



**NATIONAL
COMFORT
PRODUCTS**
HEATING & A/C EQUIPMENT

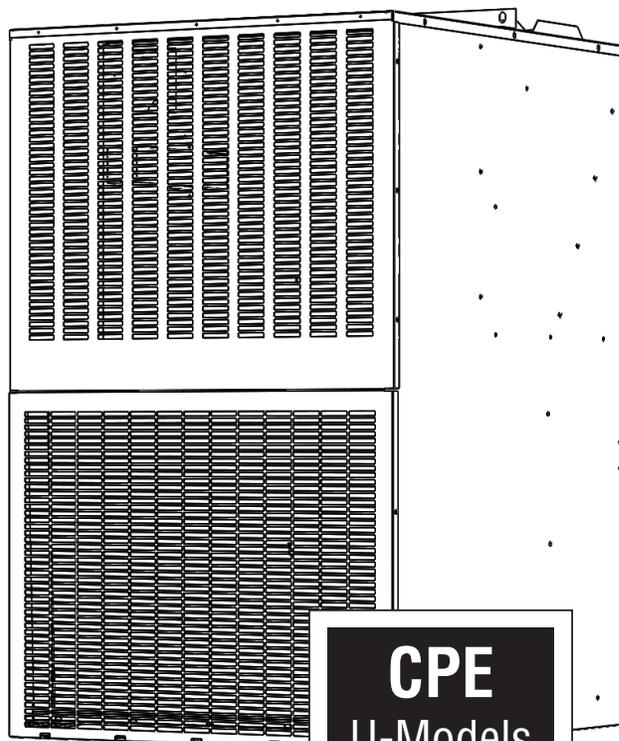
Thru-the-Wall Comfort for all types of Multi-Family Construction

Installation Manual

Comfort Pack Electric
Universal Series

**12 SEER
ELECTRIC HEAT**

This unit should be installed in an
OUTSIDE WALL for **THRU-THE-WALL
INSTALLATION ONLY!**



CPE
U-Models

Optional
Electric
Heating

Electric
Cooling



*Read Installation Manual prior to starting the installation.
This manual must be left with the homeowner for future reference.*

Go Thru-the-Wall



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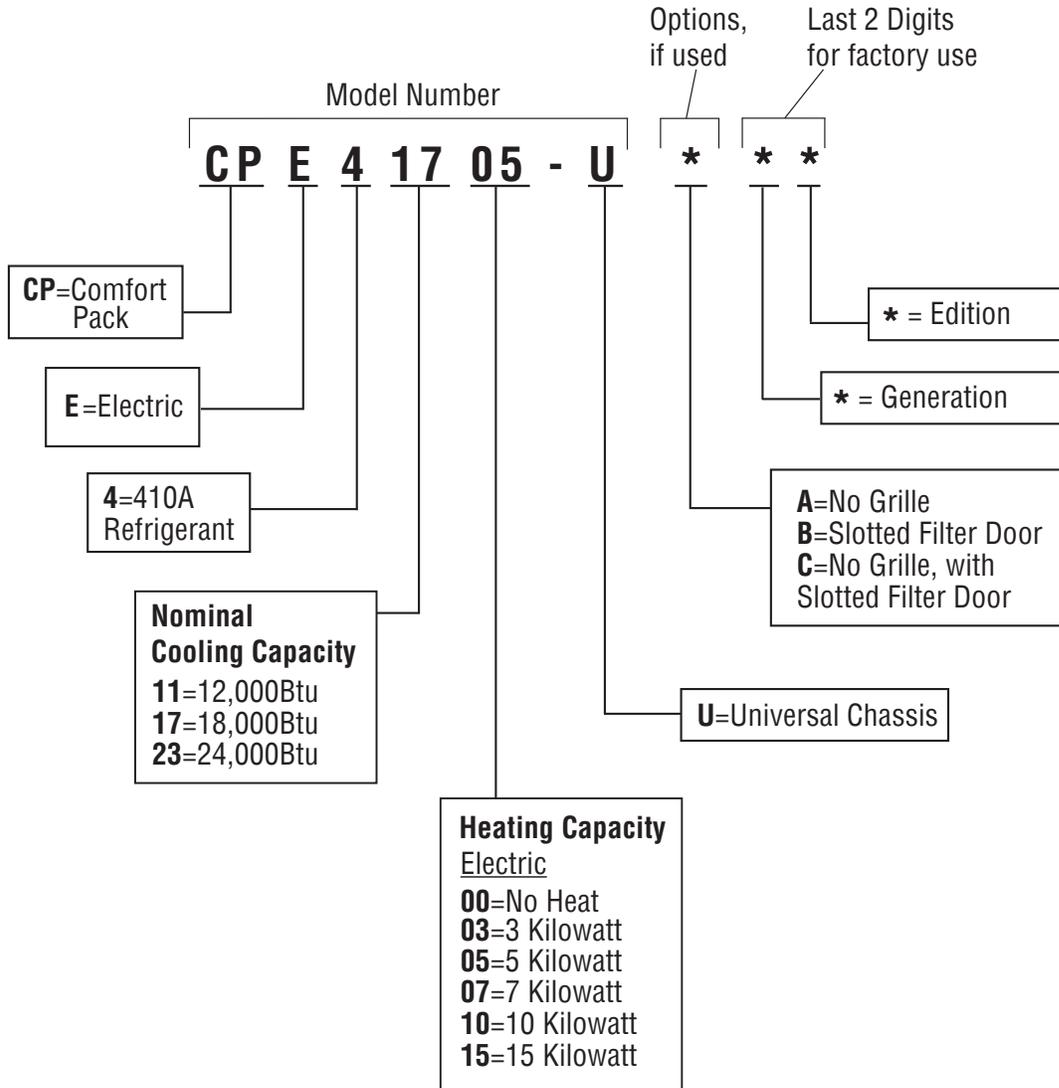
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**IMPORTANT NOTE: DO NOT DESTROY OR THROW AWAY THIS MANUAL.
IT SHOULD BE KEPT IN A SAFE PLACE FOR FUTURE REFERENCE.**

Installation Manual for Comfort Pack Electric Units

Comfort Pack Nomenclature

Note: Standard units (with no options) will have no letter after the “U” in the name. **Example:** CPE41705-U



Installation Manual for Comfort Pack Electric Units

Safety First!

WARNING

INSTALLATION AND REPAIR OF THIS UNIT SHOULD BE PERFORMED ONLY BY INDIVIDUALS MEETING THE REQUIREMENTS OF AN "ENTRY LEVEL TECHNICIAN" AS SPECIFIED BY NATIONAL CODES. ATTEMPTING TO INSTALL OR REPAIR THIS UNIT WITHOUT SUCH BACKGROUND MAY RESULT IN PRODUCT DAMAGE, PERSONAL INJURY OR DEATH.



WARNING

HIGH VOLTAGE!
DISCONNECT ALL POWER BEFORE SERVING.
FAILURE TO DO SO MAY RESULT IN PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.

CAUTION

USE CARE WHEN HANDLING SCROLL COMPRESSORS.
SOME TEMPERATURES COULD BE HOT!

CAUTION

SCROLL COMPRESSORS 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.

WARNING

THE UNIT MUST BE PERMANENTLY GROUNDED.
FAILURE TO DO SO CAN CAUSE ELECTRICAL SHOCK RESULTING IN SEVERE PERSONAL INJURY OR DEATH.

"USE COPPER SUPPLY WIRES ONLY"

WARNING

FOR YOUR SAFETY, DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS AND LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE. SUCH ACTIONS COULD RESULT IN PROPERTY DAMAGE, PERSONAL INJURY, OR DEATH.

CAUTION

THESE UNITS ARE NOT APPROVED FOR MOBILE HOME APPLICATIONS. SUCH USE COULD RESULT IN PROPERTY DAMAGE, PERSONAL INJURY, OR DEATH.

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.

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.

Operation

The cabinet includes open-wire resistance heating elements with automatic reset thermal overloads, as well as branch circuit fuses for short-circuit and electrical overload protection.

*CPE4XX00-U Models Do Not Include Heating Elements

The Comfort Pack is designed to be used with residential single-stage cooling two-stage heating wall thermostats with automatic or manual mode changeover. Automatic changeover thermostats must include a deadband to prevent cycling between cooling and heating modes. **Single-pole, single-throw thermostats are not suitable for use with Comfort Pack.** The unit also contains controls to automatically adjust the indoor blower motor speed for cooling and heating modes.

Each unit is equipped with 2 electrical heat banks with the exception of the 15kw model which has 3 banks:

APPROXIMATE COLD RESISTANCE

3kw	2 Banks	30.4 ohms per bank
5kw	2 Banks	20.8 ohms per bank
7kw	2 Banks	14.81 ohms per bank
10kw	2 Banks	10.4 ohms per bank
15kw	3 Banks	10.4 ohms per bank

Installation Manual for Comfort Pack Electric Units

When a call for heat is active sending power to the W1 and W2 heating terminals on the control board, the board will begin to sequence the heating outputs to energize the heat contactors. Once W1 is energized the board will sequence output W1A after a 3 second delay and W1B after a 28 second delay. Once W2 is energized the board will sequence out W2 after a 45 second delay. Once W1, W2, or G is energized the fan will be operated. Once de-energized the fan will run for an additional 5 seconds.

Faults

If multiple inputs are received with a cooling input (Y) than the board will automatically fault and run in cooling.

Cooling Blower Operation

Cooling fan will delay 5 seconds on a call for cooling and will delay off when a call is terminated for the duration of the board jumper set point. (A = 5 sec., B = 30 sec., C = 60 sec., & D = 90 sec.)

Before You Start

This unit is shipped with a cooling chassis installed in the cabinet. Prior to installing the unit in the wall opening, the shipping bolts located at the bottom on both sides of the cabinet must be removed to allow for removal of the cooling chassis. 1/4" hole plugs provided with the unit should be installed in the holes to prevent air leakage. Shipping bolts are located on both sides below this sticker:

THE SHIPPING BOLTS MUST BE REMOVED PRIOR TO INSTALLATION OF THE CABINET TO PERMIT REMOVAL OF THE CHASSIS. INSTALL THE HOLE PLUGS PROVIDED.

14299588

This unit is designed and approved for through-the-wall installation only. The unit must be installed a minimum of 8" above finish floor. If this unit is installed in a residential garage, it must be installed so that the ignition source and burners are located not less than 18 inches (457 mm) above the floor, and it must be located or protected to avoid physical damage by vehicles. The entire unit must not be installed outside. The grille side of the unit should extend 3/4" beyond the exterior wall to allow moisture that may enter the outdoor section to drain. The pitch of the internal drain pans toward the outside will assure proper drainage when the cabinet is installed level. **Masonry walls must have a lintel to support the wall.**

The interior of the unit may be installed with zero clearances to adjacent combustible surfaces. **The unit shall not be installed directly on carpeting, tile or other combustible material, except wood flooring.** In order to be able to remove the chassis, 29" of open area must be left unobstructed in front of the access panels. The 3/4" O.D. drain pan connection should be connected to the building drain using the flexible tubing included and a trap. The secondary drain offers protection from overflow.

The secondary drain feature is piped into the base of the unit and drains through the weep holes outside. Reconnect 3" piece of clear flexible tubing to secondary drain on drain pan. Position secondary drain through grommet of chassis and connect to flexible tubing (prime trap prior to operating).

The grille side must be kept free of any obstructions that will reduce or alter the air flow pattern.

If an optional architectural grille is to be used on standard units, the stamped and louvered grille provided **must** be removed. Consult the factory prior to ordering product(s) that require an optional architectural grille.



CAUTION

THE INSTALLATION OF THIS APPLIANCE MUST CONFORM TO THE REQUIREMENTS OF THE NATIONAL FIRE PROTECTION ASSOCIATION; THE NATIONAL ELECTRIC CODE, ANSI/NFPA NO. 70 (LATEST EDITION) IN THE UNITED STATES; THE CANADIAN ELECTRICAL CODE PART 1, CSA 22.1 (LATEST EDITION) IN CANADA; AND ANY STATE OR PROVINCIAL LAWS OR LOCAL ORDINANCES. LOCAL AUTHORITIES HAVING JURISDICTION SHOULD BE CONSULTED BEFORE INSTALLATION IS MADE. SUCH APPLICABLE REGULATIONS OR REQUIREMENTS TAKE PRECEDENCE OVER THE GENERAL INSTRUCTIONS IN THE MANUAL.

TO REMOVE THE CHASSIS FROM THE CABINET:

TURN OFF POWER TO THE UNIT. REMOVE THE LOWER ACCESS PANEL FROM THE CABINET. DISCONNECT THE DRAIN LINE FROM THE EVAPORATOR COIL DRAIN CONNECTION. DISCONNECT THE SECONDARY DRAIN FLEXIBLE TUBING & TRAP TO AVOID DAMAGE (PRIME TRAP WHEN REINSTALLING). DEPRESS AND HOLD THE RELEASE LATCH ON THE CHASSIS POWER WIRING CONNECTOR AND UNPLUG IT FROM THE CABINET POWER WIRING CONNECTOR.

DEPRESS AND HOLD THE RELEASE LATCH ON THE CONTROL WIRING CONNECTOR AND UNPLUG IT FROM THE CABINET CONTROL WIRING CONNECTOR. REMOVE THE SCREWS ATTACHING THE CONTROLS ENCLOSURE TO THE INDOOR COIL COVER. REMOVE THE SCREWS FROM THE INDOOR BLOWER COVER PLATE. REMOVE THE PLATE FROM THE UNIT. TEMPORARILY SECURE THE CHASSIS POWER AND CONTROL WIRING AND CONNECTORS TO THE TOP OF THE INDOOR COIL COVER TO PREVENT DAMAGE DURING CHASSIS REMOVAL.

Installation Manual for Comfort Pack Electric Units

CAREFULLY SLIDE THE CHASSIS OUT OF THE CABINET BY GRASPING BOTH SIDES OF THE EVAPORATOR COIL DRAIN PAN AND PULLING TOWARD YOU WHILE KEEPING THE CHASSIS CENTERED IN THE CABINET. AS THE CHASSIS IS REMOVED, KEEP THE CHASSIS LEVEL UNTIL THE OUTDOOR FAN COVER PASSES THE CABINET SEALS. **DAMAGE TO THE CABINET SEALS WILL RESULT IF THE CHASSIS IS NOT KEPT LEVEL UNTIL THE OUTDOOR FAN COVER HAS PASSED THE CABINET SEALS.** AFTER THE CHASSIS IS REMOVED, IT SHOULD BE HANDLED USING THE CHASSIS BASE AND EVAPORATOR DRAIN PAN, NOT BY USING REFRIGERANT PIPING OR THE OUTDOOR FAN MOUNT. THE BOTTOM OF THE CHASSIS IS NOT SMOOTH AND WILL DAMAGE FLOORS IF SLID.

TO INSTALL THE CHASSIS INTO THE CABINET:

TURN OFF POWER TO THE UNIT. TEMPORARILY SECURE THE CHASSIS POWER AND CONTROL WIRING AND TURN OFF POWER TO THE UNIT. TEMPORARILY SECURE THE CHASSIS POWER AND CONTROL WIRING AND CONNECTORS TO THE TOP OF THE INDOOR COIL COVER TO PREVENT DAMAGE DURING CHASSIS INSTALLATION. PLACE THE OUTDOOR COIL SECTION OF THE CHASSIS ONTO THE CABINET RAILS. LIFT THE REAR OF THE CHASSIS USING THE EVAPORATOR COIL DRAIN PAN SO THAT THE CHASSIS IS LEVEL AND CENTERED AS IT IS PUSHED IN THE CABINET. **DAMAGE TO THE CABINET SEALS WILL RESULT IF THE CHASSIS IS NOT KEPT LEVEL UNTIL THE OUTDOOR FAN COVER HAS PASSED THE CABINET SEALS, AND THE CHASSIS KEPT CENTERED IN THE CABINET.** AFTER THE CHASSIS IS ALL THE WAY IN THE CABINET, CHECK THAT THE CHASSIS IS CENTERED IN THE CABINET BY VERIFYING THAT IT IS IN CONTACT WITH THE CABINET SEALS ON BOTH SIDES.

INSTALL THE INDOOR BLOWER COVER PLATE AND SECURE IT WITH SCREWS. INSTALL THE CHASSIS POWER WIRE CONNECTOR AND THE CONTROL WIRING CONNECTOR INTO THEIR RESPECTIVE CABINET WIRING CONNECTORS SO THAT THE CONNECTORS LATCH. POSITION THE CONTROLS ENCLOSURE AND SECURE IT TO THE INDOOR COIL COVER WITH SCREWS. CONNECT THE DRAIN LINE TO THE EVAPORATOR COIL DRAIN CONNECTION. RECONNECT 3" PIECE OF CLEAR FLEXIBLE TUBING TO SECONDARY DRAIN ON DRAIN PAN. POSITION SECONDARY DRAIN THROUGH GROMMET OF CHASSIS AND CONNECT TO FLEXIBLE TUBING (PRIME TRAP PRIOR TO OPERATING). INSTALL THE LOWER ACCESS PANEL ON THE CABINET. TURN ON POWER TO THE UNIT.

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.

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

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 manufacture.

NOTE: 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.

Installation

NOTE: THESE INSTALLATION AND MAINTENANCE INSTRUCTIONS SHOULD BE LEFT WITH THE UNIT FOR FUTURE REFERENCE.

This unit must be installed in accordance with all applicable codes. This unit is not to be used for temporary heating of buildings or structures under construction.

FOR MAXIMUM PERFORMANCE, IT IS IMPERATIVE THAT THE COOLING CHASSIS AIR DIVIDER BE SEALED TO THE CABINET AIR SEAL. ANY LEAKAGE WILL ALLOW OUTSIDE UNCONDITIONED AIR TO INFILTRATE AND MIX WITH THE CONDITIONED AIR. THIS CONDITION WILL DEGRADE UNIT PERFORMANCE. ALL UNITS SHOULD BE INSPECTED FOR THIS CONDITION, AS DURING TRANSPORTATION AND INSTALLATION THE SEALS CAN BE DISTURBED. IF REQUIRED, A LIGHT BEAD OF CAULKING IS RECOMMENDED TO SEAL THE CHASSIS, TO THE AIR SEAL TO ELIMINATE LEAKAGE.

Installation Manual for Comfort Pack Electric Units

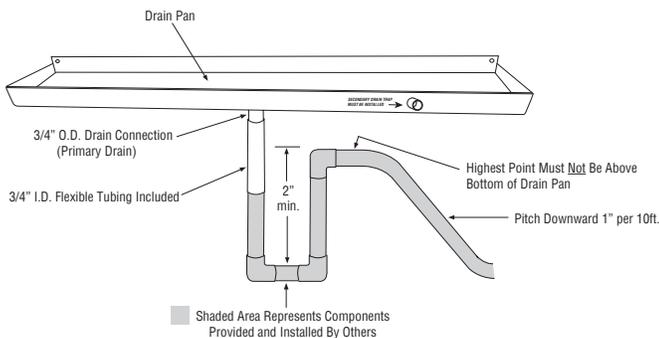
The unit should be provided with support inside the building in the area of the return air opening. The support should be high enough to allow for return air provisions to the unit. To reduce the possible transmission of sound and vibration, a resilient material such as rubber or cork should be installed between the support and the base of the unit. All spaces around the top, sides and bottom of the exterior grille area should be caulked and sealed to the wall, making sure that the openings for drainage in the bottom edge are not blocked.

If the optional wall sleeve is used, caulk the spaces between the sleeve and the wall. Completely fill the clearance on all sides between the unit and the wall sleeve with a polyurethane foam sealant (follow manufacturer's suggested application manual). Provide the unit with support inside the building in the area of the return air opening. Slide the unit into the wall sleeve and fasten the unit to the sleeve with the five screws provided with the sleeve.

NOTE: FOR EASE OF INSTALLATION, INSTALL THE CABINET INTO THE WALL SLEEVE FIRST WITHOUT THE COOLING CHASSIS. THEN SLIDE COOLING CHASSIS IN AFTER CABINET IS IN PLACE.

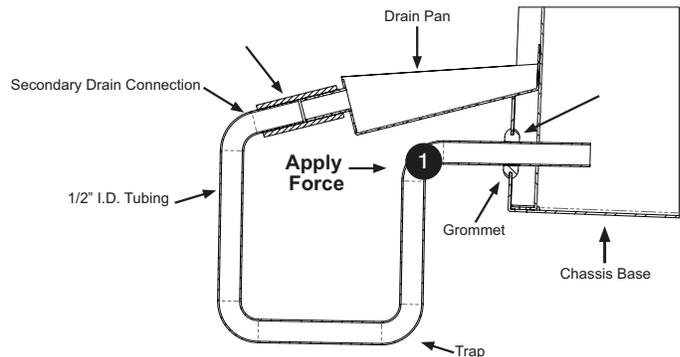
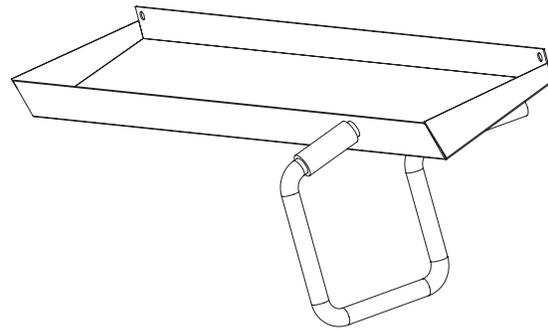
Drainage

The 3/4" I.D. flexible tubing included should be connected to the Comfort Pack primary drain connection so that it can easily be disconnected if the cooling chassis must be removed. A trap at least 2" deep should be provided close to the drain pan. The tubing should not be higher than the bottom of the unit drain pan at any point to assure proper drainage and allow chassis removal. The drain line should pitch downward at least 1" per 10 ft. to an open building drain trap.



Secondary Drain Trap Install Instructions:

1. The trap and 2" piece of clear flexible 1/2" ID tubing are shipped loose to prevent damage. They should be installed after the Comfort Pack unit is installed and the return air connection completed.
2. The trap must be primed (filled with water) for proper operation of the secondary drain system. This may be done prior to installation of the trap or after.
3. Insert trap into the grommet located in chassis base pan.
 - a. Apply force to section 1 (refer to drawing below)
 - b. Ensure at least .5" - 0.75" of tubing is inserted into the grommet
 - c. PVC should be flush with drain pan connection

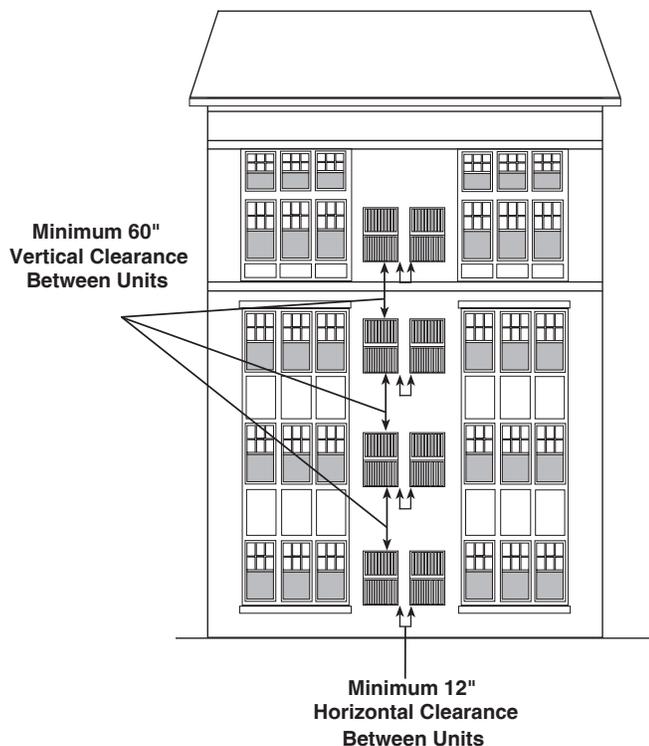


4. Position the trap as shown and slide the 2" piece of clear flexible tubing about 1" onto the top end of the trap. Slide the top of the flexible tube on the trap onto the bottom of the 1/2" OD secondary drain connection and push the top of the trap up. The trap should be positioned so that there is only a small gap between the top of the trap and the bottom of the secondary drain connection.

5. To avoid damage whenever the slide-out chassis has to be removed from the cabinet, remove the secondary drain trap before sliding the chassis out. After the chassis is reinstalled in the cabinet, prime the trap with water before reinstalling it.

Clearances

For proper unit performance and maximum operating life please maintain the following minimum installation clearances.



*Less than 12" Call National Comfort Products

Comfort Pack units must be installed through an outside wall. Confined spaces and/or covered areas should be avoided. Consult the factory if unclear of clearances required. Units must be installed a minimum of **12"** apart when two units are side by side. If three or more units are to operate next to one another, allow a minimum of **60"** between units or pairs of units. Also, a vertical clearance of **60"** should be maintained between units. Units installed on the bottom floor should be mounted at least **8"** off of the ground.

The unit is designed and approved for thru the wall installation only. The unit must be installed a minimum of **8"** above a finished floor. If the unit is installed in a residential garage, it must be installed so that the ignition source and burners are located not less than **18"** above the floor, and it must be located or protected to avoid physical damage by vehicles.

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. Extend the unit approximately 3/4" beyond outside surface of the wall. Optional mounting angles can be purchased from the factory or field fabricated for locating and mounting the unit in the wall.
3. The wall opening across the top and bottom must be flashed.
 - a. During periods of rain and wind the primary drainage path may not be adequate to handle the load. Secondary precautions may also be required but not limited to the following:
 - Seal flashing to unit
 - Floor drain
 - Additional field sealing of sheet metal joints
 - Sealing of unused access opening
4. Clearances to air inlets and outlets must be adequate to ensure no air flow obstructions or recirculation of condenser air flow.
5. Some architectural designs of buildings will require the unit to be mounted behind a decorative grille. The performance (capacity and efficiency) of the unit may be reduced with the use of these decorative grilles. The less resistive these grilles are to air flow, the better the units performance will be. Outdoor louvers provided by others must be approved by NCP to maintain unit performance and warranty. **Care must be taken to locate the condenser coil away from loose debris that may clog intake.**
6. If the unit is mounted behind a decorative grille, one or both of the following items must be done to eliminate recirculation of air to the unit:
 - a. The front of the unit must be mounted tight to the inside of the architectural grille
 - b. A barrier must be provided to prevent recirculation of air to the unit (mixing of inlet and outlet air) when the front of the unit is mounted back from the inside of the architectural grille
7. 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.
8. 30" clearance is required for service accessibility on the inside service panel.
9. If more than one unit is to be installed in the same area a min. of 60" vertical must be maintained between units to minimize recirculation of condenser exhaust air.
10. Care must be taken when locating the unit. Locate away from bedrooms as operational sounds may be objectionable.

Electrical

All wiring must be installed in accordance with applicable codes.

The unit is factory wired for 230/1/60 power. For 208/1/60 power systems, the wiring to the primary side of the control transformer should be changed from the 240-volt connection to the 208-volt connection to provide proper operation of the control system.

The operating voltage of the unit is from 197 to 253 volts. Operating the equipment outside of these limits will void the warranty.

Electrical Supply and Connections

All electrical wiring and connections, including electrical grounding must be made in accordance with the National Electric Code ANSI/NFPA No. 70 (latest edition) or, in Canada, the Canadian Electrical Code, Part I-C.S.A. Standard C22.1. In addition, the installer should be aware of any local ordinances or utility company requirements that might apply.

Check the rating plate for the supply voltage and current requirements. A dedicated line voltage supply with fused disconnect switch should be run directly from the main electrical panel to the unit. All external wiring must be within approved conduit and have a minimum temperature rise rating of 60°C. Conduit from the disconnect switch must be run so as not to interfere with the service panels.

Controls

Field wiring between the unit and the wall thermostat (by others) may be low voltage for Class 2 systems. The location of the wall thermostat should be 4 to 5 feet above the floor and carefully selected so that the thermostat senses the temperature of the largest conditioned area, without being influenced by drafts, sun exposure or outside temperature.

Electrical Connections

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.

- a. Line Voltage Connections
- b. Connect the single phase power supply to unit fuse blower terminal L1 and L2
- c. Connect ground wire to lug
- d. Low Voltage Connections

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.

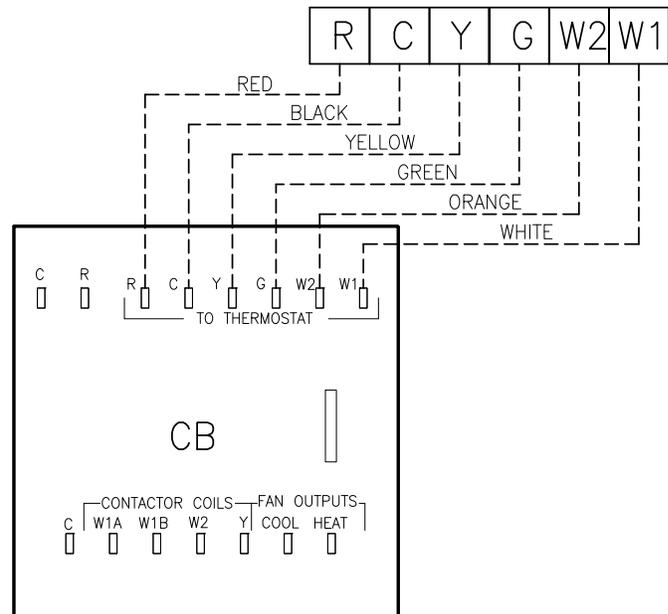
Electrical - Low Voltage

Low Voltage Maximum Wire Length

Table defines the maximum total length of low voltage wiring from the outdoor unit, 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.

Thermostat Connections Models



NOTE: IF A 2 STAGE THERMOSTAT IS NOT USED CONNECT BOTH WHITE(W1) AND ORANGE(W2) WIRES TOGETHER. THESE WIRES ARE NOT PRESENT ON CPE4XX00-U MODELS

Installation Manual for Comfort Pack Electric Units

Electrical - High Voltage

NOMINAL VOLTAGE	MINIMUM VOLTAGE	MAXIMUM VOLTAGE
208-230	197	253

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.

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

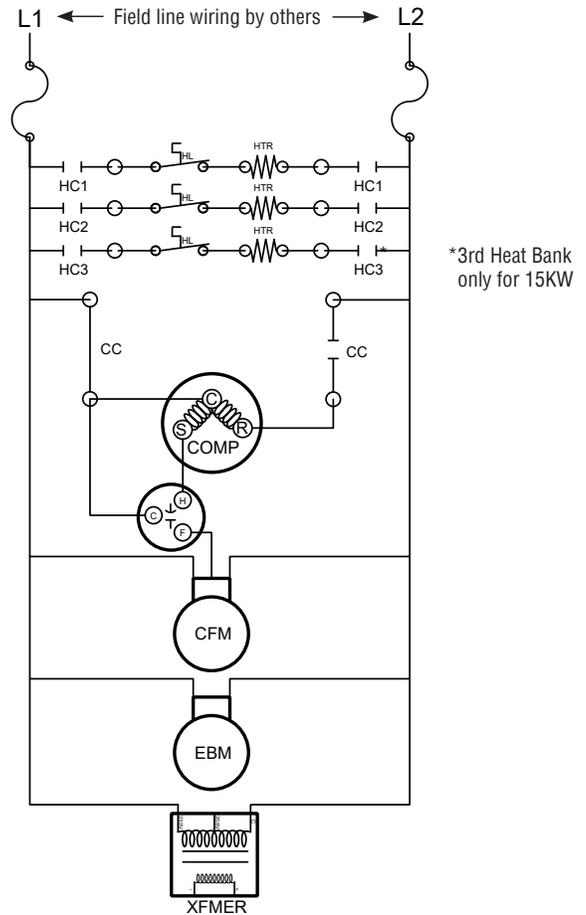
OR

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.

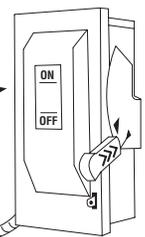
Power wiring must comply with national, state, and local codes.

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.

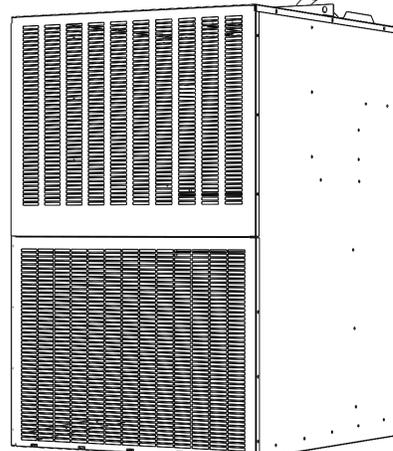
Wiring Schematic/Electric Heat 3, 5, 7, 10 & 15Kw



Install a separate disconnect switch at the location of the through the wall unit.



Disconnect Switch

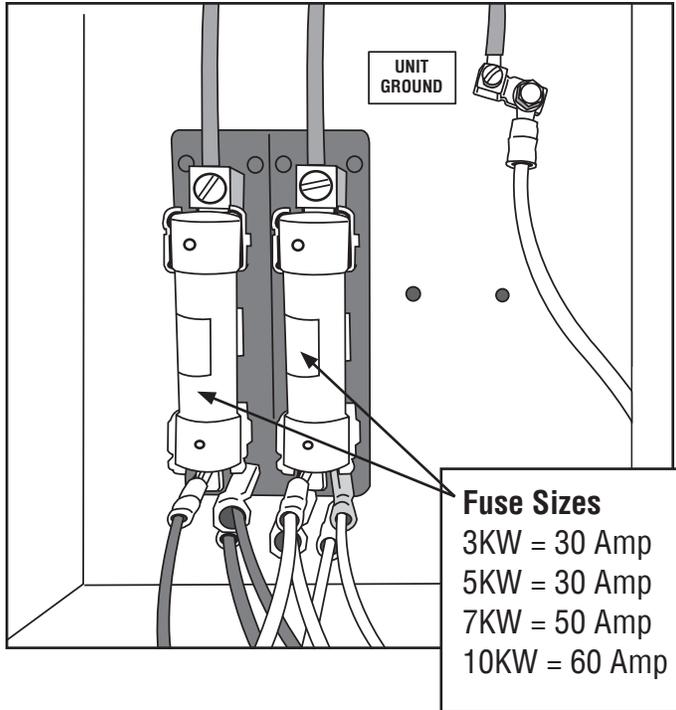


Thru-the-Wall Comfort Pack (CPE) Unit

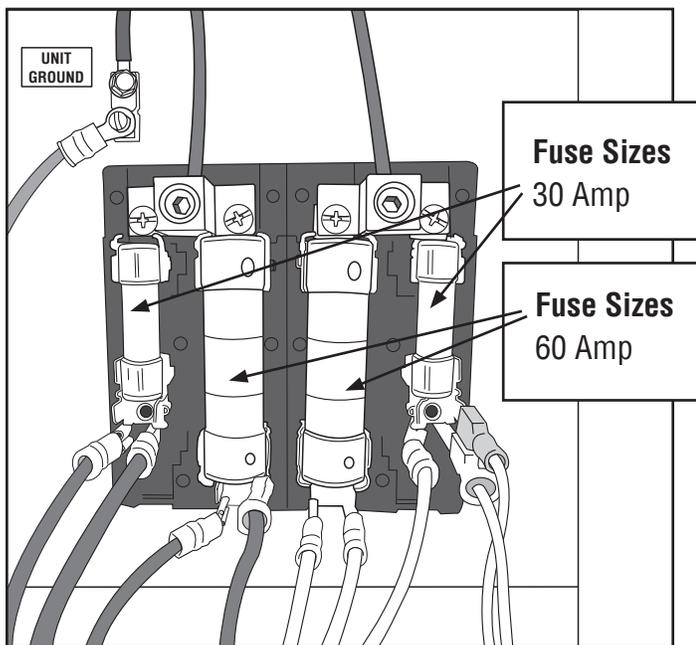
High Voltage Diagrams

*FUSES NOT INSTALLED ON CPE4XX00-U MODELS

3, 5, 7, 10KW Fuse Box



15KW Fuse Box



Maintenance and Service

The 16" x 25" x 1" filter on the cooling chassis must be maintained regularly to assure that the unit provides optimal performance and energy efficiency. The intervals between replacing depends entirely on the cleanliness of the return air to the unit and the time that the indoor blower operates. The air filter is accessible by removing the lower access panel. The filter should be inspected and replaced as needed and is not washable. Substituting the air filter with media other than the type provided with the unit is not recommended, since other materials may cause additional static pressure, which could reduce the air delivery of the unit. **The unit should never be operated without the air filter and access panels in place.**

Cooling Chassis

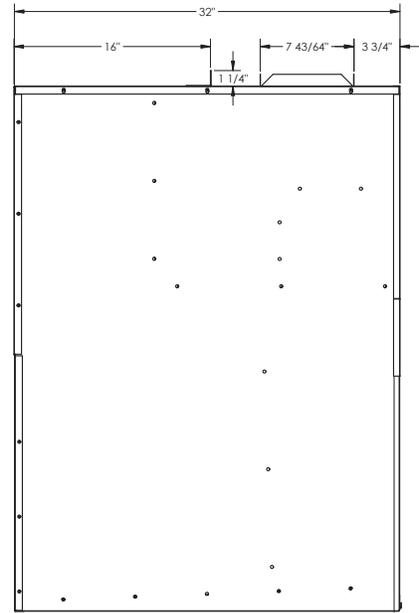
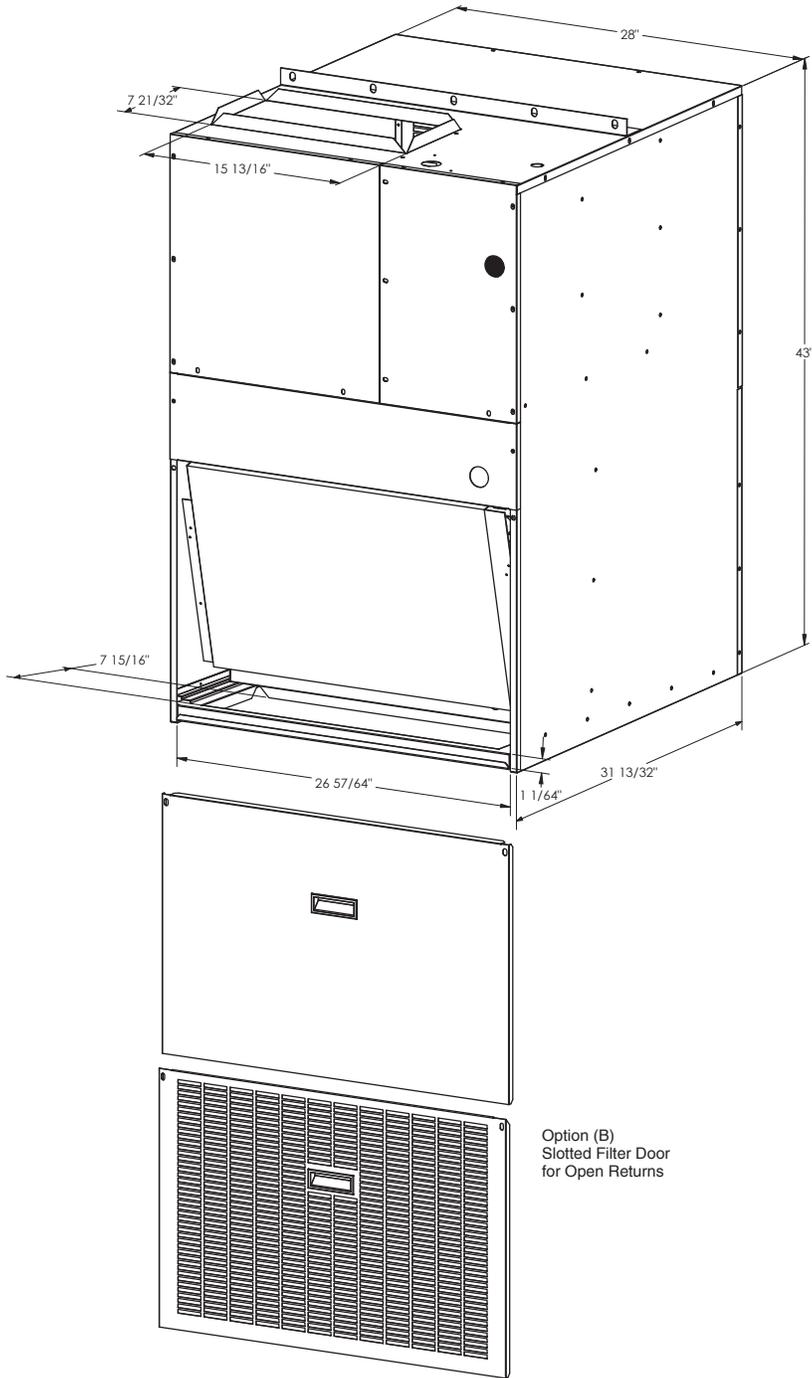
The cooling chassis contains all items related to the cooling functions of the unit, and also contains the indoor blower and motor for the heating function. For extensive servicing, qualified personnel may choose to remove the cooling chassis from the unit and take it to a work area. Spare chassis are recommended so that extensive servicing can be performed outside the living space. This will prevent introducing dirt or doing damage in the living area, and could help to eliminate significant disruption of the air conditioning and heating functions in the living areas.

The indoor blower motor and the outdoor fan motor have permanently lubricated bearings and do not require routine service. The refrigeration system is sealed and factory charged with R-410A so that routine maintenance is not required. The electrical controls do not require routine service. Cleaning of the outdoor coil, indoor coil, drain pan, and inside the bottom of the chassis are recommended at least once a year, and more often if the equipment is operated in a dusty or hostile environment. The outdoor coil is an aluminum microchannel condensing coil with an anti-corrosion coating that requires specific precaution when cleaning. It is recommended to rinse the coil using a low pressure hose (less than 70 psi) to prevent buildup of dirt and debris. Rinse from the outside of the coil in, making sure to protect the condenser motor from water damage during the cleaning process. Leaves, twigs, and other large debris should be removed with a soft, non-metallic bristle brush prior to rinsing of the coil to prevent debris from being forced between the fins. Care should be taken not to use the brush horizontally across the fins as they are easily damaged.

DO NOT USE CHEMICALS, HOUSEHOLD BLEACH, OR ACID CLEANERS AS THEY WILL ACCELERATE CORROSION ON THE COIL. AVOID USING PRESSURE WASHERS, HIGH PRESSURE HOSES, OR HIGHLY COMPRESSED AIR TO CLEAN THE COIL. DOING SO CAN PERMANENTLY DAMAGE THE COIL, REDUCE UNIT PERFORMANCE, AND VOID THE WARRANTY.

Power to the unit should always be turned off before performing service or removing the cooling chassis from the unit. One power connector and one control circuit connector are provided for easy disconnecting and re-connecting of the wires between the cooling chassis and cabinet. The controls enclosure cover must be removed to allow access to the screws holding the indoor blower cover plate to the cooling chassis and cabinet. **After reinstalling the cooling chassis, the indoor blower cover plate and controls enclosure cover must be reinstalled.**

Comfort Pack Dimension Drawing



Side view

Option (B)
Slotted Filter Door
for Open Returns

Installation Manual for Comfort Pack Electric Units

Performance Data						
Models	Nominal Cooling Tons	Cooling BTU	Heating BTU		Heating KW	
			230V	208V	230V	208V
CPE41100-U	1	12,000	N/A	N/A	N/A	N/A
CPE41103-U	1	12,000	10,912	8,934	3.2	2.62
CPE41105-U	1	12,000	15,959	13,060	4.68	3.83
CPE41107-U	1	12,000	22,438	18,312	6.58	5.37
CPE41110-U	1	12,000	31,884	26,052	9.35	7.64
CPE41700-U	1.5	17,500	N/A	N/A	N/A	N/A
CPE41703-U	1.5	17,500	10,912	8,934	3.2	2.62
CPE41705-U	1.5	17,500	15,959	13,060	4.68	3.83
CPE41707-U	1.5	17,500	22,438	18,312	6.58	5.37
CPE41710-U	1.5	17,500	31,884	26,052	9.35	7.64
CPE41715-U	1.5	17,500	47,808	39,113	14.02	11.47
CPE42300-U	2	22,000	N/A	N/A	N/A	N/A
CPE42303-U	2	22,000	10,912	8,934	3.2	2.62
CPE42305-U	2	22,000	15,959	13,060	4.68	3.83
CPE42307-U	2	22,000	22,438	18,312	6.58	5.37
CPE42310-U	2	22,000	31,884	26,052	9.35	7.64
CPE42315-U	2	22,000	47,808	39,113	14.02	11.47

Electrical Data												
Models	Voltage	Compressor		Outdoor Fan Motor			Indoor Blower Motor		Minimum Circuit Amps		Maximum Overcurrent Protector	
		RLA	LRA	HP	FLA	LRA	HP	FLA	230V	208V	230V	208V
CPE41100-U	208-230/60/1	4.7	29.5	1/4	2.4	-	1/3	3.0	11.3	11.3	15	15
CPE41103-U	208-230/60/1	4.7	29.5	1/4	2.4	-	1/3	3.0	20.4	18.7	25	20
CPE41105-U	208-230/60/1	4.7	29.5	1/4	2.4	-	1/3	3.0	28.4	26	30	30
CPE41107-U	208-230/60/1	4.7	29.5	1/4	2.4	-	1/3	3.0	38.8	35.3	40	40
CPE41110-U	208-230/60/1	4.7	29.5	1/4	2.4	-	1/3	3.0	53.8	48.9	55	50
CPE41700-U	208-230/60/1	6.5	37.5	1/4	1.8	3.6	1/3	3.0	13	13	15	15
CPE41703-U	208-230/60/1	6.5	37.5	1/4	1.8	3.6	1/3	3.0	20.4	18.7	25	20
CPE41705-U	208-230/60/1	6.5	37.5	1/4	1.8	3.6	1/3	3.0	28.4	26	30	30
CPE41707-U	208-230/60/1	6.5	37.5	1/4	1.8	3.6	1/3	3.0	38.8	35.3	40	40
CPE41710-U	208-230/60/1	6.5	37.5	1/4	1.8	3.6	1/3	3.0	53.8	48.9	55	50
CPE41715-U	208-230/60/1	6.5	37.5	1/4	1.8	3.6	1/3	3.0	79.2	71.9	80	75
CPE42300-U	208-230/60/1	8.4	37.0	1/4	2.4	-	1/2	3.9	16.8	16.8	25	20
CPE42303-U	208-230/60/1	8.4	37.0	1/4	2.4	-	1/2	3.9	21.3	19.6	25	20
CPE42305-U	208-230/60/1	8.4	37.0	1/4	2.4	-	1/2	3.9	29.3	26.9	30	30
CPE42307-U	208-230/60/1	8.4	37.0	1/4	2.4	-	1/2	3.9	39.7	36.2	40	40
CPE42310-U	208-230/60/1	8.4	37.0	1/4	2.4	-	1/2	3.9	54.7	49.8	55	50
CPE42315-U	208-230/60/1	8.4	37.0	1/4	2.4	-	1/2	3.9	80.1	72.8	85	75

Part No.	Description
CPWS	Comfort Pack Wall Sleeve
CPSG-P	Comfort Pack Stamped Grille Painted
CPLG	Comfort Pack Architectural Louver Grille
CPLG-S	Comfort Pack Architectural Louver Grille for Sleeve (Attaches to Wall Sleeve Only)
CPLG-P	Comfort Pack Architectural Louver Grille Painted (Attaches to Units Only)
CPLG-SP	Comfort Pack Architectural Louver Grille Sleeve Painted (Attaches to Wall Sleeve Only)
A	Omit Stamped Grilles
B	Slotted Filter Door
C	Combination of both A & B

All specifications are subject to change without notice.

Installation Manual for Comfort Pack Electric Units

****CPE4XX00-U MODELS DO NOT REQUIRE A HEAT TEMPERATURE RISE**

Comfort Pack Airflow Data @208 Volts												
Unit Size	Color	Speed Tap	0.1	TR	0.2	TR	0.3	TR	0.4	TR	0.5	TR
CPE41103	Red	1	780	10.6	770	10.7	760	10.9	725	11.4	680	12.2
	Yellow	2	715	11.6	690	12.0	660	12.5	620	13.3	560	14.8
	Blue	3	620	13.3	580	14.3	520	15.9	450	18.4	380	21.8
	Black	4	550	15.0	500	16.5	430	19.2	340	24.3	240	34.5
	Orange	5	415	19.9	325	25.5	225	36.8	n/a	n/a	n/a	n/a
CPE41703	Red	1	780	10.6	770	10.7	760	10.9	725	11.4	680	12.2
	Yellow	2	715	11.6	690	12.0	660	12.5	620	13.3	560	14.8
	Blue	3	620	13.3	580	14.3	520	15.9	450	18.4	380	21.8
	Black	4	550	15.0	500	16.5	430	19.2	340	24.3	240	34.5
	Orange	5	415	19.9	325	25.5	225	36.8	n/a	n/a	n/a	n/a
CPE42303	Red	1	850	9.7	833	9.9	815	10.1	803	10.3	790	10.5
	Yellow	2	750	11.0	730	11.3	710	11.7	698	11.9	685	12.1
	Blue	3	635	13.0	613	13.5	590	14.0	576	14.4	562	14.7
	Black	4	555	14.9	533	15.5	510	16.2	493	16.8	475	17.4
	Orange	5	405	20.4	378	21.9	350	23.6	328	25.2	305	27.1
CPE41105	Red	1	780	15.5	770	15.7	760	15.9	725	16.7	680	17.8
	Yellow	2	715	16.9	690	17.5	660	18.3	620	19.5	560	21.6
	Blue	3	620	19.5	580	20.8	520	23.3	450	26.9	380	31.8
	Black	4	550	22.0	500	24.2	430	28.1	340	35.6	240	50.4
	Orange	5	415	29.1	325	37.2	225	53.7	n/a	n/a	n/a	n/a
CPE41705	Red	1	780	15.5	770	15.7	760	15.9	725	16.7	680	17.8
	Yellow	2	715	16.9	690	17.5	660	18.3	620	19.5	560	21.6
	Blue	3	620	19.5	580	20.8	520	23.3	450	26.9	380	31.8
	Black	4	550	22.0	500	24.2	430	28.1	340	35.6	240	50.4
	Orange	5	415	29.1	325	37.2	225	53.7	n/a	n/a	n/a	n/a
CPE42305	Red	1	850	14.2	833	14.5	815	14.8	803	15.1	790	15.3
	Yellow	2	750	16.1	730	16.6	710	17.0	698	17.3	685	17.7
	Blue	3	635	19.0	613	19.7	590	20.5	576	21.0	562	21.5
	Black	4	555	21.8	533	22.7	510	23.7	493	24.5	475	25.5
	Orange	5	405	29.9	378	32.0	350	34.6	328	36.9	305	39.6
CPE41107	Red	1	780	21.7	770	22.0	760	22.3	725	23.4	680	24.9
	Yellow	2	715	23.7	690	24.6	660	25.7	620	27.3	560	30.3
	Blue	3	620	27.3	580	29.2	520	32.6	450	37.7	380	44.6
	Black	4	550	30.8	500	33.9	430	39.4	340	49.9	240	70.6
	Orange	5	415	40.9	325	52.2	225	75.4	n/a	n/a	n/a	n/a
CPE41707	Red	1	780	21.7	770	22.0	760	22.3	725	23.4	680	24.9
	Yellow	2	715	23.7	690	24.6	660	25.7	620	27.3	560	30.3
	Blue	3	620	27.3	580	29.2	520	32.6	450	37.7	380	44.6
	Black	4	550	30.8	500	33.9	430	39.4	340	49.9	240	70.6
	Orange	5	415	40.9	325	52.2	225	75.4	n/a	n/a	n/a	n/a
CPE42307	Red	1	850	19.9	833	20.4	815	20.8	803	21.1	790	21.5
	Yellow	2	750	22.6	730	23.2	710	23.9	698	24.3	685	24.8
	Blue	3	635	26.7	613	27.7	590	28.7	576	29.4	562	30.2
	Black	4	555	30.6	533	31.8	510	33.2	493	34.4	475	35.7
	Orange	5	405	41.9	378	44.9	350	48.4	328	51.7	305	55.6
CPE41110	Red	1	780	30.9	770	31.3	760	31.7	725	33.3	680	35.5
	Yellow	2	715	33.7	690	35.0	660	36.5	620	38.9	560	43.1
	Blue	3	620	38.9	580	41.6	520	46.4	450	53.6	380	63.5
	Black	4	550	43.9	500	48.2	430	56.1	340	70.9	240	100.5
	Orange	5	415	58.1	325	74.2	225	107.2	n/a	n/a	n/a	n/a
CPE41710	Red	1	780	30.9	770	31.3	760	31.7	725	33.3	680	35.5
	Yellow	2	715	33.7	690	35.0	660	36.5	620	38.9	560	43.1
	Blue	3	620	38.9	580	41.6	520	46.4	450	53.6	380	63.5
	Black	4	550	43.9	500	48.2	430	56.1	340	70.9	240	100.5
	Orange	5	415	58.1	325	74.2	225	107.2	n/a	n/a	n/a	n/a
CPE42310	Red	1	850	28.4	833	29.0	815	29.6	803	30.0	790	30.5
	Yellow	2	750	32.2	730	33.0	710	34.0	698	34.6	685	35.2
	Blue	3	635	38.0	613	39.4	590	40.9	576	41.9	562	42.9
	Black	4	555	43.5	533	45.3	510	47.3	493	48.9	475	50.8
	Orange	5	405	59.6	378	63.8	350	68.9	328	73.5	305	79.1
CPE41715	Red	1	780	46.4	770	47.0	760	47.7	725	50.0	680	53.3
	Yellow	2	715	50.7	690	52.5	660	54.9	620	58.4	560	64.7
	Blue	3	620	58.4	580	62.4	520	69.6	450	80.5	380	95.3
	Black	4	550	65.8	500	72.4	430	84.2	340	106.5	240	150.9
	Orange	5	415	87.3	325	111.4	225	161.0	n/a	n/a	n/a	n/a
CPE42315	Red	1	850	42.6	833	43.5	815	44.4	803	45.1	790	45.8
	Yellow	2	750	48.3	730	49.6	710	51.0	698	51.9	685	52.9
	Blue	3	635	57.0	613	59.1	590	61.4	576	62.9	562	64.4
	Black	4	555	65.3	533	67.9	510	71.0	493	73.5	475	76.2
	Orange	5	405	89.4	378	95.8	350	103.5	328	110.4	305	118.7

Installation Manual for Comfort Pack Electric Units

****CPE4XX00-U MODELS DO NOT REQUIRE A HEAT TEMPERATURE RISE**

Comfort Pack Airflow Data @230 Volts												
Unit Size	Color	Speed Tap	0.1	TR	0.2	TR	0.3	TR	0.4	TR	0.5	TR
CPE41103	Red	1	780	13.0	770	13.1	760	13.3	725	13.9	680	14.9
	Yellow	2	715	14.1	690	14.6	660	15.3	620	16.3	560	18.0
	Blue	3	620	16.3	580	17.4	520	19.4	450	22.5	380	26.6
	Black	4	550	18.4	500	20.2	430	23.5	340	29.7	240	42.1
	Orange	5	415	24.3	325	31.1	225	44.9	n/a	n/a	n/a	n/a
CPE41703	Red	1	780	13.0	770	13.1	760	13.3	725	13.9	680	14.9
	Yellow	2	715	14.1	690	14.6	660	15.3	620	16.3	560	18.0
	Blue	3	620	16.3	580	17.4	520	19.4	450	22.5	380	26.6
	Black	4	550	18.4	500	20.2	430	23.5	340	29.7	240	42.1
	Orange	5	415	24.3	325	31.1	225	44.9	n/a	n/a	n/a	n/a
CPE42303	Red	1	850	11.9	833	12.1	815	12.4	803	12.6	790	12.8
	Yellow	2	750	13.5	730	13.8	710	14.2	698	14.5	685	14.7
	Blue	3	635	15.9	613	16.5	590	17.1	576	17.5	562	18.0
	Black	4	555	18.2	533	19.0	510	19.8	493	20.5	475	21.3
	Orange	5	405	24.9	378	26.7	350	28.9	328	30.8	305	33.1
CPE41105	Red	1	780	18.9	770	19.2	760	19.4	725	20.4	680	21.7
	Yellow	2	715	20.7	690	21.4	660	22.4	620	23.8	560	26.4
	Blue	3	620	23.8	580	25.5	520	28.4	450	32.8	380	38.9
	Black	4	550	26.9	500	29.6	430	34.4	340	43.5	240	61.6
	Orange	5	415	35.6	325	45.5	225	65.7	n/a	n/a	n/a	n/a
CPE41705	Red	1	780	18.9	770	19.2	760	19.4	725	20.4	680	21.7
	Yellow	2	715	20.7	690	21.4	660	22.4	620	23.8	560	26.4
	Blue	3	620	23.8	580	25.5	520	28.4	450	32.8	380	38.9
	Black	4	550	26.9	500	29.6	430	34.4	340	43.5	240	61.6
	Orange	5	415	35.6	325	45.5	225	65.7	n/a	n/a	n/a	n/a
CPE42305	Red	1	850	17.4	833	17.7	815	18.1	803	18.4	790	18.7
	Yellow	2	750	19.7	730	20.2	710	20.8	698	21.2	685	21.6
	Blue	3	635	23.3	613	24.1	590	25.0	576	25.7	562	26.3
	Black	4	555	26.6	533	27.7	510	29.0	493	30.0	475	31.1
	Orange	5	405	36.5	378	39.1	350	42.2	328	45.1	305	48.4
CPE41107	Red	1	780	26.6	770	27.0	760	27.3	725	28.7	680	30.6
	Yellow	2	715	29.1	690	30.1	660	31.5	620	33.5	560	37.1
	Blue	3	620	33.5	580	35.8	520	40.0	450	46.2	380	54.7
	Black	4	550	37.8	500	41.6	430	48.3	340	61.1	240	86.6
	Orange	5	415	50.1	325	63.9	225	92.3	n/a	n/a	n/a	n/a
CPE41707	Red	1	780	26.6	770	27.0	760	27.3	725	28.7	680	30.6
	Yellow	2	715	29.1	690	30.1	660	31.5	620	33.5	560	37.1
	Blue	3	620	33.5	580	35.8	520	40.0	450	46.2	380	54.7
	Black	4	550	37.8	500	41.6	430	48.3	340	61.1	240	86.6
	Orange	5	415	50.1	325	63.9	225	92.3	n/a	n/a	n/a	n/a
CPE42307	Red	1	850	24.4	833	24.9	815	25.5	803	25.9	790	26.3
	Yellow	2	750	27.7	730	28.5	710	29.3	698	29.8	685	30.3
	Blue	3	635	32.7	613	33.9	590	35.2	576	36.1	562	37.0
	Black	4	555	37.4	533	39.0	510	40.7	493	42.1	475	43.7
	Orange	5	405	51.3	378	55.0	350	59.4	328	63.3	305	68.1
CPE41110	Red	1	780	37.8	770	38.3	760	38.8	725	40.7	680	43.4
	Yellow	2	715	41.3	690	42.8	660	44.7	620	47.6	560	52.7
	Blue	3	620	47.6	580	50.9	520	56.8	450	65.6	380	77.7
	Black	4	550	53.7	500	59.0	430	68.7	340	86.8	240	123.0
	Orange	5	415	71.1	325	90.8	225	131.2	n/a	n/a	n/a	n/a
CPE41710	Red	1	780	37.8	770	38.3	760	38.8	725	40.7	680	43.4
	Yellow	2	715	41.3	690	42.8	660	44.7	620	47.6	560	52.7
	Blue	3	620	47.6	580	50.9	520	56.8	450	65.6	380	77.7
	Black	4	550	53.7	500	59.0	430	68.7	340	86.8	240	123.0
	Orange	5	415	71.1	325	90.8	225	131.2	n/a	n/a	n/a	n/a
CPE42310	Red	1	850	34.7	833	35.4	815	36.2	803	36.8	790	37.4
	Yellow	2	750	39.4	730	40.4	710	41.6	698	42.3	685	43.1
	Blue	3	635	46.5	613	48.2	590	50.0	576	51.3	562	52.5
	Black	4	555	53.2	533	55.4	510	57.9	493	59.9	475	62.2
	Orange	5	450	72.9	378	78.1	350	84.3	328	90.0	305	96.8
CPE41715	Red	1	780	56.8	770	57.5	760	58.2	725	61.1	680	65.1
	Yellow	2	715	61.9	690	64.2	660	67.1	620	71.4	560	79.0
	Blue	3	620	71.4	580	76.3	520	85.1	450	98.4	380	116.5
	Black	4	550	80.5	500	88.5	430	102.9	340	130.2	240	184.4
	Orange	5	415	106.7	325	136.2	225	196.7	n/a	n/a	n/a	n/a
CPE42315	Red	1	850	52.1	833	53.1	815	54.3	803	55.1	790	56.0
	Yellow	2	750	59.0	730	60.6	710	62.3	698	63.4	685	64.6
	Blue	3	635	69.7	613	72.2	590	75.0	576	76.9	562	78.8
	Black	4	555	79.8	533	83.1	510	86.8	493	89.8	475	93.2
	Orange	5	405	109.3	378	117.1	350	126.5	328	135.0	305	145.1

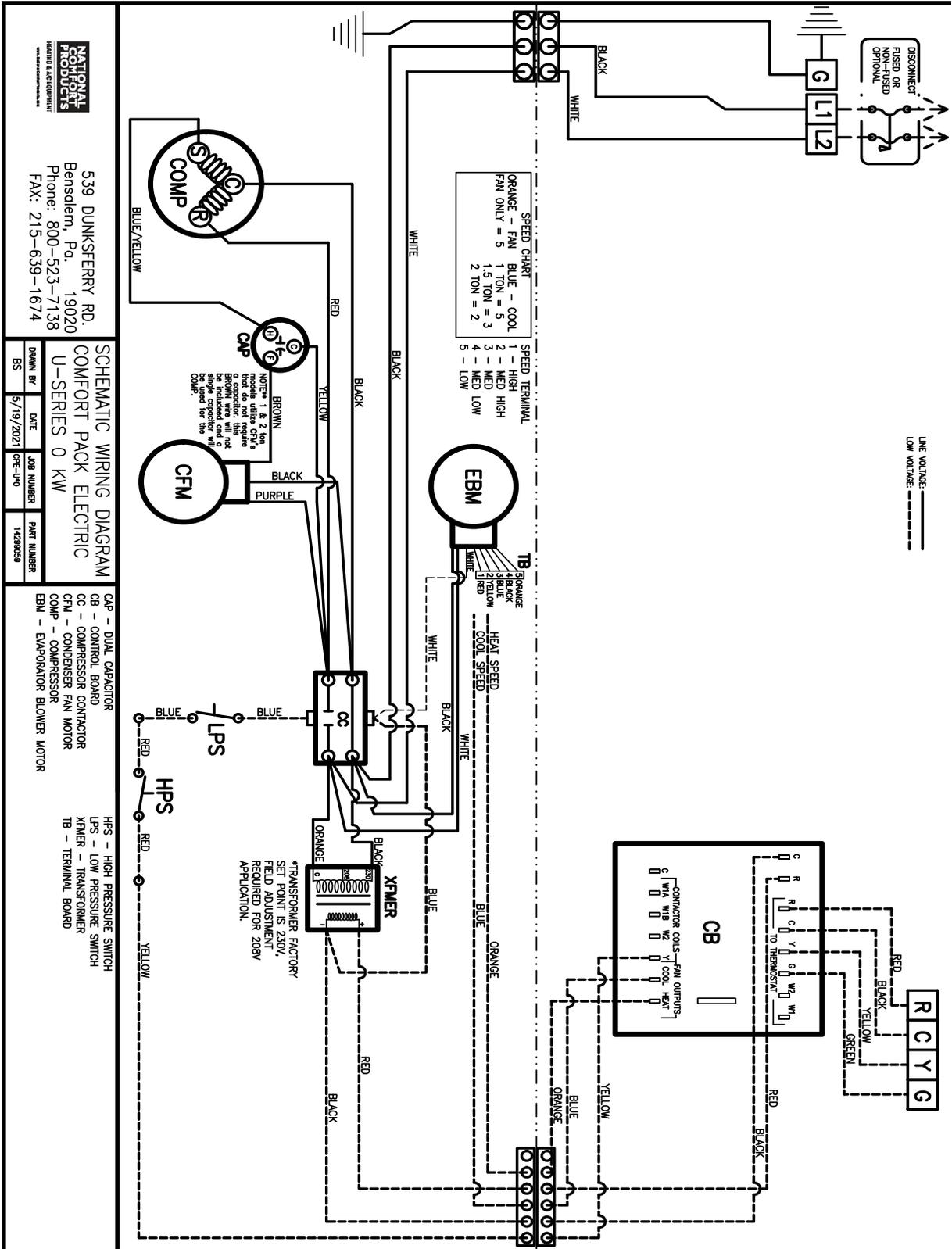
Installation Manual for Comfort Pack Electric Units

Comfort Pack Electric Air Flow Data

Models	Color	Speed Tap	ESP (in. wc) / CFM				
			0.1	0.2	0.3	0.4	0.5
CPE411	Red	1	780	770	760	725	680
	Yellow	2	715	690	660	620	560
	Blue	3	620	580	520	450	380
	Black	4	550	500	430	340	240
	Orange	5	415	325	225	X	X
CPE417	Red	1	780	770	760	725	680
	Yellow	2	715	690	660	620	560
	Blue	3	620	580	520	450	380
	Black	4	550	500	430	340	240
	Orange	5	415	325	225	X	X
CPE423	Red	1	850	833	815	803	790
	Yellow	2	750	730	710	698	685
	Blue	3	635	613	590	576	562
	Black	4	555	533	510	493	475
	Orange	5	405	378	350	328	305

Installation Manual for Comfort Pack Electric Units

U*00 Wiring Schematic - 0Kw



Installation Manual for Comfort Pack Electric Units

To assure accuracy when ordering replacement parts, please provide the following information:

EXAMPLE:

Unit Model: **CPE41705-U**
 Serial #: **34721113**
 Part #: **14208607**

Replacement Parts Guide | Cabinet and Furnace Parts

Cabinet Parts					
Part Description	3kW	5kW	7kW	10kW	15kW
Wire Harness - Control			14230025		
Wire Harness - Power			14230029		
Side Seal			14231012		
Top Mount Angle			14256101		
Upper Intake Grille			14256438		
Lower Discharge Grille			14256437		
Lower Access Panel			14256123-01		
Vertical Air Divider			14256140V		
Cabinet Air Seal			14256160-01		
Side Seal Retainer			14256163		
Controls Cover			14256169-01		
Upper Grille Stiffener			14256174		
Heat Divider			14256413		
Fuse Panel			14256414		
Left Side Panel			14256423		
Right Side Panel			14256424		
Top Panel			14256425		
Upper Front Right Panel			14256439		
Upper Front Left Panel			14256440		
Bottom Panel			14256600		
Rail			14256605		
Horizontal Air Divider			14256606		
Electric Heater Mount			14256611		
Blower Cover Mtg Strap			14256811		
Indoor Blower Cover Plate			14256814		

Furnace Parts					
Part Description	3kW	5kW	7kW	10kW	15kW
Heater	14208400	14208313	14208299	14208312	14208311
Fuse	14693026		14693045	14693028	14693026
Fuse Panel	14693031		14693030		14693029A
Control Board Wiring	14299001				14299002
Control Board	14262041				
Contactors	14262094				

Installation Manual for Comfort Pack Electric Units

Replacement Parts Guide Chassis Parts			
Part Description	Part Number		
	1 Ton	1.5 Ton	2 Ton
Chassis Model	CP41.0-UH1.1	CP41.5-UH1.1	CP42.0-UH1.1
Base Pan	14256431	14256431	14256435
Indoor Coil	14208305	14208301	14208301
Outdoor Coil	14208388	14208389	14208389
Compressor	14210249	14210251	14210252
Compressor Accessories	RECHI 272 ACCESS	RECHI 382 ACCESS	RECHI 492 ACCESS
Capacitor	14225387	14225395	14225397
TXV	14275100	14275117	14275118
Outdoor Fan Motor	14270057	14270044	14270057
Outdoor Coil Mount	14256430	14256434	
Drier	14275947		
Outdoor Fan	14214042		
Outdoor Motor Mount	14270101		
Indoor Blower Motor	14270055		14270059
Blower Wheel	14214022		
Blower Housing	14214023		
Indoor Motor Mount	14270105		
Air Divider	14256415		
Indoor Coil Cover	14256647		
Indoor Coil Drain Pan	14256098		
Air Filter	14232002		
Wire Harness Controls	14230024		
Power Connection Plug	14230026		
Compressor Harness	14230057		
Contactactor	14262082		
Transformer 208/240-24V	14262087		
5-Pole Terminal Board	14263062		
Low Pressure Switch	14265026		
High Pressure Switch	14265029		
3/4" ID Drain Tube	14275616		

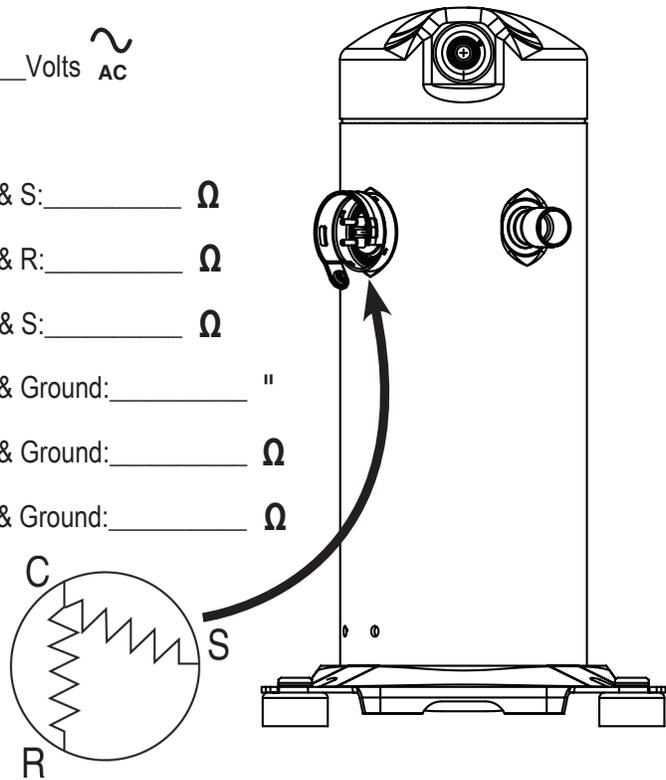


IMPORTANT!!!

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

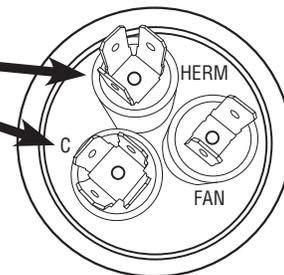
**REMOVAL OF COMPRESSOR WITHOUT FACTORY VERIFICATION
CAN LEAD TO WARRANTY CREDIT BEING DENIED**

1. Incoming Voltage to Compressor at Contactor is: _____ Volts \sim AC
2. Compressor Starting AMP Draw: _____ $\text{---}\text{W}\text{---}$ _R
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: _____ "
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: _____ $\text{---}\text{||}\text{---}$ μF
10. Start Capacitor Reading if Used: _____ $\text{---}\text{||}\text{---}$ μF

TOP VIEW OF CAPACITOR



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

Suction Pressure: _____ psig Discharge Pressure: _____ psig
 Super Heat: _____ F Subcooling: _____ F



A Division of National Refrigeration & Air Conditioning Products, Inc.

539 Dunksferry Road | Bensalem, PA 19020 | 215-244-1400 | 1-800-523-7138 | Fax: 215-639-1674

COMFORT PACK 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:

HEAT EXCHANGERS (Gas units only): for ten years from the date of original installation.

ALL OTHER PARTS: For all other parts except the Heat Exchanger, 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

Installation Manual for Comfort Pack Electric Units

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. Heat Exchangers. In addition to the above-reference requirements, customer is also required to purchase a replacement heat exchanger and return the original heat exchanger to National Comfort at National’s discretion, freight prepaid. If National Comfort determines that there is a defect in material or workmanship in the heat exchanger that is covered by this Warranty, then National Comfort shall credit Customer for the cost of the new replacement heat exchanger. 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 heat exchanger and completed RMA must accompany the original heat exchanger 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. .

B. 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 Copeland 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 scroll 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.



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HEATING & A/C EQUIPMENT

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