



# HPA SERIES Square Plate Axial Fan

# **HPA SERIES**



# Description

The plate mounted HPA Series are designed around an advanced, high performing impeller. Suitable for a wide range of air supply and discharge applications. The HPA axial fans offer a wide operating angle making them suitable for mounting in any position enabling greater flexibility for site installations. Available in 9 standard sizes from 250mm to 710mm, either single or three phase.

#### **Typical Applications**

Suitable for a wide range of air supply 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.
- · Highly efficient external rotor motors.
- Very efficient for moving high volumes of air at relatively low pressures. Can achieve air volume flow rates of up to 4.0 m<sup>3</sup>/ sec and static pressures of up to 300Pa.
- Bell mouth inlet reduces resistance to create a smoother airflow.
- The HPA is fully speed-controllable allowing levels of ventilation to be adjusted according to requirements and eliminating wasted energy expenditure.
- Motors and impellers are balanced to Grade G6.3.
- Motor mounting brackets are constructed within welded wire framework which acts as a finger guard.
- 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 designed to operate at any angle.
- Built-in integral thermal overload protection which prevents the motor from overheating.
- Rated IP44 which means they are highly resistant to dust and water ingress.
- IP54 terminal box and motor side guard.
- Motors have Class F insulation. Comes a 12 month warranty as standard.

#### Construction

Bell mouth inlet and mounting plate manufactured in powder coated steel. Finished in a tough epoxy paint to protect against corrosion. 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 the exception of HPA 250mm and 300mm models which are conventional pressed steel blades, all providing excellent performance characteristics and low noise levels. Impellers are epoxy painted colour RAL 9005 black and are welded to the motor rotor.

#### Motor

Type - external rotor motors.

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

Bearings - sealed for life, ball.

See page O-2/3 for details on these motors.

#### **Internal Thermal Protection**

Model 200 to 710 single phase - Integral thermal overload protection.

Model 200 to 710 three phase - Integral thermal overload protection.

#### Testing

Airflow to ISO 5801:1997 Noise to BS848 Part 2:1985

# Suggested Specification

The HPA plate mounted fan shall be of the HPA Series by Elta Fans. It shall have a one piece bell mouth inlet and mounting plate manufactured in powder coated steel. It shall include a finger protection guard to IS013582 for mounting the fan onto the inlet ring. Guards are to be electroplated prior to painting and finished in an epoxy polyester paint RAL 9005 Black.

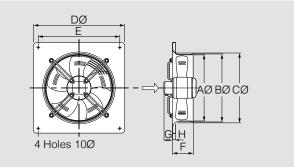
The fan must be built with external rotor motors with sealed for life, maintenance free, ball bearings enabling the fan to be mounted at any angle. Motors are to be IP44 with Class F insulation, suitable for ambient operating temperatures of up to +55° C and 95% humidity. All motors are pre-wired to 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. All performance and sound data to be based on Form A Plate Mounted test arrangement.

How To Order	
HPA - HPA Series ——	
200 to 710 - Fan size	
2, 4 or 6 - Number of poles	
1 or 3 - Electrical phase —	

## Technical Data

Model Number HPA	Fan Speed, rev/sec		220-240 Watts	FLC	/50Hz SC Amps	App. Wt. kg
200/2-1A	38	41	55	0.26	0.80	2.5
250/2-1A	40	51	80	0.40	1.20	3.0
315/2-1A	38	51	145	0.66	2.00	3.3
250/4-1A	23	46	50	0.23	0.70	3.0
315/4-1A	22	49	75	0.35	1.10	3.3
350/4-1A	23	53	140	0.65	2.00	4.9
400/4-1A	23	59	180	0.82	2.5	7.2
450/4-1A	22	59	250	1.20	3.6	7.2
500/4-1A	21	63	420	1.95	5.9	9.5
560/4-1A	21	66	550	2.55	7.7	10.5
400/6-1A	15	49	110	0.50	1.50	7.2
450/6-1A	15	51	150	0.70	2.10	7.2
500/6-1A	15	59	230	1.15	3.50	9.5
560/6-1A	15	61	330	1.70	5.10	10.5
630/6-1A	15	66	520	2.50	7.50	15.0
500/4-3A	21	63	450	0.90	2.70	9.5
560/4-3A	21	75	600	1.20	3.60	10.5
630/4-3A	22	69	800	1.60	4.80	15.0
500/6-3A	15	59	230	0.55	1.7	9.5
560/6-3A	15	61	330	0.90	2.7	10.5
630/6-3A	15	66	550	1.60	4.8	15.0
710/6-3A	15	71	900	1.90	5.7	25.0

### Dimensions

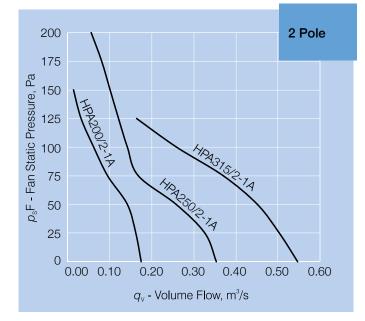


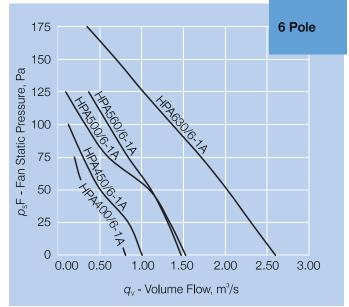
Model Number	Dimensions, mm								
HPA	AØ	BØ	CØ	DØ	Е	F	G	н	
200/*-**A	200	210	215	312	260	52	60	15	
250/*-**A	250	260	265	370	320	90	60	15	
315/*-**A	315	325	360	430	380	90	60	15	
350/*-**A	350	360	395	485	435	90	60	15	
400/*-**A	400	410	450	540	490	110	60	15	
450/*-**A	450	460	500	575	535	110	60	15	
500/*-**A	500	510	560	655	615	115	60	15	
560/*-**A	560	575	625	725	670	115	60	15	
630/*-**A	630	645	705	805	750	125	60	20	
710/*-**A	710	725	765	850	810	130	135	27	

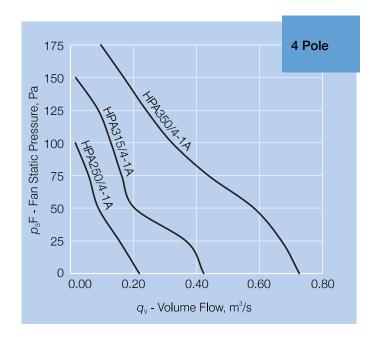
\* Add 2, 4 or 6 for number of poles

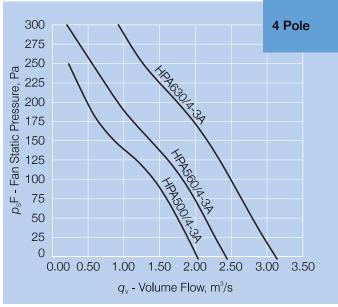
\*\* Add 1 or 3 for electrical phase

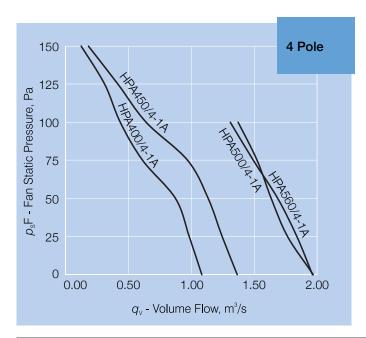
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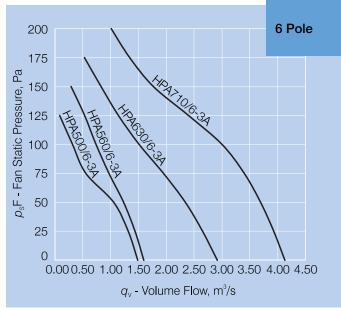














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