



HPA

Plate Mounted Axial Flow Fan

HPA

Product Overview



- Integral IP54 terminal box and motor side guard
- Single phase 220V to 240V / 50Hz
- IP44 Protection
- Suitable for operating temperatures up to +55°C
- Available in **AC**

The HPA plate mounted axial fan has sickle shaped blades to reduce noise.

Casing

Each HPA fan includes a pressed steel one piece bell mouth mounting plate, finished with a tough epoxy polyester paint finish in black (RAL9005).

Guard

Includes a welded steel wire finger guard to BS848 part 5, electroplated prior to a tough epoxy polyester paint finish in black (RAL9005).

Impeller

Impellers are also tough epoxy painted in black (RAL9005), providing excellent performance characteristics with low noise levels. The HPA impeller blades are pressed steel, welded to the rotor and dynamically balanced to ISO1940 Grade G6.3.

Motors

Motors are lightweight, high efficiency rotor motors, with sealed for life ball bearings, insulated to Class F, weatherproofed to IP44, with integral thermal overload protection. Electrical connection is made to the motor through an integrated IP54 terminal box, mounted on the back of the motor.

Quality Management

All units are tested to ISO 5801:1997 (airside performance) and BS 848 Pt 2:1985 (sound performance).

Warranty

Each HPA has a 12 month warranty.

Typical Applications

- Warehousing
- Restaurants
- Sports Halls
- Industrial Units
- Schools
- Kitchen Extract
- Agricultural Markets

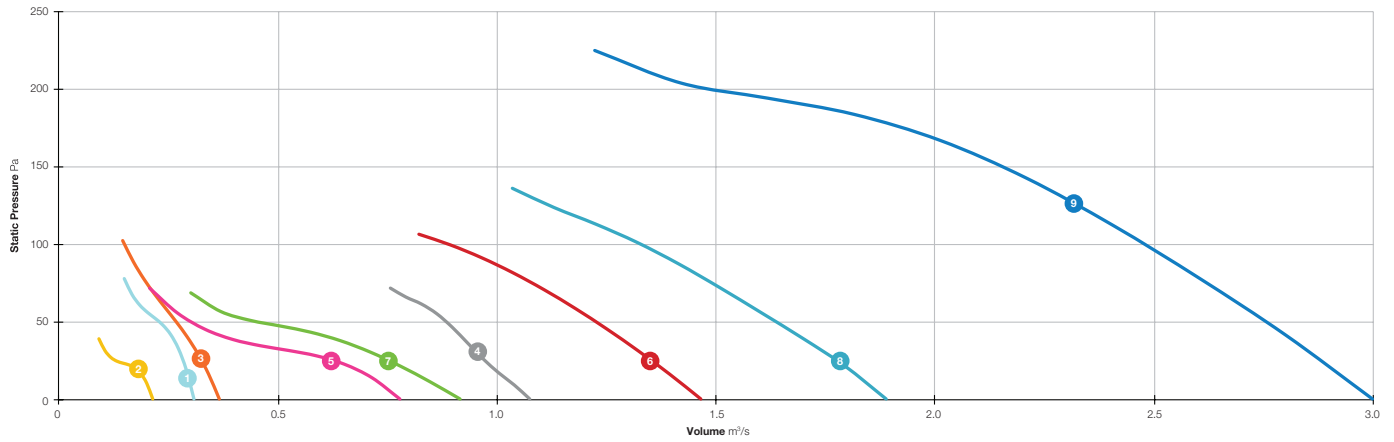
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Product Coding

Code	Reference
HPA	Product Range
250	Diameter (250/315/350...)
/	
2	Number of Poles (2/4/6)
-	
1	Voltage Supply (Single Phase / Three Phase)
AC	Motor Type (AC/EC)
A - Z	Additional Coding (A - Z) Product Variants
e.g.	HPA250 / 2 - 1AC

Performance Range Curves



- 1 HPA250 / 2-1A
- 2 HPA250 / 4-1A
- 3 HPA315 / 4-1A

- 4 HPA400 / 4-1A
- 5 HPA400 / 6-1A
- 6 HPA450 / 4-1A

- 7 HPA450 / 6-1A
- 8 HPA500 / 4-1A
- 9 HPA630 / 4-1A

Performance, SFP & Electrical Data

Single Phase 220V to 240V / 50Hz

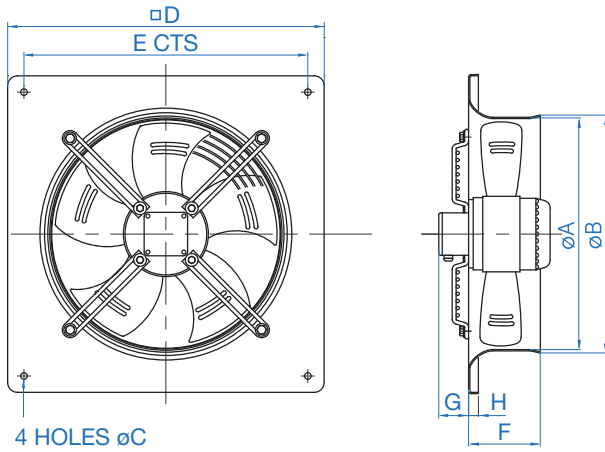
Product Code	Speed r/min	Airflow SFP	Airflow m ³ /s @ Static Pressure Pa									At Best Efficiency Point			Elec. Data		Speed Control		dBA @ 3m Inlet
			0	25	50	75	100	125	150	175	200	Overall Eff %	FMEG N	Input kW	FLC	Elec.	Trans.		
HPA250/2-1A	2760	m ³ /s	0.308	0.283	0.229	0.154	-	-	-	-	-	15.4	<125W	0.075	0.37	EL21	TC12	51	
		W/(L/s)	0.22	0.25	0.33	0.53	-	-	-	-	-								
HPA250/4-1A	1458	m ³ /s	0.215	0.131	-	-	-	-	-	-	-	7.4	<125W	0.049	0.23	EL21	TC12	46	
		W/(L/s)	0.22	0.37	-	-	-	-	-	-	-								
HPA315/4-1A	1377	m ³ /s	0.364	0.324	0.266	0.200	0.150	-	-	-	-	15.3	<125W	0.095	0.50	EL21	TC12	49	
		W/(L/s)	0.21	0.25	0.34	0.50	0.72	-	-	-	-								
HPA400/4-1A	1395	m ³ /s	1.076	0.972	0.883	-	-	-	-	-	-	29.2	N40	0.185	0.86	EL21	TC12	59	
		W/(L/s)	0.15	0.18	0.20	-	-	-	-	-	-								
HPA400/6-1A	934	m ³ /s	0.779	0.628	0.301	-	-	-	-	-	-	15.3	<125W	0.109	0.56	EL21	TC12	49	
		W/(L/s)	0.13	0.17	0.39	-	-	-	-	-	-								
HPA450/4-1A	1339	m ³ /s	1.466	1.352	1.226	1.080	0.890	-	-	-	-	30.6	N40	0.287	1.34	EL31	TC12	59	
		W/(L/s)	0.16	0.18	0.21	0.25	0.33	-	-	-	-								
HPA450/6-1A	919	m ³ /s	0.915	0.751	0.447	-	-	-	-	-	-	23.7	<125W	0.104	0.53	EL21	TC12	51	
		W/(L/s)	0.10	0.13	0.24	-	-	-	-	-	-								
HPA500/4-1A	1339	m ³ /s	1.888	1.775	1.636	1.490	1.328	1.118	-	-	-	33.3	N42	0.413	1.97	EL31	TC14	63	
		W/(L/s)	0.17	0.19	0.22	0.26	0.30	0.39	-	-	-								
HPA630/4-1A	1346	m ³ /s	2.999	2.882	2.755	2.620	2.478	2.326	2.154	1.928	1.490	35.4	N41	0.940	5.56	EL101	TC18	78	
		W/(L/s)	0.24	0.26	0.28	0.31	0.34	0.38	0.43	0.50	0.73								

The overall A-scale sound pressure level is at a distance of three meters with spherical propagation. It is expressed in dB re 20µPa and is presented for comparative purposes only, as in practice the semi reverberant nature of any installation and directivity effects can give a different value. Overall static efficiency, r/min and FMEG values are as per ISO 12759 installation category "A" (without guard grill).

Dimensional Data

Single Phase

Product Code	A	B	C	D	E	F	G	H	Weight kg
HPA250	260	280	7	370	320	90	60	15	3.0
HPA315	315	335	10	430	380	90	60	15	3.3
HPA400	410	430	10	540	490	110	60	15	7.2
HPA450	460	480	10	575	535	110	60	15	7.2
HPA500	510	530	10	655	615	115	60	15	9.5
HPA630	640	660	10	805	750	125	60	15	15.0



*Impeller rotor.
Dimensions are in mm.

Single Phase

Product Code	AC Electronic Controller	Louvre Shutter	Transformer Controller
HPA250/2-1A	149-EL31	064-0250-C	149-TC12
HPA250/4-1A	149-EL31	064-0250-C	149-TC12
HPA315/4-1A	149-EL31	064-0315-C	149-TC12
HPA400/4-1A	149-EL31	064-0400-C	149-TC12
HPA400/6-1A	149-EL31	064-0400-C	149-TC12
HPA450/4-1A	149-EL31	064-0450-C	149-TC12
HPA450/6-1A	149-EL31	064-0450-C	149-TC12
HPA500/4-1A	149-EL31	064-0500-C	149-TC14
HPA630/4-1A	149-EL101	064-0630-C	149-TC18

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