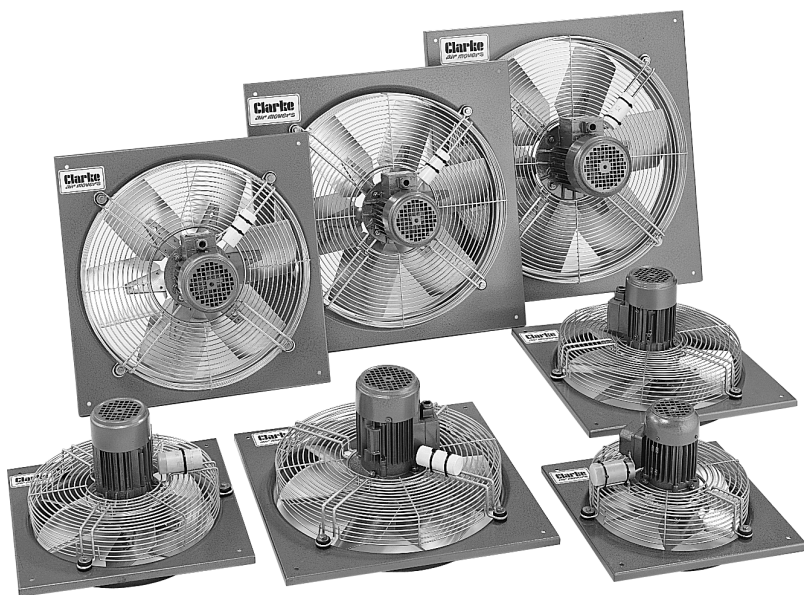


CLARKE®

air movers



AXIAL PLATE FANS

MODEL NO: CAF304,354,404,454,506,556 & 606

PART NO: 3230110, 3230110,3230120,3230130,3230140,3230150 &3230160

OPERATION & MAINTENANCE INSTRUCTIONS



ORIGINAL INSTRUCTIONS

GC0519 - rev 3

INTRODUCTION

Thank you for purchasing this CLARKE Axial Plate Fan.

Before attempting to use this product, please read this manual thoroughly and follow the instructions carefully. In doing so you will ensure the safety of yourself and that of others around you, and you can look forward to your purchase giving you long and satisfactory service.

GENERAL SAFETY WARNINGS

1. Please keep these instructions in a safe place for future reference.
2. Never carry out any alterations or modifications to this product.
3. Inspect the power cable and plug for damage and ensure that no connections are loose. Do not use this unit if it has a damaged supply cable. Any damage should be properly repaired or the part replaced.
4. Do not use adaptor plugs with earthed (grounded) appliances. Correct plugs and outlets will reduce the risk of electric shock.
5. Position the power cable so that it cannot be inadvertently pulled or pinched and where it does not cause a trip hazard.
6. Disconnect from the power supply when not in use.
7. Never abuse the mains cable or wrench the cable to disconnect it from the socket. Keep the cable away from sharp edges/hot surfaces.
8. Store this product in a dry, secure place out of reach of children.

GUARANTEE

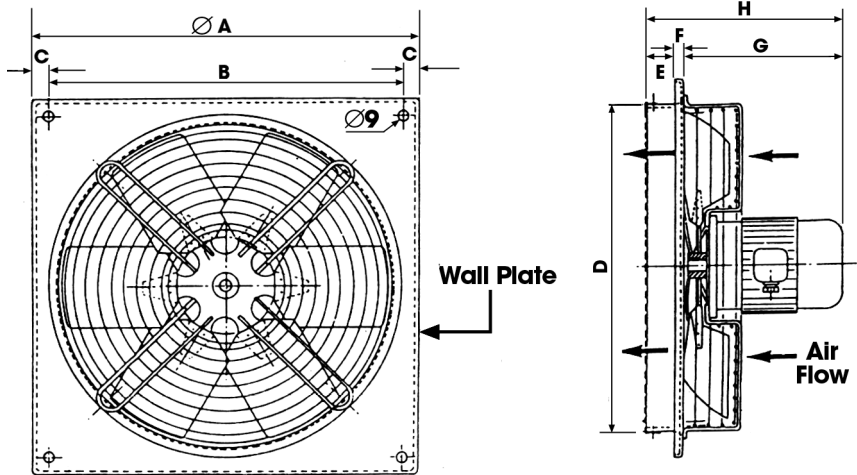
This product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt which will be required as proof of purchase.

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.

TECHNICAL DATA (DIMENSIONS IN MM)



Model	A	B	C	D	E	F	G	H
CAF304	400	350	25	315	45	15	195	255
CAF354	450	400	25	365	45	15	238	298
CAF404	500	450	25	420	45	15	238	298
CAF454	550	500	25	470	45	15	247	306
CAF506	600	550	25	520	45	15	273	332
CAF556	680	630	25	570	45	15	247	307
CAF606	730	680	25	620	45	15	273	332

PERFORMANCE

Model	RPM	Power kW	Sound Power Level db(A)	Sound Pressure Level at 3M (db(A))
CAF304	1400	0.06	72	55
CAF354	1400	0.18	76	59
CAF404	1400	0.25	75	58
CAF454	1400	0.36	80	63
CAF506	900	0.18	73	56
CAF556	900	0.25	76	59
CAF606	800	0.36	80	73

EFFICIENCY DATA (Note; no grade efficiency if power of fan <125W).

Model CAF 304		
1	Overall efficiency η	32.5
2	Measurement category used to determine the energy efficiency (A-D)	A
3	Efficiency category (static or total)	STATIC
4	Efficiency grade at optimum energy efficiency point	n/a
5	Whether the calculation of fan efficiency assumed use of a VSD and if so, whether the CSD is integrated within the fan or the VSD must be installed within the fan.	Without VSD

Model CAF 354		
1	Overall efficiency η	32
2	Measurement category used to determine the energy efficiency (A-D)	A
3	Efficiency category (static or total)	STATIC
4	Efficiency grade at optimum energy efficiency point	43
5	Whether the calculation of fan efficiency assumed use of a VSD and if so, whether the CSD is integrated within the fan or the VSD must be installed within the fan.	Without VSD

Model CAF 404		
1	Overall efficiency η	33.5
2	Measurement category used to determine the energy efficiency (A-D)	A
3	Efficiency category (static or total)	STATIC
4	Efficiency grade at optimum energy efficiency point	43.5
5	Whether the calculation of fan efficiency assumed use of a VSD and if so, whether the CSD is integrated within the fan or the VSD must be installed within the fan.	Without VSD

Model CAF 454		
1	Overall efficiency η	36
2	Measurement category used to determine the energy efficiency (A-D)	A
3	Efficiency category (static or total)	STATIC
4	Efficiency grade at optimum energy efficiency point	44
5	Whether the calculation of fan efficiency assumed use of a VSD and if so, whether the CSD is integrated within the fan or the VSD must be installed within the fan.	Without VSD

Model CAF 506

1	Overall efficiency η	32.5
2	Measurement category used to determine the energy efficiency (A-D)	A
3	Efficiency category (static or total)	STATIC
4	Efficiency grade at optimum energy efficiency point	42.5
5	Whether the calculation of fan efficiency assumed use of a VSD and if so, whether the CSD is integrated within the fan or the VSD must be installed within the fan.	Without VSD

Model CAF 556

1	Overall efficiency η	48
2	Measurement category used to determine the energy efficiency (A-D)	A
3	Efficiency category (static or total)	STATIC
4	Efficiency grade at optimum energy efficiency point	57
5	Whether the calculation of fan efficiency assumed use of a VSD and if so, whether the CSD is integrated within the fan or the VSD must be installed within the fan.	Without VSD

Model CAF 606

1	Overall efficiency η	58
2	Measurement category used to determine the energy efficiency (A-D)	A
3	Efficiency category (static or total)	STATIC
4	Efficiency grade at optimum energy efficiency point	66
5	Whether the calculation of fan efficiency assumed use of a VSD and if so, whether the CSD is integrated within the fan or the VSD must be installed within the fan.	Without VSD

ELECTRICAL CONNECTIONS



WARNING: READ THESE ELECTRICAL SAFETY INSTRUCTIONS THOROUGHLY BEFORE CONNECTING THE PRODUCT TO THE MAINS SUPPLY.

Before switching the product on, make sure that the voltage of your electricity supply is the same as that indicated on the rating plate. This product is designed to operate on 230VAC 50Hz. Connecting it to any other power source may cause damage.


This product may be fitted with a non-rewireable plug. If it is necessary to change the fuse in the plug, the fuse cover must be refitted. If the fuse cover becomes lost or damaged, the plug must not be used until a suitable replacement is obtained.

If the plug has to be changed because it is not suitable for your socket, or due to damage, it should be cut off and a replacement fitted, following the wiring instructions shown below. The old plug must be disposed of safely, as insertion into a mains socket could cause an electrical hazard.

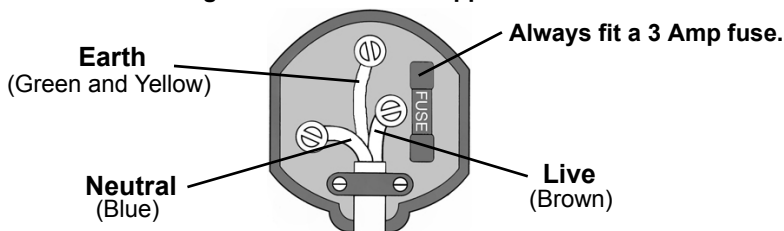


**WARNING: THE WIRES IN THE POWER CABLE OF THIS PRODUCT ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE:
BLUE = NEUTRAL BROWN = LIVE YELLOW AND GREEN = EARTH**

If the colours of the wires in the power cable of this product do not correspond with the markings on the terminals of your plug, proceed as follows.

- The **Blue** wire must be connected to the terminal which is marked **N** or coloured **Black**.
- The **Brown** wire must be connected to the terminal which is marked **L** or coloured **Red**.
- The **Yellow and Green** wire must be connected to the terminal which is marked **E** or  or coloured **Green**.

Plug must be BS1363/A approved.



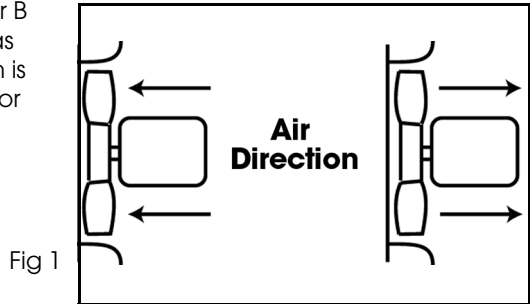
Ensure that the outer sheath of the cable is firmly held by the clamp

We strongly recommend that this machine is connected to the mains supply via a Residual Current Device (RCD)

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

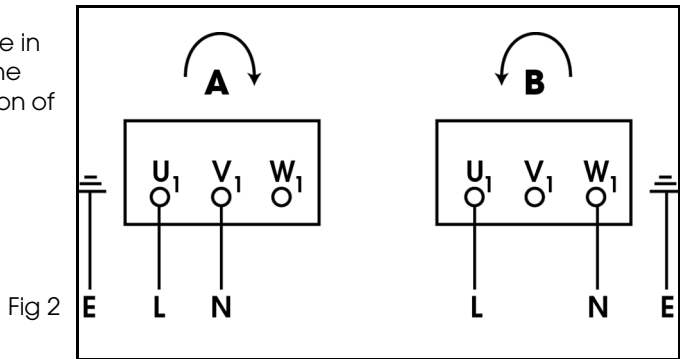
DIRECTION OF AIRFLOW

To achieve air flow direction A or B (fig 1), the fan should be wired as shown in fig 2. (A similar diagram is also included inside the fan motor terminal box).



TERMINAL BOX CONNECTIONS

Consult a qualified electrician if you are in any doubt about the electrical connection of this fan.



INSTALLATION

1. Before Installation, ensure that the impeller has not been damaged or distorted during transit.
2. Check that the impeller rotates freely and is secured tightly to the shaft. If the tip clearance of the blades is not sufficient slacken the motor bolts and re-align.
3. Mount the fan securely using the 4 bolt holes provided in the outer casing.
4. Ensure that the installation is free from any vibration which could damage the impeller or motor bearings.
5. Ensure that when installed the impeller side of the fan cannot be touched i.e. if this is not covered by ducting or cowling, then the optional side guard must be fitted.

IMPORTANT: If a fan (without louvre shutters) is used for a reversible airflow, the fan must always be completely stopped before changing direction.

6. Refer to the section on electrical connection for guidance on wiring for air flow direction.

MAINTENANCE

1. Check that the impeller and motor bolts and nuts are fully tightened within the first 100 hours of use, and periodically after this.
2. Ensure that the impeller, motor and fan housing are kept clean. This is important for the ongoing safe use of this fan.
3. Periodically check that the fan installation is free from corrosion.
4. Store in a dry place protected from the weather.

Your CLARKE fan has been designed to give long and trouble free service. If, however, having followed the instructions in this booklet carefully, you encounter problems, take the unit to your local CLARKE dealer.

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 recognized disposal facility.

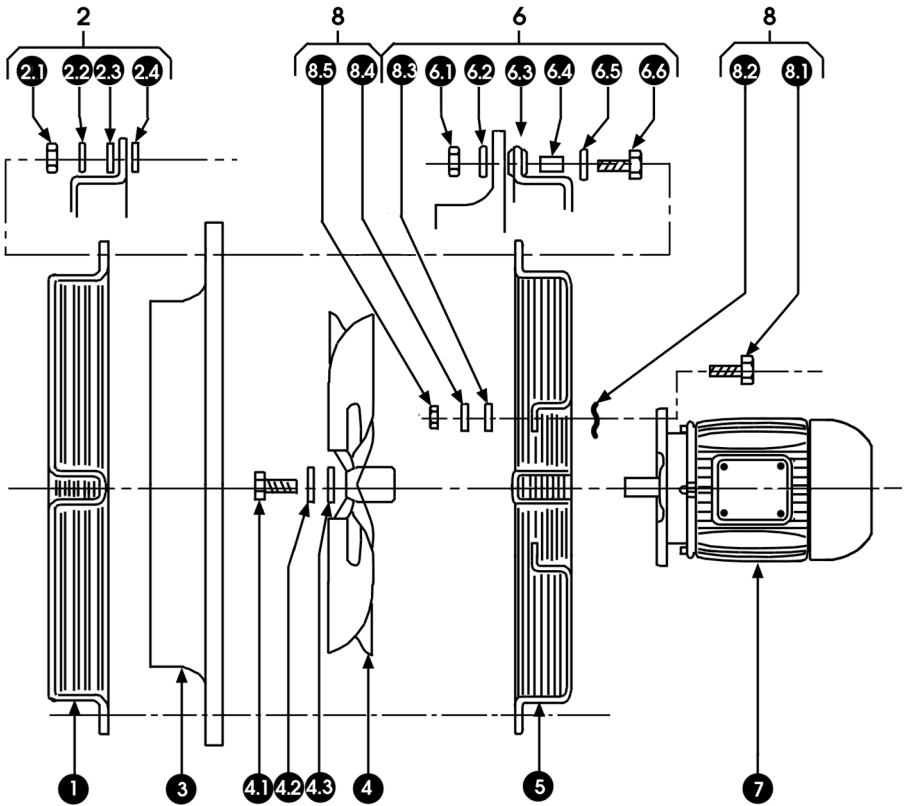
At the end of its working life, do not dispose of this product or its components with general household waste. Any tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of appropriately.

REPLACEMENT PARTS

No	DESCRIPTION	CAF304	CAF354	CAF404	CAF454	CAF506	CAF556	CAF606
1	Wire Guard	102	112	122	132	142	152	162
2	Assy Screws	103	113	123	133	143	153	163
2.1	Nut	103A	113A	123A	133A	143A	153A	163A
2.2	Washer	103B	113B	123B	133B	143B	153B	163B
2.3	Washer	103C	113C	123C	133C	143C	153C	163C
2.4	Washer	103D	113D	123D	133D	143D	153D	163D
3	Fan Plate	104	114	124	134	144	154	164
4	Impeller	105	115	125	135	145	155	165
4.1	Bolt	105A	115A	125A	135A	145A	155A	165A
4.2	Washer	105B	115B	125B	135B	145B	155B	165B
4.3	Washer	105C	115C	125C	135C	145C	155C	165C
5	Motor Guard	106	116	126	136	146	156	166
6	Assy Screws	107	117	127	137	147	157	167
6.1	Nut	107A	117A	127A	137A	147A	157A	167A
6.2	Washer	107B	117B	127B	137B	147B	157B	167B
6.3	Anti-Vib Mtg	107C	117C	127C	137C	147C	157C	167C
6.4	Anti-vibration spacer	107D	117D	127D	137D	147D	157D	167D
6.5	Washer	107E	117E	127E	137E	147E	157E	167E
6.6	Bolt	107F	117F	127F	137F	147F	157F	167F
7	Motor	108	118	128	138	148	158	168
8	Assy Screws	109	119	129	139	149	159	169
8.1	Bolt	109A	119A	129A	139A	149A	159A	169A
8.2	Plate Washer	109B	119B	129B	139B	149B	159B	169B
8.3	Washer	109C	119C	129C	139C	149C	159C	169C
8.4	Washer	109D	119D	129D	139D	149D	159D	169D
8.5	Nut	-----	119E	129E	139E	149E	159E	169E

All replacement part numbers begin with the prefix **3230**.

PARTS DIAGRAM



ACCESSORIES

A full range of draught operated Louvre Shutters, Impeller Side Guards and Fan Speed Regulators is available. Please contact your Clarke dealer for details.

DECLARATION OF CONFORMITY



Clarke[®]
INTERNATIONAL

Hernall 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 directive(s):

2014/30/EU *Electromagnetic Compatibility Directive.*
2006/42/EC *Machinery Directive.*
2014/35/EU *Low Voltage Equipment Directive.*
2009/125/EC *The Eco-design of Energy Related Products Directive.*
2011/65/EU *Restriction of Hazardous substances.*

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

n/a

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 authorities.

The CE mark was first applied in: 2015

Product Description: Axial Plate Fans
Model number(s): CAF304, 354, 404, 454, 506, 556, 606
Serial / batch Number: N/A
Date of Issue: 21/05/2019

Signed:

J.A. Clarke
Director

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Mig, Arc, Tig and Spot. From DIY to auto/industrial.

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Drills, grinders and saws for DIY and professional use.

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Saws, sanders, lathes, mortisers and dust extraction.

HYDRAULICS

Cranes, body repair kits, transmission jacks for all types of workshop use.

WATER PUMPS

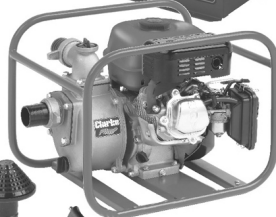
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