



**PENNBARRY™**

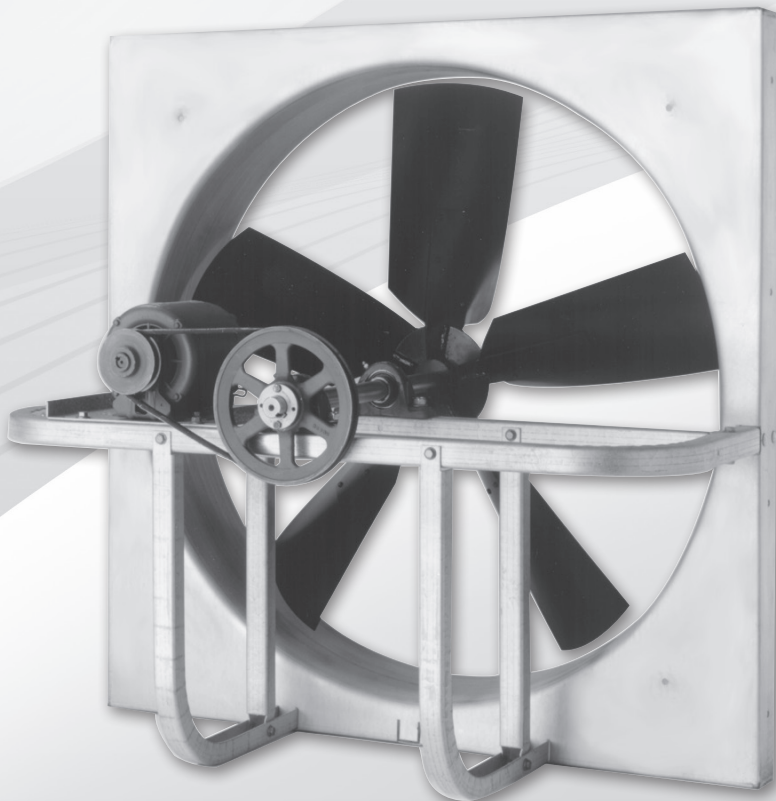
*Moving Your Way*

# BREEZEWAY

Wall Mounted Propeller Fans

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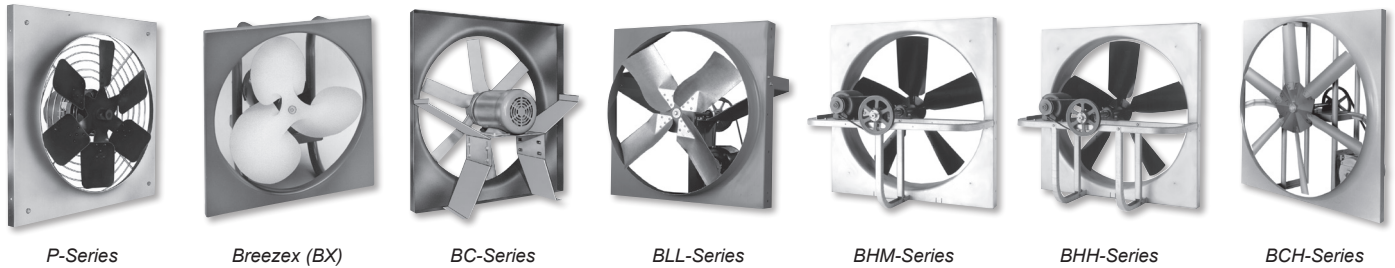
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**BULLETIN BZW13**



## INTRODUCTION



### Breezeway Series Wall Mounted Propeller Fans

The Breezeway propeller fan line provides a variety of solutions to address the needs of wall mounted exhaust and ventilation applications such as garages, factories, warehouses, and other relatively clean air applications.

Whether steel or cast aluminum, all propellers in the Breezeway product line are statically and dynamically balanced to AMCA Standard 204-96, Balance Quality and Vibration Levels for Fans, to ensure quiet and reliable operation.

Breezeway fans allow one of the broadest motor selections in the industry. All fans are fully assembled and test run prior to shipping; belt drive models are pre-set to the specified RPM.

#### Breezeway Direct Drive Series

##### Model: P-Series

- Static pressure up to .625 in. wg.
- Flow capacity up to 6,500 CFM.
- Exhaust or supply in light-duty applications.
- Stamped aluminum propeller with steel hub, zinc-coated wire guard/power assembly mounted on RIS vibration isolators attached to a steel venturi panel.
- Available in sizes 10" to 24".

##### Model: Breezex (BX)

- Static pressure up to .375 in. wg.
- Flow capacity up to 4,600 CFM.
- Exhaust or supply in light-duty applications.
- Field reversible fan.
- Stamped aluminum propeller with steel hub, a fabricated power assembly and steel venturi panel.
- Motors are base-mounted TE type.
- Explosion-proof motors are available less reversing switch.
- Available in sizes 10" to 24".

##### Model: BC-Series

- Static pressure up to .75 in. wg.
- Flow capacity up to 43,400 CFM.
- Exhaust or supply in light-duty applications.
- Available in sizes 24" to 54".

#### Breezeway Belt Drive Series

##### Model: BLL-Series

- Static pressure up to .5 in. wg.
- Flow capacity up to 13,700 CFM.
- Exhaust in light-duty applications.
- Fabricated steel propeller, fabricated steel power assembly, and a steel venturi panel.
- Available in sizes 24" to 36".

##### Model: BHM-Series

- Static pressure up to .50 in. wg.
- Flow capacity up to 34,400 CFM.
- Exhaust or supply in medium-duty applications.
- High-efficiency fabricated steel propeller, galvanized power assembly, and a fully developed venturi, integrally spun into a galvanized panel.
- Available in sizes 24" to 48".

##### Model: BHH-Series

- Static pressure up to 1 in. wg.
- Flow capacity up to 58,400 CFM.
- Exhaust or supply in heavy-duty applications.
- High-efficiency fabricated steel propeller, a robust galvanized power assembly that can handle high horsepower motors, and a fully developed venturi integrally spun into a galvanized panel.
- Available in sizes 24" to 60".

##### Model: BCH-Series

- Static pressure up to 1 in. wg.
- Flow capacity up to 68,100 CFM.
- Exhaust or supply in heavy-duty applications.
- High-efficiency cast aluminum air foil propeller, a fabricated steel power assembly and a heavy gauge venturi panel.
- Available in sizes 24" to 60".

**CERTIFICATIONS & LISTINGS**



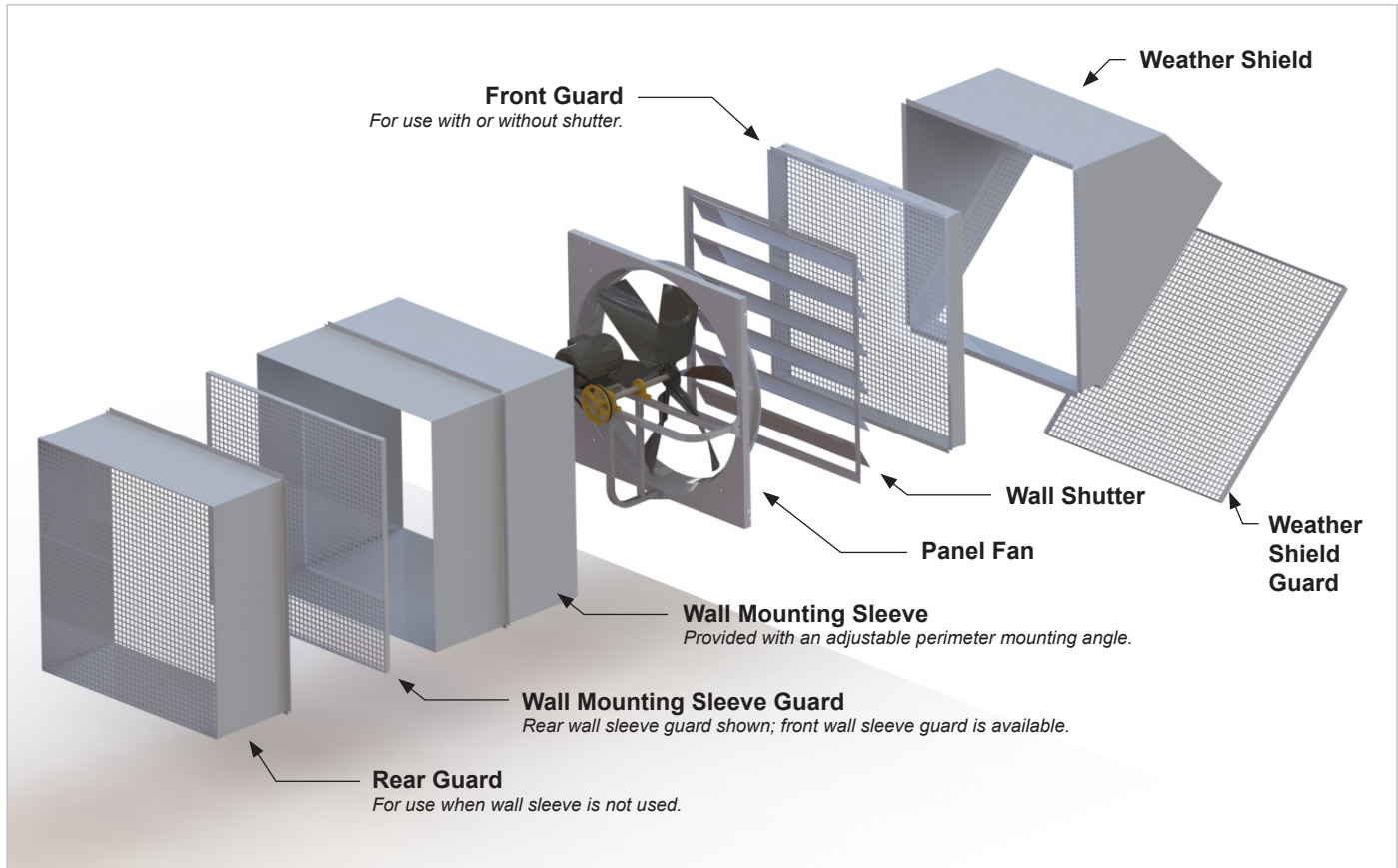
**Breezeway Direct & Belt Drive Fans**  
 PennBarry certifies that the Breezeway direct drive and belt drive models shown on pages 11 and 15 - 36 are licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA publication 211 and AMCA publication 311 and comply with the requirements of the AMCA Certified Ratings Program.



**UL and CSA Certification**  
 Breezeway fans (Models P, BLL, BHM, BHH & BCH) carry the UL label, UL 705, (ZACT), File #E28413.

**OPTIONS & ACCESSORIES**

**Accessory Overview**



Protection that conforms to OSHA regulations should be installed when fans are located within seven (7) feet of floor and/or working level, or within reach of personnel. Review OSHA codes for specific details.

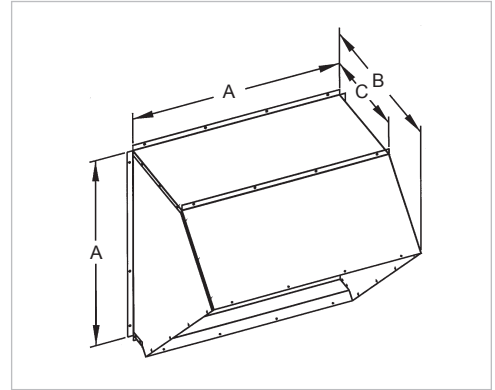
## OPTIONS & ACCESSORIES

### Weather Shield

Weather shields are designed to divert rain and snow from exhaust and supply wall openings. They are designed to be surface mounted and can be installed in conjunction with wall shutters. Guards are provided. Standard construction is galvanized steel, painted upon request. In order to minimize shipping costs, the weather shield will be shipped knocked down for the BHM and BHH products, unless factory assembly is specified. Other models will be shipped factory assembled.

Use the tables below to help with space planning and sizing guidelines. Please note the maximum recommended intake (supply) CFM. This guideline will keep the intake CFM below 500 FPM. If the intake CFM exceeds the recommended volume, use the next larger fan.

**Caution:** When a Breezeway fan is selected for a supply application, fan velocities greater than 500 FPM can pull water into the structure. We suggest that a PennBarry Weather Shield be selected in supply applications to help prevent water penetration when high velocity conditions cannot be avoided.



Size	P-Series						BLL*   BCH*   BC							
	10	12	16	18	20	24	24	30	36	42	48**	54**	60**	
Wo	15 3/4	17 3/4	23 1/2	25	27 1/2	33 1/4	28 3/4	34 3/4	40 3/4	46 3/4	55	61	67	
A	15 1/4	17 1/4	23	24 1/2	27	32 3/4	28 1/4	34 1/4	40 1/4	46 1/4	54 1/4	60 1/4	66 1/4	
B	18 3/8	19 11/16	23 3/4	24 13/16	26 9/16	30 1/2	27 3/8	31 3/4	36 5/8	41	45 3/4	49 5/8	54 5/8	
C	12 1/8	13 1/8	15 1/2	16 1/8	17 1/4	19 1/2	17 5/8	20 1/4	23 3/8	25 7/8	28 3/8	31	34 1/4	
Max. Rec. Supply CFM	10	12	16	18	20	24	24	30	36	42	48	54	60	
	806	1033	1837	2084	2531	3724	2771	4073	5625	7427	10219	12604	15240	

All dimensions in inches. \*Not supply. \*\*BCH only.

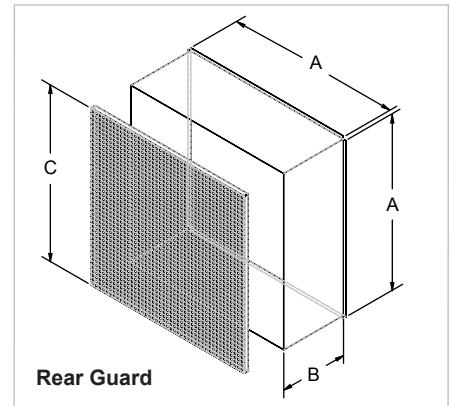
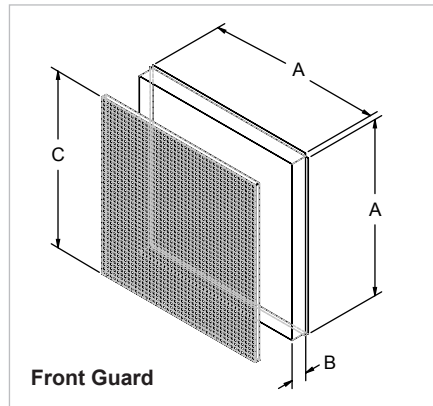
Size	BHM   BHH								BX								
	24	30	36	42	48	54*	60*	12Q	14Q	16T	16Q	18T	18Q	20T	20Q	24T	24Q
Wo	32 3/4	38 3/4	44 3/4	50 3/4	57	63	69	15 1/4	17 1/4	19 3/4	19 3/4	21 3/4	21 3/4	23 3/4	23 3/4	27 3/4	27 3/4
A	32 1/4	38 1/4	44 1/4	50 1/4	56 1/4	62 3/8	68 3/8	15 1/4	16 1/4	19	19	21	21	23	23	27	27
B	28 1/4	32 1/2	36 3/4	41	45 1/4	49 3/8	53 3/8	17 7/8	19	20	20	22 3/8	22 3/8	23 1/4	23 1/4	26 1/8	26 1/8
C	17 1/4	19 3/4	22 3/8	24 3/4	27 1/4	29 3/8	32 1/8	12 3/8	12 3/4	13 7/8	13 7/8	14 1/4	14 1/4	15 1/2	15 1/2	17 1/4	17 1/4
Max. Rec. Supply CFM	24	30	36	42	48	54	60	-	-	-	-	-	-	-	-	-	-
	3611	5080	6799	8768	10986	13509	16233	-	-	-	-	-	-	-	-	-	-

All dimensions in inches. \*BHH only.

**OPTIONS & ACCESSORIES**

**Front & Rear Guards**

Protection is available for both the rear motor side (rear guard) of the fan and the front face (front guard) of the fan. Both assemblies include a sheet metal sleeve with an attached guard. The rear guard is long enough to enclose the belt and pulleys. The front guard is surface mounted and long enough to enclose a wall shutter, if provided. The guard for either is removable for maintenance. Standard shipment is knocked down for BHM and BHH, or optionally available as factory assembled. Shipment for other models is factory assembled only. The guards on both conform to OSHA specifications.



Protection that conforms to OSHA regulations should be installed when fans are located within seven (7) feet of floor and/or working level, or within reach of personnel. Review OSHA codes for specific details.

Size	P-Series						BLL*   BCH*   BC						
	10	12	16	18	20	24	24	30	36	42**	48**	54**	60**
A	-	-	-	-	-	-	28 3/16	34 3/16	40 3/16	46 3/16	54 1/4	60 1/4	66 1/4
B	-	-	-	-	-	-	13 1/2	16 1/2	16 1/2	20 1/2	25	25	25
C <sup>SO</sup>	15 1/2	17 1/2	23 1/4	24 3/4	27 1/4	33	28 5/8	34 5/8	40 5/8	46 5/8	54 3/4	60 3/4	66 3/4
SCREEN	1 PIECE	1 PIECE	1 PIECE	1 PIECE	1 PIECE	1 PIECE	1 PIECE	1 PIECE	1 PIECE	1 PIECE	1 PIECE	2 PIECES	2 PIECES

All dimensions in inches. \*Motor side guard of concentric rings integral to unit. \*\*BCH only.

Size	BHM   BHH							BX					
	24	30	36	42	48	54*	60*	12	14	16	18	20	24
A <sup>SO</sup>	32 1/4	38 3/4	44 1/4	50 1/4	56 1/4	62 3/8	68 3/8	14 11/16	16 3/16	18 15/16	21 15/16	22 15/16	26 15/16
B FRONT	5	5	5	5	5	5	5	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2
B REAR	20	20	20	22	22	27	27	12 1/2	12 1/2	12 1/2	12 1/2	12 1/2	13 1/2
C	32 3/8	38 3/8	44 3/8	50 3/8	56 3/8	62 1/2	68 1/2	15 1/8	16 5/8	19 3/8	21 3/8	23 3/8	27 3/8
SCREEN	1 PIECE	1 PIECE	1 PIECE	1 PIECE	1 PIECE	2 PIECES	2 PIECES	1 PIECE	1 PIECE	1 PIECE	1 PIECE	1 PIECE	1 PIECE

All dimensions in inches. \*BHH only.

**Wall Mounting Sleeve Guards and Weather Shield Guards**

These guards are supplied with the Weather Shield and Wall Sleeve. They are fabricated from galvanized sheet and suitable for use for OSHA protection. (Note that guard may be attached to either front or rear of wall sleeve.)

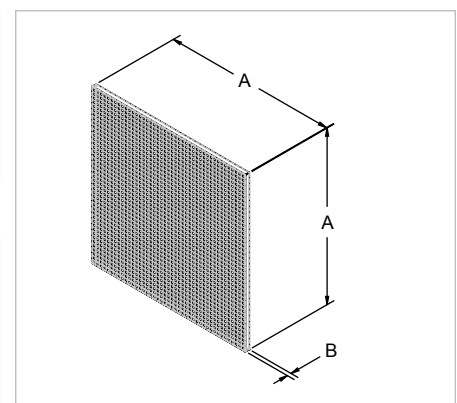
Protection that conforms to OSHA regulations should be installed when fans are located within seven (7) feet of floor and/or working level, or within reach of personnel. Review OSHA codes for specific details.

Size	BC   BLL   BCH						
	24	30	36	42*	48*	54*	60*
A <sup>SO</sup>	29	34 5/8	40 5/8	46 5/8	54 3/4	60 3/4	66 3/4
B	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2
SCREEN	1 PIECE	1 PIECE	1 PIECE	1 PIECE	1 PIECE	2 PIECES	2 PIECES

All dimensions in inches. \*BCH only.

Size	BHM   BHH						
	24	30	36	42	48	54*	60*
A <sup>SO</sup>	32 3/8	38 3/8	44 3/8	50 3/8	56 3/8	62 1/2	68 1/2
B	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2
SCREEN	1 PIECE	1 PIECE	1 PIECE	1 PIECE	1 PIECE	2 PIECES	2 PIECES

All dimensions in inches. \*BHH only.



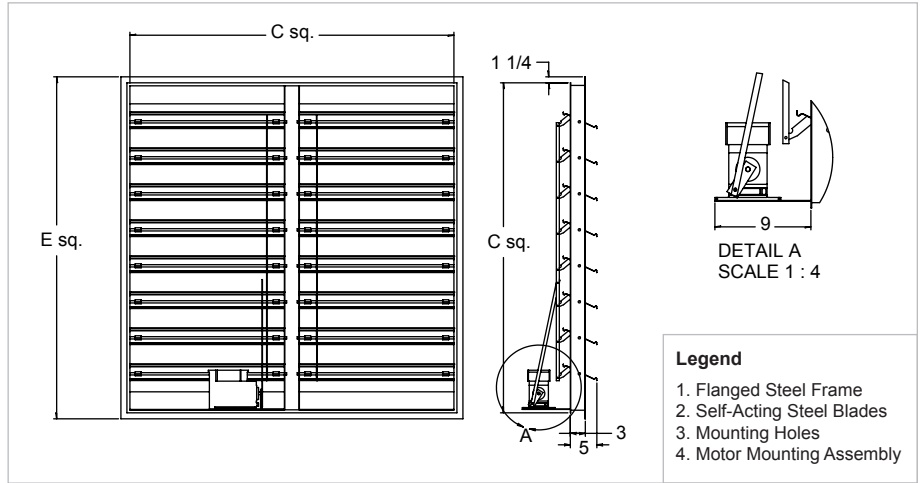
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## OPTIONS & ACCESSORIES

### Wall Shutters

Type WSR recessed gravity shutters, which are the most popular form of back draft protection, open when the fan starts and automatically close shut when the fan stops. These shutters are used for exhaust only and are enclosed within a heavy, steel frame that protects the roll-formed steel blades. Each blade pivots freely on nylon bearings. Blades are interconnected with one or more tie-rods for simultaneous operation. Consult factory for surface mount shutters, if required.

Type EBR is the motorized version of the gravity WSR. It includes all of the WSR features plus an enclosed actuator motor for positive opening and closing of the shutter. The motor is field wired in parallel with the fan. Allow a minimum 7" between the fan and the shutter when motorized. Larger actuators will be provided with a transformer for 460V.



Shutters required for supply applications are provided as motorized center-pivot type (not illustrated.) If standard top-pivot shutter is used for supply applications, a field supplied time delay relay is strongly recommended.

**Caution:** When a Breezeway fan is selected for a supply application, fan velocities greater than 500 FPM can pull water into the structure. We suggest that a PennBarry Weather Shield be selected in supply applications to help prevent water penetration when high velocity conditions cannot be avoided.

Size	P-Series							BLL   BCH   BC					
	10	12	16	18	20	24	24	30	36	42*	48*	54*	60*
E <sup>sq.</sup>	17 1/2	19 1/2	25 1/4	26 3/4	29 1/4	34 3/4	30 1/2	36 1/2	42 1/2	48 1/2	56 1/2	62 1/2	68 1/2
C <sup>sq.</sup>	15	17	22 3/4	24 1/4	26 3/4	32 1/4	28	34	40	46	54	60	66
No. Panels	1	1	1	1	1	1	1	1	2	2	2	2	2

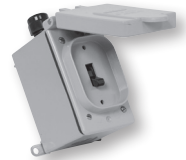
All dimensions in inches. \*BCH only.

Size	BHM   BHH							BX					
	24	30	36	42	48	54*	60*	12	14	16	18	20	24
E <sup>sq.</sup>	34 1/2	40 1/2	46 1/2	52 1/2	58 1/2	64 1/2	70 1/2	17 1/2	19 1/2	21 1/2	23 1/2	25 1/4	29 1/4
C <sup>sq.</sup>	32	38	44	50	56	62	68	15	17	19	21	22 3/4	26 3/4
No. Panels	1	1	2	2	2	2	2	1	1	1	1	1	1

All dimensions in inches. \*BHH only.

### Safety Disconnect Switch

Safety disconnect switches are available to allow positive electrical shut-off and safety. Switches are shipped loose for field mounting. (Factory wiring of explosion proof applications is not available.) A wide range of NEMA rated enclosures with disconnect switches are available for indoor, outdoor, and explosion proof installations. Disconnects are to be field wired by a licensed electrician.



### Finishes

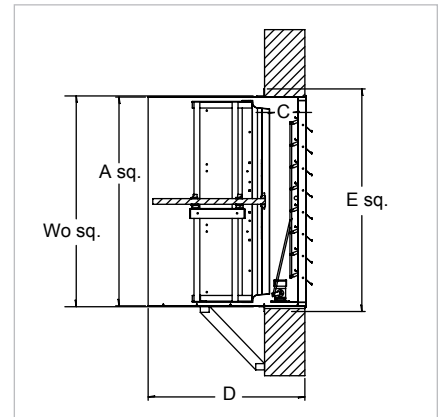
Coatings, such as Polyester Powder Coat, Epoxy Powder Coat, Phenolic Epoxy Powder Coat, and others are available. See the coatings brochure for details.

## OPTIONS & ACCESSORIES

### Wall Sleeves

Wall Sleeves effectively add depth to the wall where the fan and several of its accessories will be installed. This provides more flexibility and convenience to secure these parts, as well as protection and a neat appearance. Standard construction is galvanized steel. Standard shipment is knocked down for BHM and BHH, or optionally available as factory assembled. Shipment for other models is factory assembled only. A guard is provided for either front or rear installation.

*Fan and wall shutter shown for reference only.  
E dimension includes flange.*



Size	P-Series						BC   BLL   BCH						
	10	12	16	18	20	24	24	30	36	42*	48*	54*	60*
Wo <sup>sq.</sup>	15 3/4	17 3/4	23 1/2	25	27 1/2	33	28 3/4	34 3/4	40 3/4	46 3/4	55	61	67
A <sup>sq.</sup>	15 1/4	17 1/4	23	24 1/2	27	32 1/2	28 1/4	34 1/4	40 1/4	46 1/4	54 1/4	60 1/4	66 1/4
C <sup>MIN.</sup>	4	4	4	4	5	5	6	6	6	6	7	7 1/2	7 1/2
D	18 3/4	18 3/4	22 3/4	23	24 3/4	30 3/4	30 3/4	35	38	44	47 1/2	48	48
E <sup>sq.</sup>	17 1/2	19 1/2	25 1/4	26 3/4	29 1/4	34 3/4	30 1/2	36 1/2	42 1/2	48 1/2	56 1/2	62 1/2	68 1/2

All dimensions in inches. \*BCH only.

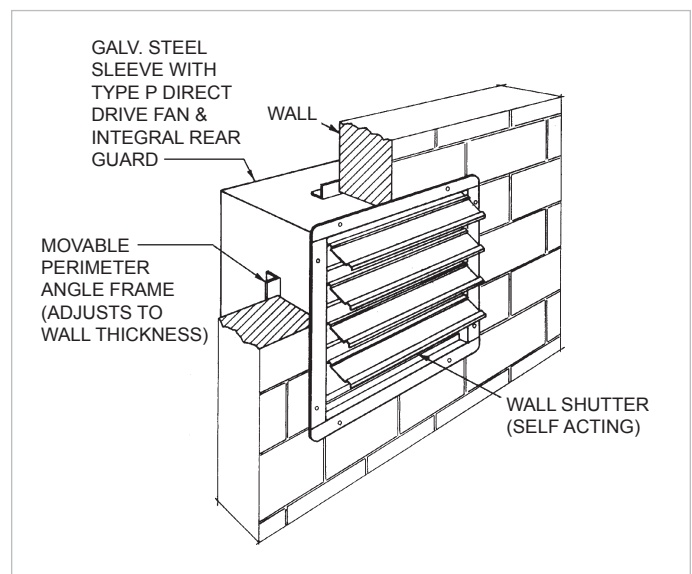
Size	BHM   BHH							BX					
	24	30	36	42	48	54*	60*	12	14	16	18	20	24
Wo <sup>sq.</sup>	32 3/4	38 3/4	44 3/4	50 3/4	57	63	69	15 1/4	17 1/4	19 3/4	21 3/4	23 3/4	27 3/4
A <sup>sq.</sup>	32 1/4	38 1/4	44 1/4	50 1/4	56 1/4	62 3/8	68 3/8	14 3/4	16 3/4	19 1/4	21 1/4	23 1/4	27 1/4
C <sup>MIN.</sup>	6	6	6	6	7	7	7	4	4	4	4	4	4
D	36	39	41	41	41	48	48	23 1/2	23 1/2	24	24 1/4	25	25
E <sup>sq.</sup>	34 1/2	40 1/2	46 1/2	52 1/2	58 1/2	64 1/2	70 1/2	17 1/2	19 1/2	21 1/2	23 1/2	25 1/4	29 1/4

All dimensions in inches. \*BHH only.

### P-Series Slip-in Fan Pak

This provides a ventilation package in one convenient and compact assembly. The Fan Pak incorporates the Breezeway Type P direct drive fans with their integral back guards installed in a galvanized steel sleeve with a self-acting shutter on the exterior face. (A motorized shutter can be substituted for the standard shutter when desired.)

A moveable angle frame is positioned on the perimeter of the sleeve. This adjusts to the wall thickness. When properly fastened it secures the assembly in the wall opening. Anchor bolts, lag screws or other appropriate fasteners should be used to fasten the unit to the inside and outside face of the wall or mounting frame.





## MOTOR AVAILABILITY

### NEMA Motor

This chart lists the NEMA frame sizes for each combination of HP, phase, voltage, enclosure and speed configuration. Verify the NEMA frame size for the desired motor and compare to the maximum motor frame size listed on the individual fan data page in this brochure.

HP	Single Phase					220V, 230V, 460V, or 575V - Three Phase			
	ODP		TE	EXP	2S2W	ODP	TE	EXP	2S2W
	115V	230V	115/230						
1/4	48	58	56	48/56	48	48	48	48	-
1/3	48/56	48/56	56	56	56	56	56	56	-
1/2	48/56	48/56	56	56	56	56	56	56	56
3/4	56	56	56	56	56	56	56	56	56
1	56	56	56	56	56	56	56	56	145T
1 1/2	56	56	145T	184T	-	56	56	56	182T
2	145T	145T	182T	182T	-	56/145T	145T	145T	182T
3	184T	184T	184T	215T	-	145T	182T	182T	184T
5	-	-	-	-	-	184T	184T	184T	215T
7 1/2	-	-	-	-	-	213T	213T	213T	215T
10	-	-	-	-	-	215T	215T	215T	256T
15	-	-	-	-	-	254T	254T	254T	284T
20	-	-	-	-	-	256T	256T	256T	284T

On horsepowers less than 1 1/2, motor frame sizes may change due to variations in voltage, special features and motor manufacturer. Motors shown are ball bearing, continuous duty and 1750 RPM or 1750/1140 RPM for two speed - two winding motors.

### BC Direct Drive Motor Availability

The following chart lists the various motor options available for each of the direct drive fan models. Once a fan model is selected, this chart can be used to determine if a suitable motor is available. (If not, another selection may have to be made from the fan performance charts). Look under the nominal RPM heading to determine which fans have 2-speed and 3-speed motors.

Model	Nominal HP	RPM				Single Phase			Three Phase				
		690 M	860 W	1140 T	1725 Q	OPEN 115/230V	TE	EXP	OPEN	TE	EXP	2S1W	2S2W
BC24W1	1/2	-	X	-	-	YES	YES	-	YES	-	-	-	-
BC24W2	1/2	-	X	-	-	YES	-	-	YES	YES	-	-	-
BC24T1	1/2	-	-	X	-	YES	YES	YES	YES	YES	YES	-	-
BC24T2	1	-	-	X	-	YES	YES	YES	YES	YES	YES	YES	YES
BC24Q	1 1/2	-	-	-	X	YES	YES	YES	YES	YES	YES	YES	YES
BC30W1	1/3	-	X	-	-	YES	-	-	YES	YES	-	-	-
BC30W2	1/2	-	X	-	-	YES	-	-	YES	YES	-	-	-
BC30W3	3/4	-	X	-	-	-	-	-	YES	YES	-	-	-
BC30T1	1	-	-	X	-	YES	YES	YES	YES	YES	YES	YES	YES
BC30T2	1 1/2	-	-	X	-	YES	YES	YES	YES	YES	YES	YES	YES
BC30Q1	3	-	-	-	X	YES	YES	YES	YES	YES	YES	YES	YES
BC30Q2	5	-	-	-	X	-	YES	YES	YES	YES	YES	YES	YES
BC36W1	1	-	X	-	-	-	-	-	YES	YES	-	-	-
BC36W2	1 1/2	-	X	-	-	-	-	-	YES	YES	-	-	-
BC36T1	3	-	-	X	-	YES	YES	-	YES	YES	YES	YES	YES
BC36Q	7 1/2	-	-	-	X	-	YES	-	YES	YES	YES	YES	YES
BC42W1	2	-	X	-	-	-	-	-	YES	YES	-	-	-
BC42W2	5	-	X	-	-	-	-	-	YES	YES	YES	-	-
BC42T	5	-	-	X	-	-	YES	-	YES	YES	-	YES	YES
BC48W1	3	-	X	-	-	-	-	-	YES	YES	YES	-	-
BC48W2	5	-	X	-	-	-	-	-	YES	YES	-	-	-
BC48W3	7 1/2	-	X	-	-	-	-	-	YES	YES	-	-	-
BC48T1	7 1/2	-	-	X	-	-	-	-	YES	YES	-	YES	YES
BC48T2	10	-	-	X	-	-	-	-	YES	YES	YES	YES	YES
BC54M	5	X	-	-	-	-	-	-	YES	YES	YES	-	-
BC54W	10	-	X	-	-	-	-	-	YES	YES	-	-	-

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## MOTOR AVAILABILITY

### Breezex BX Direct Drive Motor Availability

The following chart lists the various motor options available for each of the direct drive fan models. Once a fan model is selected, this chart can be used to determine if a suitable motor is available. (If not, another selection may have to be made from the fan performance charts). Look under the nominal RPM heading to determine which fans have 2-speed and 3-speed motors.

Model	Nominal HP	RPM		Single Phase		230/460 ODP - Three Phase	
		1140	1725	TE (A) 115V Only	EXP 115/230V	TE (A)	EXP
BX12Q	1/6	-	X	YES	YES	YES	-
BX14Q	1/6	-	X	YES	YES	YES	-
BX16T	1/6	X	-	YES	YES (B)	YES	-
BX16Q	1/3	-	X	YES	YES	YES	YES
BX18T	1/4	X	-	YES	YES	YES	-
BX18Q	1/3	-	X	YES	YES	YES	YES
BX20T	1/4	X	-	YES	YES	YES	-
BX20Q	1/3	-	X	YES	YES	YES	YES
BX24T	1/3	X	-	YES	YES (C)	YES	YES
BX24Q	1/2	-	X	YES	YES	YES	YES

(A) Use TE for ODP applications. (B) Uses 1/4 HP. (C) Uses 1/2 HP.

### Variable Speed Motor Control

PennBarry Lek-Trol™ solid state controllers are an economical way to reduce the high speed of selected P-Series motors by as much as 50%. Check the Lek-Trol™ availability table below to verify suitability for the fan model selected.

Motors suitable for use with field supplied Frequency Inverters can be supplied for BLL, BHM, BHH, BC and BCH models. Contact your PennBarry representative.

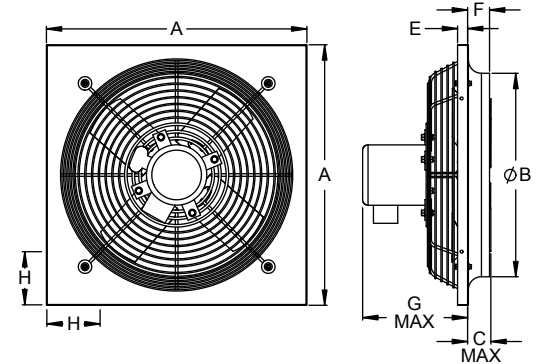
### P-Series Direct Drive Available Lek-Trol™ Speed Controls

Model	Nominal HP	RPM				Single Phase					
						115/1/60 ODP		230/1/60 ODP		TE 115/200/240/1	
		1050	1300	1550	1650	Avail.	Lek-Trol	Avail.	Lek-Trol	Avail.	Lek-Trol
P10VA	1/30	X	-	-	-	YES	LT30	-	-	-	-
P10RA	1/12	-	-	X	-	YES	LT30	USE TE	LT35	YES (2)	LT30/35*
P12VA	1/12	X	-	-	-	YES	LT30	-	-	-	-
P12RA	1/7	-	-	X	-	YES	LT50	USE TE	LT35	YES (2)	LT30/35*
P16VA	1/3	X	-	-	-	YES	-	-	-	-	-
P16SA	1/2	-	X	-	-	YES	LT50	-	-	-	-
P16RA	1/2	-	-	X	-	YES	LT40	USE TE	-	YES (2)	-
P16Q1A	3/4	-	-	-	X	YES	LT60	USE TE	-	YES (2)	-
P18VA	1/2	X	-	-	-	YES	-	-	-	-	-
P18RA	3/4	-	-	X	-	YES	-	-	-	-	-
P20TA	3/4	X (1)	-	-	-	USE TE	-	USE TE	-	YES (2)	-
P20SA	1	-	X	-	-	YES	-	YES	-	-	-
P24VA	3/4	X	-	-	-	USE TE	-	USE TE	-	YES (2)	-

(1) Nominal 1140 RPM. (2) 50/60 Hz. \*LT30 for 115V, LT35 for 200/240V.

P-SERIES | DIRECT DRIVE

Model	A	B Dia.	C Max.	E	F	G Max.	H	Wall Opening Wo	Est. Ship Wt. (Lbs.)	Panel Gauge
P10	15	10 3/4	2 1/2	1	1 1/4	6 1/2	3/4	15 3/4	12	18
P12	17	12 1/4	3 1/4	1	1	7 1/2	1 7/8	17 3/4	14	18
P16	22 3/4	16 3/4	3 3/4	1	2 1/4	11 1/4	2 7/8	23 3/4	30	18
P18	24 1/4	18 3/4	3 3/4	1	2	9 1/8	3 5/8	25	40	18
P20	26 3/4	20 7/8	3 3/4	1	1 3/4	12 1/2	3 1/4	27 1/2	50	18
P24	32 1/4	25	4 1/4	2	2 3/8	12 7/8	4 11/16	33	76	18



All wire frames are 11 gauge. All dimensions are in inches.

Model	HP	Max Watts	RPM	Tip Speed FPM	0.000" SP		0.100" SP		0.125" SP		0.150" SP		0.200" SP		0.250" SP		0.300" SP		0.375" SP		0.500" SP		0.625" SP	
					CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones
P10VA	1/30	80	1050	2749	753	4.6	531	7.5	457	7.9	385	7.2	239	6.7	-	-	-	-	-	-	-	-	-	-
P10RA	1/12	115	1550	4058	841	5.8	699	6.5	631	7.3	570	8.5	486	10.8	425	12.5	387	12.9	321	13.2	-	-	-	-
P12VA	1/12	204	1050	3299	1354	10.7	1176	9.5	1090	9.9	959	10.5	755	11.1	615	10.1	240	10.0	-	-	-	-	-	-
P12RA	1/7 <sup>(1)</sup>	174	1550	4869	1489	10.3	1367	9.8	1326	10.1	1281	10.5	1160	11.7	1046	13.2	882	15.5	798	16.9	568	19.6	210	20
P16VA	1/3	463	1050	4398	2546	9.1	2088	8.8	1859	8.7	1699	8.6	1257	8.3	-	-	-	-	-	-	-	-	-	-
P16SA	1/2	550	1300	5445	3143	13.7	2933	14	2856	14.1	2758	14.3	2495	14.6	2244	15.0	1982	15.3	1671	15.4	-	-	-	-
P16RA	1/2	724	1550	6492	3555	14	3301	14.1	3256	14.1	3211	14.2	3102	14.5	2955	15.3	2736	16.9	2514	18.3	1979	20	1772	21
P16Q1A	3/4	962	1650	6911	3760	16.3	3557	16.6	3508	16.7	3459	16.7	3358	16.9	3256	17.1	3123	17.6	2864	18.9	2369	22	2032	24
P18VA	1/2	522	1050	4948	4210	15.2	3845	15.1	3768	15.1	3661	15.1	3370	15.3	3030	15.1	2719	13.6	2215	13.1	-	-	-	-
P18RA	3/4	1265	1550	7304	5233	20	4971	21	4971	21	4919	21	4787	22	4633	23	4383	25	4029	28	3547	35	3083	34
P20TA	3/4	815	1140	5969	4852	16.2	4449	16.4	4318	16.5	4185	16.7	3898	17.1	3570	17.7	3278	18.4	2717	20	1969	24	1200	25
P20SA	1	1415	1300	6807	6063	22	5786	22	5692	21	5597	21	5397	21	5149	21	4835	21	4466	21	3909	22	3121	23
P24VA	3/4	1117	1050	6597	6562	14.6	6210	14.6	6136	14.7	6063	14.7	5917	14.7	5758	14.9	5576	15.2	5249	15.8	4065	19.3	3654	21

(1) TE motor is 1/4 Hp.  
 Performance shown is for installation Type A: Free Inlet, Free Outlet. Speed (RPM) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for Installation Type A: free inlet hemispherical sone levels. Performance ratings include the effect of rear guard in the airstream. For models shown on this page, the AMCA Certified Ratings Seal applies to air and sound.

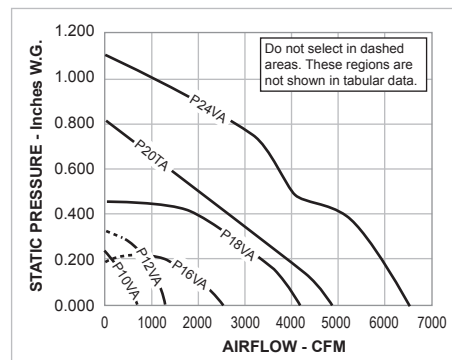
P-Series Fan Curves

The fan curves illustrated to the right show the range of capacities available for P-Series direct drive units. Each graph shows the performance of several models at one particular nominal speed. Fan curves provide a quick method for selecting a fan unit based on design point requirements.

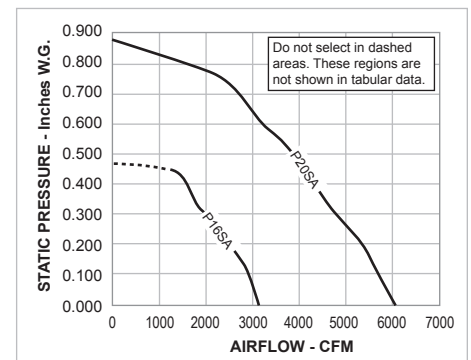
The direct drive performance charts provide the tabular data (CFM and static pressure) used to plot the fan curves. In addition, horsepower, tip speed and sones are tabulated. Since sound is normally an important factor in the selection of a fan, an engineer will usually want to select the "slowest" unit which meets CFM and SP requirements. Please refer to the Motor Selection section to make sure the motor you select meets your electrical requirements.

Note: Breezeway fans are only one component of a total system. As such, fan performance is directly affected by the system. It is critical that system designers determine the actual system loss to ensure that the actual flow is specified in the system design.

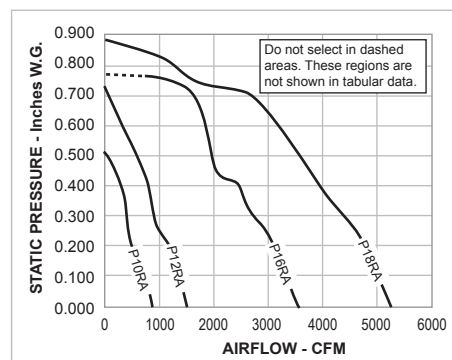
1050/1140 RPM



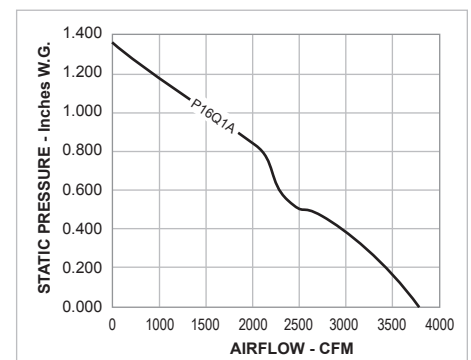
1300 RPM



1550 RPM



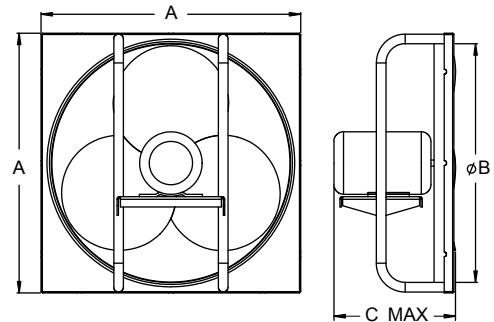
1650 RPM



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**BREEZEX BX | DIRECT DRIVE**

Model	A Sq.	B Dia.	C Max.	Wall Opening Wo	Est. Ship Wt. (LBS.)	Panel Gauge	Motor Plate Gauge
BX12Q	14 1/2	12 3/4	12	15 1/4	24	16	10
BX14Q	16 1/2	14 3/4	12	17 1/4	25	16	10
BX16T	19	16 3/4	12 1/2	19 3/4	29	16	10
BX16Q	19	16 3/4	12 1/2	19 3/4	29	16	10
BX18T	21	18 3/4	12 1/2	21 3/4	33	16	10
BX18Q	21	18 3/4	12 3/4	21 3/4	33	16	10
BX20T	23	20 3/4	13 1/2	23 3/4	35	16	10
BX20Q	23	20 3/4	12 1/2	23 3/4	35	16	10
BX24T	27	24 3/4	13 1/2	27 3/4	43	16	10
BX24Q	27	24 3/4	13 1/8	27 3/4	43	16	10



All dimensions are in inches.

**Breezex BX - Supply**

Model	HP	Fan Dia.	RPM	Tip Speed FPM	0.000" SP	0.125" SP	0.250" SP	0.375" SP	Sones @ .125"
					CFM	CFM	CFM	CFM	
BX12Q	1/6	12"	1725	5423	1400	1260	1050	805	4.0
BX14Q	1/6	14"	1725	6327	2000	1780	1580	1150	11.0
BX16T	1/6 <sup>(1)</sup>	16"	1140	4779	2255	1885	1390	650	7.2
BX16Q	1/3	16"	1725	7231	3035	2760	2550	2250	13.0
BX18T	1/4	18"	1140	5376	3100	2670	2100	820	8.2
BX18Q	1/3	18"	1725	8135	3500	3040	2275	1400	12.8
BX20T	1/4	20"	1140	5974	3800	3160	2590	2240	9.3
BX20Q	1/3	20"	1725	9039	3750	3440	3200	2560	14.0
BX24T	1/3 <sup>(2)</sup>	24"	1140	7168	4720	4540	3855	3000	14.8
BX24Q	1/2	24"	1725	10847	4650	4400	3800	3480	20.0

**Breezex BX - Exhaust**

Model	HP	Fan Dia.	RPM	Tip Speed FPM	0.000" SP	0.125" SP	0.250" SP	0.375" SP	Sones @ .125"
					CFM	CFM	CFM	CFM	
BX12Q	1/6	12"	1725	5423	1125	815	675	530	4.0
BX14Q	1/6	14"	1725	6327	1565	1395	1205	920	11.0
BX16T	1/6 <sup>(1)</sup>	16"	1140	4779	1995	1520	1000	600	7.2
BX16Q	1/3	16"	1725	7231	2530	2345	1835	1430	13.0
BX18T	1/4	18"	1140	5376	2365	2040	1605	625	8.2
BX18Q	1/3	18"	1725	8135	3000	2480	1980	1285	12.8
BX20T	1/4	20"	1140	5974	2705	2265	2130	1835	9.3
BX20Q	1/3	20"	1725	9039	3070	2835	2540	2245	14.0
BX24T	1/3 <sup>(2)</sup>	24"	1140	7168	3610	3475	2945	2295	14.8
BX24Q	1/2	24"	1725	10847	3555	3365	2905	2660	20.0

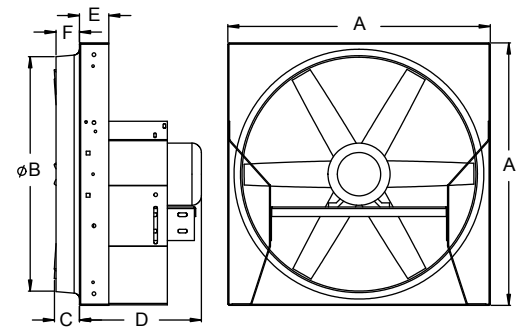
(1) EXP motor 115-230/1 is 1/4 Hp.

(2) EXP motor 115-230/1 is 1/2 Hp.

Performance shown is for installation Type A: Free inlet, Free outlet. Performance ratings do not include the effects of appurtenances in the airstream. The sone ratings shown are loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field calculated per AMCA standard 301. Values shown are for installation Type A: Free inlet hemispherical sone levels.

BC | DIRECT DRIVE

Model	A Sq.	B Dia.	C Max.	D Max.	E	F	Wall Opening Wo	Est. Ship Wt. (LBS.)	Panel Gauge	Web Gauge
BC24	28	25	4 1/2	15	3 1/8	3	28 3/4	80	16	12
BC30	34	31	4 1/2	16	2 5/8	3	34 3/4	100	16	12
BC36	40	37	5	16	3	4 3/4	40 3/4	180	14	10
BC42	46	43	5	18	3 13/16	3 1/2	46 3/4	260	14	10
BC48	54	49	5	23	2 3/4	3 1/2	54 3/4	310	14	10
BC54	60	55	5	24	3	5	60 3/4	340	14	10



All dimensions are in inches.

Model	HP	Fan Dia.	RPM	Tip Speed FPM	0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.750" SP		Sones @ .125"
					CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	
BC24W1	1/2	24"	860	5404	3153	0.15	1988	0.16	1097	0.18	-	-	-	-	13.1
BC24W2	1/2	24"	860	5404	4444	0.40	2306	0.40	-	-	-	-	-	-	13.9
BC24T1	1/2	24"	1140	7163	4718	0.33	3957	36.00	3054	0.36	2273	0.38	-	-	18.9
BC24T2	1	24"	1140	7163	7025	0.95	5500	0.94	3800	0.94	2310	0.93	-	-	20.0
BC24Q	1 1/2	24"	1750	10996	7725	1.15	7380	1.19	6995	1.25	6500	1.28	5445	1.31	33.0
BC30W1	1/3	30"	860	6754	5641	0.29	3660	0.31	-	-	-	-	-	-	14.4
BC30W2	1/2	30"	860	6754	7624	0.41	6372	0.44	4084	0.43	1661	0.42	-	-	15.9
BC30W3	3/4	30"	860	6754	9034	0.64	7897	0.66	6430	0.67	3238	0.67	-	-	16.8
BC30T1	1	30"	1140	8954	10717	0.90	9884	0.97	8969	1.01	7767	1.04	3775	0.97	23.0
BC30T2	1 1/2	30"	1140	8954	12606	1.48	11771	1.50	10922	1.52	10022	1.54	7017	1.51	24.0
BC30Q1	3	30"	1750	13744	13643	2.28	12782	2.34	12157	2.39	11581	2.47	10164	2.59	36.0
BC30Q2	5	30"	1750	13744	17110	3.04	16625	3.19	16140	3.34	15600	3.45	14405	3.58	40.0
BC36W1	1	36"	860	8105	11099	0.88	9337	0.92	5963	0.95	2525	1.09	-	-	19.0
BC36W2	1 1/2	36"	860	8105	13248	1.25	11249	1.34	6912	1.28	-	-	-	-	21.0
BC36T1	3	36"	1140	10744	18526	2.85	17232	2.94	15820	3.06	13680	3.12	6422	2.99	31.0
BC36Q	7 1/2	36"	1750	16496	25430	7.13	24372	7.21	23476	7.30	22719	7.40	21040	7.58	48.0
BC42W1	2	42"	860	9456	20033	1.94	18114	2.01	16008	2.06	12931	2.14	-	-	24.0
BC42W2	5	42"	860	9456	23083	3.58	21837	3.70	20394	3.75	18525	3.76	13396	3.75	30.0
BC42T	5	42"	1140	12535	27644	4.38	26201	4.56	24750	4.67	23297	4.70	19880	4.87	35.0
BC48W1	3	48"	860	10807	25547	2.74	23003	2.85	20415	2.89	17287	2.90	8499	2.88	31.0
BC48W2	5	48"	860	10807	30186	3.98	27927	4.08	25555	4.17	22891	4.26	10571	4.47	34.0
BC48W3	7 1/2	48"	860	10807	33416	5.63	31631	5.73	29705	5.83	27640	5.90	22719	5.80	38.0
BC48T1	7 1/2	48"	1140	14326	35342	6.23	33384	6.44	31458	6.59	29638	6.67	25448	6.75	45.0
BC48T2	10	48"	1140	14326	41224	9.18	39622	9.31	37948	9.43	36214	9.56	32477	9.79	48.0
BC54M	5	54"	690	9755	34071	3.99	31816	4.04	29388	4.06	25491	4.12	12345	3.59	30.0
BC54W	10	54"	860	12158	43437	7.68	41645	7.76	39842	7.81	38091	7.83	32441	7.99	41.0

Performance shown is for installation Type A: Free inlet, Free outlet. Performance ratings do not include the effects of appurtenances in the airstream. The sone ratings shown are loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field calculated per AMCA standard 301. Values shown are for installation Type A: Free inlet hemispherical sone levels.

## BELT DRIVE PERFORMANCE DATA

### Performance Data

The belt drive models shown on the following pages have sizes and capacities ranging from below 300 CFM to above 68,100 CFM, with static pressures from 0" to above 1". All models are available with a wide range of horsepower sizes and RPM's. Two-speed motors are commonly used to enhance this flexibility.

The data provided for each belt drive model includes:

- Elevation Drawing Showing Overall Dimensions
- Fan Curve Graph
- Performance Chart

Each curve graphically displays the range of capacities available for each model, in most cases beyond the specifics shown in the tabular data. The maximum performance afforded by each horsepower is indicated by dashed lines and the RPM is indicated by solid lines.

Some models have graphs that show both shaded and unshaded areas. Selection should be made from the unshaded area only.

The highest RPM shown for a specific horsepower in the tabular data is the maximum speed that for any point along the performance curve, the BHP will not exceed the available horsepower.

It is important to note that while it is common industry-wide practice to exceed a "nominal" horsepower by using a motor's service factor, PennBarry uses a conservative portion of the service factor, allowing half to remain a true "safety" factor.

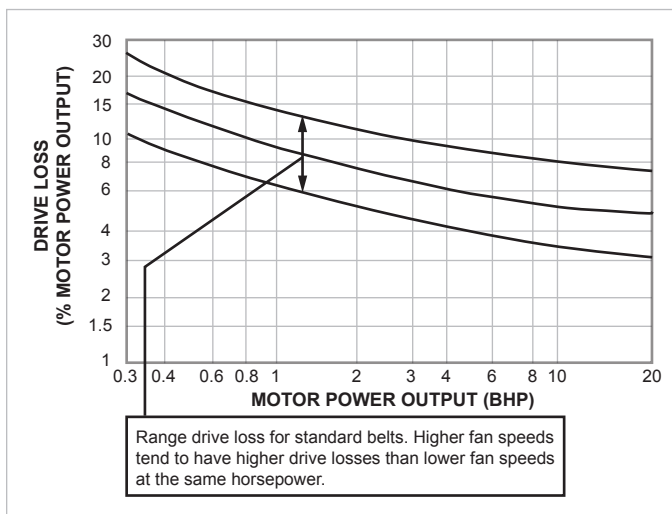
Use the Motor Availability chart (see Motor Selection) to select motor enclosures and voltages which can be installed in the fans.

*Note: Breezeway fans are only one component of a total system. As such, performance is directly affected by the system. It is critical that system designers determine actual system losses to ensure that the actual flow is specified in the system design*

### Belt Drive Losses

The AMCA Review Committee has developed the chart shown below for the purpose of estimating belt drive losses. To calculate total BHP (including drive losses): Find the BHP of your operating point on the x-axis on the graph below. Follow the vertical line to the curves indicating the range of drive losses. Look at the y-axis on the left and find the drive loss percentage. Calculate the total BHP by adding the drive loss to the operating point BHP. For BHP's below 0.3, use 30%.

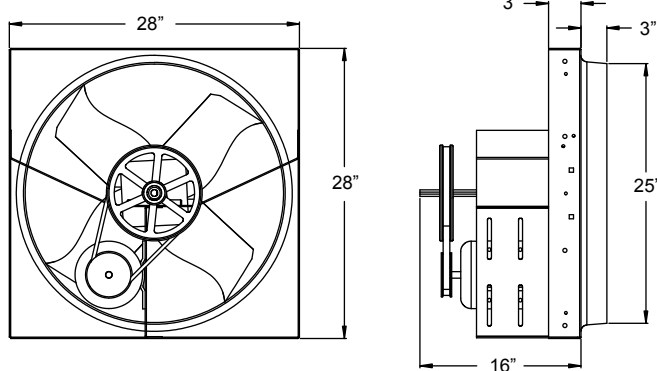
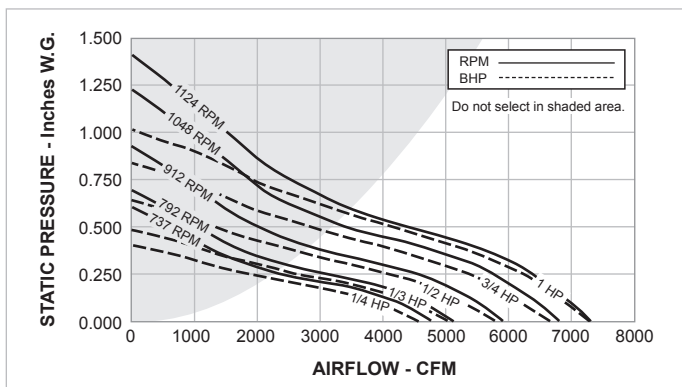
### Drive Loss Reference Chart



**For totally enclosed, explosion proof, multi-speed and all 1.0 Service Factor motors, fan BHP plus drive losses should not exceed motor rated HP.**

*Graph reprinted from AMCA publication 203, with the express written permission from the Air Movement and Control Association, Inc., 30 West University Drive, Arlington Heights, IL 60004-1983.*

**BLL24 | BELT DRIVE**

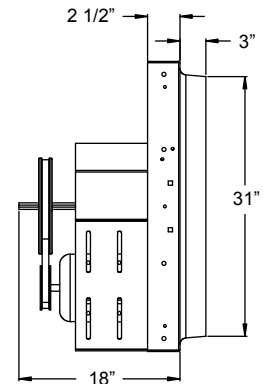
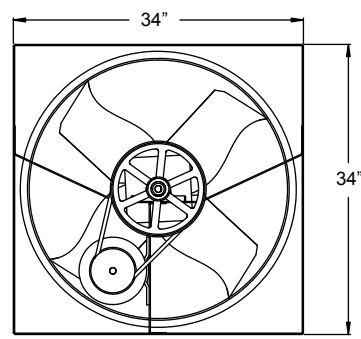
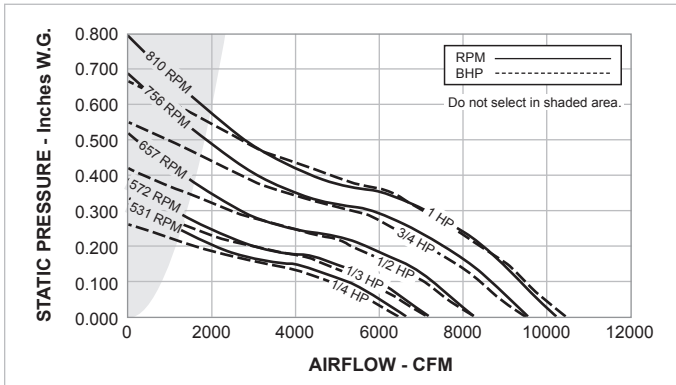


Carbon Steel Panel = 16 Gage	Galv. Steel Web = 12 Gage	Wall Opening = 28 3/4" SQ.	Wall Shutter ID = 28" SQ.
Max. Motor Frame Size = 56	Peak BHP = (RPM/941) <sup>3</sup>	Max. RPM = 1124 (1 HP)	Est. Ship Weight = 95 lbs.

HP	RPM	Tip Speed FPM	0.000" SP		0.100" SP		0.125" SP		0.150" SP		0.200" SP		0.250" SP		0.300" SP		0.375" SP		0.500" SP			
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP
1/4	470	2953	3043	1541	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			6.3	0.07	6.3	0.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	530	3330	3431	2313	1786	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			7.8	0.11	7.5	0.11	7.7	0.11	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	570	3581	3690	2762	2312	1814	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			8.9	0.13	8.7	0.14	8.7	0.14	8.9	0.14	-	-	-	-	-	-	-	-	-	-	-	-
	630	3958	4078	3345	3009	2601	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			10.7	0.18	10.7	0.19	10.7	0.19	10.7	0.19	-	-	-	-	-	-	-	-	-	-	-	-
690	4335	4467	3837	3620	3295	2527	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		14.0	0.23	13.4	0.24	13.3	0.25	13.5	0.25	13.5	0.25	-	-	-	-	-	-	-	-	-	-	
720	4524	4661	4078	3870	3618	2912	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		14.9	0.26	14.0	0.28	13.9	0.28	13.8	0.28	13.9	0.28	-	-	-	-	-	-	-	-	-	-	
737	4631	4771	4209	4010	3798	3120	2353	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		15.5	0.28	14.4	0.30	14.3	0.30	14.2	0.30	14.2	0.30	14.7	0.30	-	-	-	-	-	-	-		
1/3	750	4712	4855	4307	4116	3916	3277	2532	-	-	-	-	-	-	-	-	-	-	-	-	-	
			16.0	0.30	14.8	0.31	14.6	0.31	14.6	0.32	14.5	0.32	15.0	0.32	-	-	-	-	-	-	-	
	770	4838	4985	4457	4278	4084	3510	2806	-	-	-	-	-	-	-	-	-	-	-	-	-	
			16.4	0.32	15.3	0.34	15.1	0.34	15.1	0.34	15.0	0.34	15.4	0.34	-	-	-	-	-	-	-	
792	4976	5127	4620	4456	4266	3753	3095	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		16.9	0.35	15.9	0.36	15.7	0.37	15.6	0.37	15.6	0.37	15.9	0.37	-	-	-	-	-	-	-		
1/2	800	5027	5179	4678	4520	4332	3840	3194	2502	-	-	-	-	-	-	-	-	-	-	-	-	
			17.1	0.36	16.1	0.37	15.9	0.38	15.8	0.38	15.8	0.39	16.1	0.38	16.6	0.39	-	-	-	-	-	
	825	5184	5341	4855	4714	4537	4110	3500	2821	-	-	-	-	-	-	-	-	-	-	-	-	
			18.0	0.40	16.9	0.41	16.7	0.41	16.5	0.42	16.5	0.42	16.7	0.42	17.2	0.42	-	-	-	-	-	
	850	5341	5503	5031	4901	4739	4375	3801	3161	-	-	-	-	-	-	-	-	-	-	-	-	
			19.6	0.43	18.3	0.45	17.9	0.45	17.5	0.46	17.3	0.46	17.4	0.46	17.8	0.46	-	-	-	-	-	
	875	5498	5665	5206	5088	4940	4598	4081	3482	-	-	-	-	-	-	-	-	-	-	-	-	
			21.0	0.47	19.5	0.49	19.1	0.49	18.7	0.50	18.1	0.50	17.9	0.51	18.2	0.05	-	-	-	-	-	
900	5655	5827	5381	5270	5136	4806	4354	3789	2855	-	-	-	-	-	-	-	-	-	-	-		
		22.0	0.51	20.0	0.53	19.9	0.53	19.6	0.54	19.0	0.54	18.7	0.55	18.8	0.55	19.4	0.55	-	-	-		
912	5730	5904	5465	5355	5226	4906	4484	3934	3010	-	-	-	-	-	-	-	-	-	-	-		
		22.0	0.53	21.0	0.55	20.0	0.55	20.0	0.56	19.4	0.57	19.1	0.57	19.1	0.57	19.6	0.57	-	-	-		
920	5781	5956	5520	5411	5286	4972	4570	4031	3121	-	-	-	-	-	-	-	-	-	-	-		
		22.0	0.55	21.0	0.56	21.0	0.57	20.0	0.57	19.7	0.58	19.4	0.59	19.4	0.59	19.7	0.59	-	-	-		
945	5781	5956	5520	5411	5286	4972	4570	4031	3121	-	-	-	-	-	-	-	-	-	-	-		
		23.0	0.59	22.0	0.61	21.0	0.61	21.0	0.62	21.0	0.63	20.0	0.63	20.0	0.64	20.0	0.63	-	-	-		
970	6095	6280	5866	5763	5659	5380	5071	4596	3791	-	-	-	-	-	-	-	-	-	-	-		
		23.0	0.64	22.0	0.66	22.0	0.66	21.0	0.67	21.0	0.68	21.0	0.68	21.0	0.69	21.0	0.68	-	-	-		
995	6095	6280	5866	5763	5659	5380	5071	4596	3791	-	-	-	-	-	-	-	-	-	-	-		
		23.0	0.69	22.0	0.71	22.0	0.72	21.0	0.73	21.0	0.74	21.0	0.74	21.0	0.74	22.0	0.74	-	-	-		
1020	6409	6604	6210	6112	6014	5781	5488	5136	4403	-	-	-	-	-	-	-	-	-	-	-		
		24.0	0.75	23.0	0.76	23.0	0.77	22.0	0.77	22.0	0.78	22.0	0.79	22.0	0.80	23.0	0.80	-	-	-		
1048	6585	6785	6402	6306	6211	5996	5718	5432	4735	3405	-	-	-	-	-	-	-	-	-	-		
		25.0	0.81	24.0	0.83	24.0	0.83	24.0	0.84	23.0	0.85	23.0	0.86	23.0	0.86	24.0	0.87	24.0	0.87	24.0	0.87	
1	1060	6660	6863	6484	6390	6295	6086	5816	5533	4869	3572	-	-	-	-	-	-	-	-	-		
			26.0	0.84	25.0	0.86	25.0	0.86	25.0	0.87	24.0	0.88	24.0	0.88	24.0	0.89	24.0	0.90	24.0	0.90	25.0	0.90
	1090	6849	7057	6689	6597	6505	6311	6059	5784	5199	3982	-	-	-	-	-	-	-	-	-		
			29.0	0.91	28.0	0.93	27.0	0.94	27.0	0.94	26.0	0.95	25.0	0.96	25.0	0.97	25.0	0.98	25.0	0.98	26.0	0.97
1110	6974	7186	6825	6735	6644	6459	6221	5951	5416	4251	-	-	-	-	-	-	-	-	-			
		30.0	0.96	29.0	0.98	28.0	0.99	28.0	0.99	27.0	1.00	26.0	1.01	26.0	1.02	26.0	1.03	26.0	1.03	27.0	1.02	
1124	7062	7277	6920	6831	6742	6563	6333	6066	5567	4426	-	-	-	-	-	-	-	-	-			
		31.0	1.00	29.0	1.02	29.0	1.02	29.0	1.03	28.0	1.04	27.0	1.05	27.0	1.06	27.0	1.07	27.0	1.07			

See notes on page 18.

**BLL30 | BELT DRIVE**



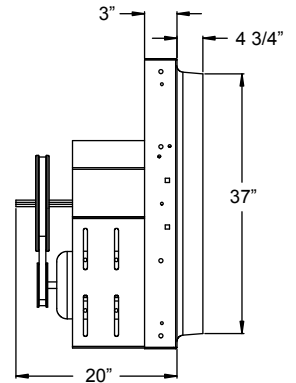
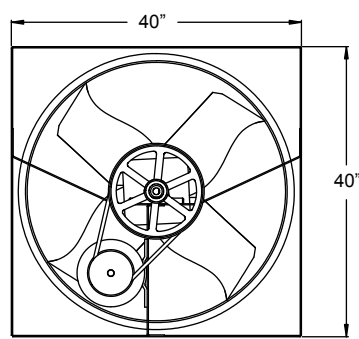
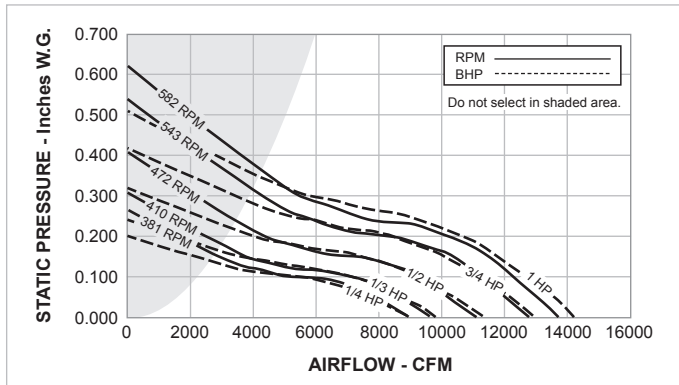
Carbon Steel Panel = 16 Gage	Galv. Steel Web = 10 Gage	Wall Opening = 34 3/4" SQ.	Wall Shutter ID = 34" SQ.
Max. Motor Frame Size = 56	Peak BHP = (RPM/741) <sup>3</sup>	Max. RPM = 826 (1 HP)	Est. Ship Weight = 110 lbs.

HP	RPM	Tip Speed FPM	0.000" SP		0.100" SP		0.125" SP		0.150" SP		0.200" SP		0.250" SP		0.300" SP		0.375" SP		0.500" SP			
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP
1/4	420	3299	5331	2695	1694	1139	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	445	3495	5648	3612	2296	1581	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			12.5	0.16	11	0.16	12.5	0.16	12.5	0.17	-	-	-	-	-	-	-	-	-	-	-	-
	460	3613	5838	3952	2684	1854	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			13.3	0.17	11.6	0.18	13.3	0.17	13.3	0.18	-	-	-	-	-	-	-	-	-	-	-	-
	475	3731	6029	4265	3217	2212	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			14.2	0.19	12.3	0.2	13.3	0.19	14.2	0.2	-	-	-	-	-	-	-	-	-	-	-	-
	490	3848	6219	4565	3861	2576	1404	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14.9			0.21	12.9	0.23	13.4	0.22	14.9	0.21	14.9	0.23	-	-	-	-	-	-	-	-	-	-	-
505	3966	6409	4861	4211	2978	1665	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		15.5	0.23	13.1	0.25	13.7	0.24	15.5	0.23	15.5	0.25	-	-	-	-	-	-	-	-	-	-	-
520	4084	6600	5127	4543	3508	1939	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		16.1	0.25	13.4	0.27	14.1	0.27	15.1	0.25	16.1	0.27	-	-	-	-	-	-	-	-	-	-	-
531	4170	6739	5320	4767	4029	2138	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		16.6	0.26	13.6	0.29	14.5	0.29	15	0.27	16.6	0.28	-	-	-	-	-	-	-	-	-	-	-
1/3	540	4241	6854	5476	4948	4306	2344	1431	-	-	-	-	-	-	-	-	-	-	-	-	-	
	560	4398	7108	5819	5344	4765	2835	1782	-	-	-	-	-	-	-	-	-	-	-	-	-	
			18.1	0.31	14.5	0.34	15.5	0.34	16.1	0.33	18.1	0.32	18.1	0.34	-	-	-	-	-	-	-	-
572	4492	7260	6007	5567	5025	3123	1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		18.8	0.33	15	0.36	15.9	0.36	16.6	0.36	18.8	0.33	18.8	0.36	-	-	-	-	-	-	-	-	-
1/2	590	4634	7488	6286	5884	5389	3676	2324	1540	-	-	-	-	-	-	-	-	-	-	-	-	
	610	4791	7742	6594	6231	5787	4504	2776	1893	-	-	-	-	-	-	-	-	-	-	-	-	
			21.5	0.4	17.1	0.43	17.8	0.44	18.8	0.43	19.9	0.41	21.5	0.42	21.5	0.44	-	-	-	-	-	-
	630	4948	7996	6899	6567	6158	5125	3264	2249	-	-	-	-	-	-	-	-	-	-	-	-	
			22.4	0.44	17.4	0.47	18.1	0.48	19.1	0.48	20.3	0.47	22.4	0.45	22.4	0.48	-	-	-	-	-	-
	645	5066	8186	7126	6801	6422	5466	3621	2522	-	-	-	-	-	-	-	-	-	-	-	-	
23.1			0.47	17.9	0.5	18.5	0.51	19.3	0.51	20.6	0.51	23.1	0.48	23.1	0.5	-	-	-	-	-	-	
657	5160	8339	7299	6988	6632	5732	4020	2762	1675	-	-	-	-	-	-	-	-	-	-	-		
		23.7	0.5	18.5	0.53	18.9	0.54	19.6	0.54	21	0.54	23.4	0.51	23.7	0.53	23.7	0.57	-	-	-	-	
660	5184	8377	7341	7034	6684	5793	4123	2837	1729	-	-	-	-	-	-	-	-	-	-	-		
		23.8	0.51	18.6	0.53	19	0.54	19.7	0.55	21.1	0.55	23.3	0.51	23.8	0.53	23.8	0.57	-	-	-	-	
675	5301	8567	7551	7265	6943	6097	4704	3208	1994	-	-	-	-	-	-	-	-	-	-	-		
		24.6	0.54	19.5	0.57	19.7	0.58	20.3	0.59	21.8	0.59	23.2	0.56	24.6	0.56	24.6	0.6	-	-	-	-	
695	5459	8821	7830	7571	7270	6497	5509	3692	2341	-	-	-	-	-	-	-	-	-	-	-		
		25.9	0.59	21.2	0.62	21	0.63	21.4	0.64	22.8	0.64	23.6	0.62	25.9	0.6	25.9	0.64	-	-	-	-	
710	5576	9011	8038	7799	7504	6793	5862	4067	2618	-	-	-	-	-	-	-	-	-	-	-		
		27	0.63	22.8	0.66	22.4	0.67	22.8	0.68	24	0.69	24.6	0.67	27	0.63	27	0.68	-	-	-	-	
730	5733	9265	8314	8097	7814	7156	6308	4756	2980	-	-	-	-	-	-	-	-	-	-	-		
		28.6	0.69	25.1	0.72	24.6	0.72	24.8	0.74	26	0.75	26.8	0.74	27.6	0.7	28.6	0.72	-	-	-	-	
745	58541	9456	8520	8307	8044	7420	6621	5417	3348	-	-	-	-	-	-	-	-	-	-	-		
		30.1	0.73	27.1	0.76	26.6	0.77	26.6	0.78	27.7	0.79	28.7	0.79	29.2	0.75	30.1	0.76	-	-	-	-	
756	5938	9595	8671	8461	8212	7612	6844	5908	3619	1887	-	-	-	-	-	-	-	-	-	-		
		31.7	0.76	28.6	0.8	28.1	0.8	27.9	0.81	29	0.83	30.3	0.82	30.6	0.79	31.7	0.79	31.7	0.87	-	-	
1	770	6048	9773	8862	8656	8425	7854	7124	6239	3959	2136	-	-	-	-	-	-	-	-	-		
	790	6205	10027	9134	8934	8728	8198	7520	6695	4436	2487	-	-	-	-	-	-	-	-	-	-	
			33.1	0.87	33.1	0.91	29.3	0.91	28.8	0.92	29.6	0.94	31.1	0.94	31.5	0.93	33.1	0.87	33.1	0.96	-	-
	810	6362	10281	9406	9210	9015	8512	7891	7129	5107	2842	-	-	-	-	-	-	-	-	-	-	
34.2			0.94	34.2	0.98	30.3	0.98	29.8	0.99	29.6	1.01	30.5	1.02	31.3	1.01	33.3	0.95	34.2	1.01	-	-	

See notes on page 18.



**BLL36 | BELT DRIVE**



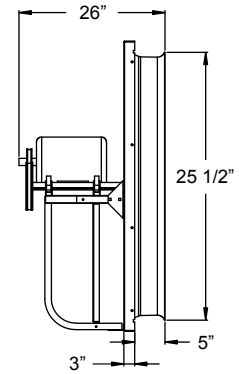
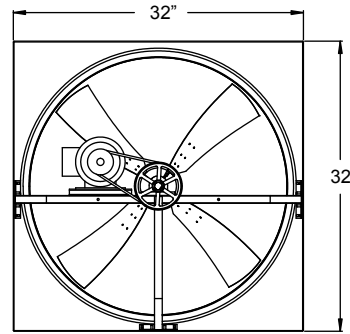
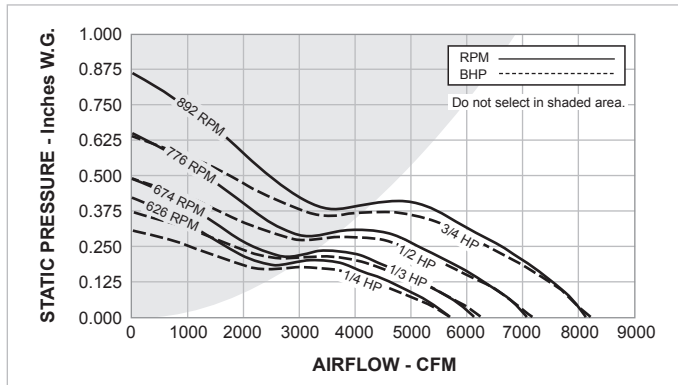
Carbon Steel Panel = 16 Gage	Galv. Steel Web = 10 Gage	Wall Opening = 40 3/4" SQ.	Wall Shutter ID = 40" SQ.
Max. Motor Frame Size = 56	Peak BHP = (RPM/526) <sup>3</sup>	Max. RPM = 619 (1 HP)	Est. Ship Weight = 180 lbs.

HP	RPM	Tip Speed FPM	0.000" SP		0.100" SP		0.125" SP		0.150" SP		0.200" SP		0.250" SP		0.300" SP		0.350" SP	
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP
1/4	315	2944	7.2	0.14	7.7	0.16	-	-	-	-	-	-	-	-	-	-	-	-
	325	3038	7.7	0.16	8.0	0.18	-	-	-	-	-	-	-	-	-	-	-	-
	334	3122	8.0	0.17	8.3	0.19	-	-	-	-	-	-	-	-	-	-	-	-
	344	3215	8.3	0.19	8.6	0.20	8.9	0.22	-	-	-	-	-	-	-	-	-	-
	356	3327	8.8	0.21	9.0	0.21	9.4	0.24	-	-	-	-	-	-	-	-	-	-
	366	3421	9.2	0.22	9.3	0.22	9.8	0.25	-	-	-	-	-	-	-	-	-	-
	376	3514	9.7	0.24	9.5	0.24	10.1	0.26	10.4	0.29	-	-	-	-	-	-	-	-
	381	3561	9.9	0.25	9.6	0.26	10.3	0.27	10.6	0.29	-	-	-	-	-	-	-	-
1/3	385	3598	10.1	0.26	9.7	0.27	10.4	0.27	10.7	0.30	-	-	-	-	-	-	-	-
	390	3645	10.4	0.27	9.9	0.28	10.5	0.28	10.9	0.31	-	-	-	-	-	-	-	-
	400	3738	10.9	0.29	10.2	0.31	10.9	0.30	11.4	0.33	-	-	-	-	-	-	-	-
	410	3832	11.4	0.31	10.6	0.33	11.3	0.31	11.8	0.34	-	-	-	-	-	-	-	-
1/2	420	3925	12.0	0.34	10.9	0.36	11.6	0.34	12.2	0.36	-	-	-	-	-	-	-	-
	430	4019	12.6	0.36	11.5	0.38	11.8	0.38	12.6	0.37	-	-	-	-	-	-	-	-
	440	4112	13.2	0.39	12.1	0.41	12.3	0.41	13.1	0.39	13.8	0.45	-	-	-	-	-	-
	460	4299	14.5	0.44	13.3	0.47	13.2	0.47	13.9	0.44	15.0	0.50	-	-	-	-	-	-
	472	4411	15.3	0.48	14.2	0.50	13.8	0.51	14.3	0.50	15.6	0.52	-	-	-	-	-	-
	482	4505	16.0	0.51	14.9	0.53	14.6	0.54	14.9	0.53	16.1	0.55	-	-	-	-	-	-
3/4	490	4580	16.5	0.54	15.4	0.56	15.1	0.57	15.3	0.56	16.5	0.56	17.1	0.63	-	-	-	-
	500	4673	17.2	0.57	16.2	0.60	15.8	0.60	15.8	0.60	17.0	0.59	17.7	0.66	-	-	-	-
	510	4767	17.9	0.60	16.8	0.63	16.5	0.64	16.3	0.64	17.5	0.61	18.2	0.73	-	-	-	-
	525	4907	18.7	0.66	17.7	0.69	17.4	0.69	17.1	0.70	18.1	0.65	18.9	0.73	-	-	-	-
	543	5075	18.9	0.73	18.4	0.76	18.2	0.76	18.0	0.77	18.3	0.76	19.3	0.77	19.8	0.85	-	-
	550	5140	19.1	0.76	18.6	0.79	18.6	0.79	18.4	0.80	18.6	0.79	19.4	0.79	20.0	0.87	-	-
1	570	5327	19.5	0.84	19.5	0.87	19.5	0.88	19.4	0.89	19.4	0.89	20.0	0.85	20.0	0.94	-	-
	582	5440	19.8	0.90	20.0	0.93	20.0	0.94	20.0	0.94	19.9	0.95	20.0	0.90	21.0	0.98	21.0	1.05

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See notes on page 18.

**BHM24B | BELT DRIVE**

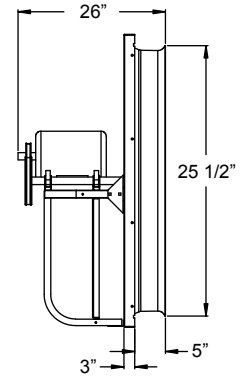
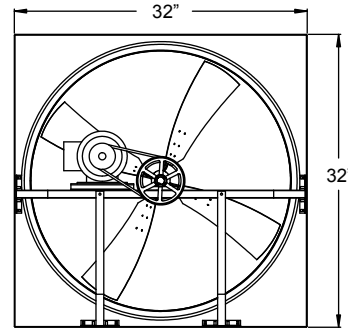
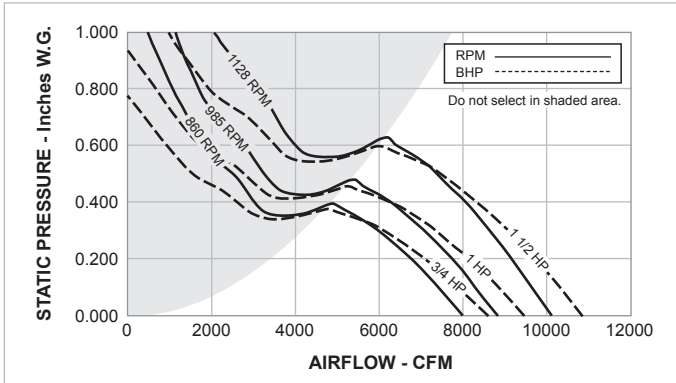


Galv. Steel Panel = 16 Gage	Galv. Steel Mtr. Plate = 12 Gage	Galv. Steel Structure = 12 Gage	Wall Opening = 32 1/4" SQ.
Max. Motor Frame Size = 184T	Peak BHP = (RPM/934) <sup>3</sup>	Max. RPM = 946 (3/4 HP)	Est. Ship Weight = 120 lbs.

HP	RPM	Tip Speed FPM	0.000" SP		0.100" SP		0.125" SP		0.200" SP		0.250" SP		0.375" SP	
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP
1/4	575	3766	8.0	0.20	6.9	0.21	6.7	0.22	-	-	-	-	-	-
	626	4100	9.3	0.25	8.3	0.27	8.0	0.28	7.3	0.30	-	-	-	-
1/3	650	4258	10.1	0.28	9.1	0.30	8.7	0.31	7.9	0.32	-	-	-	-
	674	4415	10.9	0.31	10.0	0.33	9.6	0.34	8.7	0.35	-	-	-	-
1/2	710	4651	13.5	0.37	12.5	0.39	12.0	0.39	10.3	0.41	9.50	0.43	-	-
	745	4880	14.5	0.42	13.7	0.45	13.2	0.45	11.6	0.47	10.5	0.48	-	-
	776	5083	14.6	0.48	14.2	0.50	13.8	0.51	12.3	0.53	11.4	0.54	-	-
3/4	805	5273	15.0	0.54	14.6	0.56	14.2	0.56	13.0	0.58	12.2	0.78	-	-
	835	5469	15.8	0.60	15.4	0.62	15.2	0.63	14.0	0.65	13.2	0.66	-	-
	865	5666	17.4	0.66	16.9	0.69	16.7	0.70	15.5	0.72	14.7	0.73	12.9	0.78
	892	5843	18.7	0.73	18.3	0.76	18.2	0.76	17.0	0.78	16.1	0.80	13.9	0.83

Performance shown is for installation type A: free inlet, free outlet. Power rating (BHP) does not include transmission losses. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: Free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the airstream.

**BHH24B | BELT DRIVE**

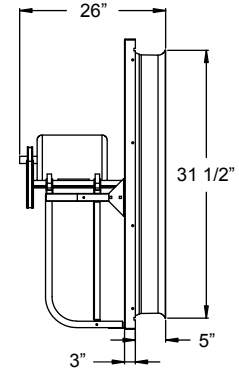
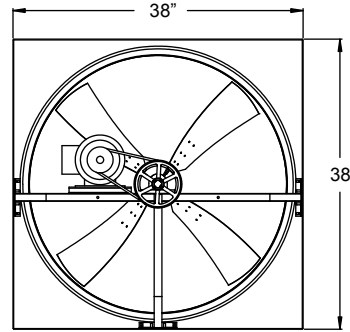
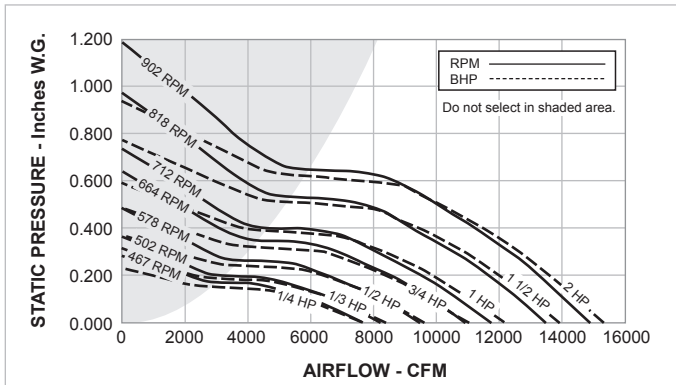


Galv. Steel Panel = 16 Gage	Galv. Steel Mtr. Plate = 12 Gage	Galv. Steel Structure = 12 Gage	Wall Opening = 32 1/4" SQ.
Max. Motor Frame Size = 184T	Peak BHP = (RPM/962) <sup>3</sup>	Max. RPM = 1216 (1 1/2 HP)	Est. Ship Weight = 130 lbs.

HP	RPM	Tip Speed FPM	0.000" SP		0.100" SP		0.125" SP		0.200" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP	
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP
3/4	800	5236	7156	0.43	6506	0.46	6322	0.47	5734	0.51	5244	0.53	-	-	-	-	-	-
	830	5432	7424	0.48	6797	0.52	6631	0.52	6064	0.56	5623	0.58	-	-	-	-	-	-
	860	5629	7692	0.54	7088	0.57	6936	0.58	6391	0.61	5997	0.64	-	-	-	-	-	-
1	935	6120	8363	0.69	7807	0.73	7668	0.74	7192	0.77	6857	0.79	5814	0.86	-	-	-	-
	945	6185	8453	0.71	7902	0.75	7765	0.76	7298	0.79	6966	0.82	5973	0.88	-	-	-	-
	955	6250	8542	0.73	7997	0.77	7861	0.78	7403	0.82	7075	0.84	6103	0.91	-	-	-	-
	965	6316	8632	0.76	8093	0.80	7958	0.81	7508	0.84	7183	0.87	6232	0.93	-	-	-	-
	975	6381	8721	0.78	8188	0.82	8054	0.83	7612	0.86	7291	0.89	6361	0.96	-	-	-	-
	985	6447	8810	0.81	8282	0.85	8150	0.86	7717	0.89	7399	0.92	6488	0.98	-	-	-	-
1 1/2	1010	6610	9034	0.87	8519	0.91	8390	0.92	7976	0.95	7666	0.98	6805	1.05	5535	1.15	-	-
	1030	6741	9213	0.92	8708	0.96	8582	0.97	8183	1.01	7879	1.03	7056	1.10	5879	1.20	-	-
	1050	6872	9392	0.98	8897	1.02	8773	1.03	8389	1.06	8090	1.09	7304	1.16	6218	1.25	-	-
	1070	7003	9571	1.03	9085	1.08	8963	1.09	8594	1.12	8300	1.15	7550	1.22	6553	1.30	-	-
	1090	7134	9750	1.09	9272	1.14	9153	1.15	8795	1.18	8510	1.21	7791	1.28	6820	1.35	-	-
	1110	7265	9929	1.15	9460	1.20	9343	1.21	8991	1.24	8718	1.27	8012	1.34	7141	1.42	-	-
	1128	7383	10090	1.21	9628	1.26	9513	1.27	9167	1.30	8905	1.33	8211	1.40	7372	1.48	6167	1.61

Performance shown is for installation type A: free inlet, free outlet. Power rating (BHP) does not include transmission losses. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: Free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the airstream.

**BHM30B | BELT DRIVE**

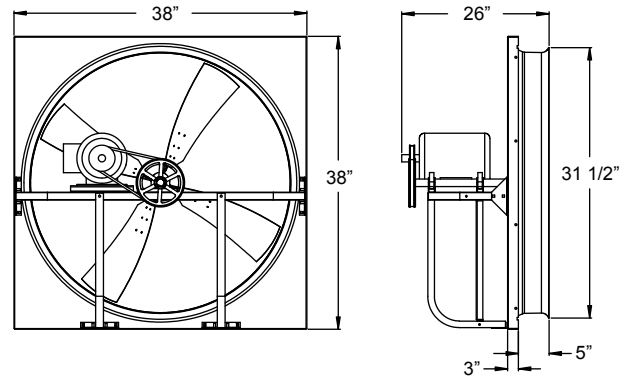
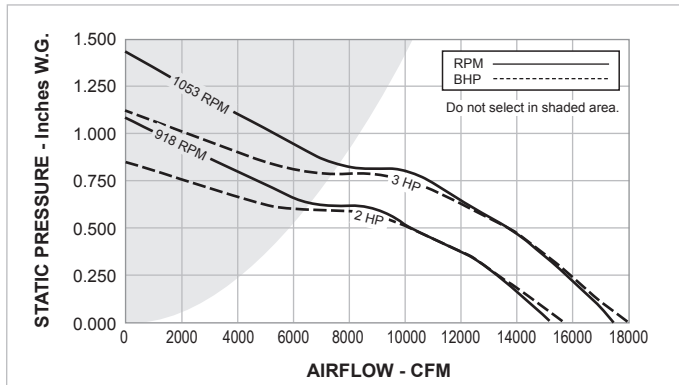


Galv. Steel Panel = 16 Gage	Galv. Steel Mtr. Plate = 12 Gage	Galv. Steel Structure = 12 Gage	Wall Opening = 38 3/4" SQ.
Max. Motor Frame Size = 184T	Peak BHP = (RPM/700) <sup>3</sup>	Max. RPM = 902 (2 HP)	Est. Ship Weight = 140 lbs.

HP	RPM	Tip Speed FPM	0.000" SP		0.100" SP		0.125" SP		0.200" SP		0.250" SP		0.375" SP	
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP
1/4	400	3246	6.1	0.16	-	-	-	-	-	-	-	-	-	-
	467	3790	7.9	0.26	8.5	0.30	-	-	-	-	-	-	-	-
1/3	485	3936	8.4	0.29	9.0	0.33	-	-	-	-	-	-	-	-
	502	4074	8.9	0.32	9.5	0.37	9.6	0.38	-	-	-	-	-	-
1/2	525	4261	9.5	0.37	10.1	0.41	10.3	0.43	-	-	-	-	-	-
	550	4464	10.3	0.42	10.9	0.47	11.1	0.48	-	-	-	-	-	-
	578	4691	11.2	0.49	11.8	0.54	11.9	0.55	-	-	-	-	-	-
3/4	615	4991	12.4	0.59	13.0	0.64	13.2	0.66	-	-	-	-	-	-
	645	5235	13.5	0.68	14.1	0.74	14.2	0.75	14.8	0.79	-	-	-	-
1	664	5389	14.2	0.74	14.8	0.80	14.9	0.82	15.5	0.86	-	-	-	-
	685	5559	15.0	0.82	15.5	0.87	15.7	0.89	16.2	0.94	-	-	-	-
	700	5681	15.5	0.87	16.1	0.93	16.3	0.95	16.8	0.99	17.0	1.02	-	-
	712	5778	16.0	0.92	16.6	0.98	16.8	0.99	17.3	1.04	17.6	1.07	-	-
1 1/2	740	6006	17.2	1.03	17.6	1.09	17.9	1.11	18.3	1.16	18.7	1.19	-	-
	775	6290	18.5	1.18	18.9	1.25	19.1	1.26	19.5	1.32	19.8	1.35	-	-
	800	6493	19.5	1.30	19.8	1.37	20.0	1.38	20.5	1.44	20.7	1.48	-	-
	818	6639	20.2	1.39	20.5	1.46	20.7	1.48	21.1	1.53	21.3	1.57	-	-
2	845	6858	21.3	1.53	21.6	1.60	21.6	1.62	22.1	1.68	22.2	1.72	22.6	1.81
	865	7020	22.1	1.65	22.3	1.71	22.4	1.73	22.8	1.79	23.0	1.83	23.3	1.92
	885	7182	23.0	1.76	23.2	1.83	23.2	1.85	23.6	1.91	23.7	1.95	24.1	2.05
	902	7320	23.7	1.87	23.9	1.94	23.9	1.96	24.3	2.02	24.4	2.06	24.7	2.16

Performance shown is for installation type A: free inlet, free outlet. Power rating (BHP) does not include transmission losses. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: Free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the airstream.

**BHH30B | BELT DRIVE**

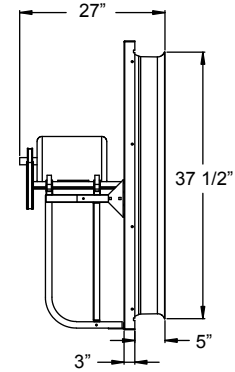
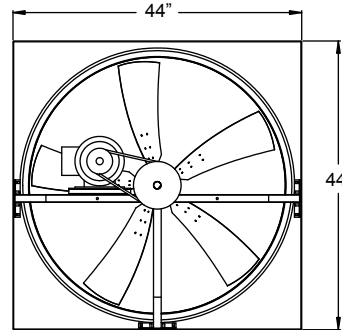
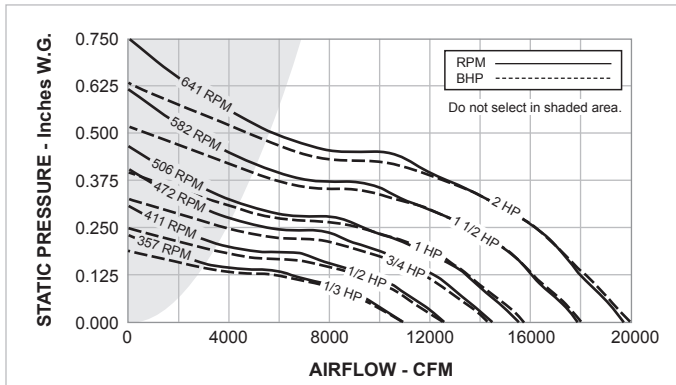


Galv. Steel Panel = 16 Gage	Galv. Steel Mtr. Plate = 12 Gage	Galv. Steel Structure = 12 Gage	Wall Opening = 38 1/4" SQ.
Max. Motor Frame Size = 184T	Peak BHP = (RPM/708) <sup>3</sup>	Max. RPM = 1053 (3 HP)	Est. Ship Weight = 150 lbs.

HP	RPM	Tip Speed FPM	0.000" SP		0.100" SP		0.125" SP		0.200" SP		0.250" SP		0.375" SP		0.500" SP	
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP
3	950	7710	16232		15411		15206		14575		14151		12987			
			25.7	2.179	25.7	2.255	25.7	2.274	25.9	2.338	26	2.381	26.3	2.490		
	975	7913	16660		15859		15659		15046		14634		13515		12114	
			26.7	2.356	26.7	2.434	26.7	2.453	26.8	2.517	26.9	2.562	27.1	2.674	27.1	2.773
	1000	8116	17087		16306		16111		15516		15113		14039		12736	
		27.7	2.542	27.7	2.622	27.7	2.641	27.7	2.707	27.8	2.752	27.9	2.867	28	2.972	
	1025	8319	17514		16753		16562		15983		15591		14558		13351	
			28.8	2.737	28.8	2.819	28.8	2.839	28.7	2.905	28.8	2.952	28.8	3.070	28.8	3.181
	1030	8359	17599		16842		16652		16076		15686		14661		13473	
			29	2.777	29	2.860	29	2.880	28.9	2.946	29	2.993	29	3.111	29	3.224

Performance shown is for installation type A: free inlet, free outlet. Power rating (BHP) does not include transmission losses. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: Free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the airstream.

**BHM36B | BELT DRIVE**

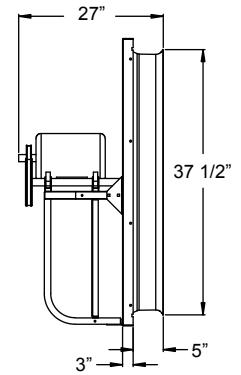
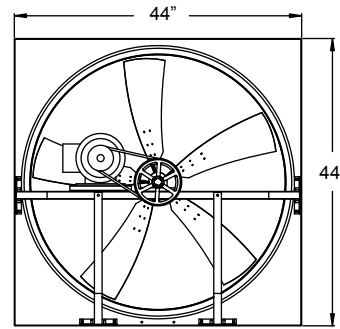
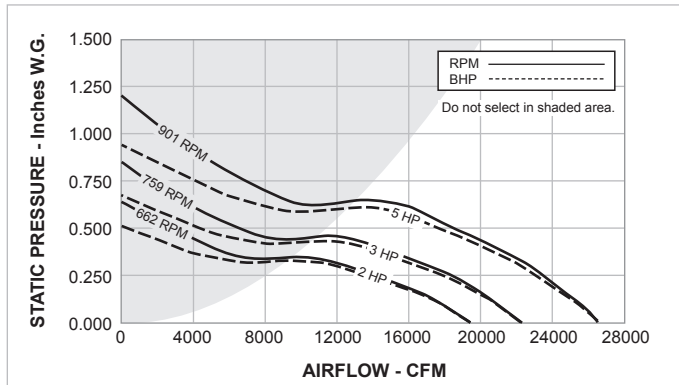


Galv. Steel Panel = 14 Gage	Galv. Steel Mtr. Plate = 12 Gage	Galv. Steel Structure = 12 Gage	Wall Opening = 44 3/4" SQ.
Max. Motor Frame Size = 215T	Peak BHP = (RPM/495) <sup>3</sup>	Max. RPM = 665 (2 HP)	Est. Ship Weight = 180 lbs.

HP	RPM	Tip Speed FPM	0.000" SP		0.100" SP		0.125" SP		0.200" SP		0.250" SP		0.375" SP		0.500" SP	
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP
1/3	300	2910	5.6	0.20	5.5	0.22	-	-	-	-	-	-	-	-	-	-
	357	3463	7.4	0.34	6.6	0.35	6.7	0.36	-	-	-	-	-	-	-	-
1/2	385	3735	8.4	0.42	7.6	0.43	7.5	0.44	-	-	-	-	-	-	-	-
	411	3987	9.4	0.51	8.5	0.53	8.3	0.53	9.6	0.57	-	-	-	-	-	-
3/4	440	4268	10.5	0.63	9.7	0.65	9.4	0.64	9.5	0.68	-	-	-	-	-	-
	472	4578	11.8	0.77	11.0	0.8	10.8	0.8	10.4	0.81	11.8	0.86	-	-	-	-
1	485	4705	12.3	0.84	11.7	0.86	11.5	0.87	10.9	0.87	11.4	0.93	-	-	-	-
	495	48020	12.8	0.89	12.2	0.92	12.0	0.93	11.3	0.92	11.8	0.97	-	-	-	-
	506	4908	13.3	0.95	12.7	0.98	12.5	0.99	11.9	0.98	12.1	1.01	-	-	-	-
1 1/2	530	5141	14.3	1.10	14.0	1.12	13.8	1.13	13.1	1.13	12.9	1.14	-	-	-	-
	555	5384	15.4	1.26	15.3	1.28	15.2	1.29	14.6	1.29	14.1	1.3	16.6	1.40	-	-
	582	5645	16.7	1.45	16.7	1.47	16.7	1.48	16.2	1.5	15.7	1.49	17.1	1.62	-	-
2	600	5820	17.6	1.59	17.7	1.61	17.7	1.62	17.3	1.65	16.8	1.63	16.7	1.74	-	-
	615	5966	18.3	1.71	18.5	1.73	18.6	1.74	18.2	1.78	17.8	1.76	17.3	1.83	-	-
	630	6111	19.1	1.84	19.3	1.86	19.4	1.89	19.2	1.91	18.8	1.89	18.0	1.93	-	-
	641	6218	19.6	1.94	19.9	1.96	20.0	1.97	19.9	2.01	19.5	2.00	18.5	2.03	21.0	2.16

Performance shown is for installation type A: free inlet, free outlet. Power rating (BHP) does not include transmission losses. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: Free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the airstream.

**BHH36B | BELT DRIVE**

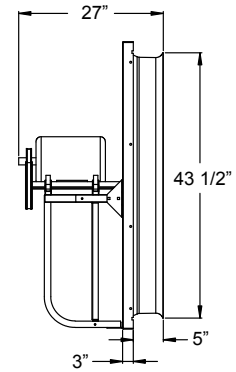
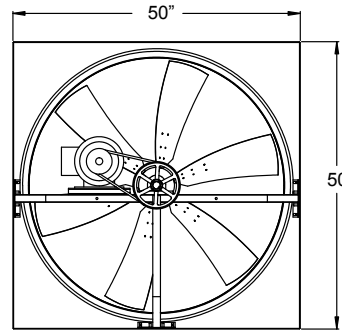
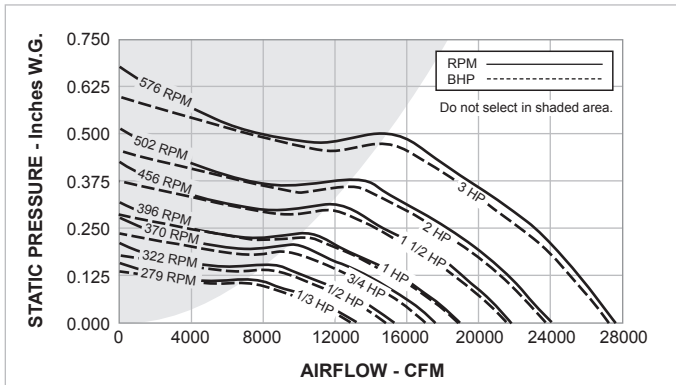


Galv. Steel Panel = 14 Gage	Galv. Steel Mtr. Plate = 12 Gage	Galv. Steel Structure = 12 Gage	Wall Opening = 44 3/4" SQ.
Max. Motor Frame Size = 215T	Peak BHP = (RPM/511) <sup>3</sup>	Max. RPM = 929 (5 HP)	Est. Ship Weight = 190 lbs.

HP	RPM	Tip Speed FPM	0.000" SP		0.100" SP		0.125" SP		0.200" SP		0.250" SP		0.375" SP		0.500" SP		.625" SP		0.750" SP	
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP
2	600	5820	17640	16310	15889	14627	13470	9971	-	-	-	-	-	-	-	-	-	-	-	-
			17.3	1.47	17.8	1.5	18.1	1.51	18.4	1.54	18.7	1.55	19.2	1.61	-	-	-	-	-	-
	620	6014	18228	16964	16557	15387	14347	11251	-	-	-	-	-	-	-	-	-	-	-	
			18.1	1.62	18.5	1.65	18.8	1.66	19.1	1.69	19.4	1.70	19.9	1.76	-	-	-	-	-	-
	640	6208	18816	17615	17220	16079	15148	12174	-	-	-	-	-	-	-	-	-	-	-	
		18.9	1.78	19.3	1.81	19.5	1.82	19.9	1.86	20.0	1.87	21.0	1.92	-	-	-	-	-	-	
	662	6421	19462	18327	17946	16834	16011	13196	-	-	-	-	-	-	-	-	-	-	-	
			19.8	1.97	20.0	2.00	20.0	2.01	21.0	2.05	21.0	2.07	21.0	2.11	-	-	-	-	-	
3	685	6645	20139	19064	18699	17617	16901	14257	10010	-	-	-	-	-	-	-	-	-	-	
			21.0	2.18	21.0	2.22	21.0	2.23	22.0	2.26	22.0	2.29	22.0	2.33	24.0	2.41	-	-	-	
	705	6839	20727	19682	19351	18292	17613	15164	12442	-	-	-	-	-	-	-	-	-		
			22.0	2.38	22.0	2.41	22.0	2.42	23.0	2.46	23.0	2.49	23.0	2.53	24.0	2.60	-	-	-	
	725	7033	21315	20299	20001	18963	18303	16060	13413	-	-	-	-	-	-	-	-	-		
			23.0	2.58	23.0	2.62	23.0	2.63	24.0	2.67	24.0	2.70	24.0	2.74	25.0	2.81	-	-	-	
	740	7178	21756	20760	20486	19463	18817	16724	14103	-	-	-	-	-	-	-	-			
			23.0	2.75	24.0	2.79	24.0	2.80	25.0	2.84	25.0	2.86	25.0	2.91	26.0	2.97	-	-		
	759	7362	22314	21344	21098	20100	19464	17556	14986	-	-	-	-	-	-	-	-			
			24.0	2.97	25.0	3.01	25.0	3.02	26.0	3.05	26.0	3.08	26.0	3.13	27.0	3.19	-	-		
5	790	7663	23226	22293	22060	21134	20511	18796	16418	14027	-	-	-	-	-	-	-			
			26.0	3.34	26.0	3.39	26.0	3.40	27.0	3.44	27.0	3.46	27.0	3.52	28.0	3.57	29.0	3.65		
	820	7954	24108	23210	22985	22128	21516	19968	17777	15431	-	-	-	-	-	-	-			
			27.0	3.74	28.0	3.78	28.0	3.79	29.0	3.83	29.0	3.86	29.0	3.93	30.0	3.98	30.0	4.05		
	850	8245	24990	24123	23907	23114	22520	21105	19114	16820	14229	-	-	-	-	-	-			
			29.0	4.17	29.0	4.21	30.0	4.22	30.0	4.26	31.0	4.29	31.0	4.36	31.0	4.41	32.0	4.48		
	880	8536	25872	25035	24826	24095	23521	22143	20427	18208	16060	-	-	-	-	-				
			30.0	4.62	31.0	4.67	31.0	4.68	32.0	4.72	32.0	4.75	32.0	4.83	32.0	4.87	33.0	4.94		
	901	8740	26489	25672	25467	24778	24218	22864	21261	19163	17029	-	-	-	-	-				
			31.0	4.96	32.0	5.01	32.0	5.02	33.0	5.06	34.0	5.09	34.0	5.17	34.0	5.22	34.0	5.29		

Performance shown is for installation type A: free inlet, free outlet. Power rating (BHP) does not include transmission losses. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: Free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the airstream.

**BHM42B | BELT DRIVE**



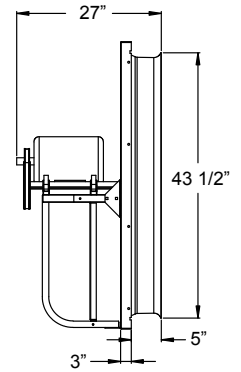
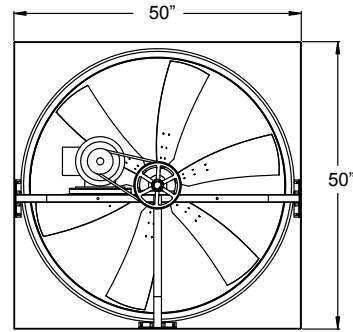
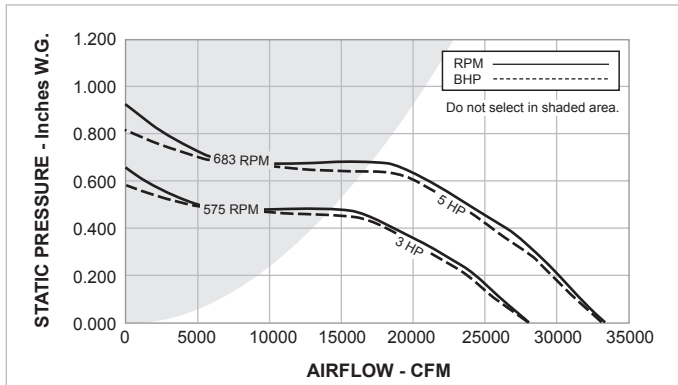
Galv. Steel Panel = 14 Gage	Galv. Steel Mtr. Plate = 12 Gage	Galv. Steel Structure = 12 Gage	Wall Opening = 50 3/4" SQ.
Max. Motor Frame Size = 215T	Peak BHP = (RPM/388) <sup>3</sup>	Max. RPM = 583 (3 HP)	Est. Ship Weight = 225 lbs.

HP	RPM	Tip Speed FPM	0.000" SP		0.100" SP		0.125" SP		0.200" SP		0.250" SP		0.300" SP		0.375" SP		0.500" SP	
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP
1/3	260	2930	12463	7191	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	279	3144	13374	8659	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1/2	300	3381	14381	10292	8779	-	-	-	-	-	-	-	-	-	-	-	-	-
	322	3629	15436	11854	10477	-	-	-	-	-	-	-	-	-	-	-	-	-
3/4	350	3944	16778	13727	12550	-	-	-	-	-	-	-	-	-	-	-	-	-
	370	4170	17737	14950	13949	10376	-	-	-	-	-	-	-	-	-	-	-	-
1	380	4283	18216	15518	14638	11145	-	-	-	-	-	-	-	-	-	-	-	-
	390	4395	18695	16081	15266	11885	-	-	-	-	-	-	-	-	-	-	-	-
	396	4463	18983	16417	15638	12360	-	-	-	-	-	-	-	-	-	-	-	-
1 1/2	420	4733	20134	17749	17075	14238	12097	-	-	-	-	-	-	-	-	-	-	-
	440	4959	21092	18844	18201	15682	13601	-	-	-	-	-	-	-	-	-	-	-
	456	5139	21859	19702	19093	16808	14865	12943	-	-	-	-	-	-	-	-	-	-
2	470	5297	22531	20449	19867	17782	15951	13992	-	-	-	-	-	-	-	-	-	-
	485	5466	23250	21243	20690	18791	17040	15139	-	-	-	-	-	-	-	-	-	-
	495	5579	23729	21771	21234	19415	17751	15930	-	-	-	-	-	-	-	-	-	-
	502	5658	24065	22139	21609	19849	18244	16478	13791	-	-	-	-	-	-	-	-	-
3	525	5917	25167	23344	22837	21242	19848	18215	15608	-	-	-	-	-	-	-	-	-
	545	6142	26126	24385	23896	22374	21182	19639	17144	-	-	-	-	-	-	-	-	-
	560	6311	26845	25162	24687	23216	22114	20692	18325	-	-	-	-	-	-	-	-	-
	576	6492	27612	25988	25526	24107	23099	21804	19564	15578	-	-	-	-	-	-	-	-

Performance shown is for installation type A: free inlet, free outlet. Power rating (BHP) does not include transmission losses. The sound ratings shown are for loudness values in fan sones at 50' (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: Free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the airstream.



**BHH42B | BELT DRIVE**

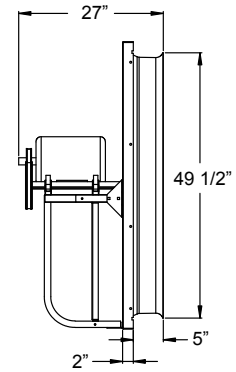
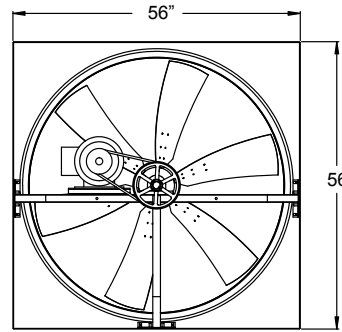
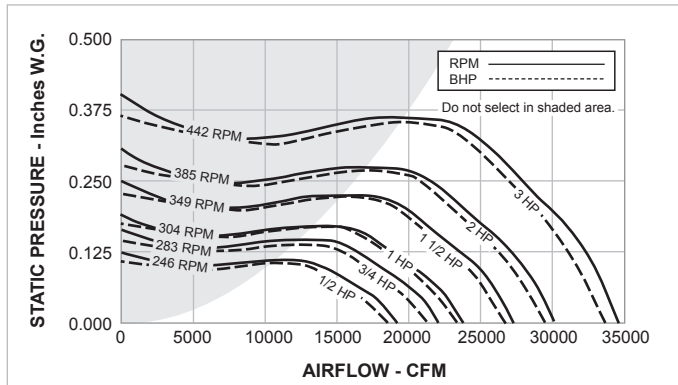


Galv. Steel Panel = 14 Gage	Galv. Steel Mtr. Plate = 12 Gage	Galv. Steel Structure = 12 Gage	Wall Opening = 50 1/4" SQ.
Max. Motor Frame Size = 215T	Peak BHP = (RPM/387) <sup>3</sup>	Max. RPM = 699 (5 HP)	Est. Ship Weight = 245 lbs.

HP	RPM	Tip Speed FPM	0.000" SP		0.100" SP		0.125" SP		0.200" SP		0.250" SP		0.300" SP		0.375" SP		0.500" SP		0.625" SP		
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones
3	525	5917	25530	23361	22879	21213	19799	18129	15429	-	-	-	-	-	-	-	-	-	-	-	-
			22.0	2.31	23.0	2.36	23.0	2.36	23.0	2.39	23.0	2.41	22.0	2.38	21.0	2.37	-	-	-	-	-
	535	6029	26017	23879	23406	21805	20484	18860	16244	-	-	-	-	-	-	-	-	-	-	-	-
			23.0	2.45	23.0	2.50	23.0	2.50	24.0	2.53	23.0	2.55	23.0	2.52	22.0	2.37	-	-	-	-	-
	550	6199	26746	24653	24193	22687	21499	19941	17450	-	-	-	-	-	-	-	-	-	-	-	-
			24.0	2.66	24.0	2.71	24.0	2.71	25.0	2.74	24.0	2.78	24.0	2.75	23.0	2.72	-	-	-	-	-
565	6368	27475	25433	24977	23561	22405	20989	18635	-	-	-	-	-	-	-	-	-	-	-	-	
		25.0	2.88	25.0	2.94	25.0	2.94	25.0	2.96	26.0	3.00	25.0	2.99	24.0	2.95	-	-	-	-	-	-
575	6480	27962	25955	25497	24141	23005	21681	19384	-	-	-	-	-	-	-	-	-	-	-	-	
		26.0	3.04	26.0	3.09	26.0	3.10	26.0	3.11	26.0	3.15	26.0	3.16	25.0	3.12	-	-	-	-	-	-
5	600	6762	29178	27255	26794	25527	24488	23387	21221	17224	-	-	-	-	-	-	-	-	-	-	
			27.0	3.45	28.0	3.51	28.0	3.52	28.0	3.53	28.0	3.56	28.0	3.61	27.0	3.56	26.0	3.57	-	-	-
	625	7044	30393	28547	28086	26867	25953	24908	23001	19342	-	-	-	-	-	-	-	-	-	-	
			29.0	3.90	29.0	3.96	29.0	3.98	29.0	3.99	30.0	4.01	30.0	4.06	29.0	4.05	28.0	4.00	-	-	-
	645	7269	31366	29577	29130	27931	27113	26100	24387	20935	-	-	-	-	-	-	-	-	-	-	
			30.0	4.28	31.0	4.35	31.0	4.37	31.0	4.38	31.0	4.39	31.0	4.44	31.0	4.46	30.0	4.39	-	-	-
665	7495	32338	30604	30170	28989	28227	27281	25753	22461	18633	-	-	-	-	-	-	-	-	-		
		32.0	4.70	32.0	4.76	32.0	4.78	32.0	4.80	32.0	4.80	32.0	4.85	33.0	4.91	32.0	4.82	31.0	4.92	-	-
683	7697	33214	31525	31102	29936	29194	28334	26900	23788	20347	-	-	-	-	-	-	-	-	-		
		33.0	5.09	33.0	5.16	33.0	5.17	34.0	5.20	34.0	5.20	34.0	5.23	34.0	5.31	33.0	5.24	33.0	5.22	-	-

Performance shown is for installation type A: free inlet, free outlet. Power rating (BHP) does not include transmission losses. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: Free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the airstream.

**BHM48B | BELT DRIVE**

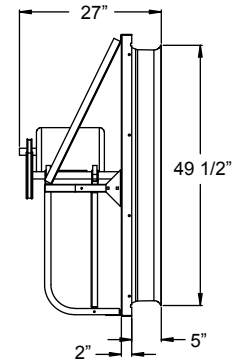
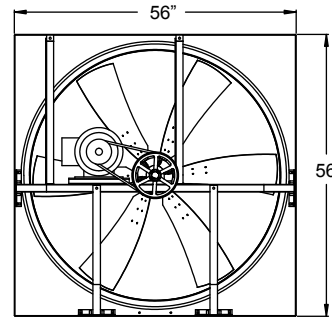
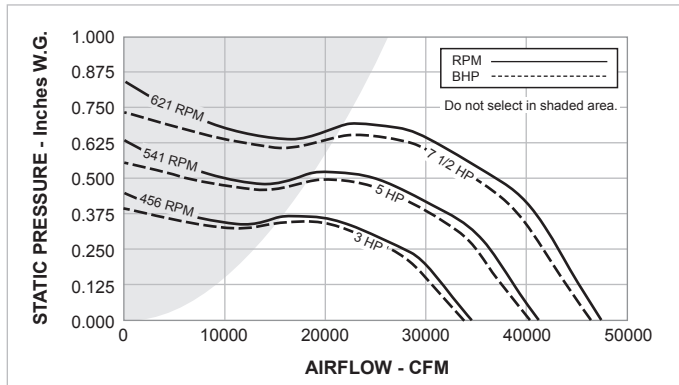


Galv. Steel Panel = 14 Gage	Galv. Steel Mtr. Plate = 12 Gage	Galv. Steel Structure = 12 Gage	Wall Opening = 57" SQ.
Max. Motor Frame Size = 215T	Peak BHP = (RPM/298) <sup>3</sup>	Max. RPM = 450 (3 HP)	Est. Ship Weight = 235 lbs.

HP	RPM	Tip Speed FPM	0.000" SP		0.100" SP		0.125" SP		0.200" SP		0.250" SP		0.300" SP	
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP
1/2	225	2882	6.5	0.43	-	-	-	-	-	-	-	-	-	-
	246	3151	7.6	0.56	8.7	0.55	-	-	-	-	-	-	-	-
3/4	265	3395	8.6	0.70	9.2	0.69	10.0	0.68	-	-	-	-	-	-
	283	3625	9.5	0.85	9.7	0.84	10.7	0.83	-	-	-	-	-	-
1	295	3779	10.2	0.96	10.1	0.95	11.0	0.95	-	-	-	-	-	-
	304	3894	10.7	1.05	10.4	1.04	11.3	1.04	-	-	-	-	-	-
1 1/2	320	4099	11.6	1.23	10.9	1.23	11.8	1.21	-	-	-	-	-	-
	335	4291	12.6	1.41	11.5	1.42	12.4	1.39	14.9	1.37	-	-	-	-
	349	4471	13.5	1.59	12.2	1.61	12.8	1.59	15.6	1.56	-	-	-	-
2	365	4676	14.5	1.82	13.3	1.84	13.3	1.83	15.7	1.79	-	-	-	-
	375	4804	15.1	1.97	13.9	2.00	13.7	1.99	15.9	1.95	17.7	1.92	-	-
	385	4932	15.7	2.13	14.6	2.16	14.3	2.16	16.2	2.11	18.1	2.09	-	-
3	400	5124	16.8	2.39	15.7	2.42	15.4	2.42	16.7	2.36	18.3	2.35	-	-
	415	5316	17.9	2.67	16.7	2.71	16.4	2.71	17.2	2.64	18.5	2.64	20.0	2.61
	430	5508	19.0	2.97	17.9	3.01	17.4	3.01	19.9	2.95	19.0	2.93	20.0	2.92
	442	5662	19.8	3.23	18.7	3.27	18.3	3.27	18.5	3.23	19.4	3.19	21.0	3.18

Performance shown is for installation type A: free inlet, free outlet. Power rating (BHP) does not include transmission losses. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: Free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the airstream.

**BHH48B | BELT DRIVE**

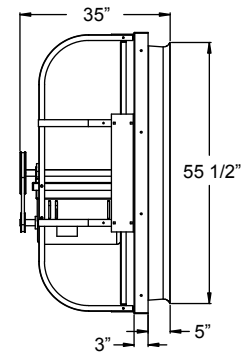
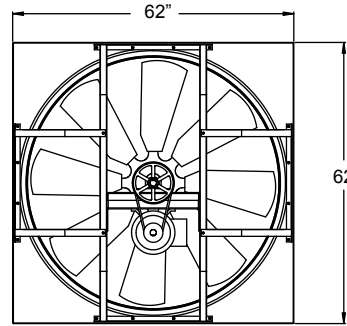
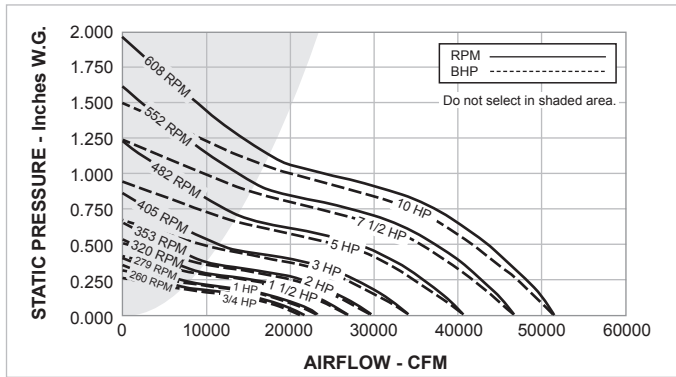


Galv. Steel Panel = 14 Gage	Galv. Steel Mtr. Plate = 12 Gage	Galv. Steel Structure = 12 Gage	Wall Opening = 57" SQ.
Max. Motor Frame Size = 215T	Peak BHP = (RPM/307) <sup>3</sup>	Max. RPM = 624 (7 1/2 HP)	Est. Ship Weight = 255 lbs.

HP	RPM	Tip Speed FPM	0.000" SP		0.100" SP		0.125" SP		0.200" SP		0.250" SP		0.300" SP		0.375" SP		0.500" SP		0.625" SP		
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	
3	400	5124	30576	2.15	27854	2.20	27180	2.21	24367	2.20	20747	2.15	-	-	-	-	-	-	-	-	
	420	5380	32105	2.49	29500	2.54	28881	2.54	26638	2.48	23551	2.50	19909	-	-	-	-	-	-	-	
	440	5636	33634	2.87	31136	2.91	30544	2.93	28614	2.92	26332	2.86	22985	-	-	-	-	-	-	-	
	456	5842	34857	3.19	32437	3.23	31866	3.25	30030	3.26	28331	3.16	25224	-	-	-	-	-	-	-	-
			20.0	3.19	21.0	3.23	21.0	3.25	21.0	3.26	21.0	3.26	22.0	3.16	-	-	-	-	-	-	-
5	475	6085	36309	3.61	33975	3.65	33427	3.67	31697	3.69	30349	3.68	27882	3.64	23178	-	-	-	-	-	
	495	6341	37838	4.08	35586	4.12	35061	4.14	33434	4.16	32263	4.17	30476	4.06	26131	-	-	-	-	-	
			23.0	4.08	24.0	4.12	24.0	4.14	24.0	4.16	24.0	4.16	24.0	4.17	25.0	4.06	-	-	-	-	-
	515	6597	39367	4.60	37191	4.63	36685	4.65	35156	4.71	34031	4.69	32689	4.57	28930	-	-	-	-	-	
	530	6789	40514	5.01	38397	5.05	37899	5.07	36426	5.13	35345	5.12	34248	5.10	31025	21858	-	-	-	-	-
25.0			5.01	26.0	5.05	26.0	5.07	27.0	5.13	27.0	5.12	27.0	5.10	28.0	5.05	32.0	5.05	-	-	-	
7 1/2	560	7174	41355	5.33	39281	5.36	38786	5.38	37344	5.45	36303	5.43	35232	5.43	32527	25495	-	-	-	-	
			26.0	5.33	27.0	5.36	27.0	5.38	28.0	5.45	28.0	5.45	28.0	5.43	29.0	5.43	31.0	5.34	-	-	-
	580	7430	42807	5.91	40803	5.95	40315	5.96	38921	6.03	37948	6.05	36913	6.04	34884	28531	-	-	-	-	
			27.0	5.91	28.0	5.95	28.0	5.96	29.0	6.03	29.0	6.05	30.0	6.03	30.0	6.04	32.0	6.51	-	-	-
	600	7686	44336	6.57	42401	6.60	41918	6.61	40572	6.69	39667	6.73	38668	6.71	36987	31355	-	-	-	-	
29.0			6.57	29.0	6.60	30.0	6.61	31.0	6.69	31.0	6.73	31.0	6.71	32.0	6.69	34.0	6.51	-	-	-	
45865			7.27	43995	7.31	43527	7.32	42214	7.39	41347	7.44	40408	7.44	38959	34154	27558	-	-	-		
610	7814	31.0	7.27	31.0	7.31	31.0	7.32	32.0	7.39	33.0	7.44	33.0	7.44	33.0	7.40	35.0	7.26	39.0	7.29		
		46629	7.64	44790	7.68	44330	7.69	43032	7.76	42180	7.81	41273	7.82	39848	35549	29378	-	-	-		
621	7955	31.0	7.64	32.0	7.68	32.0	7.69	33.0	7.76	34.0	7.81	34.0	7.82	34.0	7.79	36.0	7.69	39.0	7.66		
		47470	8.06	45663	8.10	45211	8.11	43930	8.18	43093	8.23	42221	8.25	40821	37068	31169	-	-	-		
			32.0	8.06	33.0	8.10	33.0	8.11	34.0	8.18	35.0	8.23	35.0	8.25	35.0	8.22	37.0	8.19	40.0	8.07	

Performance shown is for installation type A: free inlet, free outlet. Power rating (BHP) does not include transmission losses. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: Free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the airstream.

BHH54B | BELT DRIVE



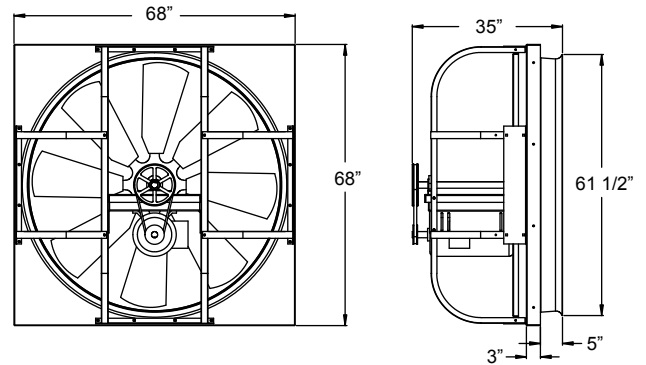
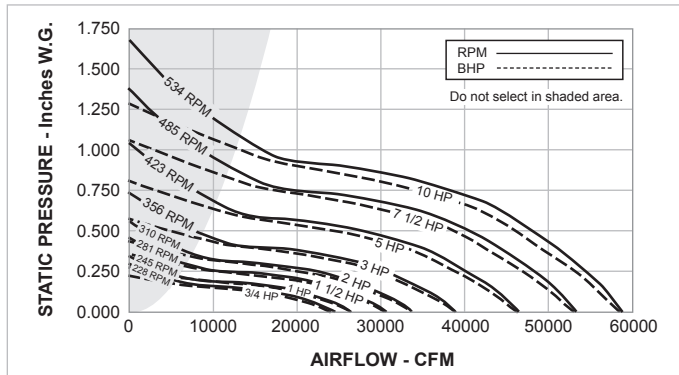
Galv. Steel Panel = 14 Gage	Galv. Steel Mtr. Plate = 10 Gage	Galv. Steel Structure = 12 Gage	Wall Opening = 63" SQ.
Max. Motor Frame Size = 284T	Peak BHP = (RPM/273) <sup>3</sup>	Max. RPM = 623 (10 HP)	Est. Ship Weight = 430 lbs.

HP	RPM	Tip Speed FPM	0.000" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		0.875" SP		1.000" SP		
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones
3/4	240	3458	9.4	0.62	9.3	0.67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	260	3747	10.8	0.79	10.7	0.85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1	270	3891	11.5	0.88	11.4	0.95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	279	4020	12.2	0.97	12.1	1.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1 1/2	295	4251	13.5	1.15	13.5	1.24	13.1	1.23	-	-	-	-	-	-	-	-	-	-	-	-	-
	310	4467	14.7	1.33	14.7	1.44	14.3	1.45	-	-	-	-	-	-	-	-	-	-	-	-	-
2	335	4287	16.8	1.68	16.7	1.80	16.4	1.83	-	-	-	-	-	-	-	-	-	-	-	-	-
	345	4971	17.7	1.84	17.6	1.96	17.4	1.99	-	-	-	-	-	-	-	-	-	-	-	-	-
3	370	5332	19.9	2.26	19.9	2.40	19.6	2.45	19.2	2.44	-	-	-	-	-	-	-	-	-	-	-
	385	5548	21.0	2.55	21.0	2.69	21.0	2.76	21.0	2.78	-	-	-	-	-	-	-	-	-	-	-
5	425	6124	24.0	3.43	24.0	3.59	26.0	3.71	25.0	3.73	24.0	3.70	-	-	-	-	-	-	-	-	-
	440	6340	25.0	3.81	26.0	3.98	27.0	4.11	27.0	4.13	26.0	4.14	-	-	-	-	-	-	-	-	-
7 1/2	500	7205	31.0	5.59	32.0	5.80	33.0	5.94	33.0	6.05	33.0	6.06	32.0	6.09	31.0	6.08	-	-	-	-	-
	515	7421	33.0	6.11	33.0	6.33	35.0	6.47	35.0	6.61	35.0	6.62	34.0	6.68	32.0	6.57	-	-	-	-	-
10	560	8070	39.0	7.85	39.0	8.09	41.0	8.26	41.0	8.43	41.0	8.50	40.0	8.52	39.0	8.58	38.0	8.46	-	-	-
	570	8214	40.0	8.28	41.0	8.52	42.0	8.7	42.0	8.87	42.0	8.96	42.0	8.98	41.0	9.05	39.0	8.96	-	-	-
10	580	8358	41.0	8.72	42.0	8.97	44.0	9.16	44.0	9.33	44.0	9.44	43.0	9.45	42.0	9.52	41.0	9.47	40.0	9.46	-
	590	8502	43.0	9.18	44.0	9.43	46.0	9.63	46.0	9.80	46.0	9.93	45.0	9.95	44.0	9.99	43.0	10.00	42.0	9.85	-
10	600	8646	45.0	9.66	45.0	9.91	47.0	10.11	48.0	10.29	48.0	10.44	47.0	10.46	46.0	10.49	45.0	10.54	44.0	10.41	-
	608	8761	46.0	10.05	47.0	10.31	49.0	10.51	49.0	10.69	49.0	10.87	48.0	10.88	47.0	10.91	46.0	10.99	45.0	10.86	-

See notes on page 27.

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**BHH60B | BELT DRIVE**



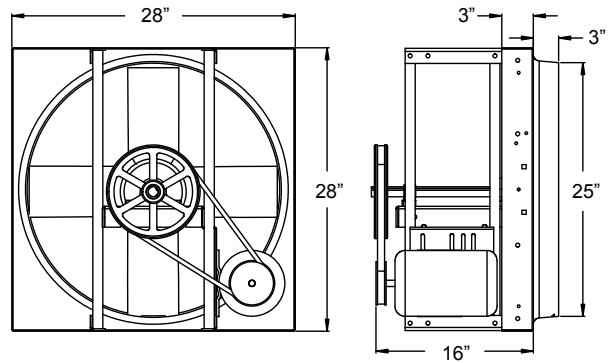
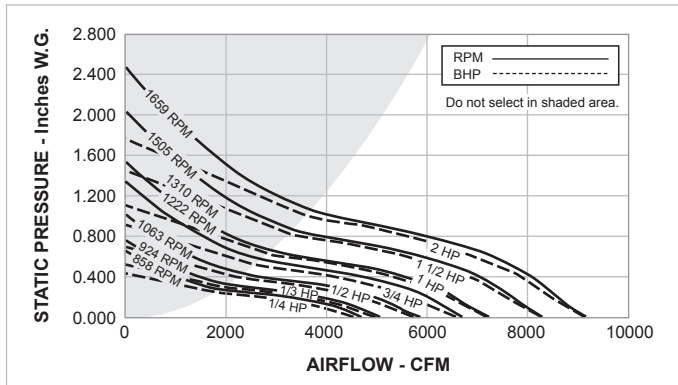
Galv. Steel Panel = 14 Gage	Galv. Steel Mtr. Plate = 10 Gage	Galv. Steel Structure = 12 Gage	Wall Opening = 69" SQ.
Max. Motor Frame Size = 284T	Peak BHP = (RPM/240) <sup>3</sup>	Max. RPM = 545 (10 HP)	Est. Ship Weight = 460 lbs.

HP	RPM	Tip Speed FPM	0.000" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		0.875" SP		1.000" SP		
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones
3/4	210	3356	22971		13646		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			9.8	0.62	9.9	0.66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	228	3643	24940		17920		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			11.3	0.79	11.4	0.84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1	235	3755	25706		19088		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			11.9	0.86	12.0	0.92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	245	3915	26800		20709		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			12.8	0.98	12.9	1.04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1 1/2	260	4155	28440		22938		7039		-	-	-	-	-	-	-	-	-	-	-	-	-
			14.2	1.17	14.3	1.24	14.4	1.26	-	-	-	-	-	-	-	-	-	-	-	-	-
	270	4315	29534		24360		8721		-	-	-	-	-	-	-	-	-	-	-	-	-
			15.1	1.31	15.2	1.39	15.4	1.37	-	-	-	-	-	-	-	-	-	-	-	-	-
	281	4490	30737		25903		13611		-	-	-	-	-	-	-	-	-	-	-	-	-
			16.2	1.48	16.2	1.57	16.5	1.57	-	-	-	-	-	-	-	-	-	-	-	-	-
2	290	4634	31722		27132		17165		-	-	-	-	-	-	-	-	-	-	-	-	-
			17.1	1.62	17.1	1.72	17.3	1.74	-	-	-	-	-	-	-	-	-	-	-	-	-
	300	4794	32816		28483		20158		-	-	-	-	-	-	-	-	-	-	-	-	-
			18.0	1.80	18.1	1.91	18.3	1.95	-	-	-	-	-	-	-	-	-	-	-	-	-
	310	4954	33910		29822		22604		-	-	-	-	-	-	-	-	-	-	-	-	-
			19.1	1.98	19.1	2.10	19.3	2.14	-	-	-	-	-	-	-	-	-	-	-	-	-
3	325	5194	35551		31808		25787		9625		-	-	-	-	-	-	-	-	-	-	-
			20.0	2.28	21.0	2.42	21.0	2.43	20.0	2.41	-	-	-	-	-	-	-	-	-	-	-
	335	5353	36644		33118		27430		11830		-	-	-	-	-	-	-	-	-	-	-
			21.0	2.50	22.0	2.65	22.0	2.66	21.0	2.59	-	-	-	-	-	-	-	-	-	-	-
	345	5513	37738		34366		29049		17018		-	-	-	-	-	-	-	-	-	-	-
			23.0	2.73	23.0	2.88	23.0	2.90	22.0	2.91	-	-	-	-	-	-	-	-	-	-	-
	356	5689	38942		35715		30753		21343		-	-	-	-	-	-	-	-	-	-	-
			24.0	3.00	24.0	3.16	25.0	3.18	24.0	3.21	-	-	-	-	-	-	-	-	-	-	-
5	370	5913	40473		37421		32769		25420		10303		-	-	-	-	-	-	-	-	-
			26.0	3.37	27.0	3.53	27.0	3.58	26.0	3.66	23.0	3.60	-	-	-	-	-	-	-	-	-
	385	6152	42114		39237		34896		28868		13045		-	-	-	-	-	-	-	-	-
			28.0	3.80	28.0	3.97	29.0	4.04	28.0	4.08	25.0	3.94	-	-	-	-	-	-	-	-	-
	400	6392	43755		41042		36989		31906		20298		-	-	-	-	-	-	-	-	-
			29.0	4.26	29.0	4.44	30.0	4.53	30.0	4.53	28.0	4.53	-	-	-	-	-	-	-	-	-
	415	6632	45395		42837		39032		34361		25852		11718		-	-	-	-	-	-	-
			30.0	4.75	30.0	4.94	31.0	5.05	32.0	5.05	30.0	5.10	28.0	5.07	-	-	-	-	-	-	-
7 1/2	423	6760	43271		43790		40112		35652		28149		13036		-	-	-	-	-	-	-
			31.0	5.03	31.0	5.23	32.0	5.35	33.0	5.34	31.0	5.45	29.0	5.29	-	-	-	-	-	-	-
	440	7031	48130		45809		42387		38243		32323		18846		-	-	-	-	-	-	-
			33.0	5.66	33.0	5.87	34.0	6.01	35.0	6.01	34.0	6.11	32.0	5.90	-	-	-	-	-	-	-
	455	7271	49771		47543		44373		40397		35623		25763		12895		-	-	-	-	-
			35.0	6.26	35.0	6.48	36.0	6.64	37.0	6.65	36.0	6.68	34.0	6.69	33.0	6.68	-	-	-	-	-
	465	7431	50865		48684		45690		41818		37356		29197		14568		-	-	-	-	-
			36.0	6.69	36.0	6.91	38.0	7.08	38.0	7.11	38.0	7.11	36.0	7.19	34.0	7.01	-	-	-	-	-
	475	7591	51959		49824		46998		43228		38994		32061		17146		-	-	-	-	-
			38.0	7.13	38.0	7.35	38.0	7.54	40.0	7.58	39.0	7.57	38.0	7.72	36.0	7.38	-	-	-	-	-
	485	7750	53053		50962		48244		44627		40614		34588		22517		12956		-	-	-
			38.0	7.59	38.0	7.81	39.0	8.02	41.0	8.07	40.0	8.05	39.0	8.22	37.0	8.01	36.0	8.17	-	-	-
10	495	7910	54146		52098		49473		46000		42219		36818		26877		14457		-	-	-
			39.0	8.07	39.0	8.30	40.0	8.51	42.0	8.58	42.0	8.55	41.0	8.68	39.0	8.61	38.0	8.55	-	-	-
	505	8070	55240		53233		50697		47361		42715		39019		30715		16290		-	-	-
			40.0	8.56	40.0	8.80	41.0	9.01	43.0	9.10	43.0	9.09	42.0	9.15	41.0	9.17	39.0	8.95	-	-	-
	515	8230	56334		54366		51917		48714		45158		40959		33599		19170		13321		-
			41.0	9.08	41.0	9.33	42.0	9.54	44.0	9.65	44.0	9.64	44.0	9.66	43.0	9.81	41.0	9.38	41.0	9.84	-
	525	8390	57428		55497		53133		50058		46591		42606		36441		25029		14831		-
			43.0	9.62	43.0	9.87	44.0	10.19	45.0	10.22	46.0	10.22	45.0	10.23	44.0	10.47	43.0	10.20	42.0	10.26	-
	530	8469	57975		56062		53739		50728		47303		43423		37599		27189		15589		-
			43.0	9.90	43.0	10.15	44.0	10.38	46.0	10.51	46.0	10.52	46.0	10.52	45.0	10.74	44.0	10.54	43.0	10.48	-
	534	8533	58413		56514		54224		51262		47871		44074		38497		28771		16301		-
			44.0	10.13	44.0	10.38	45.0	10.61	46.0	10.74	47.0	10.76	47.0	10.76	46.0	10.95	44.0	10.8	44.0	10.66	-

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See notes on page 27.

BCH24 | BELT DRIVE



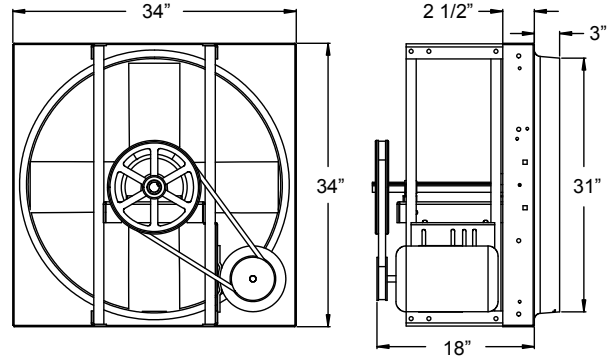
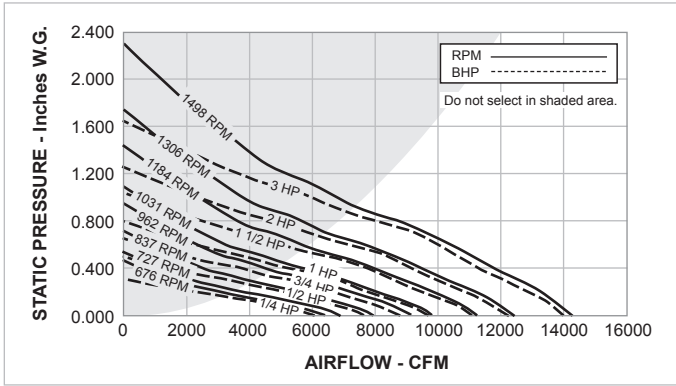
Carbon Steel Panel = 16 Gage	Carbon Steel Mtr. Plate=10 Gage	Carbon Steel Tube = 16 Gage	Wall Opening = 28 3/4" SQ.	Est. Ship Weight = 100 lbs.
Wall Shutter ID = 28" SQ.	Max. Motor Frame Size = 145T	Peak BHP = (RPM/1108) <sup>3</sup>	Max. RPM = 1659 (2 HP)	-

HP	RPM	Tip Speed FPM	0.000" SP		0.100" SP		0.125" SP		0.150" SP		0.200" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP				
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	
1/4	515	3236	2851	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	635	3990	5.6	0.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
			3516	2617	2075	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	800	5027	8.3	0.11	8.0	0.12	8.1	0.12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4429			3851	3636	3402	2586	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
12.5			0.22	12.2	0.24	12.2	0.24	12.1	0.25	12.2	0.24	-	-	-	-	-	-	-	-	-	-	-	-	-	
858	5391	4751	4210	4059	3845	3295	2446	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		13.7	0.28	13.4	0.29	13.3	0.3	13.3	0.30	13.3	0.30	13.7	0.29	-	-	-	-	-	-	-	-	-	-	-	
1/3	870	5466	4817	4284	4145	3935	3434	2595	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	910	5718	14.0	0.29	13.7	0.31	13.6	0.31	13.6	0.31	13.6	0.31	13.9	0.31	-	-	-	-	-	-	-	-	-	-	
			5039	4528	4403	4231	3809	3086	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1/2	924	5806	15.4	0.34	15.1	0.37	15.0	0.37	14.9	0.37	15.0	0.38	15.1	0.37	-	-	-	-	-	-	-	-	-	-	
	930	5843	5149	4649	4526	4376	3977	3335	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			15.6	0.5	15.2	0.37	15.2	0.37	15.1	0.38	15.1	0.38	15.3	0.37	-	-	-	-	-	-	-	-	-	-	-
3/4	1000	6283	5537	5065	4956	4842	4510	4102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	1063	6679	16.9	0.44	16.7	0.46	16.6	0.46	16.6	0.46	16.4	0.47	16.6	0.48	-	-	-	-	-	-	-	-	-	-	
			5886	5434	5338	5231	4974	4625	3147	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			18.2	0.52	18.0	0.55	17.9	0.56	17.9	0.56	17.8	0.56	17.9	0.57	18.5	0.56	-	-	-	-	-	-	-	-	-
1	1070	6723	5924	5475	5379	5274	5025	4679	3233	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	1160	7288	18.4	0.53	18.2	0.56	18.1	0.57	18.1	0.57	18.0	0.57	18.0	0.58	18.7	0.57	-	-	-	-	-	-	-	-	
			6423	5998	5909	5820	5624	5355	4337	2659	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			21.0	0.68	21.0	0.71	21.0	0.72	21.0	0.73	20.0	0.73	20.0	0.74	21.0	0.73	22.0	0.75	-	-	-	-	-	-	-
1200	7540	6644	6228	6143	6057	5871	5645	4800	3265	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		22.0	0.75	22.0	0.78	22.0	0.79	22.0	0.80	22.0	0.80	22.0	0.81	22.0	0.83	23.0	0.81	-	-	-	-	-	-	-	
		6766	5335	6271	6187	6007	5802	5000	3566	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1 1/2	1222	7678	23.0	0.79	22.0	0.83	22.0	0.84	22.0	0.84	22.0	0.85	22.0	0.85	23.0	0.87	23.0	0.85	-	-	-	-	-	-	
	1230	7728	6810	6401	6318	6234	6056	5860	5072	3665	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			23.0	0.81	22.0	0.84	22.0	0.85	22.0	0.86	22.0	0.86	22.0	0.87	23.0	0.89	23.0	0.86	-	-	-	-	-	-	
			6921	6516	6434	6352	6178	5996	5250	3909	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			23.0	0.85	23.0	0.88	23.0	0.89	23.0	0.9	23.0	0.91	23.0	0.91	23.0	0.93	24.0	0.91	-	-	-	-	-	-	-
1250	7854	7143	6745	6666	6586	6422	6245	5573	4403	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		24.0	0.93	24.0	0.97	24.0	0.98	24.0	0.94	24.0	1.00	24.0	1.00	24.0	1.02	25.0	1.00	-	-	-	-	-	-		
		7253	6859	6781	6703	6543	6369	5727	4652	3173	-	-	-	-	-	-	-	-	-	-	-	-	-		
2	1290	8105	25.0	0.98	24.0	1.01	24.0	1.02	25.0	1.03	25.0	1.04	25.0	1.04	25.0	1.07	26.0	1.04	26.0	1.07	-	-	-		
	1320	8294	7309	6917	6839	6761	6603	6431	5803	4403	-	-	-	-	-	-	-	-	-	-	-	-	-		
			25.0	1.00	25.0	1.04	25.0	1.05	25.0	1.05	25.0	1.07	25.0	1.07	25.0	1.09	26.0	1.07	27.0	1.09	-	-	-		
			7586	7202	7127	7052	6902	6739	6181	5365	4034	-	-	-	-	-	-	-	-	-	-	-	-	-	
			27.0	1.12	27.0	1.16	27.0	1.17	27.0	1.17	27.0	1.19	27.0	1.19	27.0	1.22	27.0	1.22	28.0	1.19	-	-	-	-	
1450	9111	8029	7660	7586	7515	7373	7227	6771	6122	5020	3703	-	-	-	-	-	-	-	-	-	-	-			
		31.0	1.33	31.0	1.37	31.0	1.38	31.0	1.39	31.0	1.40	31.0	1.42	31.0	1.43	31.0	1.46	31.0	1.42	32.0	1.44	-	-		
		8333	7978	7900	7831	7695	7559	7166	6554	5887	4471	-	-	-	-	-	-	-	-	-	-	-			
2	1505	9456	33.0	1.48	33.0	1.52	33.0	1.53	33.0	1.55	33.0	1.56	33.0	1.58	33.0	1.59	33.0	1.62	34.0	1.60	35.0	1.58	-		
	1520	9550	8416	8064	7985	7918	7783	7648	7273	6669	5862	4655	-	-	-	-	-	-	-	-	-	-	-		
			34.0	1.53	34.0	1.57	34.0	1.58	34.0	1.59	34.0	1.61	34.0	1.63	34.0	1.63	34.0	1.67	34.0	1.66	35.0	1.63	-		
			8582	8237	8156	8090	7957	7825	7463	6897	6205	5018	-	-	-	-	-	-	-	-	-	-	-		
			34.0	1.62	34.0	1.66	34.0	1.67	34.0	1.88	34.0	1.70	34.0	1.72	34.0	1.73	34.0	1.77	35.0	1.78	35.0	1.78	35.0	1.73	
1600	10053	8859	8525	8441	8376	8248	8119	7774	7272	6656	5643	-	-	-	-	-	-	-	-	-	-	-			
		35.0	1.78	35.0	1.83	35.0	1.84	35.0	1.85	35.0	1.87	35.0	1.89	35.0	1.90	35.0	1.94	35.0	1.96	36.0	1.96	36.0	1.90		
		9186	8864	8783	8713	8589	8465	8137	7708	7146	6351	-	-	-	-	-	-	-	-	-	-	-			
1659	10424	37.0	1.99	37.0	2.03	37.0	2.04	37.0	2.05	37.0	2.08	37.0	2.10	37.0	2.12	37.0	2.15	37.0	2.18	37.0	2.15	-			

See notes on page 27.

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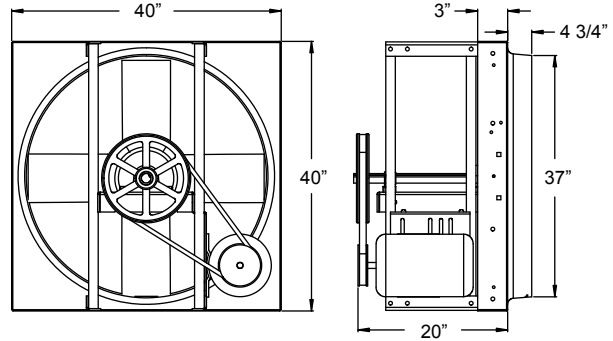
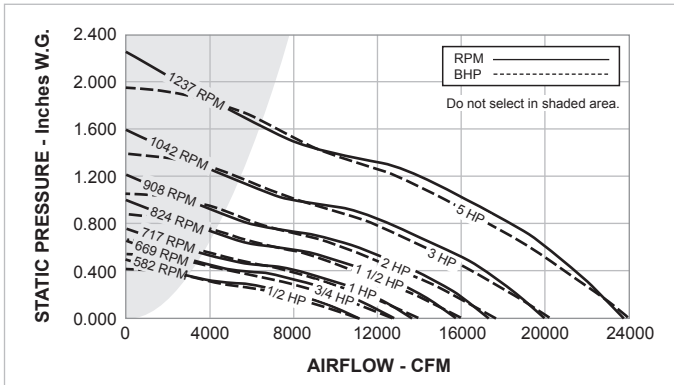
Carbon Steel Panel = 16 Gage	Carbon Steel Mtr. Plate=10 Gage	Carbon Steel Tube = 16 Gage	Wall Opening = 34 3/4" SQ.	Est. Ship Weight = 165 lbs.
Wall Shutter ID = 34" SQ.	Max. Motor Frame Size = 145T	Peak BHP = (RPM/877) <sup>3</sup>	Max. RPM = 1498 (3 HP)	-

HP	RPM	Tip Speed FPM	0.000" SP		0.100" SP		0.125" SP		0.150" SP		0.200" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP					
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP		
1/4	410	3220	3891	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
			5.9	0.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	480	3770	4555	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
			7.7	0.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	1/3	620	4869	5884	4335	3853	324	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
12.0				0.23	13.0	0.23	13.9	0.22	13.4	0.23	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
6415				5035	4625	4171	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1/2	730	5733	6543	5083	4676	4233	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
			14.0	0.30	14.8	0.30	15.3	0.30	16.3	0.29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3/4	840	6597	6899	5637	5276	4886	3951	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
			15.7	0.36	16.3	0.37	16.8	0.37	17.5	0.36	17.8	0.37	-	-	-	-	-	-	-	-	-	-	-	-	-	
1	970	7618	6927	5672	5314	4926	4005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
			15.8	0.37	16.4	0.38	16.9	0.37	17.6	0.37	18.0	0.38	-	-	-	-	-	-	-	-	-	-	-	-	-	
			7943	6957	6583	6275	5609	4817	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2	1040	8168	7971	6993	6618	6310	5649	4865	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
			20.0	0.56	20.0	0.58	21.0	0.58	21.0	0.57	22.0	0.56	23.0	0.57	-	-	-	-	-	-	-	-	-	-	-	
3	1190	9346	9129	8335	8089	7753	7192	6618	4798	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
			26.0	0.84	26.0	0.86	26.0	0.87	26.0	0.87	27.0	0.86	28.0	0.85	29.0	0.87	-	-	-	-	-	-	-	-	-	
			9205	8421	8177	7851	7287	6721	4946	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			26.0	0.86	26.0	0.88	26.0	0.89	26.0	0.89	27.0	0.88	28.0	0.87	29.0	0.89	-	-	-	-	-	-	-	-	-	-
			9395	8634	8395	8096	7525	6978	5311	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	1315	10328	27.0	0.92	27.0	0.94	27.0	0.95	27.0	0.95	28.0	0.94	29.0	0.93	30.0	0.094	-	-	-	-	-	-	-			
			9585	8847	8613	8339	7760	7233	5655	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			28.0	0.97	28.0	0.99	28.0	1.00	28.0	1.01	29.0	1.00	30.0	0.99	32.0	0.99	-	-	-	-	-	-	-	-	-	-
			9784	9069	8840	8592	8006	7498	5994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			29.0	1.04	29.0	1.06	29.0	1.07	29.0	1.07	30.0	1.07	31.0	1.05	33.0	1.04	-	-	-	-	-	-	-	-	-	-
5	1460	11467	9869	9164	8937	8700	8110	7611	6138	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
			30.0	1.06	30.0	1.08	30.0	1.09	30.0	1.10	30.0	1.10	31.0	1.08	34.0	1.07	-	-	-	-	-	-	-	-	-	
			10391	9739	9527	9311	8757	8272	6986	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			33.0	1.24	32.0	1.26	32.0	1.27	32.0	1.28	32.0	1.28	33.0	1.27	37.0	1.23	-	-	-	-	-	-	-	-	-	-
			10819	10204	10005	9798	9310	8803	7598	6076	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	1498	11765	11236	10658	10469	10270	9843	9314	8180	6817	-	-	-	-	-	-	-	-	-	-	-	-				
			35.0	1.4	35.0	1.42	35.0	1.43	35.0	1.44	35.0	1.45	36.0	1.44	39.0	1.40	39.0	1.44	-	-	-	-	-	-	-	
			38.0	1.57	38.0	1.58	38.0	1.60	38.0	1.61	37.0	1.62	38.0	1.62	41.0	1.58	43.0	1.59	-	-	-	-	-	-	-	-
			11293	10719	10532	10335	9915	9383	8258	6913	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			38.0	1.59	38.0	1.61	38.0	1.62	38.0	1.63	38.0	1.65	38.0	1.65	41.0	1.60	44.0	1.61	-	-	-	-	-	-	-	-
7	1498	11765	11862	11333	11155	10973	10595	10108	9023	7862	6343	-	-	-	-	-	-	-	-	-	-	-				
			42.0	1.85	41.0	1.85	41.0	1.87	41.0	1.88	41.0	1.91	41.0	1.91	44.0	1.87	48.0	1.82	46.0	1.91	-	-	-	-	-	
			12394	11904	11733	11563	11202	10791	9713	8634	7334	-	-	-	-	-	-	-	-	-	-	-	-	-		
			45.0	2.11	45.0	2.11	45.0	2.13	45.0	2.14	44.0	2.17	44.0	2.18	47.0	2.15	50.0	2.10	51.0	2.14	-	-	-	-	-	
			12479	11995	11826	11656	11299	10899	9821	8755	7480	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
8	1498	11765	12906	12441	12287	12124	11783	11435	10356	9353	8200	6777	-	-	-	-	-	-	-	-	-	-				
			48.0	2.38	48.0	2.38	48.0	2.39	48.0	2.41	48.0	2.44	48.0	2.46	50.0	2.44	53.0	2.39	57.0	2.38	54.0	2.46	-	-		
			13476	13030	12900	12743	12423	12090	11058	10123	9106	7861	-	-	-	-	-	-	-	-	-	-	-	-		
			52.0	2.71	52.0	2.71	52.0	2.72	52.0	2.73	52.0	2.77	52.0	2.79	53.0	2.79	56.0	2.74	60.0	2.68	60.0	2.76	-	-		
			13855	13422	13307	13155	12846	12523	11522	10629	9651	8508	-	-	-	-	-	-	-	-	-	-	-	-		
9	1498	11765	14216	13793	13687	13544	13247	12932	11975	11096	10161	9113	-	-	-	-	-	-	-	-	-	-				
			57.0	3.18	57.0	3.18	57.0	3.20	57.0	3.23	57.0	3.26	57.0	3.29	60.0	3.24	60.0	3.24	64.0	3.19	68.0	3.17	-	-		

See notes on page 27.

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Carbon Steel Panel = 16 Gage	Carbon Steel Mtr. Plate=10 Gage	Carbon Steel Tube = 16 Gage	Wall Opening = 40 3/4" SQ.	Est. Ship Weight = 195 lbs.
Wall Shutter ID = 40" SQ.	Max. Motor Frame Size = 184T	Peak BHP = (RPM/676) <sup>3</sup>	Max. RPM = 1237 (5 HP)	

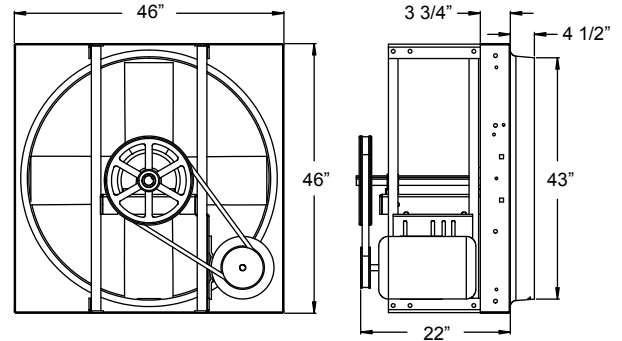
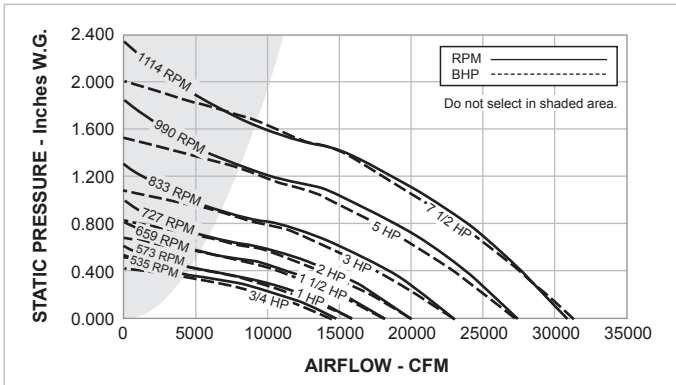
HP	RPM	Tip Speed FPM	0.000" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		1.000" SP	
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP
1/2	370	3487	6223		2136		-		-		-		-		-		-	
			6.7	0.167	6.9	0.180	-		-		-		-		-		-	
3/4	582	5485	7905		5215		1855		-		-		-		-		-	
			10.1	0.343	11.9	0.348	10.1	0.406	-		-		-		-		-	
1	669	6305	9788		7828		4684		2408		-		-		-		-	
			14.6	0.651	17.4	0.668	16.6	0.653	14.6	0.763	-		-		-		-	
1	717	6758	9923		7998		4949		2576		-		-		-		-	
			15.0	0.678	17.8	0.695	17.2	0.675	15.0	0.785	-		-		-		-	
1 1/2	824	7758	11251		9641		7488		4416		2716		-		-		-	
			18.9	0.989	22.1	1.012	21.4	1.004	19.9	1.032	18.9	1.165	-		-		-	
2	850	7540	11436		9857		7770		4708		2948		-		-		-	
			19.4	1.038	22.7	1.063	22.1	1.056	20.7	1.072	19.4	1.204	-		-		-	
3	908	8558	12059		10575		8692		5876		3754		-		-		-	
			21.2	1.217	24.9	1.244	24.4	1.245	23.6	1.217	21.2	1.345	-		-		-	
5	1042	9821	12109		10633		8762		5976		3822		-		-		-	
			21.4	1.232	25.1	1.259	24.5	1.261	23.9	1.230	21.4	1.357	-		-		-	
5	1050	9896	12445		11018		9223		6749		4272		2867		-		-	
			22.4	1.338	26.2	1.366	25.7	1.370	25.3	1.337	22.5	1.441	22.4	1.593	-		-	
5	1100	10367	12950		11590		9905		7772		5032		3499		-		-	
			24.0	1.507	27.9	1.537	27.5	1.545	27.3	1.516	25.1	1.577	24.0	1.726	-		-	
5	1150	10838	13455		12158		10575		8667		5850		4160		2911		-	
			25.8	1.690	29.8	1.722	29.4	1.734	28.9	1.711	27.5	1.724	25.8	1.872	25.8	2.040	-	
5	1150	10838	13858		12609		11090		9290		6656		4702		3425		-	
			26.9	1.847	31.3	1.881	30.9	1.894	30.2	1.877	29.5	1.853	27.1	1.997	26.9	2.164	-	
5	1150	10838	13959		12721		11218		9444		6854		4836		3551		-	
			27.2	1.888	31.7	1.922	31.3	1.936	30.6	1.920	30.0	1.886	27.6	2.029	27.2	2.196	-	
5	1150	10838	14295		13095		11642		9954		7616		5333		3968		-	
			28.3	2.028	33.1	2.063	32.6	2.079	31.9	2.068	31.7	2.025	29.4	2.140	28.3	2.305	-	
5	1150	10838	14800		13652		12271		10689		8697		6134		4640		-	
			30.4	2.250	35.5	2.288	34.7	2.306	34.0	2.302	34.7	2.259	31.8	2.319	30.4	2.483	-	
5	1150	10838	15271		14170		12852		11335		9543		6999		5270		-	
			32.6	2.472	38.3	2.511	36.8	2.532	36.0	2.531	36.3	2.495	34.6	2.499	32.7	2.659	-	
5	1150	10838	15473		14388		13099		11609		9901		7399		5539		-	
			33.6	2.571	39.1	2.611	37.6	2.634	36.9	2.634	36.9	2.600	35.8	2.581	33.6	2.737	-	
5	1150	10838	15809		14747		13509		12062		10431		8105		6081		3711	
			35.1	2.742	40.4	2.784	39.0	2.809	38.4	2.811	38.1	2.782	37.6	2.733	35.4	2.876	35.1	3.252
5	1150	10838	16314		15285		14102		12734		11202		9288		6878		4343	
			37.6	3.013	42.7	3.056	41.4	3.084	40.5	3.091	40.0	3.069	40.4	3.019	38.0	3.093	37.6	3.465
5	1150	10838	16818		15820		14685		13386		11960		10213		7845		4988	
			40.3	3.302	40.3	3.346	44.0	3.375	43.0	3.387	42.1	3.375	43.0	3.324	41.1	3.328	40.3	3.692
5	1150	10838	17525		16567		15495		14278		12940		11429		9366		5941	
			43.1	3.735	43.1	3.781	47.5	3.814	46.5	3.830	45.5	3.824	45.6	3.785	45.4	3.730	42.7	4.038
5	1150	10838	17659		16708		15648		14447		13124		11637		9682		6119	
			43.7	3.822	43.7	3.868	48.2	3.902	47.2	3.918	46.2	3.914	46.1	3.876	46.2	3.822	43.2	4.107
5	1150	10838	18500		17593		16600		15491		14256		12917		11326		7412	
			47.6	4.395	47.6	4.443	53.3	4.481	51.8	4.503	50.7	4.506	49.7	4.483	51.2	4.428	47.1	4.566
5	1150	10838	19341		18473		17544		16519		15356		14122		12742		8902	
			51.5	5.021	51.5	5.072	58.0	5.114	56.4	5.143	55.2	5.151	54.1	5.139	54.4	5.093	52.6	5.074

Performance shown is for installation type A: free inlet, free outlet. Power rating (BHP) does not include transmission losses. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: Free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the airstream.

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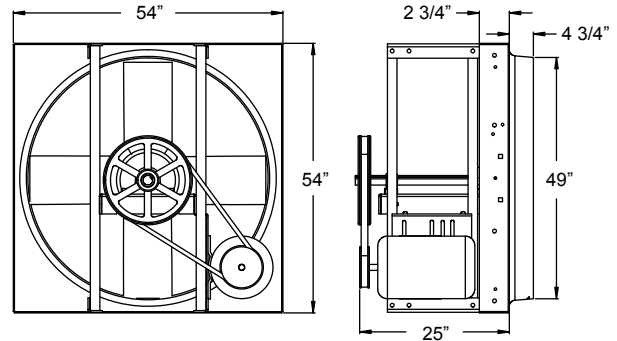
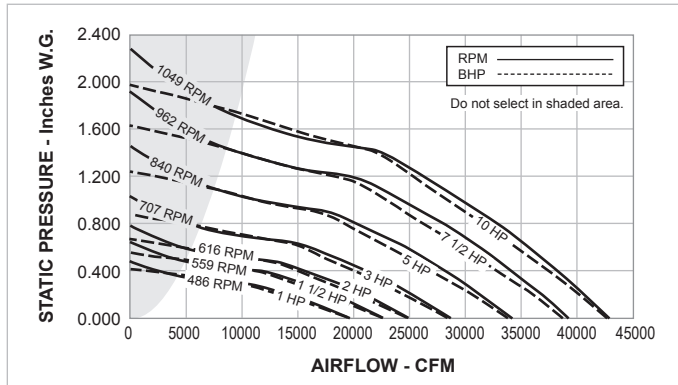
Carbon Steel Panel = 16 Gage	Carbon Steel Mtr. Plate=10 Gage	Carbon Steel Tube = 16 Gage	Wall Opening = 46 3/4" SQ.	Est. Ship Weight = 215 lbs.
Wall Shutter ID = 46" SQ.	Max. Motor Frame Size = 184T	Peak BHP = (RPM/676) <sup>3</sup>	Max. RPM = 1114 (7 1/2 HP)	-

HP	RPM	Tip Speed FPM	0.000" SP		0.100" SP		0.125" SP		0.200" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		1.000" SP		
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones
3/4	460	5058	12749	10762	10220	7903	5659	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	535	5883	14828	13175	12709	11145	9817	4583	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1	540	5938	14967	13333	12871	11341	10051	4956	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	565	6212	15660	14114	13676	12307	11143	7102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	573	6300	15881	14357	13932	12613	11464	7869	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1 1/2	580	6377	16075	14570	14155	12864	11744	8249	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	659	7246	18265	16940	16609	15498	14740	12200	8897	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	670	7367	18570	17267	16941	15857	15112	12710	9540	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	700	7697	19401	18154	17842	16828	16115	13970	11132	6610	-	-	-	-	-	-	-	-	-	-	-	-	-
	727	7994	20150	18949	18648	17693	17006	15042	12481	8914	-	-	-	-	-	-	-	-	-	-	-	-	-
3	740	8137	20510	19330	19035	18107	17432	15552	13101	10174	-	-	-	-	-	-	-	-	-	-	-	-	-
	760	8357	21064	19915	19628	18740	18083	16328	14043	11251	-	-	-	-	-	-	-	-	-	-	-	-	-
	790	8687	21896	20791	20514	19683	19051	17472	15393	12830	9083	-	-	-	-	-	-	-	-	-	-	-	-
	833	9159	23088	22039	21777	20991	20423	18925	17114	14915	12350	-	-	-	-	-	-	-	-	-	-	-	-
5	840	9236	23282	22242	21982	21203	20645	19160	17390	15245	12722	-	-	-	-	-	-	-	-	-	-	-	-
	880	9676	24391	23398	23150	22406	21905	20487	18948	17078	14785	7958	-	-	-	-	-	-	-	-	-	-	-
	900	9896	24945	23975	23732	23004	22519	21144	19714	17887	15745	9429	-	-	-	-	-	-	-	-	-	-	-
	930	10226	25776	24837	24603	23898	23429	22121	20780	19082	17161	12375	-	-	-	-	-	-	-	-	-	-	-
	960	10556	26608	25698	25471	24789	24334	23090	21791	20260	18546	14161	-	-	-	-	-	-	-	-	-	-	-
	990	10886	27439	26557	26337	25675	25234	24052	22792	21420	19758	15746	-	-	-	-	-	-	-	-	-	-	-
	1000	10996	27717	26843	26625	25970	25533	24371	23123	21803	20158	16266	-	-	-	-	-	-	-	-	-	-	-
	1020	11215	28271	27415	27201	26559	26131	25007	23783	22560	20953	17259	-	-	-	-	-	-	-	-	-	-	-
7 1/2	1040	11435	28825	27986	27776	27146	26726	25640	24440	23240	21739	18218	-	-	-	-	-	-	-	-	-	-	-
	1070	11765	29657	28841	28637	28025	27616	26584	25418	24252	22906	19635	-	-	-	-	-	-	-	-	-	-	-
	1095	12040	30350	29552	29353	28755	28356	27359	26227	25088	23868	20798	-	-	-	-	-	-	-	-	-	-	-
	1114	12249	30876	30092	29896	29309	28917	27937	26839	25719	24592	21638	-	-	-	-	-	-	-	-	-	-	-

See notes on page 27.

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BCH48 | BELT DRIVE



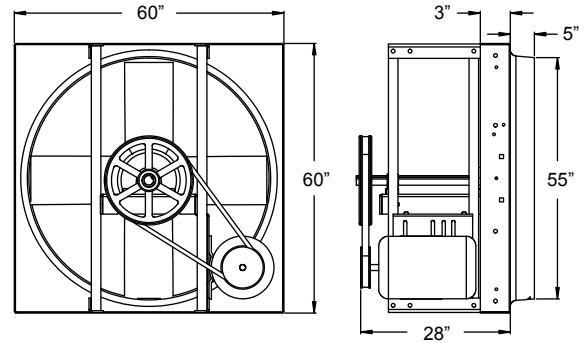
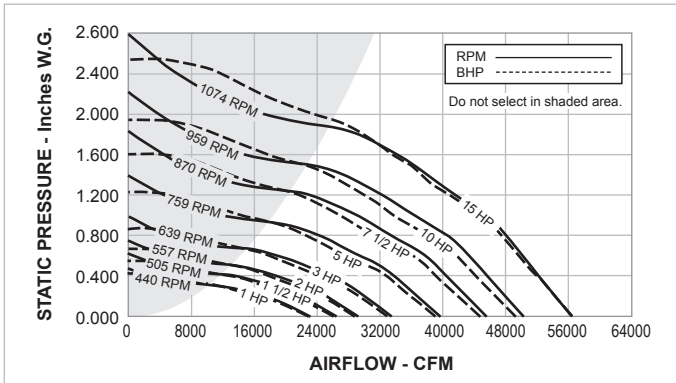
Carbon Steel Panel = 16 Gage	Carbon Steel Mtr. Plate=10 Gage	Carbon Steel Tube = 16 Gage	Wall Opening = 55" SQ.	Est. Ship Weight = 295 lbs.
Wall Shutter ID = 54" SQ.	Max. Motor Frame Size = 286T	Peak BHP = (RPM/555) <sup>3</sup>	Max. RPM = 1049 (10 HP)	-

HP	RPM	Tip Speed FPM	0.000" SP		0.100" SP		0.125" SP		0.200" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		1.000" SP			
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP
1	400	5027	16306	13155	12208	8806	3537	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	440	5529	17936	15132	14335	11467	9128	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		486	6107	19811	17327	16629	14313	12435	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1 1/2	490	6158	19974	17514	16824	14541	12696	4341	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	525	6597	21401	19137	18509	16477	14930	8629	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		559	7025	22787	20693	20102	18259	16890	12841	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	570	7163	23236	21188	20613	18825	17507	13573	5388	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	600	7540	24459	22521	21995	20312	19111	15541	8970	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		616	7741	25111	23228	22726	21096	19948	16573	11910	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	620	7791	25274	23404	22909	21290	20156	16830	12683	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	660	8294	26905	25159	24700	23220	22176	19286	15793	8604	-	-	-	-	-	-	-	-	-	-	-	-	-	
		707	8884	28820	27203	26775	25424	24474	21930	18861	15556	7493	-	-	-	-	-	-	-	-	-	-	-	-
5	710	8922	28943	27333	26907	25563	24619	22090	19054	15793	7796	-	-	-	-	-	-	-	-	-	-	-	-	
	770	9676	31389	29921	29527	28328	27470	25238	22721	19765	16597	-	-	-	-	-	-	-	-	-	-	-	-	
		810	10179	33019	31627	31260	30138	29332	27243	24976	22338	19453	8006	-	-	-	-	-	-	-	-	-	-	-
7 1/2	840	10556	34242	32900	32554	31472	30715	28716	26677	24204	21423	11532	-	-	-	-	-	-	-	-	-	-	-	
	850	10681	34650	33323	32984	31915	31173	29204	27104	24780	22074	12914	-	-	-	-	-	-	-	-	-	-	-	
		890	11184	36280	35014	34697	33679	32997	31137	29188	27051	24641	19252	-	-	-	-	-	-	-	-	-	-	-
10	910	11435	37096	35857	35547	34557	33891	32091	30202	28165	25901	20780	-	-	-	-	-	-	-	-	-	-	-	
	950	11938	38726	37539	37243	36306	35668	33969	32181	30286	28223	23428	-	-	-	-	-	-	-	-	-	-	-	
		962	12089	39216	38043	37750	36828	36198	34529	32770	30915	28904	24218	-	-	-	-	-	-	-	-	-	-	-
10	970	12189	39542	38379	38089	37176	36551	34902	33161	31333	29355	24741	-	-	-	-	-	-	-	-	-	-	-	
	990	12441	40357	39218	38933	38045	37433	35830	34135	32372	30476	26038	-	-	-	-	-	-	-	-	-	-	-	
		1015	12755	41376	40265	39987	39128	38531	36984	35344	33647	31821	27646	-	-	-	-	-	-	-	-	-	-	-
	1035	13006	42191	41102	40830	39992	39406	37903	36305	34641	32878	28916	-	-	-	-	-	-	-	-	-	-	-	-
		1049	13182	42762	41687	41419	40596	40018	38544	36971	35333	33614	29797	-	-	-	-	-	-	-	-	-	-	-

See notes on page 27.

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BCH54 | BELT DRIVE



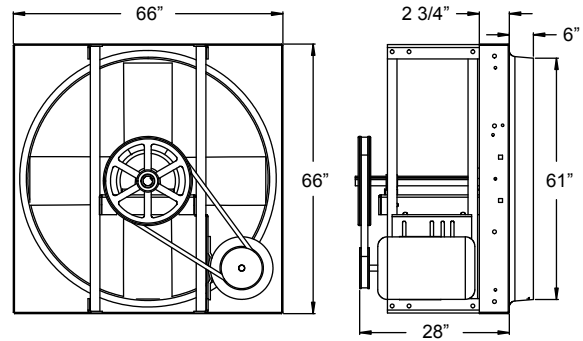
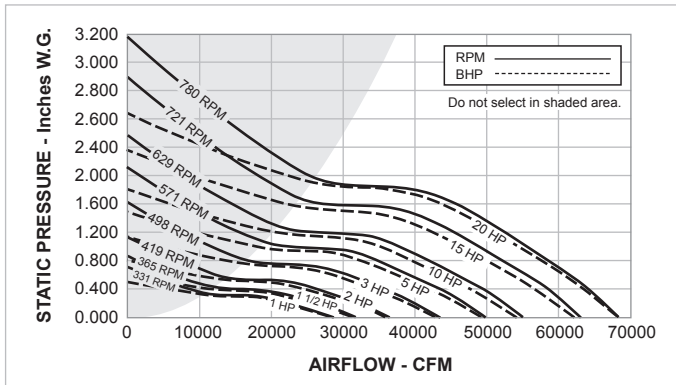
Carbon Steel Panel = 16 Gage	Carbon Steel Mtr. Plate=10 Gage	Carbon Steel Tube = 16 Gage	Wall Opening = 61" SQ.	Est. Ship Weight = 335 lbs.
Wall Shutter ID = 60" SQ.	Max. Motor Frame Size = 286T	Peak BHP = (RPM/416) <sup>3</sup>	Max. RPM = 1074 (15 HP)	-

HP	RPM	Tip Speed FPM	0.000" SP		0.100" SP		0.125" SP		0.200" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		1.000" SP			
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP
1	300	4241	15731	10711	8686	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			8.5	0.33	7.5	0.34	7.4	0.33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	340	4807	17828	13961	12337	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1 1/2	440	6220	23072	20334	19647	16439	13927	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			16.9	1.03	16.2	1.05	16.0	1.05	15.1	1.07	14.7	1.05	-	-	-	-	-	-	-	-	-	-	-	-
	450	6362	23596	20918	20252	17268	14922	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2	510	7210	26480	24108	23498	21572	19462	13255	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			21.0	1.55	20.0	1.58	19.9	1.58	19.3	1.59	18.9	1.61	18.0	1.52	-	-	-	-	-	-	-	-	-	-
	557	7874	26743	24397	23789	21945	19872	13984	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3	560	7917	29207	27083	26515	24879	23548	18852	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			26.0	2.08	25.0	2.11	25.0	2.12	24.0	2.13	23.0	2.14	23.0	2.14	-	-	-	-	-	-	-	-	-	-
	639	9034	29365	27253	26688	25062	23773	19101	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5	650	9189	37.0	3.14	37.0	3.16	37.0	3.18	35.0	3.21	34.0	3.21	34.0	3.24	36.0	3.22	-	-	-	-	-	-	-	
			34084	32309	31822	30375	29452	26371	22322	16821	-	-	-	-	-	-	-	-	-	-	-	-	-	
	700	9896	37.0	3.30	37.0	3.33	37.0	3.34	35.0	3.38	34.0	3.38	34.0	3.41	35.0	3.40	34.0	3.22	-	-	-	-	-	
7 1/2	759	10730	39800	38296	37916	36666	35833	33840	31118	27481	23812	-	-	-	-	-	-	-	-	-	-	-	-	
			37.0	5.26	35.0	5.28	35.0	5.29	34.0	5.34	33.0	5.37	32.0	5.38	30.0	5.42	29.0	5.49	28.0	5.36	-	-	-	-
	770	10886	40376	38894	38524	37293	34672	34512	31962	28407	24912	-	-	-	-	-	-	-	-	-	-	-	-	
10	820	11592	42998	41607	41259	40129	39357	37490	35590	32519	29211	20950	-	-	-	-	-	-	-	-	-	-	-	
			40.0	6.63	39.0	6.66	38.0	6.66	37.0	6.71	36.0	6.75	35.0	6.78	33.0	6.80	32.0	6.86	31.0	6.89	29.0	6.45	-	-
	870	12299	45620	44308	43981	42941	42214	40426	38682	36426	33323	26849	-	-	-	-	-	-	-	-	-	-	-	
15	880	12441	43.0	7.92	42.0	7.95	41.0	7.96	40.0	7.99	39.0	8.03	38.0	8.10	36.0	8.10	35.0	8.15	34.0	8.22	33.0	8.04	-	-
			46145	44848	44524	43501	42782	41009	39295	37180	34145	27855	-	-	-	-	-	-	-	-	-	-	-	-
	900	12723	47193	45925	45608	44619	43916	42171	40504	38678	35762	29844	-	-	-	-	-	-	-	-	-	-	-	
15	920	13006	45.0	8.77	44.0	8.80	43.0	8.80	42.0	8.84	41.0	8.88	39.0	8.96	37.0	8.96	36.0	9.00	35.0	9.06	34.0	8.99	-	-
			48242	47002	46691	45734	45047	43328	41697	39992	37354	31628	-	-	-	-	-	-	-	-	-	-	-	-
	940	13289	47.0	9.37	45.0	9.40	45.0	9.40	43.0	9.43	42.0	9.47	40.0	9.58	39.0	9.58	37.0	9.61	36.0	9.66	35.0	9.66	-	-
15	959	13558	49291	48077	47773	46847	46174	44492	42884	41234	38913	33197	-	-	-	-	-	-	-	-	-	-	-	
			48.0	9.99	46.0	10.02	46.0	10.03	45.0	10.06	44.0	10.10	42.0	10.20	40.0	10.21	38.0	10.24	37.0	10.29	36.0	10.36	-	-
	970	13713	50287	49097	48800	47901	47242	45593	44007	42407	40353	34671	-	-	-	-	-	-	-	-	-	-	-	
15	990	13996	49.0	10.61	47.0	10.64	47.0	10.65	46.0	10.67	45.0	10.71	43.0	10.82	41.0	10.85	39.0	10.86	38.0	10.91	37.0	11.07	-	-
			50864	49687	49393	48511	47859	46229	44654	43083	41181	35599	-	-	-	-	-	-	-	-	-	-	-	-
	1010	14279	51913	50760	50472	49607	48979	47382	45827	44307	42675	37271	-	-	-	-	-	-	-	-	-	-	-	
15	1030	14561	51.0	11.67	49.0	11.70	49.0	11.71	48.0	11.73	47.0	11.77	44.0	11.88	42.0	11.93	41.0	11.93	39.0	11.98	38.0	12.13	-	-
			52961	51831	51549	50702	50096	48531	46996	45510	43945	38924	-	-	-	-	-	-	-	-	-	-	-	-
	1050	14844	54010	52902	52625	51794	51211	49676	48159	46703	45187	40553	-	-	-	-	-	-	-	-	-	-	-	
15	1074	15183	54.0	13.15	52.0	13.18	51.0	13.19	50.0	13.21	49.0	13.24	47.0	13.35	45.0	13.44	43.0	13.44	41.0	13.47	40.0	13.60	-	-
			55059	53972	53700	52885	52323	50817	49318	47890	46422	42154	-	-	-	-	-	-	-	-	-	-	-	-
	55.0	13.93	53.0	13.96	53.0	13.97	52.0	13.99	51.0	14.02	48.0	14.13	46.0	14.24	44.0	14.24	42.0	14.26	41.0	14.38	-	-	-	
56317	55255	54989	54192	53655	52183	50711	49307	47895	44056	-	-	-	-	-	-	-	-	-	-	-	-	-		
57.0	14.91	55.0	14.94	55.0	14.94	53.0	14.97	52.0	14.99	50.0	15.11	48.0	15.22	46.0	15.23	44.0	15.24	42.0	15.35	-	-	-	-	

See notes on page 27.

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**BCH60 | BELT DRIVE**



Carbon Steel Panel = 16 Gage	Carbon Steel Mtr. Plate=10 Gage	Carbon Steel Tube = 16 Gage	Wall Opening = 67" SQ.	Est. Ship Weight = 420 lbs.
Wall Shutter ID = 66" SQ.	Max. Motor Frame Size = 286T	Peak BHP = (RPM/246) <sup>3</sup>	Max. RPM = 780 (20 HP)	-

HP	RPM	Tip Speed FPM	0.000" SP		0.100" SP		0.125" SP		0.200" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		1.000" SP		
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones
1 1/2	241	3786	21063	15681	13828	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			10.2	0.59	9.7	0.62	9.8	0.62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	270	4241	23598	18983	17597	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			12.4	0.83	11.6	0.86	11.7	0.87	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	331	5199	28929	25548	24423	21005	17965	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			18.0	1.52	16.9	1.57	16.6	1.58	16.7	1.60	17.1	1.60	-	-	-	-	-	-	-	-	-	-	-
	340	5341	29716	26485	25389	22081	19435	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			18.9	1.65	17.8	1.70	17.4	1.71	17.4	1.74	17.7	1.74	-	-	-	-	-	-	-	-	-	-	-
3	365	5733	31901	28976	20834	24948	22847	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			21.0	2.04	20.0	2.10	20.0	2.11	19.6	2.14	19.8	2.15	-	-	-	-	-	-	-	-	-	-	-
	370	5812	32338	29461	28557	25515	23476	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			22.0	2.12	21.0	2.19	21.0	2.20	20.0	2.23	20.0	2.24	-	-	-	-	-	-	-	-	-	-	-
5	419	6582	36620	34154	33453	30927	29128	24180	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			26.0	3.08	25.0	3.16	25.0	3.17	24.0	3.21	24.0	3.23	24.0	3.25	-	-	-	-	-	-	-	-	-
	430	6754	37582	35196	34513	32108	30360	25766	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			27.0	3.33	26.0	3.41	26.0	3.43	25.0	3.47	24.0	3.49	24.0	3.52	-	-	-	-	-	-	-	-	-
7 1/2	498	7823	43525	41530	40977	39208	37731	33957	29964	18028	-	-	-	-	-	-	-	-	-	-	-	-	-
			33.0	5.18	31.0	5.27	31.0	5.29	30.0	5.35	30.0	5.37	29.0	5.43	27.0	5.47	25.0	5.38	-	-	-	-	-
	510	8011	44574	42626	42105	40378	38997	35318	31527	24750	-	-	-	-	-	-	-	-	-	-	-	-	-
			34.0	5.56	33.0	5.65	32.0	5.68	31.0	5.74	31.0	5.77	29.0	5.83	28.0	5.87	27.0	5.75	-	-	-	-	-
10	545	8561	47632	45810	45354	43761	42643	39218	35774	31807	19636	-	-	-	-	-	-	-	-	-	-	-	-
			37.0	6.78	36.0	6.89	35.0	6.91	34.0	6.98	34.0	7.02	32.0	7.09	30.0	7.15	30.0	7.16	28.0	7.06	-	-	-
	571	8969	49905	48165	47731	46250	45222	42053	38752	35350	30653	-	-	-	-	-	-	-	-	-	-	-	-
			39.0	7.80	38.0	7.91	38.0	7.94	37.0	8.01	36.0	8.05	34.0	8.13	32.0	8.19	31.0	8.24	31.0	8.20	-	-	-
15	580	9111	50692	48979	48551	47108	46095	43022	39775	36488	32359	-	-	-	-	-	-	-	-	-	-	-	-
			40.0	8.18	39.0	8.29	38.0	8.31	37.0	8.38	37.0	8.43	35.0	8.51	33.0	8.58	32.0	8.63	31.0	8.62	-	-	-
	600	9425	52440	50784	50370	49007	48028	45159	42030	38914	35274	-	-	-	-	-	-	-	-	-	-	-	-
			42.0	9.05	40.0	9.16	40.0	9.19	39.0	9.27	38.0	9.31	37.0	9.41	34.0	9.48	33.0	9.54	33.0	9.56	-	-	-
20	615	9660	53751	52135	51732	50426	49471	46748	43703	40651	37385	-	-	-	-	-	-	-	-	-	-	-	-
			43.0	9.75	42.0	9.86	41.0	9.89	40.0	9.97	40.0	10.02	38.0	10.12	36.0	10.19	34.0	10.26	34.0	10.30	-	-	-
	629	9880	54974	53395	53000	51745	50812	48221	45251	42257	39168	22607	-	-	-	-	-	-	-	-	-	-	-
			44.0	10.43	43.0	10.55	43.0	10.58	42.0	10.66	41.0	10.71	39.0	10.81	37.0	10.89	35.0	10.96	34.0	11.02	33.0	10.86	-
25	640	10053	55936	54384	53996	52780	51862	49373	46459	43508	40554	27400	-	-	-	-	-	-	-	-	-	-	-
			45.0	10.99	44.0	11.11	44.0	11.14	43.0	11.22	42.0	11.27	40.0	11.38	38.0	11.46	36.0	11.54	35.0	11.60	34.0	11.23	-
	660	10367	57684	56179	55802	54655	53765	51453	48631	45775	42946	35529	-	-	-	-	-	-	-	-	-	-	-
			47.0	12.05	46.0	12.17	45.0	12.20	44.0	12.29	44.0	12.34	42.0	12.47	39.0	12.55	37.0	12.63	36.0	12.70	36.0	12.67	-
30	680	10681	59432	57971	57606	56510	55660	53501	50779	48017	45256	38871	-	-	-	-	-	-	-	-	-	-	-
			49.0	13.18	47.0	13.30	47.0	13.34	46.0	13.43	45.0	13.48	44.0	13.62	41.0	13.71	39.0	13.79	37.0	13.86	37.0	13.91	-
	700	10996	61180	59761	59406	58342	57548	55450	52907	50234	47537	41763	-	-	-	-	-	-	-	-	-	-	-
			51.0	14.37	49.0	14.5	49.0	14.54	48.0	14.64	47.0	14.69	45.0	14.83	43.0	14.93	41.0	15.02	39.0	15.10	38.0	15.19	-
35	721	11325	63015	61637	61293	60260	59522	57486	55124	52539	49919	44554	-	-	-	-	-	-	-	-	-	-	-
			53.0	15.71	52.0	15.84	51.0	15.88	50.0	15.98	50.0	16.04	48.0	16.18	45.0	16.29	43.0	16.38	41.0	16.47	39.0	16.59	-
	730	11467	63802	62441	62101	61080	60366	58355	56068	53517	50932	45694	-	-	-	-	-	-	-	-	-	-	-
			54.0	16.30	53.0	16.44	53.0	16.47	51.0	16.58	51.0	16.64	49.0	16.78	47.0	16.9	44.0	16.99	42.0	17.08	40.0	17.22	-
40	745	11702	65112	63779	63446	62446	61770	59800	57636	55136	52610	47579	-	-	-	-	-	-	-	-	-	-	-
			56.0	17.33	55.0	17.47	55.0	17.50	54.0	17.61	53.0	17.68	51.0	17.82	49.0	17.95	47.0	18.04	44.0	18.13	42.0	18.29	-
	760	11938	66424	65117	64790	63810	63156	61239	59195	56744	54276	49345	-	-	-	-	-	-	-	-	-	-	-
			59.0	18.40	57.0	18.54	57.0	18.57	56.0	18.68	55.0	18.75	53.0	18.9	51.0	19.04	49.0	19.13	46.0	19.23	43.0	19.39	-
775	12174	67735	66453	66133	65171	64531	62675	60746	58343	55931	51083	-	-	-	-	-	-	-	-	-	-	-	
		61.0	19.51	59.0	19.65	59.0	19.69	58.0	19.8	57.0	19.87	55.0	20.02	53.0	20.17	51.0	20.27	49.0	20.37	45.0	20.54	-	-
780	12252	68172	66898	66580	65625	64988	63152	61262	58874	56480	51660	-	-	-	-	-	-	-	-	-	-	-	
		62.0	19.89	60.0	20.03	60.0	20.07	59.0	20.18	58.0	20.25	56.0	20.41	54.0	20.56	52.0	20.66	49.0	20.76	45.0	20.93	-	-

See notes on page 27.

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**ENGINEERING SPECIFICATIONS**

**Model**

BC, BX, BCH, BLL, BHM, BHH, P

**Unit Size**

10, 12, 14, 16, 18, 20, 24,  
30, 36, 42, 48, 54, 60

**Drive Type**

D = Direct Drive  
B = Belt Drive

**Motor Tap**

M = 690 RPM	Q1A = 1650 RPM
Q1 = 1750 RPM	Q = 1725 RPM
T = 1140 RPM	Q2 = 1750 RPM
T2 = 1140 RPM	T1 = 1140 RPM
W1 = 860 RPM	W = 860 RPM
W3 = 860 RPM	W2 = 860 RPM
RA = 1550 RPM	SA = 1300 RPM
VA = 1050 RPM	TA = 1140 RPM

**Motor Speed**

1 = Single Speed  
2 = 2S2W Single & Three Phase  
3 = 2S1W Three Phase

**Horse Power**

1/30, 1/12, 1/6, 1/4, 1/3, 1/2, 3/4, 1, 1 1/2,  
2, 3, 5, 7 1/2, 10, 15, 20

**Enclosure**

O = Open Drip Proof  
T = Totally Enclosed  
E = Explosion Proof  
X = Special

**Voltage**

A = 110V	G = 230V
B = 115V	H = 240V
C = 120V	N = 440V
D = 200V	P = 460V
E = 208V	Q = 480V
F = 220V	R = 575V
X = Special	

**Phase**

1 = Single  
3 = Three

**Frequency**

5 = 50 Hz  
6 = 60 Hz

**Efficiency**

S = Standard  
P = Premium  
X = Special

**Application**

E = Exhaust  
S = Supply

**Paint / Coating**

0 = None  
F = Epoxy Powder Coat\*  
G = Epoxy Powder Coat with UV\*  
K = Phenolic Powder Coat\*  
L = Phenolic Powder Coat with UV\*  
N = Polyester Powder Coat  
1 = Polyester Powder Coat -  
Fan & Accessories \*\*  
2 = Epoxy Powder Coat\* -  
Fan & Accessories \*\*  
3 = Epoxy Powder Coat with UV\* -  
Fan & Accessories \*\*  
4 = Phenolic Powder Coat\* -  
Fan & Accessories \*\*  
5 = Phenolic Powder Coat\* -  
Fan & Accessories \*\*  
X = Special  
\* Not available with choice of color.  
\*\* Excludes Dampers.

**Color**

0 = None  
50 = Chrome Green  
53 = Williamsburg Blue  
55 = Pale Green  
56 = Dove Gray  
61 = White  
63 = Oxford Beige  
65 = Dover White  
66 = Desert Tan  
70 = Black  
73 = Smoke Gray  
77 = Brick Red  
79 = Peppercorn  
81 = Pale Brown  
83 = Chocolate Brown  
85 = Timeless Bronze  
94 = Charcoal  
X = Special

**Shutter**

0 = None  
A = Steel Wall Exhaust Shutter Blades  
B = Alum. Wall Exhaust Shutter Blades  
C = Steel WS 115V Motor Exhaust  
T = Steel WS 230V Motor Exhaust  
E = Steel WS 460V Motor Exhaust  
G = Alum. WS 115V Motor Exhaust  
U = Alum. WS 230V Motor Exhaust  
I = Alum. WS 460V Motor Exhaust  
S = Steel WS 115V Explosion Proof  
Motor Operated  
K = Steel Blades 115V Motor Supply Shutter  
M = Steel Blades 230V Motor Supply Shutter  
P = Steel Blades 460V Motor Supply Shutter  
X = Special

**Extended Lube Lines**

(With Assembled Wall Sleeve Only)  
0 = None  
L = Lube Lines

**Front Guard**

0 = None  
A = Assembled (P, BX, BC, BLL, BCH  
Standard, BHH/BHM Optional)  
B = Knocked Down (BHH, BHM Standard)

**Rear Guard without Wall Sleeve**

0 = None  
A = Assembled (P, BX, BC, BLL, BCH  
Standard, BHH/BHM Optional)  
B = Knocked Down (BHH, BHM Standard)

**Weather Shield with Guard**

0 = None  
A = Assembled (P, BX, BC, BLL, BCH  
Standard, BHH/BHM Optional)  
B = Knocked Down (BHH, BHM Standard)

**Wall Sleeve with Rear Guard**

0 = None  
A = Assembled (P, BX, BC, BLL, BCH  
Standard, BHH/BHM Optional)  
B = Knocked Down (BHH, BHM Standard)\*  
\*Standard on all units size 48-60"

**Front Guard for Wall Sleeve**

0 = None  
A = Assembled

**Thermal Overload Protection**

0 = None  
P = Thermal Overload Protection

**Disconnect Switch**

0 = None  
1 = Nema 1 Disconnect Switch  
3R = Nema 3R Disconnect Switch  
4 = Nema 4 Disconnect Switch  
7 = Nema 7 Disconnect Switch  
9 = Nema 9 Disconnect Switch  
X = Special

**Internal Wiring**

0 = None  
3R = Nema 3 Wiring; 6ft Pigtail  
X = Special

**Firestat Switch**

0 = None  
F = Firestat Switch

**P-Series Speed Control**

0 = None  
L = Loose  
X = Special

**P-Series Fan Pack**

0 = None  
F = Fan Pack

## ENGINEERING SPECIFICATIONS

### P-Series

Direct drive Axial Panel exhaust or supply fan shall be Breezeway P manufactured by PennBarry, Plano, Texas.

Motors are rigidly mounted on a heavy gauge wire basket/rear guard of concentric rings meeting OSHA specification. Vibration isolation is provided between the motor/guard assembly and a coated steel fan panel featuring welded corners, pre-punched mounting holes, and a deeply spun venturi. Statically balanced propellers are die formed aluminum. Motors shall be continuous duty, multi-speed (for applicable models) and permanently lubricated. Each fan shall bear the AMCA Licensed Ratings Seal for Air and Sound Performance, and shall be cULus Listed.

### BX

Direct drive Axial Panel exhaust or supply fan shall be Breezeway BX manufactured by PennBarry, Plano Texas.

Motors are installed on a heavy gauge mounting plate welded to a formed heavy wall tubular frame, welded onto a coated steel fan panel featuring welded corners, pre-punched mounting holes, and a deeply spun venturi. Statically balanced propellers are aluminum. Motors shall be Totally Enclosed (TE), continuous duty, ball bearing design, include thermal overload protection and be reversible. A reversing switch shall be supplied. (Explosion Proof, Cls. 1, Div. 1, Grp. D, optionally available; reversing switch by others.)

### BC

Direct drive Axial Panel exhaust or supply fan shall be Breezeway BC manufactured by PennBarry, Plano, Texas.

A heavy gauge motor mounting platform is supported by formed integral stiffening flanges and welded onto a coated steel fan panel featuring welded corners, pre-punched mounting holes, and a deeply spun venturi. Statically balanced propellers shall be cast aluminum and airfoil shaped. Motors shall be continuous duty, ball bearing design, positively cooled and furnished at the specified voltage and phase.

### BLL

Belt driven Axial Panel exhaust fan shall be Breezeway BLL manufactured by PennBarry, Plano, Texas.

A heavy gauge motor mounting platform is supported by formed integral stiffening flanges and welded onto a coated steel fan panel featuring welded corners, pre-punched mounting holes, and a deeply spun venturi. Statically balanced propellers shall be heavy gage steel. Motors shall be continuous duty, ball bearing design, and positively cooled, furnished at the specified voltage, phase, and enclosure. Shafts shall be turned, ground and polished. Heavy duty ball bearings are rated for a minimum L50 life exceeding 200,000 hours. Pulleys shall be adjustable, cast iron, machined, keyed, securely attached and sized for 150% of the horsepower at its rated maximum speed. Each fan shall bear the AMCA Licensed Ratings Seal for Air and Sound Performance, and shall be cULus Listed.

### BHM

Belt driven Axial Panel exhaust or supply fan shall be Breezeway BHM manufactured by PennBarry, Plano, Texas.

A heavy gauge motor mounting panel is fastened to heavy gauge structural channel framework laterally supported and fastened onto a galvanized steel fan panel featuring toggle-lock corners, pre-punched mounting holes, and a deeply spun reverse venturi. Statically balanced propellers shall be coated heavy gage steel, utilizing a fully welded, coated heavy gage steel spider. Motors shall be continuous duty, ball bearing design, and positively cooled, furnished at the specified voltage, phase, and enclosure. Shafts shall be turned, ground and polished. Heavy duty ball bearings are rated for a minimum L50 life exceeding 200,000 hours. Pulleys shall be adjustable, cast iron, machined, keyed, securely attached and sized for 150% of the horsepower at its rated maximum speed. Each fan shall bear the AMCA Licensed Ratings Seal for Air and Sound Performance, and shall be cULus Listed.

### BHH

Belt driven Axial Panel exhaust or supply fan shall be Breezeway BHH manufactured by PennBarry, Plano, Texas.

A heavy gauge motor mounting panel is fastened to heavy gauge structural channel framework laterally supported and fastened onto a galvanized steel fan panel featuring toggle-lock corners, pre-punched mounting holes, and a deeply spun reverse venturi. Statically balanced propellers shall be coated heavy gage steel, utilizing a fully welded, coated heavy gage steel spider. Motors shall be continuous duty, ball bearing design and positively cooled, furnished at the specified voltage, phase and enclosure. Shafts shall be turned, ground and polished. Heavy duty ball bearings are rated for a minimum L50 life exceeding 200,000 hours. Pulleys shall be adjustable, cast iron, machined, keyed, securely attached and sized for 150% of the horsepower at its rated maximum speed. Each fan shall bear the AMCA Licensed Ratings Seal for Air and Sound Performance, and shall be cULus Listed.

### BCH

Belt driven Axial Panel exhaust fan shall be Breezeway BCH manufactured by PennBarry, Plano, Texas.

A heavy gauge motor mounting panel is welded to heavy gauge structural angle and tubular welded framework laterally supported and welded onto a coated steel fan panel featuring welded corners, pre-punched mounting holes and a deeply spun venturi. Statically balanced propellers shall be cast aluminum and airfoil shaped. Motors shall be continuous duty, ball bearing design, positively cooled and furnished at the specified voltage, phase and enclosure. Shafts shall be turned, ground and polished. Heavy duty ball bearings are rated for a minimum L50 life exceeding 200,000 hours. Pulleys shall be adjustable, cast iron, machined, keyed, securely attached and sized for 150% of the horsepower at its rated maximum speed. Each fan shall bear the AMCA Licensed Ratings Seal for Air and Sound Performance, and shall be cULus Listed.





## PennBarry Product Solutions

### COMMERCIAL

Roof & Wall Exhaust Centrifugal Fans  
Ceiling, Wall, & Inline Centrifugal Fans  
Roof Supply Centrifugal Fans  
Square & Round Centrifugal Fans  
Wall Mounted Axial Fans  
Hooded Roof Axial Fans  
Upblast Roof Axial Fans  
Gravity Ventilators  
Roof Curbs

### INDUSTRIAL

Utility Vent Sets  
Freestanding Centrifugal Fans  
Industrial & Material Handling Fans  
Tubular Centrifugal Inline Fans  
Mixed Flow Centrifugal Fans  
Plug & Plenum Fans  
Wall Mounted Propeller Fans  
Tube Axial Fans  
Vane Axial Fans  
Bifurcator Fans  
Fume Exhaust

### ENERGY RECOVERY

Outdoor Units  
Indoor Units

### KITCHEN VENTILATION

Kitchen Hoods  
Make-Up Air Units  
Exhaust Fans



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