

Model Number:
OPACH6012AH



OUTDOOR PORTABLE HEAT PUMP WITH AUXILIARY ELECTRIC HEAT

ENGINEERING, INSTALLATION AND SERVICE MANUAL



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FORWARD

This manual provides the user with basic details for the installation and operation of the OceanAire OPACH6012AH Outdoor Portable Heat Pump. It is highly recommended to read and fully understand the instructions outlined within this manual, before operating the OPACH6012AH unit.

As with all commercial air conditioning equipment, it is recommended to have the OPACH6012AH sized and installed by a licensed specifying engineer and contractor, in accordance with all local and state codes. The length of service received can be extended by following the installation instructions and adhering to a preventive maintenance program consistent with outdoor equipment of this type.

NOTICE

In our ongoing process of continuous improvement, the items and procedures described in this manual are subject to change without notice. To communicate with us more effectively, please note model and serial number of the unit before contacting the factory with questions and inquiries.

GENERAL DESCRIPTION

GENERAL INFORMATION

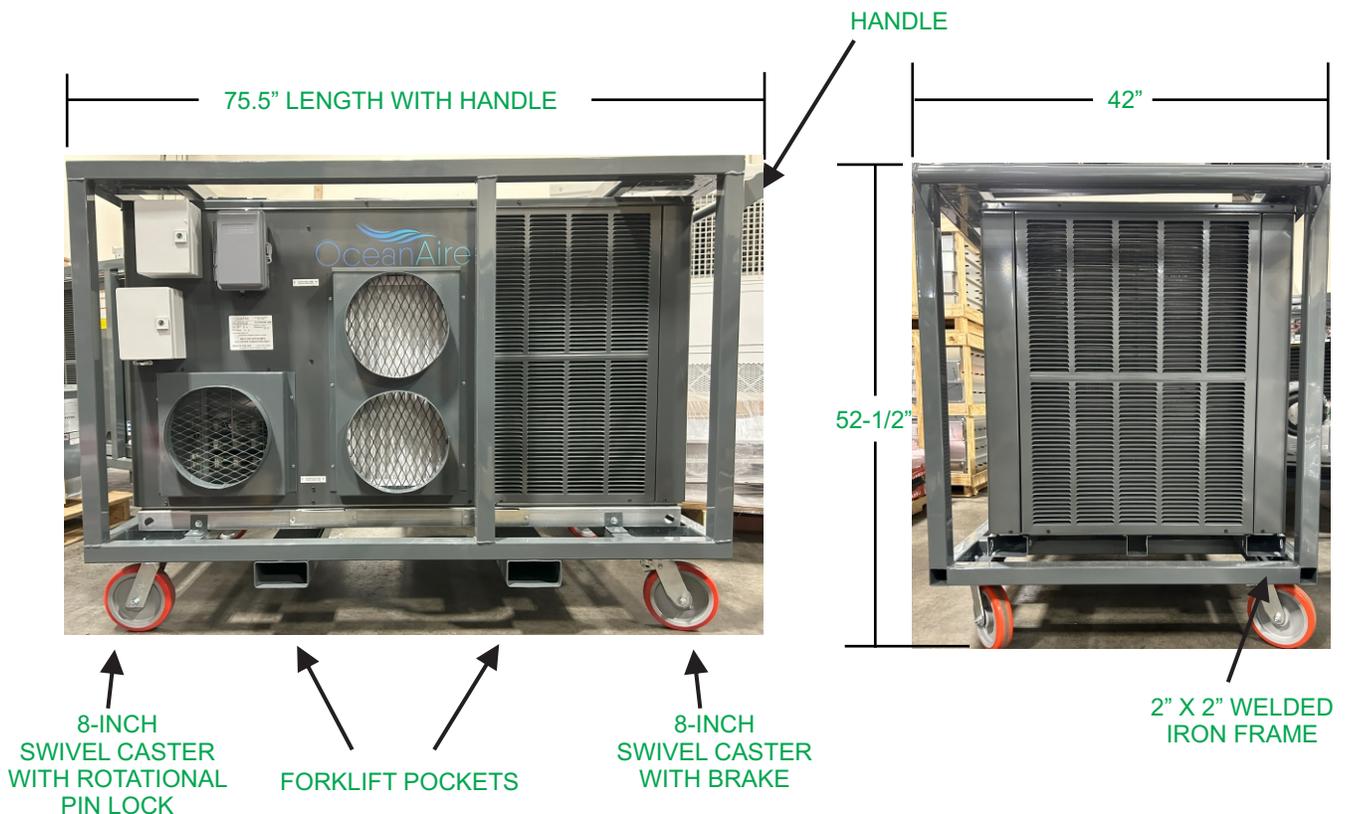
The OceanAire OPACH6012AH is an outdoor portable heat pump designed for temporary cooling and heating applications. With 5 tons of cooling capacity the OPACH6012AH can deliver cooling for almost any industrial application. With 54,500 BTUH in Heat Pump mode and 7 KW Auxiliary Electric Heat, the OPACH6012AH can heat a defined space as well.

The unit is designed for industrial applications. The heavy-gauge 2" x 2" powder coated steel frame safeguards the unit from its surroundings, and aids with handling and storage. 8-inch swivel casters allow for improved mobility and maneuvering on job sites. Two of the swivel casters are equipped with rotational pin-locks, while the other two swivel casters are equipped with brakes for the securing the unit on-site along with storage and transit.

The power connection box, digital controller, main breaker and duct connections are all located on the left side of the unit for quick installation and set-up. The 12-inch supply and return air collars are located on the same side to accommodate access to the controlled space. All electrical receptacles are equipped with weather proof covers. The Drain tube is located on the lower right side of the unit. The Drain Tube with P-trap is outfitted with a 3/4" MGH connector for hose connection purposes. The unit is equipped with a thermostat located inside an NEMA enclosure. A weatherproof receptacle is provided for the installation of the remote thermostat kit (sold separately)

OPACH6012AH FRONT

OPACH6012AH LEFT SIDE





5 Ton Outdoor Portable Heat Pump with Auxiliary Heat

PRODUCT FEATURES

REFRIGERATION

5 Ton Scroll Compressor
 Integrated Compressor Protection
 High Pressure and Low Pressure Cut-Outs

AUXILIARY HEAT - OPTION

Automatic change-over from Heat Pump to Aux. Heat
 7 KW Aux. Electrical Heat

ELECTRICAL

Power Connection Box with Terminal Block
 NOTE: Power cord to be field installed
 50 Amp Circuit Breaker for Unit Power Protection
 40 Amp Auxiliary Heat Breaker
 24V Thermostat with weatherproof enclosure

BLOWER/FILTERS

Multi-Speed ECM Evaporator Blower
 Static Capability Up to 0.7" ESP
 Totally Enclosed Condenser Fan Motor

CABINET

2" x 2" Steel Frame with Handle and Fork Pockets
 Wheel Pockets located in Frame for Stackable Storage (3 High Stack - Maximum)
 8-Inch Urethane Swivel Casters
 Two Swivel with Rotational Locking Pins, Two Swivel with Brakes

DUCT CONNECTIONS

Supply: 1 x 12" Dia. Duct Collar
 Return: 2 x 12" Dia. Duct Collar with integral Return Air Filter Frame
 Filter: (1) 14 x 25 x 1, Pleated

DRAIN

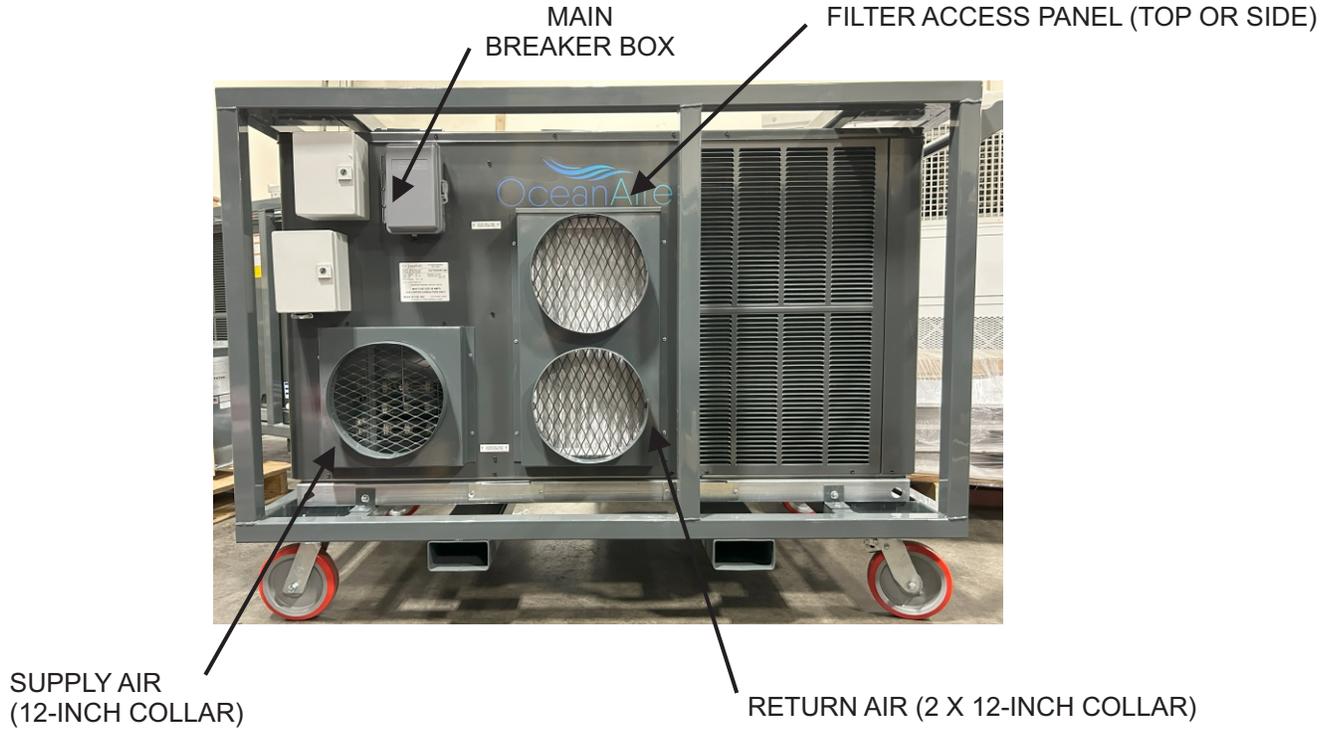
P-Trap with 3/4" Male Garden Hose Connector

TECHNICAL SPECIFICATIONS

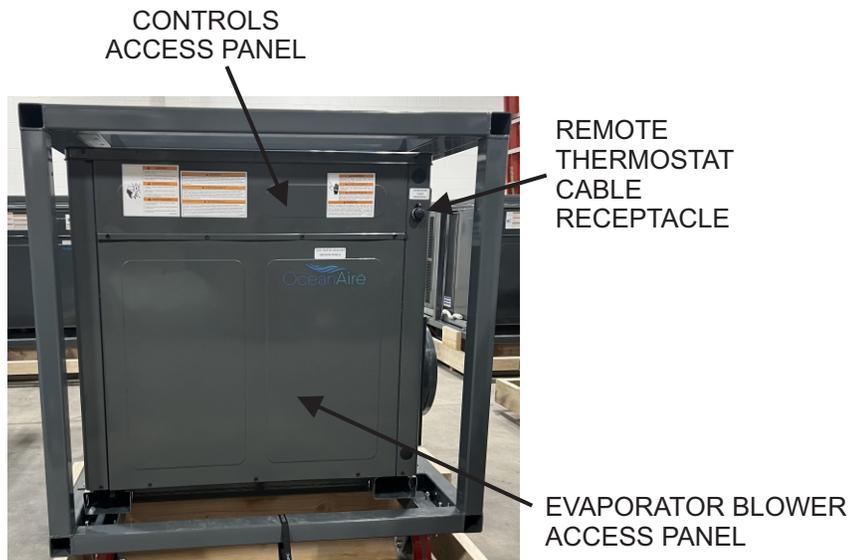
Cooling Capacity:	60,300 BTUH
Aux. Heat Capacity:	7 KW
Voltage:	208-230V, 60Hz, 1PH
Amps:	40.1
Total Watts:	5020
Cooling Ambient:	Operating Range 25° to 115°
Cooling Capacity:	Total BTUH at 80°DB/67°WB Return air, 95°F Outdoor
EER:	11.9
Compressor:	Scroll
Compressor HP:	5
Compressor RLA:	26.4
Compressor LRA:	132
Evaporator CFM - High:	1600
Blower Type:	Centrifugal
Evaporator Motor:	3/4-HP
Condenser Fan:	Propeller
COND CFM:	1750
Condenser Motor:	1/4 HP
Condensate Removal:	Gravity Drain
Refrigerant Charge:	175 ozs. R-410A
Height:	52.5"
Width:	75.5" with handle
Depth:	42"
Net Weight:	710 lbs.

*Specifications subject to change without notice

OPACH6012AH FRONT



OPACH6012AH RIGHT SIDE



NOTE: THE AUXILIARY ELECTRIC HEATER SAFETY BREAKER IS LOCATED BEHIND THE EVAPORATOR BLOWER ACCESS PANEL

SET UP GUIDELINES

CONNECT ONLY TO POWER SOURCE AS SPECIFIED ON UNIT NAMEPLATE

1. Set up the OPACH6012AH unit on a level surface. Ensure that there are no objects on top of the unit, and maintain a minum operating clearance of 3 feet mininum on all sides of unit.
2. Locate Thermostat in weatherproof enclosure on unit.
3. Locate power source and connect the power cord (field installed) to power source
4. Check that all power connections are secure, and that the Main Breaker is ON (up position).
5. Connect Supply Power at Source and observe the thermostat display.
6. To Power OFF unit, set thermostat in the OFF position
7. Once the unit has shut down, it is safe to disconnect the POWER SOURCE.

WARNING - DO NOT DISCONNECT POWER CORD WHILE UNIT IS RUNNING



230 VOLT / 1PH
POWER TERMINAL BLOCK
IN NEMA ENCLOSURE



THERMOSTAT IN
NEMA ENCLOSURE
(OPENED)



MAIN POWER BREAKER
(COVER OPENED)



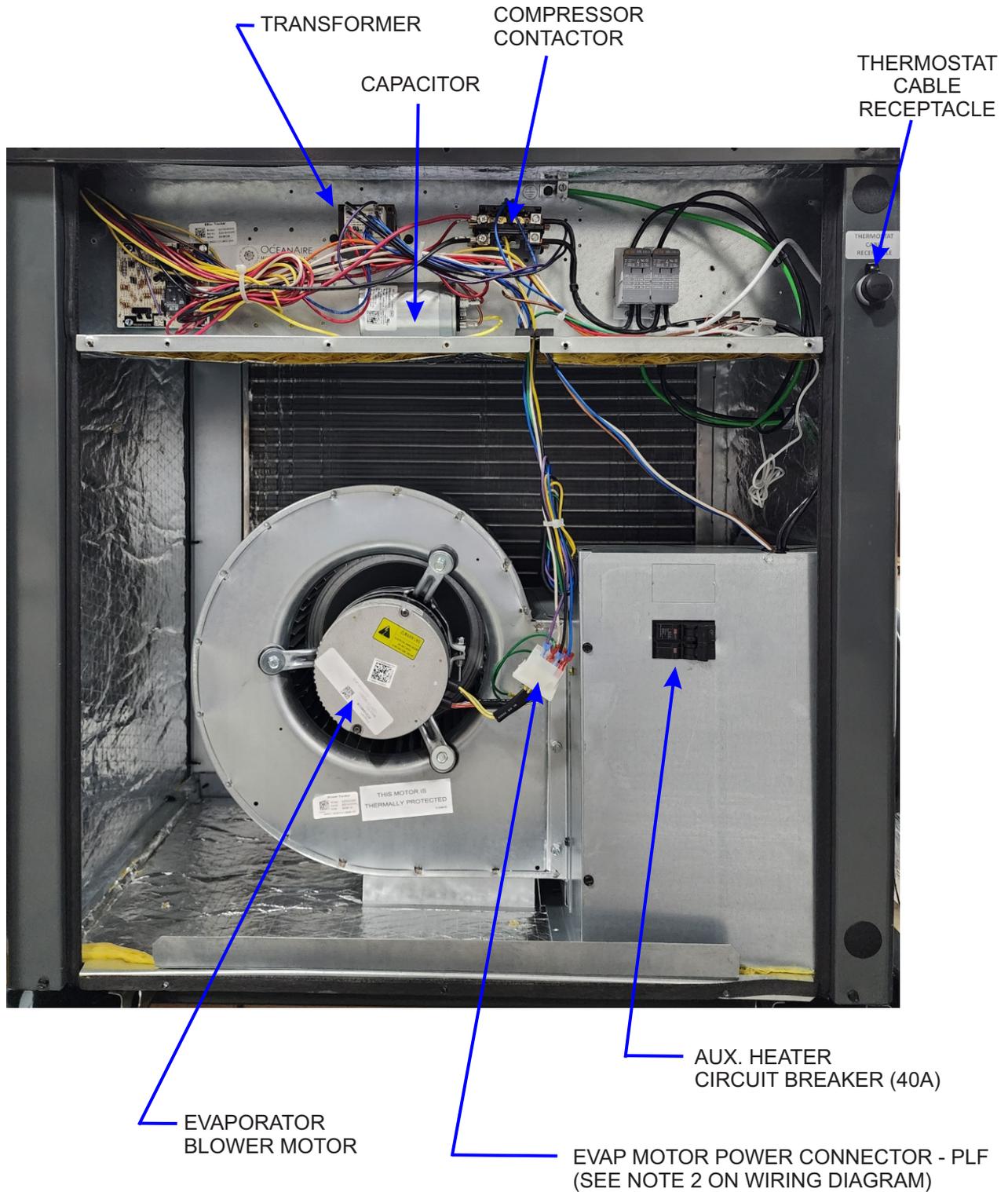
OPACH4212 DRAIN WITH
3/4" MGH CONNECTOR



(OPEN)

REMOTE THERMOSTAT
RECEPTACLE

OPACH6012AH CONTROLS



OPACH6012AH START UP AND OPERATION

Powering and Starting the Unit - Follow the Instructions on Page 6 of this manual.

1.Ensure the power supplied to the OPACH6012AH unit matches the power shown on its nameplate, and that all power connections are correct and secured.

NOTICE: Connecting the unit to an incorrect or faulty power source will void the warranty

2.Engage the MAIN POWER. The unit is now controlled by the thermostat.

Cooling Mode

Begin by pressing the SYSTEM button until the thermostat is in COOL Mode. Using the ARROW buttons, set the desired space temperature setpoint. Remember, cooling will begin once the space temperature has risen 3 degrees above the set point.

NOTE: The minimum setpoint in Cooling Mode is 55 degrees F



2-3, Adjustment



4, Mode Button



6-7, Adjustment

Start-up Guidelines—Data Nab Controller**CONNECT POWER AS SPECIFIED ON UNIT NAMEPLATE**

1. Once the power has been connected, the controller display will illuminate, and start.
2. When started, the unit is preset to run on HIGH-COOL at 72 degrees.
3. To manually adjust the temperature setting, push the ▲ or ▼ buttons to get the desired temperature.
4. To switch the unit to heat press the ► MODE button on the right until you see the HEAT MODE appear.
5. Push the ▲ or ▼ arrow until the set point appears.
6. The HEAT Setting is preset at 72 degrees.
7. To adjust the temperature push the ▲ or ▼ button to get the desired temperature.
8. To shut down the unit, set the MODE to OFF.
9. In case of a power outage, the unit will restart at the same setting that was in place when shut down.

TROUBLESHOOTING GUIDE

Heating Mode

Begin by pressing the SYSTEM button until the thermostat is in HEAT Mode. Using the ARROW buttons, set the desired space temperature setpoint. Remember, heating will begin once the space temperature has fallen 3 degrees below the set point. In HEAT Mode, the unit will switch over from Heat Pump to Auxiliary Electric Heat, automatically. As outdoor temperatures rise, the unit will switch back to Heat Pump from Auxiliary Electric Heat.

Fan Mode

Pressing the FAN button, allows the user to switch Fan Modes from AUTO to ON. In AUTO Mode, the fan will turn on and off as the unit cycles in COOL or HEAT Mode. In ON Mode, the fan will run continuously.

Circuit Breakers

The unit and the Auxiliary Heat Module are protected by line power circuit breakers. The unit breaker will trip at 50 Amps, while the Auxiliary Heat Module is protected by a separate 40 Amp breaker, located behind the Blower Cover Panel. The control access cover and blower access panel will need to be removed to gain access to the heater breaker as shown on Page 7.

OPACH6012AH Troubleshooting Guide

Start Up

Thermostat Display will not Illuminate

- Check Incoming Power. Correct power supplied to unit.
- Check MAIN Breaker and reset it, if needed.
- Check the Thermostat Cable Connection at the unit. Re-seat the connector.

Thermostat works, Not Cooling

- Check the thermostat to see if in COOL mode.
- Check the thermostat to see if the setpoint is three degrees lower than the space temperature. Adjust the setpoint if needed, or wait until the space warms.
- Check the incoming power for proper voltage plus the proper amperage to start the compressor. If not, contact an electrician.

Thermostat works, Not Heating

- Check the thermostat to see if in HEAT mode.
- Check the thermostat to see if the setpoint is three degrees higher than the space temperature. Adjust the setpoint if needed, or wait until the space cools.
- Check the Auxiliary Heater Circuit Breaker. Remove the blower access panel and locate the Circuit Breaker. The Breaker will display GREEN when tripped. Reset the breaker. The breaker will display RED when reset in the ON position.

LIMITED WARRANTY

The Manufacturer (OceanAire, Inc.) warrants to the original owner that the Product will be free from defects in material or workmanship for a period not to exceed one (1) year from date of installation. If upon examination by the Manufacturer, the Product is shown to have a defect in material or workmanship during the warranty period, the Manufacturer will repair or replace, at its option, that part of the Product which is shown to be defective.

The Manufacturer further warrants that the product's compressor-motor will be free from defects in materials and workmanship for one year from the date of installation.

If upon examination by the Manufacturer the Product is shown to have a defect in materials or workmanship during the warranty period, the Manufacturer will repair or replace, at its option, that Part of the Product which is shown to be defective. Electrical parts such as relays, overloads, capacitors, etc., and the sealed refrigeration system (condenser and evaporator) are included in the one-year limited warranty.

This limited warranty does not apply to:

- a) Product that has been subjected to misuse or neglect, has been accidentally or intentionally damaged, has not been installed, maintained or operated in accordance with the furnished written instructions, or has been altered or modified in any way.
- b) Product that has been subjected to any abnormal power conditions such as loss of power, power surges, voltage irregularities such as brown-outs or phase loss (on three-phase equipment).
- c) any expenses, including labor or material, incurred during removal or reinstallation of the Product.
- d) any workmanship of the installer of the Product.

This limited warranty is conditional upon:

- a) return to the Manufacturer, of the part of the Product thought to be defective.

Goods can only be returned with prior written approval from the Manufacturer.
All returns must be freight prepaid.

- b) determination in the reasonable opinion of the Manufacturer, that there exists a defect in material or workmanship.

Repair or replacement of any part under this Limited Warranty shall not extend the duration of the warranty with respect to such repaired or replaced part beyond the stated warranty period.

THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EITHER EXPRESSED OR IMPLIED, AND ALL SUCH OTHER WARRANTIES, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY DISCLAIMED AND EXCLUDED FROM THIS LIMITED WARRANTY. IN NO EVENT SHALL THE MANUFACTURER BE LIABLE IN ANY WAY FOR ANY CONSEQUENTIAL, SPECIAL, OR INCIDENTAL DAMAGES OF ANY NATURE WHATSOEVER, OR FOR ANY AMOUNTS IN EXCESS OF THE SELLING PRICE OF THE PRODUCT OR ANY PARTS THEREOF FOUND TO BE DEFECTIVE. THIS LIMITED WARRANTY GIVES THE ORIGINAL OWNER OF THE PRODUCT SPECIFIC LEGAL RIGHTS. YOU MAY ALSO HAVE OTHER RIGHTS WHICH MAY VARY BY EACH JURISDICTION.

