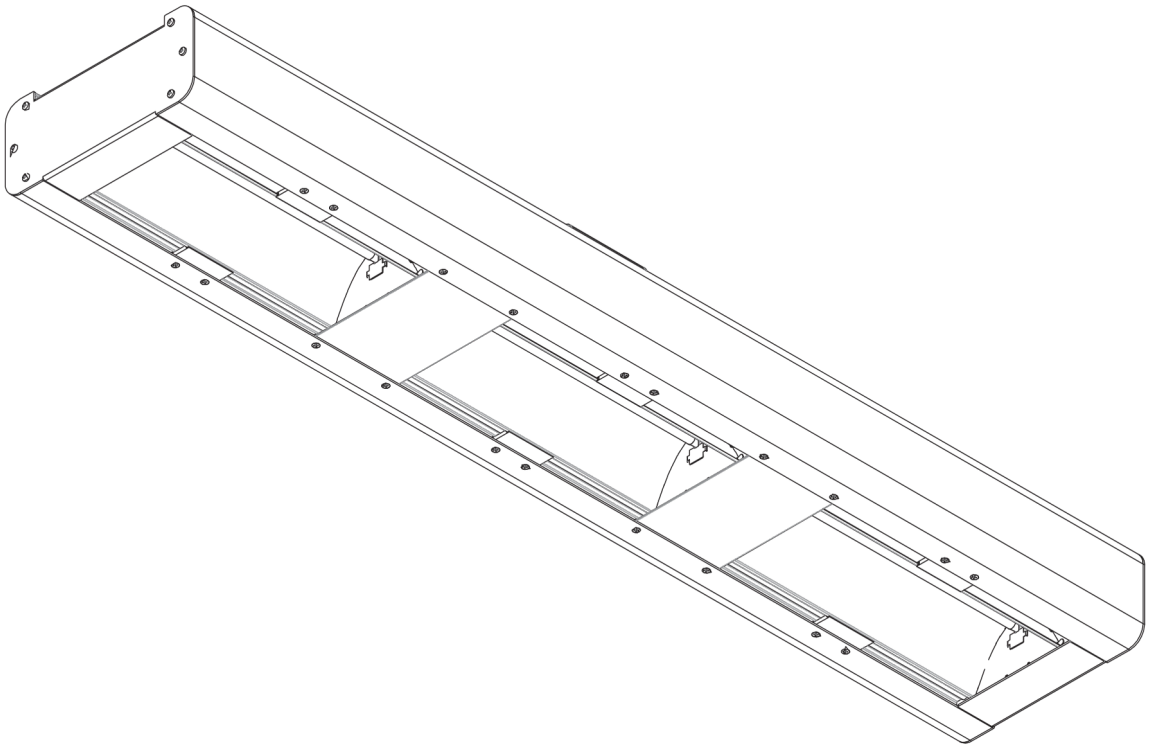


# Shadow Infinity Industrial Infrared Heaters

## Safety Instructions and Operation Manual

**4.5kW, 6kW, 9kW, 12kW, 13.5kW and 18kW Models**

SHADOW Infrared Heating

Unit 9, Stort Valley Industrial Estate Stansted Road, Bishop's Stortford Hertfordshire, United Kingdom CM23 2TU

**Available at**
**www.shadowindustrial.co.uk**
**01279 466500**
**info@shadowindustrial.co.uk**

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# Brief Introduction

Shadow Infinity industrial and warehouse infrared heaters combine the market-leading Ultra Low Glare infrared lamp technology with advanced outer casing construction, allowing you to achieve instant short-wave infrared heat in the desired area.

The Shadow Infinity 4.5kW and 6kW Industrial Heaters can be wall mounted or mounted from the ceiling, or hung on chains.

The Shadow Infinity 9kW, 12kW,13.5kW and 18kW Industrial Heaters can be mounted from the ceiling, or hung on chains only and are designed for heating large-sized industrial spaces.

# Important Information

Please carefully read all instructions provided before using this appliance . This heater must be installed and used as instructed .

This Operation Manual contains the important safety information, as well as some recommendations on correct use, installation and maintenance of the appliance .

When operating this infrared heater observe necessary safety precautions, as improper use may result in injury or damage to property .

Ensure to keep this manual along with your sales receipt, and if possible, cardboard package and packing material in case return of the unit is necessary.

- Unpack the infrared heater making sure that all the items are present, there are no components left in the box and the heater head is free from any packing material.
- Using the detailed diagrams follow the steps to assemble your infrared heater.
- Do **NOT** connect the infrared heater to the power supply until the assembly is complete.
- Do **NOT** connect the infrared heater to the power supply if any of the components are damaged in any way.

# Safety Instructions

Read these instructions before using.

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**WARNING**

Potential fire risk if the heater is covered by any flammable materials.

**CAUTION** — Some parts of the heater can become very hot and cause burns .
Do **NOT** touch the appliance during operation to avoid the risk of injury.

- Check that the voltage indicated on the nameplate of the appliance corresponds to the local mains voltage before the appliance is hardwired.
- The power supply to the appliance should correspond to the relevant regulations of the power supply companies and the regional construction regulations.
- To avoid overheating do **NOT** cover the heater.
- The heater must **NOT** be located immediately below a socket outlet.
- After fixing to a wall or ceiling, adjustments to the direction of radiation must only be made with the appropriate tools.
- It can become a fire risk if the heater is covered or positioned incorrectly.
- It’s dangerous to install the heater close to combustible materials.
- Do **NOT** use in unventilated areas.
- Do **NOT** use where gas, petrol, paint or other flammable materials are stored.
- Do **NOT** push any items through, obstruct or cover the grills of the heater head.
- Do **NOT** move the heater when it is connected to the power supply.
- Always wait till the heater has cooled down completely before putting into storage.
- Improper use of the appliance can result in electric shock or fire hazard.
- In case of damage, the heater must only be repaired by a professional electrician.

# Cleaning & Maintenance

- Isolate the appliance from the power supply system and wait until it has sufficiently cooled off.
- After the appliance has cooled down, the housing can be wiped clean with a
- damp cloth .
- Wipe the appliance only with a clean and lint-free cloth or a soft brush.
- Do **NOT** touch the bulb element with your fingers. Stains can build up from touching the bulb and may cause the bulb to malfunction .
- Do **NOT** use any abrasive or hard cleaning products on any part of this heater .
- Wait until the unit is completely dry before use .
- When cleaning the reflector, contact a qualified electrician to see if the reflector needs to be removed .

**https://www.heat-outdoors.co.uk/help-desk/useful-articles/heater-and-lamp-maintenance.html**

Any maintenance or repairs should only be carried out by a qualified electrician if you're unsure how to do so. For further information and guidance, visit our online help articles and videos.

# Assembly Instructions

## Installation

When unpacking the heater, please make sure that all the items are present, there are no components left in the box, that all the parts are free from any packing material, and are not damaged. Ensure that the items used for mounting (dowels and screws) are stable and secure enough to mounting and holding the appliance in place.

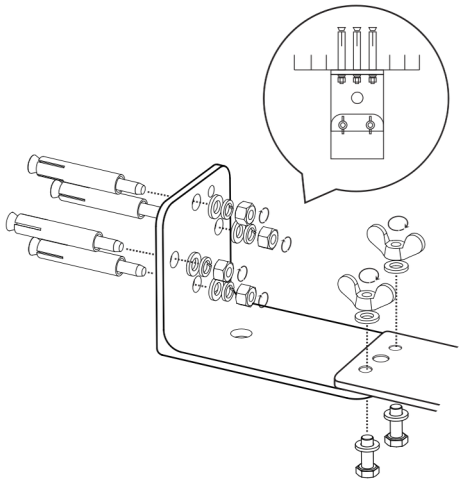
Do **NOT** connect the heater to the electrical supply until all the assembly is done .

Do **NOT** connect the heater to the electrical supply if any of the components are damaged in any way. If in doubt, please contact your local supplier.

## Wall Mounting

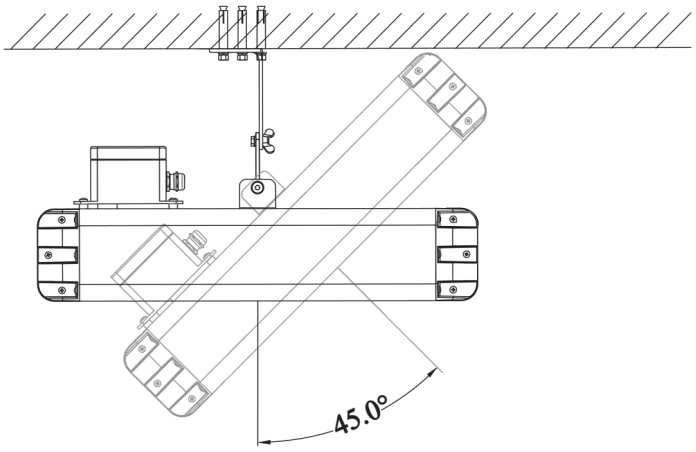
**Please note: This step only applies to single heater units (4.5kW and 6kW models).**

1. Mark and drill 4 holes 10mm in diameter on the wall.
2. Insert 4 expansion bolts into the holes, align the heater onto the bolts and lock with 4 nuts tightly.



# Bracket Mounting

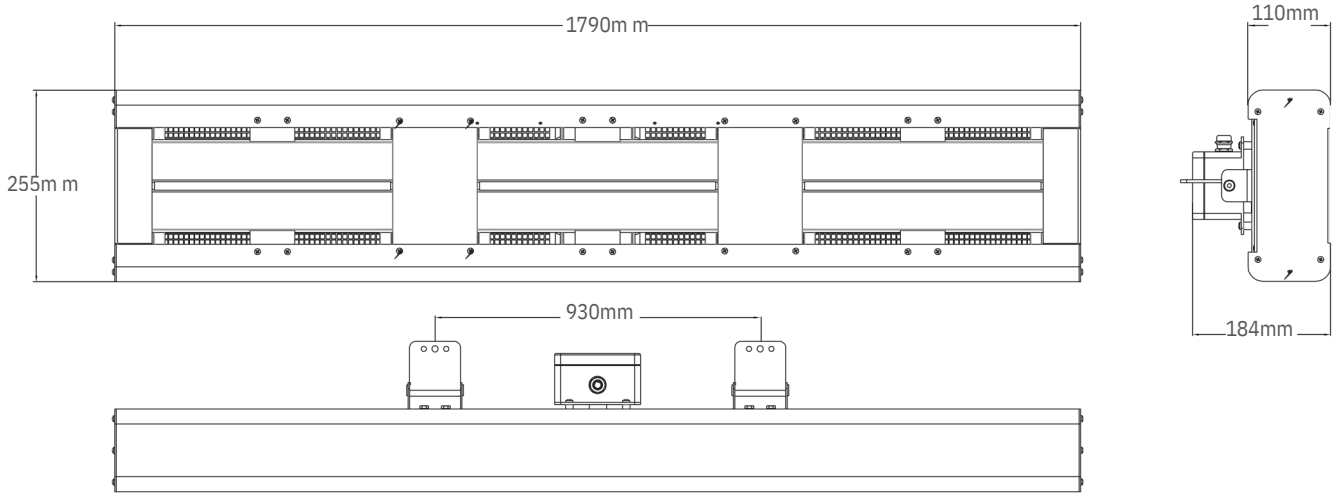
Loosen the nuts on both sides, adjust the heater to the desired angle. Tighten the nuts to seal in place. Ensure the screws are securely connected. The screws could loosen due to mechanical bearing pressure and oscillation .




# Operation

The heater needs to be hardwired to the circuit, only a qualified electrician should install appliance .

# Product Dimensions




**Please note:** The dimensions shown are for a single heater unit only. Models above 9kW consist of two or three individual units in a double or triple configuration and will therefore have larger overall dimensions.

# Double Heater Configuration

Please note: The following instructions apply to the 9kW and 12kW models only.

**Step 1 – Position the Heaters**

- Lay both heaters side by side on a flat, protected surface, ensuring they are positioned in the same direction.

**Step 2 – Attach the Connecting Brackets to the First Heater**

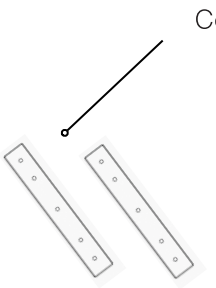
- Each heater has two mounting brackets, one at each end.
- Take the connecting bracket provided and position it against the mounting bracket on the first heater.
- Using the wing nuts supplied in the bag of fittings, secure the end of the connecting bracket to the heater.
- Repeat this process at the opposite end of the heater.

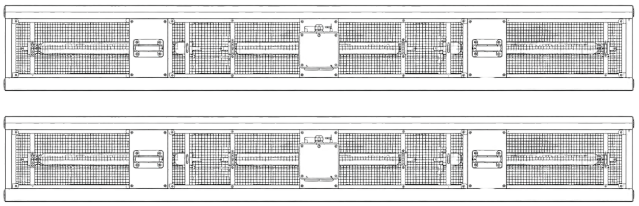
**Step 3 – Connect the Second Heater**

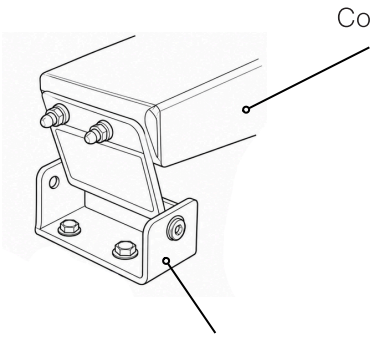
- Position the second heater alongside the first heater, ensuring the mounting brackets line up with the connecting brackets.
- Using the supplied wing nuts, secure the second heater to the connecting brackets at both ends.
- Make sure both heaters are securely connected.

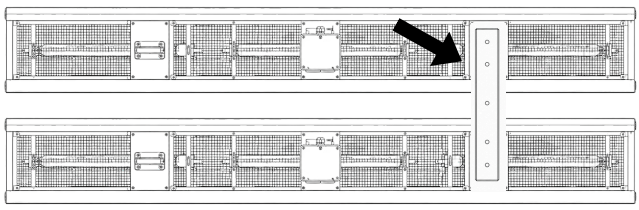
**Step 4 – Check the Final Assembly**

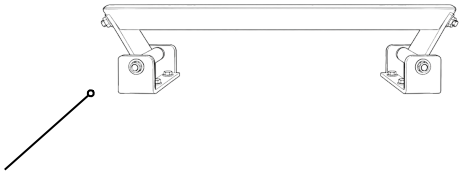
- Once both heaters are connected, check that all wing nuts are securely tightened and both heaters are correctly positioned.





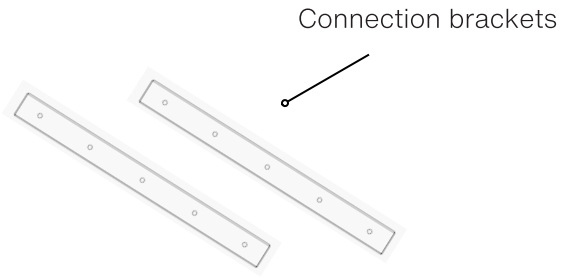


# Triple Heater Configuration

Please note: The following instructions apply to the 13.5kW and 18kW models only.

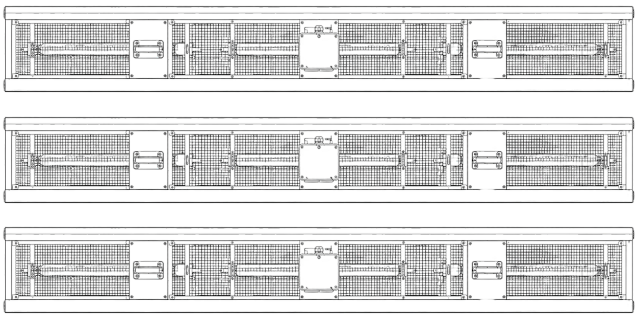
**Step 1 – Position the Heaters**

- Lay all three heaters side by side on a flat, protected surface, ensuring they are positioned in the same direction.



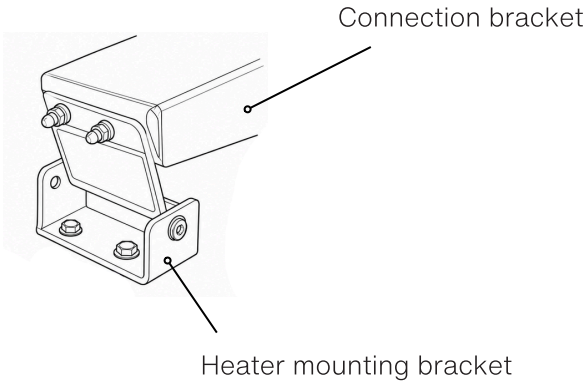

**Step 2 – Attach the Long Connecting Brackets to the First Heater**

- Take one of the long connecting brackets provided and position it against the mounting bracket on the first heater.
- Using the wing nuts supplied in the bag of fittings, secure the end of the long connecting bracket to the heater.
- Repeat this process at the opposite end of the heater.



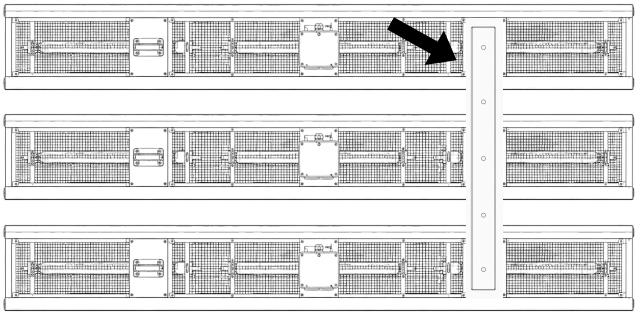
**Step 3 – Connect the Second Outer Heater**

- Position the second outer heater alongside the first heater.
- Using the supplied wing nuts, secure the second heater to the brackets in the same way as Step 2.



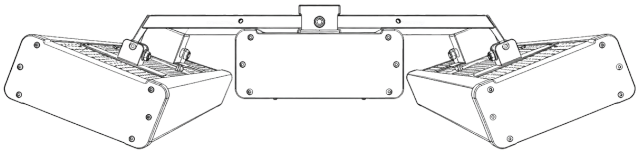

**Step 4 – Prepare the Middle Heater**

- Before fitting the middle heater, remove its two existing mounting brackets.
- Using an Allen key, undo the bolts holding the brackets in place.
- Remove both brackets and retain the Allen bolts, as these will be reused to secure the middle heater.



**Step 5 – Install the Middle Heater**

- Carefully lift the middle heater into position between the two outer heaters. Line up the mounting holes on the middle heater with the two holes located in the centre of the long connecting brackets.
- Using the Allen bolts removed in Step 4, insert them through the holes and tighten securely with the Allen key.
- Repeat this process at both ends of the middle heater.

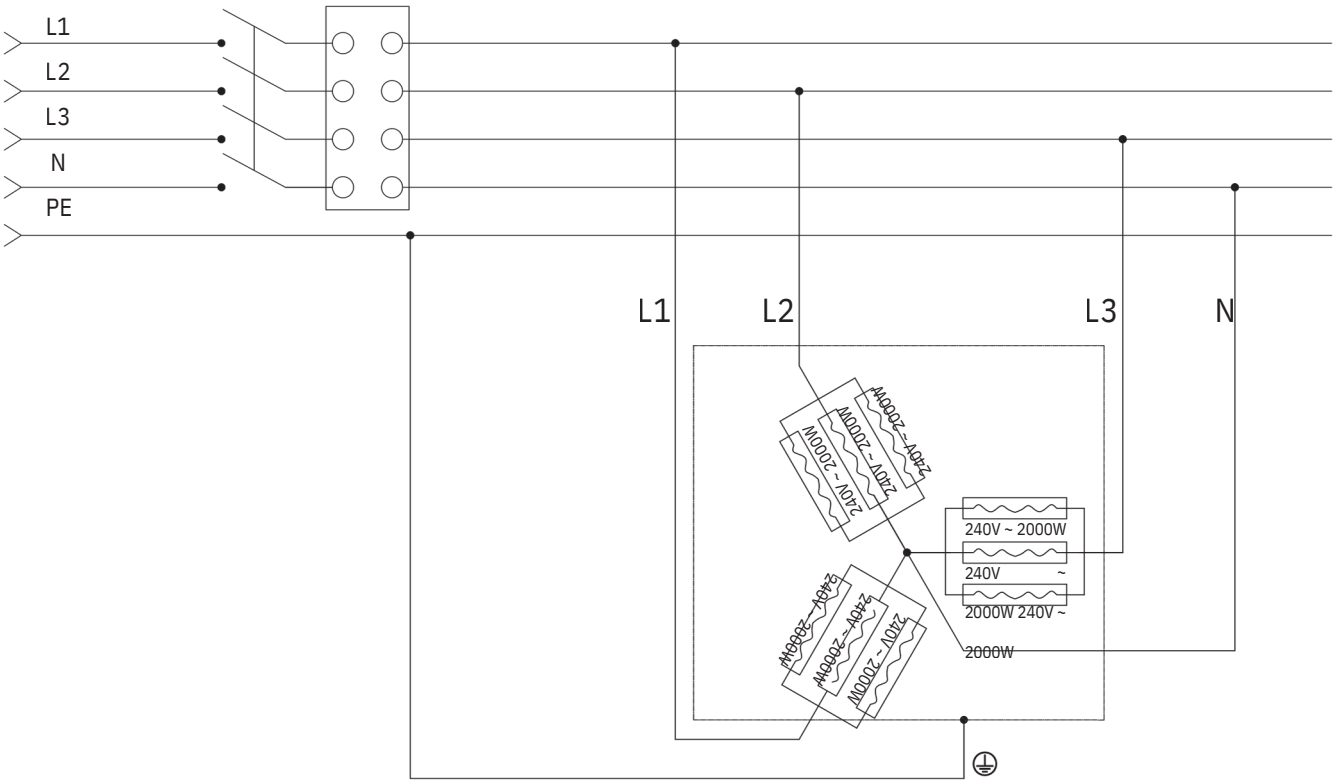


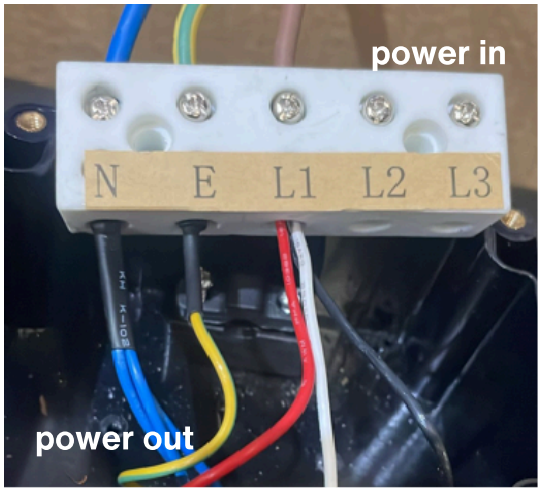
**Step 6 – Check the Final Assembly**

- Once all three heaters are connected, check that all wing nuts and Allen bolts are securely tightened.

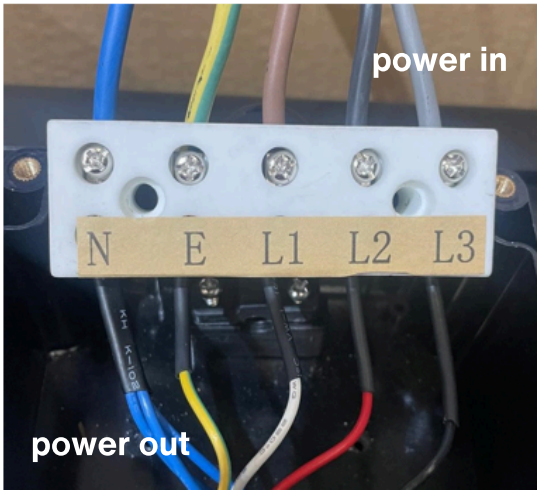
**Important: The middle heater will sit slightly offset from the two outer heaters. This is normal and is the correct assembled position. Do not attempt to force all three heaters into alignment.**

# Wiring Diagrams




**Single Phase Wiring**




**Three Phase Wiring**

**To switch from 3-phase to single-phase:**

1. Disconnect wires L1, L2, and L3.
2. Join these wires together as shown in the photo
3. Reconnect them into the connection box directly opposite the incoming live (brown) power wire.
4. Please ensure all connections are securebefore powering on the heater.

# Technical Specifications

| | | |
|---|---|---|
| **Power (kW)*** | 6 | 4.5 |
| **Dimensions (W) mm** | 255 | 255 |
| **Dimensions (H) mm** | 184 | 184 |
| **Dimensions (L) mm** | 1790 | 1790 |
| **Coverage (M sq.)** | 29.58 | 26.97 |
| **Phase supply** | Single and 3 Phase[1] | Single and 3 Phase[1] |
| **Lamps x power (kW)** | 3 x 2 | 3 x 1.5 |
| **Voltage (V)** | 220 - 240V | 220 - 240V |
| **Single-phase current (A)[1]** | 26 | 20 |
| **Min. height from floor (cm)** | 250 | 250 |
| **Min. distance from ceiling (cm)** | 25 | 25 |
| **Min. distance from side wall (cm)** | 200 | 250 |
| **Weight (kg)** | 12.4 | 12.5 |
| **Warranty (years)** | 5 | 5 |
| **Lamp Length (mm)** | 530 | 530 |

| | | |
|---|---|---|
| **Power (kW)*** | 12 | 9 |
| **Dimensions (W) mm** | 255 | 255 |
| **Dimensions (H) mm** | 184 | 184 |
| **Dimensions (L) mm** | 1790 | 1790 |
| **Coverage (M sq.)** | 65.55 | 48.88 |
| **Phase supply** | Single and 3 Phase[1] | Single and 3 Phase[1] |
| **Lamps x power (kW)** | 6 x 2 | 6 x 1.5 |
| **Voltage (V)** | 220 - 240V | 220 - 240V |
| **Single-phase current (A)[1]** | 52 | 39 |
| **Min. height from floor (cm)** | 350 | 350 |
| **Min. distance from ceiling (cm)** | 50 | 50 |
| **Min. distance from side wall (cm)** | 300 | 300 |
| **Weight (kg)** | 26 | 26 |
| **Warranty (years)** | 5 Years | 5 Years |
| **Lamp Length (mm)** | 530 | 530 |

| | | |
|---|---|---|
| **Power (kW)*** | 18 | 13.5 |
| **Coverage (M sq.)** | 96.75 | 77.88 |
| **Phase supply** | Single and 3 Phase[1] | Single and 3 Phase[1] |
| **Lamps x power (kW)** | 9 x 2 | 9 x 1.5 |
| **Voltage (V)** | 220 - 240V | 220 - 240V |
| **Single-phase current (A)[1]** | 78 | 59 |
| **Min. height from floor (cm)** | 500 | 500 |
| **Min. distance from ceiling (cm)** | 50 | 50 |
| **Min. distance from side wall (cm)** | 400 | 400 |
| **Weight (kg)** | 40 | 40 |
| **Warranty (years)** | 5 Years | 5 Years |
| **Lamp Length (mm)** | 530 | 530 |

# Disposal



In accordance with European Directive 2001/96/EG concerning used electrical and electronic appliances (waste electrical and electronic equipment – WEEE), please return any electrical equipment that you are no longer using to the collection points provided for their disposal .

This symbol indicates that the appliance cannot be treated as normal domestic waste, it must be handed to a collection point for recycling electric and electronic appliances .

Information concerning where the equipment can be disposed of can be obtained from your local authority.

**Storage**

If the heater isn't going to be used for a long period of time, store it in a cool, dry location.

To prevent dust and dirt build-up, use the original packaging to repack the heater.

**Customer Service**

- Repairs must carried out by authorised specialists, thus ensuring electrical safety.
- Please contact us or a suitably qualified electrician.
- Improper repairs could lead to danger to the user .

Warranty does **NOT** cover damage or failure which results from alteration, accident, misuse, abuse, neglect, commercial use or improper maintenance . In line with our policy of continuous product development we reserve the right to change the product and documentation specifications without notice.

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