



*Please dispose of packaging for the product in a responsible manner. It is suitable for recycling. Help to protect the environment, take the packaging to the local amenity tip and place into the appropriate recycling bin.*



*Never dispose of electrical equipment or batteries in with your domestic waste. If your supplier offers a disposal facility please use it or alternatively use a recognised re-cycling agent. This will allow the recycling of raw materials and help protect the environment.*

**sip**  
SIP INDUSTRIAL

**machinery specialists since 1968**

# Fireball

## Turbofan 5000



09220

**FOR HELP OR ADVICE ON THIS PRODUCT PLEASE CONTACT YOUR DISTRIBUTOR,  
OR SIP DIRECTLY ON:**

**TEL: 01509500400**

**EMAIL: [sales@sip-group.com](mailto:sales@sip-group.com) or [technical@sip-group.com](mailto:technical@sip-group.com)  
[www.sip-group.com](http://www.sip-group.com)**

***Please read and fully understand the instructions in this manual before operation. Keep this manual safe for future reference.***

Declaration of Conformity

We

SIP (Industrial Products) Ltd
Gelders Hall Road
Shepshed
Loughborough
Leicestershire
LE12 9NH
England

As the manufacturer within the UK, England, Scotland & Wales,
declare that the

SIP 7 u 5 - SIP Part. No. 0 220

Conforms to the requirements of the following directive(s), as
indicated.

Electrical Equipment (Safety) Regulations 2016
Electromagnetic Compatibility Regulations 2016

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The Restriction of the Use of Certain Hazardous Substances in Electrical
and Electronic Equipment Regulations 2012

And the relevant harmonised standard(s), including

- BS EN 60335-1:2012+A11+A13+A1+A14+A2
BS EN 60335-2-30:2009+A11
BS EN 62233:2008
BS EN 55014-1:2017+A11
BS EN 55014-2:2015
BS EN IEC 61000-3-2:2019
BS EN 61000-3-3:2013+A1

Handwritten signature of Paul Ippaso

Signed: .....

Mr P. Ippaso - Director - SIP (Industrial Products)
Ltd Date: 21/06/2021



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- EN 60335-1:2012+A11+A13+A1+A14+A2
EN 60335-2-30:2009+A11
EN 62233:2008
EN 55014-1:2017+A11
EN 55014-2:2015
EN IEC 61000-3-2:2019
EN 61000-3-3:2013+A1

Handwritten signature of Paul Ippaso

Signed:

Mr P. Ippaso - Director - SIP (Industrial Products) Ltd
Date: 21/06/2021.



## ERP INFORMATION...cont

				Other control options.	
				Room temperature control, with presence detection.	[no]
				Room temperature control, with open window detection.	[no]
				With distance control option.	[no]
				With adaptive start control.	[no]
				With working time limitation.	[no]
				With black bulb sensor.	[no]
<b>Contact Details.</b>	SIP (INDUSTRIAL PRODUCTS) LTD, Gelders Hall Road, Shepshed, Loughborough, Leicestershire LE12 9NH, Tel: 01509500500.				
Remark: For electric local space heaters, the measured seasonal space heating energy efficiency $\eta_S$ cannot be worse than the declared value at the nominal heat output of the unit.					

## CONTENTS

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## SAFETY SYMBOLS USED THROUGHOUT THIS MANUAL



**Danger / Caution:** Indicates risk of personal injury and/or the possibility of damage.



**Warning:** Risk of electrical injury or damage!



**Note:** Supplementary information.

## SAFETY INSTRUCTIONS



**IMPORTANT:** Please read the following instructions carefully, **failure to do so could lead to serious personal injury and / or damage to the heater.**

When using your heater, basic safety precautions should always be followed to reduce the risk of fire, electric shock, personal injury and / or damage to the heater.

Read all these instructions before operating the heater and save this user manual for future reference.

**SIP** recommends that this heater should **not** be modified or used for any application other than that for which it was designed; It was designed for the short term heating of offices etc. If you are unsure of its relative applications do not hesitate to contact us and we will be more than happy to advise you.

**KNOW YOUR HEATER:** Read and understand the owner's manual and labels affixed to the heater. Learn its applications and limitations, as well as the potential hazards specific to it.

**DO NOT USE THE HEATER IN DANGEROUS ENVIRONMENTS:** Do not use your heater in damp or wet locations, including bathrooms or similar or expose it to rain. Always provide adequate space around the heater.

**DO NOT OPERATE THE HEATER IN EXPLOSIVE ATMOSPHERES:** Do not use the heater in the presence of flammable liquids, gases, dust or other combustible sources.

**KEEP CHILDREN AND UNTRAINED PERSONNEL AWAY FROM THE WORK AREA:** All visitors should be kept at a safe distance from the work area.

**STORE THE HEATER SAFELY WHEN IT IS NOT IN USE:** The heater should be stored in a dry, locked cupboard, or similar when not in use wherever possible and out of the reach of children.

**STAY ALERT:** Always watch what you are doing and use common sense.

**DISCONNECT THE HEATER FROM THE MAINS SUPPLY:** When not in use.

**AVOID UNINTENTIONAL STARTING:** Make sure the switch is in the **OFF** position before connecting the heater to the mains supply.

**DO NOT ABUSE THE MAINS LEAD:** Never carry the heater by the mains lead or pull it to remove the plug from the mains socket. Keep the mains lead away from heat, oil and sharp edges. If

## ERP INFORMATION

Model: 09220					
Item	Symbol	Value	Unit	Item	Unit
<b>Heat output.</b>				Type of heat input, for electric storage heaters only.	
Nominal heat output.	$P_{nom}$	5	kW	Manual heat charge control with integrated thermostat.	[no]
Minimum heat output (indicative).	$P_{min}$	3.3	kW	Manual heat charge control with room and/or outdoor temperature feedback.	[no]
Maximum continuous heat output.	$P_{max}$	5	kW	Electronic heat charge control with room and/or outdoor temperature feedback.	[no]
<b>Auxiliary electricity consumption</b>				Fan assisted heat output.	
At nominal heat output.	$e_{lmax}$	N/A	kW	Type of heat output/room temperature control.	
At minimum heat output.	$e_{lmin}$	N/A	kW	Single stage heat output and no room temperature control.	[no]
In standby mode.	$e_{iSB}$	N/A	W	Two or more manual stages, no room temperature control.	[no]
				With mechanical thermostat room temperature control.	[yes]
				With electronic room temperature control.	[no]
				Electronic room temperature control plus day timer.	[no]
				Electronic room temperature control plus week timer.	[no]

## PARTS LIST

Ref No.	Description	SIP Part No.
1.	Grill	PW09-00350
2.	Outlet	PW09-00351
3.	PTC Element	PW09-00352
4.	Duct	PW09-00353
5.	Relay Holder	PW09-00354
6.	Relay	PW09-00355
7.	Thermostat	PW09-00356
8.	Switch	PW09-00357
9.	Switch Knob	PW09-00358
10.	Thermostat Knob	PW09-00359
11.	Control Box	PW09-00360
12.	Mains Lead Gland	PW09-00361
13.	Fan Plate	PW09-00362
14.	Fan	PW09-00363
15.	Motor	PW09-00364
16.	Motor Plate	PW09-00365
17.	Plug	PW09-00366
18.	Mains Lead	PW09-00367
19.	Angle Adjust Screws	PW09-00368
20.	Rubber Gasket	PW09-00369
21.	Stand	PW09-00370
22.	Outer Casing	PW09-00371
23.	Feet	PW09-00372
24.	Support	PW09-00373
25.	Thermal Fuse	PW09-00374
26.	Thermostat	PW09-00375

## SAFETY INSTRUCTIONS...cont

the mains lead is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid unwanted hazards.

**HAVE YOUR HEATER REPAIRED BY A QUALIFIED PERSON:** The heater is in accordance with the relevant safety requirements. Repairs should only be carried out by qualified persons using original spare parts, otherwise this may result in considerable danger to the user.

**WARNING! RISK OF ELECTRIC SHOCK.** Do not expose the heater to water spray, rain, dripping water or moisture of any kind.

**WARNING!** Do not direct the front of the heater towards any combustible materials (e.g. wooden items, cloth, plastics, paper, etc).

**DANGER!** Check that the heater is in sound condition and good working order. Take immediate action to repair or replace damaged parts.

**WARNING!** Do not use the heater near flammable material, liquids, solids, gases or compressed gas cylinders.

**NEVER** use this heater where flammable vapours may be present.

**NEVER** cover the heater, or obstruct the inlet or outlet.

**NEVER** move or handle heater while still hot.

**ALWAYS** locate heater on a stable and level surface.

**ALWAYS** unplug the heater when not in use.

- Use recommended parts only - Unapproved parts may be dangerous and will invalidate the warranty.
- Only operate on a level and stable surface.
- **Do not** allow untrained persons to operate the heater and do not operate the heater without all covers etc. correctly fitted.
- **Do not** move or handle the heater when it is running or still hot - always turn it off and allow it to cool.
- **Do not** leave the heater unattended when in use. Switch the heater off and unplug from the mains supply before leaving the work area.
- **Do not** obstruct the air inlet (rear) and air outlet (front) of the heater.
- **Do not** use any form of ducting in front or at the rear of the heater.
- **Do not** touch the heater outlet or any internal parts when first switched off as these can be hot and will take time to cool.
- Ensure that the heater is correctly turned off when not in use and store in a safe, dry area, out of reach of children.
- **Do not** unplug the heater to switch it off - always use the on/off switch.
- **Do not** use this heater in the immediate surroundings of a bath, a shower or a swimming pool.
- Keep all combustible materials away from this heater.
- **Do not** dismantle or tamper with the heater, as this may be dangerous and will invalidate the warranty.
- If the heater is used in a place of work all rules and laws etc. relating to the use of portable electrical appliances should be followed.
- Never stand on the heater.
- Never allow children to 'play' with the heater - It is not a toy.
- Cleaning and maintenance procedures should not be carried out by children without supervision.
- Children under 3 years old should be kept away from the heater unless continuously supervised.

## SAFETY INSTRUCTIONS...cont

vised.

- Children aged from 3 years and less than 8 years shall only switch on/off the heater provided that it has been placed or installed in its intended normal operating position and they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children aged from 3 years and less than 8 years shall not plug in, regulate and clean the heater or perform user maintenance.
- Never connect any other electrical appliances to the same socket as the heater.
- Understand the operating environment; Before each use the operator should assess, understand and where possible reduce the specific risks and dangers associated with the operating environment. Bystanders should also be made aware of any risks associated with the operating environment.
- When using the heater for the first time, you may notice a slight emission of smoke, or a slight burning smell. This is normal and will stop after a short time; Some parts of the heater are coated for protection during shipping / storage.
- Use only the electrical power (voltage and frequency) specified on the specification label of the heater.
- This heater can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance.
- Cleaning and user maintenance shall not be made by children without supervision.
- **WARNING:** Risk of Electric Shock!

*This heater is only suitable for well insulated spaces or occasional use.*

If a problem with the heater is experienced, or if the mains lead or plug become damaged, stop operation and contact your distributor for repair.

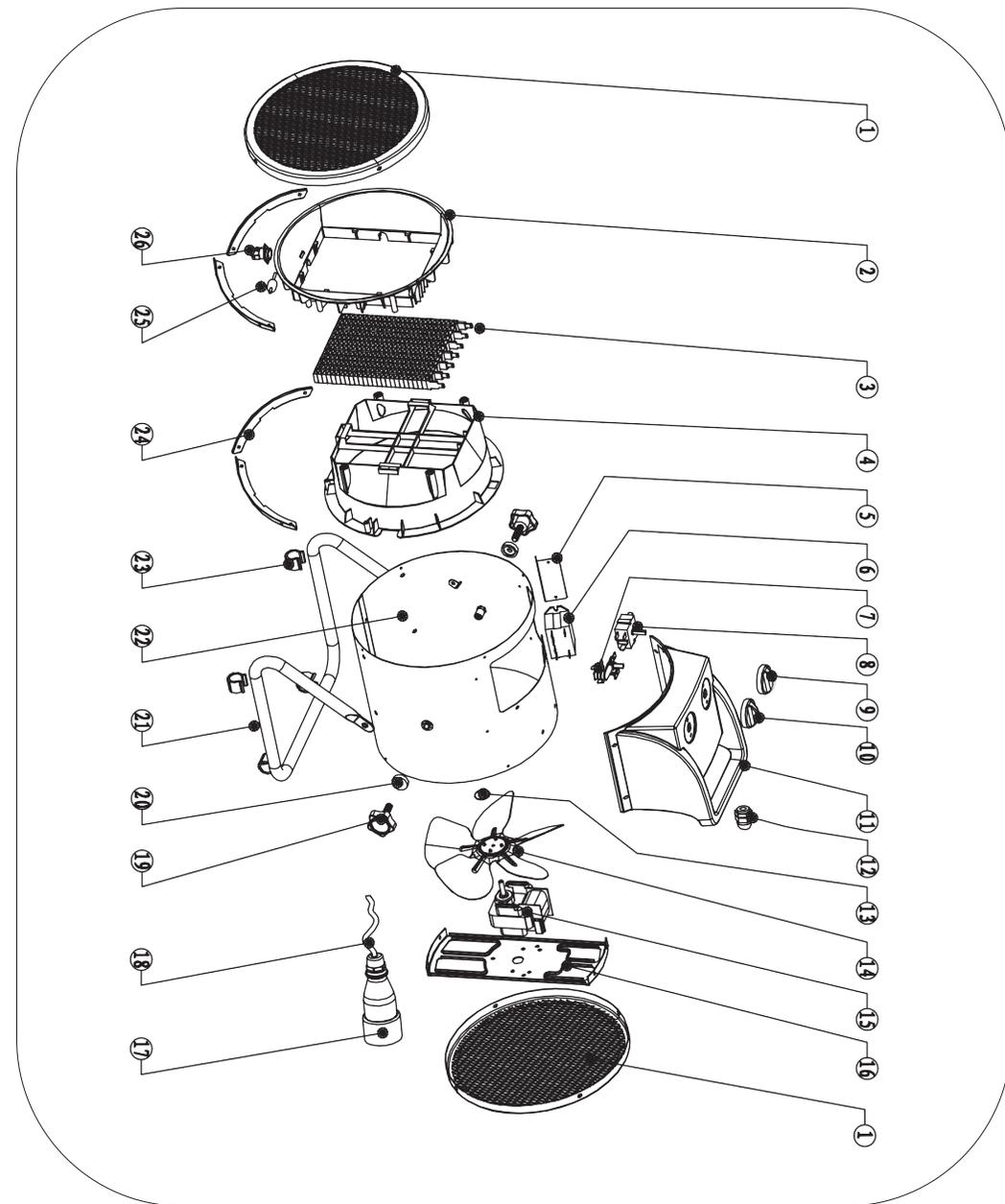


**Caution:** The warnings and cautions mentioned in this user manual can not cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be applied.

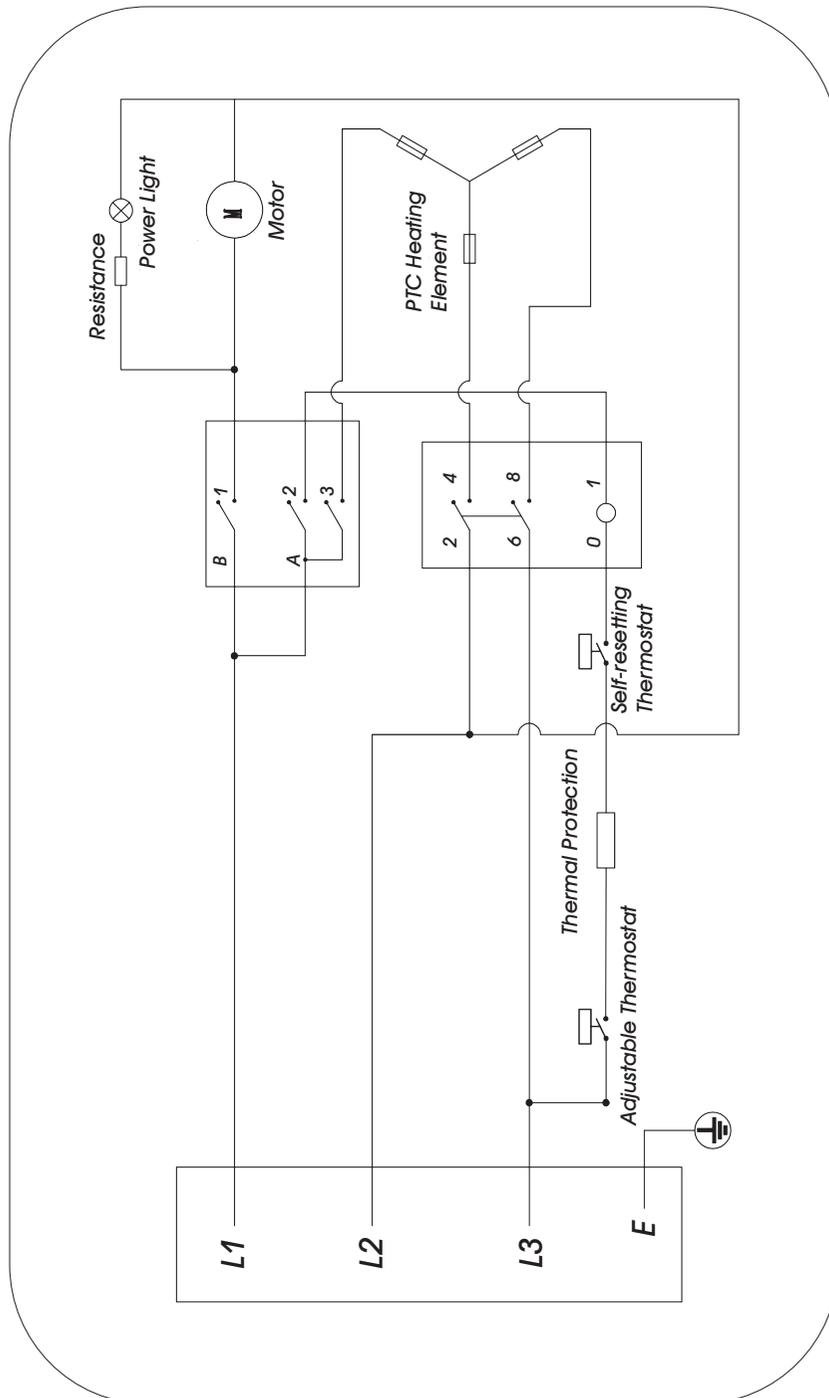


**Caution:** During normal operation some parts of the heater become very hot and could cause burns. Particular attention should be given where children and vulnerable people are present.

## EXPLODED DRAWING



## WIRING DIAGRAM



## ELECTRICAL CONNECTION

**WARNING!** It is the responsibility of the owner and the operator to read, understand and comply with the following:

You must check all electrical products, before use, to ensure that they are safe. You must inspect power cables, plugs, sockets and any other connectors for wear or damage. You must ensure that the risk of electric shock is minimised by the installation of appropriate safety devices; A residual current circuit Breaker (RCCB) should be incorporated in the main distribution board. We also recommend that a residual current Device (RCD) is used. It is particularly important to use an RCD with portable products that are plugged into a supply which is not protected by an RCCB. If in any doubt consult a qualified electrician.

### Connecting to the power supply:

This SIP heater is fitted with a 3 phase 16 amp type plug. Before using the heater, inspect the mains lead and plug to ensure that neither are damaged. If any damage is visible have the heater inspected / repaired by a suitably qualified person. If it is necessary to replace the plug a heavy duty impact resistant plug would be preferable.

*The wires for the plug are coloured in the following way:*

Yellow / green	Earth
Grey	Phase
Black	Phase
Brown	Phase

Always secure the wires in the plug terminals carefully and tightly. Secure the cable in the cord grip carefully.



**Warning:** Never connect live or neutral wires to the earth terminal of the plug. Only fit an approved plug with the correct rated fuse. If in doubt consult a qualified electrician.



**Note:** Always make sure the mains supply is of the correct voltage and the correct fuse protection is used. In the event of replacing the fuse always replace the fuse with the same value as the original.



**Note:** If an extension lead is necessary in order to reach the mains supply; The cross section should be checked so that it is of sufficient size so as to reduce the chances of voltage drops. Always fully unwind the lead during use.



**Note:** If an extension lead is necessary it should be as short as possible. Never connect any other electrical items to the same mains lead, or mains outlet.

## GUARANTEE

This SIP heater is covered by a 12 month parts and labour warranty covering failure due to manufacturers defects. This does not cover failure due to misuse or operating the heater outside the scope of this manual - any claims deemed to be outside the scope of the warranty may be subject to charges including, but not limited to parts, labour and carriage costs.

The warranty does not cover consumables such as fuses.

In the unlikely event of warranty claims, contact your distributor as soon as possible.



**Note:** Proof of purchase will be required before any warranty can be honoured.

## TROUBLESHOOTING

Symptom	Possible cause	Corrective Action
<ul style="list-style-type: none"> <li>The heater does not operate, even when it is plugged in and the switch and thermostat are switched on / set.</li> </ul>	<ul style="list-style-type: none"> <li>The plug is loose / bad connection.</li> <li>No power in socket outlet.</li> <li>Fuse is blown.</li> </ul>	<ul style="list-style-type: none"> <li>Pull out the plug, check the connection of the plug and socket. Then connect again.</li> <li>Insert the plug in a correctly powered socket.</li> <li>Check / replace the fuse.</li> </ul>
<ul style="list-style-type: none"> <li>The heating element is glowing.</li> </ul>	<ul style="list-style-type: none"> <li>The input voltage is too high or too low.</li> <li>The air inlet grill is blocked.</li> </ul>	<ul style="list-style-type: none"> <li>Insert the plug in a correctly powered socket.</li> <li>Inlet or outlet flow restricted; See minimum clearances on page 9.</li> </ul>
<ul style="list-style-type: none"> <li>The heater does not get hot.</li> </ul>	<ul style="list-style-type: none"> <li>The switch is not set to 1 of the 2 heat settings.</li> <li>Safety thermostat has operated.</li> </ul>	<ul style="list-style-type: none"> <li>Check and adjust the switch accordingly.</li> <li>The internal temperature is too high; Check and clear any obstructions. The heater will begin to run normally once the internal temperature has reduced.</li> </ul>
<ul style="list-style-type: none"> <li>Heater does not turn on.</li> </ul>	<ul style="list-style-type: none"> <li>Thermostat is set below ambient temperature.</li> <li>Fuse blown.</li> <li>Loose connection in wiring.</li> </ul>	<ul style="list-style-type: none"> <li>Turn the thermostat up above ambient temperature.</li> <li>Check / replace the fuse.</li> <li>Have the heater checked by a competent person.</li> </ul>

## MAINTENANCE INSTRUCTIONS

Before cleaning or maintenance operations always run the heater for a short while in fan mode to allow it to cool.

Turn the heater off and remove the plug from the mains supply.

- Clean the heater with a soft dry cloth only.
- **DO NOT** use abrasives or solvents.
- Periodically check the heater grill to ensure that it is not blocked.



**Note:** Dry compressed air, or a vacuum cleaner could be used to blow/ suck away any dust etc. that may build up inside the turbofan 5000, or on the inlet or outlet grills.



**Caution:** Whilst using compressed air, dust and / or other particles may become air borne; carry out the operation in a well ventilated area and use the appropriate eye and ear protection and a dust mask.

No other maintenance is necessary.

**DO NOT** dismantle or tamper with the heater, as this may be dangerous and will invalidate the warranty.

If a problem with the heater is experienced, or if the mains lead or plug become damaged, contact your distributor for repair.

When you store the heater, let it cool down, ensure that it is dry, cover with a plastic bag, put in a packing box and store it in a dry, ventilated place.

## TECHNICAL SPECIFICATIONS

Part Number	09220
Input Voltage	380V - 400V : 3 ~ 50Hz
Power (Max.)	5000 Watts
Fuse Rating	10 Amps
Settings - Fan	50 watts
Settings - Heat 1	3300 watts
Settings - Heat 2	5000 Watts
Protection	IPX0
Heater Dimensions	300 x 235 x 345 mm
Net Weight	4.32 Kg

Minimum Clearance Around Heater	Top - 500 mm
	Sides - 500 mm
	Rear - 750 mm
	Front - 1800 mm



**Never** cover the heater, or block the inlet or outlet.

## GETTING TO KNOW YOUR HEATER



A.	Mode Selection Knob
B.	Power Indication Light
C.	Temperature Selection Knob
D.	Handle
E.	Inlet
F.	Heating Element
G.	Outlet Grill
H.	Feet
I.	Angle Adjust Knob

## OPERATING INSTRUCTIONS

- Position the heater so that it stands upright on a firm surface and at a safe distance from wet environments and flammable objects / materials.
- Connect the heaters plug to a correctly rated mains supply.
- Select the desired mode - First setting for just fan with no heat, 2nd setting for half power and third setting for full power.
- Select the desired temperature.

Once the room reaches the required temperature, the heating element/s will stop working but the fan will continue to run. Once the temperature has decreased enough, the heating element/s will resume operation. The Turbofan 5000 heating element/s now start and stop automatically and thus keep the room temperature relatively constant.

- To turn the heater off, turn the mode selection to the off (0) position.



**Note:** After operation in heat mode; Set to fan mode and run the heater for a short while to allow it to cool before turning it off.

On / Off / Mode selection switch



Temperature selection



**Note:** The power light will only illuminate when the heater is running; Take care not to leave the heater in automatic (thermostat control) mode thinking that it is turned off.