

Axial flow fans

TERAL

APK5/APK-B/ AESII

50Hz



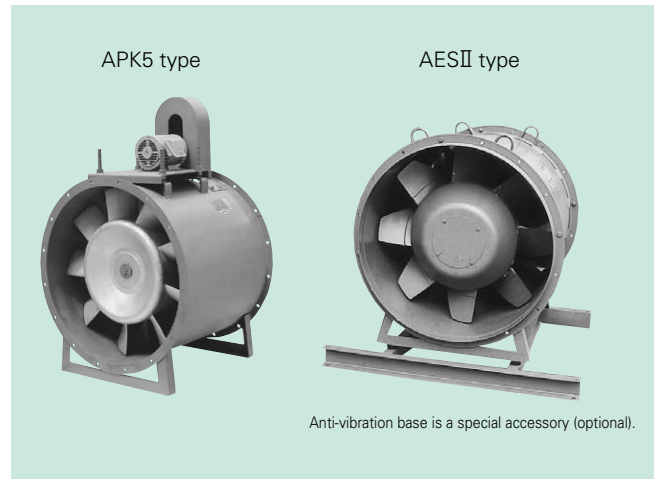
TERAL INC.

■ Uses

- For facilities;
Air supply/exhaust of factories, warehouses, schools, hospitals, leisure centers, etc.
- For incorporation into equipment;
Cooling of motors, generators, transformers, molds, etc.
- For dryers;
Laver, fish, shiitake mushroom, etc.

■ Features

- Can be installed anywhere directly placed between ducts and installed as part of piping, and also ceiling-suspended.
- Relatively low-priced compared with centrifugal fans of equal performance due to the small number of components.
- A wide selection of models high in efficiency with increased static pressure as inner barrel support legs are adopted as stator blades.



* Keep in mind that the above show typical examples, part of which may differ from actual devices.

■ Standard/special specifications

Use only for standard air.

● standard specification, ◎ special specification, — unsupported

Model		APK5	APK-B	AESII
Power transmission method		Belt driven type	Belt driven type	Motor direct driven type without coupling
Temperature of gas handled	0~40°C 41~80°C	● ◎※1	● —	● —
Structure(internal)	Impeller ... Axial flow	●	●	●
	Bearing: APK5/APK-B ... Pillow type unit; AESII ... Sealed ball bearing in motor	●	◎	—
	Bearing grease external injection method	●	◎	—
Structure(external)	Casing ... Internally sealed type	◎	—	—
	Horizontal leg mounted	●	●	●
	Vertical flange mounted (bottom suction, top discharge)	—	—	—
	Vertical flange mounted (top suction, bottom discharge)	◎	◎※3	◎
	Vertical bracket mounted (bottom suction, top discharge)	—	—	—
	Vertical bracket mounted (top suction, bottom discharge)	◎	◎	◎
	With inspection opening (cleaning window)	—	—	◎
With terminal box	—	—	◎	
Material	With sound-muffling box	◎	—	◎
	Casing ... SS400, SPHC, etc.	●	●	●
	Impeller: APK5 ... AC4AF, etc.; APK-B/AESII ... SPHC, etc.	●	●	●
	Shaft: APK5/APK-B ... S45C; AESII ... S35C motor shaft	●	●	●
Installation location	Casing ... SUS304	◎	◎	—
	Impeller ... SUS304 (unsupported for APK5)	◎	◎	—
	Shaft ... SUS304	◎	◎	—
Installation method	Indoors (ambient temperature 0 – 40°C, relative humidity 85% or less)	●	●	●
	Outdoors	—※6	—※6	◎
Motor	Floor type	●	●	●
	Anti-vibration type (floor or ceiling suspension)	◎	◎	◎
Coating ※4	Totally-enclosed-fan-cooled indoor type (frame number 160L or lower), drip-proof protected type (frame number 180M or higher), 200V	●	●	●
	Totally-enclosed-fan-cooled indoor type (frame number 180M or higher), totally-enclosed-fan-cooled outdoor type	◎	◎	◎※5
	Different voltage	◎	◎	◎
Coating ※4	Priming and inner surface ... Rust-preventive coating	●	●	●
	Outer surface overcoating: Acrylated alkyd resin coating 7.5BG5/1.5	●	●	●
	Inner/outer surface: PVC coating, epoxy resin coating, coating against salt damage, coating color designation	◎	◎	◎

※1 Internal clearance HR5 heat-resistant bearings (pulley side, anti-pulley side) are used according to temperature classification.

※2 Gland packing type shaft seal parts is included. Performance drawings differ.

※3 Supported only when the bore is 125 or less and the motor output is 30kW or less.

※4 Parts of stainless steel material are uncoated in principle.

※5 Supported by modifying the terminal box, etc.

※6 Outdoor installation is not supported.

Note) For installing outdoors, select an area not exposed to wind and rain, or provide covering.

■ Standard accessories

	APK5/APK-B type	AESII
Companion flange	2	2
Motor	1	1
V-belt guard	1	
Fan side V-pulley	1	
Motor side V-pulley	1	
V-belt	1 set	

* For accessories other than the above, consult us.

■ Type designation

(Example)

Model Bore
(flange I.D.)
APK5 - 30
Belt driven type 30cm
axial flow fan

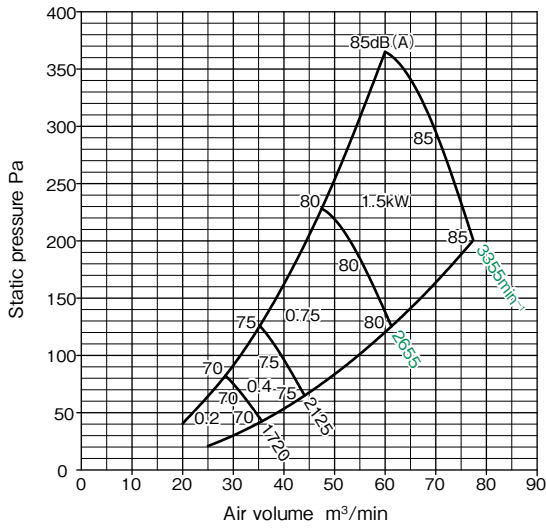
Model Bore
(flange I.D.)
APK - 150 B
Belt driven type 150cm B type
axial flow fan

AESII - 60
Direct driven type 60cm
without coupling
axial flow fan

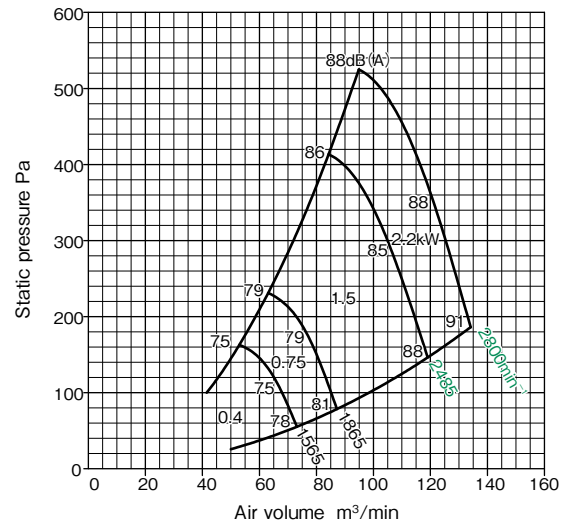
Performance drawing

- * Performances data show the values obtained with suction bell-mouth.
- * In performance drawings, rotation speeds in green correspond to 2P for the number of poles.
- * In performance drawings, rotation speeds in white (hollow) correspond to 6P for the number of poles.

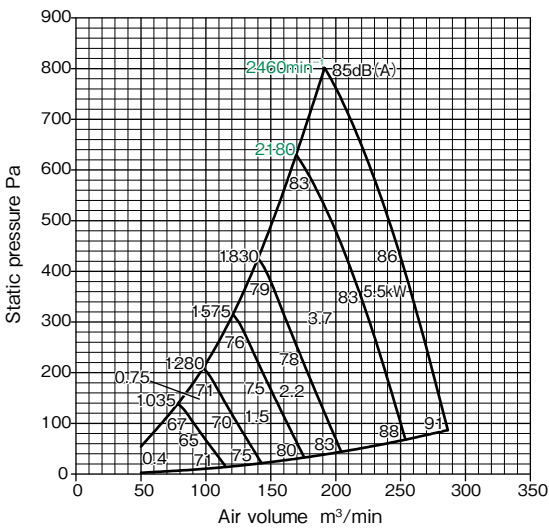
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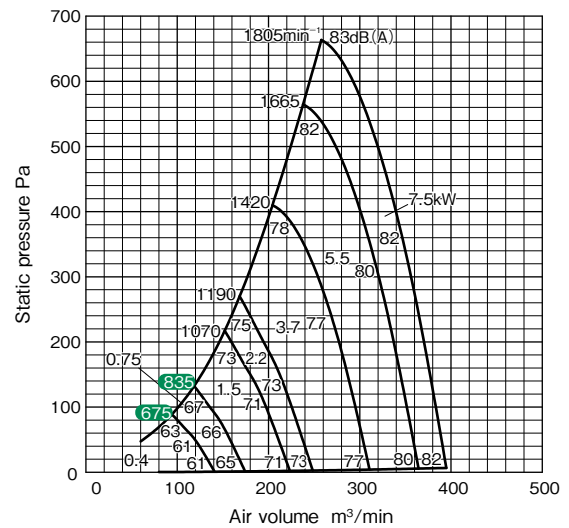
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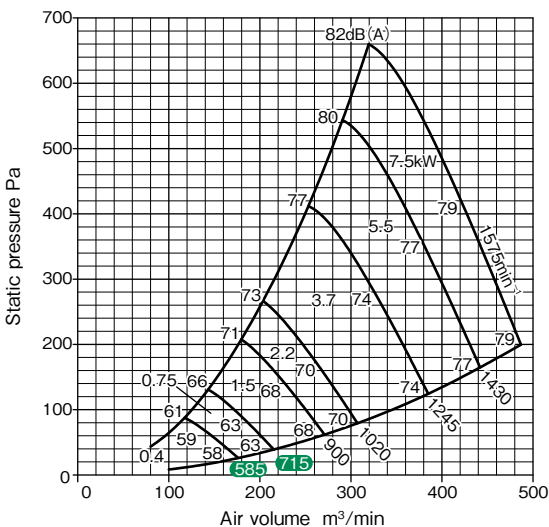
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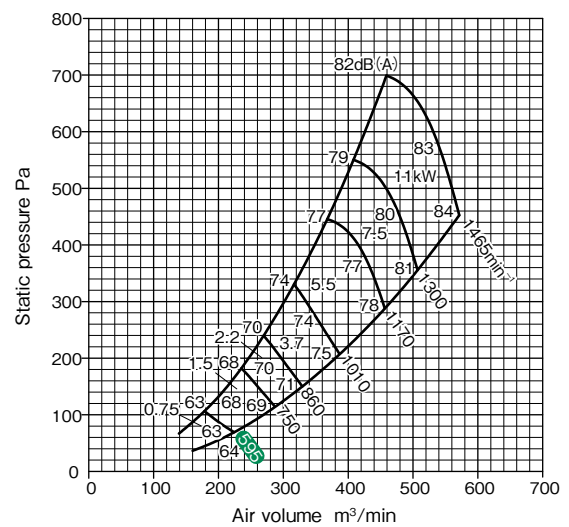
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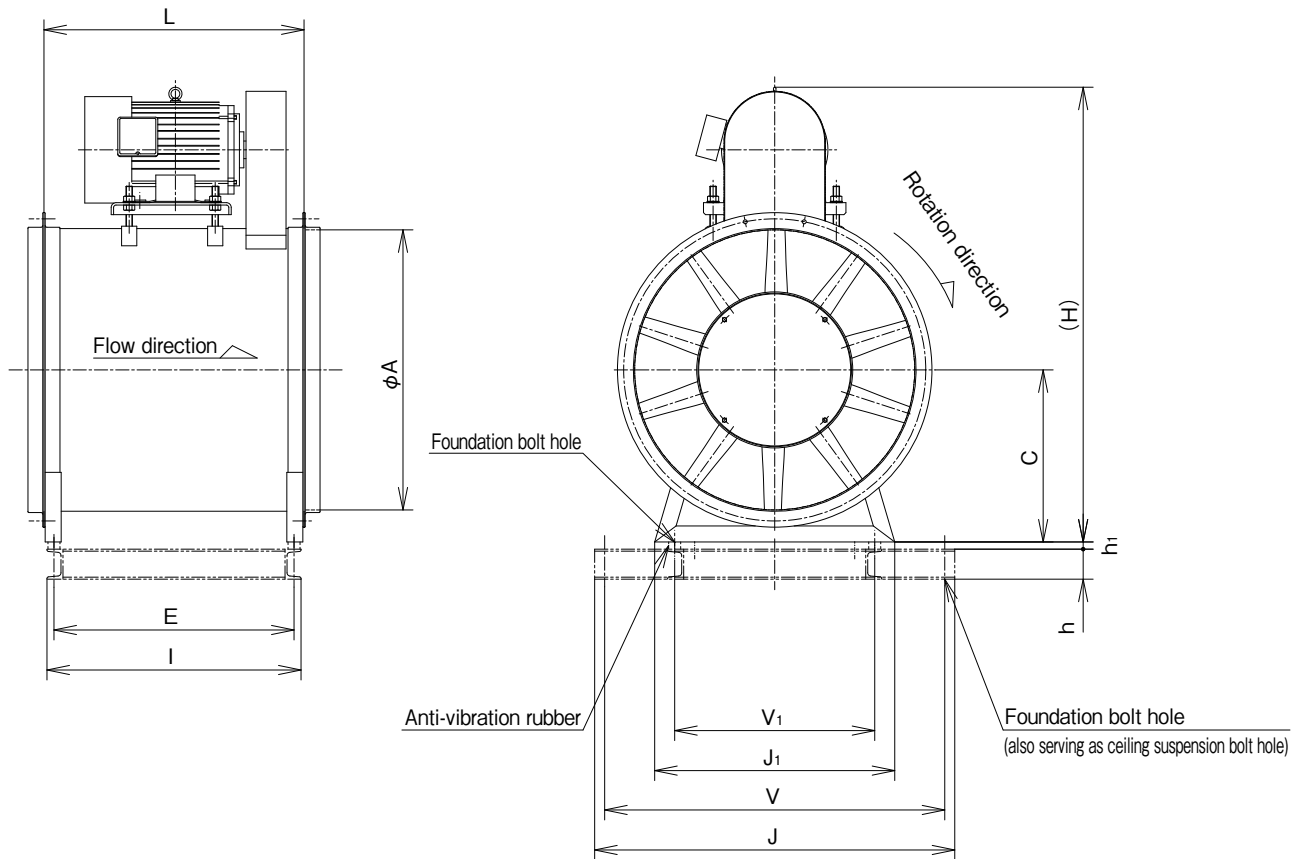
70



80



■ Assembly drawing



■ Size table

Model	Main body				
	φA	C	E	H	L
APK5- 30	300	210	385	625	425
APK5- 40	400	265	420	760	470
APK5- 50	500	315	480	910	530
APK5- 60	600	375	520	1020	570
APK5- 70	700	430	600	1140	650
APK5- 80	800	490	635	1345	700
APK5- 90	900	550	720	1460	800
APK5-100	1000	610	750	1610	850

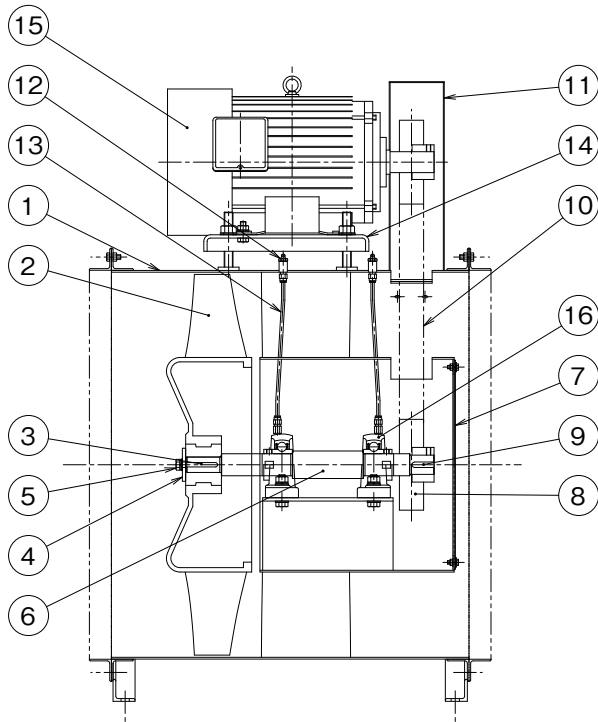
(Unit: mm)

Model	Maximum rotation speed (min ⁻¹)	Maximum motor		Base								Foundation bolt hole (also serving as ceiling suspension bolt hole)	Approx. mass (kg) (not including motor)	
		Output (kW)	No. of poles (P)	I	J	J ₁	E	V	V ₁	h	h ₁		Non-anti-vibration type	Anti-vibration type
APK5- 30	3355	1.5	2/4	420	480	280	385	430	200	75	16	4-φ12	30	40
APK5- 40	2825	2.2	2/4	455	580	350	420	530	250	75	16	4-φ15	45	60
APK5- 50	2460	5.5	2/4	515	680	450	480	630	350	75	18	4-φ15	65	80
APK5- 60	1825	7.5	4/6	555	800	550	520	750	450	75	18	4-φ15	100	115
APK5- 70	1595	7.5	4/6	635	900	600	600	850	500	75	18	4-φ15	120	140
APK5- 80	1490	11	4/6	675	1000	650	635	950	530	100	27	4-φ19	200	230
APK5- 90	1350	15	4/6	780	1120	750	720	1070	620	125	27	4-φ19	265	305
APK5-100	1225	18.5	4/6	810	1220	830	750	1170	690	125	34	4-φ19	320	380

- Floor, anti-vibration type, and ceiling-suspended, anti-vibration type are drawn in chain double-dashed lines.
- For companion flange dimensions, see the companion flange dimensional drawings.
- Dimensions in brackets differ according to motor.

Internal structure drawing

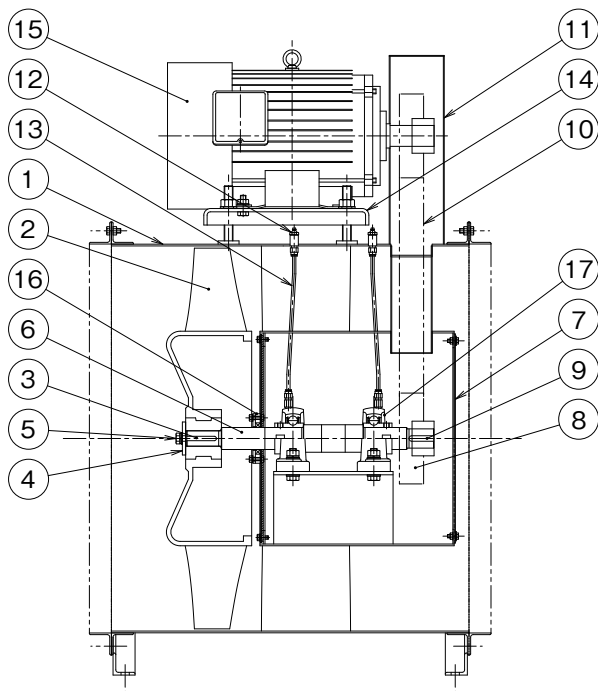
Standard type



No.	Part name	Qty	Material
1	Casing	1	SPHC-SS400
2	Impeller	1	AC4A
3	Impeller key	1	S45C
4	Impeller retaining washer	1	SPHC
5	Impeller retaining bolt	1	SWCH
6	Shaft	1	S45C
7	Cover	1	SPHC
8	V-pulley	1set	FC200
9	V-pulley key	1	S45C
10	V-belt	1set	
11	V-belt cover	1	SPHC
12	Grease nipple	2	C3604B
13	Lubrication piping	2	
14	Motor base plate	1	SPHC
15	Motor	1	

No.	Part name	Qty	Material	30	40	50	60	70	80	90	100
16	Pillow block	2	SUJ	UCP204	UCP205	UCP208	UCP308	UCP308	UCP310	UCP311	UCP311

Internally sealed type

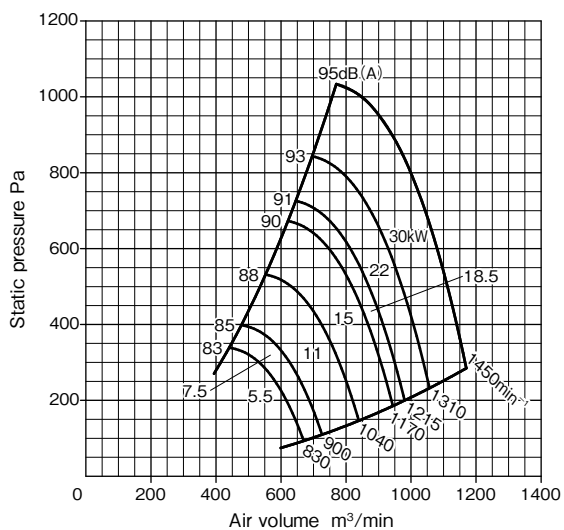


No.	Part name	Qty	Material
1	Casing	1	SPHC-SS400
2	Impeller	1	AC4AF
3	Impeller key	1	S45C
4	Impeller retaining washer	1	SPHC
5	Impeller retaining bolt	1	SWCH
6	Shaft	1	S45C
7	Cover	1	SPHC
8	V-pulley	1set	FC200
9	V-pulley key	1	S45C
10	V-belt	1set	
11	V-belt cover	1	SPHC
12	Grease nipple	2	C3604B
13	Lubrication piping	2	
14	Motor base plate	1	SPHC
15	Motor	1	
16	Shaft seal	1	SS400

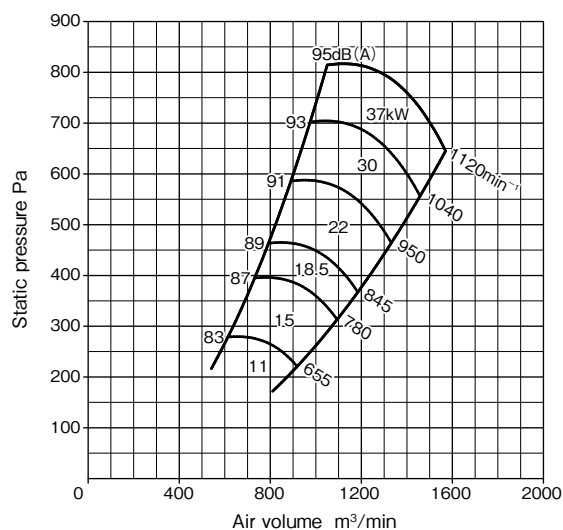
No.	Part name	Qty	Material	30	40	50	60	70	80	90	100
17	Pillow block	2	SUJ	UCP204	UCP205	UCP208	UCP308	UCP308	UCP310	UCP311	UCP311

Performance drawing

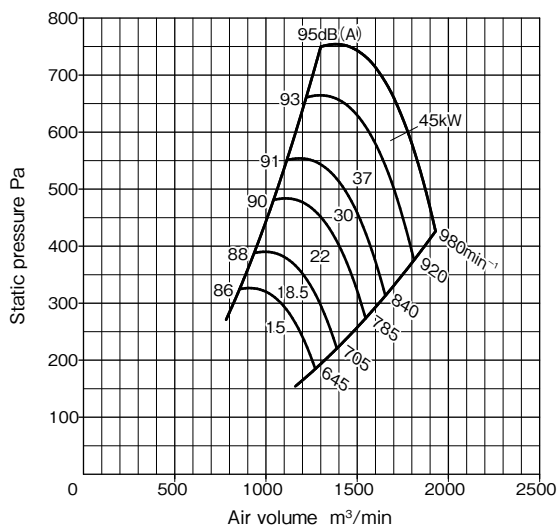
100B



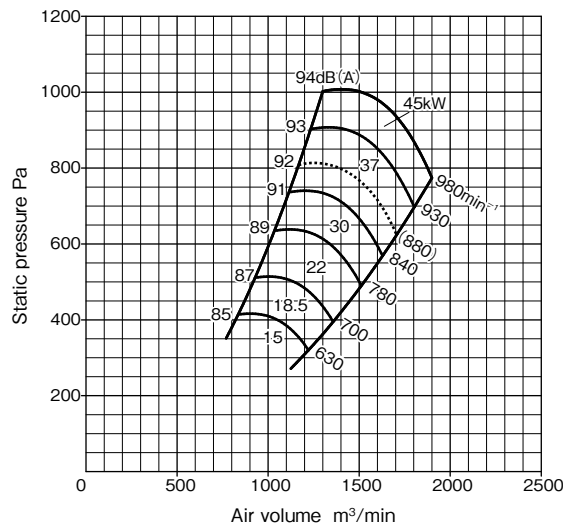
125B



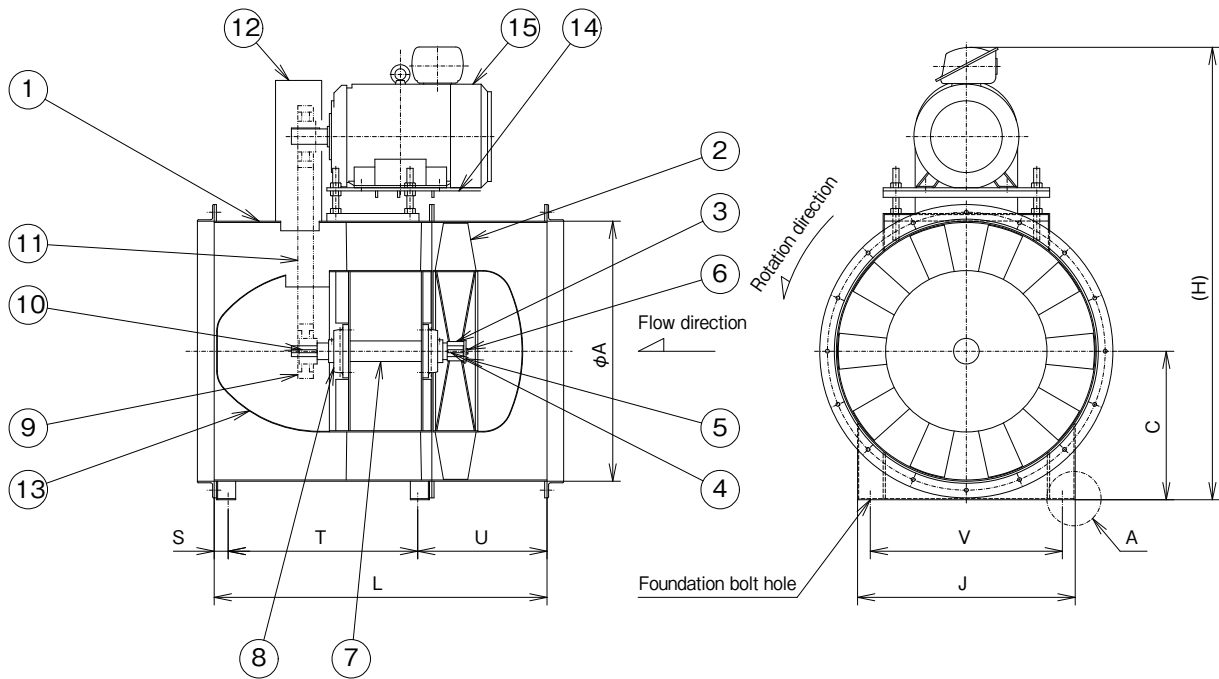
140B



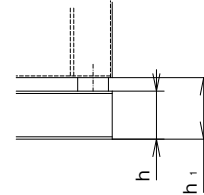
150B



Assembly drawing/internal structure diagram



Dimension of portion A of floor, anti-vibration type



Size table

(Unit: mm)

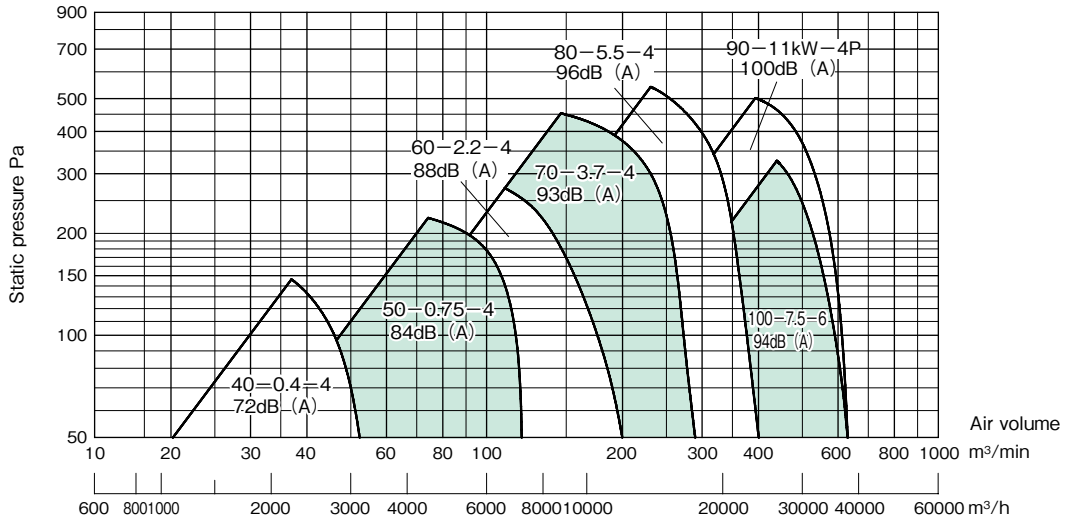
Model	Main body				Mounting leg							Foundation bolt hole	Bearings	Maximum motor		Approx. mass (kg) (not including motor)
	ϕA	C	H	L	J	V	S	T	U	h	h ₁			Output (kW)	No. of poles (P)	
APK-100B	1000	580	1800	1300	850	750	55	740	505	125	160	4- $\phi 19$	UCF313	30	4	480
APK-125B	1250	730	2100	1300	1050	850	55	690	555	150	195	4- $\phi 19$	UCF313	37	4	720
APK-140B	1400	850	2300	1400	1200	1000	54	742	604	150	195	4- $\phi 24$	UCF313	45	4	880
APK-150B	1500	900	2400	1650	1200	1050	60	980	610	150	195	4- $\phi 28$	UCF318	45	4	980

No.	Part name	Qty	Material
1	Casing	1	SPHC-SS400
2	Impeller	1	SS400
3	Impeller hub	1	SS400
4	Impeller key	1	S45C
5	Impeller retaining washer	1	SS400
6	Impeller retaining bolt	1	SWCH
7	Shaft	1	S45C
8	Pillow block	2	SUJ-FC200

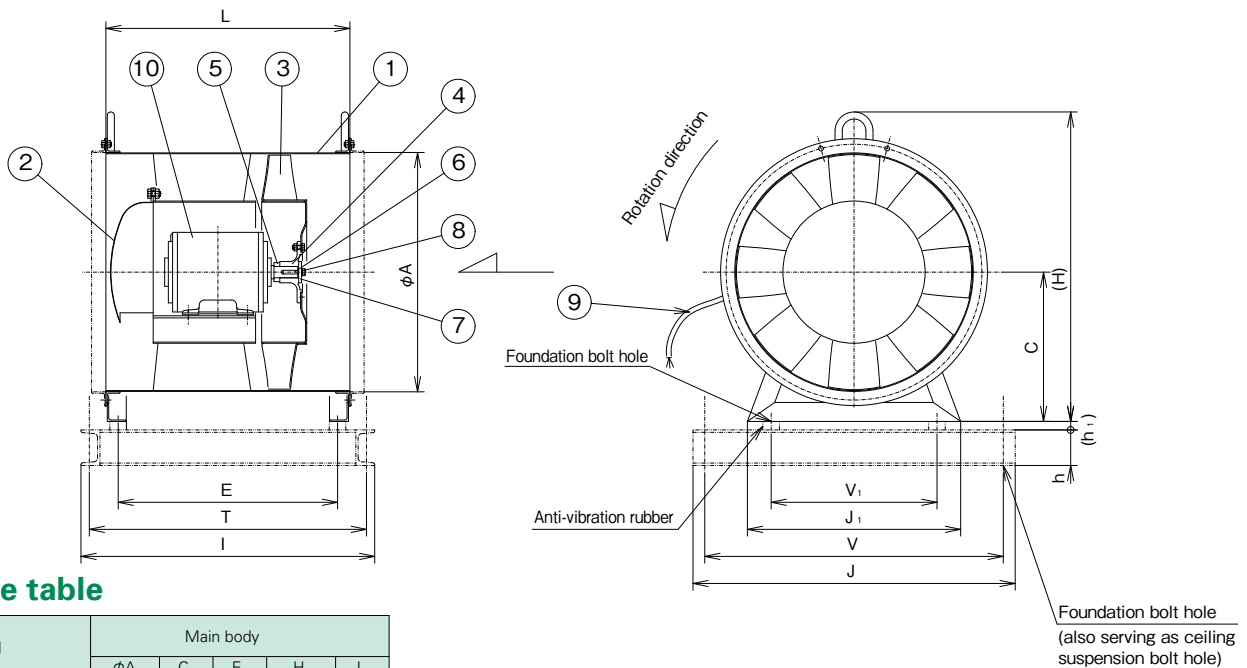
No.	Part name	Qty	Material
9	V-pulley	1	FC200
10	V-pulley key	1	S45C
11	V-belt	1 set	
12	V-belt guard	1	SPHC-SS400
13	Hub cover	1	SS400
14	Motor base plate	1	SPHC
15	Motor	1	

- Dimensions in brackets differ according to motor.
- For companion flange dimensions, see the companion flange dimensional drawings.

Performance drawing



Assembly drawing/internal structure diagram



Size table

Model	Main body				
	ϕA	C	E	H	L
AESII- 40	400	266	421	570	473
AESII- 50	500	315	463	660	515
AESII- 60	600	375	558	780	610
AESII- 70	700	433	644	880	690
AESII- 80	800	495	711	1000	767
AESII- 90	900	540	846	1150	910
AESII-100	1000	590	926	1250	990

(Unit: mm)

Model	Base									Foundation bolt hole (also serving as ceiling suspension bolt hole)	Motor		Approx. mass (kg) (not including motor)	
	I	J	J ₁	T	V	V ₁	h	h ₁	Output (kW)		No. of poles (P)	Standard type	Anti-vibration type	
AESII- 40	555	580	350	520	530	250	75	20	4- $\phi 15$	0.4	4	40	55	
AESII- 50	620	680	450	585	630	350	75	20	4- $\phi 15$	0.75	4	45	60	
AESII- 60	790	800	550	755	750	450	75	20	4- $\phi 15$	2.2	4	75	95	
AESII- 70	895	900	600	860	850	500	75	20	4- $\phi 15$	3.7	4	115	140	
AESII- 80	980	1000	650	940	950	530	100	25	4- $\phi 19$	5.5	4	150	180	
AESII- 90	1100	1120	750	1060	1070	620	100	25	4- $\phi 19$	11	4	215	245	
AESII-100	1195	1220	830	1155	1170	690	100	25	4- $\phi 19$	7.5	6	275	310	

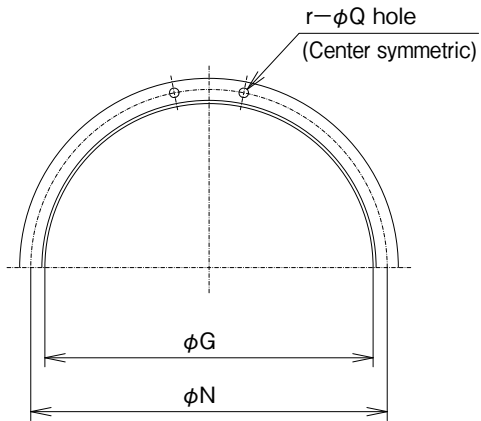
No.	Part name	Qty	Material
1	Casing	1	SPHC-SS400
2	Stator hub cover	1	SPCC
3	Impeller	1	SPHC-SS400
4	Impeller hub	1	FC200
5	Spacer	1	SS400

No.	Part name	Qty	Material
6	Impeller key	1	S45C
7	Impeller retaining washer	1	SS400
8	Impeller retaining bolt	1	SWCH
9	Motor connection cable	1 set	
10	Motor	1	

- Floor, anti-vibration type, and ceiling-suspended, anti-vibration type are drawn in chain double-dashed lines.
- For companion flange dimensions, see the companion flange dimensional drawings.
- Impeller hub structure and suspended metal fittings differ according to model.

Companion flange dimensional drawings

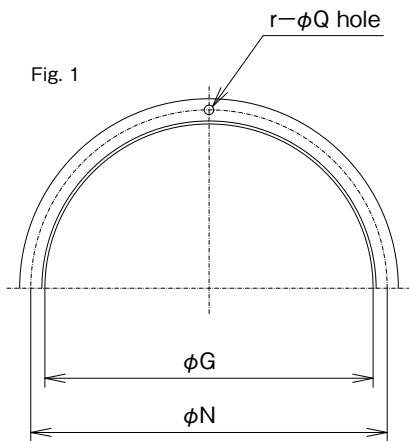
●AESII/APK5 model



(Unit: mm)

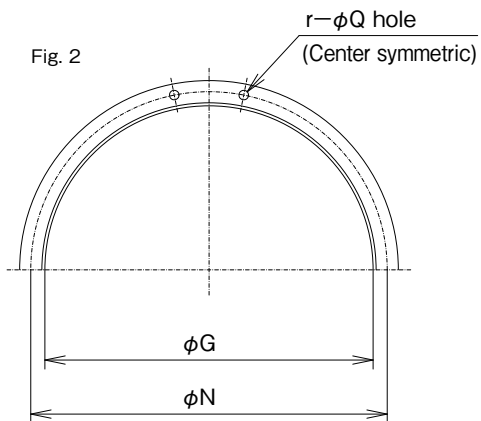
No.	φG	φN	r-φQ	Steel size
30	305	335	12-10	L30×30×3
40	406	440	12-10	L30×30×3
50	506	540	12-10	L30×30×3
60	606	655	12-10	L40×40×3
70	706	755	16-10	L40×40×3
80	806	850	16-15	L40×40×3
90	908	960	16-15	L50×50×4
100	1008	1060	16-15	L50×50×4

●APK-B model



(Unit: mm)

No.	Fig.	φG	φN	r-φQ	Steel size
100B	1	1015	1085	16-15	L65×65×6
125B	1	1265	1335	16-15	L65×65×6
140B	1	1417	1500	24-19	L75×75×6
150B	2	1517	1600	16-19	L75×75×6



Your Dealer

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