



Only suitable for well insulated areas and not designed to be the primary heat source

## 22KW ELECTRIC FAN HEATER

MODEL NO: DEVIL 7025

PART NO: 6935457

# OPERATION & MAINTENANCE INSTRUCTIONS



**ORIGINAL INSTRUCTIONS** 

DL0625-Rev12

## INTRODUCTION

Thank you for purchasing this CLARKE product.

Before attempting to use this product, please read this manual thoroughly and follow the instructions carefully.

#### **GUARANTEE**

This product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt which will be required as proof of purchase.

This guarantee is invalid if the product is found to have been abused or tampered with in any way, or not used for the purpose for which it was intended.

Faulty goods should be returned to their place of purchase, no product can be returned to us without prior permission.

This guarantee does not effect your statutory rights.

## **FUNCTION AND OPERATING PARAMETERS**

This is a forced air heater. It's intended use is for drying and the warming of commercial/industrial buildings and areas where adequate ventilation is provided.

- It must be operated as prescribed in the operating manual.
- It is not intended to be used for domestic use or for the heating of habitable areas.
- It is not intended to be used to reach and maintain a certain level of human thermal comfort within an enclosed space in which the heater is situated.
- It is not intended to be used in enclosed areas with restricted ventilation.
- It is not intended for warming animals or live stock.

# THE FOLLOWING TABLE ADDRESSES THE INFORMATION REQUIREMENTS OF REG.2024/1103

Item	Symbol	Value	Unit
Heat output			
Nominal heat output	22.00	kW	
Minimum heat output (indicative)	P <sub>min</sub>	11.00	kW
Maximum continuous heat output	P <sub>max, c</sub>	22.00	kW
Auxiliary electricity consumption	-		
In off mode	Po	0.000	W
In standby mode	$P_{sm}$	0.000	W
In idle mode	P <sub>idle</sub>	0.000	W
In network standby	P <sub>nsm</sub>	0.000	W
Seasonal space heating energy efficiency in active mode	n <sub>s, on</sub>	85	%
Standby mode with display information or status	-	No	-
Type of heat output/room temperature control (sel	ect one)		
Single stage heat output, no temperature control			No
Two or more manual stages, no temperature control			No
With mechanical thermostat temp control			Yes
With electronic temperature control			No
Electronic temperature control with day timer			No
Electronic temperature control with week timer			No
Other control options (multiple selections possible)		·	
Room temperature control with presence detection			No
Room temperature control with open window detection			No
Room temperature control with distance control option			No
Room temperature control with adaptive start control			No
Room temperature control with working time limitation			No
Room temperature control with black bulb sensor			No
Room temperature control with self-learning functionality			No
Room temperature control with control accuracy			No

## **SAFETY SYMBOLS**

The following symbols appear on the unit.



Hot Surface, Do Not Touch



Do Not Cover



High Voltage

## **SAFETY RULES**

Make sure that you read, understand and comply with the following.

#### **ELECTRICAL SAFETY**



**WARNING: THIS HEATER MUST BE EARTHED** 

- Electrical appliances must match the power outlet. **NEVER** modify the plug in any way. **DO NOT** use adaptor plugs with earthed (grounded) appliances. Correct plugs and outlets will reduce the risk of electric shock.
- 2. **DO NOT** abuse the electrical cable. **NEVER** use the cable for pulling or unplugging the heater. Keep the cable away from sources of heat, oil, sharp edges or moving parts. Damaged or tangled cables increase the risk of electric shock.
- 3. Keep the power cable well away from machines and ensure an adequate electrical supply is close at hand so that the operation is not restricted by the length of the cable.
- 4. **ALWAYS** disconnect from the power supply before moving the heater or performing any cleaning or maintenance tasks.
- 5. Inspect the mains cable regularly for signs of damage. **DO NOT** use if it is damaged, and **ALWAYS** keep it away from the source of heat.
- 6. Check the heater for damage before use. **DO NOT** use if the heater tubes/ elements are damaged or broken. Any damage should be properly repaired or the part replaced. If in doubt, **DO NOT** use. Consult your local CLARKE dealer.

#### MAINTENANCE.



## WARNING: SERVICING OR INTERNAL MAINTENANCE MUST ONLY BE CARRIED OUT BY THE CLARKE SERVICE DEPARTMENT.

- 1. Check that the heater is in good working order. Take immediate action to repair or replace damaged parts.
- 2. **DO NOT** allow the heating elements to become covered with dust which could become a fire hazard. If used in a dusty workplace it should be cleaned as described under Cleaning and Maintenance.
- 3. Only recommended parts should be used. Unapproved parts may be dangerous and will invalidate the warranty.
- 4. **DO NOT** attempt to repair a damaged heater, contact the Clarke service department.

#### **POSITIONING**



WARNING: DO NOT USE THE HEATER NEAR FLAMMABLE MATERIAL, LIQUIDS, SOLIDS, GASES OR COMPRESSED GAS CYLINDERS ETC.

- 1. This heater is designed for indoor use only.
- 2. **DO NOT** use this heater in small rooms when they are occupied by persons not capable of leaving the room on their own unless constant supervision is provided.
- 3. **DO NOT** use this heater in the immediate surrounds of a bath, a shower, a swimming pool or wet surfaces.
- 4. **NEVER** place the heater against or near any surface such as a wall, door, curtains, furniture or combustible material etc. Allow at least 2 metre clearance.
- 5. **DO NOT** place the heater immediately below any electrical outlet.
- 6. **DO NOT** place the heater on a raised surface or anywhere where it could topple over. **ALWAYS** use on a horizontal and stable surface.
- 7. **ALWAYS** ensure that the grille cannot be blocked.
- 8. **DO NOT** operate fan heaters in explosive atmospheres such as in the presence of flammable liquids, gases or dust such as in a paint spray booth or any explosive environment. Electric motors create sparks which may ignite dust or fumes.

#### **OPERATION**

- 1. This heater is intended for drying & warming of commercial/industrial buildings where adequate ventilation is provided. It is **NOT** for domestic use or for heating habitable areas.
- 2. The heater should **NOT** be used by children or persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge.
- 3. **CAUTION:** Some parts of this product can become very hot and cause burns. Particular attention should be given where, animals, children and vulnerable people are present.
- 4. The heater must only be used by people who have read these instructions and have been trained in its use.
- 5. **DO NOT** use if dropped.
- 6. **DO NOT** use if there is visible signs of damage.
- 7. **DO NOT** obstruct the air inlet and outlet sections of the heater.
- 8. **DO NOT** cover the heater with anything that could restrict the air flow.
- DO NOT touch the heater casing or grille when first switched off, as these will be very hot and will take time to cool.
- 10. **DO NOT** get the heater wet or use in areas of high condensation.
- 11. **DO NOT** allow the power lead to touch hot surfaces.
- 12. **DO NOT** connect other appliances to the same mains socket as the heater.
- 13. **DO NOT** use this heater with a programmable timer used to switch it on automatically.
- 14. **DO NOT** leave the heater unattended.

#### **SERVICE & REPAIRS**

- 1. If necessary, have your heater repaired by a qualified person using identical replacement parts. This will ensure that the safety of the product is maintained.
- 2. Please keep these instructions in a safe place for future reference.

## **ELECTRICAL CONNECTIONS**



WARNING: THE INSTALLATION OF THIS APPLIANCE SHOULD BE CARRIED OUT BY A COMPETENT ELECTRICIAN AND BE IN ACCORDANCE WITH THE CURRENT IEE WIRING REGULATIONS (BS7671-2:2008).

This machine MUST be connected to a 400 Volt, 3 phase 50Hz supply through a suitably rated isolator switch. It cannot be operated from a single phase supply.

The user should purchase a suitable connecting cable capable of handling 63 Amps (recommended Cross Sectional Area 10mm<sup>2</sup>) and supply plug rated at 63A (or better) which complies with BSEN 60309. A length of 2-3 metres is recommended giving mobility to the appliance but without becoming a trip hazard

If in any doubt, consult a qualified electrician. **DO NOT** attempt any electrical work yourself.

## **SAFETY SYSTEMS**

#### THERMOSTATIC PROTECTION

The Devil 7025 has a manual reset thermal cut out to prevent the unit from overheating.

If the thermal cut out activates, then turn off the power and disconnect from the power supply. Allow the heater to cool down for several minutes before pressing the reset button. Reconnect to the power supply and turn on to resume operation.

## **LIST OF CONTENTS**

1 x Heater	1 x Axle c/w Circlip (2)
1 x R/H & 1 x L/H Support Frames	2 x Wheel
1 x Upper Handle	1 x Fixings Pack

## **ASSEMBLY**

1. Fit the right leg frame to the main body as shown.

**NOTE:** The bolt needs to be inserted before the hand-wheel.

**NOTE:** The bolt goes through the larger of the 2 holes in the spacer.

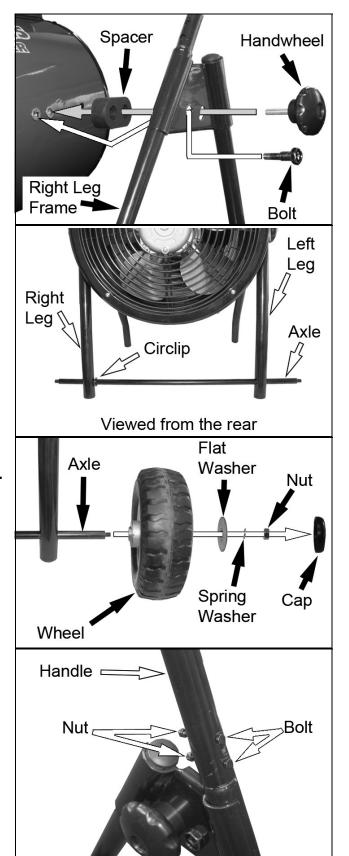
2. Fit the axle and left hand support frame.

**NOTE:** The circlip shown must be on the inside of the legs.

3. Fit the wheels as shown.

**NOTE:** The cap fits over the flat washer.

4. Use the nuts and bolts supplied, to secure the handle to the leg frames as shown.



## **OPERATION**



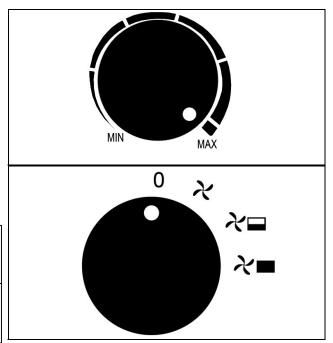
WARNING: DO NOT USE THIS HEATER IN SMALL ROOMS WHEN THEY ARE OCCUPIED BY PERSONS NOT CAPABLE OF LEAVING THE ROOM ON THEIR OWN, UNLESS CONSTANT SUPERVISION IS PROVIDED.



CAUTION: SOME PARTS OF THIS PRODUCT CAN BECOME VERY HOT AND CAUSE BURNS. PARTICULAR ATTENTION HAS TO BE GIVEN WHERE CHILDREN AND VULNERABLE PEOPLE ARE PRESENT.

- 1. Put the heater in a level position on a flat surface and at a safe distance from flammable materials. Keep a minimum of 2m clearance all round.
- 2. Connect the heater to a suitable power supply.
- 3. Set the thermostat control to the maximum setting (fully clockwise).
- 4. Set the mode selector to one of the 3 settings:

0	Off
X	Fan Only
<b>∤</b> □	Fan + Heat Setting 1
×■	Fan + Heat Setting 2



- The heater will take up to three minutes to reach optimum temperature.
- 5. Once the room reaches the required temperature, turn the thermostat control slowly counter-clockwise until the thermostat clicks, leave the control in this position.
  - The room temperature will be maintained at this setting. The heater will continue to operate until the power switch is turned to the OFF position.

- 6. For fan only operation, turn the power switch to the fan only setting and set the thermostat to its minimum setting.
- 7. Turn the heater off by turning the power switch to "0",
  - Do not remove the plug from the mains supply. The fan will continue to run for several minutes to lower the temperature of the case and elements. Once the fan stops you can safely remove the plug from the power supply.
- 8. When not in use, disconnect the heater from the mains supply. Store it in a safe, dry, childproof location.

## **MAINTENANCE**



WARNING: ALWAYS DISCONNECT FROM THE POWER SUPPLY AND ALLOW THE HEATER IT TO COOL DOWN BEFORE PERFORMING ANY MAINTENANCE TASKS.

- Clean the heater with a soft damp cloth, Do not use solvents or abrasives.
- Make sure that the heater grill is not blocked.
- No other maintenance is required, should you discover any problem with the heater, return it to the Clarke service department for repair.

## **SPECIFICATIONS**

Operating Voltage, Current and Frequency:	400 V / 43A / 50Hz / 3 Phase
(V / A / Hz / Phs)	
Operating Temperature: (Min/Max) (°C):	0-40°C
Heat Output: (kW):	22 kW
Air Output: (m³/h)	1428m³/h
Safety Device:	Thermal cut-out
Duty Cycle Classification:	Continuous duty
Electrical Insulation Class	I
Product: Depth x Width x Height	640 x 612 x 1025 mm
Product Weight	29.05 kg

## **ENVIRONMENTAL RECYCLING POLICY**



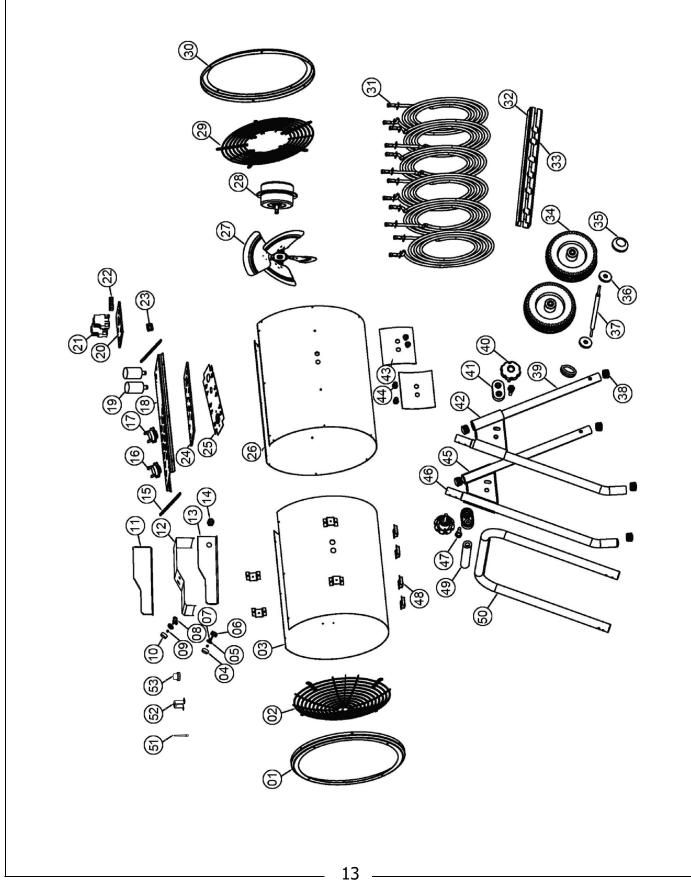
Through purchase of this product, the customer is taking on the obligation to deal with the WEEE in accordance with the WEEE regulations in relation to the treatment, recycling & recovery and environmentally sound disposal of the WEEE.

In effect, this means that this product must not be disposed of with general household waste. It must be disposed of according to the laws governing Waste Electrical and Electronic Equipment (WEEE) at a recognised disposal facility.

## **TROUBLE SHOOTING**

Problem	<b>Possible Cause</b>	Remedy	
Heater does not operate, although plugged in with the switch and thermostat switched on.	Plug is loose/bad connection.	Pull the plug out & check all connections (cable/plug and socket).	
	Fuse blown or circuit breaker trips.	Replace if necessary and investigate cause. If fuse blows repeatedly, consult your Clarke dealer.	
	No power at socket outlet	Insert the plug in a suitable socket	
Heating element glowing hot.	Input voltage too high or too low.	Use a power supply in accordance with the rating on the label.	
	Air inlet grille is blocked	Ensure the heater is kept away from any objects which could cover the air inlet or be drawn into it.	
The unit has failed to heat up so only the air fan has operated.	Control switch not set at a "HEATING" level.	Turn switch to a heating level.	
	Thermostat has tripped.	Turn the thermostat and listen. If there is no CLICK and the thermostat is not damaged, the heater will automatically switch ON when it has cooled down.	
	The manually reset cut-out has operated.	Disconnect the power. Take a suitable pin and insert it into the manual RESET hole in the control panel. Press the RESET button and connect the circuit.	
Abnormal noise.	Heater is not level.	Stand heater on a level surface	

## **PARTS DIAGRAM**



## **PARTS LIST**

1	Front Rings	28	Motor
2	Front Grille	29	Rear Grille
3	Heat Shield	30	Rear Rings
4	Switch Knob	31	Heating Elements
5	Securing Rings	32	Heater Bracket Upper
6	Speed Controller	33	Heater Bracket Bottom
7	Location Part For Switch	34	Wheel
8	Temperature Controller	35	Wheel Cover
9	Fasten Spring	36	Securing Plate
10	Thermostat Knob	37	Axle
11	Control Box L	38	Base Pad
12	Control Box Cover	39	Rear Frame
13	Control Box R	40	Adjustable Screw
14	Cable Inlet Gland	41	Spacer
15	Sealing Tape	42	Securing Plate L
16	Overheat Thermostat	43	Securing Plate
17	After Cooling Thermostat	44	Rivet Nut
18	Chassis Panel	45	Securing Plate R
19	Motor Capacitor.	46	Front Frame
20	Insulate Board Of Contactor	47	Fixing Bolt
21	Ac Contactor	48	Location Plate
22	Wire Terminal	49	Insulate Sleeve
23	Grommet	50	Upper Frame
24	Insulate Board	51	Temperature Control Top Rod
25	Heat Shield	52	Temperature Control Bracket
26	House Casing	53	Button
27	Fan		

Part number = (CXDEV7025 + the number of the part)

## **DECLARATION OF CONFORMITY - UKCA & CE**





Hemnall Street, Epping, Essex CM16 4LG

DECLARATION OF CONFORMITY

This is an important document and should be retained.

We hereby declare that this product(s) complies with the following statuary requirement(s):

Electromagnetic Compatibility Regulations 2016

Electrical Equipment (Safety) Regulations 2016

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

The Eco-design for Energy Related Products and Energy Information (Amendment) (EU Exit) Regulations 2019

The following standards have been applied to the product(s):

EN 55014-1:2017, EN 55014-2:2015, EN 61000-3-2:2014, EN 61000-3-3:2013, EN 61000-3-11:2000 EN 61000-3-12:2011, EN 60335-2-30:2009+A11:2012, EN 62233:2008

EN 60335-1:2012+AC:2014+A11:2014+A13:2017, IEC 62321-3-1:2013, IEC 62321-4:2013, IEC 62321-5:2013, IEC 62321-6:2015, IEC 62321-7-1:2015, IEC 62321-7-2:2017, IEC 62321-8:2017

IEC/EN 60675:1998, IEC 62301:2011

The UKCA mark was first applied in: 2022

The technical documentation required to demonstrate that the product(s) meet(s) the requirement(s) of the documentation has been compiled and is available for inspection by the relevant enforcement

13/04/2022

Date of Issue:

13/04/2022

Serial / batch Number: Model number(s): Product Description:

Signed:

N A

Devil 7005, Devil 7009, Devil 7015, Devil 7025, Devil 7030 Electric Fan Heaters – 5kW, 9kW, 15kW, 22kW, 30kW

Date of Issue: Serial / batch Number: Product Description:

Model number(s):

Signed

J.A. Clarke

Director

Page 1 of 1

Devil 7025 CE Clarke DOC 041322

Devil 7025 UKCA Clarke DOC 041322



This is an important document and should be retained.

**DECLARATION OF CONFORMITY** 

We hereby declare that this product(s) complies with the following directive(s) Electromagnetic Compatibility Directive

2014/30/EU

Low Voltage Directive

Equipment Directive

2009/125/EC

2011/65/EU

2014/35/EU

Eco-design Directive

Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic

The following standards have been applied to the product(s):

EN 60335-1:2012+AC:2014+A11:2014+A13:2017, IEC 62321-3-1:2013, IEC 62321-4:2013, EN 55014-1:2017, EN 55014-2:2015, EN 61000-3-2:2014, EN 61000-3-3:2013, EN 61000-3-11:2000, IEC 62321-5:2013, IEC 62321-6:2015, IEC 62321-7-1:2015, IEC 62321-7-2:2017, IEC 62321-8:2017, EN 61000-3-12:2011, EN 60335-2-30:2009+A11:2012, EN 62233:2008,

The technical documentation required to demonstrate that the product(s) meet(s) the requirement(s) of the aforementioned directive(s) has been compiled and is available for inspection by the relevant enforcement

IEC/EN 60675:1998, IEC 62301:2011

The CE mark was first applied in: 2014

Devil 7005, Devil 7009, Devil 7015, Devil 7025, Devil 7030 Electric Fan Heaters - 5kW, 9kW, 15kW, 22kW, 30kW

J.A. Clarke

Director

Page 1 of 1

## A SELECTION FROM THE VAST RANGE OF





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