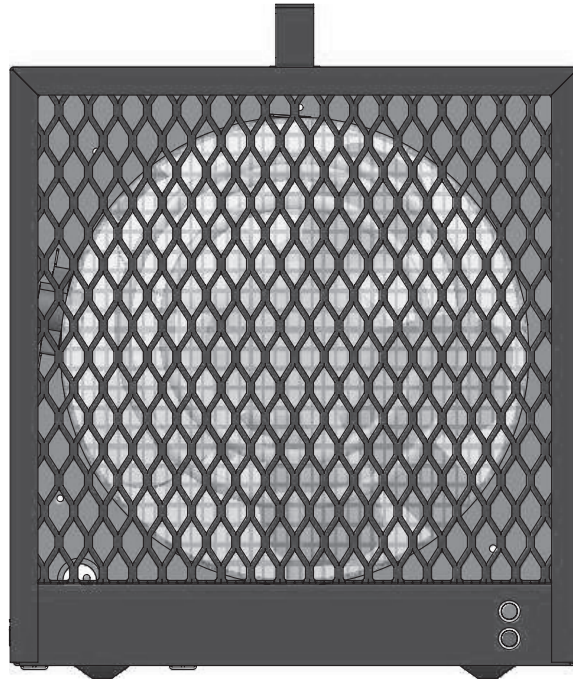




# USER'S GUIDE

## ASCH SERIES PORTABLE HEATER

REPLACEMENT COMPONENT LIST INCLUDED



  
This unit  
complies with  
the CSA  
standards



### WARNING

### IMPORTANT INSTRUCTIONS

This product is designed and approved for use under normal, dry conditions. It is not intended for use or storage within damp and/or dusty conditions. It should not be exposed to flammable liquids, combustible materials, corrosive, abrasive, chemical and/or explosive products such as, but not limited to, paint, gasoline, chlorine, cleaning products, sawdust, etc.

When choosing a heater, assure that it is suitable to the application. Should your application possess any of the above-mentioned conditions, then your product should be designed specifically to operate under those conditions. We highly recommend inquiring with your insurance company, CSA and UL or any other recognized equivalent, to assist you in your product selection. We encourage you to consult your local electrical and building codes.

Stelpro Design inc. does not warrant their products should they be used under any condition to which their design is not intended, nor shall they be held responsible for any incident arising as a result of improper use.

Please ensure that the plug of the unit is not impaired (color changes, rust, distortion, etc.). It is important to inspect the plug and the electrical outlet at least once a year, or once a month if they are used on a construction site. A damaged plug or outlet could cause a fire.

It is the user's responsibility to evaluate if the unit must be cleaned based on the amount of dirt accumulated on and inside air vents. Accumulated dirt can lead to a component malfunction. It may cause a fire hazard if not installed and maintained in accordance with these instructions. Read all instructions before using this heater. Save these instructions. When using electrical appliances, basic precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons, including the following. If these instructions are not followed, the warranty will be considered null and void and the manufacturer deems no further responsibility for this product.

This unit must be used in accordance with the **electrical and building codes** effective in your region.

Use this heater only as described in this manual. Any other use not recommended by the manufacturer may cause fire, electric shock, or injury to persons.

Protect the heating unit with the appropriate circuit breaker or fuse, in accordance with the nameplate.

Make sure the line voltage (volt) is consistent with that indicated on the unit's nameplate.

Connect to properly grounded outlets only. (This item may be omitted if the heater is not provided with a grounding type attachment plug.)

Switch off the power at the circuit breaker/fuse before installing, repairing and cleaning the unit. To disconnect heater, turn controls to off, then remove plug from outlet.



## WARNING

Make sure the unit is appropriate for the intended use (if needed, refer to the product catalog or a representative).

### Recommended heating capacity:

#### 1.25 W/cubic foot (0.03 m<sup>3</sup>).

It corresponds to **10 watts / square foot (0.09 m<sup>2</sup>)** based on a standard ceiling height of 8 feet (2.44 m). The recommended capacity is usually sufficient for normal heating needs. Please note that the insulation quality of walls and windows are some of the factors that influence heat losses, which modify the required capacity to heat a room. If needed, refer to a specialist (industrial and commercial buildings) who will be able to calculate these heat losses and optimize the required capacity or consult the "Online heating calculation" section of the Stelpro Design Web site (residential buildings). To heat a large room and to increase your comfort, it is recommended to install several units instead of one. For example, 2 X 1000 W rather than 1 X 2000 W.

If the unit capacity is insufficient for the size of the room, it will be in operation continuously, and may become defective earlier.

**Respect distances and positions** indicated in the installation section. Make sure the unit does not fall on its side.

Extreme caution is necessary when any heater is used by or near children or invalids and whenever the heater is left operating and unattended.

Do not use outdoors. (Omitted if the heater is intended for outdoor use.)

If the installer or the user modifies the unit, he will be held responsible for any damage resulting from this modification, and the CSA certification could be void.

This heater is not intended for use in bathrooms, laundry areas and similar indoor locations. Never locate heater where it may fall into a bathtub or other water container. Do not use it if any part has been immersed. Moreover, do not turn it on or off when standing in water or if your hands are wet.

Do not run cord under carpeting. Do not cover cord with throw rugs, runners, or similar coverings. Do not route cord under furniture or appliances. Arrange cord away from traffic area and where it will not be tripped over. Always unplug heater when not in use. (This item may be omitted if the heater is provided with a clock-operated switch).

Before starting the unit, make sure the power cord is fully inserted into the wall outlet. If it is a ceiling outlet, it is recommended to fix the connector to the outlet using a proper clamp system.

Always plug heaters directly into a wall outlet/receptacle. Never use with an extension cord or relocatable power tap (outlet/power strip).

When starting up the unit for the first time or after a long period, it is normal that it produces some temporary odours and whitish smoke.

This heater is hot when in use. To avoid burns, do not let bare skin touch hot surfaces. If provided, use handles when moving this heater. Be **careful and responsible** when using it. The unit must cool down for few minutes since it will stay warm for some time after shut-down.

Keep combustible materials, such as furniture, pillows, bedding, papers, clothes and curtains at least **3 feet (0,9 m)** from the front of the heater and keep them away from the sides and rear (sides and rear restrictions apply to location dedicated heaters only).

**DANGER** – High temperatures may be generated under certain abnormal conditions. Do not partially or fully cover or obstruct the front of this heater.

You must leave at least 6 in. (152 mm) of clearance between the air inlet of the heater and the walls of the room where the heater will be installed.

Do not install on a wall behind a door.

To prevent a possible fire, do not block air intakes or exhausts in any manner. Do not use on soft surfaces, like a bed, where openings may become blocked.

Do not insert or allow foreign objects to enter any ventilation or exhaust opening as this may cause an electric shock or fire, or damage the heater.

A heater has hot and arcing or sparking parts inside. Do not use it in areas where gasoline, paint, flammable liquids, chlorine, sawdust or cleaning products are used or stored. Store it in a dry place when not using it.

Some areas are dustier than others. Thus, it is the user's responsibility to evaluate if the unit must be cleaned based on the amount of dirt accumulated on and inside air vents. Accumulated dirt can lead to a component malfunction. It may cause a fire hazard if not installed and maintained in accordance with these instructions.

The thermal protection activation indicates that the unit has been subjected to abnormal operating conditions. If the thermal protection remains activated or activates and deactivates repeatedly, it is recommended that a qualified electrician or a certified repair centre examine the unit in order to make sure it is not damaged. (Refer to the limited warranty)

Do not operate any heater with a damaged cord or plug or after the heater malfunctions, has been dropped or damaged in any manner. Discard heater, or return to authorized service facility for examination and/or repair.

This unit is equipped with a protection device whose activation is indicated by a light inside the unit, the protective device cuts off the supply to the unit and warning light turn on. Unplug the unit, replug it and check if the light turns on again. If such is the case, disconnect the unit and have it repaired at a recognized service center. Never modify or repair the unit yourself. Failure to follow these instructions may result in a fire.

This heater includes a visual alarm (red light) to warn that parts of the heater are overheating. If the red light turns on, immediately turn heater off and inspect for any objects on or adjacent to the heater that may cause high temperatures. **DO NOT OPERATE WHEN RED LIGHT IS ON.**

When using electrical appliances, basic precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons.

Read all instructions before using this heater.

Always unplug the heater when not in use.

Avoid the use of an extension cord. Extension cords may overheat and cause risk of fire. If you must use an extension cord, the cord must be a No. 10 AWG minimum size and rated no less than 6 kW.

Before unplugging the unit, all controls must be in the "OFF" position and the current from the main breaker panel should be cut. (The general switch may be used also, if included.) If the unit is damaged or defective, discontinue use, cut off power supply at circuit breaker and contact a certified electrician or certified repair centre. (Refer to the limited warranty)

When transporting or storing the heater and cord, keep in a dry place, free from excessive vibration and store so as to avoid damage.

## SAVE THESE INSTRUCTIONS

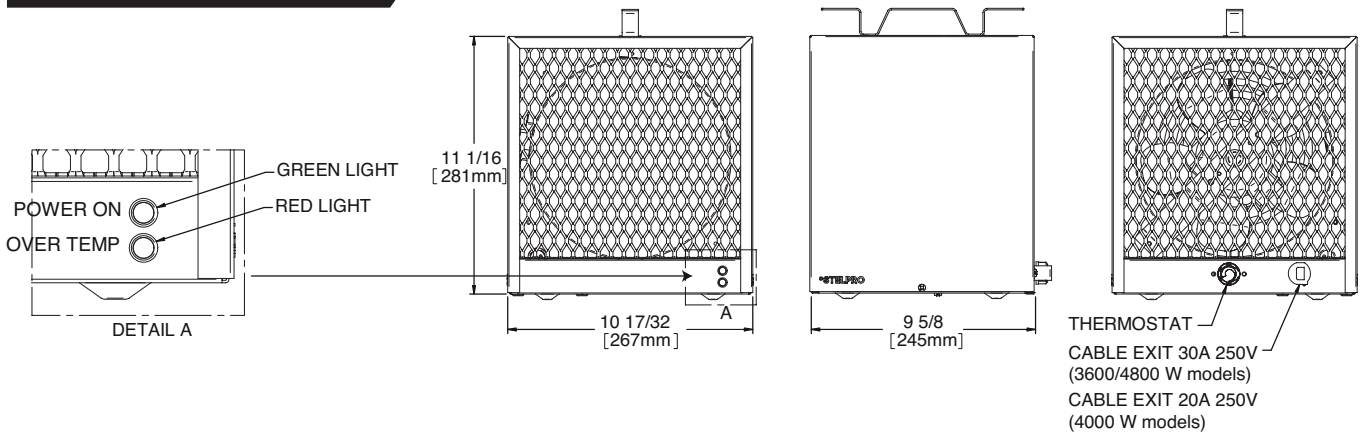
**Note:** When a part of the product specification must be changed to improve operability or other functions, priority is given to the product specification itself. In such instances, the instruction manual may not entirely match all the functions of the actual product. Therefore, the actual product and packaging, as well as the name and illustration, may differ from the manual.

# SPECIFICATIONS, TECHNICAL DRAWINGS AND INSTALLATION

## SPECIFICATIONS

PORTABLE HEATER		
MODELS	ASCH48T, ASCH4800T	ASCH40T
VOLTS	208/240 V	240 V
WATTS	3600/4800 W	4000 W
AMPS	17.3/20 A	16.67 A
FREQUENCY	60 HZ	60 HZ
BTU/H	12286/16382	13648
WEIGHT	13 LB / 5.9 KG	13 LB / 5.9 KG
LENGTH	9 5/8" / 245 MM	9 5/8" / 245 MM
WIDTH	10 1/2" / 267 MM	10 1/2" / 267 MM
HEIGHT	11" / 279 MM	11" / 279 MM

## TECHNICAL DRAWINGS



## INSTALLATION

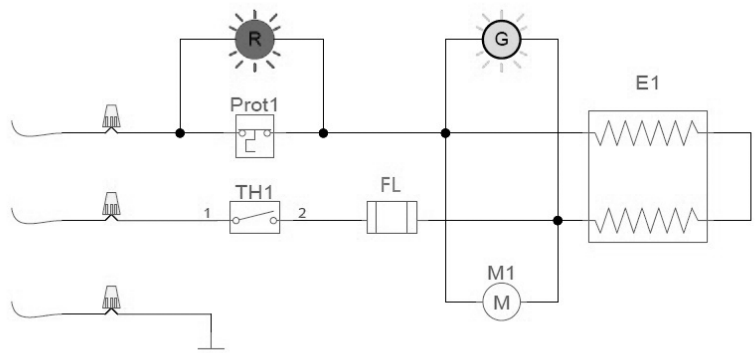
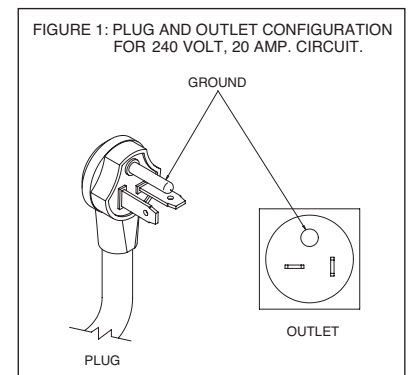
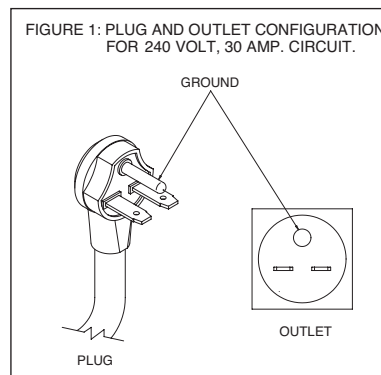
**N.B. Cut off power supply at circuit breaker/fuse before proceeding to the installation and wiring connections. This product must be connected by a certified electrician, according to the electrical and building codes effective in your region.**

**To reduce the risk of fire, do not store or use gasoline or other flammable vapors and liquids in the vicinity of the heater. Do not mount in contact with combustible material. Do not mount in close proximity to another unit.**

**DANGER** – High temperatures may be generated under certain abnormal conditions. Do not partially or fully cover or obstruct the front of this heater.

**CAUTION** – High temperature, risk of fire, keep electrical, cords, drapery, furnishings, and other combustibles at least 3 feet (0.9 m) from the front of the heater and away from the side and rear.

1. Read the "Warning" section carefully before installing this product.
2. Plug the unit into a properly grounded outlet only.
3. Check the heater's voltage and amperage indicated on the back of the unit to make sure it is compatible with the electrical supply. Follow all other indications written on the nameplate.
4. This heater is not suitable for use in wet or very humid locations.
5. Before starting the unit, make sure the power cord is fully inserted into the wall outlet. If it is a ceiling outlet, it is recommended to fix the connector to the outlet using a proper clamp system.



# INSTALLATION, OPERATION AND MAINTENANCE

## OPTION

Wall or ceiling installation.

Do not install the unit at less than 6 in (152 mm) from the wall and/or the ceiling.

Do not store the unit in places containing flammable liquid such as, but not limited to, painting, gasoline, chlorine, sawdust and cleaning products.

The unit must be mounted for a horizontal exhaust air only.

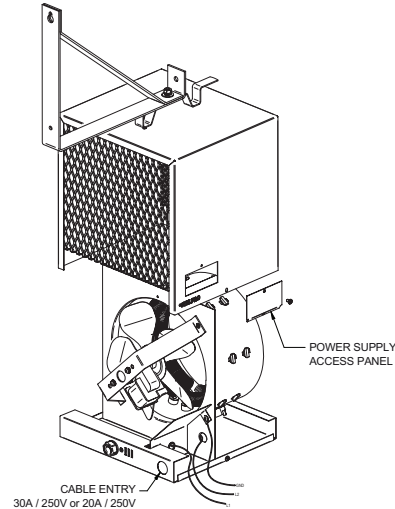
Maximum installation height: 8 feet (2.44 m).

The wall or ceiling must be solid enough to support the combined weight of the unit and the mounting bracket: 13 lbs (5.9 kg)

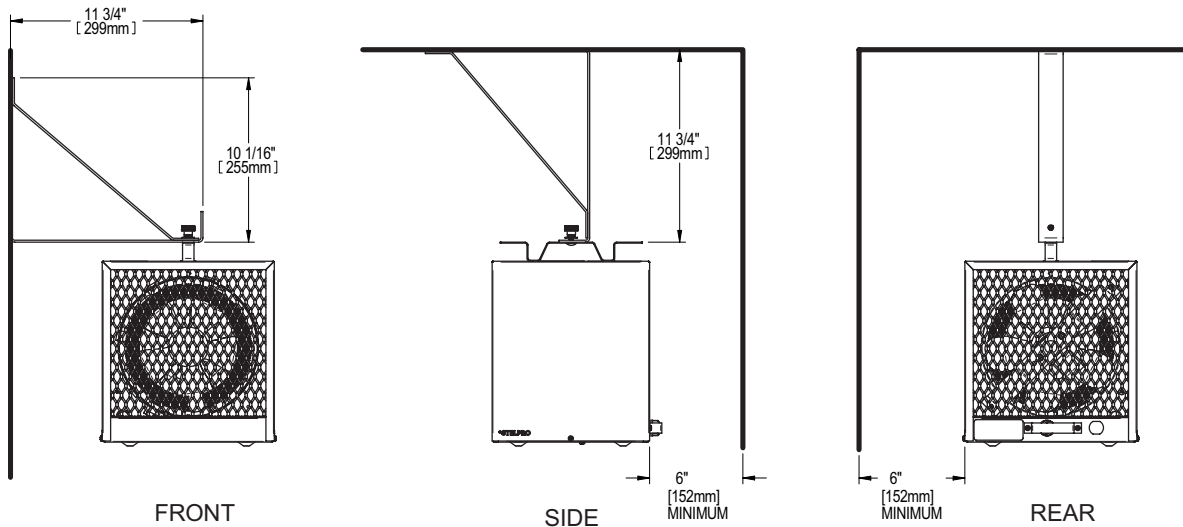
Secure the bracket to the framing of the wall or ceiling.

The electrical wiring must be done in the appropriate location inside the unit for the models without male plug (ASCH48TWBPL) - see illustration.

Do not install the fixed unit (ASCH48TWBPL) less than 2 feet (0.61 m) from the floor.



## MOUNTING BRACKET INSTALLATION



## GROUNDING INSTRUCTIONS

This heater is for use on 240 or 208 Volts. The cord has a plug as shown on Figure 1. No adapter should be used with this unit. The type outlet is a 240 or 208 Volt grounding outlet. When properly installed, it provides a ground connection through the cord to the heater to protect the operation from electric shock.

## OPERATION

**Warning: the heater must be properly installed before it is used.**

Set the thermostat to its full counter-clockwise position. Plug the unit into a properly grounded 240 V outlet in accordance with all the guidelines indicated in this guide. Set the thermostat to its furthest clockwise position. The fan should turn on and the unit will start heating the room (the green pilot light will turn on). Then, turn the thermostat counter-clockwise until you hear a "click" sound. The heater will cycle automatically around the pre-set temperature. To increase the temperature, turn the thermostat clockwise. To lower the temperature, turn the thermostat counter-clockwise. To turn off the heater, turn the thermostat to its furthest counter-clockwise position (after the "click" sound). The green pilot light will then turn off.

## MAINTENANCE



**All other repairs and maintenance other than those described in this guide should be performed by qualified service personnel. In order for the warranty to be valid, the unit must be cleaned regularly. Cut off power supply at circuit breaker/fuse and wait for the unit to cool down before cleaning.**

Turn off the thermostat and remove the plug from the electrical outlet before cleaning this heater. Use a soft rag for dusting. When cleaning, use only a damp rag and non-abrasive dish soap. Do not use abrasive or chemical cleaners because they may damage the finishing. If the unit is used in a very dusty location, use a vacuum brush to remove dust and other foreign objects from the grilles. Wrap the power cord of the unit around the handle when it is disconnected and has cooled.

**N.B. Note that there is electrical current linked to the unit even if the thermostat is set off. This means that there is a risk of electric shock as long as the unit is connected.**

**Do not use cleaning products identified with these symbols:**

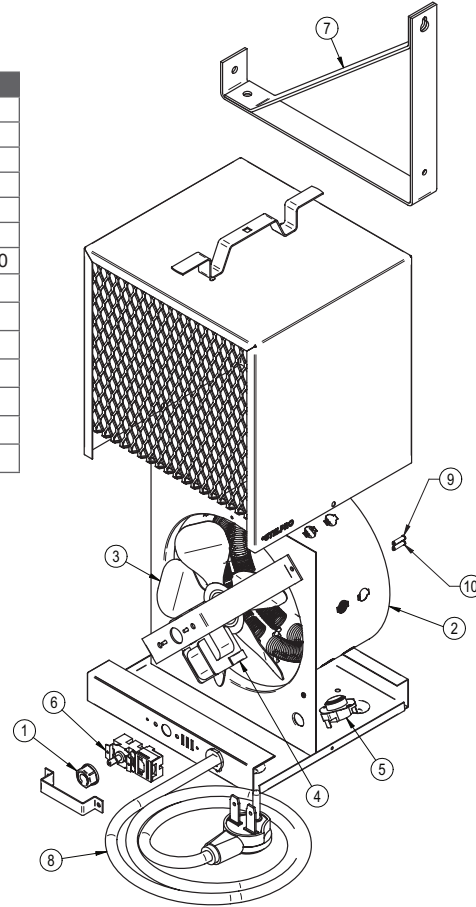


# REPLACEMENT COMPONENT LIST AND WIRING DIAGRAM

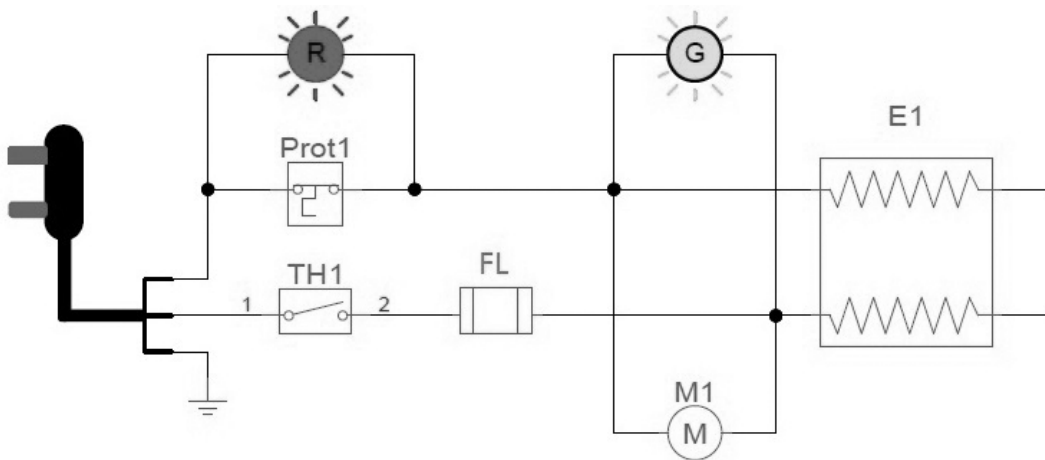
## REPLACEMENT COMPONENT LIST

### MODELS ASCH48T AND ASCH4800T

REF. #	PART #	DESCRIPTION
1	BOU-003	BLACK THERMOSTAT KNOB
2	C155-700-6.2-9L	ELEMENTS 4800 W - 240 V
2	C160-700-6.8-6,8L	ELEMENTS 4000 W - 240 V
3	BLA-026	FAN BLADE (8", 30°, 5 BLADES)
4	MO-016	CLOSED MOTOR 240 V (SCH4800T)
4	MO-038	OPEN MOTOR 240 V (SCH48T)
5	PROT-059	THERMAL PROTECTION L130-5F /THERMAL FUSE 170
6	ST-007	THERMOSTAT SP
7	SCH-WBB	MOUNTING SUPPORT
8	CD-001	EXT. CORD 2M BLACK 12-3SJTW
8	CD-012	EXT. CORD 2M BLACK 12-3SJTW (4000 W MODELS)
9	PL-002	GREEN PILOT LIGHT 240 V
10	PL-240	RED PILOT LIGHT 240 V
-	FL-ASCH	FUSE-LINK 84C 21A (KIT)



## WIRING DIAGRAM





# TROUBLESHOOTING

## TROUBLESHOOTING

PROBLEM	DEFECTIVE PART OR PART TO CHECK
The unit does not work	<ul style="list-style-type: none"> <li>Defective thermostat or wrong thermostat setting</li> <li>Open circuit breaker or fuse</li> <li>The thermal protection has been activated</li> <li>Faulty connections</li> <li>Damaged or defective plug or outlet</li> <li>Protection device. See warning.</li> </ul>
The unit runs continuously	<ul style="list-style-type: none"> <li>Defective thermostat or wrong thermostat setting</li> <li>Heat losses higher than the unit capacity</li> </ul>
Elements are on but the motor does not work	<ul style="list-style-type: none"> <li>Defective motor</li> <li>The thermal protection has been activated</li> <li>Blocked fan blades</li> </ul>
The enclosure is extremely hot	<ul style="list-style-type: none"> <li>Defective thermal protection</li> <li>Blocked air vents</li> <li>Defective motor</li> </ul>
The desired room temperature cannot be reached	<ul style="list-style-type: none"> <li>One or more elements are defective</li> <li>Defective thermostat or wrong thermostat setting</li> <li>Voltage lower than that written on the nameplate</li> <li>Heat losses higher than the unit capacity</li> </ul>
Overheating	<ul style="list-style-type: none"> <li>Defective thermostat or wrong thermostat setting</li> <li>Defective motor</li> </ul>
The unit cycles under control of the thermal protection (overheat indicator)	<ul style="list-style-type: none"> <li>Blocked air vents</li> <li>Defective motor</li> </ul>

N.B. If you do not solve the problem after checking these points, cut off the power supply at the main electrical panel and contact our customer service (see the "Limited warranty" section to obtain the phone numbers).

**LIMITED WARRANTY**

This limited warranty is offered by Stelpro Design inc. ("Stelpro") and applies to the following products made by Stelpro: models ASCH48T, ASCH4800T. **Please read this limited warranty carefully. Subject to the terms of this warranty**, Stelpro warrants its products and their components against defects in workmanship and/or materials for the following periods from the date of purchase: **3 years (ASCH4800T) and 2 years (ASCH48T and ASCH40T)**. This warranty applies only to the **original purchaser**; it is non-transferable and cannot be extended.

**CLAIM PROCEDURE**

If at any time during the warranty period the unit becomes defective, you must cut off the power supply at the main electrical panel and contact 1) your installer or distributor, 2) your service center or 3) Stelpro's customer service department. In all cases, you must have a **copy of the invoice** and provide the **information written on the product nameplate**. Stelpro reserves the right to examine or to ask one of its representatives to examine the product itself or any part of it before honoring the warranty. Stelpro reserves the right to replace the entire unit, refund its purchase price or repair a defective part. Please note that repairs made within the warranty period must be authorized in advance in writing by Stelpro and carried out by persons authorized by Stelpro.

Before returning a product to Stelpro, you must have a Stelpro authorization number (RMA). To obtain it, call the customer service department at: **1-800-363-3414** (electricians and distributors - French), **1-800-343-1022** (electricians and distributors - English), or **1-866-766-6020** (consumers). The authorization number must be clearly written on the parcel or it will be refused.

**CONDITIONS, EXCLUSIONS AND DISCLAIMER OF LIABILITY**

This warranty is exclusive and in lieu of all other representations and warranties (except of title), expressed or implied, and Stelpro expressly disclaims and excludes any implied warranty of merchantability or implied warranty of fitness for a particular purpose.

Stelpro's liability with respect to products is limited as provided above. Stelpro shall not be subject to any other obligations or liabilities whatsoever, whether based on contract, tort or other theories of law, with respect to goods or services furnished by it, or any undertakings, acts or omissions relating thereto. Without limiting the generality of the foregoing, Stelpro expressly disclaims any liability for property or personal injury damages, penalties, special or punitive damages, damages for lost profits, loss of use of equipment, cost of capital, cost of substitute products, facilities or services, shutdowns, slowdowns, or for other types of economic loss or for claims of a dealer's customers or any third party for such damages. Stelpro specifically disclaims all consequential, incidental and contingent damages whatsoever.

This warranty does not cover any damages or failures resulting from: 1) a faulty installation or improper storage; 2) an abusive or abnormal use, lack of maintenance, improper maintenance (other than that prescribed by Stelpro) or a use other than that for which the unit was designed; 3) a natural disaster or an event out of Stelpro's control, including, but not limited to, hurricanes, tornadoes, earthquakes, terrorist attacks, wars, overvoltage, flooding, water damages, etc. This warranty does not cover any accidental or intentional losses or damages nor does it cover damages caused by negligence of the user or owner of the product. Moreover, it does not cover the cost of disconnection, transport, and installation.

The warranty is limited to the repair or the replacement of the unit or the refund of its purchase price, **at the discretion of Stelpro**. Any parts replaced or repaired within the warranty period with the written authorization of Stelpro will be warranted for the remainder of the original warranty period. This warranty will be considered null and void and Stelpro will have the right to refuse any claims if **products have been altered** without the written authorization of Stelpro and if the nameplate numbers have been removed or modified. This warranty does not cover scratches, dents, corrosion or discoloration caused by excessive heat, chemical cleaning products and abrasive agents. It does not cover any damage that occurred during the shipping.

Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages and some of them do not allow limitations on how long an implied warranty lasts, so these exclusions or limitations may not apply to you. This warranty gives you specific legal rights and you may have other rights which vary from state to state or from province to province.