

Getting the most out of your

# COLD-CLIMATE HEAT PUMP HEATING AND COOLING SYSTEM

A HOMEOWNER'S GUIDE



Cold-climate heat pump systems heat and cool your home at a fraction of the cost of oil and propane. Get the top performance out of your new energy-efficient system by following these simple operation guidelines.

## OPERATING TIPS:

### PROPERLY SET THE SYSTEM

The auto mode may not provide the most efficient and comfortable operation. Set the indoor unit to HEAT mode during the cooler months and COOL mode during the warmer months. If you have multiple indoor units, set them all to operate in the same mode. For instance, if you are operating in HEAT mode during the cooler months, set all units to HEAT mode and conversely COOL mode in the warmer months.

### USE THE "AUTO" FAN SPEED SETTING

As indoor and outdoor conditions change, your heat pump automatically uses the optimal fan speed. Achieve more electric energy savings by using the AUTO fan speed setting instead of other settings (typically quiet, low, medium and high).

### SET THE TEMPERATURE

Depending on the location of your indoor unit, you may need to set the temperature slightly higher or lower than the desired temperature in the room to meet your comfort needs. Think of the remote's temperature setting as a comfort setting rather than the exact temperature desired.

### AVOID ADJUSTING THE TEMPERATURE SETTING

Cold-climate heat pump systems are designed to adjust to changing conditions automatically and efficiently. Once you find a comfortable temperature setting, avoid changing the setting or turning the unit off. Maximum efficiency is attained through a constant set point on the thermostat.

## OPERATION GUIDELINES:

### DETERMINE THE “EFFECTIVE ZONE”

The room area served by the cold climate heat pump system is called the “effective zone”, an area that likely extends beyond the room where the unit is located. Depending on the size of your system, your comfort needs and the configuration of your home, you may increase the size of the effective zone by opening doors between rooms. If you prefer to isolate an adjacent room, you can close doors as needed. If your home’s backup central system thermostat is in the “effective zone” you need to keep it turned down to avoid losing the heat pump heating opportunity.

Do not place furniture, wall hanging etc. in front of the indoor unit. It will only heat and cool effectively if it has a clear path for air movement.

Likewise, do not place any objects within 4' of the outdoor unit. Blocked air flow will prevent the unit from functioning properly and efficiently.

### DEFROST FUNCTION

The coil on the outdoor unit may accumulate frost during cold weather. This is a normal occurrence and your ductless system will defrost automatically while continuing to operate efficiently. During the defrost process, the indoor unit stops producing heat and a light may turn on or start blinking. You may notice water below or around the outdoor unit during this process.

These occurrences are normal; do not try to override this process. At the end of the defrost process (typically 5 to 15 minutes), the unit will return to heating mode.

### LET THE SYSTEM DO THE WORK

Use the cold climate heat pump system as the primary heating and cooling source in the effective zone to maximize cost and energy savings. This will help maintain comfort and ensure that the unit is reducing your fossil fuel use as much as possible.

- When heating your home, rooms outside the effective zone should have “backup” heat with thermostats set at 10°F to 15°F colder or warmer (seasonally) than the hybrid electric system’s temperature setting
- When cooling your home, rooms outside the effective zone with “backup” air conditioning should be set slightly warmer than the ductless system’s temperature setting

In severe weather, make temperature adjustments to provide optimal comfort. In extremely cold weather, the cold climate heat pump system may not be able to provide desired comfort levels to all areas of the effective zone. To maintain comfort in these cases, you should temporarily:

- Increase the thermostat setting on “backup” heat outside of the effective zone as needed. Reduce the size of the effective zone by closing doors to unused portions of the house
- Do not shut the unit off as it will do this automatically and will come back on when conditions dictate.

## MAINTENANCE GUIDELINES:

### CLEAN THE FILTERS

As cold climate heat pump systems operate, they circulate and filter the air in your home. These filters need to be serviced regularly to optimize the performance of your system. Filters are quick and easy to clean and cleaning frequency depends on the conditions of use. Please refer to your operation manual for details.

### SOUNDS

In addition to the low-level fan sound (both indoor and outdoor units), you may also hear “whirring,” “clicking” or the sound of rushing fluid. These sounds are the result of thermal expansion, refrigerant movement or mechanical parts and are normal. As you encounter these sounds, please refer to the operation manual for additional details. Contact your contractor if you are concerned.

This homeowner guide is not meant to replace your manufacturer provided operation manual. Refer to your operation manual for additional details.

