

WARRANTY

Toolstation products deliver reliable service for normal, household use in domestic settings. All Toolstation products are individually tested before leaving the factory.

Your product is under warranty for 1 year from the date of purchase or the date of delivery of the product, if later.

The warranty is subject to the following provisions:

- The warranty does not cover accidental damage, misuse, parts, knobs, or consumable items.
- The product must be correctly installed and operated in accordance with the instructions contained in this manual.
- It must be used solely for domestic purpose.
- The warranty will be rendered invalid if the product is re-sold or has been damaged by inexpert repair.
- Specifications are subject to change without notice.
- The manufacturer disclaims any liability for incidental or consequential damages.
- The warranty is in addition to, and does not diminish your statutory or legal rights.

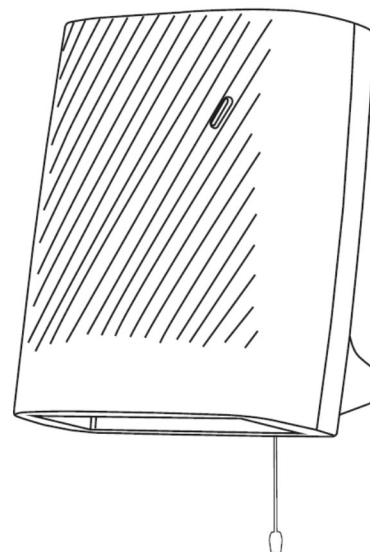
CUSTOMER SUPPORT

www.toolstation.com/contact
Call us 0808 100 7211
Mobile friendly 0330 333 3303
Email: info@toolstation.com

Made in China

Imported by Toolstation 04372131.

Wessex Electrical is a Toolstation brand. Toolstation is part of Travis Perkins Trading Company Limited.

**Original User Instructions****2kW Downflow Heater with Runback Timer**
SKU:70068**Domestic Use Only**

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



READ BEFORE USE
PLEASE KEEP THESE INSTRUCTIONS FOR FURTHER REFERENCE

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ENERGY USE INFORMATION

Information requirements for electric local space heaters

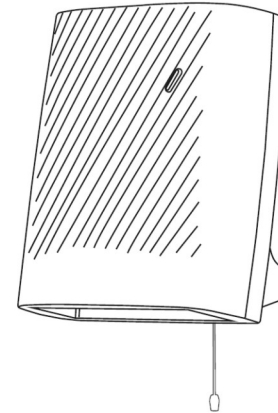
Model identifier(s): SKU:70068 Model: DFH-02					
Item	Symbol	Value	Unit	Item	Unit
Heat output				Type of heat input, for electric storage local space heaters only (select one)	
Nominal heat output	Pnom	2.0	kW	Single stage heat output and no room temperature control	[no]
Minimum heat output (indicative)	Pmin	N/A	kW	Two or more manual stages, no room temperature control	[no]
Maximum continuous heat output	Pmax,c	1.669	kW	With mechanic thermostat room temperature control	[no]
Power consumption				With Electronic thermostat room temperature control	[yes]
				Electronic room temperature control plus day timer	[no]
In off mode	Po	N/A.	kW	Electronic room temperature control plus weekly timer	[no]
In standby mode	Psm	N/A.	kW	Other control options (multiple selections possible)	
In idle mode	Pidle	N/A	kW	Room temperature control, with presence detection	[no]
In network standby	Pnsm	0.00036	kW	Room temperature control, with open window detection	[no]
Standby mode with display of information or status			[yes]	Distance control option	[no]
Seasonal space heating energy	ηS,on	Fixed: /	%	Adaptive start control	[no]
Efficiency in active mode				Working time limitation	[yes]
				Black bulb sensor	[no]
				Self-learning functionality	[no]
				Control accuracy	[no]
Contact details		Toolstation Limited (company number 04372131)			

ENVIRONMENTAL INFORMATION



The symbol on the product or its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste for recycling, please contact your local authority, or where you purchased your product.

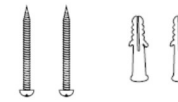
WHAT'S IN THE BOX



Downflow heater x1



Power cable pressure washer x 1 and screw x 2



Screw x 2 and screw anchor x 2



Heat shrinkable insulation sleeve x 2



Circular naked terminal x 2

• If you do not have all these items, please contact:
 • www.toolstation.com/contact
 • Telephone 0808 100 7211 Mobile friendly 0330 333 3303
 • Email info@toolstation.com

TOOLS REQUIRED

- PH2 Screwdriver (not provided)



SPECIFICATIONS

- 230V~50/60Hz
- 2 heat settings
- 1000W/2000W
- No self-reset thermal cut-out + thermal fuse
- Pull cord operation
- Overheat protection
- Built-in non-programmable runback timer (30 minutes)
- Flame retardant casing
- Power indicator light

TECHNICAL DATA

SKU/Model	70068/DFH-02
Rated Voltage	230V~50/60Hz
Rated Power Rate	2000W
Double Insulated	Yes
Thermostat	Fixed, 30° at 1kw, 45° at 2kw
IP Rating	IP22
Plug	Not provided
Power Cord	Not provided
Power Cord Spec Required	1.5mm² two core
Mounting Height	Min 1000mm above floor, recommended 1.8m
Dimensions Approx. (mm)	260 (H) x 250 (L) x 130 (W)
Net Weight Approx. (g)	1360

DECLARATION OF CONFORMITY / PERFORMANCE



1. **Product Models:**
70086(DFH-02)
2. **Product Description:**
2kW Downflow Heater with Runback Timer
3. **Name and Address of the Manufacturer (or its authorised representative in the UK):** Toolstation - company number 04372131.
4. This declaration of conformity is issued under the sole responsibility of Toolstation.
5. The product(s) detailed above is/are in conformity with the following applicable UK legislation and EU harmonisation legislation:
 - Low Voltage Directive - 2014/35/EU (The Electrical Equipment (Safety) Regulations 2016 - SI 2016/1101)
 - Electromagnetic Compatibility - Directive 2014/30/EU (The Electromagnetic Compatibility Regulations 2016 - SI 2016/1091)
 - Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) - Directive 2011/65/EU (The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 - SI 2012/3032)
 - Ecodesign Directive - Commission Regulation (EU) 2024/1103 (The Ecodesign for Energy-Related Products Regulations 2010 - SI 2010/2617)
6. References to the relevant harmonised standards and technical specifications:
 - EN 60335-1
 - EN 60335-2-30
 - EN 62233
 - EN 55014-1
 - EN 55014-2
 - EN IEC 61000-3-2
 - EN 61000-3-3

Signed for and on behalf of Toolstation - company number 04372131.

CARE AND CLEANING

CAUTION: Prior to performing any maintenance or cleaning of your downflow heater always disconnect the electrical supply for the heater at the adjacent double pole switch.

- Disconnect the power and allow the heater to cool.
- Clean the exterior only of this heater with a soft dry cloth.
- Do not use any chemical or abrasive cleaners.
- Ensure that any dust or fluff does not build up on the air inlet to the heater or on the outlet. Build-up of dirt and fluff will cause the unit to overheat and trip out. It is recommended to regularly vacuum both the inlet and outlet of the heater when any dust or fluff builds up.

TROUBLESHOOTING

Use this section to help you to try and solve any problems you may have:

PROBLEM	POSSIBLE CAUSES	REMEDIES
Although the heater is plugged in and switched on, the heater does not start working.	The plug may not be properly connected.	Check that the plug is properly inserted into the socket.
The machine stops suddenly while it is working.	The temperature has exceeded the threshold of the thermal cut-out.	Let the heater cool down before use. Ensure that the vents are not clogged with dust or fluff.

NOTE: IF YOU EXPERIENCE A PROBLEM WITH YOUR HEATER, PLEASE DO NOT ATTEMPT TO OPEN OR REPAIR THE HEATER YOURSELF. DOING SO MAY VOID THE WARRANTY AND COULD CAUSE DAMAGE OR PERSONAL INJURY. IF THE PROBLEM STILL PERSISTS, PLEASE CONTACT US BY REFERRING TO THE SERVICE & SUPPORT INFORMATION ON THE FOLLOWING PAGE.

EXPLANATIONS AND SYMBOLS, CAUTIONS AND WARNINGS



DO NOT COVER



UK Conformity Assessed



The product complies with the applicable European Directives and an evaluation method of conformity for these Directives was done.



WEEE symbol. Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or local store for recycling advice.



Double insulation. Protection class II

IMPORTANT SAFETY WARNINGS

Note: These instructions should be carefully read before installation and retained by the user. The booklet must be kept and delivered to the new user in case of disposal of the heater. This heater must be installed in accordance with the Building Regulations. These may be obtained from OPSI or viewed and downloaded from www.communities.gov.uk following the link for Building Regulations.

- This product is only suitable for well insulated spaces or occasional use.
- This product is a wall mounting appliance, never use it as portable appliance.
- This heater is intended solely for the use it has been designed for,

namely space heating. The Manufacturer or Distributor is not responsible for any damage that could happen due to improper use.

- After unpacking make sure that the heater is complete and shows no signs of tampering or any visible damage.
- **Do not** use this heater if it has been dropped.
- Keep packing materials, which are potentially dangerous, away from children.
- The heater can be used by children of at least 8 years (as well as by persons with reduced physical, sensory or mental capabilities, or lack of experience or required knowledge) provided that they are under supervision, or after they have been instructed relating to the safe use and have understood the potential dangers. Children should not play with the Heater.
- Cleaning and maintenance must be performed by the user and not by unsupervised children.
- Children of less than 3 years should be kept away unless continuously supervised. Children aged from 3 years and less than 8 years shall only switch on/off the heater provided that it has been installed in its intended normal operating position and they have been given instruction concerning use of the heater in a safe way and understand the hazards involved, children should always be supervised.
- Children aged from 3 years and less than 8 years shall not plug-in, regulate, clean the heater or perform maintenance.
- Before connecting the heater make sure that the voltage is the same as indicated on the device rating label.
- **Do not** use in presence of gas, inflammable or explosive liquids or substances as defined in BS5345.
- This product is suitable for installation on surfaces with normal flammability e.g. wood, plasterboard, masonry. It is not suitable for use on highly flammable surface (e.g. polystyrene, textiles).
- **Do not** insert any object through the heat outlet or air intake grilles of the heater. Keep combustible materials such as curtains and other furnishings clear from the front, sides and rear of the heater. **Do not** use heater to dry your laundry.
- **Do not** touch the heater with wet hands.
- **Do not** handle the heater when you have bare feet.
- **Do not** let children play with the heater.
- **Do not** put any objects or containers susceptible to heat in the path of the airflow, e.g. aerosol cans or flammable liquids. To reduce the

- To remove the cover of the heater, undo the 2 locking screws at the top of the heater and rotate the cover forwards being careful not to damage the hinge at the bottom of the heater.
- Using the dimensions shown above, mark the top 2 holes (A & B) on the wall. Drill and install the mounting plugs and partially install the screws for the holes A & B.
- Hang the heater on the screws and move the product through the Z locking shape shown in figure 1.
- Feed the supply cable through the cable inlet at the top of the heater and secure it using the cable clamp supplied, leaving sufficient slack on the cable to connect to the terminals on the Printed Circuit Board (PCB), [the cable used to supply the heater should be at least 1.5mm² two core.]
- Connect the Live (Red or Brown) cable to the terminal marked "L" and the Neutral (Blue or Black) cable to the terminal marked "N", see Figure 2. Ensure that there are no strands of cable left protruding from the terminal blocks. As the downflow heater is a double insulated appliance the Earth cable should not be connected and if present should be terminated in a connector and wrapped in electrical tape to prevent nuisance tripping.
- Refit the Cover by inserting the two hooks at the base of the cover into the corresponding pockets and rotate the cover. The cover should smoothly fit over the internal components, if the cover does not easily close, check that the PCB is firmly seated in its slot and that the supply cables are not obstructing the cover. Once the cover is closed, insert the screws being careful not to over tighten.
- The downflow heater is now ready to use and the power supply can be turned back on.
- **Note:** **Do not** operate the downflow heater without the cover in place.

Operation

- The downflow heater is fitted with a pull-cord and electronic micro switch to operate the appliance. To activate the switch, gently pull the cord until the switch clicks on and the heater operates.
- The first pull of the cord will operate the heater at 1kW showing a yellow indicator light, the temperature probe sets the temperature limit to 30°C.
- A second pull of the cord will bring the heater on at 2kW with a red indicator light, the temperature probe sets the temperature limit to 45°C.
- To turn the heater off pull the cord a third time and the heater will turn off the heating elements and enter cool down mode, the elements are turned off and the light flashes green. Once the unit is cooled down sufficiently it will turn off completely.
- The downflow heater also has a built in 1/2 hour run back timer. At the end of the run back period the heater will turn itself off and cool down. If the operation of the heater is adjusted during the run-back period then the heater defaults back to the full 30 minutes countdown duration.

Safety features

- **Electronic Temperature Sensor:** The downflow heater continually monitors the air temperature inside the heater to detect if it is overheating. In the event that the downflow heater overheats the electronic sensor will turn the heater off automatically. To reset the electronic sensor, turn the power off to the heater from the adjacent double pole switch, identify the cause of the overheating and rectify if possible (See Maintenance section). Ensure that the heater has cooled sufficiently and then reenergize the power supply. Pull the cord to restart the heater. Should the heater not restart check the element thermal cutout or element thermal fuse (Electrician required).
- **Element Thermal Cutout:** The element in the Downflow heater is equipped with a self-resetting high level bi-metallic thermal cutout. The thermal cutout will turn the element off if it overheats. **If the thermal cutout is triggered, it needs to disconnect the power to the heater and wait for 5 -10 minutes then connect the power to the heater again.** Once it cools down it needs to pull the cord to operate to heat. If you experience the element running cold when the indicator light is yellow or red then it is likely that the thermal cutout has tripped. Wait until the unit has cooled down and identify the cause of overheating (see above). If the unit still blows cold then check the element thermal fuse (Electrician required).
- **Element Thermal Fuse:** In addition to the element thermal cutout there is a thermal fuse built into the element, this is provided as a supplementary layer of safety, if the fuse blows and is open circuit, it can only be as a result of an irregular operating condition such as repeated overheating. If the thermal fuse is blown then the element will require replacement.

Installation

Warning: This heater must be installed at least 1000mm above the floor, recommended 1800mm. This heater must be installed so that switches and other controls (except the pull cord) cannot be touched by a person in the bath or shower.

Clearance required: 300mm above the heater to the ceiling, 250mm to the side of the heater. 1000mm to the floor and to any shelf below the heater.

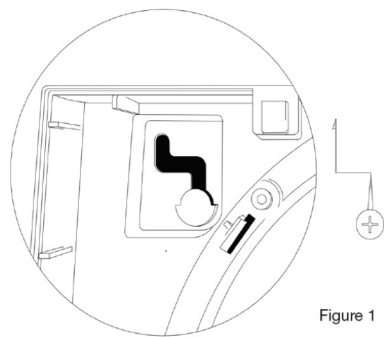
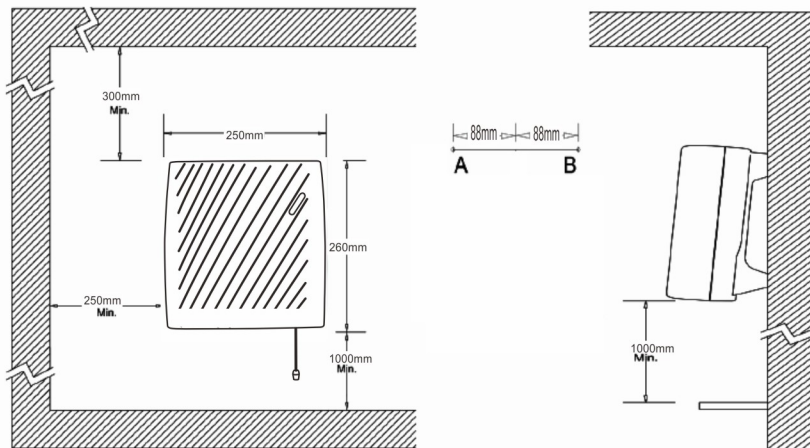


Figure 1

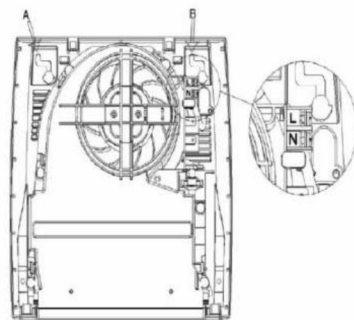


Figure 2

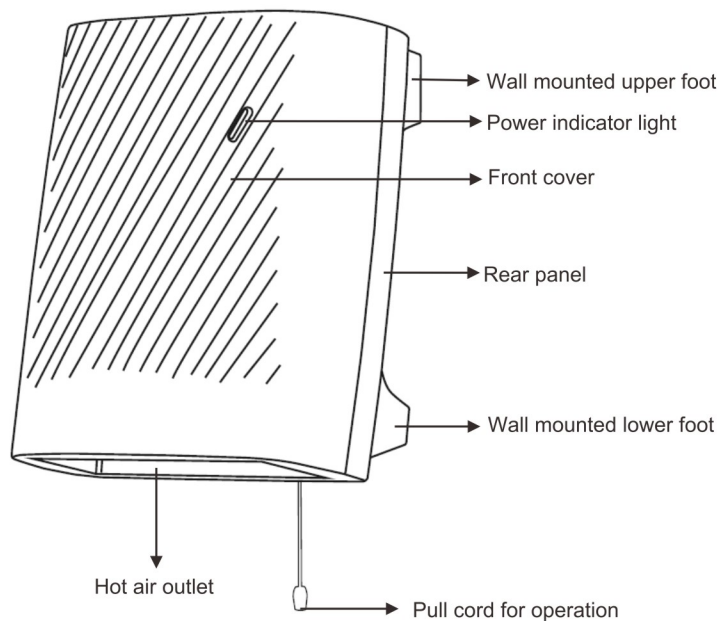
risk of fire, keep textiles, curtains, or any other flammable material a minimum distance of 1 m from the air outlet.

- **Do not** place the heater on carpets.
- **Do not** make any modification to the Heater.
- Keep connections dry.
- Always disconnect the heater before doing any maintenance.
- Some parts of this product can become very hot and may cause burns. Particular attention must be given where children and vulnerable people are present.



- The image shown to the left is the **Do not Cover symbol**, this symbol is printed on the heater to remind the user to ensure that the heater is not covered and to not obstruct the airflow around the heater, items such as Curtains or Furniture could cause the unit to over heat and may be a risk of Fire.
- Suitable for indoor use only.
- As this device is supplied without any connection cables it should therefore be fitted by a qualified and competent electrician in accordance with the IEE wiring regulations.
- A suitable termination to the fixed wiring of the premises must be provided adjacent to the heater using a suitably rated double pole disconnection switch with a minimum of 3mm contact gap and protected by an appropriately rated circuit breaker or RCD.
- If this heater is installed in a bathroom it must be supplied from a circuit that is protected by a high sensitivity RCD with a maximum rating of 30mA.
- **Do not** connect the power supply to the heater through an external control device such as a timer or thermostat.
- If the power supply is turned off whilst the unit is heating it will cause the heater to trip out the thermal cutouts or thermal fuse. Should the thermal fuse is blow the heating element will need to be replaced.
- **Do not** install on flammable materials.
- **Never** leave the heater unattended at any time whilst switched on.

PRODUCT DESCRIPTION AND IDENTIFICATIONS



ASSEMBLY AND OPERATING INSTRUCTIONS

Intended use: This heater is designed for wall mounting and must be used with the warm air vent facing downwards. This heater should not be used in any other orientation and should not be used as a free standing portable appliance.

Read before installation or use

- The mounting position should allow the free movement of air around the heater. Obstructing the air flow could result in overheating.

- This product is not intended to be used by children and persons with sensory, physical and/or mental impairments that would prevent them from using it safely.
- Small children should be supervised to ensure that they do not play with this appliance.
- Switch off the mains before commencing installation and remove the appropriate circuit fuse.
- Suitable for indoor use only.
- This product is suitable for installation on surfaces with normal flammability e.g. wood, plasterboard, masonry. It is not suitable for use on highly flammable surfaces (e.g. polystyrene, textiles).
- Before making fixing hole(s), check that there are no obstructions hidden beneath the mounting surface such as pipes or cables.
- The chosen location of your new heater should allow for the product to be securely mounted (e.g. to a firm wall) and safely connected to the mains supply.
- Do not site the heater directly beneath a mains outlet socket.
- Ensure the power supply to the heater is in accordance with the rating label on the heater.
- Keep the mains lead away from the hot body of the heater.
- If the location of your new heater requires the provision of a new electrical supply, the supply must conform with the requirements of the Building Regulations.
- This product is designed for permanent connection to fixed wiring: this should be to a suitable ring circuit (protected with a 10 Amp MCB or fuse) or a fused spur (with a 10 Amp fuse) via a fused connection unit. The supply must incorporate a switch or other means of disconnection.
- This product is not suitable for mounting within bathroom zones 0, 1 or 2 – it can be installed outside of zones where the permanent connection to the mains supply is made in accordance with the requirements of building and wiring regulations.**
- If in doubt, consult a qualified electrician.
- If installed in a bathroom, the supply circuit must be protected by a 30mA RCD.
- The room which is to be heated should not contain any easy inflammable materials (e.g., petrol, solvents, spray canisters etc.) or other easy combustible materials (e.g., wood or paper). Keep such materials away from equipment. Risk of fire!!

