

# Quest PowerHeat HFC 100 Pro

## Installation, Operation and Maintenance Instructions

– Read and Save These Instructions –

*This manual is provided to acquaint you with the portable fan coil so that installation, operation and maintenance can proceed successfully. Ultimate satisfaction depends on the quality of installation and a thorough understanding of this equipment. This unit is built around tested engineering principles and has passed a thorough inspection for quality of workmanship and function.*

### Quest PowerHeat HFC 100 Pro:

- 100,000 BTUs
- 950 CFM
- ETL Certified to ANSI/UL 1995 and CSA C22.2 No. 236
- Thermostatically controlled
- Multiple air filter options
- Multiple ducting options  
16" intake, 18" supply
- Stainless steel cabinet



**Therma-Stor<sup>®</sup> LLC**

Driven by performance. Powered by design.™

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Serial No. \_\_\_\_\_

Purchase Date \_\_\_\_\_

Dealer's Name \_\_\_\_\_



## Safety Precautions

Read the installation, operation and maintenance instructions carefully before installing and operating this device. Proper adherence to these instructions is essential to obtain maximum benefit from your Quest PowerHeat HFC 100 Pro.

### READ AND SAVE THESE INSTRUCTIONS

## WARNING

### Unit Intended for INDOOR USE ONLY; DO NOT USE OUTDOORS

- Device is HOT when in use. To prevent burns, avoid skin contact with hot surfaces.
- Use handle when moving device.
- Extreme caution is necessary when device is used by or near children or invalids and whenever device is left operating unattended.
- Always unplug unit when not in use.
- DO NOT OPERATE with damaged cord, inlet receptacle, or after unit malfunctions, has been dropped or damaged in any manner. Return to authorized service facility for adjustment or repair.
- Device not intended for use directly in an area where it may fall into a bathtub or other water container.
- DO NOT run cord under carpeting or other floor covering. Arrange cord away from traffic area and where it will not present a trip hazard.
- To disconnect device, turn controls off, then remove user-supplied cord from inlet receptacle.
- Connect ONLY to properly grounded outlets.
- DO NOT insert or allow foreign objects to enter any inlet or supply openings as this may cause an ELECTRIC SHOCK or FIRE, or damage to the heater.
- To prevent a possible fire, do not block air inlet or supply openings in any manner. Do not use on soft surfaces, like a bed, where openings may become blocked.
- Device is not explosion proof. Do not use in areas where gasoline, paint, or flammable liquids are used or stored.
- Use device only as described in this manual. Any other use not recommended by the manufacturer may cause fire, electric shock, or injury to persons.
- Ensure that the user-supplied cord is sized appropriately to the current of this device.



## 1. Specifications

**Part Number:** 4034330

**Power:** 1.8 full load amps, 120 V / 60Hz

**Blower:** 950 CFM

### Temperature

**Set Point Range:** 40°F to 180°F

### Filter Box

**(Option):** Filter Size: 16" X 16" X 2"

### Hydronic

**Connections:** 3/4" ISO 7241 Series B couplings

**Duct** Inlet: 16" Flex-Duct

**Connections** Supply: 18" Lay Flat-Duct

**Warranty:** 1 Year Parts and Labor

### Dimensions :

	Unit	Shipping
<b>Width</b>	20.25"	24"
<b>Height</b>	40"	45.25"
<b>Depth</b>	31.375"	25.5"
<b>Weight</b>	115 lb	142 lb

## 2. Operation

### 2.1 Transporting

The Quest PowerHeat HFC 100 *Pro* may be transported and operated upright or on its back. The unit features a high-impact plastic skid plate which protects the unit while navigating obstacles such as curbs, stairways, and while loading into vehicles.

### 2.2 Electrical Requirements

The Quest PowerHeat HFC 100 *Pro* requires 120VAC and features a standard 120VAC inlet receptacle with ground. When properly connected to a grounded outlet, it provides a ground connection through the user-supplied cord in order to protect the operator from electric shock. Ensure that the supply cord used is a 2-conductor with ground and that it has no nicks or cuts in the insulation. The electrical inlet is designed to accept a NEMA 5-15R (receptacle - 15 amp, 2 pole + ground ).

### 2.3 Power Switch and Thermostat

**Master POWER Switch:** The master power switch located on the side of the Quest PowerHeat HFC 100 *Pro* can be used to turn the unit ON, OFF.



When set to ON, the Quest PowerHeat HFC 100 Pro will energize the blower. Temperature set point can be set by using a flat-bladed screwdriver. The thermostat will control only the blower motor - not the glycol fluid - so the unit may be hot even when the blower is not energized. The blower will cycle on and off as needed to maintain the selected temperature.

## 2.4 Glycol Line Connections

Hydronic (hot water/propylene glycol) connections are made using 3/4 inch couplings that comply with the ISO 7241 Series B standard. These couplers minimize the fluid loss on disconnection – but there is a small amount lost (~1 tablespoon/16cc). The Quest PowerHeat HFC 100 Pro has been designed to direct this loss away from the fan inlet.

Ensure that the hydronic pump is off before attempting connection of the hydronic couplers.

Heat transfer fluid temperatures can approach 200°F (93C). Use gloves when handling hot couplers and working around the unit's hot surfaces.

## 2.5 Ducting

The Quest PowerHeat HFC 100 Pro can be ducted at the inlet, the outlet or both. The Quest HFC 100 comes equipped with a snap ring on the outlet that accommodates 18" lay-flat duct. By adding the optional ductable filter box assembly, 16" flex duct can be used on the inlet. When ducting the HFC 100, care must be taken to ensure airflow is not choked off due to kinks or sharp bends in the duct.

# 3 Maintenance

## 3.1 Cleaning

Coils should be checked periodically to ensure they are free of dirt and debris. Remove debris from coil with compressed air (preferred method). If coils become contaminated, they can be washed down with water and blown dry with compressed air.

If the Quest PowerHeat HFC 100 Pro is operated in dirty environments, the optional air filter kit should be installed on the intake of the machine.

# 4 Service

**Servicing the Quest Heat HFC 100 with its high voltage circuitry presents a health hazard which could result in death, serious bodily injury, and/or property damage. Only qualified service people should service this unit.**

**Do not operate the unit without all panels in place.**

## 4.1 Technical Description

The Quest PowerHeat HFC 100 Pro uses a high efficiency heat transfer coil and high volume impeller to transfer and deliver heat to the structure. The system is designed to operate with hydronic heating module



that use a low-pressure, open fluid loop distribution system with an atmospherically vented fluid reservoir. A hydronic heating module warms the heat transfer fluid. This heated fluid is pumped through a distribution system loop, passing through heat exchangers in remote locations. By providing a clean heat source, the system eliminates the need to draw in outside air, minimizing energy costs.

## 4.2 Troubleshooting

### Blower not running

1. Unit unplugged, no power to inlet receptacle
2. Power switch not working or thermostat not calling for heat
3. Wiring fault inside device
4. Defective blower motor or capacitor

### Blower running but no heat

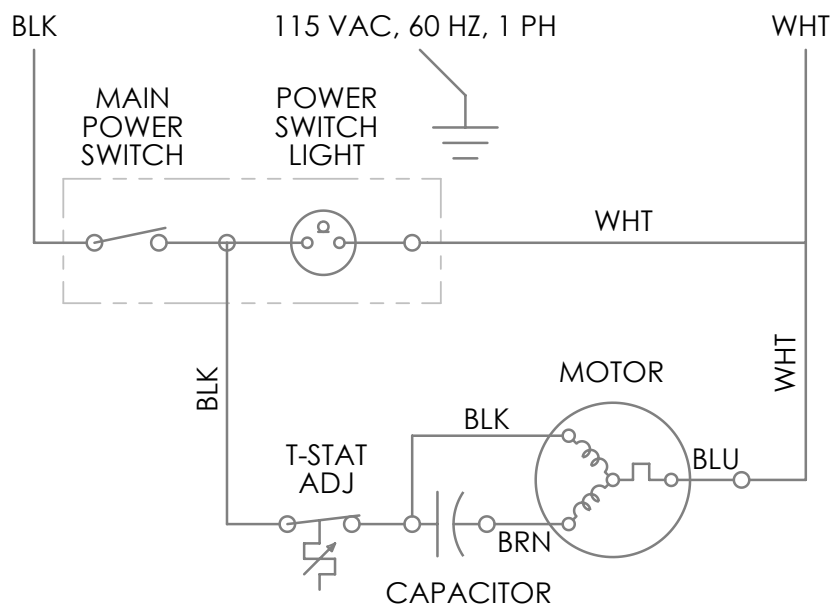
1. Airflow restricted at inlet, outlet or fouled coil
2. Heating source not operating

## 5 Options and Accessories

Accessory Part	Description
4029876	DUCTABLE FILTER BOX KIT
4021799	16" x 16" x 2" MERV-8
4029263	16" X 25" HEAVY DUTY FLEX DUCT
4029256	18" X 250" LAY FLAT DUCT

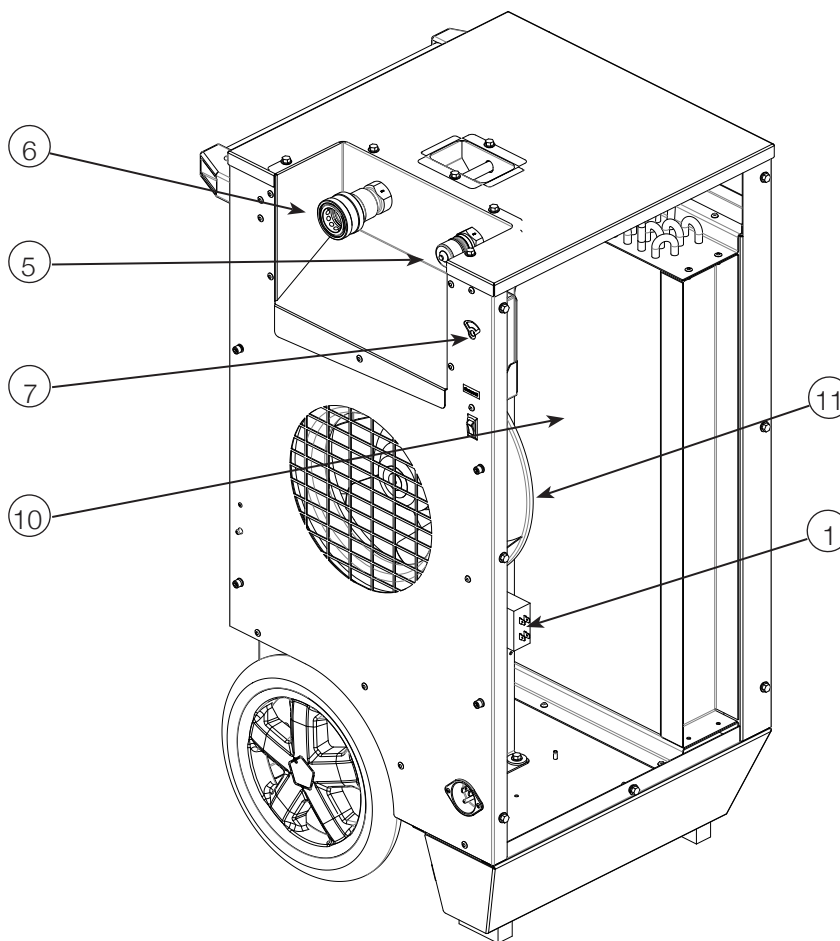


## 6 Wiring Diagram



## 7 Service Parts

Item	Description	Service Part	Qty
1	CAPACITOR 15 MFD	4033031-07	1
2	HOSE CLAMP	4030356	8
3	DUST CAP	4029781	1
4	DUST PLUG	4029782	1
5	COUPLING MALE,3/4"x3/4"FNPT	4029783	1
6	COUPLING,FEMALE,3/4"x3/4"NPT	4029784	1
7	THERMOSTAT	4030411	1
8	NUT JAM 1.25-12 UNF 2B, ZP	4030193	2
9	HOSE	4030341	24"
10	HYDRONIC COIL	4034406	1
11	FAN,MOTORIZED IMPELLER	4029455	1
12	BULKHEAD FITTING	4030192	2
13	18" OVAL SNAP RING	4034484	1





## Quest PowerHeat HFC 100 Pro Limited Warranty

### Warrantor:

Therma-Stor LLC  
4201 Lien Rd.  
Madison, WI 53704  
Telephone: 1-866-933-7486

**Who Is Covered:** This warranty extends only to the original end-user of the Quest PowerHeat HFC 100 Pro and may not be assigned or transferred.

**One Year Warranty:** Therma-Stor LLC warrants that, for one (1) year the Quest PowerHeat HFC 100 Pro will operate free from any defects in materials and workmanship, or Therma-Stor LLC will, at its option, repair or replace the defective part(s), free of any charge.

**End-User Responsibilities:** Warranty service must be performed by a Servicer authorized by Therma-Stor LLC. If the end-user is unable to locate or obtain warranty service from an authorized Servicer, the end-user should call Therma-Stor LLC at the above number and ask for the Therma-Stor Service Department., which will then arrange for covered warranty service. Warranty service will be performed during normal working hours.

The end-user must present proof of purchase (lease) upon request, by use of the warranty card or other reasonable and reliable means. The end-user is responsible for normal care. This warranty does not cover any defect, malfunction, etc. resulting from misuse, abuse, lack of normal care, corrosion, freezing, tampering, modification, unauthorized or improper repair or installation, accident, acts of nature or any other cause beyond Therma-Stor LLC' reasonable control.

**Limitations and Exclusions:** If any Quest PowerHeat HFC 100 Pro part is repaired or replaced, the new part shall be warranted for only the remainder of the original warranty period applicable thereto (but all warranty periods will be extended by the period of time, if any, that the Quest PowerHeat HFC 100 Pro is out of service while awaiting covered warranty service).

UPON THE EXPIRATION OF THE WRITTEN WARRANTY APPLICABLE TO THE QUEST POWERHEAT HFC 100 PRO OR ANY PART THEREOF, ALL OTHER WARRANTIES IMPLIED BY LAW, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL ALSO EXPIRE. ALL WARRANTIES MADE BY THERMA-STOR LLC ARE SET FORTH HEREIN, AND NO CLAIM MAY BE MADE AGAINST THERMA-STOR LLC BASED ON ANY ORAL WARRANTY. IN NO EVENT SHALL THERMA-STOR LLC, IN CONNECTION WITH THE SALE, INSTALLATION, USE, REPAIR OR REPLACEMENT OF ANY QUEST POWERHEAT HFC 100 PRO OR PART THEREOF BE LIABLE UNDER ANY LEGAL THEORY FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES INCLUDING WITHOUT LIMITATION WATER DAMAGE (THE END-USER SHOULD TAKE PRECAUTIONS AGAINST SAME), LOST PROFITS, DELAY, OR LOSS OF USE OR DAMAGE TO ANY REAL OR PERSONAL PROPERTY.

Some states do not allow limitations on how long an implied warranty lasts, and some do not allow the exclusion or limitation of incidental or consequential damages, so one or both of these limitation may not apply to you.

**Legal Rights:** This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

