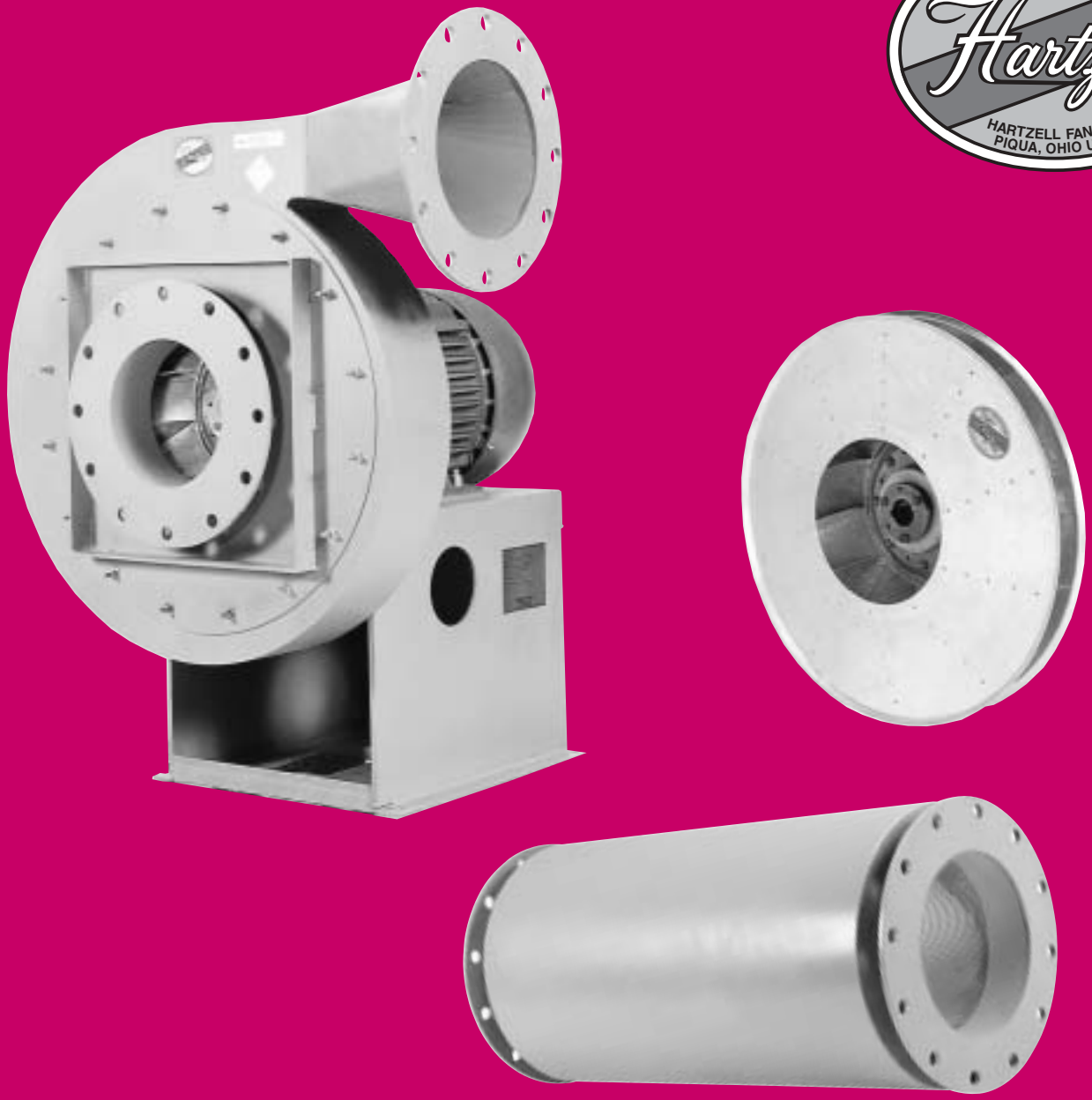
Turbo Pressure Blowers

Series 07T



HARTZELL®

Hartzell Fan, Inc., Piqua, Ohio 45356
www.hartzellfan.com

Bulletin A-135-D November 2004

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Turbo Pressure Blower Selection

The Hartzell Turbo Pressure Blower performances on page 6 are based on standard air conditions (sea level, 70°F, and 29.92 inches barometric pressure). Performance data does include drive losses on belt drive units.

When placing your order, be sure to specify the Hartzell Model Code. The following example demonstrates our coding system. The illustrated Series Number specifies a Hartzell Series 07T Turbo Pressure Blower.

Be sure to include blower model, performance requirements, operating temperature, motor data (enclosure, voltage, mounting position, etc.) and a list of required accessory items. (See page 7).

How to use Performance Tables

Select a model for a given air delivery and pressure by looking up the required flow horizontally along the top of each section and moving vertically down until the required pressure is obtained. The model is shown in the left column. Note the outlet and inlet size of the model for dimensional reference. The brake horsepower can be obtained by evaluating the performance curve.

For performance at other than standard conditions of 0.075 #/ft.^{3} refer to Bulletin A-108, Engineering Data.

For belt drive selections or **for additional assistance contact your local Hartzell Representative.**

Hartzell Model Code Explanation

A 07T 4 223 – PB 100 ST OP P 2

- Type
  - A – Production Item
- Product Series
- Arrangement
- Size (Nominal Wheel Diameter) and Outlet Size: (1 = 4", 2 = 6", 3 = 8", 4 = 10", 5 = 12")
- Class
- Wheel Code (Refer to Page 5, Table 2)
- Wheel Width (entries represent percents)
- Material of Construction (Refer to Page 5, Table 2)
- Motor Enclosure
- Motor Horsepower
- Motor RPM/Phase
  - **3 Phase**
    - 2 = 3450
    - 3 = 1750
  - **1 Phase**
    - B = 3450
    - C = 1750

Motor Horsepower

Horsepower	1	1 1/2	2	3	5	7 1/2	10	15	20	25	30	40	50
Code Letter	H	I	J	K	L	M	N	O	P	Q	R	S	T

Example

Assume the required performance to be 1,900 CFM at 38" S.P., standard air. Reading across the top of each section of the performance tables on page 6 we find 1,900 CFM. Reading vertically down we find a pressure of 38.2".

As a production unit the model code begins “A”. The product series is “07T”. Arrangement “4” construction is required. The nominal wheel diameter is “22”. The outlet size for the model is 8" therefore outlet size code is “3”. The standard aluminum wheel code is PB. Wheel width is “100” percent for all series 07T’s. Standard construction of a steel housing and aluminum wheel is suitable, therefore material code is “ST”. “OP” is the motor enclosure code for an open, protected motor with a 1.15 service factor. Evaluation of the performance curve indicates that the required brake horsepower at the operating point is 15.8, the next larger motor size is 20 therefore code “P”, with a three phase 3600 RPM motor the code is “2”.

This bulletin lists Hartzell’s line of Turbo Pressure Blowers and accessories. More than 70 Hartzell offices can provide specific performance and installation data to meet your requirements. Call your Hartzell representative for assistance. Visit our website **(www.hartzellfan.com)** or call toll-free for the name of your Hartzell representative…

1-800-336-3267

Construction Features

Applications

The Hartzell Series 07T Turbo Pressure Blower is ideal for applications with a high static pressure and low flow requirement. The compact design, easy installation, and low maintenance is useful in a variety of applications. The majority of Turbo Pressure Blowers are supplied in arrangement 4 construction with the wheel mounted directly to the motor shaft.

Features

- **Performance** – 100 CFM to 5,250 CFM; static pressures to 60" W.G.
- **Sizes** – 14" to 26" wheel diameters. Single Width, Single Inlet construction only (SWSI).
- **Housings** – Housings are continuously welded heavy gauge steel.
- **Arrangement** – Series 07T is available in arrangements 1, 4, 8, 9, and 10.
- **Rotation and Discharge** – Clockwise or counter-clockwise rotation in six standard discharge positions. Rotatable housing. See dimensional details on page 4.
- **Wheels** – Aluminum and steel wheel is standard. (Code is PB.) Other materials of construction are available.
- **Construction** – Standard construction is steel housing (Code ST) with an aluminum and steel wheel. Spark resistant construction is available.
- **Drive Bases** – Drive bases are reinforced steel construction designed for industrial applications. Where belt drive arrangement is required belts are oil, heat and static resistant type and shafts are turned, ground and polished, keyed at both ends.
- **Easy installation and maintenance** – Motor, (and drive and bearings on belt drive units) are readily accessible for ease in wiring, installation, adjustment and lubrication.
- **Inlet** – Standard blower inlet is flanged and punched to match ANSI standards. Straight slip inlet or venturi inlet is available.
- **Outlet** – Standard blower outlet is flanged and punched to match ANSI standards.
- **Options and Accessories** – see page 7.

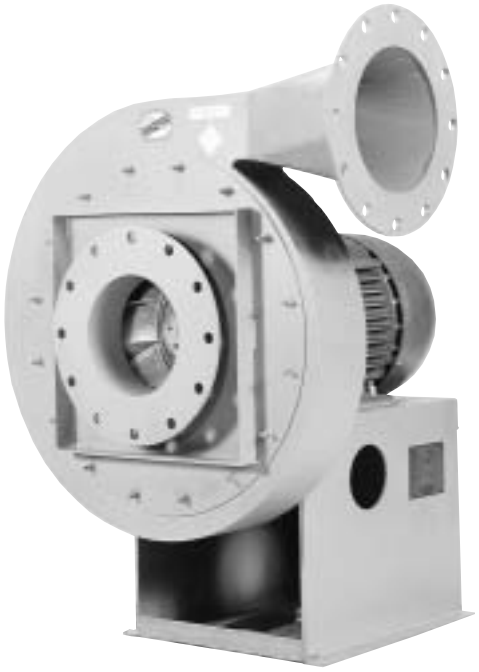
Type PB

- **Wheel** – The Type PB Turbo Blower wheel is a fabricated high strength aluminum and steel wheel incorporating a spun front plate and formed blades. The blades are slightly backwardly inclined. The wheel is riveted together and includes a bolt in hub with a split taper lock bushing. The Type PB wheel is also available with AMCA Type “A” or Type “B” Spark Resistant Construction.

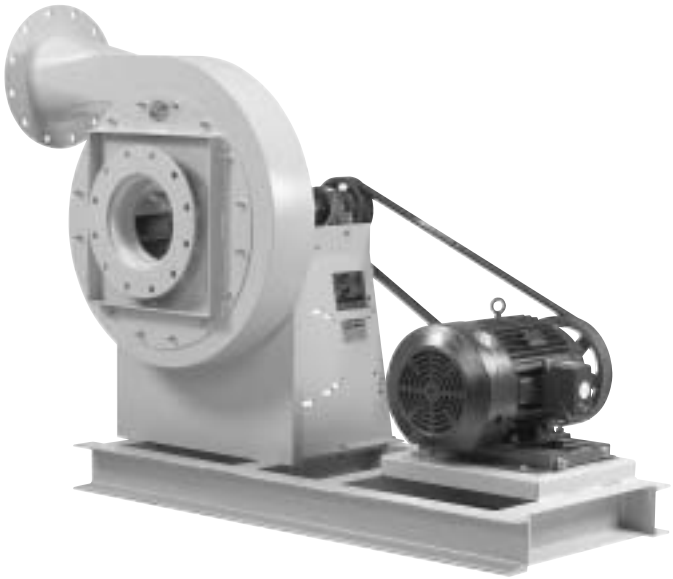
The Type SB Turbo Blower wheel is a fabricated steel or stainless steel wheel incorporating a spun front plate and formed blades. The wheel is riveted together and includes a bolt in hub.

The wheel is dynamically balanced for smooth operation.

Common processes which use the Turbo Pressure Blower are: combustion air for burners and boilers; high pressure cooling air; air pollution control scrubbers; air slides; air turns; water treatment; converting; industrial incinerators; blow off air knives; soil vapor extraction; petro-chemical processes; fluidized beds; and material conveying.

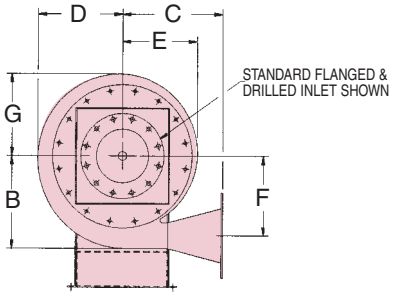


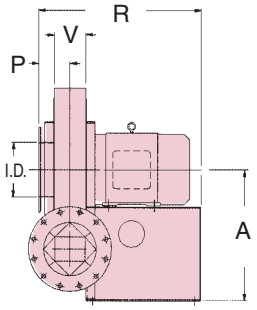
Series 07T Turbo Pressure Blower (Arrangement 4)

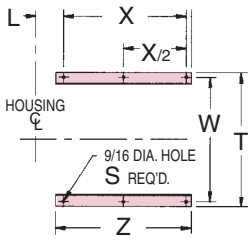


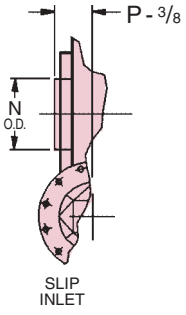
Series 07T Turbo Pressure Blower (Arrangement 1 with sub-base)

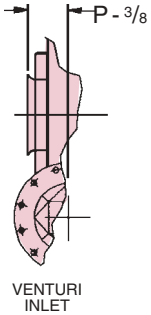
Dimensions – Arrangement 4











Clockwise rotation shown. Counter clockwise rotation is opposite as shown.
Max. allowable operating temp. 200°F. Housing is rotatable.

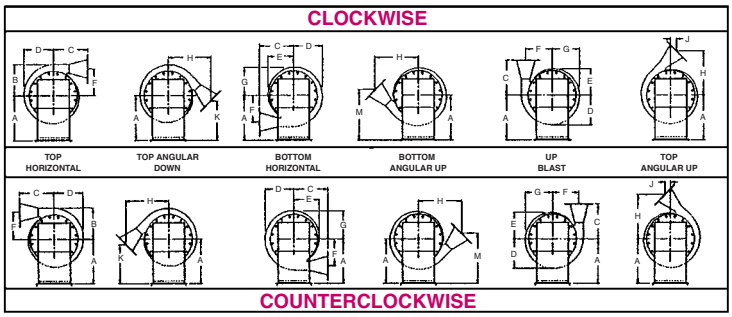
Principal Dimensions

Wheel Dia.	Outlet Size	Outlet Code	Inlet Flange	Motor Frame	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	V	W	X	Z	Bare Fan Wt.
14-18	04	1	06	143T-145T	17 3/4	14 3/8	18 1/4	13 5/8	12	11 3/4	12 7/8	21 1/4	4 5/8	13 3/16	3 3/8	22 3/8	6 5/8	5 5/8	19	4	19 1/2	3 7/8	17 3/4	8 5/8	11 5/16	142
				182T-184T	19									14 3/8		23 5/8			24 1/2					14 1/8	16 13/16	162
14-18	06	2	08	143T-145T	17 3/4	14 3/8	18 1/4	13 5/8	12	11 3/4	12 7/8	21 1/4	4 5/8	13 3/16	4 1/2	22 3/8	8 5/8	6 3/4	21 3/8	4	19 1/2	6 1/4	17 3/4	8 5/8	11 3/8	162
				182T-184T	19									14 3/8		23 5/8			26 7/8					14 1/8	16 7/8	182
				213T-215T	19 3/4									15 3/16		24 3/8										187
15-18	08	3	08	182T-184T	19	14 3/8	18 1/4	13 5/8	12	11 3/4	12 7/8	21 1/4	4 5/8	14 3/8	4 1/2	23 5/8	8 5/8	6 3/4	26 7/8	4	19 1/2	6 1/4	17 3/4	14 1/8	16 7/8	187
				213T-215T	19 3/4									15 3/16		24 3/8										
19-22	04	1	06	143T-145T	23	17 1/2	17 3/4	16 1/2	14 1/2	14 7/8	15 1/2	23 1/16	2 1/16	21	3 3/8	25 1/16	6 5/8	6 1/8	25	4	23 1/2	3 7/8	21 3/4	14 1/8	16 13/16	226
				182T-184T	24									22		26 1/16										
19-22	06	2	06	143T-145T	23	17 1/2	17 3/4	16 1/2	14 1/2	14 7/8	15 1/2	23 1/16	2 1/16	21	3 3/8	25 1/16	6 5/8	6 1/8	25	4	23 1/2	3 7/8	21 3/4	14 1/8	16 13/16	231
				182T-184T	24									22		26 1/16										236
				213T-215T	24 3/4									22 3/4		26 13/16										
19-22	08	3	08	182T-184T	24	17 1/2	17 3/4	16 1/2	14 1/2	14 7/8	15 1/2	23 1/16	2 1/16	22	4 1/2	26 1/16	8 5/8	6 3/4	26 7/8	4	23 1/2	6 1/4	21 3/4	14 1/8	16 7/8	255
				213T-215T	24 3/4									22 3/4		26 13/16			32 1/4					19 1/2	22 1/4	285
				254T-256T	26									24		28 1/16										
19-22	10	4	10	213T-215T	24 3/4	17 1/2	21 3/4	16 1/2	14 1/2	14 7/8	15 1/2	25 7/8	4 7/8	19 7/8	4 1/2	29 5/8	8 5/8	6 3/4	26 7/8	4	23 1/2	6 1/4	21 3/4	14 1/8	16 7/8	294
				254T-256T	26									21 1/8		30 7/8			32 1/4	6				19 1/2	22 1/4	
				284T-286T	26 3/4									21 7/8		31 5/8										
23-26	06	2	08	182T-184T	24	20 5/8	19	19 1/2	17 1/8	17 5/8	18 3/8	25 7/8	1	23 1/16	3 7/8	25	8 5/8	7	26 1/2	4	23 1/2	5	21 3/4	14 1/8	16 7/8	285
				213T-215T	24 3/4									23 3/4		25 3/4			31 7/8	6				19 1/2	22 1/4	309
				254T-256T	26									25 1/16		27										
23-26	08	3	08	213T-215T	24 3/4	20 5/8	19	19 1/2	17 1/8	17 5/8	18 3/8	25 7/8	1	23 3/4	3 7/8	25 3/4	8 5/8	7	26 1/2	4	23 1/2	5	21 3/4	19 1/2	14 1/8	16 7/8
				254T-256T	26									25 1/16		27			31 7/8	6					22 1/4	314
				284T-286T	26 3/4									25 3/4		27 3/4										
23-26	10	4	10	254T-256T	26	20 5/8	23	19 1/2	17 1/8	17 5/8	18 3/8	28 3/4	3 13/16	22 3/16	5	29 13/16	10 3/4	7 1/4	33 1/4	6	23 1/2	7 1/4	21 3/4	19 1/2	22 1/4	243
				284T-286T	26 3/4									22 15/16		30 9/16										
				324T-326T	29 1/4									25 7/16		33 1/16			37 1/4					23 1/2	26 1/4	368
23-26	12	5	12	284T-286T	28 1/4	20 5/8	23	19 1/2	17 1/8	17 5/8	18 3/8	28 3/4	3 13/16	24 7/16	5	32 1/16	10 3/4	7 1/4	37 1/4	6	23 1/2	7 1/4	21 3/4	23 1/2	26 1/4	383
				324T-326T	29 1/4									25 7/16		33 1/16										

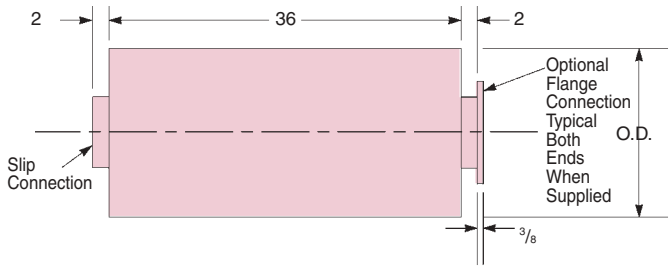
Inlet/Outlet Flange Dimensions

Flange Dimensions				
Size	I.D.	O.D.	Bolt Circle	Hole No.-Size
04	4	9	7 1/2	8 3/4
06	6	11	9 1/2	8 7/8
08	8	13 1/2	11 3/4	8 7/8
10	10	16	14 1/4	12-1
12	12	19	17	12-1

Fan Discharges



Silencer



Silencer Size	Slip O.D.	Silencer O.D.	Est. Wt.
4"	4 1/8	15	73
6"	6 1/8	15	78
8"	8 1/8	15	83
10"	10 1/4	18 3/4	122
12"	12 1/4	18 3/4	127

Notes:

Optional Flange connection matches ANSI Standard punching.

Material Specifications/Weights

Material Gauges

Wheel Diameter	Housing	Mounting Panel	Inlet Adapter	Motor Pedestal
14-18	10 Ga.	10 Ga.	10 Ga.	1/4
19-22	10 Ga.	10 Ga.	10 Ga.	1/4
23-26	10 Ga.	10 Ga.	7 Ga.	1/4

Maximum Safe Speeds (RPM) Table 1

Wheel Diameter	PB Wheel	SB Wheel
14-18	4000	3600
19-22	3900	3200
23-26	3800	3000

Note: Based on 70°F operating temperature.

Motor Frame Size Ranges

Model Range		Motor Frame Size				
		Arr. 4		Arr. 1	Arr. 9	Arr. 10
		Min.	Max.	Max.	Max.	Max.
07T__-141PB	07T__-221PB	143T	184T	215T	215T	215T
07T__-142PB	07T__-222PB	143T	215T	215T	215T	215T
07T__-232PB	07T__-262PB	182T	256T	256T	256T	215T
07T__-153PB	07T__-183PB	182T	215T	256T	215T	215T
07T__-193PB	07T__-223PB	182T	256T	256T	215T	215T
07T__-233PB	07T__-263PB	213T	286T	256T	256T	215T
07T__-234PB	07T__-264PB	254T	326T	286T	256T	256T
07T__-235PB	07T__-265PB	286T	326T	286T	256T	256T

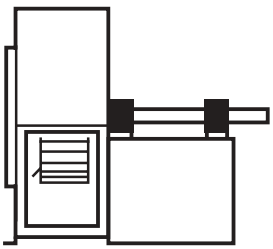
Note: For motors exceeding these values please contact Factory.

Maximum Safe Speed Correction Factors* Table 2

Spark Resistance	Materials of Construction Housing/Wheel (code)	Material Code	Temperature °F					
			0°F	70°F	150°F	200°F	250°F	300°F
None	Steel / Aluminum & Steel (Type PB)	ST	1.000	1.000	1.000	1.000	-	-
None	Steel / Steel (Type SB)	ST	1.000	1.000	1.000	1.000	0.985	0.966
None	304 Stainless / 304 & 302 Stainless (Type SB)	S4	1.000	1.000	1.000	1.000	0.971	0.938
AMCA "A"	Aluminum / All Aluminum (Type PB)	AN	1.000	1.000	1.000	1.000	-	-
AMCA "B"	Steel / All Aluminum (Type PB)	BN	1.000	1.000	1.000	1.000	-	-

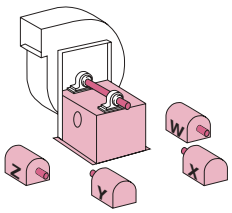
***Notes: To correct maximum safe operating speeds (Table 1) for high temperatures, multiply those speeds by correction factor from Table 2.**
Maximum Temperature for arrangement 4 construction is 200°F.
Maximum Temperature for arrangement 1, 8, 9, and 10 construction is 300°F.

Fan Arrangements



Arrangement 1

Unit furnished with shaft and bearings, less motor and drive. Designed to be driven by a separately mounted motor. Impeller is overhung – two bearings on base. Temperature limitations: Standard fan to 300°F.

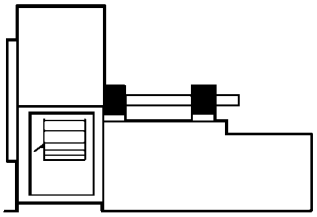


Motor Position Designation

Motor position designation is necessary when ordering the following for Arrangement 1 fans –

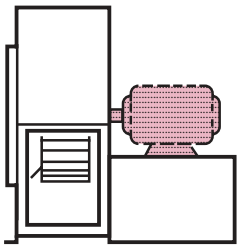
1 - V Belt Drive.
2 - Vibration Bases.
3 - Belt Guards.

Note: Location of motor is determined by facing the drive side of the fan and designating the motor position by letters W, X, Y or Z.



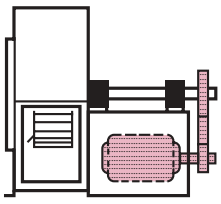
Arrangement 8 SWSI

For belt drive or direct connection. Arrangement 1 plus extended base for prime mover. Temperature limitations: Standard fan to 300°F.



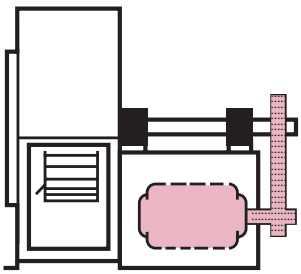
Arrangement 4

Direct drive packaged unit, wheel is overhung and attached to the shaft of the electric motor. No bearings on fan. Temperature limitations: Standard fan to 200°F.



Arrangement 9

Belt drive configuration with motor mounted on outside of bearing base support. Packaged unit, wheel is overhung, slide rail motor base permits easy adjustment of belt tension. Available on either left or right hand side of base (when facing drive end of shaft). Temperature limitations: Standard fan to 300°F.



Arrangement 10

Belt drive configuration with motor mounted inside base. Packaged unit, wheel is overhung. Temperature limitations: Standard fan to 300°F.

Adapted from AMCA Standard 99-2404-03, *Drive Arrangements for Centrifugal Fans*, and AMCA Standard 99-2407-03, *Motor Positions for Belt or Chain Drive Centrifugal Fans*, with written permission from Air Movement and Control Association International, Inc.

Direct Drive Performance Data Series 07T

Pressure Conversions:
Pounds per square inch (PSI) x 27.76 = in. wc.
Ounces per square inch (OSI) x 1.74 = in. wc.

4" Outlet Size

Model	Flanged Inlet Size	RPM	BHP Range	Capacity in CFM 100 SP	150 SP	200 SP	250 SP	300 SP	350 SP	400 SP	450 SP	500 SP	550 SP	600 SP
A07T_141-PB100ST_____	6"	3450	0.9 - 2.2	16.5	16.5	16.4	16.1	15.7	15.2	14.6	14.1	13.4	12.8	12.1
A07T_151-PB100ST_____	6"	3450	0.9 - 2.6	18.4	18.5	18.4	18.3	18.1	17.8	17.4	17.0	16.4	15.6	14.6
A07T_161-PB100ST_____	6"	3450	0.9 - 2.9	19.4	19.8	19.9	19.9	19.7	19.5	19.1	18.7	18.2	17.5	16.7
A07T_171-PB100ST_____	6"	3450	1.0 - 3.1	20.5	21.0	21.4	21.6	21.6	21.5	21.4	21.1	20.6	19.9	19.2
A07T_181-PB100ST_____	6"	3450	1.1 - 3.4	21.8	22.6	23.1	23.3	23.3	23.2	23.0	22.8	22.4	21.9	21.2
A07T_191-PB100ST_____	6"	3485	1.8 - 4.4	28.3	28.6	28.7	28.9	29.0	29.0	28.7	28.3	27.9	27.5	27.0
A07T_201-PB100ST_____	6"	3485	1.7 - 4.5	29.8	30.2	30.5	30.8	31.1	31.2	31.1	30.9	30.7	30.3	
A07T_211-PB100ST_____	6"	3485	1.9 - 5.0	31.6	32.1	32.5	32.7	32.9	33.0	32.8	32.7	32.6	32.3	31.8
A07T_221-PB100ST_____	6"	3485	2.2 - 5.7	32.7	33.2	33.7	34.1	34.4	34.7	34.9	35.1	35.1	34.9	34.6

6" Outlet Size

Model	Flanged Inlet Size	RPM	BHP Range	Capacity in CFM 300 SP	400 SP	500 SP	600 SP	700 SP	800 SP	900 SP	1000 SP	1100 SP	1200 SP	1300 SP
A07T_142-PB100ST_____	8"	3485	1.3 - 4.6	15.8	16.0	15.8	15.6	15.3	14.9	14.2	13.5	12.7	12.0	11.2
A07T_152-PB100ST_____	8"	3485	1.4 - 5.0	18.1	18.3	18.4	18.3	18.0	17.6	17.1	16.7	16.1	15.4	14.6
A07T_162-PB100ST_____	8"	3485	1.5 - 5.5	20.2	20.6	20.8	20.8	20.7	20.5	20.1	19.7	19.0	18.2	
A07T_172-PB100ST_____	8"	3485	1.6 - 6.0	21.7	22.1	22.6	22.6	22.6	22.6	22.3	21.9	21.1	20.3	
A07T_182-PB100ST_____	8"	3504	2.1 - 7.5	24.6	25.1	25.4	25.6	25.6	25.5	25.3	25.0	24.6	24.1	23.4
A07T_192-PB100ST_____	6"	3504	2.2 - 7.6	29.7	30.1	29.9	29.3	28.9	28.2	27.2	26.0	24.7	23.4	21.9
A07T_202-PB100ST_____	6"	3504	2.3 - 8.6	32.0	32.3	32.3	32.2	32.0	31.4	30.6	29.6	28.4	27.0	25.3
A07T_212-PB100ST_____	6"	3500	2.3 - 9.7	33.4	34.1	34.5	34.3	33.7	33.2	32.6	31.8	30.7	29.6	28.5
A07T_222-PB100ST_____	6"	3500	2.4 - 10.1	35.0	36.0	36.8	37.0	37.0	36.6	35.9	35.1	34.2	33.1	31.6
A07T_232-PB100ST_____	8"	3509	4.0 - 14.4	41.3	42.2	43.0	43.6	44.2	44.5	44.7	44.7	44.5	44.1	43.5
A07T_242-PB100ST_____	8"	3509	5.0 - 14.3	45.0	45.6	46.3	47.2	47.8	48.0	48.2	48.2	48.3	48.2	47.8
A07T_252-PB100ST_____	8"	3509	5.5 - 15.7	46.5	47.4	48.2	49.0	49.6	50.1	50.3	50.4	50.4	50.3	50.1
A07T_262-PB100ST_____	8"	3509	5.7 - 17.1	49.6	50.5	51.6	52.2	52.7	53.2	53.6	54.0	54.0	53.8	53.6

8" Outlet Size

Model	Flanged Inlet Size	RPM	BHP Range	Capacity in CFM 500 SP	700 SP	900 SP	1100 SP	1300 SP	1500 SP	1700 SP	1900 SP	2100 SP	2300 SP	2500 SP
A07T_153-PB100ST_____	8"	3504	1.9 - 7.8	18.6	18.5	18.2	17.6	16.7	15.5	14.1	12.4	10.4		
A07T_163-PB100ST_____	8"	3500	2.2 - 10.1	20.9	21.1	20.9	20.3	19.4	18.2	16.9	15.6	13.9	11.8	9.3
A07T_173-PB100ST_____	8"	3500	2.5 - 11.2	22.5	23.0	22.9	22.5	21.7	20.7	19.3	17.7	16.0	14.3	12.4
A07T_183-PB100ST_____	8"	3509	3.0 - 14.0	25.6	26.1	25.9	25.6	25.1	24.2	22.8	21.4	19.9	18.4	16.7
A07T_193-PB100ST_____	8"	3509	3.9 - 15.7	28.7	29.8	30.2	30.2	30.0	29.4	28.7	27.9	26.9	25.7	24.2
A07T_203-PB100ST_____	8"	3509	3.8 - 17.5	31.0	32.2	32.8	33.1	33.1	32.7	32.0	31.2	30.2	29.2	28.1
A07T_213-PB100ST_____	8"	3509	4.5 - 18.3	33.5	34.8	35.7	36.3	36.6	36.5	36.0	35.1	34.2	33.1	31.9
A07T_223-PB100ST_____	8"	3501	5.1 - 19.8	36.1	37.3	38.4	39.2	39.5	39.5	39.1	38.2	37.0	35.7	
A07T_233-PB100ST_____	8"	3501	5.3 - 20.3	43.1	44.3	44.9	44.9	44.4	43.6	42.0	40.1	38.4		
A07T_243-PB100ST_____	8"	3501	6.2 - 25.0	46.2	47.7	48.6	49.0	48.8	47.9	46.7	45.3	43.7	41.9	39.8
A07T_253-PB100ST_____	8"	3501	6.8 - 25.6	48.2	49.9	51.1	51.3	51.2	50.7	49.8	48.4	46.8	45.0	43.1
A07T_263-PB100ST_____	8"	3510	7.7 - 28.3	51.8	53.2	54.3	54.7	55.2	55.0	54.2	52.9	51.2	49.4	47.2

10" Outlet Size

Model	Flanged Inlet Size	RPM	BHP Range	Capacity in CFM 750 SP	1250 SP	1500 SP	1750 SP	2000 SP	2250 SP	2500 SP	2750 SP	3000 SP	3250 SP	3500 SP
A07T_194-PB100ST_____	10"	3501	4.5 - 21.0	29.9	30.5	30.1	29.4	28.3	26.9	25.3	23.3	21.0	18.6	15.9
A07T_204-PB100ST_____	10"	3510	5.2 - 25.2	32.4	33.6	33.4	32.7	31.6	30.2	28.7	26.9	24.8	22.2	19.1
A07T_214-PB100ST_____	10"	3510	5.1 - 25.1	34.8	36.5	36.7	36.3	35.5	34.1	32.7	31.2	29.2	26.2	
A07T_224-PB100ST_____	10"	3510	6.0 - 28.2	37.6	39.9	40.0	39.7	38.9	37.6	36.0	34.3	32.4	30.1	27.6
A07T_234-PB100ST_____	10"	3514	8.3 - 32.0	42.6	44.3	44.6	44.8	44.8	44.6	44.2	43.7	42.9	42.0	41.0
A07T_244-PB100ST_____	10"	3514	9.8 - 35.0	45.5	47.8	48.4	48.8	49.0	49.1	49.1	48.7	47.6	45.5	42.5
A07T_254-PB100ST_____	10"	3546	10.5 - 44.5	49.0	51.8	53.0	53.9	54.5	54.8	54.8	54.4	53.7	52.8	52.0
A07T_264-PB100ST_____	10"	3546	11.3 - 43.5	52.4	55.2	56.3	57.3	58.1	58.6	58.6	58.3	57.7	57.0	56.1

12" Outlet Size

Model	Flanged Inlet Size	RPM	BHP Range	Capacity in CFM 1000 SP	1500 SP	2000 SP	2500 SP	3000 SP	3500 SP	4000 SP	4500 SP	4750 SP	5000 SP	5250 SP
A07T_235-PB100ST_____	12"	3546	10.1 - 48.0	43.9	45.4	45.9	45.5	44.3	42.5	40.0	36.9	35.1	33.1	
A07T_245-PB100ST_____	12"	3546	12.1 - 49.1	47.9	49.3	49.9	49.8	49.0	47.3	45.0	42.5	40.9	38.7	35.9
A07T_255-PB100ST_____	12"	3544	11.3 - 52.1	50.4	52.8	54.4	54.6	53.9	52.5	49.9	46.0	43.9	41.9	
A07T_265-PB100ST_____	12"	3544	14.4 - 57.4	54.3	56.2	57.8	58.5	58.0	56.4	54.3	52.8	51.2	49.0	46.3

Performance shown is for installation type B & D - Free or ducted inlet, Ducted outlet.
Performance is based on standard air conditions (0.075 #/ft^3).
Power rating BHP does not include drive losses.
Performance ratings do not include the effects of appurtenances in the airstream.

To complete model code add arrangement code, motor enclosure code, motor horsepower code, and motor speed code. (Wheel Type PB (aluminum & steel) shown with standard steel housing construction.) Refer to page 2 for additional model code information.

Options and Accessories

Construction Materials
The Series 07T Turbo Pressure Blower can be fabricated with alternate materials of construction including: All Steel Construction; Stainless Steel Airstream Construction; and with AMCA Spark Resistant Construction.

Companion Flange
A companion flange is available to match the inlet or outlet flange of the blower.

Drain Pipe Coupling
A standard pipe coupling welded to housing at its lowest point; female pipe has threaded plug.

Access Door
For maintenance and clean-out of internal fan housing. Bolted and gasketed. A hinged, quick release type also available for Class I only.

Vibration Isolator
Rubber-in-shear or spring-type isolators are available.

Combination Drive Guard and Weather Cover
Covers motor and shaft sheaves as well as belts. Combines guarding of the drive as well as protection from the weather.

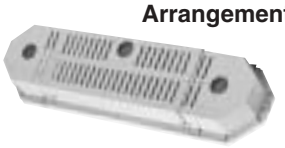
Arrangement 4

Arrangement 9

Drive Guards
Encloses the drive assembly while permitting circulation of ambient air. Standard features include: tach opening, belt tension openings and adjustable length.

Shaft Guard
Arrangement 9 or 1

Belt Drive Guard
Arrangement 9



Inlet and Outlet Guards
Spiral ring guard offers protection on inlet or outlet side.

Arrangement 1 Sub-Base
Common structural support for Arrangement 1 fan and motor. Specify motor mounting position. (See page 5.)

Slip or Venturi Inlet
The inlet of the blower can be supplied with a Slip inlet configuration or with a venturi inlet in place of the flanged inlet.

Silencers
Silencers to match the inlet or discharge of the blower are available. Silencers have heavy welded construction and perforated liner with fiberglass absorptive material. The silencer can be provided with flanges or slip fit connections. Dimensions are on page 4 and Dynamic Insertion Losses are as shown:

Flanged Silencer

Silencer Dynamic Insertion Losses

Silencer Size	Octave Band							
	1	2	3	4	5	6	7	8
4"	3	10	27	36	39	33	25	23
6"	2	5	24	35	38	36	27	25
8"	1	3	18	31	33	31	22	22
10"	2	4	14	24	27	26	17	16
12"	1	5	17	28	32	29	21	21

Inlet Filter
Flanged inlet filter is available for connection to inlet of the blower or silencer. Polyester, steel mesh, or paper filter elements are available with optional pre-filter.

Support Leg
An adjustable support leg for use with the inlet filter or silencer is available.

Outlet Damper
Manual Wafer Type outlet damper provides control of airflow for mounting down stream of the blower.

Flexible Connectors
Flanged flexible connectors are available to match the inlet or outlet of the blower. The flexible connector isolates the fan vibration from the duct system.

SAFETY ACCESSORIES, APPLICATION AND USE WARNING

The safe application and use of equipment supplied by Hartzell Fan, Inc. is the responsibility of the installer, the user, the owner, and the employer. Since the application and use of its equipment can vary greatly, Hartzell Fan, Inc. offers various product types, optional safety accessories, and sound performance data per laboratory tests. Hartzell Fan, Inc. sells its equipment with and without safety accessories, and accordingly, it can supply such safety accessories only upon receipt of an order. The need for safety accessories will frequently depend upon the type of system, fan location and operating procedures being employed. The proper protective safety accessories to meet company standards, local codes, and the requirements of the Occupation Safety and Health Act must be determined by the user since safety requirements vary depending on the location and use of the equipment. If applicable local conditions, standards, codes or OSHA rules require the addition of the safety accessories, the user should specify and obtain the required safety accessories from Hartzell Fan, Inc. and should not allow the operation of the equipment without them.

Owners, employers, users and installers should read “RECOMMENDED SAFETY PRACTICES FOR USERS AND INSTALLERS OF INDUSTRIAL AND COMMERCIAL FANS” published by the Air Movement and Control Association International, Inc., 30 West University Drive, Arlington Heights, Illinois 60004. A copy of this publication is enclosed with each fan shipped from Hartzell Fan, Inc., and is available upon request at Hartzell's office in Piqua, Ohio 45356

Please contact Hartzell Fan, Inc. or your local Hartzell representative for more information on product types, safety accessories, and sound performance estimates.

Remember, the selection of safety accessories and the safe application and use of equipment supplied by Hartzell Fan, Inc. is **your** responsibility.

Hartzell Warranty

LIMITED WARRANTIES

Hartzell represents to Buyer that any goods to be delivered hereunder will be produced in compliance with the requirements of the Fair Labor Standards Act of 1938 as amended.

Hartzell also warrants to Buyer its goods to be free from defects in workmanship and material under normal use and service for one (1) year after tender of delivery by Hartzell, plus six months allowance for shipment to approved stocking dealers and distributors. No warranty extends to future performance of goods and any claims for breach of warranty or otherwise accrues upon tender of delivery.

The foregoing constitute Hartzell's sole and exclusive warranties and are in lieu of all other warranties, whether written, oral, express, implied or statutory.

LIMITATION OF LIABILITY FOR BREACH OF WARRANTY

Hartzell's obligation for any breach of warranty is limited to repairing or replacing, at its option, without cost to Buyer at its factory any goods which shall, within such a warranty period, be returned to it with transportation charges prepaid, and which its examination shall disclose to its satisfaction to have been defective. Any request for repair or replacement should be directed to Hartzell Fan, Inc., P.O. Box 919, Piqua, Ohio 45356. Hartzell will not pay for any repairs made outside its factory without its prior written consent. This does not apply to any such Hartzell goods which have failed as a result of faulty installation or abuse, or incorrect electrical connections or alterations, made by others, or use under abnormal operating conditions or misapplication of the goods.

LIMITATION OF LIABILITY

To the extent the above limitation of liability for breach of warranty is not applicable, the liability of Hartzell on any claim of any kind, including negligence, for any loss or damage arising out of or connected with, or resulting from the sale and purchase of the goods or services covered by these Terms and Conditions of Sale or from the performance or breach of any contract pertaining to such sale or purchase or from the design manufacture, sale, delivery, resale, installation, technical direction installation, inspection repair, operation or use of any goods or services covered by these Terms and Conditions shall, in no case exceed the price allocable to the goods or services which gave rise to the claim and shall terminate one year after tender of delivery of said goods or services, plus six months allowance for shipment to approved stocking dealers and distributors. In no event will Hartzell be responsible or liable for any labor or other incidental costs associated with the removal or replacement of defective products or materials.

In no event whether as a result of breach of contract, or warranty or alleged negligence, defects, incorrect advice or other causes, shall Hartzell be liable for special or consequential damages, including, but not limited to, loss of profits or revenue, loss of use of the equipment or any associated equipment, cost of substitute equipment, facilities or services, down time costs, or claims of customers of the Buyer for such damages. Hartzell neither assumes nor authorizes any person to assume for it any other liability in connection with the sale of its goods or services.

NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS

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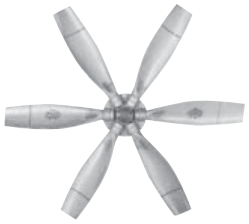
Propeller Fans



Cooling Tower & Heat Exchanger Fans

Duct Fans

Duct Axial Fans

Vaneaxial Blowers

Cool Blast & Utility Fans

Steel Centrifugal Blowers

Roof Ventilators – Steel & Fiberglass

Heating Equipment – Gas & Steam

Fiberglass Axial Flow Fans

Fiberglass Centrifugal Blowers

Marine – Mine Duty Blowers

Hartzell Fan, Inc., Piqua, Ohio 45356 • Plants in Piqua, Ohio and Portland, Indiana.

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