



RECESSED CEILING HEATERS INSTALLATION AND OPERATING MANUAL

**ACT-03-RX-R
ACT-04-RX-R
ACT-06-RX-R**

All electrical appliances produced by the Company are guaranteed for one year against faulty materials or workmanship. This applies only if the appliance has been used for purposes in accordance with the instructions provided and has not been connected to an unsuitable electricity supply, or subject to misuse, neglect, damage or modified or repaired by any person not authorised by us. This guarantee is offered to you as an extra benefit and does not affect your legal rights.

The correct electricity supply voltage is shown on the rating label attached to the appliance.

Reasonable care has been taken to ensure that this guide is accurate at the time of printing. In the interest of progress the Company reserve the right to vary specifications from time to time without notice.

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1. General Information

1.1 Warnings

All installations must be in accordance with the regulations. These instructions must be handed to the user on completion of the installation. Installers and service engineers must be able to demonstrate competence and be suitably qualified in accordance with the regulations. To ensure continued and safe operation, it is recommended that the appliance is serviced annually. The heaters' outlet/inlet grilles must not be obstructed during use. Any modifications made to the unit and not approved by Consort will void manufacturer's warranty and potentially create a hazard. The appliance is NOT intended for use by persons (including children) with reduced physical, sensory or mental capabilities or lack of experience or knowledge unless they have been given instruction concerning use of the appliance by a person responsible for their safety.

1.2 Health and Safety

Please read these instructions thoroughly before installing the appliance. Sole liability rests with the installer to ensure that all site safety procedures are adhered to during installation. Sole liability rests with the installer to ensure that protective safety wear such as hand, eye, ear and head protection is used during installation of the product. Ensure that all anchorage points are suitable for the weight of the appliance. Do not rest anything, especially, ladders against the product.

1.3 Location

All units should be installed horizontally. Care must be taken to allow completely free air movement into the inlet grilles of the unit to ensure the correct working operation of the heater. If the ACT03-RX-R or ACT04-RX-R heaters are mounted close to the wall or corner, the discharge opening should be facing the wall. The minimum distance from the wall or corner is 0.8m or 1.2m for the ACT06-RX-R.

WARNING:

**THIS HEATER SHOULD NOT BE INSTALLED
WHERE THERE IS A
CORROSIVE ATMOSPHERE OR
EXCESSIVE DUST.**



2. Introduction

2.1 Introduction

This instruction manual describes the Reznor Recessed Warm Air Ceiling Heaters. The heater is designed for discreet positioning in a suspended 600mm ceiling within retail or commercial premises. It can fit a recess as shallow as 210mm.

- 3kW, 4.5kW or 6kW rating
- Quiet operation
- Fan only setting for air circulation
- Sealed heater box for improved energy efficiency
- LED indicator light
- Complete with white aluminium diffuser

Controllers aren't supplied with the heaters and have to be purchased separately.

2.2 RX wireless controllers

The heaters can be controlled by a Reznor wireless CRXSL controller. Each controller can control any number of heaters providing they are within the RF range. For more details please follow the instructions supplied with the controller.

The heaters will not work without a controller.

2.3 Electrical Supply

Electrical supply is 230/240V single phase, Neutral and Earth. The maximum cable inlet size is 4mm². Electrical connection are located under the cover on the side of the heater.

The appliance shall be connected to the supply via an appropriate switched fused double pole isolator having a contact separation of greater than 3mm.



There are no exceptions.



For connection to the mains supply it will be necessary to open the terminal cover at the side/back of the unit. For safety reasons, a sound earth connection must always be made to the unit before it is put to use. The unit should be wired in accordance with IEE Regulations for the Electrical Equipment of Buildings.



Fig.1.0 Heater with terminal cover open

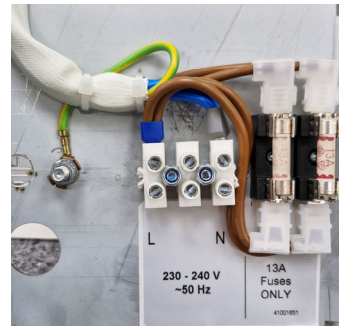


Fig.1.1 Terminal cover detail

3. Dimensions & Fixing locations

It is recommended that a minimum clearance of 50mm is allowed around the case and 35mm above the heater. The clearance allows for cable entry and prevents combustible surfaces overheating. The minimum mounting height (floor to grille) is 2.2m for the ACT03-RX-R and ACT04-RX-R and 2.5m for the ACT06-RX-R.

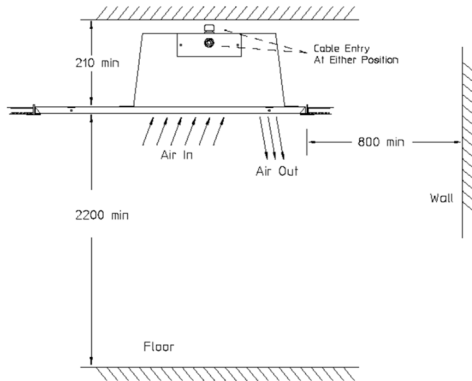


Fig.2.0 ACT03-RX-R and
ACT04-RX-R mounting
specifications

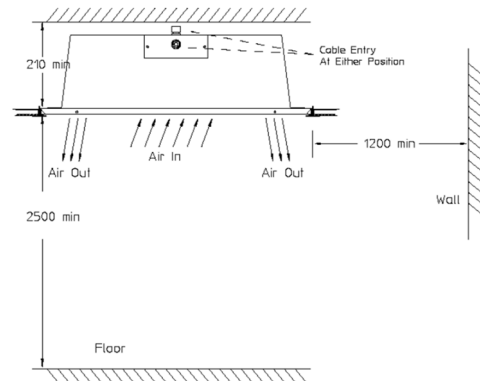


Fig.2.1 ACT06-RX-R
mounting specifications

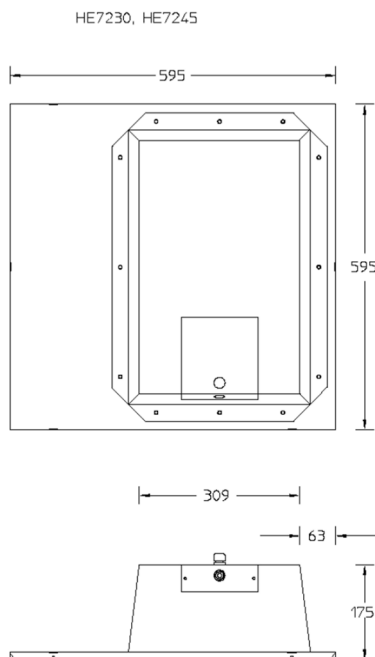


Fig.2.2 ACT03-RX-R &
ACT04-RX-R
Dimensions

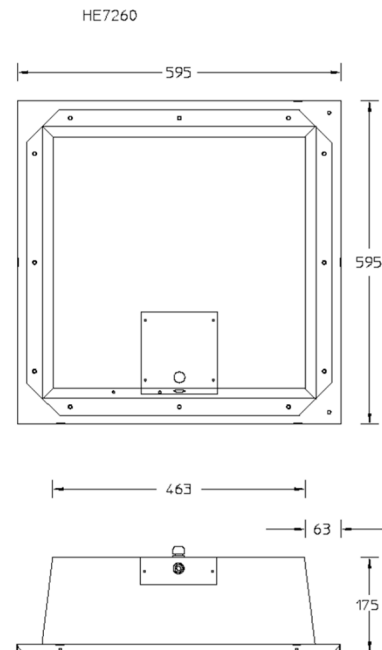


Fig.2.3 ACT06-RX-R
Dimensions

4. Installation Details

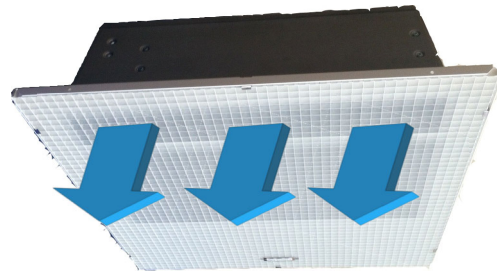
It is the sole responsibility of the installer to ensure that the points of attachment to the building are sound. Care must be taken to allow completely free air movement into the inlet grilles of the unit to ensure the correct working operation of the heater. Carefully unpack the unit. The unit is supplied with a length of self-adhesive foam strip. This can be cut into lengths and is to be laid on the 4 sides of the ceiling frame. This will ensure that the unit assembly is free of vibration. The discharge grille and diffuser assembly can now be fitted into the ceiling frame.

The weight of the ACT03-RX-R is 7kg.
The weight of the ACT04-RX-R is 7kg.
The weight of the ACT06-RX-R is 10kg.

The Reznor recessed ceiling heaters are designed to fit in space of a standard 600mm ceiling panel.

IT IS ESSENTIAL THAT EITHER THE CEILING FRAME IS ADEQUATE TO SUPPORT THE WEIGHT OF THE HEATER OR THAT THE HEATER IS INDIVIDUALLY SUPPORTED. THERE IS PROVISION ON THE HEATER FOR CHAIN OR WIRE MOUNTING OR SUPPORT.

Fig.3.0 Air discharge of ACT03-RX-R and ACT04-RX-R



! ENSURE THE AIR OUTLET OF ACT03-RX-R AND ACT04-RX-R IS NEAREST TO THE WALL OR CORNER. !

Fig.3.1 Air discharge of ACT06-RX-R

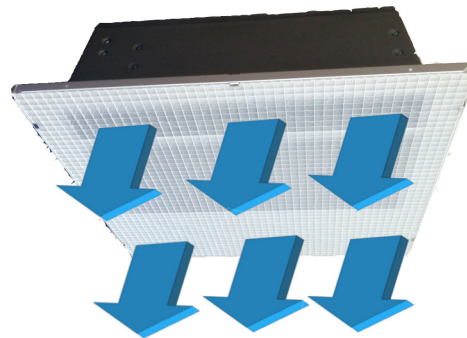
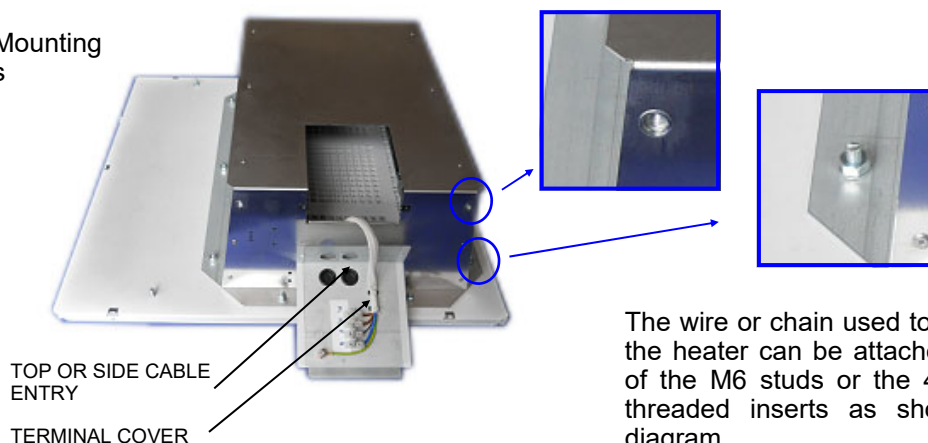


Fig.3.2 Mounting supports



The wire or chain used to mount the heater can be attached to 4 of the M6 studs or the 4 x M6 threaded inserts as shown in diagram.

5. Heater operation and Status light

5.1 Powering on the unit

Upon powering up the unit:

- A purple light LED will flash three times.

5.2 Controls

The heaters are controlled by a CRXSL controller only (supplied separately).

5.3 Status lights on RX models

Light colour	Heater status
	Heater is in stand-by mode/ not receiving signal from controller. Heater is ready for pairing with controller.
	Heater paired successfully - Pulsing Purple light for 5 seconds.
	Half heat output.
	Full power heat output.
	Heater is in fan only mode.
	If the LED is flashing white, there is a fault. The unit will continue to function in restricted mode. However, in specific circumstances, the unit will stop running.

5.4 Pairing heater to controller



Heaters have to be paired with the controller otherwise they will not work.



To pair the ceiling heater to the controller will require cycling the power to the heater. The pairing sequence should be completed within 20 seconds.

1. Ensure controller is powered.
2. Cycle power to the heater (wait until status light disappears before re-energising the heater).
3. Within 20 seconds of powering the heater, depending on controller, press and hold the pairing button/buttons.
4. The heater status light should show; pulsing purple light followed by red light.
5. The heater is now ready to use.

6. Fault detection / Indication

6.1 Fault indication

Heaters are equipped with electronic fault detection. In the event of a fault being detected, the heater will show the nature of the fault via a flashing white status light located at the front of the heater. The LED will flash one of the sequences shown in the table below. The sequence is repeated every 5 seconds.

Number of flashes	Fault
1	<u>Overheating detected</u> Heater has detected overheating and is cooling down. After 10 minutes, it will return to normal operation.
2	<u>Temperature measurement fault</u> Cause: Faulty temperature sensor. Response: Will operate as normal. However, overheating protection will not work.
3	<u>Low power detected</u> Cause: low supply voltage, TOC tripped, blow fuse, faulty heating element, faulty PCB, power measurement fault. Response: Heater inoperative.
4	<u>Problem with motor</u> Cause: Faulty motor, RPM sensor fault, low supply voltage (following power-cut). Response: Heater inoperative.
5	<u>High power detected</u> Cause: Stuck relay, overvoltage. Response: Heater inoperative.
6	<u>Motor slow</u> Response: Heat reduced.

6.2 Fault Finding

If the heater will not operate, disconnect it from the mains and arrange for a certified electrician to attend and investigate the reason.

The units are protected by thermal cut-outs from overheating in the event of fan failure or an obstruction of the free airflow. If this happens the thermal cut-outs switch off the appliance. The appliance will not operate until the heater has been disconnected from the mains supply and it has cooled down for at least 10 minutes.

THE CAUSE OF CUT-OUTS OPERATING SHOULD BE INVESTIGATED BEFORE RESETTNG.

6.3 Maintenance

ALWAYS ENSURE THAT THE MAIN EXTERNAL ELECTRICITY SUPPLY IS SWITCHED OFF BEFORE COMMENCING ANY MAINTENANCE ON THIS HEATER.

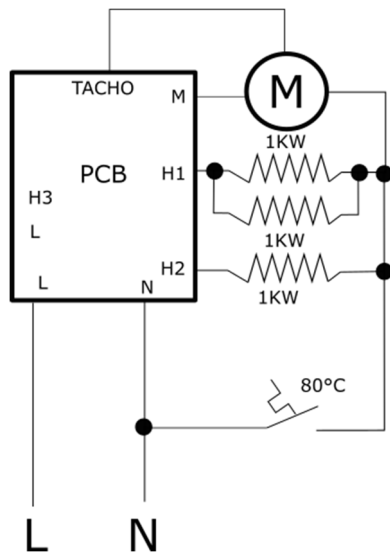
To obtain the best results from the heater, it is essential to avoid the accumulation of dust and dirt within the unit on the air inlet and discharge grilles. For this reason regular cleaning is necessary. Cleaning of the fan is best carried out with a soft brush.

The product should be serviced annually. Servicing shall be undertaken by a competent person.

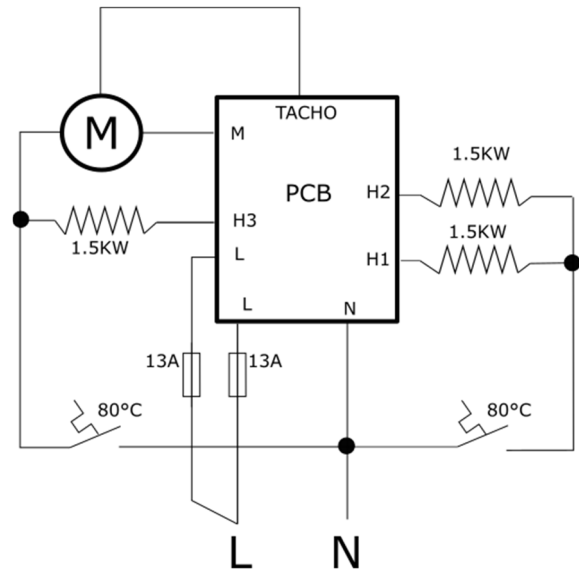
6.4 Replacing the Heater Fan

1. Remove the grille.
2. Disconnect the internal wiring from the blower.
3. Remove the four screws fixing the heater fan assembly to the back of the case.
4. The heater fan assembly can now be eased forward and removed from the heater case.
5. Fit replacement heater fan and reassemble in reverse order.

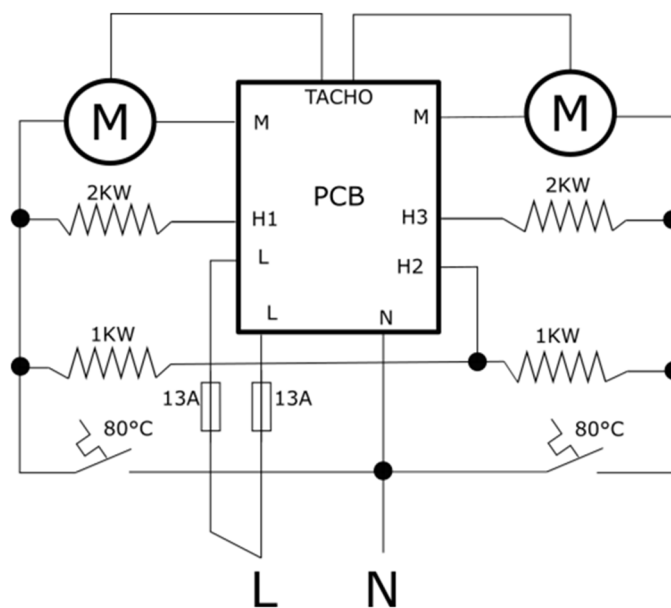
7.1 Wiring Diagrams



ACT03-RX-R - 3kW

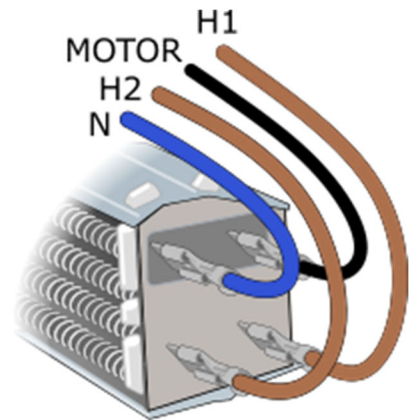
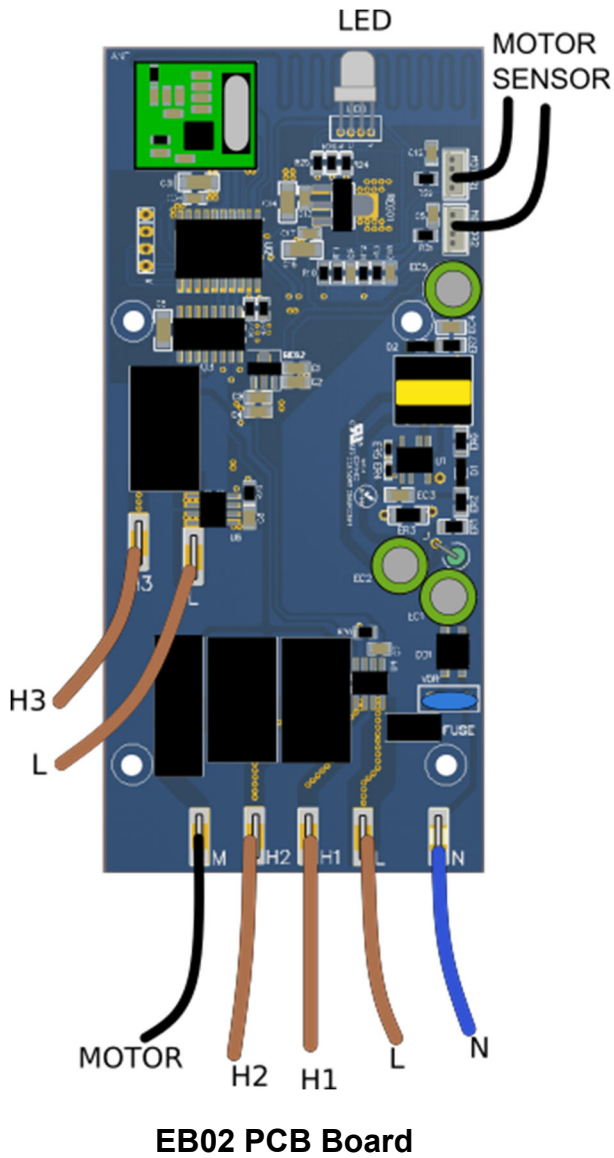


ACT04-RX-R - 4.5kW

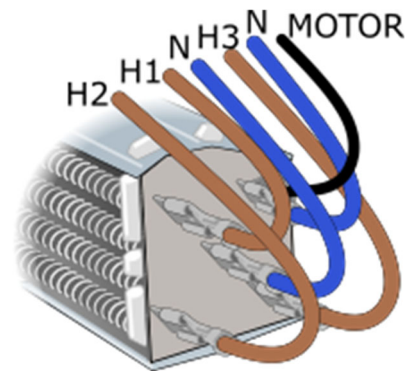


ACT06-RX-R - 6kW

7.2 Heater Connections

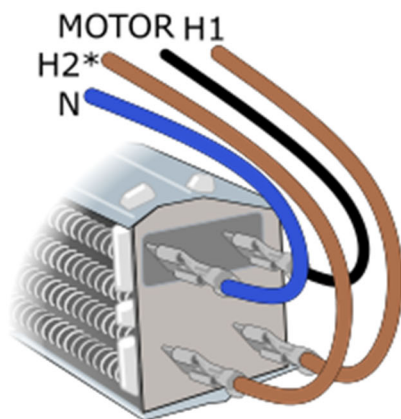


ACT03-RX-R - 3kW

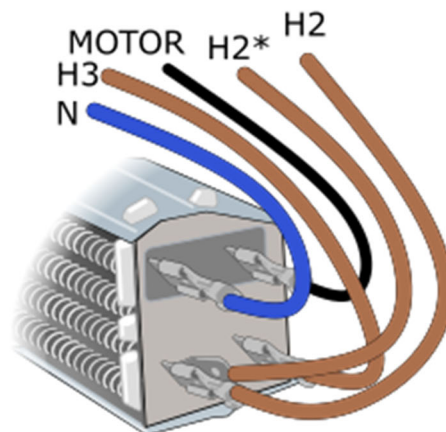


ACT04-RX-R - 4.5kW

NON PCB SIDE



PCB SIDE



ACT06-RX-R - 6kW

8 Disposal and Recycling



When the product reaches the end of its life, the person responsible for dismantling or disposing of it must do so in accordance with the regulations governing waste electrical and electronic equipment (WEEE).

Observe the regulations in force in the country concerned.

Dispose of the equipment in the recycling facilities applicable to waste electrical and electronic equipment.

Metal components can be recycled accordingly.

By disposing of this equipment by appropriate means, you will help to prevent potential risks to the environment and human health, which could otherwise be caused by improper waste handling.

Recycling the materials from this product will help to reduce the impact on the environment.

Do not dispose of old electrical and electronic equipment through household waste collection.



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