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# 16" VENTILATION FAN

MODEL NO: CON400 (110V)

PART NO: 3230483

# OPERATION & MAINTENANCE INSTRUCTIONS



ORIGINAL INSTRUCTIONS

DL0722 - ISS 6

# INTRODUCTION

Thank you for purchasing this CLARKE Ventilator which is designed for indoor use in an industrial environment.

Read this manual carefully, in doing so you guarantee the safety of yourself and that of others around you, and you can look forward to your purchase giving you long and satisfactory service.

# **SAFETY WARNINGS**

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

# **POSITIONING**

Be aware that the suction capability is considerable. Do not position the ventilator where it will blow dust or hazardous fumes at people.

DO NOT place the ventilator close to any wet surface. DO NOT place against any surface such as a wall, door or furniture etc.

DO NOT place the fan on a raised surface or anywhere it could topple over.

Only use in a level position.

Take care to ensure that the intake grille cannot be blocked by curtains or other fabrics. Do not allow loose clothing, long hair, jewellery etc. to be drawn into the intake side of the fan.

DO NOT operate the ventilator in explosive atmospheres such as in the presence of flammable liquids, gases or dust such as in a paint spray booth. Electric motors create sparks which may ignite dust or fumes.

DO NOT cover the fan or obstruct the air inlet and outlet sections of the ventilator.

DO NOT get the ventilator wet or use in areas of high condensation.

DO NOT allow the power cable to touch hot surfaces.

ALWAYS make sure the brakes are engaged before operating.

DO NOT operate without the safety grills secured in position.

# PERSONNEL SAFETY

DO NOT use the ventilator when you are tired or under the influence of alcohol, drugs or intoxicating medication.

DO NOT stand on the ventilator.

DO NOT use the ventilator with wet hands or when there is water on the power cable.

Young children must be kept away unless supervised.

# **ELECTRICAL SAFETY**

Inspect the power cable/plug for damage/looseness. Do not use the fan if the power cable is damaged.

Make sure that the voltage on the product label is the same as the voltage of the power supply. If in doubt, consult a qualified electrician.

DO NOT abuse the electrical cable. Do not use the cable for pulling or unplugging the fan.

Keep the cable away from sources of heat, oil, sharp edges or moving parts. Damaged or tangled cables increase the risk of electric shock.

DO NOT use extension cables with this ventilator.

# SERVICE & REPAIRS

Check that the fan is in good working order. Take immediate action to have it repaired or any damaged parts replaced.

DO NOT attempt to repair the ventilator yourself. Always contact the CLARKE service department who will use recommended parts only. Unapproved parts may be dangerous and will invalidate your warranty.

# **ENVIRONMENTAL RECYCLING POLICY**



By purchasing this product, the customer is taking on the obligation to deal with its safe disposal in accordance with the Waste Electrical and Electronic Equipment regulations (WEEE).

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

# **GUARANTEE**

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

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

Faulty goods must 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.

# **ELECTRICAL CONNECTIONS**



WARNING! READ THESE ELECTRICAL SAFETY INSTRUCTIONS THOROUGHLY BEFORE CONNECTING THE PRODUCT TO A POWER SUPPLY.

This product can be connected to one of the following power supplies:

- 110V Generator
- 110V Isolating Transformer
- 110V Site supply
- 230V Generator via a 110V transformer.

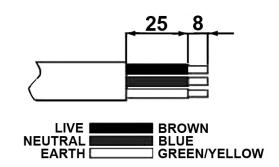
Connecting it to any other power source may cause damage.

This product includes a fitted industrial plug to BS-EN 60309, and a cable for use with a 110 volt supply. On no account must a 230V, 13amp (BS1363) plug be used.

If using a portable 110V transformer make sure it has a rated capacity sufficient to take the load of the fan.

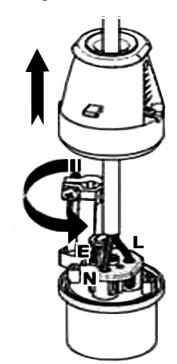
Should the plug need changing at any time, ensure that a plug of identical specification is used and proceed as follows:

- 1. Undo the socket screws & remove the rear section.
- 2. Rotate the cable clamp clear of the terminals.
- 3. Feed the cable through the rear gland in the plug.
- 4. Remove the cable sheath to the required lengths as shown in the diagram.
- 5. Terminate the correct wires in the correct terminal blocks as shown.
- Remove the cable clamp screws. Clip
  the cable clamp back into position and
  place the clamp around the outer
  sheath of the cable. Replace the screws
  and tighten until the cable is securely
  held.



7. Replace the rear cover and tighten the cover screws.

If in any doubt, consult a qualified electrician. DO NOT attempt any repairs yourself.



# **BEFORE USE**

Before assembly, check for damage or shortages. Any damage or shortage should be reported to the CLARKE dealer where the fan was purchased.

Your ventilation fan should be supplied with the following parts:

- 4 x castor (2 with brakes)
- 16 bolts, 16 nuts, 16 spring washers and 32 flat washers.

Bolt the castor assemblies to the frame as shown using the fastenings supplied. Install the castors with brakes at one end of the frame.

This ventilator will be used with CLARKE 16" diameter retractable ducting available in 5 metre lengths sold separately as follows:

Yellow (3230484) or Orange (3230241)

- 1. Before use, attach the ducting to the discharge end of the ventilator as shown, secured with the tie cord provided.
- 2. Place the ventilator in a level position on a flat surface and at a safe distance from flammable materials.
- 3. Set the angle of tilt as required using the hand knob shown.
- 4. Connect the ventilator to a suitable power outlet.
- 5. Always apply the brakes before operating the ventilator.

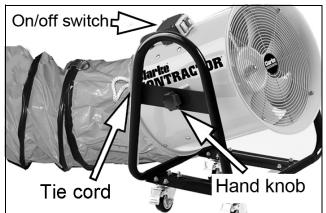
# **CARE & MAINTENANCE**



WARNING: ALWAYS DISCONNECT FROM THE POWER SUPPLY BEFORE PERFORMING ANY CLEANING OR MAINTENANCE TASKS. REPAIRS SHOULD BE CARRIED OUT BY THE CLARKE SERVICE DEPARTMENT.

Clean the ventilator with a soft damp cloth, Do not use solvents or abrasives. If used in spaces with high dust content, clean the guards and fan blades by vacuuming or wiping.





Remove the end guard to gain access to the blades by removing the four securing screws.

REPLACE GUARD BEFORE RE-CONNECTING TO POWER SUPPLY.

No other maintenance is required, should you discover any problem with the ventilator return it to the CLARKE service department for repair.

Should the fan fail to operate, check the power supply and that the circuit breaker has no tripped. Abnormal noise while the fan is running may occur if the fan is not standing on a level surface.

Model	CON400
Product dimensions	575 x 435 x 770 mm
Fan diameter	385mm
Product Weight	38 kg
Tilt range	360°
Operating temperature	10 - 40°C
Power supply	110V/50Hz
Duty Cycle Classification:	S1 (continuous)
Electrical Insulation Class	I
Ingress Protection Rating	IP 54
Fan rpm @ optimum energy efficiency	2800 rpm
Flow rate at full speed	120 m <sup>3</sup> /min (7200 m <sup>3</sup> /h)
Rated air flow @ overall efficiency point	63.28 m3/s (3796.7 m3/h)
Rated air flow @ optimum energy efficiency	63.28 m <sup>3</sup> /s (3796.7 m <sup>3</sup> /h)
Rated pressure @ optimum energy efficiency	436.41 Pa
Total pressure	700 Pa
Static pressure@ overall efficiency point	436.41 Pa
Rated motor input power	1200 W
Overall efficiency	59.52%
Measurement category	С
Efficiency category	Static
Efficiency grade (at optimum energy point)	40
Specific Ratio (EU no 327/2011)	N/A
Sound Guaranteed Power level: (dB LWA)	79dB

# **DECLARATION OF CONFORMITY**





# Fitzwilliam Hall, Fitzwilliam Place, Dublin 2

# 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.

Low Voltage Directive

Eco-design Requirements Directive. Restriction of Hazardous Substances (RoHS).

2009/125/EC 2011/65/EU 2014/35/EU 2014/30/EU

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

EN 55014-2:1997/A2:2008, EN 55014-2:2015, EN 61000-3-2:2014, EN 61000-3-3:2013. EN 60034-1:2010, EN 60034-5:2001+A1:2007, EN 55014-1:2006/A2:2011, EN 55014-1:2017,

EN ISO 17075-1:2017. IEC 62321-3-1:2013, IEC 62321-6:2015, IEC 62321-7-1:2015, IEC 62321-7-2:2017,

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

The CE mark was first applied in: 2020

16inch Ventilator (110V)

Ķ CON400 14/07/2022

Signed

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

J.A. Clarke Director

Signed:

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CON400 UKCA Clarke DOC 071422

CON400 CE Clarke DOC 071422



# 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 Ecodesign for Energy-Related Products and Energy Information (Amendment) (EU Exit) Regulations 2020.

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

BS EN 60034-1:2010, BS EN 60034-5:2001+A1:2007, BS EN 55014-1:2006/A2:2011,

BS EN 61000-3-3:2013, IEC 62321-3-1:2013, IEC 62321-6:2015, IEC 62321-7-1:2015, BS EN 55014-1:2017, BS EN 55014-2:1997/A2:2008, BS EN 55014-2:2015, BS EN 61000-3-2:2014,

IEC 62321-7-2:2017, BS EN ISO 17075-1:2017.

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

The UKCA mark was first applied in: 2022

Serial / batch Number: N A CON400 14/07/2022

J.A. Clarke Director

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# A SELECTION FROM THE VAST RANGE OF





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