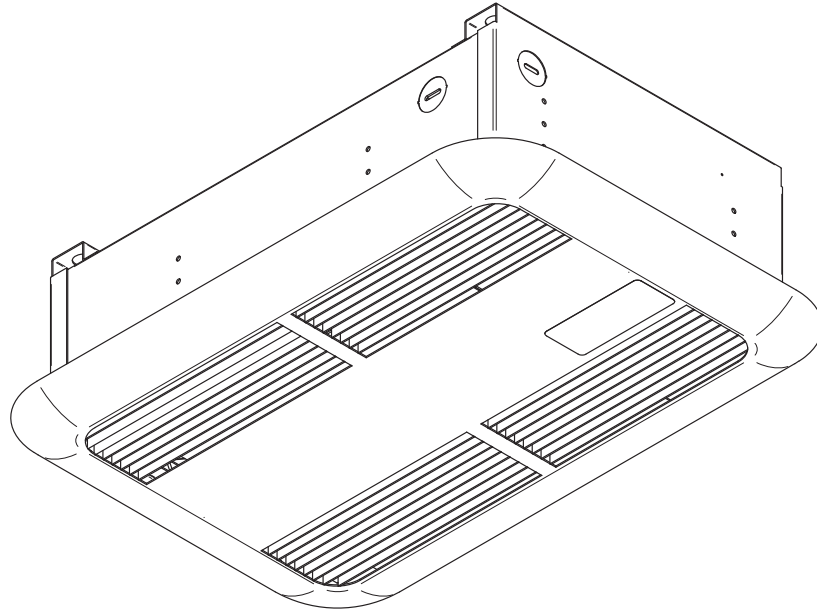


USER'S GUIDE

ASK SERIES CEILING FAN HEATER

REPLACEMENT COMPONENT LIST INCLUDED



**AIR
 CURTAIN**



This unit complies with the CSA and UL standards



WARNING

IMPORTANT INSTRUCTIONS

Before installing and operating this product, the user and/or installer must read, understand and follow these instructions and keep them handy for future reference. 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 product must be installed by a qualified person and connected by a **certified electrician**, according to the **electrical and building codes** effective in your region.

The following instructions must be adhered to in order to avoid personal injuries or property damages, serious injuries and potentially fatal electric shocks.

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.

This unit must be **grounded**.

Switch off the power at the circuit breaker/fuse before installing, repairing and cleaning the unit.

Make sure the unit is appropriate for the intended use (if needed, refer to the product catalog or a representative). 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. Do not use outdoors.

RECOMMENDED HEATING CAPACITY:

1.25 W/cubic foot (0.03 m³).

It corresponds to **10 W/square foot (0.09 m²)** 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.

Do not install the unit where objects or pieces of furniture could be heat damaged.

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

Respect distances and positions indicated in the installation section.

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 unit must not come into contact with a water source such as, but not limited to, showers, bathtubs, sinks, toilets, etc. and must be protected from

SPECIFICATIONS & INSTALLATION



WARNING

splashes. Do not use it if any part has been immersed.

When mounting the unit, make sure that the anchorage used can support the total weight of the unit with the mounting brackets.

When cutting or drilling into a ceiling, do not damage electrical wiring and other hidden utilities.

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.

Because this unit is hot when in use, it may pose risks even in normal operation. Therefore, be **careful and responsible** when using it. To avoid burns, do not let bare skin touch hot surfaces. The unit must cool down for few minutes since it will stay warm for some time after shut-down. Extreme caution is necessary when any heater is used by or near children or invalids and whenever the heater is left operating and unattended.

This unit must be installed at least **6 inches (15.2 cm)** from the walls and between **8' (244 cm)** and **10' (305 cm)** from the floor.

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.

Never block air vents (with objects or other items). You risk damaging the heater and the obstruction could lead to electric shock or overheating, which could result in a fire.

Do not insert or allow foreign objects to enter any air vent as this may cause electric shocks, fires, or damages to the unit.

This unit has hot and arcing or sparking parts inside. It is not designed to be used or stored in wet areas or areas containing flammable liquids, combustible materials or corrosive, abrasive, chemical, explosive and flammable substances such as, but not limited to, gasoline, paint, chlorine, sawdust and cleaning products.

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 or discoloration (yellow). It may cause a fire hazard if not installed and maintained in accordance with these instructions.

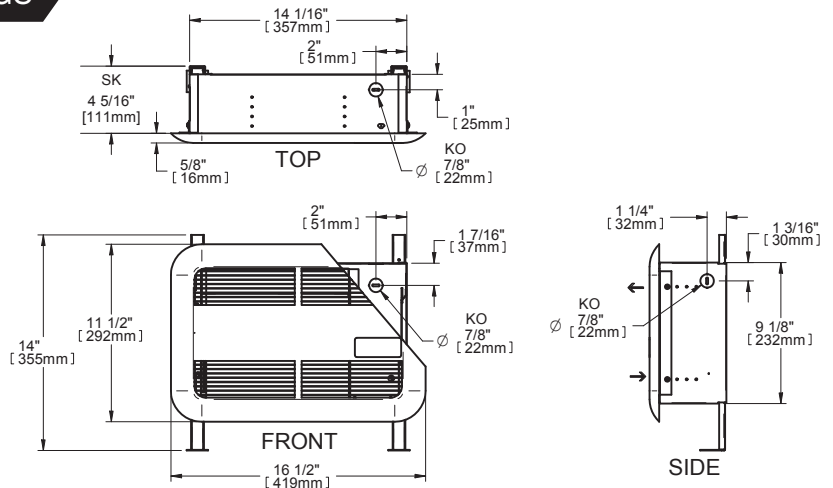
Before unplugging the unit, all controls must be in the "OFF" position and the current from the main breaker panel should be cut. (The general switch may be used also, if included.)

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)

SAVE THESE INSTRUCTIONS

SPECIFICATIONS & TECHNICAL DRAWINGS

CEILING FAN HEATER	
MODEL	ASKI
VOLTS	120, 208, 240, 277, 347 V
WATTS	500 A 2000 W
WEIGHT	11 LB / 5 KG
DEPTH	4 3/8" / 111 MM
WIDTH	14 1/16" / 357 MM
HEIGHT	11 1/2" / 292 MM



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. Consult the wiring plan found on the unit.

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.

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.

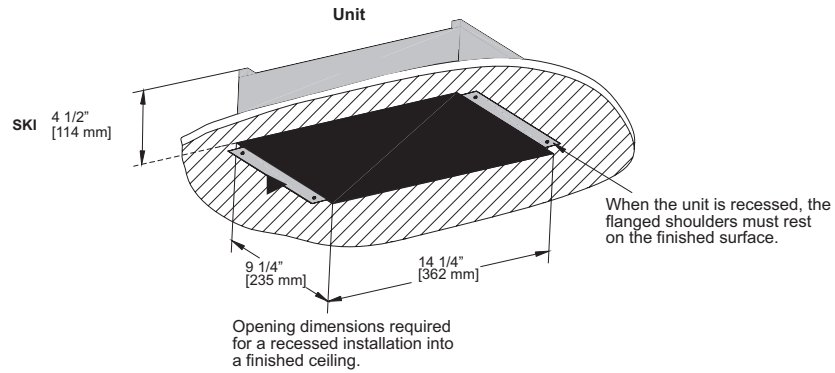
This unit must be installed at no less than 6" (15.2 cm) from adjacent walls and between 8' (244 cm) and 10' (305 cm) from the floor. Moreover, it can be ceiling mounted only, in horizontal position (not on an angle).

An installation template has been placed in this document to help you throughout the installation process. Pin the template onto the ceiling. This user's guide will let you know when it is time to refer to the template, indicating: **Follow cut (A, B or C) on template.**

N.B. You must follow the template accurately so that once the surface grille is installed, it will completely cover the opening you have made in the ceiling.

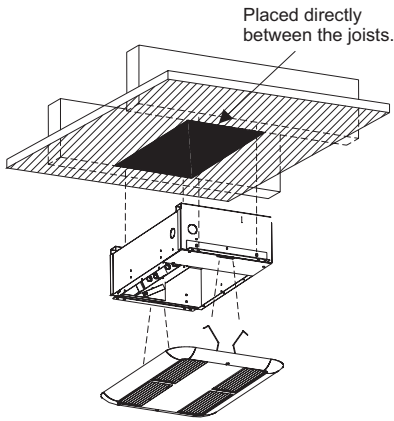
INSTALLATION

RECESSED INSTALLATION INTO A FINISHED CEILING

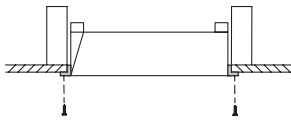


THREE INSTALLATION OPTIONS

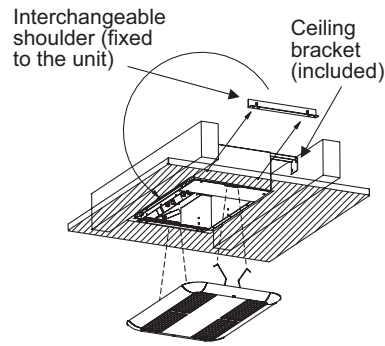
1. THE LONGER SIDE OF THE UNIT RESTING PERPENDICULAR TO THE CEILING JOISTS.



FOLLOW CUT A ON TEMPLATE

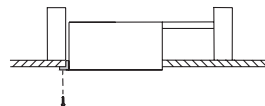


2. THE LONGER SIDE OF THE UNIT RESTING PARALLEL TO THE CEILING JOISTS. (WHEN YOU HAVE ACCESS TO THE ATTIC)

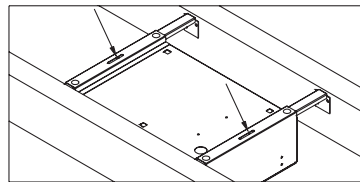


FOLLOW CUT C ON TEMPLATE

You must unscrew the shoulder and reposition it on the side that will rest on the ceiling joist. Screw the shoulder into the lowest level of holes on the enclosure so that they will be in line.



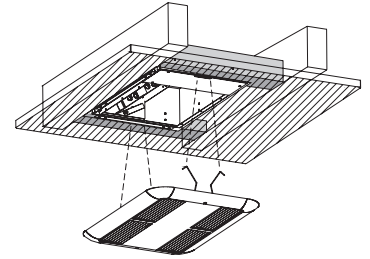
Measure the distance between the enclosure and the joist on which the brackets will be fixed. Insert the brackets into their respective slots on the enclosure. Adjust the brackets using screws (2 per bracket) until the proper length has been achieved.



3. THE LONGER SIDE OF THE UNIT RESTING PARALLEL TO THE CEILING JOISTS. (WHEN YOU DO NOT HAVE ACCESS TO THE ATTIC)

Screw wooden boards (2" X 4") between the ceiling joists in order to create a "box" in which you will insert the unit.

The enclosure must rest on the finished ceiling.



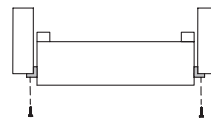
FOLLOW CUT A ON TEMPLATE



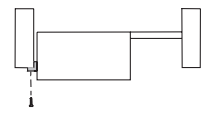
NEW CONSTRUCTION

If the ceiling is not finished yet, the interchangeable shoulders should be raised by screwing them into the second level of holes on the enclosure. So, once installed, the enclosure will rest flush with the finished ceiling (see the ILLUSTRATION OF THE ADJUSTMENT HOLES).

FOLLOW CUT B ON TEMPLATE (TO CUT THE LASTERBOARD BEFORE ITS INSTALLATION)



FOLLOW CUT C ON TEMPLATE (TO CUT THE PSTERBOARD BEFORE ITS INSTALLATION)



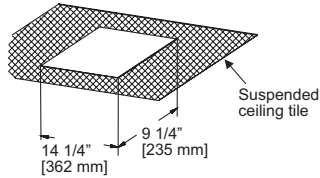
INSTALLATION

RECESSED INSTALLATION INTO A SUSPENDED CEILING

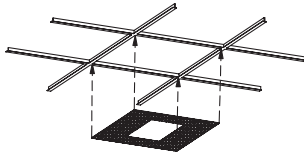
WITHIN THE CURRENT SUSPENDED CEILING TILE

1. Remove a tile where you want to install the unit and cut an opening within it (see dimensions hereinafter).

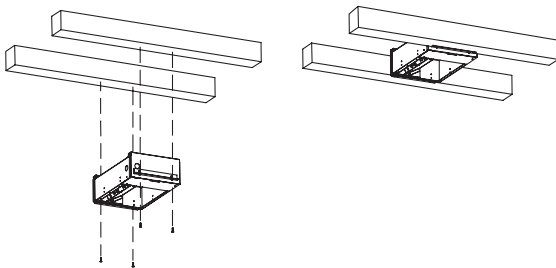
FOLLOW CUT A ON TEMPLATE



2. Put the cut tile back on.

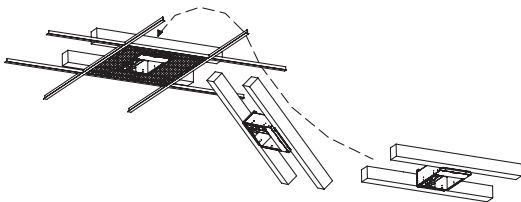


3. Fix the unit between two wooden boards (2" x 4") using four (4) screws and the shoulders fixed at each side of the unit (the two boards must be long enough to cross over the T-bar ceiling supports in order to support the weight of the heater).

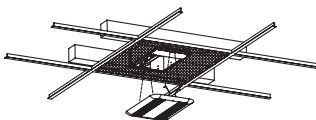


The enclosure of the unit must rest flush with the finished ceiling so that the clips on the grille extend far enough to properly hold the grille in place. To adjust the level of the enclosure, you must move the interchangeable shoulders either up or down and screw them in the proper adjustment holes. (See the ILLUSTRATION OF THE ADJUSTMENT HOLES)

4. A) Remove a tile beside the one you have cut in order to have enough room to put the two boards at their respective locations.
B) Pick up the assembly and place it above the cut tile, and across the T-bar ceiling supports. The enclosure of the heater must be suspended exactly above the opening and in line with the tile.
C) Put the adjacent tile back on.



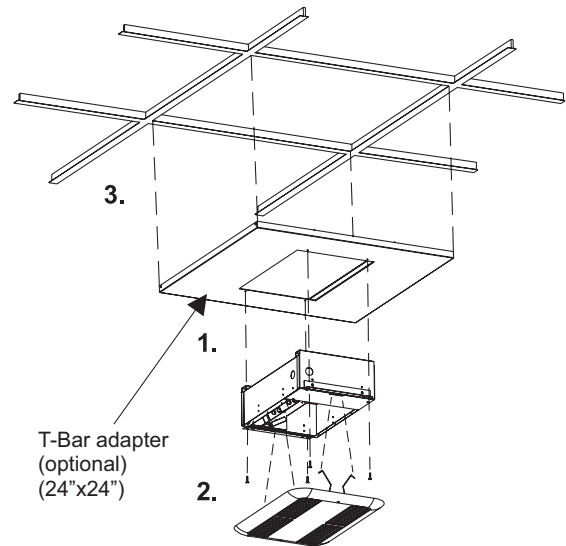
5. Install the grille by putting the clips into their respective slots within the enclosure and pushing it up into place.



*Wooden boards are merely a recommendation, any other material capable of supporting the weight of the heater may be used.

WITHIN THE T-BAR ADAPTER (OPTIONAL)

1. Fix the unit directly to the T-bar adapter (optional) by screwing the shoulders into the adapter at both sides with four (4) screws, in such a way that the unit will be entirely recessed.
2. Install the grille by putting the clips into their respective slots within the enclosure and pushing it up into place.
3. Insert the T-Bar adapter (optional) into its desired position by first removing the existing suspended ceiling tile.



WITH THREADED RODS

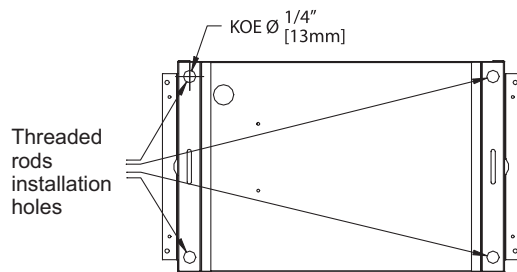
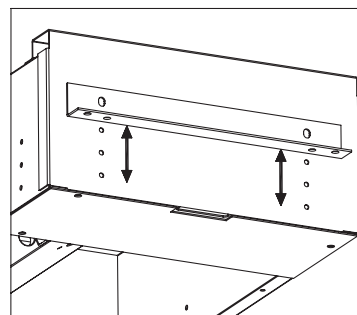


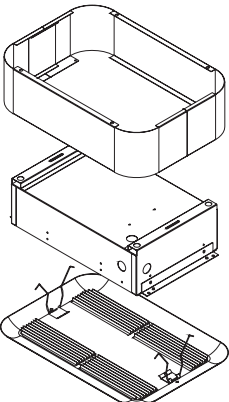
ILLUSTRATION OF THE ADJUSTMENT HOLES

Will adjust to all types of suspended ceilings.



INSTALLATION & OPERATION

SURFACE INSTALLATION (WITH AN OPTIONAL SURFACE ADAPTER)

	FINISHED CEILING	SUSPENDED CEILING	
	<ol style="list-style-type: none"> 1. Screw the surface adapter (optional) to the ceiling (4 screws), making sure the joist will support its weight. 2. Screw the unit to the surface adapter (optional) (4 screws). 3. Install the grille by putting the clips into their respective slots within the enclosure and pushing it up into place. 	TO THE SUSPENDED CEILING TILE	TO THE T-BAR ADAPTER (OPTIONAL)
		<ol style="list-style-type: none"> 1. Insert the surface adapter (optional) into the tile and screw it in place (4 screws). Continue to screw through two wooden boards (2"x 4") which should be laying across the supports of the T-Bar ceiling. 2. Screw the unit to the surface adapter (optional) (4 screws). 3. Install the grille by putting the clips into their respective slots within the enclosure and pushing it up into place. 	<ol style="list-style-type: none"> 1. Screw the surface adapter (optional) (4 screws) directly onto the T-Bar adapter (optional). 2. Screw the unit to the surface adapter (optional) (4 screws). 3. Install the grille by putting the clips into their respective slots within the enclosure and pushing it up into place.

OPERATION

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

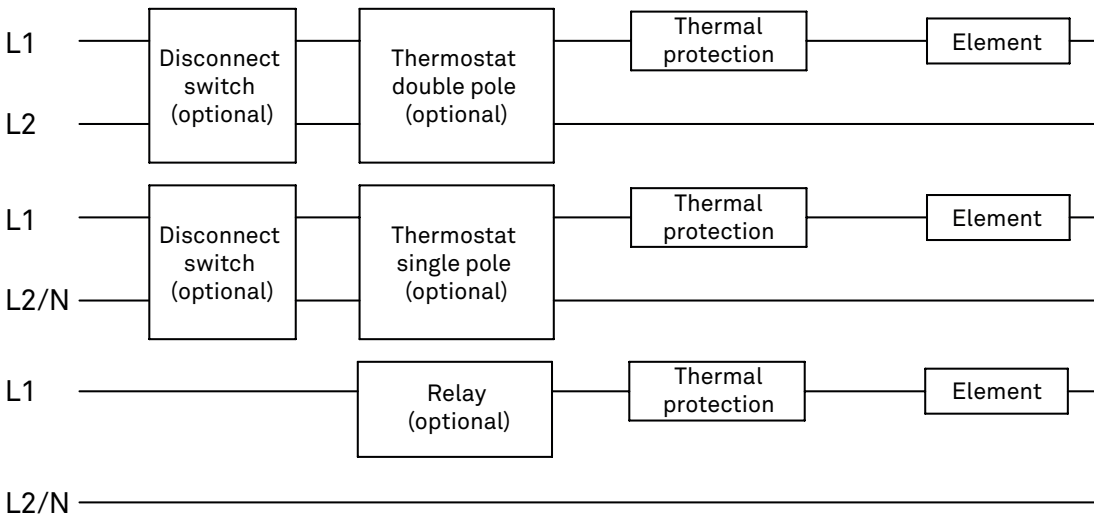
This heater must be controlled by a wall thermostat or a 60-minute timer (# FD60MCW70). The voltage must correspond to the technical specifications of the heater (thermostat and timer not included).

ELECTRICAL CONNECTION

The ground fault protection connection must be made by connecting the green wire coming from the circuit breaker panel to the green screw located inside the junction box of the heater.

N.B. All electrical connections must be made by a qualified electrician, according to the electrical and building codes effective in your region.

ELECTRICAL DIAGRAM



MAINTENANCE & TROUBLESHOOTING

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. WARNING: if the unit is equipped with a circuit breaker, the power supply at the main breaker must be turned off before removing the cover of the junction box or to open or close the unit's circuit breaker.

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. Note that cigarette smoke could

yellow the discharge grille and that the best way to prevent it is to clean the unit on a regular basis.

Do not use cleaning products identified with these symbols:



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 energized.

TROUBLESHOOTING

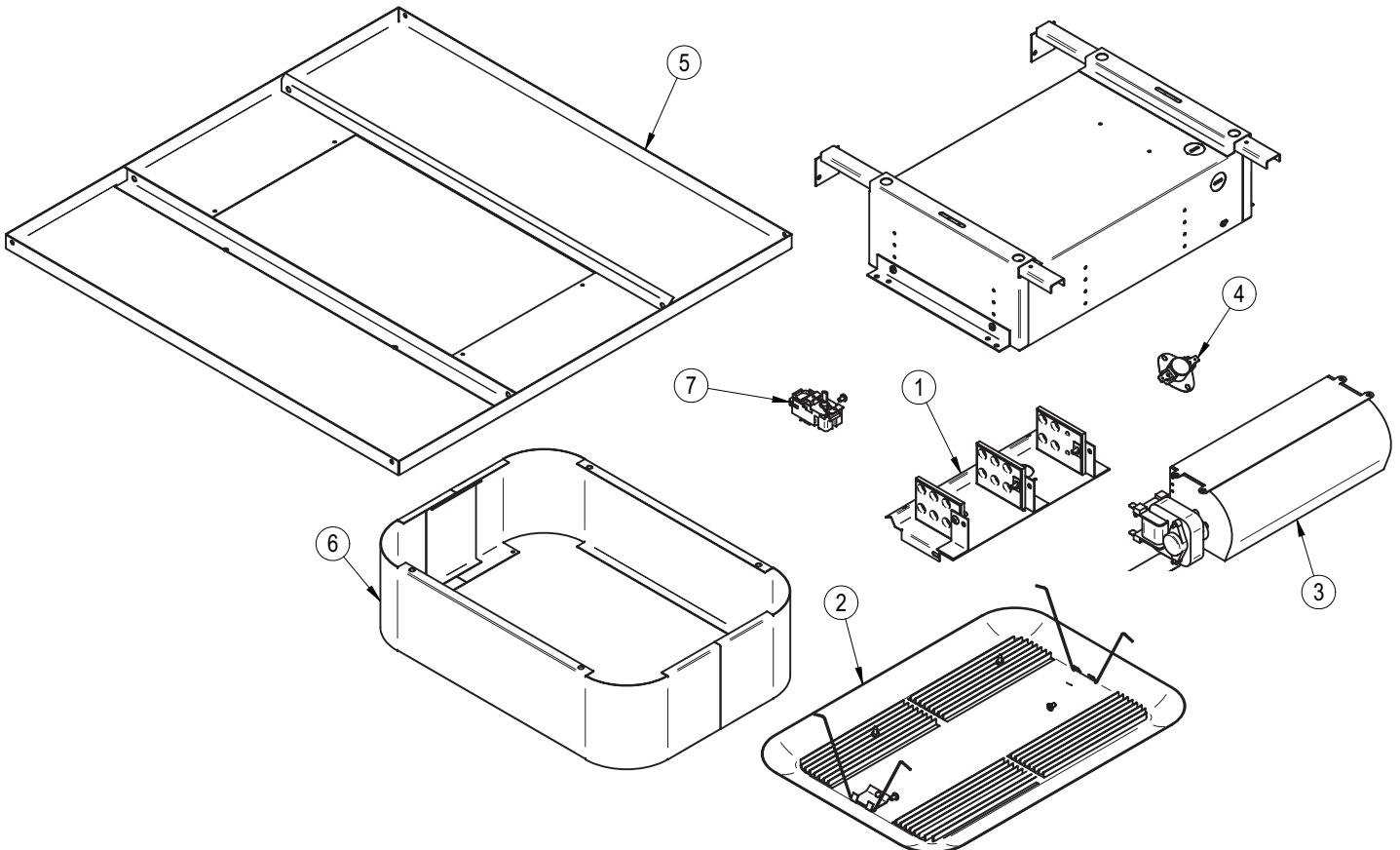
PROBLEM	DEFECTIVE PART OR PART TO CHECK
The unit does not work	<ul style="list-style-type: none"> Defective thermostat/timer or wrong thermostat/timer setting Open circuit breaker or fuse The thermal protection has been activated Faulty connections
The unit runs continuously	<ul style="list-style-type: none"> Defective thermostat/timer or wrong thermostat/timer setting Heat losses higher than the unit capacity
The enclosure is extremely hot	<ul style="list-style-type: none"> Defective thermal protection Blocked air vents Defective motor
The unit cycles under control of the thermal protection (overheat indicator)	<ul style="list-style-type: none"> Blocked air vents Defective motor
Overheating	<ul style="list-style-type: none"> Defective thermostat/timer or wrong thermostat/timer setting Defective motor
The breaker trips when the heater is turned on	<ul style="list-style-type: none"> Faulty connections Voltage higher than that written on the nameplate
Elements are on, but the motor does not work	<ul style="list-style-type: none"> Defective motor

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).

REPLACEMENT COMPONENT LIST

REPLACEMENT COMPONENT LIST

REF. #	PART #	DESCRIPTION
1	ELF-SK001	ELEMENT (KIT) 500 W-120 V / 2000 W-240 V / 1500 W-208 V
1	ELF-SK002	ELEMENT (KIT) 500 W-240 V
1	ELF-SK003	ELEMENT (KIT) 1000 W-240 V / 750 W-208 V
1	ELF-SK004	ELEMENT (KIT) 1000 W-120 V
1	ELF-SK005	ELEMENT (KIT) 1000 W-347 V
1	ELF-SK006	ELEMENT (KIT) 1250 W-240 V
1	ELF-SK007	ELEMENT (KIT) 1500 W-120 V
1	ELF-SK008	ELEMENT (KIT) 1500 W-240 V
1	ELF-SK009	ELEMENT (KIT) 2000 W-208 V / 750 W-120 V
1	ELF-SK010	ELEMENT (KIT) 2000 W-347 V / 1250 W-277 V
1	ELF-SK011	ELEMENT (KIT) 1000 W-600 V / 1500 W-600 V / 2000 W-600 V
1	ELF-SK012	ELEMENT (KIT) 750 W-240 V / 1000 W-277 V / 1500 W-347 V
1	ELF-SK013	ELEMENT (KIT) 1250 W-120 V
1	ELF-SK014	ELEMENT (KIT) 1250 W-347 V / 750 W-277 V
1	ELF-SK015	ELEMENT (KIT) 2000 W-277 V
1	ELF-SK016	ELEMENT (KIT) 500 W-277 V
1	ELF-SK017	ELEMENT (KIT) 500 W-208 V
1	ELF-SK018	ELEMENT (KIT) 1000 W-208 V
1	ELF-SK019	ELEMENT (KIT) 1500 W-277 V
1	ELF-SK020	ELEMENT (KIT) 1250 W-208 V
2	M-SK00A*	GRILLE
3	MO-008	MOTOR/BLOWER (240 V) (FOR 2000 W MODELS)
3	MO-009	MOTOR/BLOWER (120 V)
3	MO-032	MOTOR/BLOWER (240 V) (FOR 1500 W AND LESS MODELS)
4	PROT-005	THERMAL PROTECTION (AUTO.) (L175)
5	SKTBA	SUSPENDED CEILING ADAPTATOR
6	SKSA	SURFACE ADAPTER 120, 208 AND 240 V (OPTIONAL)
7	ST-017	THERMOSTAT SP
	FD60MCW70	60-MINUTE TIMER (WHITE)



LIMITED WARRANTY

This limited warranty is offered by Stelpro Design inc. ("Stelpro") and applies to the following products made by Stelpro: models ASKI. **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: **5 years**. 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.



USER'S GUIDE

STE402NP+ SINGLE PROGRAMMING ELECTRONIC THERMOSTAT



 **WARNING**

Before installing and operating this product, the owner and/or installer must read, understand and follow these instructions and keep them handy for future reference. If these instructions are not followed, the warranty will be considered null and void and the manufacturer deems no further responsibility for this product. **Moreover, the following instructions must be adhered to in order to avoid personal injuries or property damages, serious injuries and potentially fatal electric shocks.** All electric connections must be made by a qualified electrician, according to the electric and building codes effective in your region. Do NOT connect this product to a supply source other than 120 VAC or 240 VAC, and do not exceed the load limits specified. Protect the heating system with the appropriate circuit breaker or fuse. You must regularly clean dirt accumulations on the thermostat. Do NOT use fluid to clean thermostat air vent. Do not install thermostat in a wet place. However, installing it in isolated walls is allowed.

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.

The screen/LCD display shown as an example in this manual may be different from the actual screen/LCD display.

DESCRIPTION

The electronic thermostat STE402NP with or without backlight (indicated by a + at the end of the code) can be used to control electric heating units such as electric baseboards, convectors, or aeroconvectors. It keeps the temperature of a room at the requested set point with a high degree of accuracy. This product is designed for installations with electrical current - with a resistive load - ranging from 1.25 A to 16,7 A (120/240 VAC). It possesses a user-friendly interface. Furthermore, it gives you the possibility to control the temperature of a room with great precision.

This thermostat is not compatible with the following installations:

- electrical current higher than 16,7 A with a resistive load (4000 W @ 240 VAC and 2000 W @ 120 VAC);
- electrical current lower than 1.25 A with a resistive load (300 W @ 240 VAC and 150 W @ 120 VAC); and
- central heating system.

Parts supplied:

- one (1) thermostat;
- wall mounting plate located at the back of the thermostat;
- two (2) mounting screws;
- two (2) solderless connectors suitable for copper wires.

INSTALLATION


Selection of the thermostat location

The thermostat must be mounted to a connection box on a wall facing the heating unit, at around 1.5 m (5 feet) above the floor level, on a section of the wall exempt from pipes or air ducts.

Do not install the thermostat in a location where temperature measurements could be altered. For example:

- close to a window, on an external wall, or close to a door leading outside;
- exposed directly to the light or heat of the sun, a lamp, a fireplace or any other heat source;
- close or in front of an air outlet;
- close to concealed ducts or a chimney; and
- in a location with poor air flow (e.g. behind a door), or with frequent air drafts (e.g. head of stairs).

Thermostat mounting and connection

1.  Cut off power supply on lead wires at the electrical panel in order to avoid any risk of electric shock.
2. Ensure that the air vents of the thermostat are clean and clear of any obstruction.
3. Using a screwdriver, loosen the screw retaining the mounting base of the thermostat until you feel a loose (do not completely remove the screw).



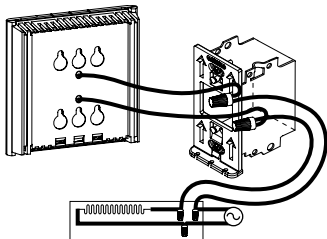
Then, remove the mounting base at the back of the thermostat by tilting it downward, then towards you.

4. Align and secure the mounting base to the connection box using the two screws supplied.

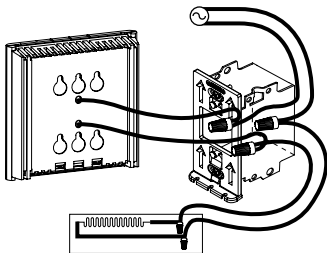


5. Pass the wires from the wall through the hole at the base of the mounting base and connect them using the supplied solderless connectors. When making the connection with aluminum wire, make sure that you are using connectors identified CO/ALR. Please note that the thermostat wires do not have polarity. Therefore, the way they are connected is not important.

2-WIRE INSTALLATION



4-WIRE INSTALLATION

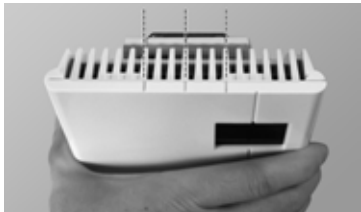


6. Place all the wires into the connection box.



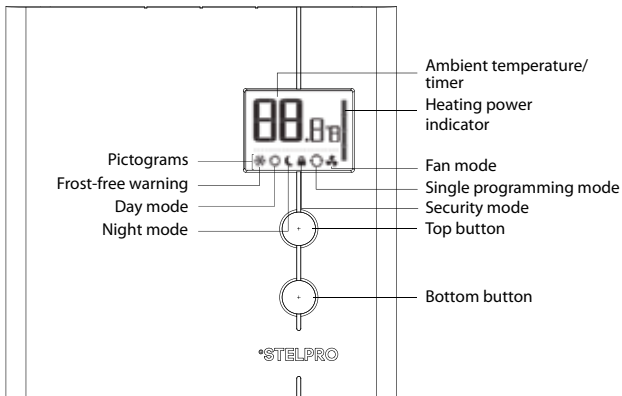
7. Align the little slots located on the top of the thermostat with those on the the mounting base and secure the thermostat to the mounting base. Note that you can also position the thermostat on the left or the right side of the junction box (see the illustrations below). Then, tighten the screw at the bottom of the unit.

Alignment




8. Turn on the power.

9. Set the thermostat to the desired setting (see the following section).



Initial start up



When powering on for the first time, the thermostat is initially set to Day mode . The temperature is displayed in Celsius and is set at 21 degrees by default.

Temperature set points

The figures displayed above the pictogram indicate the temperature set point. It can be displayed in degrees Celsius or Fahrenheit (see "Display in degrees Celsius/Fahrenheit").

To adjust the set point, just press down the top button to increase the value, or the bottom button to decrease it. Set points can be adjusted by increments of 0.5°C (1°F). To quickly scroll through the set point values, press and hold down the button. The minimum set point is 3°C (37°F), and the maximum set point is 30°C (86°F). In Day mode, you can turn off the thermostat by lowering the set point below 3°C. The set point value displayed will be --., and heating system start up will be impossible.

Day mode and Night mode

The thermostat includes a Day mode  and a Night mode , both of them having their own independently adjustable and recorded set point. When switching from one mode to the other, the system will automatically use the temperature set point corresponding to the Day/Night mode selected. The standard factory set point adjustment is 21°C (70°F) for the Day mode, and 18°C (64°F) for the Night mode.

The current Day/Night mode selection is indicated on the display by the Sun or Moon icon. In order to manually switch from one mode to the other, simultaneously press down the two buttons and release them immediately.

Night mode timer

The Night mode features a timer that automatically returns to the Day mode after a selectable time period. This timer allows the temporary use of a temperature set point. The standard factory adjustment of the timer is 8 hours. With this adjustment, the thermostat automatically returns to Day mode 8 hours after being switched to the Night mode.

For example, if you want a night temperature lower than the day temperature, both Day/Night mode set points will first have to be set at the desired temperatures. Before bedtime, the Night mode temperature set point will be activated by switching manually to the Night mode. The timer is set for the duration of the night. The thermostat will automatically return to the Day mode at the end of the night, and the Day mode temperature set point, which is higher, will become effective at this time.

Night mode timer adjustment procedure

1. If necessary, adjust the Day/Night mode set points at the desired temperatures. If needed, switch from one mode to the other by simultaneously pressing down the two buttons and releasing them immediately.
2. From the Night mode, simultaneously press down the two buttons for more than 3 seconds until the Moon icon blinks.
3. If needed, adjust the timer by pressing down the top button to increase the value, or the bottom button to decrease it. The adjustment range is from 1 hour to 999 hours. To quickly scroll through timer values, press and hold down the button.
4. When the adjustment is completed, release the buttons and wait for 5 seconds to exit the adjustment function.

NOTE: The Night mode timer will be automatically reinitialized to the latest recorded value when switching from the Day mode to the Night mode. It is not necessary to readjust the timer every time you switch to the Night mode. The timer is also reinitialized when this value is adjusted. Once the timer has completed its cycle and when the thermostat is in the Day mode, you must manually return to the Night mode. If you want to automatically return to the Night mode, the Single programming mode must be selected.


Single programming mode

The Single programming mode, which is associated with the Night mode timer, allows alternating between the Day/Night modes and the two corresponding set points over a 24-hour period. Once activated, this mode allows an automatic return to the Night mode after 24 hours. The Single programming mode allows you to define two periods in a single day with different set points.


For example, if the Single programming mode is activated and the Night mode timer is set at 8 hours, the thermostat will be operating in the Night mode for 8 hours at the night temperature set point. Then, it will return to the Day mode for 16 hours operating at the day temperature set point. At the end of the 24-hour cycle, the thermostat will return to the Night mode, and the cycle will start over. The 24-hour cycle starts with the Night mode as soon as the Single programming mode is activated. The Single programming mode activation should be made when you want to return to the Night mode. The normal course of a cycle in the Single programming mode is as follows:

- 1- Night mode: activated for the duration of the Night mode timer cycle. It returns to the Day mode when the timer cycle is completed.
- 2- Day mode: activated for the remaining time of the 24-hour cycle. It returns to the Night mode at the end of the 24-hour cycle.

Adjustment procedure of the Single programming mode:

1. If necessary, adjust the Day/Night set point at the desired temperatures. If needed, switch from one mode to the other by simultaneously pressing down the two buttons and releasing them immediately.
 2. From the Night mode, simultaneously press down the two buttons for more than 3 seconds. If needed, adjust the timer by pressing down the top button to increase the value, or the bottom button to decrease it. The Night mode timer adjustment range is from 1 hour to 23 hours in the Single programming mode. To quickly scroll through the timer values, press and hold the bottom button.
- NOTE: If you set the timer to any value exceeding 23 hours, it will be impossible to activate the Single programming mode and if it was activated, the Single programming mode will be deactivated.
3. Activate the Single programming mode by simultaneously pressing down the two buttons for at least 3 seconds. The  icon will appear. If the Single programming mode was already activated, the same procedure should be used to deactivate it.
 4. When the adjustment is completed, release the buttons and wait for 5 seconds to exit the adjustment function.

NOTE: It is always possible to manually change the Day/Night mode during a 24-hour cycle. However, any manual return to the Night mode will re-initialize the Night mode timer to the latest value recorded, which modifies the cycle in progress. In all cases, at the end of the 24-hour cycle, the thermostat will return to the Night mode and start a new cycle. It is thus not necessary to readjust the Single programming mode when a manual change is made to the Day/Night mode.

When turning back on after being powered off (because of a power failure, for example), the Single programming mode is deactivated, and, if previously activated, the  icon will blink. The blinking will stop as soon as you press down a button.

Display in either degrees Celsius/Fahrenheit

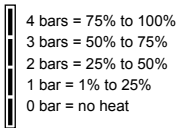
The thermostat can display the ambient temperature and the set point in degrees Celsius (standard factory setting) or Fahrenheit.

1. From the Day mode, simultaneously press down the two buttons for 3 seconds. The Celsius/Fahrenheit symbol will blink after 3 seconds. (For the backlit models, press down the two buttons for 8 seconds. Note that the backlight will blink after 3 seconds, but you must hold down the buttons. The Celsius/Fahrenheit symbol will blink after 8 seconds.) Release the buttons.
2. Press down the top button to switch from the degrees Celsius to the degrees Fahrenheit, and conversely. The degree Celsius or Fahrenheit symbol will be displayed.

- When the adjustment is completed, release the buttons and wait for 5 seconds to exit the adjustment function.

Heating Power Indicator

The level of power used to maintain the temperature at the set point is expressed as a percentage indicated by the number of bars in the thermometer displayed. The heating power used is displayed as follows:



Frost-free warning ❄️

The Snowflake icon is displayed when the temperature set point is between 3°C (37°F) and 5°C (41°F). A minimum temperature will be maintained to ensure frost control.



Security mode 🔒

It is possible to impose a maximum temperature set point by activating this mode. Then, it becomes impossible to exceed this set point, regardless of the current mode (Day/Night). However, it is still possible to lower the set point at your discretion.

Procedures to activate the Security mode

- To activate the Security option, from the Day mode adjust the day set point to the desired maximum temperature.
- From the Day mode, simultaneously press down the two buttons for more than 13 seconds, until the 🔒 icon appears (note that the °C or °F symbol will blink after 3 seconds, but continue to keep both buttons pressed down). (For the backlit models, note that the backlight will blink after 3 seconds and the °C or °F symbol will appear after 8 seconds, but continue to keep both buttons pressed down).
- Release the buttons. The thermostat is now locked.

Procedures to deactivate the Security mode

1. To deactivate the Security mode, start by cutting off the thermostat power at circuit breaker and wait at least 20 seconds.
2. Turn the thermostat power back on and the  icon will blink for a maximum of 5 minutes.
3. Simultaneously press down both buttons for 13 seconds (note that the backlight will blink after 3 seconds and the °C or °F symbol will appear after 8 seconds, but continue to keep both buttons pressed down). After 13 seconds, the  icon will disappear and the degrees symbol (C or F) will stop blinking, indicating that the Security mode is deactivated. Release the buttons.


Fan mode

The activation of the Fan mode is similar to the Celsius/Fahrenheit adjustment.

To activate or deactivate the Fan mode, you must press down both buttons simultaneously for 3 seconds while in Day mode. Once the 3 seconds have passed, the Celsius/Fahrenheit symbol will blink. (For the backlit models, press down both buttons for at least 3 seconds in Day mode. Note that the backlight will blink after 3 seconds but hold down the buttons until the Celsius/Fahrenheit symbol blinks.) At this point, release the buttons. You must then press down the bottom button to activate or deactivate the Fan mode. The Fan pictogram will turn on or off depending on the case.


When the Fan mode is activated, the stop or minimum heating time (off/on) for a complete 10 minute cycle is established at 90 seconds (factory setting). You can adjust it from 90 to 300 seconds. This is done to limit the amount of times the thermostat will turn on or off. Also, if the thermostat reaches a differential superior or inferior to the 2 degrees requested, it will shut off immediately. The deactivation of the Fan mode will cause the thermostat to go back to the heating cycle previously programmed. Once the adjustment is finished, you can exit the adjustment mode by not pressing any buttons for 5 seconds.

Ventilation intervals duration

You can adjust the minimum time between the fan startups and shutdowns. This adjustment is similar to the fan activation procedure. First, you have to enter the fan adjustment mode, as described in the previous section. Then, you must press down the bottom button for 3 seconds, until the  icon blinks. A duration in seconds will appear. You can adjust it from 90 (factory setting) to 300 seconds by increments of 30 seconds. Once the adjustment is done, you can exit the adjustment mode by not pressing down any button during 5 seconds.

Parameters saving and power failures

The thermostat saves some parameters in a non-volatile memory to be able to recover them after being shut off (a power failure, for example). These parameters are the Day/Night settings, the Single programming mode, the state of the Security mode, the maximum symbol of the Security mode, the Celsius/Fahrenheit symbol, the Fan mode, the number of minutes associated to a heating cycle, the number of hours of the night time-switch, the number of hours remaining on the night time-switch and the current Day/Night mode. These parameters are saved every minute if any changes are made, except for the Day/Night mode and the remaining time left on the time-switch. These are saved only if the Single programming mode had not been activated.

Please note that the Single programming mode is not automatically reactivated when the thermostat is turned on. The  icon blinks to warn the user that the mode was previously activated when the thermostat was shut off but is no longer active. Furthermore, when power is shut off, the existing Day/Night mode is recovered only if the Single programming mode was previously deactivated. In the opposite case, the Day mode is automatically reactivated. The Security mode is also reactivated if it was previously activated. However, the icon will blink for 5 minutes, during which it is possible to deactivate the Security mode by pressing down both buttons simultaneously for 13 seconds. If this is not done, the Security mode will remain activated and the icon will stop blinking.

Night light (only for model with backlight)

You can activate the Night light option to permanently turn on the backlight. To activate or deactivate this mode, the thermostat must first be set in Day mode. Then, simultaneously press down both buttons for 3 seconds until the backlight blinks. Release the buttons. The night light mode will be activated (or deactivated if it was previously activated).

PROBLEM	DEFECTIVE PART OR PART TO CHECK
The thermostat is hot.	<ul style="list-style-type: none"> In normal operating conditions, the thermostat housing can reach nearly 40°C at maximum load. That is normal and will not affect the effective operation of the thermostat.
Heating is always on.	<ul style="list-style-type: none"> Check if the thermostat is properly connected. Refer to the installation section.
Heating does not run even if the thermostat indicates it is on.	<ul style="list-style-type: none"> Check if the thermostat is properly connected. Refer to the installation section.
The display does not turn on.	<ul style="list-style-type: none"> Check if the thermostat is properly connected. Refer to the installation section. Check the power supply at the electrical panel. Check if the heating unit has a switch. If so, ensure that this switch is turned on.
The display turns off a few minutes and then turns on again.	<ul style="list-style-type: none"> The thermal protection of the heating unit has opened due to overheating. Check if the heating unit is in good condition of operation and that clearance around the appliance is according to the manufacturer's specifications.
The display has low contrast when heating is on.	<ul style="list-style-type: none"> The load is lower than the minimum load. Install a heating unit that is within the load limits of the thermostat.
The displayed ambient temperature is incorrect.	<ul style="list-style-type: none"> Check the presence of an air stream or a heat source near the thermostat, and correct the situation.
The display indicates E1 or E2.	<ul style="list-style-type: none"> Faulty thermal sensor. Contact the customer service.
Weak luminosity of the display.	<ul style="list-style-type: none"> Possibility of a bad contact. Check thermostat wirings. Refer to the installation section.

N.B. If you are unable to solve the problem after having verified these points, please communicate with our customer service. Consult our website for the phone numbers.

Supply voltage:

120/208/240 VAC, 50/60 Hz

Minimum electrical current with a resistive load:

1.25 A

150 W @ 120 V

260 W @ 208 V

300 W @ 240 V

Maximum electrical current with a resistive load:

16.7 A

2000 W @ 120 VAC

3470 W @ 208 VAC

4000 W @ 240 VAC

Temperature display range:

3°C to 40°C (37°F to 99.5°F)

Temperature display resolution:

0.5°C (0.5°F)

Temperature set point range:

3°C to 30°C (37°F to 86°F)

Temperature set point increments:

0.5°C (1°F)

Storage temperature:

-40°C to 50°C (-104°F to 122°F)

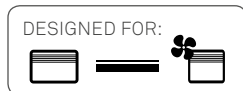
STE402NP/STE403NP

ELECTRONIC THERMOSTAT – SINGLE PROGRAMMING

4000 W



ALSO AVAILABLE
STE403NP – 347 V MODEL



PRACTICAL AND EFFICIENT!

The STE402NP electronic thermostat allows you to precisely control the temperature. It has a Security mode that lets you program a maximum temperature setpoint. It's simple and safe!



**SIMPLE TO USE
AND INSTALL**



GREAT POWER
4000 W



**INCREASED SAVINGS
AND COMFORT**
INCOMPARABLE ACCURACY



BACKLIT SCREEN†
CAN BE USED AS A NIGHTLIGHT



ELECTRICITY SAVINGS
ENERGY SAVINGS OF 10-15%
DEPENDING ON USE*

COLOUR

- white

FINISH

- molded plastic

WATTAGE AND VOLTAGE

- 150 W to 2000 W @ 120 V
- 260 W to 3475 W @ 208 V
- 300 W to 4000 W @ 240 V
- 350 W to 4600 W @ 277 V (STE403NP)
- 400 W to 5750 W @ 347 V (STE403NP)

CONTROL

- two- or four-wire connection
- acts like a programmable thermostat by automatically lowering the temperature once per 24-hour period (Single programming mode)

- compatible with forced-air units (Fan mode)
- frost-free warning
- lock option at a maximum temperature setpoint (Security mode)
- display in Celsius or Fahrenheit

ACCURACY

- accurate ambient temperature control of ± 0.5 °C (1 °F)
- CSA C828-13
- temperature sensing with thermistor

TEMPERATURE RANGE

- 3 to 30 °C (37 to 86 °F)

WARRANTY

- three years
- * independent study
- † except STE403NP model

TECHNICAL SPECIFICATIONS

PRODUCT	WATTS		VOLTAGE	AMPERAGE	FREQUENCY	PACKAGING	UNIT PRICE
	CODE	MINIMUM	MAXIMUM	VOLTS	AMPERES		
STE402NPWB+	150/260/300	2000/3475/4000	120/208/240	16.7	50/60	BOX	39.00
STE403NPW24	150/260/300/350/400	2000/3475/4000/4600/5750	120/208/240/277/347	16.7	50/60	BOX	106.00

Dimensions: 4 7/8 in. (124 mm) wide, 4 7/8 in. (124 mm) high and 1 3/8 in. (29 mm) deep
(STE403NP: 4 1/2 in. (114 mm) wide, 4 7/8 in. (124 mm) high and 1 3/8 in. (35 mm) deep)

°STELPRO

°STELPRO reserves the right to modify descriptions, manufacturing specifications or prices without prior notice. No returns accepted on optional-colour products. For all the latest models and prices, please refer to our website at www.stelpro.com.



