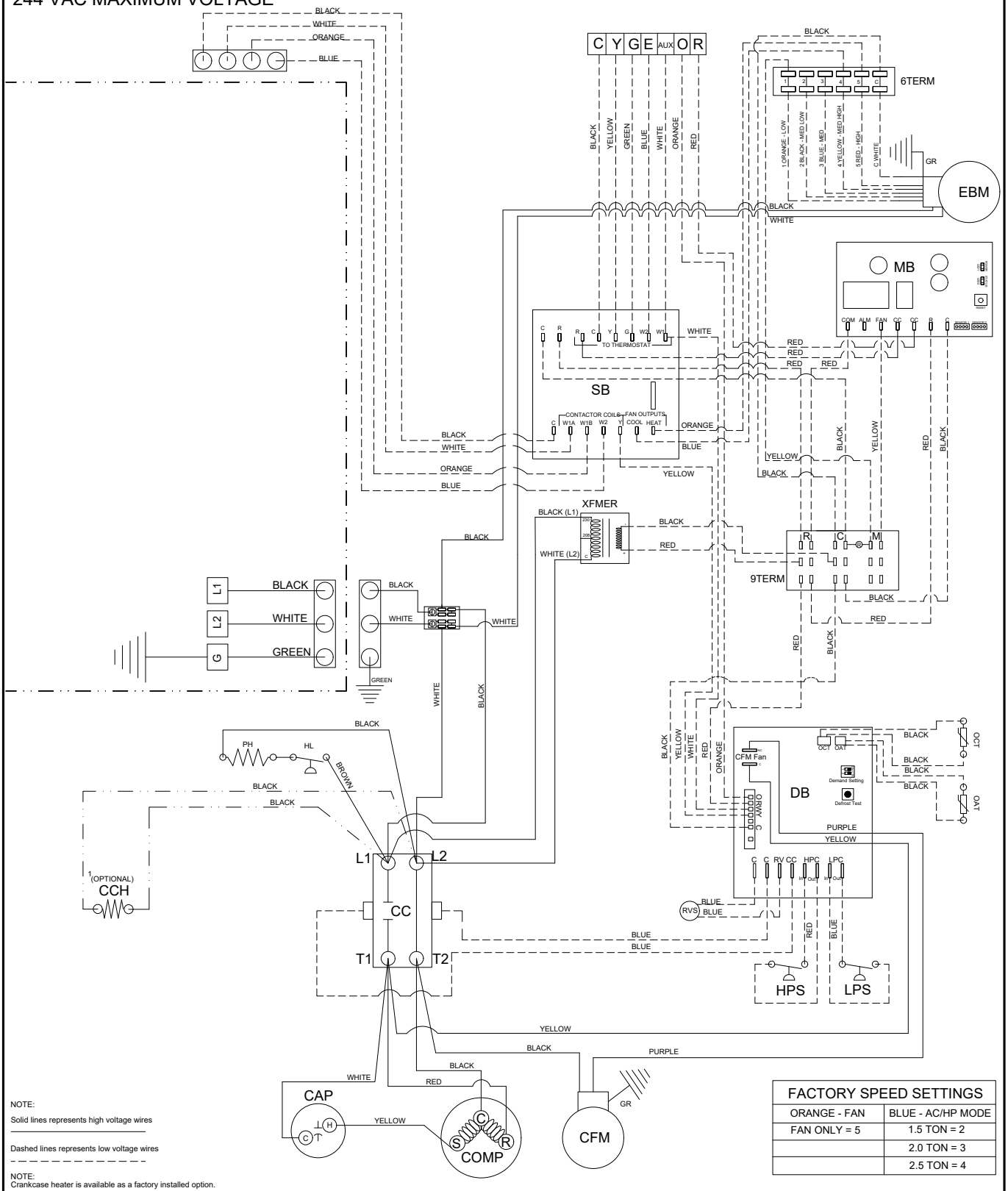
4. Pump down refrigerant system
5. Make sure that cylinder is situated on the scales before recovery takes place.
6. Start the recovery machine and operate in accordance with instructions
7. Do not overfill cylinders (no more than 80% volume liquid charge).
8. Do not exceed the maximum working pressure of the cylinder, even temporarily.
9. \When the cylinders have been filled correctly and the process completed, make sure that the cylinders and the equipment are removed from site promptly and all isolation valves on the equipment are closed off.
10. Recovered refrigerant shall not be charged into another **REFRIGERATING SYSTEM** unless it has been cleaned and checked. Recovered refrigerant shall be processed according to local legislation in the correct recovery cylinder, and the relevant waste transfer note arranged. Do not mix refrigerants in recovery units and especially not in cylinders
11. If compressors or compressor oils are to be removed, ensure that they have been evacuated to an acceptable level to make certain that flammable refrigerant does not remain within the lubricant. The compressor body shall not be heated by an open flame or other ignition sources to accelerate this process. When oil is drained from a system, it shall be carried out safely

Equipment shall be labelled stating that it has been de-commissioned and emptied of refrigerant. The label shall be dated and signed. Label shall state the equipment contains **FLAMMABLE REFRIGERANT.**

Service Access

Note: 30" of clearance is required for service accessibility on the inside. All units are serviceable from the inside.

208-230 VAC NOMINAL VOLTAGE
196 VAC MINIMUM VOLTAGE
244 VAC MAXIMUM VOLTAGE



FACTORY SPEED SETTINGS	
ORANGE - FAN	BLUE - AC/HP MODE
FAN ONLY = 5	1.5 TON = 2
	2.0 TON = 3
	2.5 TON = 4

NOTE:
Solid lines represents high voltage wires

Dashed lines represents low voltage wires

NOTE:
Crankcase heater is available as a factory installed option.

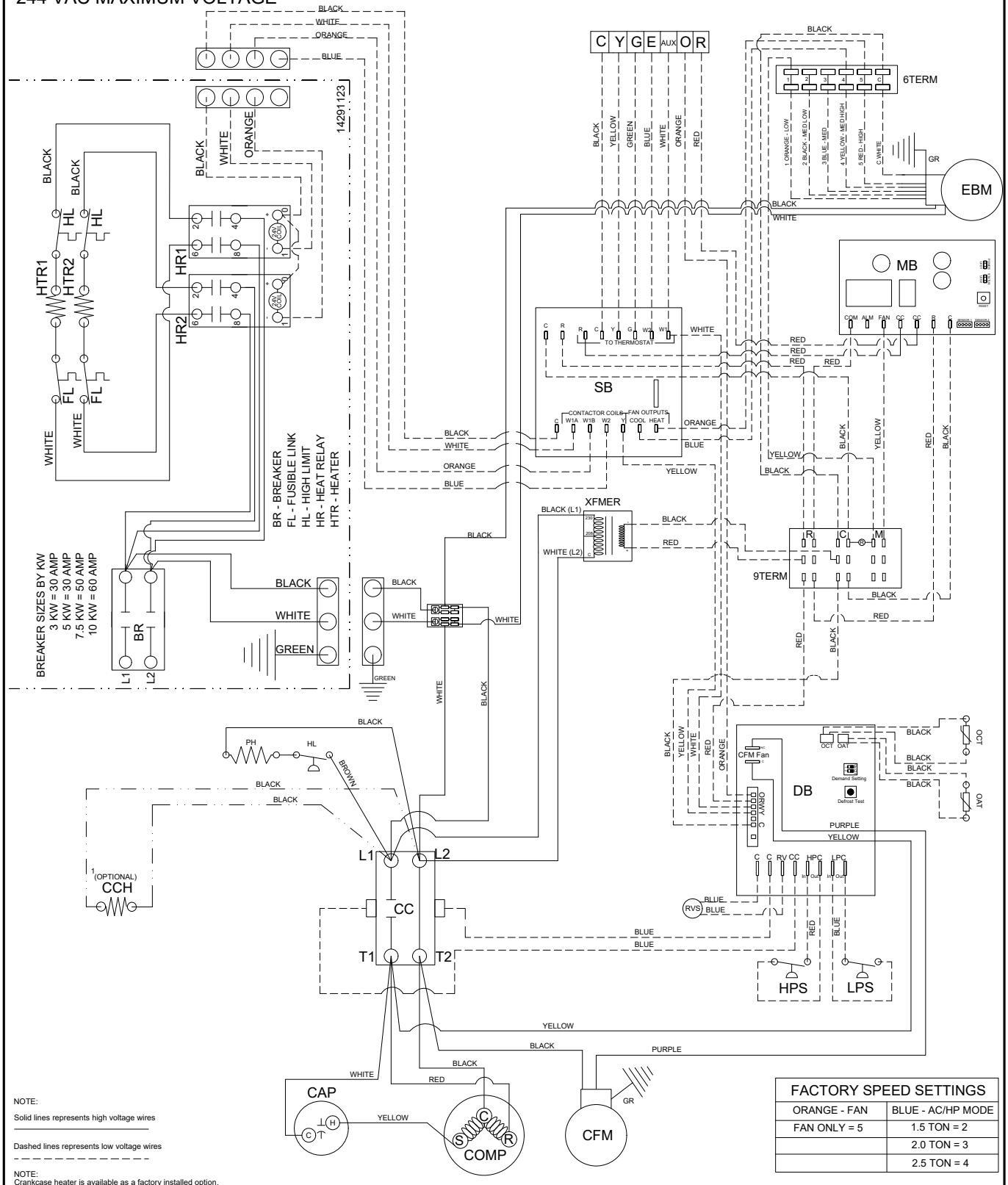
NATIONAL COMFORT PRODUCTS
539 DUNKSFERRY RD.
Bensalem, Pa. 19020
Phone: 800-523-7138
FAX: 215-639-1674

WIRING DIAGRAM
FCH NO HEAT KIT

DRAWN BY	DATE	JOB NUMBER
JH	10/28/2025	14299293

LEGEND:
6TERM - 6 PIN TERMINAL BOARD
9TERM - 9 PIN TERMINAL BOARD
CAP - DUAL CAPACITOR
CC - COMPRESSOR CONTACTOR
CCH - CRANKCASE HEATER (OPTIONAL)
COMP - COMPRESSOR
CFM - CONDENSER FAN MOTOR
DB - DEFROST BOARD
EBM - EVAPORATOR BLOWER MOTOR
HL - HIGH LIMIT
HPS - HIGH PRESSURE SWITCH
LPS - LOW PRESSURE SWITCH
MB - MITIGATION BOARD
OAT - OUTDOOR AIR TEMP. SENSOR
OCT - OUTDOOR COIL TEMP. SENSOR
PH - PAN HEATER
R - RESISTOR
RVS - REVERSING VALVE SOLENOID
SB - SEQUENCING BOARD
TB - TERMINAL BOARD
XFMER - TRANSFORMER

208-230 VAC NOMINAL VOLTAGE
196 VAC MINIMUM VOLTAGE
244 VAC MAXIMUM VOLTAGE



NOTE:
Solid lines represents high voltage wires

Dashed lines represents low voltage wires

NOTE:
Crankcase heater is available as a factory installed option.

FACTORY SPEED SETTINGS	
ORANGE - FAN	BLUE - AC/HP MODE
FAN ONLY = 5	1.5 TON = 2
	2.0 TON = 3
	2.5 TON = 4

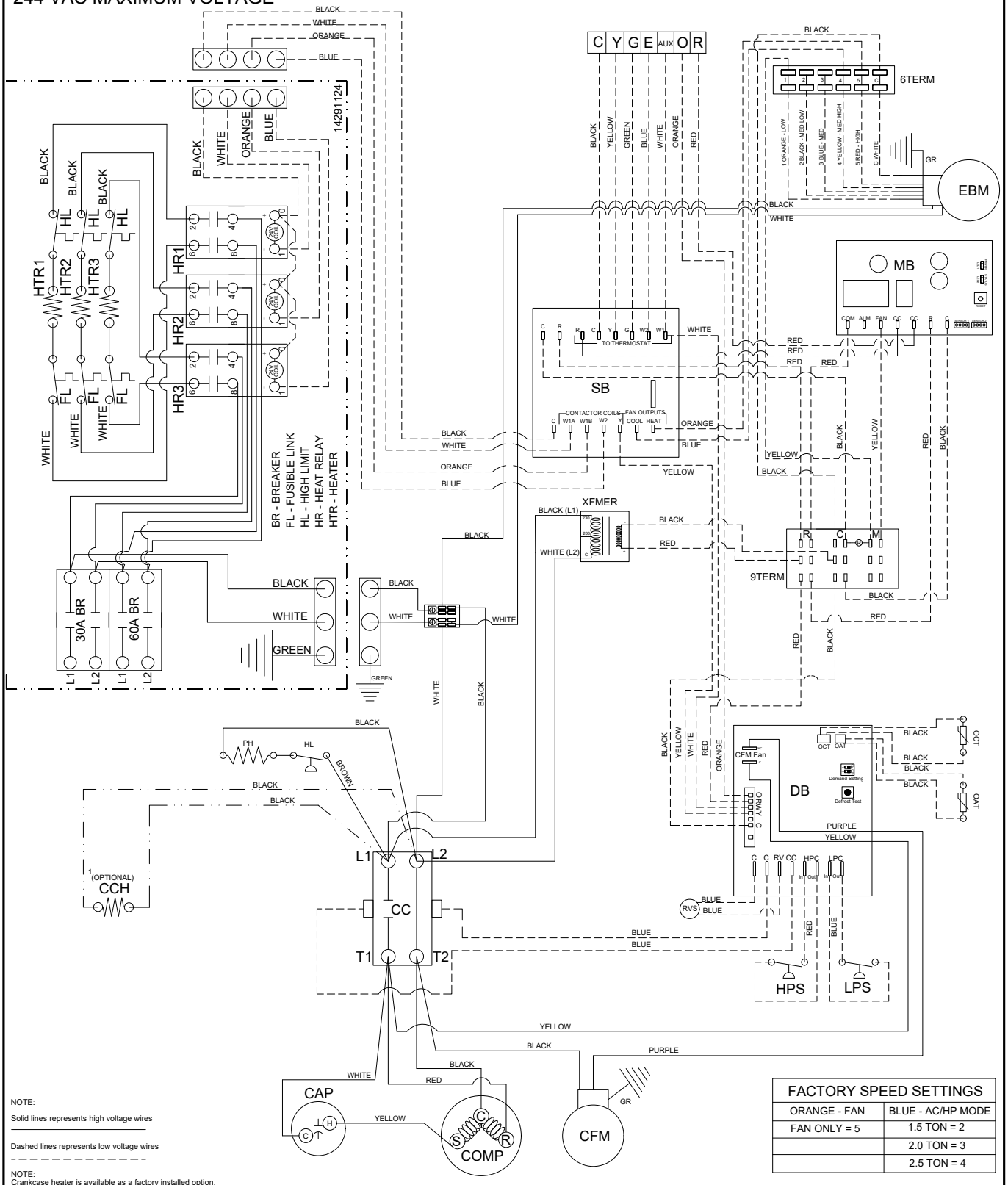
NATIONAL COMFORT PRODUCTS
539 DUNKSFERRY RD.
Bensalem, Pa. 19020
Phone: 800-523-7138
FAX: 215-639-1674

WIRING DIAGRAM
FCH 3-10KW HEAT KIT

DRAWN BY	DATE	JOB NUMBER
JH	10/28/2025	14299294

LEGEND:
6TERM - 6 PIN TERMINAL BOARD
9TERM - 9 PIN TERMINAL BOARD
CAP - DUAL CAPACITOR
CC - COMPRESSOR CONTACTOR
CCH - CRANKCASE HEATER (OPTIONAL)
COMP - COMPRESSOR
CFM - CONDENSER FAN MOTOR
DB - DEFROST BOARD
EBM - EVAPORATOR BLOWER MOTOR
HL - HIGH LIMIT
HPS - HIGH PRESSURE SWITCH
LPS - LOW PRESSURE SWITCH
MB - MITIGATION BOARD
OAT - OUTDOOR AIR TEMP. SENSOR
OCT - OUTDOOR COIL TEMP. SENSOR
PH - PAN HEATER
R - RESISTOR
RVS - REVERSING VALVE SOLENOID
SB - SEQUENCING BOARD
TB - TERMINAL BOARD
XFMER - TRANSFORMER

208-230 VAC NOMINAL VOLTAGE
196 VAC MINIMUM VOLTAGE
244 VAC MAXIMUM VOLTAGE



NOTE:
Solid lines represents high voltage wires

Dashed lines represents low voltage wires

NOTE:
Crankcase heater is available as a factory installed option.

FACTORY SPEED SETTINGS	
ORANGE - FAN	BLUE - AC/HP MODE
FAN ONLY = 5	1.5 TON = 2
	2.0 TON = 3
	2.5 TON = 4

NATIONAL COMFORT PRODUCTS

539 DUNKSFERRY RD.
Bensalem, Pa. 19020
Phone: 800-523-7138
FAX: 215-639-1674

WIRING DIAGRAM
FCH 15KW HEAT KIT

DRAWN BY	DATE	JOB NUMBER
JH	10/28/2025	14299295

LEGEND:
6TERM - 6 PIN TERMINAL BOARD
9TERM - 9 PIN TERMINAL BOARD
CAP - DUAL CAPACITOR
CC - COMPRESSOR CONTACTOR
CCH - CRANKCASE HEATER (OPTIONAL)
COMP - COMPRESSOR
CFM - CONDENSER FAN MOTOR
DB - DEFROST BOARD
EBM - EVAPORATOR BLOWER MOTOR
HL - HIGH LIMIT
HPS - HIGH PRESSURE SWITCH
LPS - LOW PRESSURE SWITCH
MB - MITIGATION BOARD
OAT - OUTDOOR AIR TEMP. SENSOR
OCT - OUTDOOR COIL TEMP. SENSOR
PH - PAN HEATER
R - RESISTOR
RVS - REVERSING VALVE SOLENOID
SB - SEQUENCING BOARD
TB - TERMINAL BOARD
XFMER - TRANSFORMER

IMPORTANT!!!

BEFORE REMOVING A WARRANTY COMPRESSOR, PLEASE FILL OUT THE FOLLOWING AND CALL (800) 523-7138.

REMOVAL OF COMPRESSOR WITHOUT FACTORY VERIFICATION CAN LEAD TO WARRANTY CREDIT BEING DENIED

1. Incoming Voltage to Compressor at Contactor is:_____Volts ~ AC

2. Compressor Starting AMP Draw:_____ A

3. Compressor Winding OHM Reading between Terminals C & S:_____ Ω

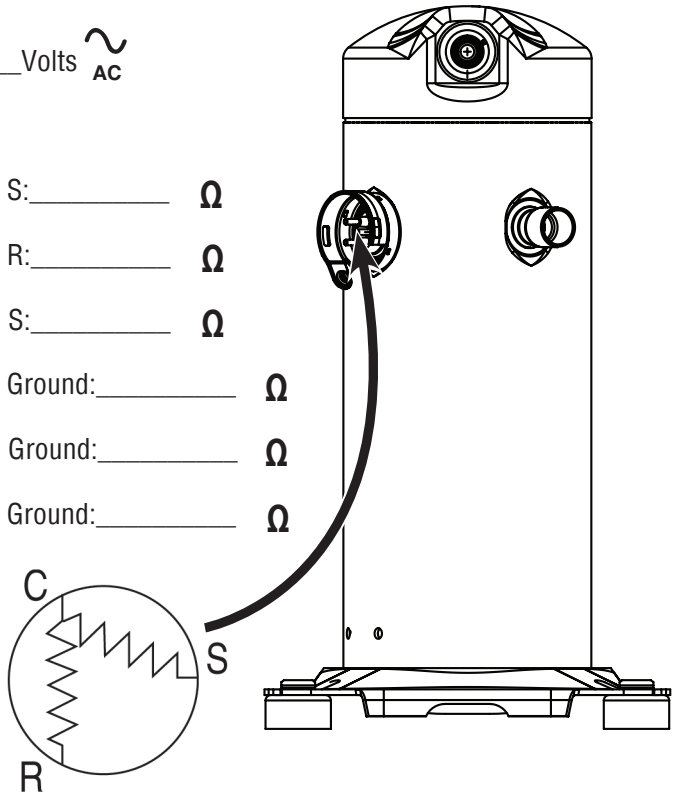
4. Compressor Winding OHM Reading between Terminals C & R:_____ Ω

5. Compressor Winding OHM Reading between Terminals R & S:_____ Ω

6. Compressor Winding OHM Reading between Terminals C & Ground:_____ Ω

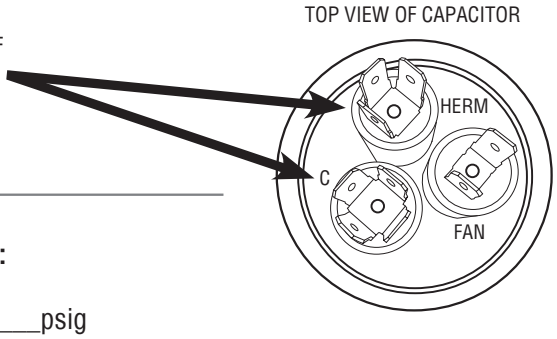
7. Compressor Winding OHM Reading between Terminals R & Ground:_____ Ω

8. Compressor Winding OHM Reading between Terminals S & Ground:_____ Ω



9. Run Capacitor Reading from HERM to COM:_____ ⏚ µF

10. Start Capacitor Reading if Used:_____ ⏚ µF



11. If the Compressor is Operating Please Indicate the Following:

Suction Pressure:_____psig Discharge Pressure_____psig

Super Heat:_____F Subcooling:_____F

Replacement Parts Guide | FCH

Item Type	Description	FCH518****-**	FCH524****-**	FCH530****-**
S	Base Pan	14356200	14356200	14356200
S	Unit Leveler	14356201	14356201	14356201
S	Bottom Section Right Side Panel	14356203	14356203	14356203
S	Radial Fan Deck	14356204	14356204	14356204
S	Bottom Section Left Side Panel	14356214	14356214	14356214
S	Top Section Back/Side Panel	14356220	14356220	14356220
S	Blower Mounting Deck	14356225	14356225	14356225
S	Return Panel	14356228	14356228	14356228
S	Filter Door	14356233	14356233	14356233
S	Bottom Section Acc. Panel	14356236	14356236	14356236
S	Outdoor Air Sensor Cover	14356242	14356242	14356242
S	Outdoor Coil Drain Pan	14356014	14356014	14356014
S	Capcitor Strap	14356082	14356082	14356082
S	No Breaker Patch Plate	14256697	14256697	14256697
S	Single Breaker Patch Plate	14256698	14256698	14256698
S	Dual Breaker Patch Plate	14256699	14256699	14256699
E	Contactor	14262101	14262101	14262101
E	Start/Run Capacitor	14225395	14225395	14225396
E	Outdoor Motor	14270069	14270069	14270069
E	Defrost Control Board	14262099	14262099	14262099
E	Outdoor Air Temp. Sensor	14260026	14260026	14260026
E	Outdoor Coil Temp. Sensor	14260030	14260030	14260030
E	Drain Pan Heater	14299103	14299103	14299103
E	Thermal Switch	14260028	14260028	14260028
E	Blower Motor	14270068	14270068	14270068
E	Transformer	14262105	14262105	14262105
E	Sequencing Board	14262098	14262098	14262098
E	A2L Gas Sensor	14260031	14260031	14260031
E	A2L Gas Sensor Harness	14230071	14230071	14230071
E	A2L Mitigation Control Board	14262102	14262102	14262102
E	Terminal Board with Resistor	14263064	14263064	14263064
E	Power Terminal Block	14263063	14263063	14263063
E	Blower Motor Speed Terminal Board	14263065	14263065	14263065
E	Compressor Plug	14230418	14230418	14230418
E	Rev. Valve Solenoid	14206027	14206027	14206027
R	Compressor	14210272	14210274	14210280
R	Rev. Valve	14206031	14206031	14206031
R	Low Pressure Switch	14265031	14265031	14265031
R	High Pressure Switch	14265029	14265029	14265029
R	Outdoor Coil	14208377	14208376	14208376
R	Outdoor TXV	14275223	14275223	14275223
R	Indoor TXV	14275225	14275226	14275226
R	Accumulator	14255010	14255010	14255010
M	Outdoor Motor Mount	14270115	14270115	14270115
M	Fan Blade	14214048	14214048	14214048
M	Blower Motor Mount	14270108	14270108	14270108
M	Blower Housing and Wheel	14214046	14214046	14214046
M	Air Filter	14232005	14232005	14232005

OPTION SPECIFIC PARTS				
Item Type	**Description**	**FCH518****-**	**FCH524****-**	**FCH530****-**
S	Top Panel F & L Options	14356231	14356231	14356231
S	Top Panel K & R Options	14356232	14356232	14356232
S	Blower Acc. Panel F & L Options	14356237	14356237	14356237
S	Blower Acc. Panel K & R Options	14356238	14356238	14356238
S	Blower Acc. Panel Patch Plate F & L Options	14356239	14356239	14356239
S	Blower Acc. Panel Patch Plate K & R Options	14356240	14356240	14356240
S	Indoor Coil Drain Pan F & L Options	14256682	14256682	14256682
S	Indoor Coil Drain Pan K & R Options	14256683	14256683	14256683
S	Control Board Breaker Bracket F & L Options	14256696	14256696	14256696
S	Control Board Breaker Bracket K & R Options	14256397	14256397	14256397
R	Indoor Coil F & L Options	14208394	14208394	14208391
R	Indoor Coil K & R Options	14208395	14208395	14208393

Item Type Legend

S=Sheet Metal

E=Electrical System

R=Refrigerant System

M=Miscellaneous

1. When replacing fan blade, the installer must make sure the fan blade is secured in such a way that the top of the fan blade is flush with the top of the radial fan deck.

539 Dunksferry Road | Bensalem, PA 19020 | 215-244-1400 | 1-800-523-7138

THRU-THE-WALL COMFORT PACK FLEX
LIMITED WARRANTY

1. National Comfort Products warrants to its customers that its product shall be free from defects in material and workmanship under normal use and regular service and maintenance as follows:

PARTS: For five years from the date of original installation.
Customer must register the product within 60 days of purchase. If Customer cannot adequately document date of installation, then, for purposes of determining the warranty period, the date of installation shall be 60 days from the date of purchase.

2. This warranty does not extend to any damages or losses due to misuse, accident, abuse, neglect, normal wear and tear, negligence (other than National Comfort's), unauthorized modification or alteration; use beyond rated capacity; unsuitable power sources or environmental conditions; improper installation, repair, handling, maintenance or application; damage as a result of fire, wind, floods, lightning, or corrosive conditions; or any other cause not the fault of National Comfort. By way of example and without limitation, the following do not constitute a defect in workmanship and materials and are not covered by this warranty: slugging of liquid refrigerant or oil, unstable line voltage, lightning, operating without proper lubrication, and operating without factory provided safeties. Any installation that impairs or impedes air flow negatively impacts performance and causes premature equipment failure that voids this warranty. For example, installation behind a brick façade or the addition of a brick pattern façade, i.e. pigeon holes impedes air flow and shall void this warranty. No warranty will apply if the input section exceeds the rated input as indicated on the nameplate by more than 5%, or if the heat section in the judgement of the manufacture has been subject to misuse, negligence, accident, corrosive atmospheres, atmospheres contacting any contaminant (silicone, aluminum oxide, etc.), excessive thermal shock, physical damage, impact, abrasion, unauthorized alterations, or operation contrary to the manufacture's printed instructions, or if the serial number has been altered, defaced, or removed.

3. SOLE WARRANTY
The warranties identified herein constitute National Comfort's sole and exclusive warranties with respect to the goods and are in lieu of and exclude all other warranties, express or implied, arising by operation of law or otherwise, including without limitation, merchantability and fitness for a particular purpose whether or not the purpose or use has been disclosed to National Comfort in specifications, drawings or otherwise, and whether or not National Comfort's goods are specifically designed and/or manufactured by National Comfort for Customer's use or purpose.

4. LIMITATION OF REMEDY
The sole and exclusive remedy for breach of any warranty hereunder (other than the warranty provided herein) shall be limited to repair, replacement, credit or refund of the purchase price to distribution as set forth herein.
National Comfort is not responsible for any other item including but not limited to local transportation, freight, removal of any compressor or part, any labor associated therewith, service or diagnosis calls, refrigerant, or costs for returning any defective compressor or part.

5. LIMITATION OF WARRANTY
NATIONAL COMFORT MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ORAL OR WRITTEN, RELATED TO THE GOODS, INCLUDING ANY WARRANTY OF MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE EXPRESSLY DISCLAIMED. NATIONAL COMFORT SHALL NOT BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OR LOSSES FROM ANY CAUSE WHATSOEVER, INCLUDING, WITHOUT LIMITATION, LOSS OF USE, COMMERCIAL PROFITS, OR CUSTOMER GOODWILL, AND ANY OTHER CLAIMS BASED ON CONTRACT OR TORT, WHETHER OR NOT ARISING FROM NATIONAL COMFORT'S NEGLIGENCE.
National Comfort shall not be liable for damages caused by delay in performance and the remedies of Customer set forth in this agreement are exclusive. In no event, regardless of the form of the claim or cause of action (whether based in contract, infringement, negligence, strict liability, other tort or otherwise) shall National Comfort's liability to Customer and/or its customers exceed the price paid by Customer for the specific goods or portion of the goods provided by National Comfort giving rise to the claim or cause of action, and Customer shall indemnify and hold harmless National Comfort for any damages incurred by National Comfort in excess thereof. Customer agrees that in no event shall National Comfort's liability to Customer and/or its customers extend to include incidental, consequential, or punitive damages.

Continued on next page

The term “consequential damages” shall include, but not be limited to, loss of anticipated profits, business interruption, loss of use, revenue, reputation and data, costs incurred, including without limitation, for capital, fuel, power and loss or damage to capital or equipment. Customer agrees that all instructions and warnings supplied by National Comfort will be passed on to those persons who use the Goods. National Comfort’s Goods are to be used in their recommended applications and all warning labels adhered to the Goods by National Comfort are to be left intact.

It is expressly understood that any technical advice furnished by National Comfort before or after delivery in regard to the use or application of the Goods is furnished without charge, and National Comfort assumes no obligation or liability for the advice given or results obtained, all advice being given and accepted at Customer’s sole risk.

6. WARRANTY PROCEDURE

For All Warranty Claims. Customer must register the product with National Comfort within 60 days from purchase. Failure to timely register the product may void the warranty. Any claim for warranty shall be made within thirty days of discovery and in any event, within thirty days from removal of the compressor or part from the unit. Failure to make a timely claim shall void the warranty. Prior authorization from National Comfort is required for all warranty claims. Any claim for warranty must be first reported to National Comfort in writing specifying the unit, serial number, date of purchase and date of original installation. Customer shall also request a Return Material Authorization (“RMA”) from National Comfort to initiate the warranty claim process. Issuance of an RMA by National Comfort is not an acknowledgment that the defect is covered by this Warranty. Any replacement compressor or part is warranted for the original product warranty, or for one year from the date of shipment of the replacement compressor/part, whichever is later.

A. Compressors. In addition to the above-referenced requirements, Customer is also required to purchase a replacement compressor and return the original compressor to National Comfort at National’s discretion. If the defect is reported to National Comfort within one year from the date of original installation or within 20 months from the date of manufacture of the compressor (as determined by the compressor serial number), whichever occurs first, then Customer may take the compressor to any Authorized Distributor for replacement of said compressor. If the defect is reported to National Comfort after one year from the date of installation or after 20 months from the date of manufacture of the compressor (as determined by the compressor serial number), whichever occurs first, but before the expiration of five years from the date of installation, then the compressor should be returned to National Comfort at National’s discretion and Customer shall purchase a new compressor. If National Comfort determines that there is a defect in material or workmanship that is covered by this Warranty, then National shall credit Customer for the cost of the new replacement compressor. If National Comfort determines that the defect in material or workmanship is not covered by this Warranty, then no credit shall be issued. A copy of the invoice of the replacement compressor and completed RMA must accompany the compressor. National Comfort, at its sole discretion, may also require Customer to supply the compressor tag. The failure to follow this procedure shall render the warranty void.

B. Other Parts. In addition to the above-referenced requirements, Customer is required to purchase a replacement part for the original part for which Customer is making a warranty claim. The original part for which warranty is claimed is to be returned to National Comfort at National’s discretion, freight prepaid. If National Comfort determines that there is a defect in material or workmanship in the part that is covered by this Warranty, then National Comfort shall credit Customer for the cost of the new replacement part. If National Comfort determines that the defect in material or workmanship is not covered by this Warranty, then no credit shall be issued. A copy of the invoice of the replacement part and completed RMA must accompany the original part for which warranty is claimed. National Comfort reserves the right to request additional documentation. The failure to follow this procedure shall render the warranty void.

7. SHIPPING INSTRUCTIONS

A. Compressors. Returned compressors must be totally secured by use of shipping lugs taken from the replacements compressors and clearly marked with the RMA number. Do not use tape, rags or putty to seal the compressor. Line connections should be sealed with rubber plugs. All compressors must be securely bolted, banded, and stretch wrapped to a skid in the upright position.

B. **Parts.** All other returned parts must be securely packaged and clearly marked with its corresponding RMA number provided from NCP.

5 YEAR WARRANTY ON PARTS

5 YEAR WARRANTY COMPRESSOR

AHRI CERTIFIED® www.ahridirectory.org
Unitary Small HP
AHRI Standard 210/240
Certification applies only when the complete system is listed with AHRI.

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Notes

National Comfort Products
A Division of AeriTek
539 Dunksferry Road | Bensalem, PA 19020-5908
(800) 523-7138
www.nationalcomfortproducts.com

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