

# HCA SERIES



## Description

The short cased HCA Series are compact, lightweight units designed around an advanced, high performing impeller. Suitable for a wide range of air supply and discharge applications. Can be used for a duct mounted ventilation system. HCA axial fans offer a wide operating angle making them suitable for mounting in any position enabling greater flexibility for site installations. Available in 5 standard sizes from 315mm to 500mm, either single or three phase.

## Typical Applications

Suitable for a wide range of air supply and discharge applications in the building services sector such as warehousing, restaurants, sports halls, industrial units, schools and kitchen extract to agricultural markets.

## Features

- Finished in a tough epoxy paint to protect against corrosion.
- Suitable for duct mounted applications.
- The compact design allows for easy installation especially within restricted spaces.
- Highly efficient external rotor motors.
- Very efficient for moving high volumes of air at relatively low pressures.
- Motors and impellers are balanced to Grade G6.3.
- Motor mounting brackets are constructed within welded wire framework.
- The mounting brackets are electroplated prior to black epoxy powder coating to provide added protection.
- Suitable for operating temperatures of up to +55°C and up to 95% humidity.
- Condensation drainage holes are built into the motors as standard. These remove the build up of condensation within the motor when operating in humid surroundings or from considerable changes in temperature.
- Motors have sealed-for-life bearings.
- Built-in integral thermal overload protection which prevents the motor from overheating.
- Unit is rated IP44 which means they are highly resistant to dust and water ingress.
- IP54 rated terminal box and motor side guard for extra protection.
- Motors have Class F insulation.
- Comes with a 12 month warranty as standard.

## Construction

Mounting brackets are electroplated prior to black epoxy powder coating. Guards are electroplated prior to painting and finished in a tough epoxy polyester paint RAL 9005 Black.

All impeller blades are pressed steel sickle bladed type with epoxy painted colour RAL 9005 black and welded to the motor rotor.

## Motor

Type - external rotor motors.

Electricity supply - 230V, single-phase, 50Hz or 400V, three-phase, 50Hz.

Ball Bearing - sealed for life.

See section O for details on these motors.

## Internal Thermal Protection

Model 315 to 500 single phase - Integral thermal overload protection.

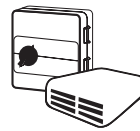
Model 315 to 500 three phase - Integral thermal overload protection.

## Testing

Airflow to ISO 5801:1997

Noise to BS848 Part 2:1985

## Ancillary Equipment

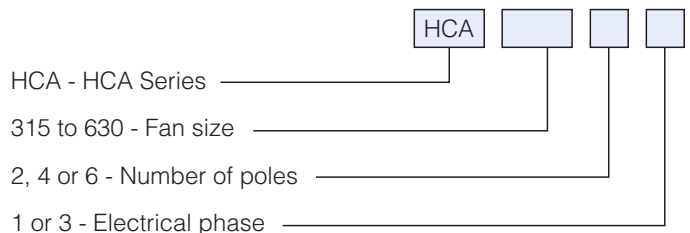


Controllers & Sensors  
Ref. Section M



Ducting, Louvres & Grilles  
Ref. Section L

## How To Order



## Suggested Specification

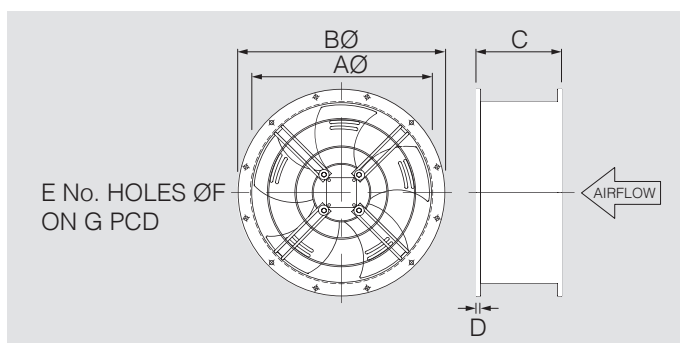
The short cased axial fan shall be of the HCA Series by Elta Fans. Mounting plate shall be manufactured in powder coated steel. Guards to be electroplated prior to painting and finished in an epoxy polyester paint RAL 9005 Black.

The fan must be built with external rotor motors with sealed for life, maintenance free, ball bearings enabling the fan to be mounted at any angle. Motors are to be IP44 with Class F insulation, suitable for ambient operating temperatures of up to +55° C and 95% humidity. All motors are pre-wired to an IP54 terminal box, incorporate built in thermal overload protection and are suitable for speed control. Motors and impellers are balanced to Grade G6.3. All performance shall be based upon tests to ISO 5801:1997 for airflow and to BS848 Part 2:1985 for noise.

## Technical Data

Model Number HCA...	Fan Speed, rev/sec	Avg. dB(A) @ 3m	220-240V/1Ph/50Hz			App. Wt. kg
			Watts	FLC Amps	SC Amps	
<b>315/4-1B</b>	22	49	75	0.35	1.10	3.3
<b>350/4-1B</b>	23	53	140	0.65	2.00	4.9
<b>400/4-1B</b>	23	59	180	0.82	2.50	7.2
<b>450/4-1B</b>	22	59	250	1.20	3.60	7.2
<b>500/4-1B</b>	21	63	420	1.95	5.90	9.5

## Dimensions



Model Number HCA...	Dimensions, mm						
	AØ	BØ	C	D	E	FØ	G
<b>315/*-**B</b>	315	382	180	8	8	9.5	356
<b>350/*-**B</b>	350	420	180	8	8	9.5	395
<b>400/*-**B</b>	400	460	190	9	12	9.5	438
<b>450/*-**B</b>	450	515	190	9	12	9.5	487
<b>500/*-**B</b>	500	567	250	9	12	9.5	541
<b>560/*-**B</b>	560	635	250	9	16	11.5	605
<b>630/*-**B</b>	630	705	250	9	16	11.5	674

\* Add 2, 4 or 6 for number of poles

\*\* Add 1 or 3 for electrical phase



## Elta Fans Malaysia Sdn Bhd (714973-T)

Tel **+603 7846 0340**

Fax **+603 7842 1132**

Email **info@eltafans.asia**

Web **www.eltafans.asia**

No. 147, Jalan TUDM Kampung Baru Subang  
40150 Shah Alam, Selangor West Malaysia, Malaysia

## Elta Fans India Pvt. Ltd.

Tel **+(91) 33 2498 8126**

Fax **+(91) 33 2498 8126**

Email **info@eltafans.in**

Web **www.eltafans.in**

165, Bakhrahat Road, Post - Joka, Hanspukur,  
Kolkata - 700104 West Bengal, India

### Branches

Mumbai **+(91) 22 2683 2155**

New Delhi **+(91) 88 0043 4400**

Bengaluru **+(91) 80 4113 2524**