Reference Manual

Solaira Alpha H3 277V

(3 × Lamp Emitter Heater)

CANADA & USA MODELS:

SALPHA3-45277C SALPHA3-45277L1C SALPHA3-60277C SALPHA3-60277L1C

(240V - 3375W / 277V - 4500W) (240V - 3375W / 277V - 4500W) CANDEL LOW LIGHT (240V - 4500W / 277V - 6000W) (240V - 4500W / 277V - 6000W) CANDEL LOW LIGHT

C = COLOR CODE



WEATHERPROOF INFRARED HEATERS SUITABLE FOR OUTDOOR AND INDOOR USE - COMMERCIAL AND INDUSTRIAL, (RESIDENTIAL 240V OUTDOOR USE ONLY) IN NON-HAZARDOUS AREAS 🔺 🛦 🖄



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A IMPORTANT - SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

Ref No. 043484-EN-S Iss. A





When using electrical INFRARED HEATERS, basic precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons, including the following:

1. Read all instructions before using this heater.

- 2. 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.
- 3. 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. Keep combustible materials, such as furniture, pillows, bedding, papers, clothes, and curtains at least 6 feet (1.8m) from the front of the heater and keep them away from the sides and rear.
- 4. Extreme caution is necessary when any heater is used by or near children or invalids and whenever the heater is left operating and unattended.
- 5. Do not operate any heater with a damaged cord or after the heater malfunctions, has been dropped or damaged in any manner. Return heater to authorized service facility for examination, electrical or mechanical adjustment, or repair.
- 6. This heater is not intended for use in bathrooms, laundry areas and similar locations. Never locate heater where it may fall into a bathtub or other water container.
- To disconnect heater, turn controls to off.
 WARNING Each power supply circuit shall be provided with disconnecting means and the disconnecting means shall be grouped together.

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- 9. To prevent a possible fire, do not block openings in any manner.
- 10. A heater has hot parts inside. Do not use it in areas where gasoline, paint, or flammable liquids are used or stored.
- 11. Do not cover or otherwise obstruct the heater.

SAVE THESE INSTRUCTIONS

GROUNDING INSTRUCTIONS

For 240V / 277V heaters, the cords from each terminal box must be permanently connected (hard wired).

WARNING: RISK OF FIRE

Keep combustible material such as furniture, papers, clothes and curtains at least 6 feet (1.8m) from the front of the heater and away from the sides and rear.

Δ	1.8m
<u> </u>	-1.8m (6 ft)

Heaters are <u>not intended</u> for use as indoor residential or as a household heater. They may be used for outdoor residential 240V use.

INTRODUCTION

The Alpha H3 heater produces radiant heat like the sun, warming people and objects rather than the air in between. It is mounted on an adjustable bracket that allows the heat to be directed exactly where it is required. The Alpha H3 can also be used in a modular system in that more than one heater can be connected together - see 'Configurations' later in the manual. The Alpha H3 weatherproof heater is designed for indoor and outdoor use.

Please read the following instructions carefully before use. The safety of this heater is guaranteed only by its correct usage in accordance with these instructions, therefore they should be retained for future reference.

CAUTION

Before using this appliance:

- 1. Check that the voltage indicated on the units rating label corresponds to the mains supply voltage.
- 2. Do not install the heaters less than the minimum height from the floor as specified below in the specification table.
- 3. Ensure that the heater has been securely fastened in its final mounting position.
- 4. **WARNING** This appliance must be grounded and hard wired!
- 5. **WARNING** Keep the supply cables away from the front and body of the heater which will get hot during use.
- 6. Do not cover or obstruct the heater while it is in use.
- 7. Do not insert any object through any slot or opening in the heater.
- 8. Do not use if a grille is not present.
- 9. When replacing the emitter or cleaning the unit, ensure that the hard wired circuit(s) is disconnected from the mains supply. **Note:** always ensure that the lamp emitter is cool before handling.
- 10. Do not handle the halogen emitter with bare hands. If it is inadvertently touched, remove finger marks with a soft cloth and methylated spirit or rubbing alcohol. Otherwise, the marks will burn into the quartz glass of the lamp emitter during use causing premature heater failure.



11. The heater is not intended for use by young children and must be supervised by a responsible person at all times.

SPECIFICATION TA Alpha H3 240V / 277V I	BLE	Heaters
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Number of	1 - off SALPHA3-45277C	1 - off SALPHA3-60277C	2 - off SALPHA3-45277C	2 - off SALPHA3-60277C
Model Type	or SALPHA3-45277L1C	or SALPHA3-60277L1C	or SALPHA3-45277L1C	or SALPHA3-60277L1C
Voltage	240V / 277V	240V / 277V	240V / 277V	240V / 277V
Number of Lamp Emitters x Power	3 × 1125W / 1500W	3 x 1500W / 2000W	6 x 1125W / 1500W	6 × 1500W / 2000W
Total Power of Unit	3375W / 4500W	4500W / 6000W	6750W / 9000W	9000W / 12000W
Current per Lamp Emitter	4.7A / 5.4A	6.3A / 7.2A	4.7A / 5.4A	6.3A / 7.2A
Total Current of Unit	14.1A / 16.2A	18.8A / 21.7A	28.1A / 32.5A	37.5A / 43.3A
Minimum Mounting Height from Floor/ Grade to Bottom of Heater	7ft 101∕⊴in (240 cm)	7ft 10½in / 8ft 2in (240 cm) / (249cm)	8ft 9in 9 ft 6in (267cm) / (290cm)	9ft 9in 11ft (297cm) / (330cm)
Minimum Distance from Ceiling to Top A of Heater	7% (19	71⁄₂in (19cm)	15in (38cm)	15in 38cm)
Minimum Distance from Side Wall to Side of Heater	36in / 33in (92cm) / (84cm)	34in / 39in (86cm) / (99cm)	43in 4 9in (109cm) / (124cm)	51in 59in (130cm) (150cm)
Dimensions - W × H × D (inc. Bracket & bars in max. position)	471⁄⊴in × 9 (120cm × 23	47 <i>1⁄</i> ₂in × 9in × 12¾in 20cm × 23cm × 32cm)	47½in × 18¼in × 12¾in (120cm × 46cm × 32cm)	∡in × 12¾in icm × 32cm)
Weight	17. (8.0	17.6lb (8.0kg)	35.4lb (16.5kg)	4lb 5kg)

CONFIGURATIONS

The Alpha H3 heater contains three lamp emitters. It can be installed as a single unit or joined to one other single unit with joining bars that are available to connect the heaters together and increase the size and output of the installation. The maximum number of Alpha H3 heaters that can be joined together is two. Please read the section 'joining heaters together' for information on how this should be done.

INSTALLATION

The heater is fitted with 3 × supply cords measuring 79in (200cm) for hard wiring.

- **WARNING:** Wiring procedures and connections should be in accordance with the National Electric Code (NEC) and local codes.
- **WARNING:** If the supply cord(s) becomes damaged, it must be immediately replaced by a qualified person in order to avoid a hazard.
- **CAUTION:** Disconnect electric power supply before working on circuit wiring to prevent electric shock.
- **A** CAUTION: Please observe the minimum safe distance between the heater body and any inflammable surfaces.
- **CAUTION:** When the electrical connection is outside weatherproof sockets must be used having ground fault protection (GFCI or GFI).
- NOTE: CONSULT A QUALIFIED ELECTRICIAN, IF IN DOUBT.

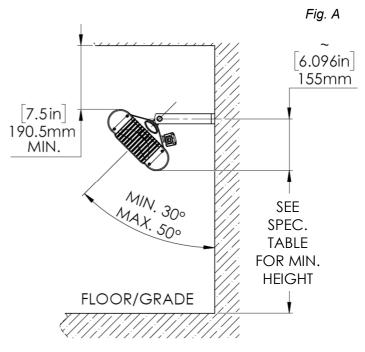
MOUNTING - 1 × TRIPLE (THREE LAMP EMITTER) HEATER

CAUTION

Always isolate the heater from the mains supply when mounting or adjusting the heater position.

- The Alpha H3 heater should only be wall mounted in a horizontal manner or hung from a ceiling from chains (not supplied).
- When wall mounting the Alpha H3 heater, do not position the heater at an angle more than 50° and less than 30° as shown in Fig. A.
- When ceiling hanging the Alpha H3 heater, ensure the minimum distance from the ceiling is adhered to as shown in Fig. B.

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- Always allow the heater to cool before attempting to reposition/move. Never attempt to move the heater while it is switched on!
- Observe the minimum safe distance between the heater body and inflammable surfaces and objects when mounting.
- Please refer to the specification table for the recommended positioning of the heater with regards to minimum distances. <u>Do not install the heater in a</u> <u>corner!</u>
- Keep out of the reach of children.

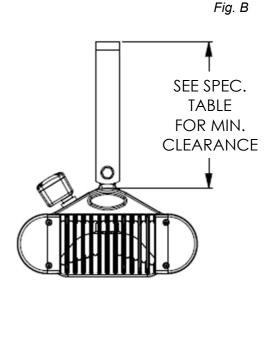
1. When wall mounting, securely fasten the L-shaped wall brackets to the mounting surface using both of the fixing holes in the short part of the bracket (see Fig. D for mounting hole centres). Please refer to the specification table for recommended positioning of the heater. Please note. wall fixings are not supplied. They should be selected to substantially support the weight of the installation. If in doubt contact a professional for advice! When hanging from a ceiling two equal length and gauge chains are required and should be selected with fixings that are adequate to hold the weight of the heater. Again, if in doubt contact a professional for advice!

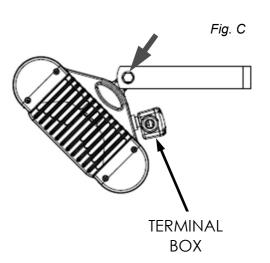
2. The heater should be mounted with the terminal box at the bottom of the heater when being wall mounted.

3. When wall mounting, fix in the required angular position by tightening the fixing bolts on the brackets at the rear of the heater as shown in Fig. C. The heater should face directly down when hanging.

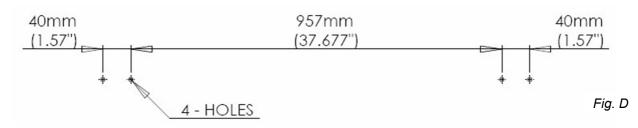
4. Secure the supply cable so it is not resting on the body or obstructing the air-vents.

Always isolate the heater from the mains supply when adjusting the position.





DRILLING HOLE TEMPLATE DIMENSIONS FOR WALL MOUNTED BRACKETS



ASSEMBLING -2 × TRIPLE (THREE LAMP EMITTER) HEATERS JOINED

- 1. Take the first heater and place it face down on a flat surface.
- 2. Take the second heater and place it face down and positioned parallel to the first heater.
- 3. Push the bolts used to hold the wall brackets through the hole in the brackets on the rear heaters and slide a shake-proof washer on all the threads from the protruding side.
- 4. Slide the joining bars on each bolt and fit a washer and nut do not fully tighten at this point.
- 5. Ensure the second heater is still parallel to the first and sitting flat.
- 6. Slide the joining bars on each protruding bolt of the other heater to connect them together and fit the washers and nuts.
- 7. Again, ensuring the heaters remain flat, fully tighten all four nuts to secure the joining bars in place.

CHAIN HANGING -2 × TRIPLE (THREE LAMP EMITTER) HEATERS JOINED

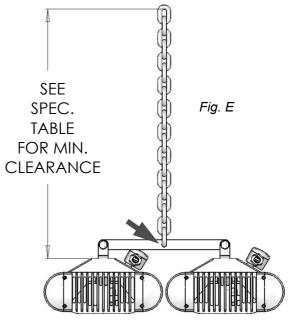


CAUTION

Always isolate the heater from the mains supply when mounting or adjusting the heater position.

- When two Alpha H3 heaters are joined they should only be hung from a ceiling on chains <u>do not wall mount!</u>
- Always allow the heater to cool before attempting to reposition/move. Never attempt to move the heater while it is switched on!
- Observe the minimum safe distance between the heater body and inflammable surfaces and objects when mounting.
- Please refer to the specifications table for the recommended positioning of the heater with regards to minimum distances. <u>Do not install the heater in a corner!</u>
- Keep out of the reach of children.
- 1. When hanging from a ceiling, two chains of equal length and gauge are required and should be selected with fixings that are adequate to hold the weight of the heater. If in doubt contact a professional for advice!

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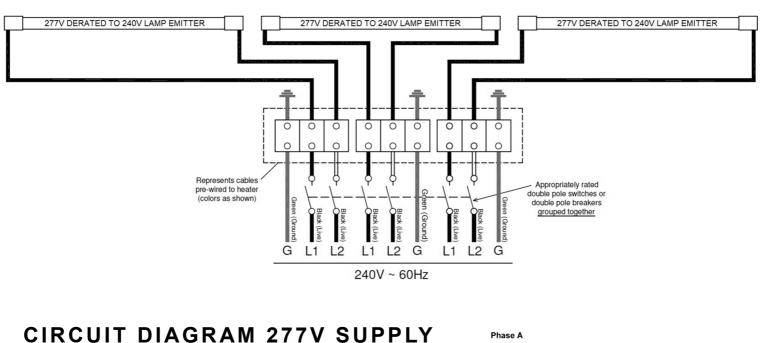


- 2. Fix the heater assembly to the chains via the hole in the centre of the joining bar as shown in Fig. E. and ensure the heaters face directly down when hanging.
- 3. Secure the supply cable so it is not resting on the body or obstructing the air-vents.

Always isolate the heater from the mains supply when adjusting the position.

CIRCUIT DIAGRAM 240V SUPPLY

277V HEATER RATED ON 240V SUPPLY



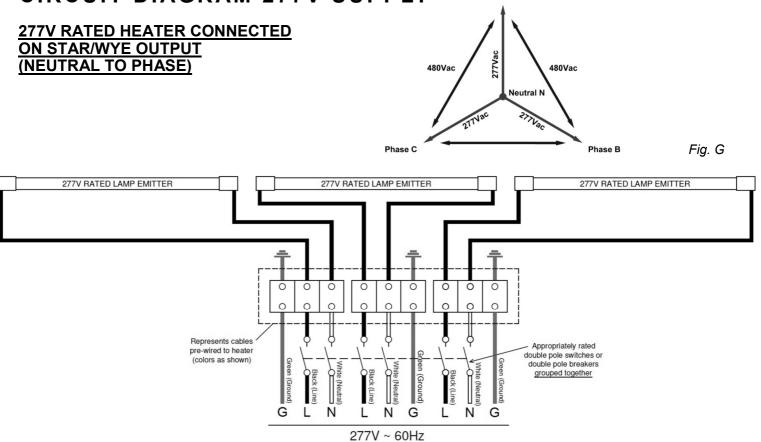


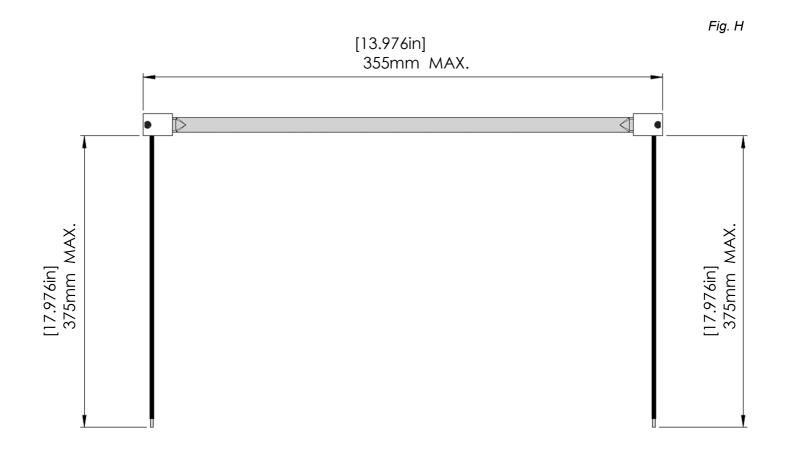
Fig. F

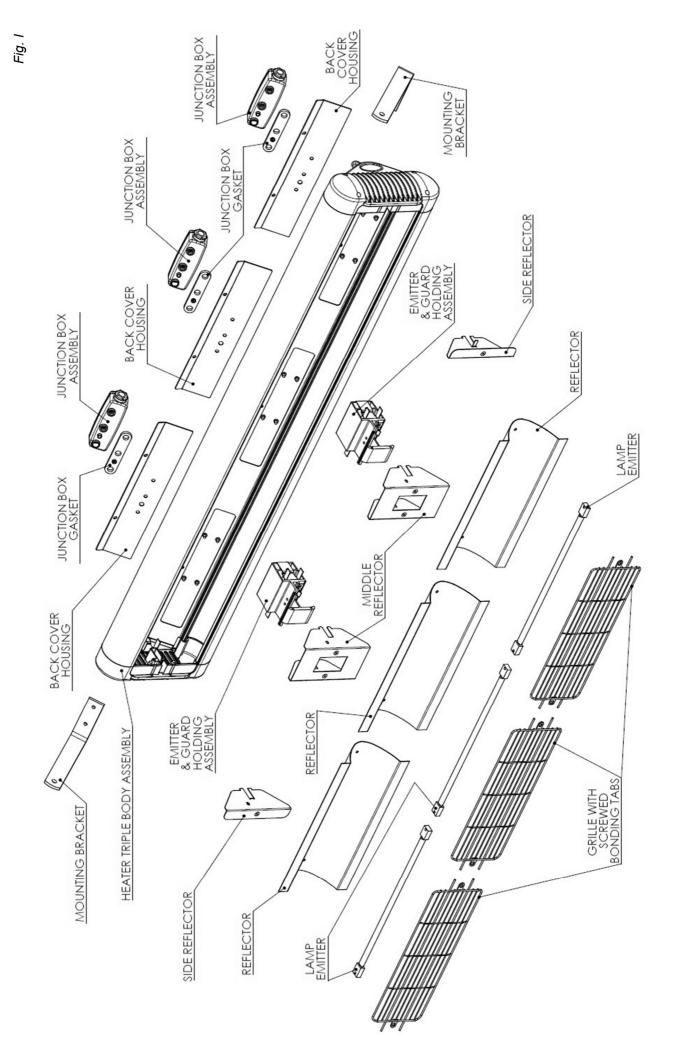
MAINTENANCE (277V CIRCUIT)

- NOTE: For replacement lamp emitters or spare parts please contact your local distributor quoting model type and rating from rating label. It is very important that your replacement lamp emitters are exactly the same as the one it was supplied with. Failure to fit the exact same type can cause the heater to prematurely fail.
- ▲ CAUTION: Unplug/Switch off unit from the mains supply before replacing a lamp emitter or any maintenance procedure including cleaning.
- ▲ CAUTION: Should dust or dirt appear on the reflectors, it is recommended that that the wire grilles and lamp emitters are removed and the reflectors are wiped with a lint-free cloth before reassembling (see lamp emitter replacement instructions).

YOUR REPLACEMENT LAMP EMITTER

▲ CAUTION: Please ensure that the length of wires on the replacement lamp emitter are the same as shown in the diagram below (Fig. H).





REPLACING A LAMP EMITTER

CAUTION

Disconnect from the mains power before any attempts are made to replace the lamp emitter. Contact your distributor for the correct replacement quoting model type and rating from the rating label. We recommend you read through the procedure and refer to the parts diagram on the previous page of this manual before commencing work.

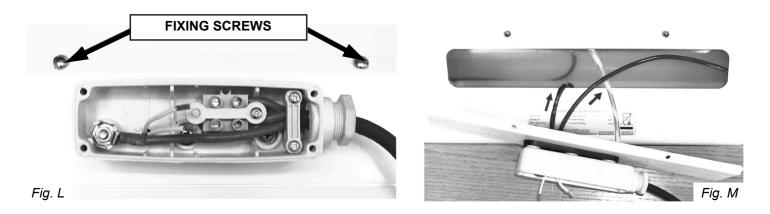
1. Ensure the heater and lamp emitter is cool and the power supply is disconnected to all lamp emitters before disassembly.

2. Remove the screws from the junction box at the back of the lamp emitter to be replaced and lift off the lid - see Fig. J.



3. Disconnect the lamp emitter from the connector block by unscrewing the screws highlighted above in Fig. K and remove the lamp emitter wires from the connector block.

4. At the back of the heater, remove the plate holding the junction box behind your lamp emitter by removing the two fixing screws as shown in Fig. L.



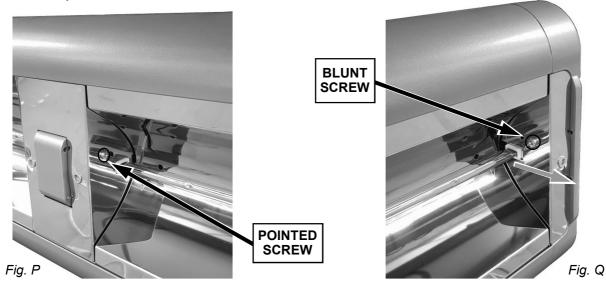
5. Pull the lamp emitter wires one at a time through the gasket on the terminal plate to remove as shown in Fig. M.

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6. At the front of the heater, remove the screws from the grille tabs at both sides of the grille as shown in Fig. N (taking care to retain the spring washers) then remove the grille by pulling it out from the centre and prizing the prongs away from their locating holes at one end (Fig. O) and pull out of opposite end.



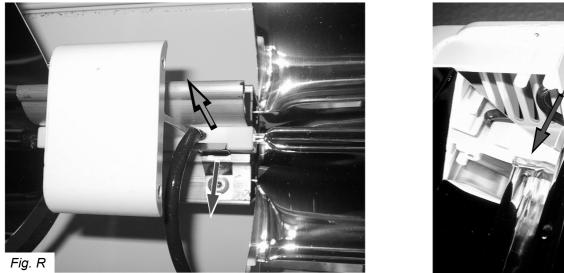
7. Remove the screws from the middle reflector on both sides (Fig. P) and the single screw from the side reflector (Fig. Q). Lift them up and away from the heater to reveal the ceramic caps on the lamp emitters.



8. Release the lamp emitter end by pressing the top edge of the spring clip away from the lamp emitters ceramic end cap. Gently lift the end of the lamp emitter upwards so it is no longer being retained by the clip (Fig. R). The wire can then be gently pulled from behind the reflector.

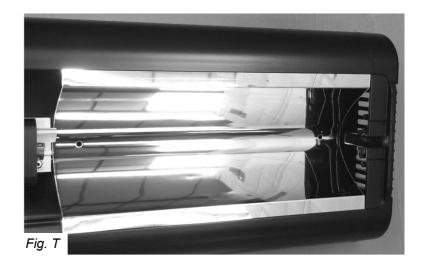
9. The lamp emitter wire at the opposite end should be pulled out of the side slot (Fig. S) and the lamp emitter can be lifted up completely. The wire can then be gently pulled forward so that it also comes out from behind the reflector.

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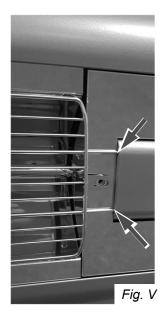
10. The lamp emitter can now be removed away from the heater leaving it ready for the new lamp emitter to be fitted as shown in Fig. T.



11. Refit the new lamp emitter in reverse order making sure that no wires can get trapped. Replace the side and middle reflectors and their screws before any other parts are fitted to make sure the lamp emitter is held securely.

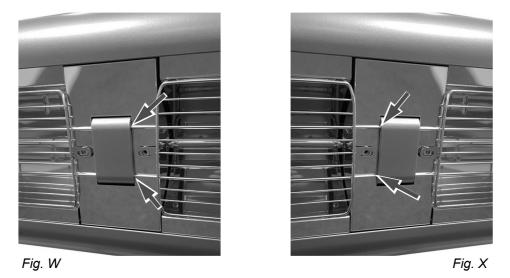
12. Refit the grilles by taking a grille and inserting the $2 \times \text{prongs}$ into the holes in the end of the heater (left side shown below in Fig. U) and gently flex the wire grille to insert the $2 \times \text{opposite}$ prongs into the grille holder holes (to the other side of the lamp emitter as shown in Fig. V).





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13. When fitting the middle grille, insert the 2 × prongs into the holes in the grille holder (Fig. W) and gently flex the grille to insert the 2 × opposite prongs into the opposite grille holder holes as shown in Fig. X.



14. Refit the screws into the tabs on the grilles ensuring there is a spring washer under all of the screw heads (Fig. Y).

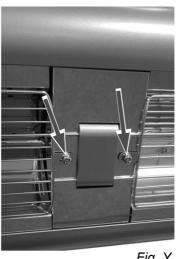


Fig. Y

15. Check the fitment of the grille by individually gripping them and moving them to their extreme left and right positions/pushing up and down to ensure they are all securely located (Fig. Z).

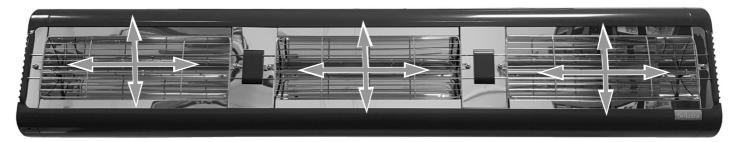


Fig. Z

Solaira Alpha H3 277V

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(240V - 3375W / 277V - 4500W) (240V - 3375W / 277V - 4500W) (240V - 4500W / 277V - 6000W) (240V - 4500W / 277V - 6000W) C = COLOR CODE

CANDEL LOW LIGHT



Also available in this range...

Solaira Alpha H1 277V Solaira Alpha H2 277V







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