

CONVECTAIR

ALLEGRO DUO

7791 BB or BM



Installation & Operating Instructions

ATTENTION : Documents to be kept by the end-user

INTRODUCTION :

Dear owner,

- Congratulations on the purchase of this premium electric heater from CONVECTAIR, manufacturer of the highest quality heating product in the electrical industry.
- To obtain the best results and the ultimate in performance and comfort, please take a moment to read the installation and maintenance instructions shown in this manual.

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- QUICKSTART GUIDE -



Electrical requirements : 240 V

The electrical supply cable should be located 190 mm (7,5 in.) from the floor, (p.5 Figure C).



Installing and connecting the heater :

See diagrams on pages 4 and 5.

To turn the heater ON or OFF :

Press the  key (p.7).

To set the temperature :

In Comfort mode (temperature is displayed) - press  or  to increase or decrease the set point (p.8).



Changing from °C to °F :

Turn the heater OFF. Press both  and  keys for 3 seconds (p.8).

Changing mode :

Press the  (Comfort > Economy > Frost protection > Program > Comfort >... p.9 & 10).

Locking or unlocking the control panel :

press  and  together and hold for 3 seconds (p.10).

Diagnostics : p.14.

Contact CONVECTAIR : p.14

1 SPECIFICATIONS

Optional accessories :

For greater comfort and energy efficiency, several programming modules can be added to this heater : the Pilot Wire Programmer or the wireless Power Carrier Master and Receiver modules. For more information, call your CONVECTAIR electrician or dealer, or contact CONVECTAIR directly (see contact info at the end of this booklet).



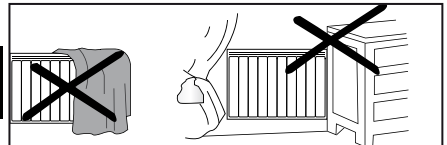
2 SETTING UP

Heater installation

This heater must be installed in accordance with national and local codes and CONVECTAIR recommends an installation by a qualified electrician.



IMPORTANT :
DO NOT COVER THE HEATER



Covering the heater can result in severe overheating.

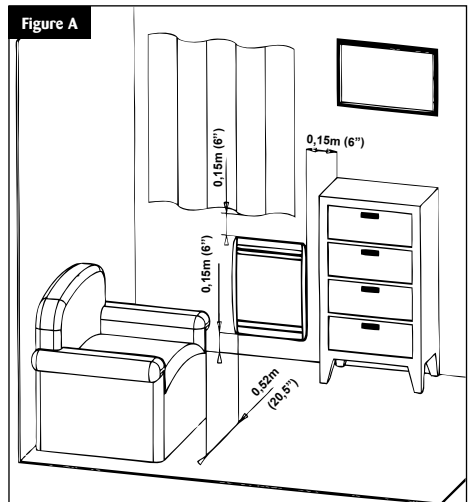
The above logo warns of risk : do not cover.

Do not cover or obstruct the air intake or outlet on the unit as this could cause overheating and damage the heater.

When choosing a location for this heater, avoid drafty areas which can affect the thermostat.

Make a note of the minimum required clearances (height from floor, distances from side walls or furniture, drapes, etc). See Fig.A.

Figure A



3

INSTALLATION

- Choose the location where the Allegro Duo will be installed (Fig. C). It must be installed 4 in (10cm) from the floor.
- Ensure that there are no restrictions to the minimum clearances permitted which are : 20 in (52cm) in front, 6 in (15cm) on each side and 4 in (10cm) on top of the Allegro Duo.

Installation :

- 1- free the mounting bracket by pressing and pulling both locking bracket (Fig. B).
- 2- Relocate the mounting bracket to match the marks with the holes for the bottom fasteners (Fig. C)
- 3- Make sure that the mounting bracket is level then mark the 3 or 4 holes for fastening.
- 4- Place the mounting bracket and fasten it with screws.



Figure B

Power. (W)	1000		1500		2000	
Bracket	250mm	9 3/4"	518mm	20 1/4"	788mm	31"
Width	605mm	23 7/8"	925mm	36 3/8"	1165mm	46"
Height	580mm	22 3/4"	580mm	22 3/4"	580mm	22 3/4"

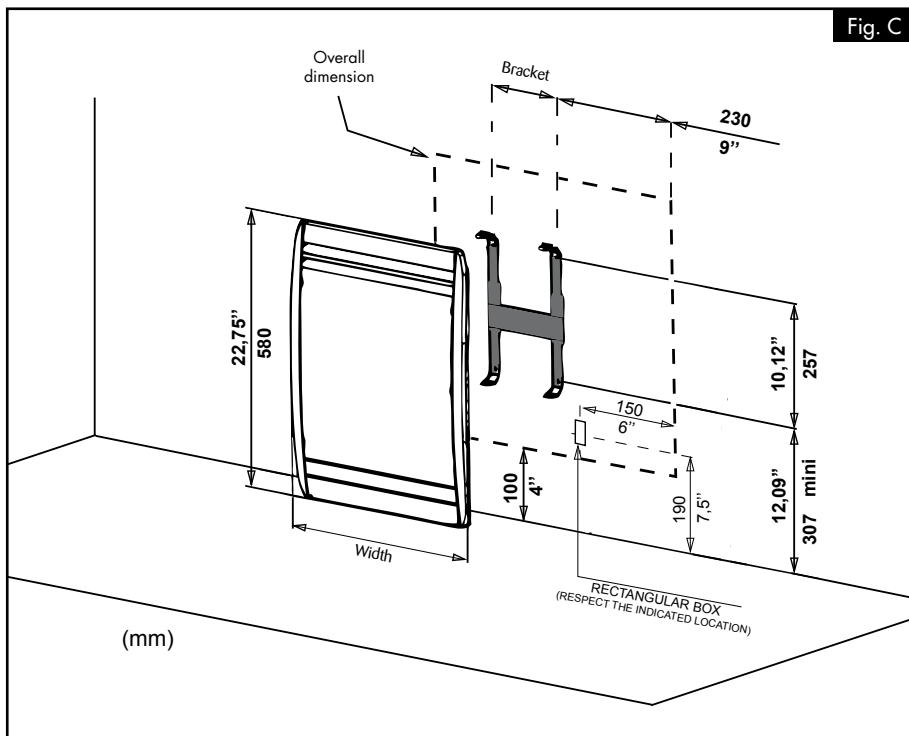


Fig. C

4 ELECTRIC CONNECTION

CONVECTAIR recommends that this heater be installed in accordance with national and local codes.

- A rectangular junction box must be installed in the wall, prior to electrical hookup (Figure 3a). The box must be of appropriate size to receive the necessary electrical connections and the 2 3/4" x 4 1/2" (70mmx115mm) cover that is supplied with the unit cable.

- To prevent short circuits and electrical shocks turn the power off at the main panel before attempting the installation or any repairs.
- If the power cable is damaged it must be replaced by the manufacturer, an approved service depot or a technician with similar qualifications.

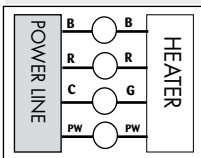
CAUTION : This unit must be connected to a 240 volts or 208 volts circuit, 60 cycles. Disconnect power supply before making wiring connections to prevent electrical shock or equipment damage.

The unit must be hooked up with the rectangular junction box already installed in the wall.

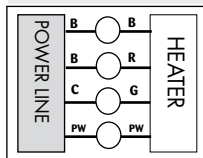
- 1- Connect the ground wire (C) to the green wire (G) inside the connection box.
- 2- Connect the black (B) and red (R) leads from the heater to the electrical supply wires (see diagrams below).
- 3- You will find, on the supply cord, a fourth purple wire (PW) with a sealed end. This wire must not be used for the electrical connection. This wire will be used only if the unit is connected to a CONVECTAIR "Programmer" central control system.
- 4- Carefully put back all wires inside the box, close and screw the cover.
- 5- Hook the CONVECTAIR unit onto the mounting bracket tabs with the unit slightly angled towards you. Push the CONVECTAIR towards the wall until it is engaged on both locking brackets.

WITH the use of a pilot wire (PW).

CANADA

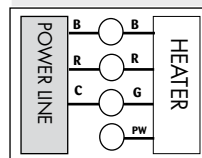


U.S.A.

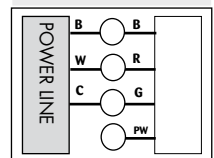


WITHOUT using a pilot wire (PW).

CANADA



U.S.A.



B - Black

G - Green

R - Red

W - White

C - Copper

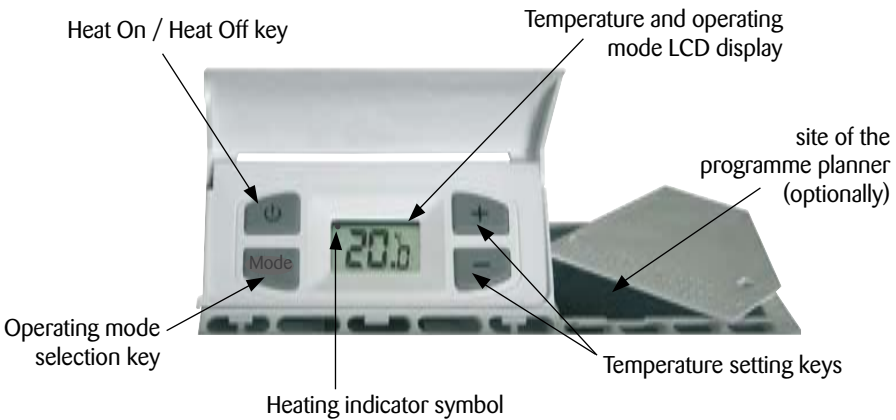
PW - Pilote Wire

5 OPERATING INSTRUCTIONS

Operation

During the heating season, the CONVECTAIR heater will remain warm and the ambient temperature will remain constant. It is normal in very cold temperatures for the unit to become hot. Caution is advised when young children are present.

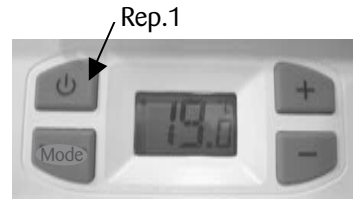
THE BUILT-IN THERMOSTAT OFFERS 5 MODES :



[no display]	OFF :	no heating.
°C/°F	Comfort:	the heater maintains the set temperature
EC0	Economy setback:	the temperature is lowered to the desired setting without changing the comfort setting (night setback, unused rooms, temporary absence).
Hg	Frost protection :	the temperature is set at 45°F(7°C) for long term absence.
P	Program :	the heater can respond to signals from a Programmer (CONVECTAIR 7392, sold separately).

Turning the heater ON.

Note : When the heater is first connected, it will be in the OFF position, with a blank display. To start, press briefly on the Heating ON/OFF key (rep 1) and the display shows the default comfort set point : 19.0°C (66°F).



Selection °C or °F display.

The setpoint display is set to °C by default.

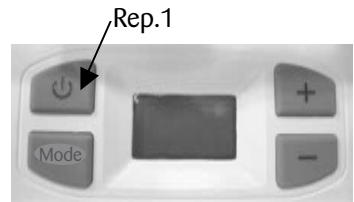
In order to display °F : press the ON/OFF key to turn the heater OFF. Then, press the ON/OFF and + keys at the same time and hold for about 3 seconds. The display will show °F.

Repeat this operation to go back to °C.

Shutting off heater operation.

To shut off the heating function, press briefly on the Heating ON/OFF key (Rep.1). The display goes blank.

Note : the heater still retains all settings in memory. It remains in standby mode.



Setting the desired temperature.

Turn the heating on. The display shows 19.0°C (or 66.0°F if set in Fahrenheit). Using the + and – keys, you can raise or lower the setting as you wish by 0.5° each time the key is pressed.

This is how you can adjust the thermostat to your desired temperature (see example).

To confirm this comfort level, you may follow the following procedure, preferably in the evening (no sun influence) : close the doors to the room where the heater is located ; wait about one hour to allow for the temperature to stabilize, then adjust the setting up or down (+ or – keys) until the temperature feels right. Allow another hour to verify that the temperature has stabilized at the correct level.



Comfort mode (.19.0°C - 66.0°F,...).

When the thermostat is in Comfort mode, the heater will maintain the set temperature (19.0°C 66.0°F) without responding to any Programmer instruction.

To change the set temperature, simply press the + or – keys to change the setting in steps of 0.5°.



Exception to the Comfort mode :

If the heater is connected to a Programming system, it will still respond to a Frost Protection instruction.

To select the Comfort Mode :

Press the Mode key several times until the set temperature value appears on the display (19.0°C. 66.0°F,...).

Eco mode.

When the heater is in ECo Mode, it will maintain the temperature at a lower value. This setting is useful to reduce energy consumption at night or when a room is temporarily unused.



To select the ECo mode :

Press the Mode key briefly until the word ECo appears on the display.

To display the ECo temperature setting :

While in ECo mode, press the + or – key. The ECo temperature setting will appear on the display (the default setting is 3.5°C or 7°F below the Comfort temperature).



To change the ECo temperature :

When the display is in Eco mode, you have the option of choosing a set temperature. The Eco temperature can be set at any value between the Frost Protection temperature (7°C or 45°F) and the Comfort temperature minus 0.5°.

Select the ECo mode. Press and maintain the Mode key until the temperature value starts to blink. Release the Mode key and adjust the temperature up or down in 0.5° steps using the + or – keys. Press Mode to confirm the setting.

Note : the ECo temperature is relative to the Comfort temperature. If the Comfort setting is changed, the ECo temperature will change automatically to maintain the same difference between the two values.

Exceptions to the Eco Mode :

if the heater is connected to a Programming system, it will still respond to a Frost Protection instruction.

Frost Protection setting : HG

In case of longer term absence (24hrs or more), the HG mode will maintain the room temperature at 7°C (45°F). You can reduce your energy consumption while maintaining a minimum safe temperature.



To select the HG mode :

Press the Mode key until the display shows : HG.

Locking the heater controls

The control pad can be locked from any Mode selection to prevent tampering.

To lock the control : From any Mode setting, press both the + and the – key at the same time and hold for about 3 seconds. The display will blink to show that the keyboard is locked.

Pressing any key when the keyboard is locked will cause the screen to display «FF» and the heater will not respond.

To unlock the keyboard, repeat the same procedure : press and hold both + and – keys at the same time for about 3 seconds.



Program Mode : P

This mode allows the heater to respond to instructions from a central Programmer system or from an individual Programmer module. The thermostat display will show what instruction is being received (see summary table below).



To select the Program Mode :

Press the Mode key briefly until the display shows the temperature setting with the letter P on the top right of the screen (19.0^P or 66.0^P, for instance).

The temperature is equal to the Comfort setting. To modify the set temperature, simply press the + or – keys.

Suggestion :

For better comfort, we recommend that you keep this heater in the Programming Mode.

This function allows your heater to react automatically to instructions sent by a central Programmer System or by an individual Programmer cassette inserted in the receptacle located next to the thermostat.

SUMMARY TABLE OF PROGRAMMING MODES SENT BY A PROGRAMMER :

PROGRAMMER INSTRUCTION	HEATER DISPLAY	RESULTING MODE
Setback on.	ECO ^P	Temperature is lowered by 3.5°C (7°F) from the comfort setting (or as selected).
Frost Protection on.	HG ^P	Maintains the room temperature at 7°C (45°F).

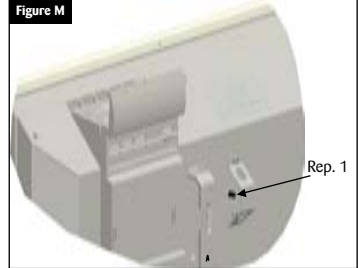
Note :

Frost Protection instructions from a Programming system will override all other settings even if a heater is not set in the Program Mode.

In that case, the heater screen will display the appropriate symbol (see table above) but the letter «P» will be flashing.

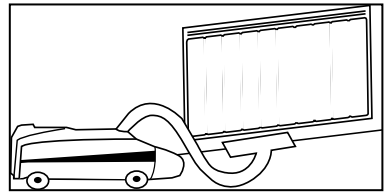
Temperature limiting control :

This heater is equipped with a manual reset control. In case of a malfunction of the unit (blocked air output or intake, for example) the heater will stop heating automatically. After correcting the malfunction the heater can be reset. To restart the heater, push the button on the upper back panel of the heater.



6 MAINTENANCE

To keep your CONVECTAIR unit clean, regular maintenance is suggested. To remove dust, use a soft cloth. To remove a stain, use a damp cloth. For a better performance and a maximum efficiency, it is suggested that dust and lint be regularly removed from the protective grille situated at the base of your CONVECTAIR heater.



NEVER USE ABRASIVE OR ACETONE-BASED PRODUCTS TO CLEAN THE HEATER AS THIS MAY CAUSE DETERIORATION OF THE EPOXY FINISH.

ANY REPAIR ON YOUR CONVECTAIR HEATER SHOULD ONLY BE DONE BY A QUALIFIED TECHNICIAN AFTER DISCONNECTING THE HEATER.

Operation and Maintenance TIPS

Your CONVECTAIR heater will become hot when in use. Caution is advised when young children are present.

Do not insert small objects through the front louvers : this could cause electrical short-circuit, fire or damage to the inner components.

Any use or modifications not approved by CONVECTAIR may cause electrical short-circuits, fire or injuries to the users.

In certain cases, it is possible for yellowing of the grille to occur over time. This is not due to a manufacturing defect. This is caused by surrounding air, which contains smoke or dust, being heated and released through the grille.

Prevention : it is suggested that grilles be frequently cleaned especially with units installed in locations where cigarette smoke is present or in the kitchen. Never use this heater during construction work or other activities that generate a lot of dust.

Note : The first time your CONVECTAIR heats, a light smoke could be released. This is normal and should disappear after about 2 to 3 minutes.

7

DIAGNOSTICS

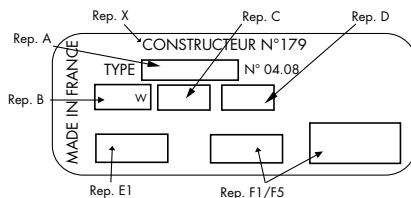
PROBLEM	VERIFICATION	ACTION
No Heat	■ The display screen is blank	■ Put the heater ON (top left key on the control ON/OFF.
	■ The screen remains blank.	■ Check the breakers for the heating circuits.
	■ The display screen is on, the heating indicator is not visible :	■ Check the set temperature : the ambient temperature does not require any heat.
	■ The display screen is on, the heating indicator is still not visible. The heater may have been shut by the Temperature Limiting Control :	■ Clean the inlet and outlet grilles and reset the overheat protection (see the Temperature Limiting Control section).
	■ The heater in ECo or HG mode, or in EcoP, OFFP or HGP mode :	■ Check that the heater is in comfort mode or that it has not been cut by the central Programming system.
The heater does not stop heating	■ Has the temperature setting been changed ?	■ Reset the temperature level.
	■ Is the heater affected by a draft, a nearby unheated space, an open window or an open door ?	■ Correct the source of cold affecting the heater.
Programming seems out of order	■ Are the Programmer (and the receiver module, if any) operating ?	■ Check the Programmer (and receiver if any) – for more details, refer to their instruction manuals. Make sure that the heater is in Program Mode. Remove and reinsert the Programmer (and receiver if any) in its receptacle.
IN ALL OTHER CASES, CONTACT YOUR ELECTRICIAN OR THE NEAREST CONVECTAIR REPAIR CENTER.		

8 IDENTIFICATION OF YOUR HEATER

IMPORTANT : Product information appears on the heater's identification label.

The identification label is located on the lower right hand side of the heater (same side as the thermostat). It includes :

- The complete model number and its production reference number (rep. A) that must be included in any warranty claim.
- Its capacity in watts (rep.B).
- Its approval standard (rep. E,C,D,F).



9 GUARANTEE

- 2 years against all defects
- 5 years on heating element

All CONVECTAIR units are subject to a double warranty: 2 years on all parts and manufacturing defects and 5 years on the heating element itself.

Warranty is applicable from date of purchase by the customer and under certain specific conditions. All details furnished with each unit. Please keep your invoice (purchase and/or installation).

REPAIR CENTERS :

Contact **CONVECTAIR** for information regarding your closest repair center.
Toll-free : **1-800-463-6478**

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