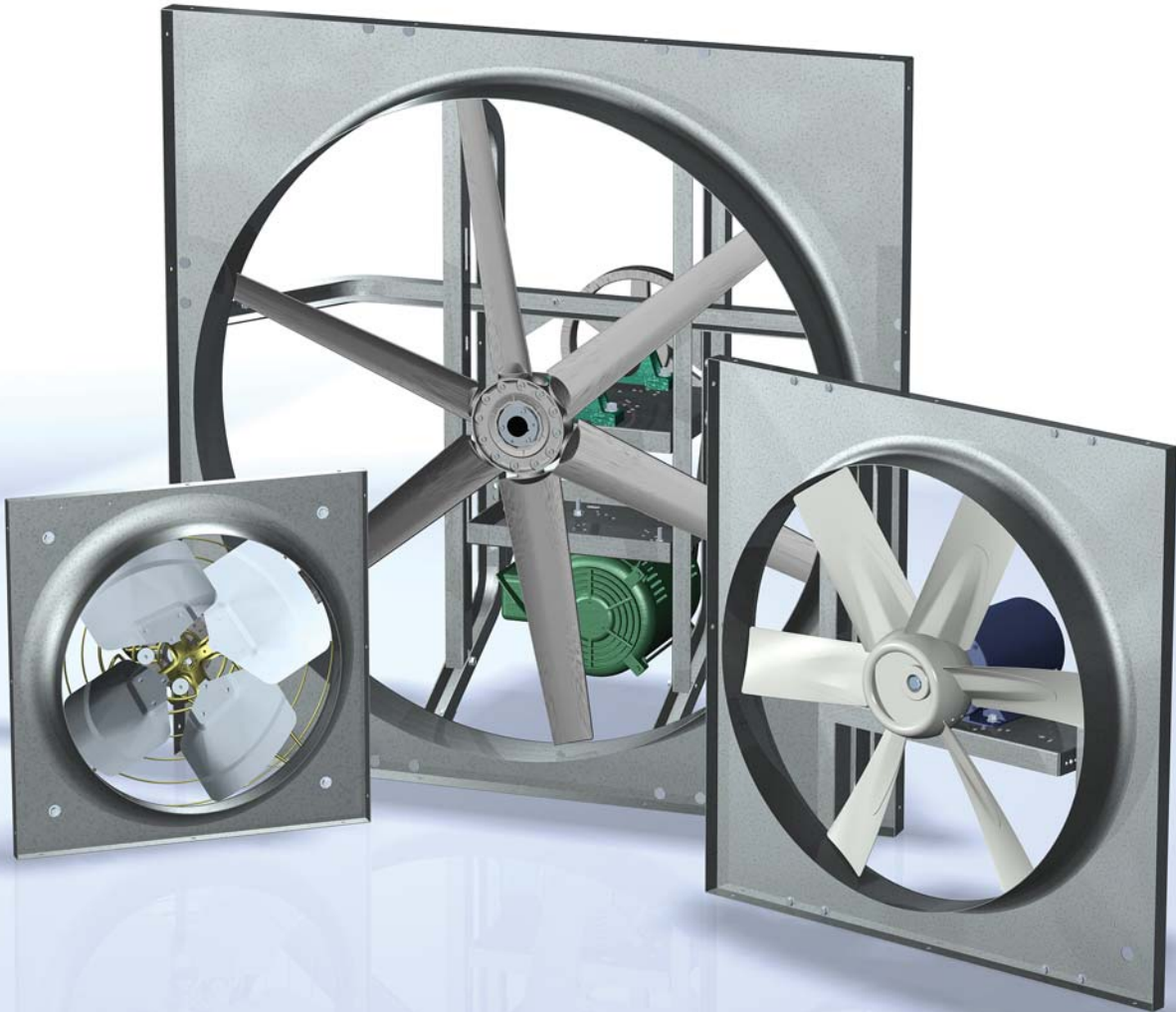


Sidewall Propeller Fans Belt and Direct Drive Exhaust, Supply and Reversible



 **GREENHECK**
Building Value in Air.

December
2007

Sidewall Propeller Fans




Greenheck's sidewall propeller fan line is the ideal choice for factory and warehouse applications where high volumes of air and low pressures are required. From general ventilation to industrial duty, the range of construction and performance capabilities offered in this catalog represent the most comprehensive sidewall propeller fan line in the industry.

Performance spans the range between 300 to 87,000 cfm (510 to 147,814 m³/hr) with static pressures to 1.0 in. wg (249 Pa). Fan sizes range from 8 to 54 inches (203 to 1372 mm) for direct drive and 20 to 72 inches (508 to 1829 mm) for belt drive. Regardless of fan size, performance or duty level, all Greenheck sidewall propeller fans are built to perform with the same high standards of reliability and durability.

All models are available in exhaust or supply arrangements. Propellers are available in fabricated steel, fabricated aluminum or cast aluminum. Drive frames and panels are constructed to match the level of duty and the motor size from the smallest low volume model to the largest industrial duty fan.

There is a wide variety of fans to choose from including:

- Three air flow directions; exhaust, supply and reversible
- Both belt drive and direct drive fans
- Three levels of construction from commercial to industrial
- Multiple blade designs for low sound and optimum efficiency



Greenheck Fan Corporation certifies that the SE1, SS1, SE2, SS2, SC3E, SC3S, SBE, SBS, SBCE and SBCE models shown herein 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.



Sidewall Direct Drive, Sidewall Belt Drive, Sidewall Belt Driven Cast and Sidewall Cast models are listed for electrical (UL/cUL 705) File no. E40001

*UL is optional and must be specified

Leading Edge Technical Support



CAPS
Computer Aided Product Selection

When product and IOM (Installation, Operation and Maintenance Manual) information is needed, our products are supported by the industry's best product literature, electronic media and Computer Aided Product Selection (CAPS) program. You'll also find this information on our website at

www.greenheck.com

Our national and international representative organization provide personal service and expertise. To locate your nearest Greenheck representative, call 715-359-6171 or visit our website at www.greenheck.com

Quick Delivery and Quick Build Programs



There are several Sidewall Propeller Fans available through our Quick Build (QB) and Quick Delivery (QD) programs. The QB program provides custom built to order products shipped three, five, or ten days after ordered. Allowing you the flexibility of knowing that your fan can be made to order and shipped in as little as three days.

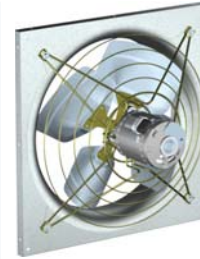
Other products are available from our Quick Delivery (QD) program. The QD program provides same day shipments of Greenheck products from our strategically located warehouses throughout the world.

Direct Drive Fan Selection

Three propeller and drive frame combinations are available. Models SE1 and SS1 are designed for smaller size applications where lower volumes and static pressures are found. Models SE2, SS2, SCE3 and SCS3 are designed and constructed for applications with higher volumes and static pressures.

Construction Levels		Models	Size Range diameter	Performance
1	Fabricated aluminum propeller riveted to the hub	SE1 SS1	8 to 24 in. (203 to 610)	Up to 6,700 cfm (11,383) and up to 5/8 in. wg (156)
2	Fully welded and gusseted steel blade and hub design	SE2 SS2	16 to 54 in. (406 to 1372)	Up to 45,000 cfm (76,455) and up to 1 in. wg (249)
3	Cast aluminum air foil blades	SCE3 SCS3 SCR3	24 to 54 in. (610 to 1372)	Up to 45,000 cfm (76,455) and up to 1 in. wg (249)

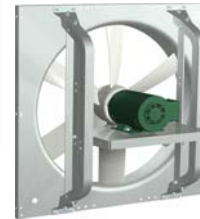
All measurements given in in. (mm), cfm (m3/hr) or in. wg (Pa).



Level 1
Sizes 8 to 12



Level 1
Sizes 12 to 24



Level 2



Level 3

Belt Drive Fan Selection Propeller Types

Three propeller drive frame construction levels and two blade designs are available. The application requirements for sound and static pressure determine propeller type. Propellers are available in fabricated steel, fabricated aluminum or cast aluminum.

Construction Levels		Models	Size Range diameter	Performance
1	Galvanized steel blades riveted to the hub	SBE-1 SBS-1	20 to 54 in. (508 to 1372)	Up to 30,000 cfm (50,970) and up to 5/8 in. wg (156)
2	Dual thickness galvanized steel blades riveted to the hub	SBE-2 SBS-2	20 to 60 in. (508 to 1524)	Up to 53,000 cfm (90,048) and up to 3/4 in. wg (19)
3	Fabricated, fully welded and gusseted steel blade and hub design	SBE-3 SBS-3	24 to 72 in. (610 to 1829)	Up to 87,000 cfm (149,513) and up to 1 in. wg (249)
3	Cast aluminum air foil blades and hub design	SBCE SBCE SBCR	24 to 72 in. (610 to 1829)	Up to 87,000 cfm (149,513) and up to 1 in. wg (249)

All measurements given in in. (mm), cfm (m3/hr) or in. wg (Pa).



Level 1



Level 2



Level 3
Fabricated



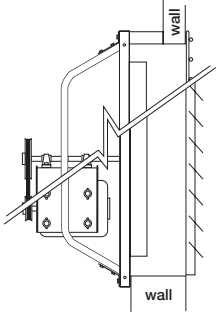
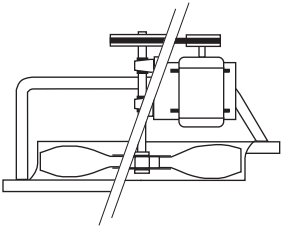
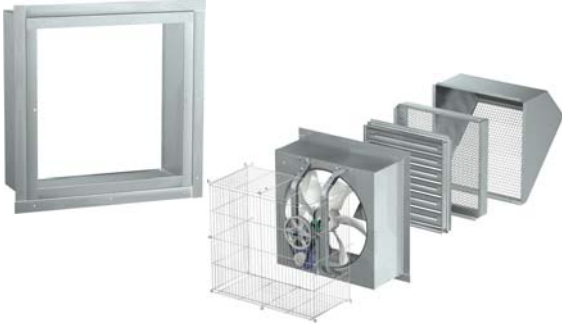


Level 3
Cast Aluminum

Blade Designs

L Propeller: Swept, steeply pitched blade design. These propellers typically run at lower RPMs and generate low sound levels making them the best selection for sound critical applications or applications that require the best combination of both air and sound performance. Typically used when the static pressure is 0.5 in. wg (13 mm) or less.

H Propeller: Straight, moderately pitched blade. It is designed for applications where static pressures are above 0.5 in. wg (13 mm). These propellers typically run at higher RPMs and generate slightly higher sound levels than the “L” propellers.



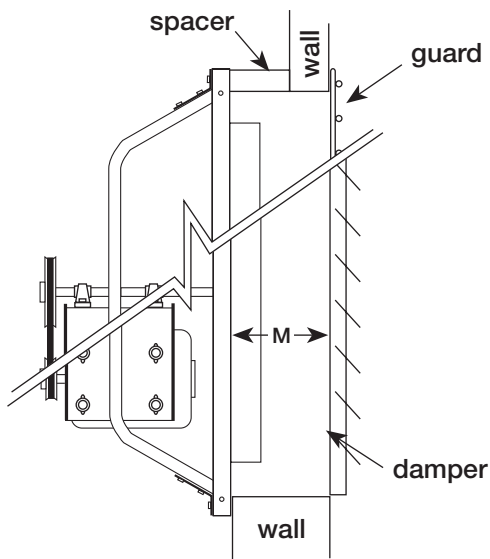
Mounting Option	Description	Page
<p>Standard Wall Mounting</p> 	<p>Fan can be mounted directly to a wall.</p>	<p>5</p>
<p>Standard Horizontal Mounting</p> 	<p>Fan can be horizontally mounted to move air up or down.</p>	<p>6</p>
<p>Wall Collar</p> 	<p>The wall collar is an easy way to mount the sidewall propeller fan and its accessories.</p>	<p>7</p>
<p>Wall Housing</p> 	<p>The wall housing is the easiest and most flexible way to mount the sidewall propeller fan and all its accessories.</p>	<p>8-9</p>
<p>Filtered Supply Wall Housing</p> 	<p>The filtered supply wall housing is flexible and easy way for installations where filtering is required.</p>	<p>10</p>

Mounting Fan Directly to Wall

The split drawing below illustrates the typical ways of mounting fans directly to the wall when a wall housing or collar is not used.

For exhaust fans, there is a minimum dimension (M) which must be maintained between the propeller and damper or guard to achieve optimum performance (*failure to meet this minimum dimension will result in loss of fan performance, increased noise and shortened fan and damper life*). There is also a minimum required wall opening dimension (W.O.) to allow the venturi to fit into the wall opening.

See the chart at right for the minimum “M” and wall opening dimensions.



This installation may require a spacer (by others) between the fan and wall to achieve the minimum “M” dimension.

Fans can be mounted directly to a wall only if the wall is of sufficient thickness to meet the minimum “M” dimension as shown here.

Fan Size	M	Wall Opening
8	6 (152)	10½ (267)
10	6 (152)	12½ (318)
12	7 (178)	14½ (368)
14	8 (203)	16½ (419)
16	9 (229)	18½ (470)
18	10 (254)	20½ (521)
20	12 (305)	22½ (572)
24	13 (330)	26½ (673)
30	13 (330)	32½ (826)
36	14 (356)	38½ (978)
42	15 (381)	44½ (1130)
48	16 (406)	50½ (1283)
54	17 (432)	56½ (1435)
60	19 (483)	62½ (1588)
72	19 (483)	74½ (1892)

All dimensions given in inches (mm).

Motor Side Guard

Protective guards of welded steel wire completely enclose the motor and drive side of the fan. Guards are coated with Permator, a thermal setting polyester urethane. Other paint finishes are also available. Sizes 20 and larger only.

OSHA Motor Side Guard

Protective guards of expanded metal screen in structural steel frames are available to completely enclose the motor and drive side of the fan.

Weatherhood

Weatherhoods shield wall openings and dampers from rain and snow. Weatherhoods are shipped unassembled in kit form for field assembly. Construction is of galvanized steel with wire mesh birdscreen. Mounting flanges have prepunched mounting holes. 45° turn down is for exhaust and 90° turn down is for exhaust and supply. Options include aluminum construction, insect screen and painted finish.

Damper Guard

Damper guards meet the OSHA requirements completely enclose the damper or wall openings on the discharge side of the fan. They are constructed of expanded galvanized steel screen in galvanized steel frames. Mounting flanges have prepunched mounting holes. Options include aluminum construction and painted finish.

Dampers

Used alone or in conjunction with the wall housing or wall collar, a complete line of dampers is available for exhaust or supply configurations.



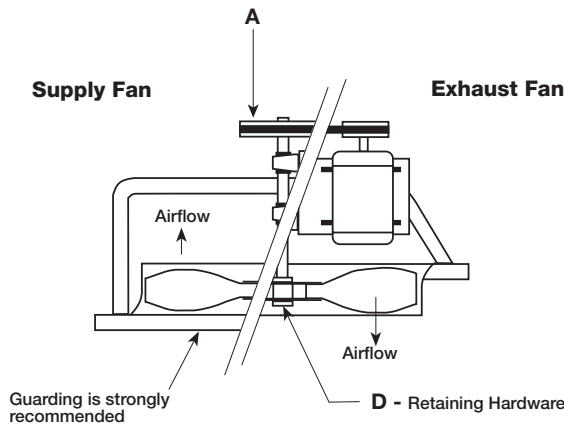
Horizontally mounted fans are available for applications requiring vertical airflow. Typical applications include mounting fans in ductwork or plenums as transfer fans or suspending them from the ceiling in a wall housing for use as recirculation fans. Both belt and direct drive fans can be horizontally mounted. Motors can be mounted on top or on bottom with airflow up or down. Specify configuration best suited for access and service.

Horizontally mounted fans are put under different stresses than fans mounted in a wall. Construction modifications are required depending on motor location (top or bottom) and whether the fan is belt or direct drive.

These modifications may include the following:

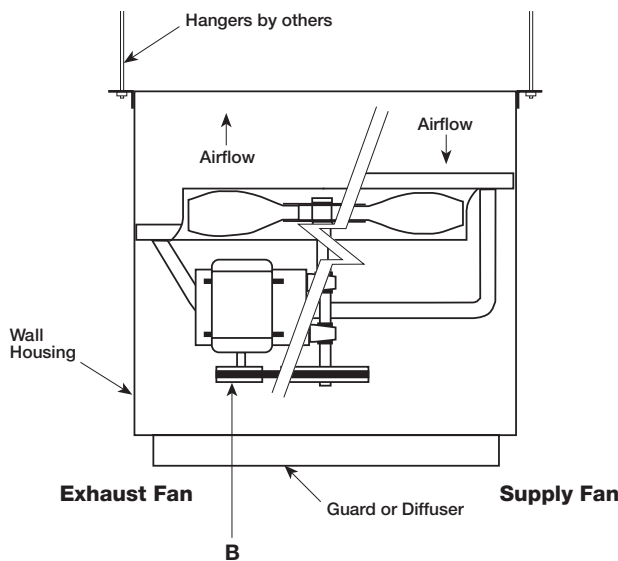
- A - Grooved shaft with snap rings
(belt drive fans)
- B - Motor pulley retaining hardware
(belt drive fans with motor on bottom)
- C - Reinforcing angles on fan panel - not shown
(all fans with motor on bottom)
- D - Propeller retaining hardware
(direct drive fans with motor on top)

Motor on Top
Air Blowing Upward



Motor on Top
Air Blowing Downward

Motor on Bottom
Air Blowing Upward
(Shown as suspended installation with fan mounted in wall housing.)



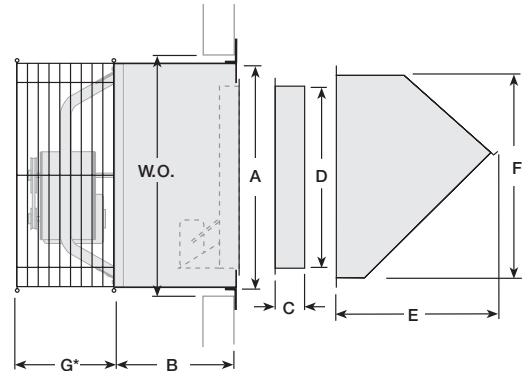
Motor on Bottom
Air Blowing Downward
(Shown as suspended installation with fan mounted in wall housing.)

NOTE: Protective guarding is also required below the fan for safety. When guarding is not ordered with the fan, it must be supplied by the installer. When specifying a fan for horizontal mounting, the motor location (top or bottom) and airflow (upward or downward) are required information.

Wall Collar Mounting Option



Wall collars offer an alternate method for mounting sidewall propeller fans and the optional accessories shown here. Standard construction is of galvanized steel (painted steel is optional) with heavy gauge mounting flanges and pre-punched mounting holes.

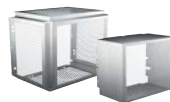


Size	Wall Collar			Damper Guard		Weatherhood			Motor Side Guard	Damper
	A	B**	W.O.	C	D	E	F	Width	G*	
8	12 ⁷ / ₈ (327)	16 ¹ / ₈ (410)	14 ¹ / ₄ (362)	5 ¹ / ₂ (140)	10 ¹ / ₄ (260)	13 ¹ / ₄ (337)	11 ¹ / ₄ (286)	10 ¹ / ₂ (267)	8 ⁵ / ₈ (219)	10 (254)
10	14 ⁷ / ₈ (378)	16 ¹ / ₈ (410)	16 ¹ / ₄ (413)	6 ¹ / ₂ (165)	12 ¹ / ₄ (311)	14 ⁷ / ₈ (378)	13 ³ / ₈ (340)	12 ¹ / ₂ (318)	9 (229)	12 (305)
12	17 ⁷ / ₈ (454)	16 ¹ / ₈ (410)	19 ¹ / ₄ (489)	5 ³ / ₈ (137)	14 ³ / ₄ (362)	16 ³ / ₈ (416)	15 ⁵ / ₈ (397)	14 ¹ / ₂ (368)	11 (279)	14 (356)
14	19 ⁷ / ₈ (505)	18 ³ / ₈ (467)	21 ¹ / ₄ (540)	6 ³ / ₈ (162)	16 ¹ / ₄ (413)	17 ¹ / ₂ (445)	17 ⁷ / ₈ (448)	16 ¹ / ₂ (419)	11 (279)	16 (406)
16	21 ⁷ / ₈ (556)	18 ³ / ₈ (467)	23 ¹ / ₄ (591)	6 ³ / ₄ (171)	18 ¹ / ₄ (464)	19 ³ / ₈ (492)	19 ⁵ / ₈ (498)	18 ¹ / ₂ (470)	11 (279)	18 (457)
18	23 ⁷ / ₈ (606)	18 ³ / ₈ (467)	25 ¹ / ₄ (641)	6 (152)	20 ¹ / ₄ (514)	22 (559)	21 ¹ / ₈ (549)	20 ¹ / ₂ (521)	11 (279)	20 (508)
20	25 ⁷ / ₈ (657)	18 ³ / ₈ (467)	27 ¹ / ₄ (692)	6 ¹ / ₂ (165)	22 ¹ / ₄ (565)	24 ³ / ₄ (629)	23 ³ / ₈ (600)	22 ¹ / ₂ (572)	16 (406)	22 (559)
24	31 ⁷ / ₈ (810)	18 ³ / ₈ (467)	33 ³ / ₄ (857)	6 ³ / ₈ (162)	26 ¹ / ₄ (667)	26 ⁷ / ₈ (683)	30 ³ / ₈ (772)	29 ⁷ / ₈ (740)	18 (457)	26 (660)
30	37 ⁷ / ₈ (962)	18 ³ / ₈ (467)	39 ³ / ₄ (1010)	6 ¹ / ₂ (165)	32 ¹ / ₄ (819)	29 ⁷ / ₈ (740)	36 ¹ / ₂ (927)	35 ⁵ / ₈ (892)	21 (533)	32 (813)
36	43 ⁷ / ₈ (1114)	18 ³ / ₄ (476)	45 ³ / ₄ (1162)	6 ³ / ₄ (171)	38 ¹ / ₄ (972)	33 (838)	42 ¹ / ₂ (1080)	41 ¹ / ₈ (1045)	22 (559)	38 (965)
42	49 ⁷ / ₈ (1127)	18 ³ / ₄ (476)	51 ³ / ₄ (1314)	10 (254)	44 ¹ / ₄ (1124)	35 ³ / ₄ (908)	48 ¹ / ₂ (1232)	47 ⁷ / ₈ (1197)	24 (610)	44 (1118)
48	55 ⁷ / ₈ (1419)	18 ³ / ₈ (479)	57 ³ / ₄ (1467)	9 (229)	50 ¹ / ₄ (1276)	40 ³ / ₈ (1026)	54 ⁵ / ₈ (1387)	53 ³ / ₄ (1353)	27 (686)	50 (1270)
54	61 ⁷ / ₈ (1572)	20 ⁷ / ₈ (512)	63 ³ / ₄ (1619)	7 ¹ / ₂ (191)	56 ¹ / ₄ (1429)	44 ³ / ₄ (1137)	60 ⁷ / ₈ (1546)	59 ¹ / ₂ (1511)	32 (813)	56 (1422)
60	67 ⁷ / ₈ (1724)	21 (533)	69 ³ / ₄ (1772)	7 ¹ / ₄ (184)	62 ¹ / ₄ (1581)	48 ³ / ₈ (1229)	67 (1702)	65 ⁵ / ₈ (1667)	32 (813)	62 (1575)
72	81 ⁷ / ₈ (2080)	22 (559)	83 ³ / ₄ (2127)	7 ¹ / ₂ (191)	74 ¹ / ₄ (1886)	53 ¹ / ₄ (1353)	79 ¹ / ₂ (2019)	78 ¹ / ₈ (1984)	32 (813)	74 (1880)

*Dimensions are for exhaust fan guard. See CAPS for supply fan and for optional OSHA motor side guard dimensions. **All sizes except 20 and 72 are 2 in (51 mm) larger if a VCD damper is used. For complete dimensional information refer to submittal. All dimensions given in inches (mm).

Motor Side Guard – Protective guards of welded steel wire completely enclose the motor and drive side of the fan. Guards are coated with Permator, a thermal setting polyester urethane. Other paint finishes are also available. Sizes 20 and larger only.

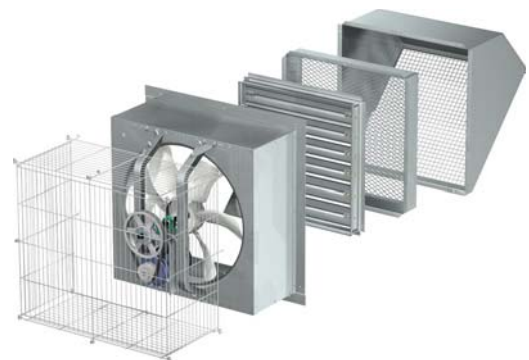
OSHA Motor Side Guard – Protective guards of expanded metal screen in structural steel frames are available to completely enclose the motor and drive side of the fan.



Dampers – Used alone or in conjunction with the wall housing or wall collar, a complete line of dampers is available for exhaust or supply configurations.

Damper Guard – Damper guards meet the OSHA requirements completely enclose the damper or wall openings on the discharge side of the fan. They are constructed of expanded galvanized steel screen in galvanized steel frames. Mounting flanges have prepunched mounting holes. Options include aluminum construction and painted finish.

Weatherhood – Weatherhoods shield wall openings and dampers from rain and snow. Weatherhoods are shipped unassembled in kit form for field assembly. Construction is of galvanized steel with wire mesh birdscreen. Mounting flanges have prepunched mounting holes. 45° turn down is for exhaust and 90° turn down is for exhaust and supply. Options include aluminum construction, insect screen and painted finish.

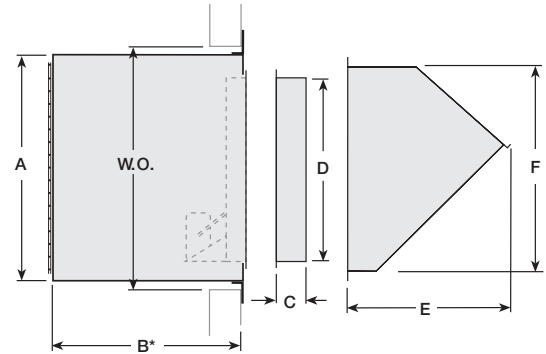


Note: Wall collar, fan, damper and guards ship completely factory assembled except when ordered as a kit.. Weatherhood ships loose.

Wall Housing Mounting Option



Wall housings are the safest, most efficient and sturdy platform for mounting sidewall propeller fans and their optional accessories. Wall housings allow for a wide range of mounting arrangements to meet specific applications. It is constructed of galvanized steel (painted steel optional) with heavy gauge mounting flanges and prepunched mounting holes. Protective guards of welded steel wire completely protect the drive side of the wall housing. Guards are coated with Permator, a thermal setting polyester urethane. Other paint finishes are also available. Wall housing guards that meet the OSHA requirements are also available.



Size	Wall Housing			Damper Guard		Weatherhood			Damper	Material Gauge (ga) Thickness
	A	B*	W.O.	C	D	E	F	Width		
8	13¼ (337)	19 (483)	14¼ (362)	5½ (140)	10¼ (260)	13¼ (337)	11¼ (286)	10½ (267)	10 (254)	20
10	15¼ (387)	19 (483)	16¼ (413)	6½ (165)	12¼ (311)	14¾ (378)	13¾ (340)	12½ (318)	12 (305)	20
12	18¼ (464)	23 (584)	19¼ (489)	5¾ (137)	14¼ (362)	16¾ (416)	15¾ (397)	14½ (368)	14 (356)	20
14	20¼ (514)	26 (660)	21¼ (540)	6¾ (162)	16¼ (413)	17½ (445)	17¾ (448)	16½ (419)	16 (406)	20
16	22¼ (565)	27 (686)	23¼ (591)	6¾ (171)	18¼ (464)	19¾ (492)	19¾ (498)	18½ (470)	18 (457)	20
18	24¼ (616)	28 (711)	25¼ (641)	6 (152)	20¼ (514)	22 (559)	21¾ (549)	20½ (521)	20 (508)	20
20	26¼ (667)	32 (813)	27¼ (692)	6½ (165)	22¼ (565)	24¾ (629)	23¾ (600)	22½ (572)	22 (559)	18
24	32¼ (819)	37 (940)	33¾ (857)	6¾ (162)	26¼ (667)	26¾ (683)	30¾ (772)	29¾ (740)	26 (660)	18
30	38¼ (972)	38 (965)	39¾ (1010)	6½ (165)	32¼ (819)	29¾ (740)	36½ (927)	35¾ (892)	32 (813)	18
36	44¼ (1124)	39 (991)	45¾ (1162)	6¾ (171)	38¼ (972)	33 (838)	42½ (1080)	41¾ (1045)	38 (965)	18
42	50¾ (1280)	44 (1118)	51¾ (1314)	10 (254)	44¼ (1124)	35¾ (908)	48½ (1232)	47¾ (1197)	44 (1118)	18
48	56¾ (1432)	44 (1118)	57¾ (1467)	9 (229)	50¼ (1276)	40¾ (1026)	54¾ (1387)	53¾ (1353)	50 (1270)	18
54	62¾ (1584)	52 (1321)	63¾ (1619)	7½ (191)	56¼ (1429)	44¾ (1137)	60¾ (1546)	59½ (1511)	56 (1422)	16
60	68¾ (1737)	54 (1372)	69¾ (1172)	7¼ (184)	62¼ (1581)	48¾ (1229)	67 (1702)	65¾ (1667)	62 (1575)	16
72	83¾ (2111)	60 (1524)	84¾ (2153)	7½ (191)	74¼ (1886)	53¼ (1353)	79½ (2019)	78¾ (1984)	74 (1880)	12

* B dimension will increase by 6 in (152 mm) when a heavy duty motorized backdraft damper is specified. For complete dimensional information refer to submittal. All dimensions given in inches (mm).

Dampers – Used alone or in conjunction with the wall housing or wall collar, a complete line of dampers is available for exhaust or supply configurations.

Damper Guard – Damper guards meet the OSHA requirements completely enclose the damper or wall openings on the discharge side of the fan. They are constructed of expanded galvanized steel screen in galvanized steel frames. Mounting flanges have prepunched mounting holes. Options include aluminum construction and painted finish.

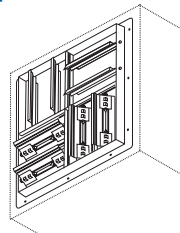
Weatherhood – Weatherhoods shield wall openings and dampers from rain and snow. Weatherhoods are shipped unassembled in kit form for field assembly. Construction is of galvanized steel with wire mesh birdscreen. Mounting flanges have prepunched mounting holes. 45° turn down is for exhaust and 90° turn down is for exhaust and supply. Options include aluminum construction, insect screen and painted finish.



Note: Wall housing, fan, damper and guards ship completely factory assembled except when ordered as a kit. Weatherhood ships loose.

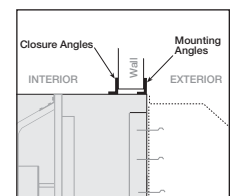
Diffusers - Wall Housing Mounted - Manual Operator

Diffusers are constructed with heavy gauge galvanized steel frames, blades and prepunched mounting flanges. They are designed to mount to the interior end of the wall housing when used in the supply configuration. Manual quadrants set the angle of the blades to deflect air in 1, 2 or 4 directions.



Closure Angles

An extra set of mounting flanges is available for field installation to close off the interior wall opening for a finished appearance.



Wall Housing Mounting Arrangements

The wall housing is designed to reduce installation time and provide maximum installation flexibility. Attached accessories such as backdraft dampers, guards and weatherhoods may mount to either end. As a result a wide variety of configurations are available to accommodate the needs of the system designer.

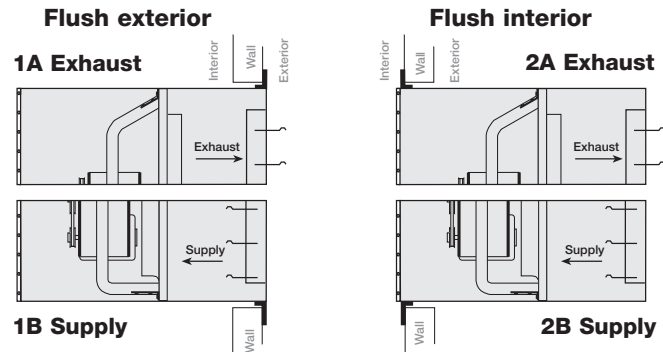
The following information will help determine the correct arrangement required. When ordering specify arrangement by the drawing number 1A, 2A, 1B or 2B as shown in the diagrams below.

NOTE: Weatherhoods are strongly recommended for all configurations to help prevent moisture infiltration. Mounting flange, damper and guard ship factory mounted on all arrangements as shown except when ordered as a kit.

Mounting Arrangements for Interior Service Applications

The arrangements shown below are the most commonly used and should be considered first for most applications. The choice of flush interior or exterior mounting are based on appearance or space considerations.

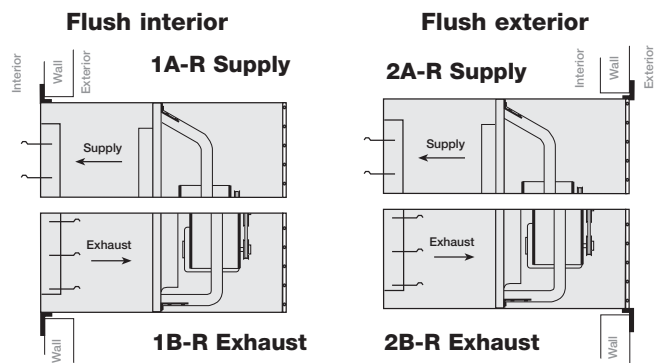
Belts, pulleys and motors are serviced from inside the building with these arrangements. For applications requiring service from outside the building, see reverse mounting arrangements below.



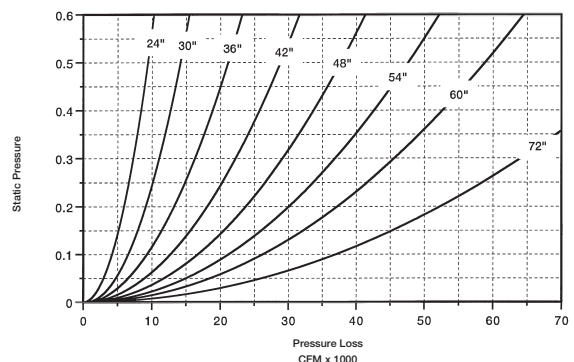
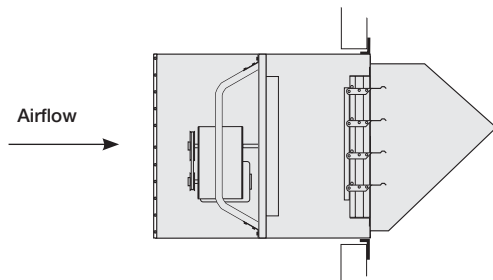
Mounting Arrangements for Exterior Service Applications (Optional)

Reverse mounting a wall housing simply involves installing the wall housing through the wall opening in the opposite direction of the above configurations. This results in an opposite effect on fan function. An exhaust fan in a wall housing is reverse mounted.

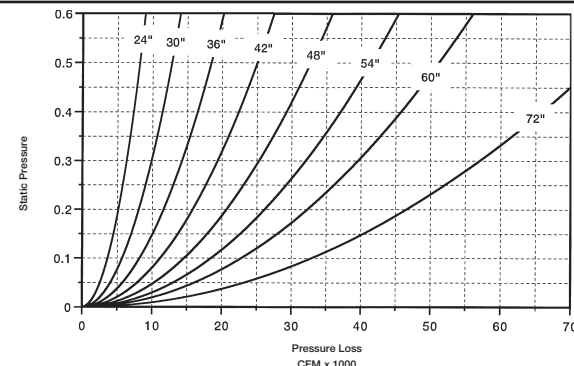
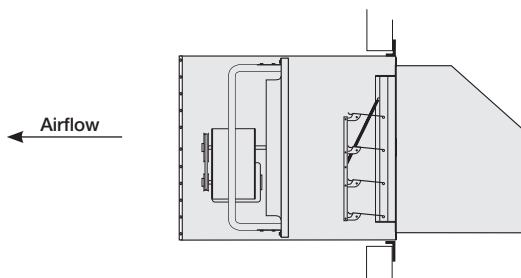
Example: When the exhaust arrangement shown as 1A is reversed (shown as 1A-R) the same unit now becomes a supply arrangement. The construction, fan position and mounting angle location in both configurations remain identical.



EXHAUST FAN in Wall Housing with Gravity Damper and Weatherhood



SUPPLY FAN in Wall Housing with Gravity Damper and Weatherhood



Filtered Supply Wall Housing Mounting Options

Filtered supply wall housings are available in seven sizes for fans ranging from size 24 to 54 inches (610 to 1372 mm). They are designed with the draw-thru concept to achieve the highest filter and fan efficiencies.

Standard construction is galvanized steel (painted steel optional). Mounting flanges are factory installed for either flush exterior or flush interior. Permanent 2 inch (51 mm) washable filters are accessed through a bolted panel and can be easily removed for cleaning.

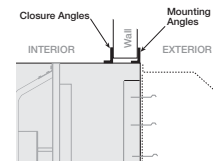
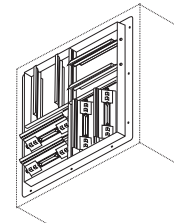
All accessory items available with the standard wall housing can be used with the filtered supply wall housing.

Diffusers - Wall Housing Mounted - Manual Operator

Diffusers are constructed with heavy gauge galvanized steel frames, blades and prepunched mounting flanges. They are designed to mount to the interior end of the wall housing when used in the supply configuration. Manual quadrants set the angle of the blades to deflect air in 1, 2 or 4 directions.

Closure Angles

An extra set of mounting flanges is available for field installation to close off the interior wall opening for a finished appearance.



Size	A	B	C	Wall Opening	Filter Size & Quantity
24	32 1/4 (819)	63 (1600)	24 (610)	33 3/4 (857)	(4) 23 1/4 (591) x 16 1/4 (413)
30	38 1/4 (972)	65 (1651)	26 (660)	39 3/4 (1010)	(4) 24 5/8 (625) x 19 1/4 (489)
36	44 1/4 (1124)	67 1/4 (1708)	28 1/4 (718)	45 3/4 (1162)	(6) 23 1/4 (591) x 22 1/8 (562)
42	50 1/8 (1273)	72 7/8 (1851)	34 (864)	51 1/4 (1314)	(6) 24 1/8 (613) x 25 1/8 (638)
48	56 1/8 (1426)	72 7/8 (1851)	34 (864)	57 3/4 (1467)	(12) 23 1/4 (591) x 18 3/4 (476)
54	62 3/8 (1584)	79 11/16 (2024)	40 11/16 (1033)	63 3/4 (1619)	(12) 23 1/4 (591) x 20 3/4 (527)

Filters are 2 in (51 mm) nominal thickness. Above filter sizes are actual dimensions. All dimensions given in inches (mm).

Notes:

- Additional bracing (by others) above or below the housing is required for support of the filtered supply wall housing.
Attach at least two supports (either vertical or angled) to the end of housing.
Vertical supports must carry 500# minimum per support, and angled (45°) supports a minimum of 750# per support.
- Filtered supply wall housing, fan damper and guards ship completely factory assembled. Weatherhood ships loose.

Weatherhood

Weatherhoods shield wall openings and dampers from rain and snow. Weatherhoods are shipped unassembled in kit form for field assembly. Construction is of galvanized steel with wire mesh birdscreen. Mounting flanges have prepunched mounting holes. 45° turn down is for exhaust and 90° turn down is for exhaust and supply. Options include aluminum construction, insect screen and painted finish.



Damper Guard

Damper guards meet the OSHA requirements completely enclose the damper or wall openings on the discharge side of the fan. They are constructed of expanded galvanized steel screen in galvanized steel frames. Mounting flanges have prepunched mounting holes. Options include aluminum construction and painted finish.



Dampers

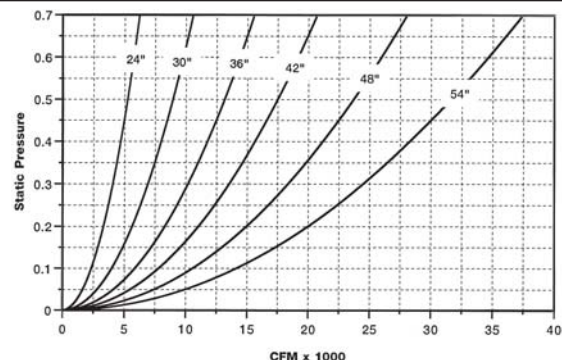
Used alone or in conjunction with the wall housing or wall collar, a complete line of dampers is available for exhaust or supply configurations



FILTERED SUPPLY FAN in Wall Housing with Filter Bank, Gravity Damper and Weatherhood

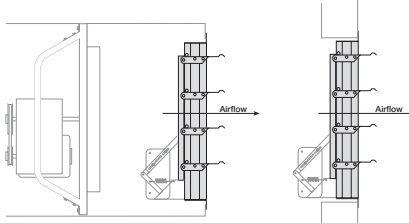
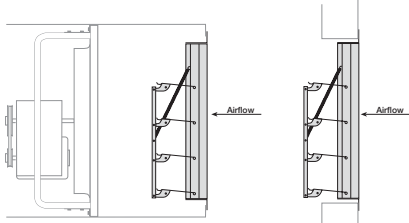
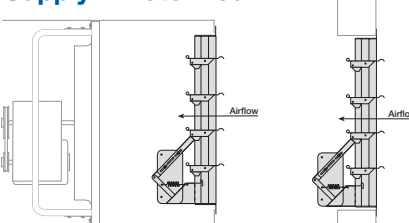


Note: This chart is for manual calculations only. CAPS has filter losses built into the selection tool when the filtered housing option is selected.



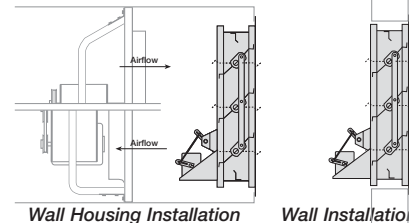
Backdraft Dampers

Used alone or in conjunction with the wall housing or wall collar, backdraft dampers are available for exhaust or supply configurations. Backdraft dampers are constructed with galvanized frames, aluminum blades and vinyl blade seals. Actuators are available in 24, 120, 208, 230 or 460 volts. Actuators for 50 cycle voltages are also available. Actuators for 50 cycle voltages are also available.

Damper Type	Description	Flush Exterior	Flush Interior
Exhaust - Gravity or Motorized¹  <p>Wall Housing Installation Wall Installation</p>	WD-320 and WD-300 exhaust dampers are available as either gravity operated or motorized	Exhaust backdraft dampers are Model WD-320, which has the prepunched mounting flange located on the outlet end of the damper for a flush exterior appearance.	For applications where the mounting flange is required on the inlet end of the damper (so that the damper projects to the exterior), the Model WD-300 is available.
<i>Model WD-320 shown</i>			
Supply - Gravity²  <p>Wall Housing Installation Wall Installation</p>	<ul style="list-style-type: none"> WD-430 and WD-420 intake dampers are only available as gravity operated Galvanized steel frame and aluminum blades 	<ul style="list-style-type: none"> Model WD-430 has a prepunched mounting flange located on the inlet end of the damper for a flush exterior appearance Flange on intake 	<ul style="list-style-type: none"> Model WD-420 is for applications where a prepunched mounting flange is required on the outlet end of damper (so the damper projects to the exterior) Flange on discharge
<i>Model WD-430 shown</i>			
Supply - Motorized³  <p>Wall Housing Installation Wall Installation</p>	<ul style="list-style-type: none"> WD-220 and WD-210 intake dampers are only available as motorized Galvanized steel frame and aluminum blades 	<ul style="list-style-type: none"> Model WD-220 has a prepunched mounting flange located on the inlet end of the damper for a flush exterior appearance Flange located opposite of motor side of the damper 	<ul style="list-style-type: none"> Model WD-210 is for applications where a mounting flange is required on the outlet end of the damper (so that the damper projects to the exterior) Flange located on motor side of the damper
<i>Model WD-220 shown</i>			

Volume Control/Heavy Duty Dampers

Volume control dampers are available for exhaust or supply configurations and may be used alone or in conjunction with the wall housing or wall collar. Constructed with heavy galvanized steel frames and blades, model VCD dampers are designed to handle higher air volumes than the standard backdraft damper. Dampers are available in standard leakage (VCD-20), low leakage (VCD-23) and insulated low leakage (VCD-34) configurations. Actuators are available in 24, 120, 208, 230 or 460 volts. Actuators for 50 cycle voltages are also available.

Damper Type	Description	Flush Exterior	Flush Interior
Exhaust or Supply - Motorized  <p>Wall Housing Installation Wall Installation</p>	<p>Model VCD-20 - Standard leakage</p> <p>Model VCD-23 - Low leakage – This damper has blade and jamb seals for minimal leakage when closed.</p> <p>Model VCD-34 - Insulated low leakage – This damper has blade and jamb seals for minimal leakage when closed. Blades are constructed with ½ in. (13 mm) polystyrene insulation between two galvanized steel skins.</p>	The VCD damper has the parallel blade set-up and a prepunched mounting flange that provides a flush exterior appearance.	N/A

¹ Model WD-320 and WD-300 are used with fans where the motor is 5 hp or less. For fans with motors larger than 5 hp, the Model GM-31 medium duty gravity backdraft damper or the Model VCD heavy duty motorized backdraft dampers are required.

² Model WD-430 and WD-420 are used with fans where the motor is 5 hp or less. For fans with motors larger than 5 hp, the Model VCD heavy duty motorized backdraft dampers are required.

³ Model WD-220 and WD-210 are used with fans where the motor is 3 hp or less. For fans with motors larger than 3 hp, the Model VCD heavy duty motorized backdraft damper is required.

Note: Wall housing length increases by 6 inches (152 mm) when a heavy duty backdraft damper is specified.

Electrical

Disconnect Switches

Toggle type and heavy duty disconnect switches are available for positive electrical shut-off and safety in servicing fans. The following switches are available to meet individual electrical requirements and can be factory mounted or shipped loose for field mounting. Wiring from the motor to the disconnect box is provided with factory mounted disconnect switches.

- NEMA-1 - General purpose
- NEMA-3R - Rainproof
- NEMA 4 - Watertight
- NEMA-3R & NEMA 4 - Heavy Duty
- NEMA-7 & 9 - for Class 1 and Class 2 hazardous locations.

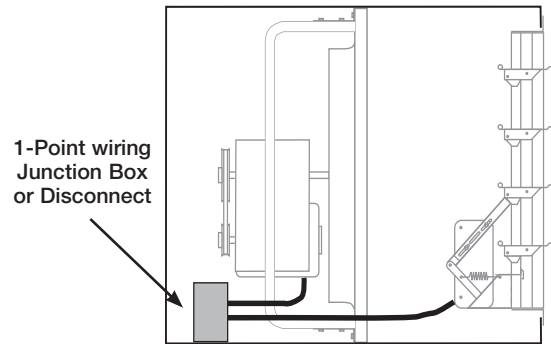


NEMA-3R
and NEMA-1

1-Point Wiring

Available when the following items are selected: common voltages on the motor and the actuator, disconnect mounted and wired and a wall housing. The wires are pulled from the motor and the actuator on the damper to the disconnect box. (Hard wiring of the components to the disconnect switch is by others.)

Exception: When a specific voltage is not available on the actuator, Greenheck will provide a hard wired transformer to the actuator. Greenheck will then pull the wires from the transformer to the disconnect box.



UL/cUL 705

All belt and selected direct drive fans with TE standard efficiency, single speed motors are available with the UL705 listing for electrical.

Extended Wiring Pigtail

Available only in conjunction with factory mounted disconnect switches, liquid tight wiring pigtails allow direct hook-up to the power supply which eliminates field wiring at the fan. Internal or external power supply can be specified.

End Switches

Factory mounted end switches allow the damper to open completely before the fan is energized. This will reduce the back pressure and brake horsepower load on the fan motor at startup. (Field supplied motor starter with a relay is required to complete the wiring on a system using an end switch.)

Options

Coatings

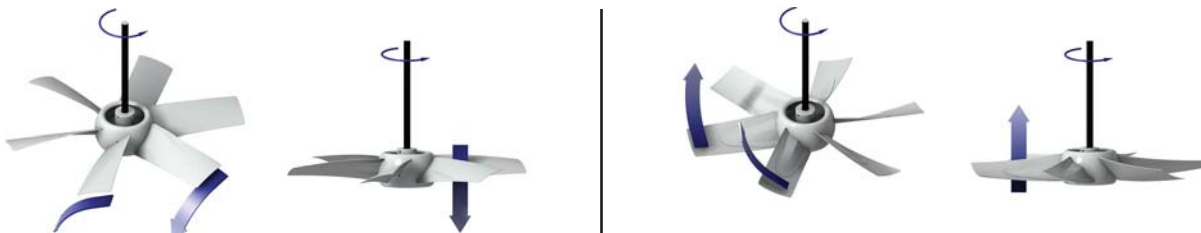
A variety of special coatings ranging from enamels to phenolics are available for decorative or protective purposes. When a special coating is selected for the fan, all accompanying accessory items are also coated unless so specified. Consult your local representative for more details.

Welded and Painted Fan Construction

For applications where extra heavy construction is required, welded steel construction is available. With this option, all stationary connections which are normally bolted are welded and coated with an industrial grade paint. This option applies to belt drive level 3 fans and direct drive level 2 and 3 fans only.

Propeller Fan Rotation Guide

Propeller blade should cup and throw the air when rotating in the correct rotation as shown below.



The first consideration in any fan selection is the amount of air to be moved and the resistance to this air movement. With specific performance and application criteria in mind, propeller fan selections typically require decisions based on the following criteria.

Belt Drive vs. Direct Drive

Belt drive fans offer the ability to adjust fan speed for system balancing if necessary. They also offer more flexibility in speeds and motor selections. In a cost comparison, belt drive fans are typically less costly than comparable size direct drive fans with low speed motors.

Direct drive fans are often preferred for jobs where maintenance access is difficult. Maintenance costs are generally lower with direct drive fans, since there are no belts or bearings to replace and no pulleys to adjust.

Larger Fans vs. Smaller Fans

In most applications, several fans may meet the specified airflow and pressure requirements. Just as larger fans tend to turn slower and generate less sound, they also tend to have higher initial costs but lower operating costs. Smaller fans, with their higher speeds, have more stable performance curves, lower initial costs, higher sound levels, and higher operating costs.

Low Sound vs. High Static Pressure

Fans selected for high static pressures run at higher speeds and produce higher tip speeds, resulting in higher sound levels. Conversely, in low pressure applications, fans generally run at lower speed producing lower sound levels and are recommended for sound sensitive applications.

How Accessories Affect Static Pressure

All accessory losses must be accounted for when calculating a fan's static pressure load. In most cases dampers, guards and weatherhoods actually add very little to the total system pressure. This means that propeller fans used in conjunction with common accessories can typically be specified with low pressure capabilities (below $\frac{3}{8}$ in. wg). However, in cases where airflow velocities exceed 1500 fpm through the damper or where filters are used, static pressure loss may be significant. For more specific information on pressure losses due to accessories, refer to pages 9 and 10.

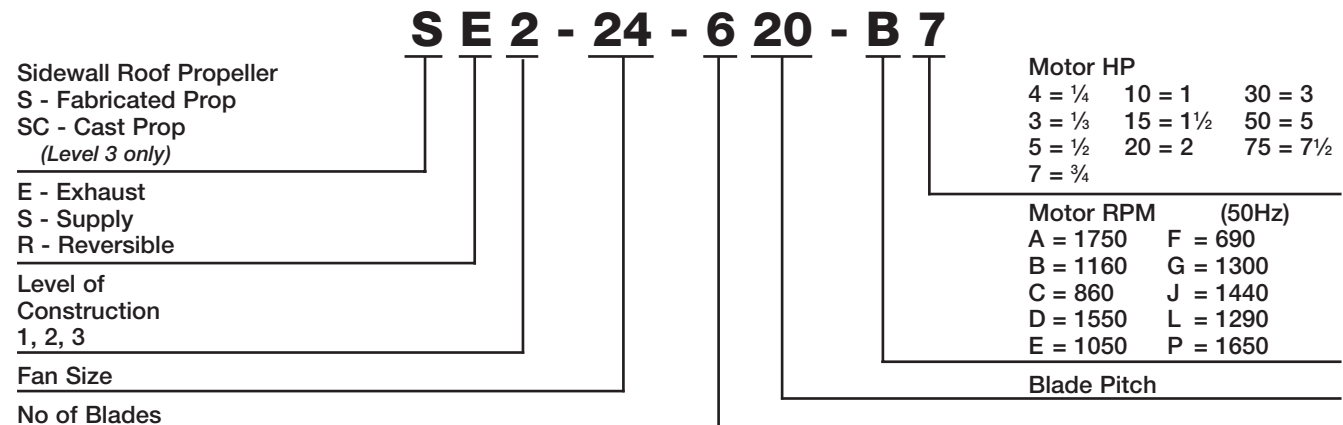
Motor Service Factor

Motors for sidewall propeller fans are cooled by the airstream. With an uninterrupted flow of cooling air, motors may be operated in their service factor range (up to 20% above the motor's nameplate horsepower) without damage due to overheating. Lesser overloads are recommended for applications using totally enclosed or explosion resistant motors.

Belt drive performance tables in this catalog show two speed selections for each propeller type (L or H) at a given motor hp. The first selection is a 1.0 bhp service factor. The second speed selection is at 1.2 bhp service factor. Direct drive performance tables show BHP levels with service factors ranging up to 1.2 bhp. When a selection at 1.2 bhp service factor is not desirable for the application, specify the next higher motor horsepower.

Direct Drive Model Number Code

The model number system is designed to completely identify the fan. The correct code letters must be specified to designate direct drive with exhaust or supply air configuration. The remainder of the model number is determined by the size and performance selected from pages 15 through 21.



Direct Drive - Level 1

Dimensional Data: Models SE1/SS1

All direct drive models are available in either exhaust (Model SE1) or supply (Model SS1) arrangements.

Panel/Drive frame - Galvanized steel with one-piece drawn venturi
 Sizes 8-12; D, G, & E motor speeds - zinc plated heavy welded wire guard/support structure (paint optional).

Sizes 12-24; A, B, & C motor speeds - bolted structural steel channels and motor plate. (paint optional).

Propeller - Aluminum blades riveted to a steel hub.

Motors - Heavy duty, permanently lubricated, sleeve bearing type on sizes 8-12 and ball bearing type on sizes 14-24.

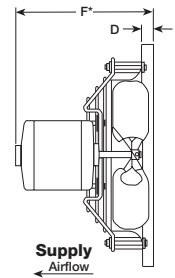
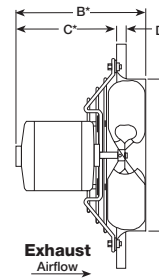
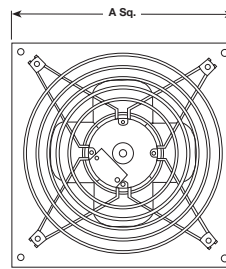
Fan Size	Material Gauges		Max. Motor Frame Size	Approx. Weight (lbs.)
	Fan Panel	Drive Frame		
8	18	-	48	15
10	18	-	48	16
12	18	14*	48	20
14	18	14	56	27
16	18	14	56	30
18	18	14	56	35
20	18	14	145T	39
24	18	14	145T	45

* A, B, and C motor speeds only. Approximate weight does not include accessories.

Model SE1 exhaust shown



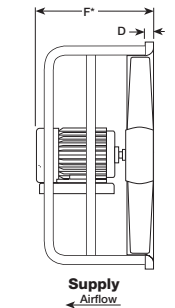
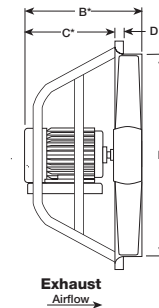
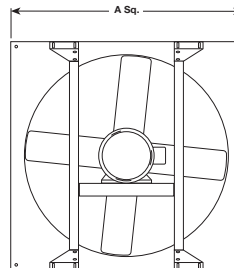
Sizes 8-12
 D, G, & E
 Motor Speeds



Model SS1 supply shown



Sizes 12-24
 A, B, & C
 Motor Speeds



Fan Size	A Panel**	B*	C*	D	E	F*	Damper Size**
8	13 (330)	7 (178)	5 (127)	1 (25)	8 ⁵ / ₈ (213)	8 (203)	10 (254)
10	15 (381)	8 ³ / ₄ (222)	5 (127)	1 (25)	10 ⁵ / ₈ (264)	8 (203)	12 (305)
12	18 (457)	10 ³ / ₄ (273)	8 ¹ / ₄ (210)	1 (25)	12 ⁵ / ₈ (314)	13 ¹ / ₈ (333)	14 (356)
14	20 (508)	11 ¹ / ₄ (286)	8 ¹ / ₂ (216)	1 (25)	14 ⁵ / ₈ (365)	14 ¹ / ₄ (362)	16 (406)
16	22 (559)	11 ³ / ₄ (298)	8 ⁷ / ₈ (225)	1 (25)	16 ⁵ / ₈ (416)	14 (356)	18 (457)
18	24 (610)	14 (356)	10 ⁷ / ₈ (276)	1 (25)	18 ⁵ / ₈ (467)	14 ¹ / ₄ (362)	20 (508)
20	26 (660)	17 ¹ / ₄ (438)	11 (279)	1 (25)	20 ¹ / ₂ (521)	18 (457)	22 (559)
24	32 (813)	20 (508)	12 ⁵ / ₈ (321)	1 ¹ / ₄ (32)	24 ⁵ / ₈ (619)	21 (533)	26 (660)

* Varies with motor selection. All dimensions given in inches (mm). **Square dimension.

Direct Drive - Level 1

Model SE1 for exhaust – Model SS1 for supply



Model Number	Motor HP	Fan RPM	Max BHP	Sones @ F.A.	CFM/Static Pressure in Inches WG											
					0.00	0.05	0.10	0.125	0.15	0.20	0.25	0.30	0.375	0.50	0.625	0.75
SE1/SS1 Performance Limits																
SE1/SS1-8-424-G	1/80	1350	28W	3.2	300	263	190									
SE1/SS1-8-426-D		1550	39 W	3.7	310	282	231	190	140							
SE1/SS1-8-428-P	1/40	1650	53 W	3.9	329	302	266	237	214	149						
SE1/SS1-8-440-E	1/100	1050	50 W	1.5	311	224	126	100								
SE1/SS1-8-440-G	1/40	1350	55 W	3.5	399	354	256	198	174	138						
SE1/SS1-8-440-D	1/25	1550	75 W	4.9	459	419	351	307	255	198	167	115				
SE1/SS1-10-424-D	1/50	1550	45 W	4.6	575	525	462	407								
SE1/SS1-10-426-P	1/30	1650	55 W	4.8	590	551	502	468	428							
SE1/SS1-10-428-P	1/20		78 W	5.2	606	573	536	511	484	407	272	249	213			
SE1/SS1-10-440-E	1/40	1050	105 W	3.2	626	533	361									
SE1/SS1-10-440-G	1/20	1350	135 W	4.9	804	738	655	615	564							
SE1/SS1-10-440-D	1/12	1550	170 W	5.9	924	869	800	763	726	641						
SE1/SS1-12-426-D	1/10	1550	105 W	6.6	1113	1055	975	929	877	748	609	428				
SE1/SS1-12-436-G		1350	120 W	7.5	1269	1202	1101	1048	973	779	359					
SE1/SS1-12-432-E	1/20	1050	125 W	4.3	981	877	744	678	622	463	383					
SE1/SS1-12-432-G	1/12	1350	170 W	6.0	1262	1185	1097	1037	986	886	798	721	540			
SE1/SS1-12-432-D	1/8	1550	190 W	7.5	1449	1382	1309	1271	1224	1129	1042	952	860	614	478	
SE1/SS1-12-432-C8		860	0.03	4.0	804	664	511	438	348	248						
SE1/SS1-12-432-B6	1/6	1160	0.07	4.8	1084	991	872	816	755	660	503	431				
SE1/SS1-12-432-A4	1/4	1750	0.27	8.7	1636	1577	1515	1481	1447	1365	1282	1207	1085	947	706	585
SE1/SS1-14-440-C8	1/8	860	0.07	5.9	1189	1055	919	711	649	551	408					
SE1/SS1-14-440-B6	1/6	1160	0.15	7.3	1604	1493	1406	1350	1297	1207	908	837	720			
SE1/SS1-14-432-A4	1/4	1750	0.29	12.9	2404	2351	2299	2273	2245	2189	2134	2052	1912	1636		
SE1/SS1-14-436-A3	1/3		0.39	14.8	2734	2674	2615	2585	2553	2487	2422	2340	2192	1829	1220	
SE1/SS1-16-436-C8	1/8	860	0.12	5.0	2003	1876	1732	1621	1433	1037	849	705				
SE1/SS1-16-426-B6	1/6	1160	0.15	7.5	2108	2027	1942	1894	1846	1725	1588					
SE1/SS1-16-428-B6			0.19	7.6	2235	2148	2058	2012	1964	1840	1710	1534	1126			
SE1/SS1-16-436-B4	1/4		0.29	9.5	2702	2609	2512	2461	2410	2281	2067	1761	1359	1049		
SE1/SS1-16-421-A3	1/3		0.38	13.5	2552	2506	2461	2438	2415	2367	2309	2252	2143	1916		
SE1/SS1-16-428-A5	1/2	1750	0.60	15.3	3372	3315	3257	3228	3199	3140	3078	3016	2908	2700	2468	1861
SE1/SS1-16-436-A7	3/4		0.89	16.6	4076	4015	3954	3923	3892	3828	3760	3693	3591	3349	2902	2298
SE1/SS1-18-434-C8	1/8	860	0.15	8.7	2661	2464	2202	2032	1874	1346						
SE1/SS1-18-436-C6	1/6		0.19	9.2	2778	2595	2319	2102	1963	1385	1108	912				
SE1/SS1-18-424-B6			0.20	6.7	2800	2690	2568	2501	2427	2257	2025					
SE1/SS1-18-429-B4	1/4	1160	0.30	7.2	3238	3120	2987	2908	2828	2668	2434	2145	1510	1183		
SE1/SS1-18-436-B3	1/3		0.40	12.6	3747	3621	3466	3370	3267	3034	2732	2548	1727	1363		
SE1/SS1-18-424-A5	1/2	1750	0.60	15.7	4224	4151	4079	4043	4006	3925	3835	3745	3592	3252		
SE1/SS1-18-429-A7	3/4		0.88	17.4	4885	4807	4729	4690	4651	4565	4460	4354	4196	3926	3460	2984
SE1/SS1-20-428-C6	1/6	860	0.19	10.8	3133	3001	2823	2727	2641	2390	2085	1632				
SE1/SS1-20-436-C4	1/4		0.29	11.7	3888	3717	3523	3420	3285	2918	2237	2091	1873			
SE1/SS1-20-424-B4			0.30	13.8	3655	3561	3467	3419	3364	3255	3095					
SE1/SS1-20-428-B3	1/3	1160	0.40	14.3	4227	4128	4030	3974	3901	3755	3621	3493	3175	2287		
SE1/SS1-20-436-B5	1/2		0.60	14.4	5245	5118	4991	4926	4849	4697	4525	4321	3863	2920	2650	
SE1/SS1-20-420-A7	3/4		0.87	24	4682	4617	4552	4519	4486	4421	4362	4303	4215	4036	3810	
SE1/SS1-20-428-A10	1	1750	1.19	25	6377	6311	6246	6214	6181	6116	6050	5965	5820	5580	5368	5087
SE1/SS1-20-432-A15	1½		1.73	26	7115	7038	6962	6924	6886	6809	6733	6653	6518	6292	6016	5688
SE1/SS1-24-432-C4	1/4	860	0.29	9.1	5000	4767	4540	4409	4233	3789						
SE1/SS1-24-436-C3	1/3		0.39	10.0	5457	5232	5002									
SE1/SS1-24-437-C5	1/2	1160	0.58	11.6	6136	5953	5764	5631	5497	5150	4720	4341				
SE1/SS1-24-428-B5			0.58	14.1	5908	5794	5680	5623	5566	5382	5175	4898				
SE1/SS1-24-432-B7	3/4		0.83	14.7	6745	6572	6399	6313	6229	6064	5830	5569	5007			

Performance certified is for Models SE1/SS1 for installation type A: free inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). -Speed (RPM) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are loudness values in fan sones at 5 ft (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation type A: free inlet hemispherical sone levels.

Numbers in blue have a larger BHP and require the next size larger motor.

Direct Drive - Level 2

Dimensional Data: Models SE2/SS2



All direct drive models are available in either exhaust (Model SE2) or supply (Model SS2) arrangements.

Panel/Drive frame - Galvanized steel with one-piece drawn venturi, bolted structural steel channels and motor plate (paint optional).

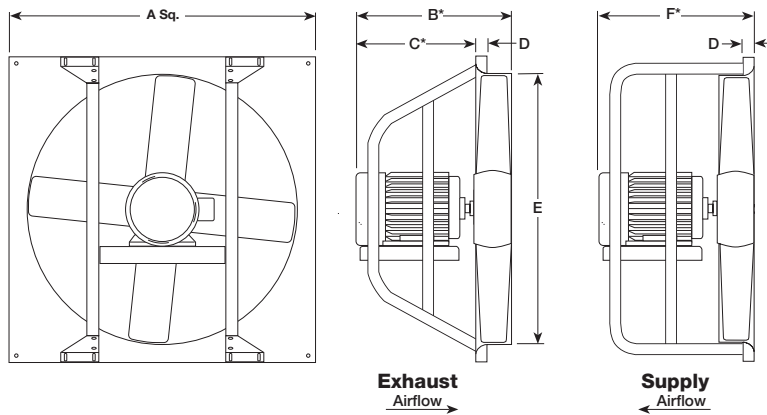
Propeller - Heavy duty, welded and gusseted painted steel.

Motors - Heavy duty, permanently lubricated, ball bearing type.

Fan Size	Material Gauges				Max. Motor Frame Size	Approx. Weight (lbs.)
	Fan Panel	Drive Frame	Prop Hub	Prop Blade		
16	18	14	14	16	56	40
18	18	14	14	16	56	45
20	18	12	14	16	145T	60
24	18	12	14	16	145T	85
30	16	12	12	16	184T	130
36	16	12	12	16	215T	230
42	14	10	11	14	254T	290
48	14	10	11	14	254T	375
54	14	10	10	14	256T	465

Approximate weight does not include accessories.

Model SE2 exhaust shown



Fan Size	A Panel**	B*	C*	D	E	F*	Damper Size**
16	22 (559)	13½ (343)	10¼ (260)	1 (25)	16% (416)	14 (356)	18 (457)
18	24 (610)	13½ (343)	10¼ (260)	1 (25)	18% (467)	14¼ (362)	20 (508)
20	26 (660)	17¼ (438)	13½ (343)	1 (25)	20½ (521)	18 (457)	22 (559)
24	32 (813)	20 (508)	13½ (343)	1¼ (32)	24% (625)	21 (533)	26 (660)
30	38 (965)	20½ (521)	16% (416)	1¼ (32)	30% (778)	21¼ (552)	32 (813)
36	44 (1118)	20½ (521)	16% (416)	2 (51)	36% (930)	28 (711)	38 (965)
42	50 (1270)	26 (660)	18¼ (464)	2 (51)	42% (1083)	28 (711)	44 (1118)
48	56 (1422)	26% (676)	20% (524)	2 (51)	49¼ (1251)	28½ (724)	50 (1270)
54	62 (1575)	28 (711)	22⅞ (570)	2 (51)	55% (1407)	30% (765)	56 (1422)

* Varies with motor selection. All dimensions given in inches (mm). **Square dimension.

Direct Drive - Level 2

Model SE2 for exhaust – Model SS2 for supply



Model Number	Motor HP	Fan RPM	Max BHP	Sones @ F.A.	CFM / Static Pressure in Inches WG											
					0.00	0.10	0.125	0.15	0.20	0.25	0.30	0.375	0.50	0.625	0.75	1.00
SE2 / SS2 Performance Limits																
SE2/SS2-16-427-B6	1/6	1160	0.15	11.3	2213	1933	1849	1766	1536	1215	894					
SE2/SS2-16-435-B6			0.20	11.6	2522	2239	2150	2055	1732	1434						
SE2/SS2-16-417-A4	1/4	1750	0.30	18.7	2582	2414	2375	2336	2255	2156	2053	1869	1435	1084		
SE2/SS2-16-423-A3	1/3		0.38	19.9	3076	2899	2854	2809	2719	2621	2524	2331	1916			
SE2/SS2-16-430-A5	1/2		0.56	23	3531	3344	3297	3250	3155	3058	2944	2750	2303	1642		
SE2/SS2-18-423-B6	1/6		0.20	12.5	2917	2632	2562	2458	2249	2018						
SE2/SS2-18-430-B4	1/4	1160	0.29	14.2	3376	3038	2944	2861	2662	2398	2084					
SE2/SS2-18-435-B3	1/3	1750	0.35	16.2	3658	3311	3208	3089	2850	2556	1903					
SE2/SS2-18-411-A4	1/4		0.30	21	3121	2978	2941	2893	2799	2697	2586	2415				
SE2/SS2-18-415-A3	1/3		0.41	22	3623	3476	3439	3400	3300	3199	3091	2920				
SE2/SS2-18-421-A5	1/2		0.59	22	4177	4015	3975	3931	3807	3683	3574	3416	3059	2558		
SE2/SS2-20-420-B6	1/6	1160	0.21	15.3	3697	3350	3257	3137	2857	2532	2155					
SE2/SS2-20-423-B4	1/4		0.30	17.2	3997	3626	3522	3419	3153	2834	2430					
SE2/SS2-20-430-B3	1/3	1750	0.40	18.6	4468	4087	3989	3882	3626	3281						
SE2/SS2-20-407-A4			0.37	27	3579	3382	3333	3282	3180	3053	2922	2744	2300	1869	1342	
SE2/SS2-20-410-A3			0.37	28	4035	3835	3785	3731	3623	3461	3254	3113	2791			
SE2/SS2-20-415-A5			1/2	0.57	29	4934	4697	4637	4578	4454	4330	4185	3957			
SE2/SS2-20-420-A7	3/4	1750	0.88	30	5577	5355	5300	5243	5121	4999	4877	4614	4138	3544	2992	
SE2/SS2-20-427-A10	1		1.19	33	6633	6364	6297	6231	6099	5968	5837	5613				
SE2/SS2-20-435-A15	1½		1.76	35	7266	6980	6909	6837	6691	6543	6396	6115	5453	4658		
SE2/SS2-24-615-C4	1/4		860	0.28	15.7	4687	4200	4058	3895	3561	3126	2488				
SE2/SS2-24-620-C3	1/3	0.36		18.5	5300	4710	4557	4410	3993	3445	2607					
SE2/SS2-24-630-C5	1/2	0.54		18.8	6439	5768	5599	5412	4993	4387						
SE2/SS2-24-620-B7	3/4	1160		0.86	23	7148	6728	6619	6502	6268	6049	5831	5308	4315		
SE2/SS2-24-625-B10	1		1.13	25	7917	7491	7391	7291	7060	6781	6501	6035	4850	2745		
SE2/SS2-24-600-A7	3/4	1750	0.87	36	5070	4877	4828	4778	4676	4573	4455	4251	3911	3518	3161	2287
SE2/SS2-24-604-A10	1		1.18	39	6297	6081	6027	5973	5865	5747	5627	5447	5084	4671	4203	
SE2/SS2-24-610-A15	1½		1.70	40	8137	7904	7845	7787	7670	7559	7448	7281	6968	6571	6178	5106
SE2/SS2-24-615-A20	2		2.28	41	9537	9310	9253	9197	9083	8961	8835	8646	8315	7915	7508	6559
SE2/SS2-30-618-C7	3/4	860	0.79	23	9698	9066	8886	8707	8309	7892	7340	6370				
SE2/SS2-30-625-C10	1		1.18	28	11515	10823	10644	10461	10097	9629	9051	7945				
SE2/SS2-30-635-C15	1½		1.80	32	13290	12505	12291	12076	11647	11060	10192	7951				
SE2/SS2-30-605-B7	3/4		1160	0.86	29	7911	7479	7369	7257	7034	6795	6551	6210	5496	4497	3377
SE2/SS2-30-610-B10	1	1.17		30	9662	9293	9201	9103	8872	8640	8392	7976	7204	6248	5108	
SE2/SS2-30-615-B15	1½	1.72		31	12000	11565	11456	11348	11130	10890	10619	10200	9404	8327	6921	
SE2/SS2-30-620-B20	2	2.29		33	13905	13434	13316	13198	12939	12665	12391	11954	11144	10136	8640	
SE2/SS2-36-607-C7	3/4	860	0.82	27	9985	9347	9183	9012	8669	8255	7829	7039	5325	3679	2486	
SE2/SS2-36-611-C10	1		1.11	30	12131	11529	11360	11187	10840	10449	10058	9289	7622	5532	3782	
SE2/SS2-36-617-C15	1½		1.61	31	15162	14491	14324	14153	13810	13442	12926	12117	10512	7704	5270	
SE2/SS2-36-600-B10	1		1.21	34	8200	7791	7656	7515	7224	6913	6617	6214	5478	4679	3902	
SE2/SS2-36-605-B15	1½	1160	1.72	36	11977	11535	11424	11313	11077	10828	10580	10147	9384	8487	7337	5080
SE2/SS2-36-609-B20	2		2.34	37	14957	14468	14345	14223	13976	13728	13480	13098	12411	11537	10483	7678
SE2/SS2-36-614-B30	3	860	3.29	40	18400	17945	17832	17718	17490	17263	16965	16517	15787	15003	13722	10993
SE2/SS2-42-602-C10	1		1.08	30	8673	7991	7811	7632	7254	6888	6531	5979	4937	3944	2850	
SE2/SS2-42-608-C15	1½		1.73	32	14642	14035	13883	13732	13396	13058	12692	12072	10980	9558	8035	
SE2/SS2-42-612-C20	2		2.42	33	18363	17675	17503	17331	16966	16600	16233	15619	14477	13041		
SE2/SS2-42-617-C30	3	860	3.32	35	21840	21148	20975	20802	20440	20032	19624	18975	17694	16259	14629	8191
SE2/SS2-42-627-C50	5		5.95	41	28811	27924	27702	27480	27037	26533	26023	25261	24002	22494	20376	13589
SE2/SS2-48-407-C15	1½		860	1.84	43	18124	17081	16823	16565	16049	15499	14820	13815	12067	9984	7536
SE2/SS2-48-410-C20	2			2.40	44	21801	20853	20616	20362	19848	19333	18699	17684	15807	13843	11719
SE2/SS2-48-415-C30	3	3.58		48	27004	26027	25783	25539	24915	24272	23638	22726	21025	19172	16924	
SE2/SS2-48-422-C50	5	5.91		53	34332	33166	32874	32583	31944	31257	30570	29594	27990	25869	23518	
SE2/SS2-54-420-F50	5	690	5.76	52	41542	39736	39284	38845	38011	37177	36322	34995	32089	28911	25289	14535
SE2/SS2-54-410-C50		860	5.68	53	35642	34502	34217	33932	33364	32826	32287	31334	29690	27722	25548	20120
SE2/SS2-54-416-C75	7½	860	8.68	54	45612	44465	44179	43892	43319	42745	42051	40967	39103	37130	34973	30171

Performance certified is for Models SE2/SS2 for installation type A: free inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). -Speed (RPM) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are loudness values in fan sones at 5 ft (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation type A: free inlet hemispherical sone levels. Numbers in blue have a larger BHP and require the next size larger motor.

Direct Drive - Level 3

Dimensional Data: Models SCE3/SCS3



All direct drive models are available in either exhaust (Model SCE3) or supply (Model SCS3) arrangements.

Panel/Drive frame - Galvanized steel with one-piece drawn venturi, bolted structural steel channels and motor plate. (paint optional).

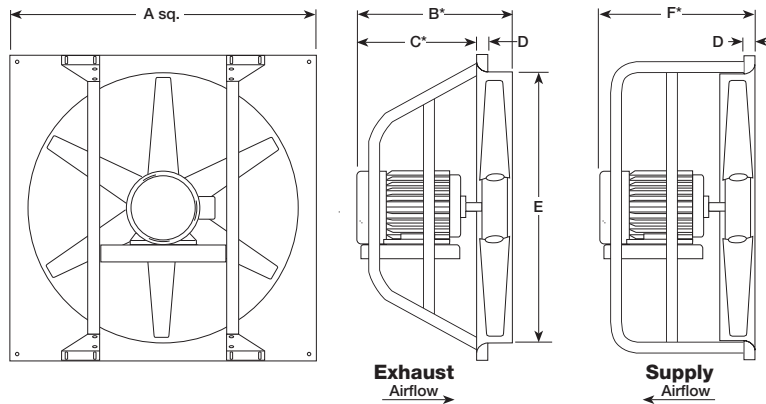
Propeller - Heavy duty, cast aluminum.

Motors - Heavy duty, permanently lubricated, ball bearing type.

Fan Size	Fan Panel	Drive Frame	Material Gauges		Max. Motor Frame Size	Approx. Weight (lbs.)
			Prop Hub	Prop Blade		
20	18	12	Cast Aluminum Prop	Cast Aluminum Prop	145T	55
24	18	12			184T	80
30	16	12			184T	125
36	16	12			215T	220
42	14	10			254T	290
48	14	10			254T	386
54	14	10			256T	477

Approximate weight does not include accessories.

Model SCE3 exhaust shown



Fan Size	A Panel**	B*	C*	D	E	F*	Damper Size**
20	26 (660)	17¼ (438)	13½ (343)	1 (25)	20½ (521)	18 (457)	22 (559)
24	32 (813)	20 (508)	13½ (343)	1¼ (32)	24⅝ (625)	21 (533)	26 (660)
30	38 (965)	20½ (521)	16⅝ (416)	1¼ (32)	30⅝ (778)	21¼ (552)	32 (813)
36	44 (1118)	20½ (521)	16⅝ (416)	2 (51)	36⅝ (930)	28 (711)	38 (965)
42	50 (1270)	26 (660)	18¼ (464)	2 (51)	42⅝ (1083)	28 (711)	44 (1118)
48	56 (1422)	26⅝ (676)	20⅝ (524)	2 (51)	49¼ (1251)	28½ (724)	50 (1270)
54	62 (1575)	28 (711)	22⅞ (570)	2 (51)	55⅝ (1407)	30⅝ (765)	56 (1422)

* Varies with motor selection. All dimensions given in inches (mm). **Square dimension.

Direct Drive - Level 3

Model SCE3 for exhaust – Model SCS3 for supply



Model Number	Motor HP	Fan RPM	Max BHP	Sones @ F.A.	CFM / Static Pressure in Inches WG												
					0.00	0.10	0.125	0.15	0.20	0.25	0.30	0.375	0.50	0.625	0.75	1.00	
SCE3/SCS3 Performance Limits																	
SCE3/SCS3-20-617-B4	1/4	1160	0.29	22	3243	2990	2924	2851	2703	2529	2292	1796					
SCE3/SCS3-20-622-B3	1/3		0.40	23	3766	3517	3451	3381	3241	3067	2871	2468					
SCE3/SCS3-20-630-B5	1/2		0.55	25	4394	4115	4049	3984	3809	3635	3448	3039					
SCE3/SCS3-20-307-A4	1/4		0.27	31	2984	2707	2629	2554	2410	2250	2083	1789	1213				
SCE3/SCS3-20-312-A3	1/3	0.40	33	3753	3486	3424	3364	3240	3087	2909	2623	2082	1415				
SCE3/SCS3-20-320-A5	1/2	1750	0.62	37	4673	4463	4383	4304	4152	4011	3873	3667	3222	2608	1804		
SCE3/SCS3-20-327-A7	3/4		0.92	41	5504	5189	5129	5069	4931	4772	4613	4365	3931	3335	2471		
SCE3/SCS3-20-429-A10	1		1.26	42	6005	5797	5745	5692	5564	5434	5303	5106	4739	4327	3763		
SCE3/SCS3-24-620-C4	1/4		0.28	16.7	4777	4292	4146	3999	3695	3312	2822						
SCE3/SCS3-24-627-C3	1/3	860	0.39	16.2	5612	5090	4940	4787	4420	3982	3385						
SCE3/SCS3-24-630-C5	1/2		0.45	18.2	5924	5401	5252	5094	4653	4184	3656						
SCE3/SCS3-24-412-B4	1/4		0.28	18.8	4685	4204	4105	4007	3762	3481	3172	2538					
SCE3/SCS3-24-417-B3	1/3		0.38	21	5446	4960	4843	4725	4461	4167	3905	3412					
SCE3/SCS3-24-617-B5	1/2	1160	0.60	24	5994	5634	5537	5440	5248	5053	4828	4472	3675				
SCE3/SCS3-24-625-B7	3/4		0.87	27	7249	6872	6772	6672	6462	6248	6013	5592	4773				
SCE3/SCS3-24-630-B10	1		1.10	28	7991	7644	7535	7426	7206	6984	6694	6203	5304				
SCE3/SCS3-24-407-A5	1/2		0.62	39	5559	5316	5250	5169	5010	4854	4691	4434	3963	3367	2586		
SCE3/SCS3-24-315-A7	3/4	1750	0.88	40	7200	6785	6689	6593	6393	6186	6008	5746	5228	4642	3857		
SCE3/SCS3-24-415-A10	1		1.17	46	7728	7431	7356	7276	7103	6940	6782	6541	6130	5680	5163		
SCE3/SCS3-24-615-A15	1 1/2		1.81	49	8561	8331	8273	8216	8097	7976	7856	7674	7356	7005	6637	5750	
SCE3/SCS3-24-620-A20	2		2.37	53	9721	9501	9446	9391	9281	9159	9033	8844	8488	8126	7757	6886	
SCE3/SCS3-30-315-C4	1/4	860	0.30	16.5	7276	5972	5609	5236	4402	2816							
SCE3/SCS3-30-320-C3	1/3		0.40	19.0	8235	6951	6532	6111	5245	3909							
SCE3/SCS3-30-422-C5	1/2		0.59	21	9389	8340	8040	7711	6993	6222	4858						
SCE3/SCS3-30-623-C7	3/4		0.87	23	10396	9831	9655	9433	8937	8357	7699	6456					
SCE3/SCS3-30-627-C10	1	1160	1.01	23	11192	10384	10182	9958	9484	8897	8174	6869					
SCE3/SCS3-30-409-B5	1/2		0.63	26	8794	8076	7878	7680	7286	6886	6363	5594	3748				
SCE3/SCS3-30-317-B7	3/4		0.85	29	10420	9538	9269	9010	8493	7941	7343	6384					
SCE3/SCS3-30-612-B10	1		1.21	32	10679	10168	10038	9904	9637	9349	9047	8544	7622	6348			
SCE3/SCS3-30-620-B15	1 1/2	860	1.87	36	13263	12742	12615	12489	12237	11942	11611	11091	10081	8865			
SCE3/SCS3-30-625-B20	2		2.32	40	14779	14160	14005	13849	13537	13220	12901	12376	11276	9927			
SCE3/SCS3-36-407-C5	1/2		0.60	25	11645	10275	9900	9546	8692	7632	6426						
SCE3/SCS3-36-415-C7	3/4		0.86	34	13452	12100	11762	11424	10596	9480	8239						
SCE3/SCS3-36-612-C10	1	860	1.21	25	14903	13880	13580	13281	12683	12079	11454	10212					
SCE3/SCS3-36-620-C15	1 1/2		1.75	30	17206	16138	15847	15555	14959	14327	13561	12192					
SCE3/SCS3-36-627-C20	2		2.30	31	19898	18735	18408	18081	17299	16428	15538	13942					
SCE3/SCS3-36-305-B7	3/4		0.94	37	13250	12067	11799	11452	10652	9938	9223	7620	4470				
SCE3/SCS3-36-307-B10	1	1160	1.18	38	14446	13289	13000	12698	12093	11443	10672	9209					
SCE3/SCS3-36-410-B15	1 1/2		1.82	43	17128	16145	15888	15629	15110	14561	13964	13052	11211	8411			
SCE3/SCS3-36-609-B20	2		2.42	48	17903	17169	16986	16802	16424	16015	15607	14993	13899	12434	10501		
SCE3/SCS3-36-617-B30	3		3.54	49	21781	20957	20751	20546	20134	19710	19269	18607	17398	15999	14133		
SCE3/SCS3-42-610-F7	3/4	690	0.85	25	14274	13009	12625	12182	11224	10210	8748	5893					
SCE3/SCS3-42-615-F10	1		1.16	27	16960	15417	15027	14641	13687	12645	11511	8704					
SCE3/SCS3-42-622-F15	1 1/2		1.76	28	20327	18789	18421	17960	17008	15991	14609	11992					
SCE3/SCS3-42-629-F20	2		2.40	31	23088	21265	20790	20297	19236	18050	16564						
SCE3/SCS3-42-605-C10	1	860	1.16	35	14770	13609	13290	12964	12277	11524	10705	9283	6513				
SCE3/SCS3-42-610-C15	1 1/2		1.64	34	17791	16813	16543	16272	15653	14934	14156	12957	9944				
SCE3/SCS3-42-615-C20	2		2.24	35	21138	19913	19598	19283	18657	18039	17251	15978	13640				
SCE3/SCS3-42-620-C30	3		3.11	36	24242	23108	22791	22474	21840	21181	20517	19111	16580	12206			
SCE3/SCS3-48-410-F7	3/4	690	0.90	32	18398	15714	14918	14090	12218	10042	6727						
SCE3/SCS3-48-414-F10	1		1.20	32	21562	18368	17420	16448	14580	12041	8226						
SCE3/SCS3-48-614-F15	1 1/2		1.78	35	25271	23113	22519	21926	20713	19474	17794	14865					
SCE3/SCS3-48-619-F20	2		2.37	38	29125	26642	26019	25396	24108	22773	21122	18057					
SCE3/SCS3-48-625-F30	3	860	3.29	41	32762	30379	29640	28898	27385	25882	24151	20889					
SCE3/SCS3-48-605-C15	1 1/2		1.80	45	23073	21487	21054	20621	19708	18766	17714	16029	12669	7307			
SCE3/SCS3-48-609-C20	2		2.33	48	26491	24711	24266	23812	22881	21974	21083	19377	16101	11261			
SCE3/SCS3-48-614-C30	3		3.44	51	31497	29785	29357	28909	27957	27004	26029	24538	21223				
SCE3/SCS3-48-622-C50	5	690	5.61	52	39085	37241	36752	36264	35287	34162	33029	31264	27766				
SCE3/SCS3-48-630-C75	7 1/2		7.66	53	43290	41324	40745	40167	38989	37745	36536	34864	30731				
SCE3/SCS3-54-306-F15	1 1/2		1.72	28	24805	22316	21660	20953	19422	17603	15619	12506					
SCE3/SCS3-54-311-F20	2		2.42	28	30602	27772	27138	26500	25218	23953	22581	19674	11567				
SCE3/SCS3-54-317-F30	3	860	3.47	31	36325	33687	33047	32411	31012	29503	27774	25025	18028				
SCE3/SCS3-54-328-F50	5		5.82	40	44402	41230	40512	39795	38189	36133	34392	30263	22490				
SCE3/SCS3-54-300-C20	2		2.47	42	22960	20143	19493	18842	17457	15965	14473	12260	8206				
SCE3/SCS3-54-307-C30	3		3.51	42	31594	29768	29284	28783	27774	26704	25565	23289	19595	15339	10240		
SCE3/SCS3-54-315-C50	5	860	5.79	45	42371	40506	40040	39569	38391	37237	36172	34553	31073	27246	20063		
SCE3/SCS3-54-323-C75	7 1/2		9.00	50	51206	48980	48424	47828	46616	45404	44315	42712	39307	35027	29939		

Performance certified is for Models SCE3/SCS3 for installation type A: free inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). -Speed (RPM) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are loudness values in fan sones at 5 ft (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation type A: free inlet hemispherical sone levels. Numbers in blue have a larger BHP and require the next size larger motor.

Direct Drive - Level 3 - Reversible

Dimensional Data: Model SCR3

Panel/Drive frame - Galvanized steel with one-piece drawn venturi, bolted structural steel channels and motor plate. (paint optional).

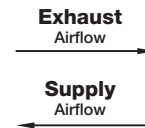
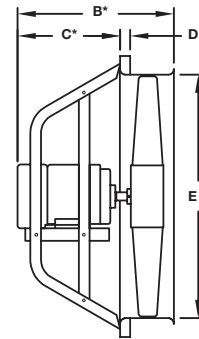
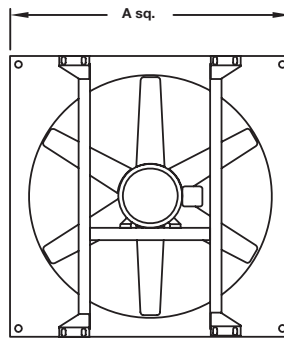
Propeller - Heavy duty, cast aluminum.

Motors - Heavy duty, permanently lubricated, ball bearing type.

Material Gauges					Max. Motor Frame Size	Approx. Weight (lbs.)
Fan Size	Fan Panel	Drive Frame	Prop Hub	Prop Blade		
24	16	14	Cast Aluminum Prop	Cast Aluminum Prop	184T	80
30	16	11			184T	125
36	16	11			215T	220
42	14	10			254T	290
48	14	10			254T	386
54	14	10			256T	477

Approximate weight does not include accessories.

Model SCR3 reversible shown



Fan Size	A Panel**	B*	C*	D	E	Damper Size**
20	26 (660)	17¼ (438)	13½ (343)	1 (25)	20½ (521)	22 (559)
24	32 (813)	20 (508)	13½ (343)	1¼ (32)	24⅝ (625)	26 (660)
30	38 (965)	20½ (521)	16⅝ (416)	1¼ (32)	30⅝ (778)	32 (813)
36	44 (1118)	20½ (521)	16⅝ (416)	2 (51)	36⅝ (930)	38 (965)
42	50 (1270)	26 (660)	18¼ (464)	2 (51)	42⅝ (1083)	44 (1118)
48	56 (1422)	26⅝ (676)	20⅝ (524)	2 (51)	49¼ (1251)	50 (1270)
54	62 (1575)	28 (711)	22⅞ (570)	2 (51)	55⅝ (1407)	56 (1422)

* Varies with motor selection. All dimensions given in inches (mm). **Square dimension.

Direct Drive - Level 3 - Reversible

Model SCR3 Reversible for exhaust and supply



Model Number	Motor HP	Fan RPM	Max BHP	Sones	CFM / Static Pressure in Inches WG										
					0.00	0.05	0.10	0.125	0.15	0.20	0.25	0.30	0.375	0.50	0.625
24 Performance Limits															
SCR3-24-627-C4	1/4	860	0.29	16.7	4981	4664	4269	4007	3498						
SCR3-24-632-C3	1/3		0.35	16.9	5478	5153	4731	4391	3789						
SCR3-24-416-B4	1/4		0.29	18.1	4521	4241	3949	3784	3619	3015	2232				
SCR3-24-420-B3	1/3	1160	0.37	19.3	5200	4904	4597	4434	4271	3815	2837				
SCR3-24-623-B5	1/2		0.58	22	6093	5869	5627	5499	5371	5029	4529	3791			
SCR3-24-632-B7	3/4		0.86	27	7389	7148	6896	6739	6582	6207	5689				
SCR3-24-410-A5	1/2	1750	0.57	32	5233	5028	4828	4730	4632	4403	4167	3921	3364		
SCR3-24-414-A7	3/4		0.83	34	6297	6114	5930	5834	5738	5546	5331	5108	4625		
SCR3-24-418-A10	1		1.15	35	7332	7141	6949	6853	6752	6552	6348	6112	5758	4623	
SCR3-24-425-A15	1 1/2	2	1.67	38	8928	8701	8474	8364	8259	8050	7831	7581	7160	6055	
SCR3-24-626-A20	2		2.31	41	9935	9786	9636	9561	9486	9325	9155	8984	8707	8111	6996
30 Performance															
SCR3-30-415-C4	1/4	860	0.29	16.6	6262	5732	5131	4718	4013						
SCR3-30-419-C3	1/3		0.38	17.2	7219	6523	5854	5466	4860						
SCR3-30-620-C5	1/2		0.56	18.8	8118	7694	7218	6953	6682	5738					
SCR3-30-629-C7	3/4	1160	0.84	2	9694	9233	8450	7977	7404						
SCR3-30-412-B5	1/2		0.58	24	7490	7051	6640	6429	6211	5688	4914				
SCR3-30-418-B7	3/4		0.88	27	9414	8921	8440	8206	7968	7466	6763	5490			
SCR3-30-423-B10	1	1750	1.14	29	10658	10134	9606	9329	8999	8338	7672	6255			
SCR3-30-624-B15	1 1/2		1.74	33	12167	11796	11425	11239	11041	10647	10032	9244	8158		
SCR3-30-630-B20	2		2.18	35	13226	12911	12595	12375	11987	11233	10437	9304			
SCR3-30-407-A10	1	1750	1.21	47	8583	8290	7998	7882	7765	7533	7258	6770	6243		
SCR3-30-410-A15	1 1/2		1.63	46	10337	10022	9712	9571	9429	9146	8892	8652	8266	7375	
SCR3-30-413-A20	2		2.09	45	11779	11498	11216	11077	10943	10673	10403	10114	9643	8634	
SCR3-30-420-A30	3	5	3.34	53	15176	14806	14437	14258	14084	13737	13393	13070	12585	11691	10359
SCR3-30-623-A50	5		5.5	63	17896	17658	17419	17300	17180	16942	16703	16454	16067	15380	14269
36 Performance															
SCR3-36-412-C5	1/2	860	0.55	23	9047	8380	7589	7156	6726						
SCR3-36-419-C7	3/4		0.85	23	12243	11532	10734	10259	9750	8734					
SCR3-36-425-C10	1		1.15	27	14110	13544	12541	12029	11535	10271	8338				
SCR3-36-628-C15	1 1/2	1160	1.74	31	16432	15855	15258	14814	14370	13429	12309				
SCR3-36-406-B7	3/4		0.84	38	9490	8991	8415	8053	7676						
SCR3-36-410-B10	1		1.14	38	10863	10436	9964	9700	9412	8797	8226	7493			
SCR3-36-415-B15	1 1/2	1750	1.71	38	14215	13624	13075	12814	12552	11874	11201	10530	9442		
SCR3-36-616-B20	2		2.2	44	15749	15311	14874	14666	14468	14071	13650	13183	12407		
SCR3-36-623-B30	3		3.44	49	19714	19293	18873	18658	18420	17943	17467	16951	16028	14204	
SCR3-36-630-B50	5	5	4.66	51	23117	22703	22290	22083	21876	21222	20473	19750	18648	16179	
42 Performance															
SCR3-42-417-F7	3/4	690	0.69	22	13597	12267	10835	9808	8589						
SCR3-42-620-F10	1		1.12	25	16651	15569	14511	13928	13315	11602					
SCR3-42-629-F15	1 1/2		1.72	30	19201	18039	16406	15463	14600	12682					
SCR3-42-415-C10	1	860	1.15	30	16078	14907	13968	13436	12804	11234					
SCR3-42-422-C15	1 1/2		1.77	35	18875	17758	16552	15875	15182	13699	11683				
SCR3-42-621-C20	2		2.28	36	21190	20336	19478	19048	18614	17612	16541	15213			
SCR3-42-630-C30	3	1160	3.48	43	24181	23243	22221	21682	20821	18963	17704	16613			
SCR3-42-408-B15	1 1/2		1.76	50	15026	14328	13600	13216	12824	11978	10952	9650	7136		
SCR3-42-412-B20	2		2.33	51	18959	18189	17432	17066	16700	15890	15029	14017	11855		
SCR3-42-418-B30	3	1750	3.47	54	23445	22661	21885	21501	21117	20314	19400	18384	16497		
SCR3-42-621-B50	5		5.54	60	28583	27949	27315	26999	26680	26042	25405	24704	23590	21563	
SCR3-42-630-B75	7 1/2		8.55	73	32616	31921	31226	30878	30483	29683	28884	27018	25357	23149	
48 Performance															
SCR3-48-414-F7	3/4	690	0.87	28	18011	16528	14580	13364	11950						
SCR3-48-418-F10	1		1.17	30	20555	19027	16931	15671	14268	10900					
SCR3-48-619-F15	1 1/2		1.75	33	23382	22284	20801	19931	19057	17136	14215				
SCR3-48-624-F20	2	860	2.29	37	26551	25172	23613	22714	21701	19145	15868				
SCR3-48-414-C15	1 1/2		1.69	40	22448	21297	19941	19200	18353	16384	14153				
SCR3-48-418-C20	2		2.27	42	25619	24430	23020	22243	21306	19279	16958	14401			
SCR3-48-620-C30	3	1160	3.52	48	30092	29264	28435	27770	27003	25523	24096	22719	19594		
SCR3-48-629-C50	5		5.6	56	35190	33738	32249	31430	30610	28531	26291	24091	20049		
SCR3-48-403-B15	1 1/2		1.6	56	14101	13313	12413	11885	11323	10099	8759				
SCR3-48-407-B20	2	1750	2.31	69	20861	20047	19222	18773	18324	17285	16039	14683	12327		
SCR3-48-412-B30	3		3.57	69	28014	27172	26330	25844	25330	24303	23202	22039	19654	15119	
SCR3-48-418-B50	5		5.57	72	34556	33674	32792	32352	31787	30634	29386	27973	25647	21187	
SCR3-48-417-B75	7 1/2	10	8.95	69	37004	36466	35928	35659	35390	34852	34216	33475	32363	30250	27397
SCR3-48-420-B100	10		11.14	75	41055	40543	40032	39776	39520	39008	38383	37504	36185	34026	31482
54 Performance															
SCR3-54-409-F15	1 1/2	690	1.62	36	21244	19996	18972	18303	17490	15579	12407				
SCR3-54-413-F20	2		2.31	35	25286	24141	22996	22310	21495	19866	17523				
SCR3-54-420-F30	3		3.48	35	32665	31099	29514	28700	27784	25855	23632	20807			
SCR3-54-623-F50	5	860	5.52	46	38452	37244	36028	35293	34558	33088	31492	29814	27135		
SCR3-54-409-C20	2		2.38	51	26479	25468	24556	24145	23734	22661	21344	19757	16344		
SCR3-54-410-C30	3		3.37	53	28003	26997	26093	25707	25320	24416	23141	21715	18977		
SCR3-54-417-C50	5	1750	5.81	52	37090	35925	34761	34229	33715	32688	31591	30131	27681	21769	
SCR3-54-618-C75	7 1/2		8.46	61	41795	40904	40014	39569	39124	38309	37501	36693	35197	31916	25633
SCR3-54-625-C100	10		11.7	68	50142	49192	48243	47768	47283	46066	44850	43285	40770	37198	33806

Performance certified is for Model SCR3 for installation type A: free inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). *Speed (RPM) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are loudness values in fan sones at 5 ft (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation type A: free inlet hemispherical sone levels.

Numbers in blue have a larger BHP and require the next size larger motor.

Belt Drive Model Number Code

The model number system is designed to completely identify the fan. The correct code letters must be specified to designate belt drive with exhaust or supply air configuration. The remainder of the model number is determined by the size and performance selected from pages 26 through 38.

SB E - 2 L 24 - 7

Sidewall Belt Drive
 SB - Fabricated Propeller
 SBC - Cast Propeller
 (Level 3 only)

E - Exhaust
 S - Supply
 R - Reversible

Level of
 Construction
 1, 2, 3

Motor HP

4 = 1/4	15 = 1 1/2	75 = 7 1/2
3 = 1/3	20 = 2	100 = 10
5 = 1/2	30 = 3	150 = 15
7 = 3/4	50 = 5	200 = 20
10 = 1		

For specific motor limitations and availability see page 31.

Fan Size

Propeller Type
 L - Low
 H - High

Belt Drive - Level 1

Dimensional Data: Models SBE-1/SBS-1

All belt drive models are available in either exhaust (Model SBE-1) or supply (Model SBS-1) arrangements.

Propeller - Galvanized steel, riveted blades (aluminum optional).

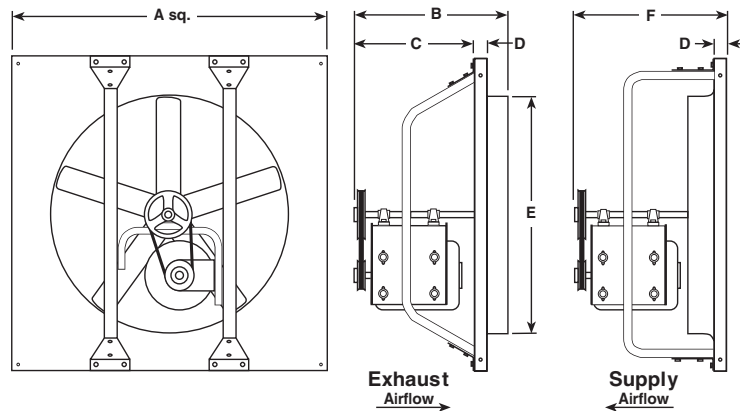
Bearings - Stamped steel pillow blocks up to size 36 and cast pillow blocks for size 42 and larger.

Panel/Drive frame - Galvanized steel with one-piece drawn venturi, bolted structural steel channels and one-piece motor/bearing plate (paint optional).

Fan Size	Fan Panel	Drive Frame	Material Gauges				Shaft Size	Max Motor Frame Size	Approx. Weight (lbs.)
			Hub		Blade				
			L	H	L	H			
20	18	14	14	16	18	3/4	56	60	
24	18	14	14	16	18	3/4	56	70	
30	18	12	14	12	16	3/4	56	95	
36	18	12	14	12	16	3/4	145T	110	
42	16	12	12	11	14	1	145T	150	
48	16	12	12	11	14	1	145T	175	
54	16	12	12	11	14	1	145T	205	

Approximate weight does not include accessories.

Model SBE-1H exhaust shown



Fan Size	A Panel**	B	C	D	E	F	Damper Size**
20	26 (660)	19½ (495)	16¼ (413)	1 (25)	20½ (521)	20 (508)	22 (559)
24	32 (813)	19½ (495)	16⅝ (410)	1¼ (32)	24⅝ (625)	20 (508)	26 (660)
30	38 (965)	22½ (572)	18¼ (464)	1¼ (32)	30⅝ (778)	21 (533)	32 (813)
36	44 (1118)	21½ (546)	16½ (419)	2 (51)	36⅝ (930)	23 (584)	38 (965)
42	50 (1270)	25 (635)	20 (508)	2 (51)	42¾ (1086)	23 (584)	44 (1118)
48	56 (1422)	25 (635)	19 (483)	2 (51)	48¾ (1238)	23 (584)	50 (1270)
54	62 (1575)	25 (635)	19½ (495)	2 (51)	55¼ (1403)	24 (610)	56 (1422)

All dimensions given in inches (mm). **Square dimension.

Belt Drive - Level 2

Dimensional Data: Models SBE-2/SBS-2

Propeller - Reinforced galvanized steel, riveted blades, keyed hub.

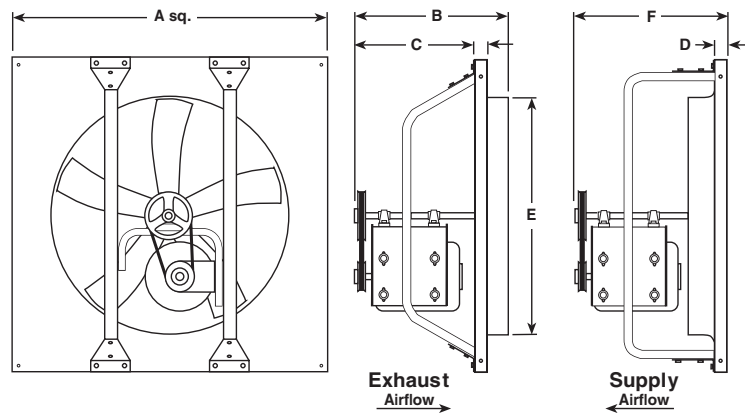
Bearings - Cast iron pillow blocks with grease fittings.

Panel/Drive frame - Galvanized steel with one-piece drawn venturi, bolted structural steel channels and one-piece motor/bearing plate (paint optional).

Fan Size	Fan Panel	Drive Frame	Material Gauges				Shaft Size	Max Motor Frame Size	Approx. Weight (lbs.)
			Propeller		L	H			
			Hub	Blade					
20	18	14	14	16	18	3/4	145T	65	
24	18	14	14	16	18	3/4	145T	75	
30	18	12	14	12	16	1	184T	100	
36	18	12	14	12	16	1	184T	115	
42	16	12	12	11	14	1 1/4	184T	160	
48	16	12	12	11	14	1 1/4	184T	260	
54	16	12	12	11	14	1 1/4	184T	315	
60	14	12	3/16 in		12	1 1/2	215T	370	

Approximate weight does not include accessories.

Model SBE-2L exhaust shown



Fan Size	A Panel**	B	C	D	E	F	Damper Size**
20	26 (660)	19 1/2 (495)	16 1/4 (413)	1 (25)	20 1/2 (521)	20 (508)	22 (559)
24	32 (813)	19 1/2 (495)	16 5/8 (410)	1 1/4 (32)	24 3/8 (625)	20 (508)	26 (660)
30	38 (965)	21 1/2 (546)	17 1/4 (438)	1 1/4 (32)	30 3/8 (778)	21 (533)	32 (813)
36	44 (1118)	21 1/2 (546)	16 1/2 (419)	2 (51)	36 3/8 (930)	22 (559)	38 (965)
42	50 (1270)	25 (635)	20 (508)	2 (51)	42 3/4 (1086)	25 1/2 (648)	44 (1118)
48	56 (1422)	25 (635)	19 (483)	2 (51)	48 3/4 (1238)	25 1/2 (648)	50 (1270)
54	62 (1575)	26 (660)	20 1/2 (546)	2 (51)	55 1/4 (1403)	24 (610)	56 (1422)
60	68 (1727)	28 (711)	21 7/16 (545)	2 (51)	61 1/4 (1556)	24 (610)	62 (1575)

All dimensions given in inches (mm). **Square dimension.

Belt Drive - Level 3 and Reversible

Dimensional Data: Models SBE-3/SBS-3, SBCE-3/SBCS-3 and SBCR

Propellers- SBE-3/SBS-3 - Heavy duty, welded, reinforced, steel blades coated in Permatecor™. SBCE-3/SBCS-3 - Heavy duty, cast aluminum blades. All with keyed hubs.

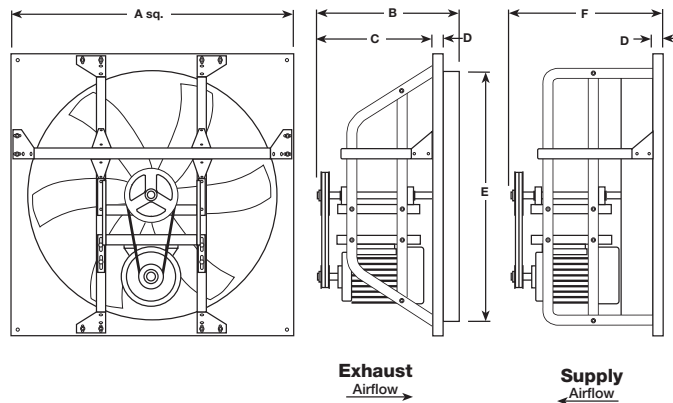
Bearings - Cast iron pillow blocks with grease fittings.

Panel/Drive Frame - Galvanized steel with one-piece drawn venturi, bolted structural steel channels and one-piece motor/bearing plate on sizes 24-36, two piece on sizes 42-72 (all-welded panel/drive frame optional, paint optional).

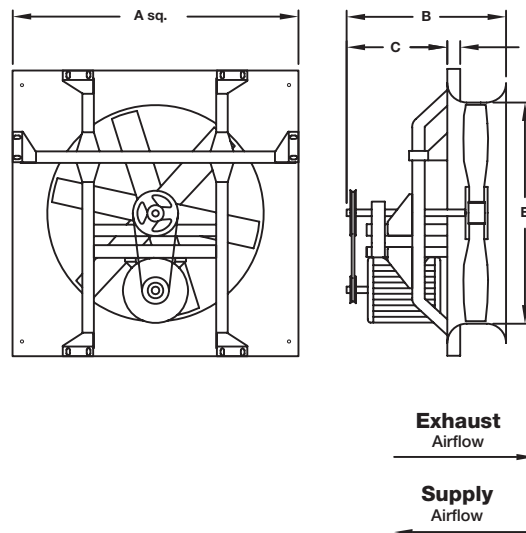
Material Gauges					Shaft Size	Max Motor Frame Size	Approx. Weight (lbs.)
Fan Size	Fan Panel	Drive Frame	Propeller				
			Hub Steel	Blade Steel			
24	16	14	12	16	3/4	145T	90
30	16	12	12	16	1	184T	140
36	16	12	12	16	1	184T	260
42	14	12	11	14	1 1/2	215T	320
48	14	12	11	14	1 1/2	215T	420
54	14	10	10	14	1 1/2	254T	590
60	14	10	3/16 in	12	1 3/4	256T	755
72	12	10	3/16 in	12	2	256T	1050

Approximate weight does not include accessories.

LEVEL 3 – Model SBE-3L exhaust shown



REVERSIBLE – Model SBCR reversible shown



Fan Size	A Panel**	B	C	D	E	F	Damper Size**
24	32 (813)	19 (483)	15 5/8 (397)	1 1/4 (32)	24 5/8 (625)	20 1/2 (521)	26 (660)
30	38 (965)	21 1/2 (546)	17 1/4 (438)	1 1/4 (32)	30 5/8 (778)	20 (508)	32 (813)
36	44 (1118)	28 (711)	23 (584)	2 (51)	36 5/8 (930)	27 (686)	38 (965)
42	50 (1270)	28 (711)	23 (584)	2 (51)	42 3/4 (1086)	29 1/4 (743)	44 (1118)
48	56 (1422)	31 1/2 (800)	27 1/2 (699)	2 (51)	48 3/4 (1238)	30 1/2 (775)	50 (1270)
54	62 (1575)	35 3/4 (908)	30 1/4 (768)	2 (51)	55 1/4 (1403)	36 1/4 (921)	56 (1422)
60	68 (1727)	35 (889)	28 7/16 (722)	2 (51)	61 1/4 (1556)	35 1/2 (902)	62 (1575)
72	82 (2083)	35 (889)	28 1/4 (718)	2 1/8 (54)	73 1/4 (1861)	35 1/2 (902)	74 (1880)

All dimensions given in inches (mm). **Square dimension.

Using The Performance Table

Shown below is a portion of a typical performance table used in this catalog. Performance data shown offers the best selections for each propeller type (“L” or “H”) relative to sound, RPM and static pressure. Consider “L” type propellers first for most applications.

Many sidewall applications can be met with the “L” type propeller. When using the performance tables, look first at the “L” selections, because they offer the lowest speed and sound levels.

Model Number	Motor HP	Fan RPM	Max BHP	*Sones	CFM / Static Pressure in Inches WG																
					0.00	0.10	0.125	0.15	0.20	0.25	0.30	0.375	0.50	0.625	0.75	1.00					
Level 1 Performance		Max RPM		L - 1085	H - 1221	Max Motor Frame Size - 56					TS = RPM x 5.235										
SBE/SBS-1L20-4	1/4	705	0.17	11.6	3606	2836	2451														
		810	0.25	13.3	4143	3510	3325	3084													
		861	0.30	14.3	4404	3795	3672	3455													
SBE/SBS-1H20-4	1/4	773	0.17	11.1	2904	2453	2293	2112	1596	924	676	304									
		892	0.27	14.1	3351	2987	2873	2744	2436	2011	1409	886	348								
		953	0.30	16.2	3581	3247	3148	3034	2769	2469	2002	1160	657								
SBE/SBS-1L20-3	1/3	889	0.33	14.9	4547	3950	3830	3655	3067												
		947	0.40	16.1	4844	4271	4156	4044	3648												
		998	0.37	16.7	3750	3436	3342	3244	3006	2727	2398	1588	873	393							
SBE/SBS-1H20-3	1/3	1039	0.40	17.2	3904	3608	3517	3427	3212	2954	2676	2037	1064	603							
		1021	0.50	17.0	5222	4675	4566	4461	4181	3747											
		1085	0.60	17.9	5550	5021	4919	4817	4621	4269	3712										
SBE/SBS-1L20-5	1/2	1107	0.50	18.0	4159	3885	3805	3720	3534	3315	3065	2599	1368	935	502						
		1221	0.60	20	4587	4339	4277	4203	4049	3873	3675	3333	2514	1456	1064						

Shows level of construction based on fan RPM & motor frame size. See Performance Charts.

Note that each max. BHP is cataloged at a 1.0 and 1.2 service factor. See page 13.

Optimum selection range for the “L” type propeller.

Optimum selection range for the “H” type propeller.

CFM values shown in black are the most efficient selections. Values shown in gray are not recommended.

20 Belt Drive SBE/SBS

Model SBE for exhaust – Model SBS for supply

Model Number	Motor HP	Fan RPM	Max BHP	*Sones	CFM / Static Pressure in Inches WG																
					0.00	0.10	0.125	0.15	0.20	0.25	0.30	0.375	0.50	0.625	0.75	1.00					
Level 1 Performance		Max RPM		L - 1085	H - 1221	Max Motor Frame Size - 56					TS = RPM x 5.235										
SBE/SBS-1L20-4	1/4	705	0.17	11.6	3606	2836	2451														
		810	0.25	13.3	4143	3510	3325	3084													
		861	0.30	14.3	4404	3795	3672	3455													
SBE/SBS-1H20-4	1/4	773	0.17	11.1	2904	2453	2293	2112	1596	924	676	304									
		892	0.27	14.1	3351	2987	2873	2744	2436	2011	1409	886	348								
		953	0.30	16.2	3581	3247	3148	3034	2769	2469	2002	1160	657								
SBE/SBS-1L20-3	1/3	889	0.33	14.9	4547	3950	3830	3655	3067												
		947	0.40	16.1	4844	4271	4156	4044	3648												
		998	0.37	16.7	3750	3436	3342	3244	3006	2727	2398	1588	873	393							
SBE/SBS-1H20-3	1/3	1039	0.40	17.2	3904	3608	3517	3427	3212	2954	2676	2037	1064	603							
		1021	0.50	17.0	5222	4675	4566	4461	4181	3747											
		1085	0.60	17.9	5550	5021	4919	4817	4621	4269	3712										
SBE/SBS-1L20-5	1/2	1107	0.50	18.0	4159	3885	3805	3720	3534	3315	3065	2599	1368	935	502						
		1221	0.60	20	4587	4339	4277	4203	4049	3873	3675	3333	2514	1456	1064						

Level 2 Performance		Max RPM		L - 1241	H - 1391	Max Motor Frame Size - 143T					TS = RPM x 5.235									
SBE/SBS-2L20-5	1/2	1021	0.50	17.0	5222	4675	4566	4461	4181	3747										
		1085	0.60	17.9	5550	5021	4919	4817	4621	4269	3712									
		1107	0.50	18.0	4159	3885	3805	3720	3534	3315	3065	2599	1368	935	502					
SBE/SBS-2H20-5	1/2	1221	0.60	20	4587	4339	4277	4203	4049	3873	3675	3333	2514	1456	1064					
		1168	0.75	20	5974	5466	5371	5275	5090	4861	4527									
		1241	0.90	22	6348	5853	5764	5674	5496	5325	5053	4479								
SBE/SBS-2L20-7	3/4	1262	0.75	21	4742	4501	4441	4375	4226	4065	3883	3562	2849	1635	1255	495				
		1391	0.90	25	5226	5008	4954	4899	4774	4639	4493	4244	3741	3005	1886	1138				

Performance certified is for Models SBE/SBS for installation type A: free inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Speed (RPM) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are loudness values in fan sones at 5 ft (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation type A: free inlet hemispherical sone levels. *Sones shown apply to the highest cataloged CFM in black type at each fan RPM. For selections at other CFM and static pressure points, refer to the CAPS computerized selection program.

36 Belt Drive SBE/SBS

Model SBE for exhaust – Model SBS for supply



Model Number	Motor HP	Fan RPM	Max BHP	*Sones	CFM / Static Pressure in Inches WG														
					0.00	0.10	0.125	0.15	0.20	0.25	0.30	0.375	0.50	0.625	0.75	1.00			
Level 1 Performance		Max RPM L - 551 H - 694			Max Motor Frame Size - 56						TS = RPM x 7.854								
SBE/SBS-1L36-3	1/3	329	0.25	12.3	9491	6448												CFM values shown in black are the most efficient selections. Values shown in gray are not recommended.	
		361	0.34	11.8	10415	7958	6849												
		384	0.40	11.8	11078	8915	8018	6662											
SBE/SBS-1H36-3	1/3	410	0.25	10.0	9011	6831	6112												
		450	0.33	11.1	9890	7967	7391	6725											
SBE/SBS-1L36-5	1/2	412	0.50	12.7	11886	9913	9250	8354											
		438	0.61	13.6	12636	10809	10290	9572											
SBE/SBS-1H36-5	1/2	521	0.52	13.5	11451	9845	9398	8912	7811										
		556	0.61	14.9	12220	10729	10328	9891	8958										
SBE/SBS-1L36-7	3/4	471	0.76	14.5	13588	11925	11442	10947	9408										
		500	0.90	15.3	14425	12890	12435	11981	10808	8915									
SBE/SBS-1H36-7	3/4	591	0.75	16.4	12989	11605	11223	10844	9985	9016									
		628	0.90	18.2	13802	12520	12156	11800	11035	10205	9228								
SBE/SBS-1L36-10	1	518	1.01	16.1	14944	13482	13044	12605	11569	10084									
		551	1.21	17.7	15896	14558	14146	13733	12908	11731	10007								
SBE/SBS-1H36-10	1	651	1.01	18.8	14308	13083	12731	12386	11668	10880	9995								
		694	1.23	20	15253	14135	13798	13468	12824	12111	11358	9875							
Level 2 Performance		Max RPM L - 693 H - 870			Max Motor Frame Size - 184T						TS = RPM x 7.854								
SBE/SBS-2L36-10	1	518	1.01	16.1	14944	13482	13044	12605	11569	10084									
		550	1.21	17.6	15867	14525	14113	13699	12873	11682	9934								
SBE/SBS-2H36-10	1	651	1.01	18.8	14308	13083	12731	12386	11668	10880	9995								
		694	1.23	20	15253	14135	13798	13468	12824	12111	11358	9875							
SBE/SBS-2L36-15	1½	593	1.51	20	17108	15909	15527	15144	14377	13512	12329								
		631	1.81	22	18204	17113	16759	16400	15680	14959	14025	12176							
SBE/SBS-2H36-15	1½	744	1.50	23	16352	15358	15021	14714	14106	13486	12810	11706							
		792	1.80	27	17407	16519	16198	15894	15316	14753	14145	13170							
SBE/SBS-2L36-20	2	653	2.01	24	18839	17784	17467	17120	16424	15728	14942	13287							
		693	2.41	27	19993	18999	18744	18416	17762	17106	16450	15154							
SBE/SBS-2H36-20	2	821	2.02	30	18044	17217	16907	16601	16043	15496	14935	14011	12258						
		870	2.40	34	19121	18388	18096	17803	17259	16736	16223	15389	13871						
Level 3 Performance		Max RPM L - 819 H - 1321			Max Motor Frame Size - 184T						TS = RPM x 7.854								
SBE/SBS-3L36-20	2	614	1.52	18.1	16901	15679	15294	14909	14075	13113	11866								
		675	2.02	20	18580	17464	17178	16828	16128	15335	14463	12727							
		716	2.41	22	19709	18646	18404	18098	17438	16759	15972	14576							
SBE/SBS-3H36-20	2	833	1.52	26	15014	14373	14212	14041	13682	13275	12740	11908	10095						
		915	2.04	30	16492	15908	15762	15616	15299	14972	14598	13867	12585	10735	8063				
		967	2.40	33	17429	16877	16739	16600	16313	16003	15694	15059	13876	12427	10502				
SBE/SBS-3L36-30	3	771	3.01	25	21223	20222	19997	19772	19169	18556	17898	16802	14296						
		819	3.60	28	22544	21590	21378	21166	20658	20081	19504	18511	16505						
SBE/SBS-3H36-30	3	1046	3.00	38	18853	18342	18215	18087	17831	17554	17268	16833	15767	14646	13192				
		1106	3.60	40	19935	19452	19331	19210	18968	18721	18450	18044	17147	16121	15045	11743			
SBE/SBS-3H36-50	5	1241	5.01	52	22368	21937	21830	21722	21507	21291	21076	20715	20113	19273	18372	16280			
		1321	6.00	59	23810	23405	23304	23203	23001	22799	22596	22277	21711	21077	20233	18473			

Performance certified is for Models SBE/SBS for installation type A: free inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). -Speed (RPM) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are loudness values in fan sones at 5 ft (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation type A: free inlet hemispherical sone levels. *Sones shown apply to the highest cataloged CFM in black type at each fan RPM. For selections at other CFM and static pressure points, refer to the CAPS computerized selection program. Numbers in blue have a larger BHP and require the next size larger motor.

42 Belt Drive SBE/SBS

Model SBE for exhaust – Model SBS for supply



Model Number	Motor HP	Fan RPM	Max BHP	*Sones	CFM / Static Pressure in Inches WG													
					0.00	0.10	0.125	0.15	0.20	0.25	0.30	0.375	0.50	0.625	0.75	1.00		
Level 1 Performance		Max RPM	L - 424	H - 533	Max Motor Frame Size - 145T						TS = RPM x 10.995							
SBE/SBS-1L42-3	1/3	250	0.24	9.4	11651													CFM values shown in black are the most efficient selections. Values shown in gray are not recommended.
		275	0.33	10.3	12816	8583												
		294	0.40	11.1	13701	10026												
SBE/SBS-1H42-3	1/3	314	0.25	9.4	10844	7332												
		345	0.33	11.1	11915	9126	7744											
		369	0.40	12.6	12744	10191	9283											
SBE/SBS-1L42-5	1/2	316	0.50	12.0	14726	11363	10252											
		335	0.60	13.0	15612	12415	11671	10248										
SBE/SBS-1H42-5	1/2	400	0.51	14.7	13814	11527	10841	9931										
		426	0.61	16.3	14712	12605	11980	11333										
SBE/SBS-1L42-7	3/4	362	0.75	14.5	16870	13939	13189	12422										
		385	0.90	15.8	17942	15273	14451	13804	11298									
SBE/SBS-1H42-7	3/4	460	0.78	18.5	15887	13987	13420	12834	11361									
		482	0.90	20	16646	14868	14327	13784	12592	10507								
SBE/SBS-1L42-10	1	398	1.00	16.8	18548	16016	15189	14528	12837									
		424	1.21	18.8	19759	17478	16705	15953	14777									
SBE/SBS-1H42-10	1	500	1.00	20	17268	15573	15060	14539	13448	11853								
		533	1.22	21	18408	16849	16388	15899	14900	13752	11887							
Level 2 Performance		Max RPM	L - 723	H - 907	Max Motor Frame Size - 184T						TS = RPM x 10.995							
SBE/SBS-2L42-10	1	398	1.00	16.8	18548	16016	15189	14528	12837									
		424	1.21	18.8	19759	17478	16705	15953	14777									
		500	1.00	21	17268	15573	15060	14539	13448	11853								
SBE/SBS-2H42-10	1	533	1.22	22	18408	16849	16388	15899	14900	13752	11887							
		456	1.50	21	21251	19152	18532	17809	16577	15188								
SBE/SBS-2L42-15	1½	484	1.80	23	22555	20599	20064	19420	18117	17086	15458							
		577	1.53	24	19927	18529	18109	17678	16773	15831	14681							
SBE/SBS-2H42-15	1½	608	1.81	26	20998	19701	19302	18903	18053	17182	16275	14193						
		502	2.01	24	23394	21521	21006	20440	19128	18098	16824							
SBE/SBS-2L42-20	2	532	2.40	27	24792	23046	22560	22074	20881	19757	18819	16579						
		630	2.00	28	21758	20527	20142	19757	18951	18122	17251	15564						
SBE/SBS-2H42-20	2	673	2.41	31	23243	22131	21771	21411	20682	19906	19122	17893						
		575	3.01	32	26796	25212	24762	24312	23339	22193	21216	19836						
SBE/SBS-2L42-30	3	611	3.60	31	28474	26984	26586	26162	25316	24279	23201	21952	18527					
		721	3.00	36	24900	23864	23572	23236	22564	21861	21137	20017	17604					
SBE/SBS-2H42-30	3	766	3.61	40	26455	25479	25235	24931	24298	23664	22982	21961	20125	16908				
		681	5.08	36	31736	30400	30066	29712	28952	28192	27265	25814	23967	20093				
SBE/SBS-2L42-50	5	723	6.00	39	33693	32435	32120	31805	31102	30386	29642	28275	26322	24165				
		853	4.99	48	29459	28583	28364	28145	27603	27035	26466	25556	24003	22312	19563			
SBE/SBS-2H42-50	5	907	5.95	56	31324	30500	30294	30088	29630	29095	28561	27738	26299	24797	22915			
Level 3 Performance		Max RPM	L - 762	H - 951	Max Motor Frame Size - 184T						TS = RPM x 10.995							
SBE/SBS-3L42-30	3	527	1.99	18.3	22520	20843	20397	19944	18862	17664	16166							
		606	3.00	24	25896	24438	24073	23695	22908	21971	20980	19316						
		640	3.61	26	27349	25968	25623	25278	24537	23737	22813	21321	17720					
SBE/SBS-3H42-30	3	657	1.99	24	19872	18805	18554	18303	17771	17180	16461	15333	13065					
		755	3.00	30	22836	21890	21671	21453	21016	20567	20053	19187	17554	15662				
		800	3.60	31	24197	23301	23090	22883	22471	22059	21605	20878	19377	17765	15725			
SBE/SBS-3L42-50	5	714	5.02	30	30512	29274	28964	28655	28028	27360	26666	25424	23169	19687				
		762	6.01	33	32563	31403	31113	30823	30243	29634	29008	27942	25934	23434				
SBE/SBS-3H42-50	5	893	5.01	37	27010	26207	26007	25816	25447	25078	24709	24107	22961	21608	20168	16141		
		951	6.00	43	28764	28010	27822	27634	27286	26939	26592	26072	25063	23863	22589	19606		

Performance certified is for Models SBE/SBS for installation type A: free inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Speed (RPM) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are loudness values in fan sones at 5 ft (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation type A: free inlet hemispherical sone levels. *Sones shown apply to the highest cataloged CFM in black type at each fan RPM. For selections at other CFM and static pressure points, refer to the CAPS computerized selection program. Numbers in blue have a larger BHP and require the next size larger motor.

54 Belt Drive SBE/SBS

Model SBE for exhaust – Model SBS for supply



Model Number	Motor HP	Fan RPM	Max BHP	*Sones	CFM / Static Pressure in Inches WG													
					0.00	0.10	0.125	0.15	0.20	0.25	0.30	0.375	0.50	0.625	0.75	1.00		
Level 1 Performance		Max RPM	L - 343	H - 377	Max Motor Frame Size - 145T						TS = RPM x 13.135							
SBE/SBS-1L54-7	3/4	224	0.51	10.7	19676	12031												CFM values shown in black are the most efficient selections. Values shown in gray are not recommended.
		257	0.77	12.0	22575	17498	14789											
		272	0.90	12.7	23892	19346	17418	14251										
SBE/SBS-1H54-7	3/4	244	0.49	10.6	18660	13392												
		281	0.75	12.2	21490	17541	16040											
SBE/SBS-1L54-10	1	283	1.03	13.3	24859	20604	19008	16462										
		300	1.21	14.1	26352	22515	21155	19430										
SBE/SBS-1H54-10	1	310	1.01	14.0	23708	20252	19215	17828										
		329	1.21	15.6	25161	21986	21010	20033										
SBE/SBS-1L54-15	1½	325	1.56	16.5	28548	25088	24008	22726	18692									
		343	1.81	17.3	30129	26851	26014	24825	21850	16537								
SBE/SBS-1H54-15	1½	355	1.52	17.4	27149	24310	23414	22509	20237									
		377	1.82	19.0	28832	26243	25408	24557	22802	19924								
Level 2 Performance		Max RPM	L - 508	H - 562	Max Motor Frame Size - 184T						TS = RPM x 13.135							
SBE/SBS-2L54-15	1½	325	1.56	16.5	28548	25088	24008	22726	18692									
		343	1.81	17.3	30129	26851	26014	24825	21850									
SBE/SBS-2H54-15	1½	355	1.52	17.4	27149	24310	23414	22509	20237									
		377	1.82	19.0	28832	26243	25408	24557	22802	19924								
SBE/SBS-2L54-20	2	356	2.00	18.0	31271	28113	27322	26297	23790									
		380	2.41	19.6	33379	30420	29680	28940	26821	23826								
SBE/SBS-2H54-20	2	390	2.01	20	29826	27374	26567	25750	24103	21767								
		414	2.41	22	31662	29444	28684	27924	26374	24628	21971							
SBE/SBS-2L54-30	3	408	3.07	22	35839	33083	32394	31704	30019	27876	24657							
		433	3.61	26	38035	35439	34789	34139	32810	30926	28749							
SBE/SBS-2H54-30	3	446	3.01	26	34109	32145	31468	30762	29338	27897	26104							
		474	3.61	30	36250	34402	33873	33209	31882	30526	29170	26145						
SBE/SBS-2L54-50	5	478	4.87	35	41988	39636	39048	38459	37283	36006	34299	31347						
		508	5.97	44	44623	42410	41857	41303	40196	39088	37699	35194	28363					
SBE/SBS-2H54-50	5	528	4.99	35	40380	38721	38307	37854	36662	35469	34252	32427	27435					
		562	6.03	40	42980	41422	41032	40643	39618	38498	37370	35655	32079					
Level 3 Performance		Max RPM	L - 619	H - 779	Max Motor Frame Size - 254T						TS = RPM x 13.135							
SBE/SBS-3L54-30	3	339	1.97	20	29862	26277	25025	23452	19663									
		390	3.01	25	34354	31312	30531	29462	26898	24533	21251							
		415	3.61	27	36557	33708	32974	32162	30005	27535	24061							
SBE/SBS-3H54-30	3	430	2.03	27	27612	25569	25157	24640	23580	22036	20032							
		491	3.00	33	31529	29634	29274	28913	28053	27125	25868	23501						
		526	3.62	38	33776	31946	31609	31272	30565	29698	28831	26933						
SBE/SBS-3L54-50	5	463	5.01	40	40785	38252	37593	36935	35395	33426	31153	26792						
		492	6.02	44	43339	40968	40348	39728	38489	36778	34740	31783	26116					
SBE/SBS-3H54-50	5	584	5.01	48	37501	35765	35447	35144	34537	33881	33101	31897	28836					
		618	6.02	52	39684	38044	37683	37396	36823	36250	35558	34451	32025	28547				
SBE/SBS-3L54-75	7½	530	7.51	46	46687	44501	43926	43351	42200	40903	39302	36323	30423					
		563	9.03	49	49594	47550	47008	46467	45384	44301	42910	40440	36084	30683				
SBE/SBS-3H54-75	7½	666	7.38	57	42766	41244	40864	40558	40026	39494	38962	37956	36129	33526				
		710	9.02	63	45591	44164	43807	43450	42943	42444	41945	41121	39515	37449	34796			
SBE/SBS-3L54-100	10	584	10.04	51	51443	49482	48960	48438	47394	46350	45173	42994	38597	33058				
		619	12.00	56	54526	52685	52198	51706	50721	49736	48751	46840	42826	39077	33870			
SBE/SBS-3H54-100	10	738	10.01	68	47389	46016	45673	45329	44791	44311	43831	43111	41571	39835	37550			
		779	12.00	75	50022	48721	48396	48070	47487	47032	46578	45895	44548	43085	41129	35732		

Performance certified is for Models SBE/SBS for installation type A: free inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). -Speed (RPM) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are loudness values in fan sones at 5 ft (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation type A: free inlet hemispherical sone levels. *Sones shown apply to the highest cataloged CFM in black type at each fan RPM. For selections at other CFM and static pressure points, refer to the CAPS computerized selection program. Numbers in blue have a larger BHP and require the next size larger motor.

60 Belt Drive SBE/SBS

Model SBE for exhaust – Model SBS for supply



Model Number	Motor HP	Fan RPM	Max BHP	*Sones	CFM / Static Pressure in Inches WG													
					0.00	0.10	0.125	0.15	0.20	0.25	0.30	0.375	0.50	0.625	0.75	1.00		
Level 2 Performance		Max RPM L - 399 H - 521			Max Motor Frame Size - 215T						TS = RPM x 15.691							
SBE/SBS-2L60-15	1 1/2	219	0.99	11.8	29223													CFM values shown in black are the most efficient selections. Values shown in gray are not recommended.
		252	1.52	14.9	33627	26297												
		267	1.80	16.7	35628	28888	26731											
SBE/SBS-2H60-15	1 1/2	285	0.98	19.3	25029	21665	20507	19031										
		328	1.50	23	28805	25931	25163	24307	21827									
SBE/SBS-2L60-20	2	348	1.81	25	30561	27858	27152	26428	24458	21479								
		277	2.01	17.9	36963	30532	28569											
SBE/SBS-2H60-20	2	294	2.41	20	39231	33280	31524	29592										
		361	2.01	26	31703	29065	28432	27734	25998	23625								
SBE/SBS-2L60-30	3	383	2.41	28	33635	31095	30577	29920	28558	26588	23870							
		317	3.02	23	42300	36880	35324	33661										
SBE/SBS-2H60-30	3	337	3.63	25	44969	39902	38533	37026	33664									
		415	3.01	31	36445	34024	33548	33054	31839	30400	28519							
SBE/SBS-2L60-50	5	438	3.60	34	38465	36115	35664	35214	34128	32978	31354	28368						
		375	5.00	28	50040	45536	44345	43137	40410	37274								
SBE/SBS-2H60-50	5	399	6.02	31	53242	49009	47929	46800	44361	41676	38401							
		489	5.00	42	42944	40718	40314	39911	39104	38087	37057	34972	29773					
		521	6.01	47	45754	43590	43208	42830	42072	41233	40266	38708	34835					
Level 3 Performance		Max RPM L - 503 H - 659			Max Motor Frame Size - 256T						TS = RPM x 15.691							
SBE/SBS-3L60-50	5	317	3.02	23	42300	36880	35324	33661										
		375	5.00	28	50040	45536	44345	43137	40410	37274								
		399	6.02	31	53242	49009	47929	46800	44361	41676	38401							
SBE/SBS-3H60-50	5	415	3.01	31	36445	34024	33548	33054	31839	30400	28519							
		489	5.00	42	42944	40718	40314	39911	39104	38087	37057	34972	29773					
		521	6.01	47	45754	43590	43208	42830	42072	41233	40266	38708	34835					
SBE/SBS-3L60-75	7 1/2	430	7.54	41	57379	53451	52469	51451	49333	46970	44412							
		457	9.05	56	60982	57286	56362	55438	53476	51359	49101	45184						
SBE/SBS-3H60-75	7 1/2	559	7.51	51	49091	47075	46626	46274	45568	44862	44021	42669	39714	35627				
		595	9.00	56	52253	50358	49884	49518	48855	48192	47529	46261	43933	40629	35715			
SBE/SBS-3L60-100	1 0	473	10.04	67	63117	59546	58653	57760	55891	53922	51775	48286						
		503	12.10	72	67120	63762	62923	62083	60374	58582	56644	53530						
SBE/SBS-3H60-100	1 0	615	10.00	60	54009	52176	51718	51314	50673	50031	49389	48236	46188	43214	39510			
		659	12.00	70	57873	56163	55735	55307	54653	54054	53455	52537	50625	48395	45470			

72 Belt Drive SBE/SBS

Model SBE for exhaust – Model SBS for supply

Level 3 Performance		Max RPM L - 492 H - 559			Max Motor Frame Size - 256T						TS = RPM x 18.802							
SBE/SBS-3L72-30	3	236	2.00	17.5	41661	36581	34402	32305										
		271	3.02	20	47840	43440	42315	40635	36937									
		288	3.61	22	50841	46713	45654	44576	40999									
SBE/SBS-3H72-30	3	266	2.00	24	40185	35934	34790	33352	29513									
		306	3.01	28	46228	42491	41629	40634	38280	35026								
		324	3.61	30	48947	45342	44616	43707	41829	39122	35680							
SBE/SBS-3L72-50	5	321	5.05	26	56667	52986	52036	51086	48805	45604	42580							
		341	6.01	29	60197	56743	55852	54958	53170	50373	47427							
SBE/SBS-3H72-50	5	362	5.04	35	54688	51305	50655	50006	48405	46723	44302	39813						
		387	6.03	39	58465	55195	54588	53980	52646	51074	49325	45737						
SBE/SBS-3L72-75	7 1/2	367	7.52	33	64787	61577	60768	59938	58276	56442	53627	49588						
		391	9.03	38	69024	66011	65258	64489	62930	61371	59275	55346						
SBE/SBS-3H72-75	7 1/2	414	7.52	43	62543	59374	58806	58238	57102	55698	54228	51410	44663					
		442	9.01	50	66773	63726	63155	62623	61559	60428	59051	56986	51688					
SBE/SBS-3L72-100	1 0	405	10.01	41	71495	68587	67859	67128	65622	64117	62514	58687						
		430	12.10	45	75909	73169	72484	71799	70395	68977	67559	64603	58769					
SBE/SBS-3H72-100	1 0	456	10.02	51	68888	65934	65321	64806	63775	62743	61437	59435	54874	47671				
		486	12.00	57	73421	70649	69956	69464	68496	67529	66500	64622	60962	55889				
SBE/SBS-3L72-150	1 5	463	15.10	52	81734	79190	78554	77918	76637	75320	74003	72027	66649	61379				
		492	18.00	57	86854	84459	83861	83262	82065	80838	79599	77740	73537	68410				
SBE/SBS-3H72-150	1 5	522	15.00	64	78859	76279	75633	75025	74124	73223	72322	70752	67837	63842	58785			
		559	18.10	75	84449	82039	81436	80834	79872	79030	78189	76927	74244	71276	67313			

Performance certified is for Models SBE/SBS for installation type A: free inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Speed (RPM) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are loudness values in fan sones at 5 ft (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation type A: free inlet hemispherical sone levels. *Sones shown apply to the highest cataloged CFM in black type at each fan RPM. For selections at other CFM and static pressure points, refer to the CAPS computerized selection program.

36-42 Belt Drive SBCE/SBCS

Cast Aluminum

Model SBCE for exhaust – Model SBCS for supply



Model Number	Motor HP	Fan RPM	Max BHP	*Sones	CFM / Static Pressure in Inches WG																	
					0.00	0.10	0.125	0.15	0.20	0.25	0.30	0.375	0.50	0.625	0.75	1.00						
36 Performance		Max RPM	L - 1183	H - 1480	Max Motor Frame Size - 184T						TS = RPM x 9.424											
SBCE/SBCS-3L36-7	3/4	516	0.50	16.8	11939	9557	8829															
		593	0.75	19.4	13721	11814	11168	10528														
		630	0.90	21	14577	12834	12261	11645	10267													
SBCE/SBCS-3H36-7	3/4	644	0.50	16.4	11014	9546	9133	8714	7772	6388												
		740	0.75	19.3	12655	11375	11058	10720	9987	9269	8128	5237										
		786	0.90	21	13442	12239	11937	11639	10951	10296	9439	7708										
SBCE/SBCS-3L36-10	1	652	1.00	22	15086	13432	12900	12305	11146													
		693	1.20	24	16034	14528	14037	13515	12409													
SBCE/SBCS-3H36-10	1	814	1.00	21	13921	12764	12467	12179	11539	10887	10251	8712										
		865	1.20	24	14793	13713	13424	13152	12595	11952	11363	10148	6816									
SBCE/SBCS-3L36-15	1½	747	1.50	26	17284	15904	15505	15043	14034	13022												
		793	1.80	28	18348	17064	16709	16301	15395	14424	13478											
SBCE/SBCS-3H36-15	1½	932	1.50	27	15939	14947	14679	14413	13910	13358	12764	11955	9834									
		991	1.81	29	16948	16024	15773	15521	15038	14565	14009	13209	11486	8916								
SBCE/SBCS-3L36-20	2	822	2.01	29	19019	17789	17447	17085	16238	15296	14379											
		873	2.41	32	20199	19058	18736	18414	17658	16812	15930	14506										
SBCE/SBCS-3H36-20	2	1026	2.00	31	17547	16654	16418	16174	15701	15243	14737	13939	12515	10428								
		1090	2.41	35	18641	17801	17589	17360	16902	16471	16041	15285	14101	12341	9976							
SBCE/SBCS-3L36-30	3	939	3.00	35	21726	20687	20387	20088	19454	18719	17906	16689										
		998	3.61	39	23092	22127	21851	21569	21006	20343	19635	18470	16315									
SBCE/SBCS-3H36-30	3	1174	3.00	39	20078	19297	19102	18902	18477	18060	17661	17032	15873	14769	12962							
		1248	3.60	43	21343	20609	20426	20242	19850	19449	19067	18503	17426	16390	15077	10981						
SBCE/SBCS-3L36-50	5	1113	5.01	47	25752	24888	24672	24424	23919	23413	22823	21871	20143	18120								
		1183	6.01	51	27372	26559	26355	26145	25670	25194	24713	23837	22246	20647								
SBCE/SBCS-3H36-50	5	1392	5.00	51	23806	23148	22983	22819	22490	22132	21773	21255	20412	19413	18480	15976						
		1480	6.01	58	25311	24692	24537	24382	24073	23751	23413	22909	22117	21253	20313	18538						
42 Performance		Max RPM	L - 916	H - 1259	Max Motor Frame Size - 184T						TS = RPM x 10.995											
SBCE/SBCS-3L42-10	1	459	0.76	15.0	15668	12712	11573															
		504	1.00	17.1	17205	14534	13822	12742														
		536	1.20	18.1	18297	15764	15173	14440														
SBCE/SBCS-3H42-10	1	630	0.75	23	14710	13176	12736	12261	11152	9826	8273											
		692	1.00	25	16158	14789	14403	14003	13096	12041	10833	8546										
		736	1.20	27	17185	15919	15558	15190	14411	13492	12420	10692										
SBCE/SBCS-3L42-15	1½	577	1.50	19.7	19696	17316	16771	16196	14444													
		613	1.80	21	20925	18692	18147	17635	16364	14566												
SBCE/SBCS-3H42-15	1½	793	1.50	29	18516	17367	17032	16698	16004	15223	14370	12822	9458									
		842	1.80	31	19660	18600	18285	17970	17329	16671	15872	14556	11992									
SBCE/SBCS-3L42-20	2	635	2.00	23	21676	19551	18980	18485	17376	15648												
		675	2.40	25	23042	21097	20492	20012	19068	17750	16130											
SBCE/SBCS-3H42-20	2	872	2.00	33	20361	19351	19047	18743	18130	17495	16775	15590	13189	9576								
		927	2.40	36	21645	20721	20435	20149	19576	18987	18390	17308	15214	12754								
SBCE/SBCS-3L42-30	3	727	3.00	29	24817	23036	22520	21969	21104	20153	18783											
		773	3.61	31	26387	24729	24278	23762	22864	22051	21080	18935										
SBCE/SBCS-3H42-30	3	998	3.00	40	23303	22459	22211	21945	21414	20882	20328	19443	17697	15606	13168							
		1061	3.61	44	24774	23980	23776	23526	23026	22526	22019	21236	19699	17881	15890							
SBCE/SBCS-3L42-50	5	862	5.01	37	29425	27971	27566	27161	26242	25478	24749	23472	20356									
		916	6.01	42	31269	29920	29539	29158	28347	27517	26831	25762	23038									
SBCE/SBCS-3H42-50	5	1184	5.01	51	27645	26934	26756	26579	26135	25687	25239	24559	23384	21956	20349	16653						
		1259	6.01	57	29397	28728	28561	28393	28011	27590	27168	26536	25446	24224	22881	19615						

Performance certified is for Models SBCE/SBCS for installation type A: free inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Speed (RPM) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are loudness values in fan sones at 5 ft (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation type A: free inlet hemispherical sone levels. *Sones shown apply to the highest cataloged CFM in black type at each fan RPM. For selections at other CFM and static pressure points, refer to the CAPS computerized selection program.

48-54 Belt Drive SBCE/SBCS

Cast Aluminum

Model SBCE for exhaust – Model SBCS for supply



Model Number	Motor HP	Fan RPM	Max BHP	*Sones	CFM / Static Pressure in Inches WG													
					0.00	0.10	0.125	0.15	0.20	0.25	0.30	0.375	0.50	0.625	0.75	1.00		
48 Performance		Max RPM		L - 908	H - 1182		Max Motor Frame Size - 215T					TS = RPM x 12.566						
SBCE/SBCS-3L48-15	1½	435	0.99	18.5	21897	17413	15801											CFM values shown in black are the most efficient selections. Values shown in gray are not recommended.
		500	1.51	23	25169	21295	20354	19165										
		531	1.80	24	26730	23117	22183	21212										
SBCE/SBCS-3H48-15	1½	566	0.99	23	21010	18533	17717	17010	15233	13144	9229							
		650	1.50	28	24128	21973	21464	20750	19481	17983	16242	12200						
SBCE/SBCS-3L48-20	2	691	1.80	31	25650	23608	23130	22600	21313	20083	18535	15959						
		550	2.00	25	27686	24227	23288	22434										
SBCE/SBCS-3H48-20	2	585	2.32	27	29448	26249	25335	24494	22640									
		716	2.01	33	26578	24598	24136	23675	22413	21279	19918	17513						
SBCE/SBCS-3L48-30	3	761	2.40	35	28249	26368	25935	25501	24434	23316	22195	20084	15370					
		630	3.01	30	31713	28809	27962	27113	25587	23623								
SBCE/SBCS-3H48-30	3	669	3.50	32	33676	30972	30203	29404	27904	26301								
		819	3.00	39	30402	28632	28231	27827	27020	25867	24889	23274	19744	13540				
SBCE/SBCS-3L48-50	5	871	3.60	43	32332	30648	30270	29892	29133	28230	27191	25779	22761	19268				
		746	5.00	38	37552	35186	34519	33835	32401	31082	29675							
SBCE/SBCS-3H48-50	5	793	5.88	41	39918	37729	37102	36474	35144	33810	32626	30464						
		971	5.00	53	36044	34496	34157	33818	33140	32459	31682	30277	28102	25291	22178			
SBCE/SBCS-3L48-75	7½	1032	6.00	59	38308	36841	36509	36191	35553	34913	34272	33002	30995	28669	25923	16703		
		854	7.50	45	42989	41003	40421	39838	38648	37395	36190	34476						
SBCE/SBCS-3H48-75	7½	908	8.88	50	45707	43860	43334	42786	41690	40528	39350	37736	34664					
		1112	7.51	67	41278	39917	39577	39282	38690	38098	37504	36601	34556	32687	30384	25026		
		1182	9.00	75	43876	42596	42275	41971	41415	40859	40300	39461	37668	35918	34068	29382		
54 Performance		Max RPM		L - 727	H - 856		Max Motor Frame Size - 254T					TS = RPM x 14.135						
SBCE/SBCS-3L54-20	2	364	1.51	18.0	25482	21713	20664	19377										
		400	2.01	20	28002	24618	23706	22752	19950									
		425	2.41	22	29752	26685	25741	24882	22822									
SBCE/SBCS-3H54-20	2	429	1.51	21	25150	22604	21870	21035	19310	17043	13521							
		471	2.00	23	27612	25349	24701	24032	22511	20907	18781							
SBCE/SBCS-3L54-30	3	501	2.41	26	29370	27282	26674	26066	24696	23254	21708	18049						
		458	3.01	25	32062	29480	28382	27585	25914	23719								
SBCE/SBCS-3H54-30	3	487	3.60	28	34092	31897	30843	29919	28420	26637	24050							
		539	3.00	29	31598	29657	29143	28577	27407	26078	24712	22298						
SBCE/SBCS-3L54-50	5	573	3.61	31	33591	31765	31309	30796	29731	28536	27286	25299	20153					
		543	5.02	33	38013	36203	35539	34594	32996	31652	30072	26691						
SBCE/SBCS-3H54-50	5	577	5.96	38	40393	38690	38264	37449	35716	34451	33186	30778						
		639	5.00	37	37461	35823	35414	35004	34086	33131	32068	30386	27398	22327				
SBCE/SBCS-3L54-75	7½	680	6.02	41	39864	38325	37941	37556	36748	35851	34954	33382	30664	27125	21725			
		621	7.51	44	43473	41891	41495	41090	39437	38008	36833	34916	30021					
SBCE/SBCS-3H54-75	7½	660	9.01	49	46203	44715	44342	43970	42720	41165	40006	38347	34940					
		732	7.52	47	42913	41483	41126	40768	40054	39254	38421	37100	34654	32044	28344			
SBCE/SBCS-3L54-100	10	778	9.00	53	45609	44264	43928	43592	42919	42229	41445	40269	38025	35671	33163	23604		
		684	10.03	53	47883	46447	46088	45729	44718	43217	41935	40334	37224	30947				
SBCE/SBCS-3H54-100	10	727	12.00	61	50894	49542	49204	48866	48191	46850	45438	43846	41235	37872				
		805	10.02	55	47192	45892	45567	45242	44592	43942	43205	42068	39973	37748	35353	27829		
		856	12.00	61	50182	48959	48654	48348	47737	47126	46501	45432	43599	41507	39367	33873		

Performance certified is for Models SBCE/SBCS for installation type A: free inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Speed (RPM) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are loudness values in fan sones at 5 ft (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation type A: free inlet hemispherical sone levels. *Sones shown apply to the highest cataloged CFM in black type at each fan RPM. For selections at other CFM and static pressure points, refer to the CAPS computerized selection program. Numbers in blue have a larger BHP and require the next size larger motor.

60-72 Belt Drive SBCE/SBCS

Cast Aluminum

Model SBCE for exhaust – Model SBCS for supply



Model Number	Motor HP	Fan RPM	Max BHP	*Sones	CFM / Static Pressure in Inches WG													
					0.00	0.10	0.125	0.15	0.20	0.25	0.30	0.375	0.50	0.625	0.75	1.00		
60 Performance		Max RPM	L - 620	H - 775	Max Motor	Frame Size - 254T						TS = RPM x 15.691						
SBCE/SBCS-3L60-20	2	310	1.51	16.6	30908	25347	22293	19082										CFM values shown in black are the most efficient selections. Values shown in gray are not recommended.
		341	2.01	19.4	33999	29312	27467	24664										
		363	2.42	22	36192	31785	30693	28420	23150									
SBCE/SBCS-3H60-20	2	389	1.52	21	29943	25920	24798	23553	20680	15870								
		427	2.01	24	32868	29286	28268	27248	24967	22058	17552							
		453	2.40	27	34870	31476	30591	29632	27574	25189	22147							
SBCE/SBCS-3L60-30	3	390	3.00	25	38884	34776	33760	32638	27839									
		415	3.62	28	41377	37510	36555	35601	32117	27497								
SBCE/SBCS-3H60-30	3	488	3.00	30	37564	34371	33650	32779	30979	28994	26657	21643						
		519	3.61	32	39950	36909	36232	35520	33845	32059	30140	26478						
SBCE/SBCS-3L60-50	5	463	5.02	32	46162	42688	41830	40975	39264	35742	31582							
		492	6.02	36	49054	45784	44971	44165	42555	40364	36566	30638						
SBCE/SBCS-3H60-50	5	579	5.01	38	44569	41770	41163	40556	39227	37725	36138	33558	27786					
		615	6.01	42	47340	44661	44089	43517	42374	40977	39563	37234	32691	25081				
SBCE/SBCS-3L60-75	7½	530	7.53	41	52842	49807	49049	48296	46801	45306	42821	37434						
		563	9.03	46	56133	53276	52561	51847	50438	49031	47623	43088	34085					
SBCE/SBCS-3H60-75	7½	663	7.53	48	51034	48490	47960	47430	46369	45239	43927	41918	38131	33224				
		704	9.01	54	54190	51775	51244	50745	49746	48747	47588	45736	42385	38434	33206			
SBCE/SBCS-3L60-100	10	583	10.02	50	58127	55368	54678	53988	52623	51264	49905	46376	38202					
		620	12.10	56	61816	59221	58573	57924	56632	55354	54076	52119	44587					
SBCE/SBCS-3H60-100	10	729	10.01	57	56115	53782	53238	52756	51791	50827	49796	48006	44851	41263	36767			
		775	12.00	63	59656	57462	56913	56439	55532	54624	53717	52131	49309	46183	42537	31181		
72 Performance		Max RPM	L - 578	H - 795	Max Motor	Frame Size - 256T						TS = RPM x 18.802						
SBCE/SBCS-3L72-30	3	278	2.00	19.3	41857	28605	23878	19635										
		319	3.03	24	48030	37936	33936	29771										
		338	3.60	27	50891	41519	38276	34437	26696									
SBCE/SBCS-3H72-30	3	381	1.99	28	40824	35815	34566	33074	29443	24659								
		438	3.02	34	46931	42584	41485	40398	37929	34824	31069	23783						
		465	3.58	37	49824	45755	44693	43669	41527	39012	35800	29847						
SBCE/SBCS-3L72-50	5	378	5.04	33	56913	48882	46438	43660	36768	29874								
		401	5.71	37	60376	53221	50620	48457	42331	35746	29279							
SBCE/SBCS-3H72-50	5	519	5.02	46	55610	52015	51052	50092	48258	46311	44091	39883	30522					
		551	6.00	52	59039	55683	54777	53870	52112	50384	48405	44927	37456					
SBCE/SBCS-3L72-75	7½	432	7.52	41	65043	58947	56432	54138	49416	43402	37327							
		459	8.69	45	69109	63324	61492	59114	55204	49816	44056	35555						
SBCE/SBCS-3H72-75	7½	594	7.56	58	63646	60574	59733	58892	57219	55616	54013	51160	45205	37157				
		631	9.00	65	67611	64754	63963	63171	61587	60049	58540	56106	51062	44626	36346			
SBCE/SBCS-3L72-100	10	476	10.06	48	71668	66060	64634	62341	58348	53680	48216	39954						
		505	12.00	54	76035	70697	69477	67767	63628	60117	55073	47224						
SBCE/SBCS-3H72-100	10	653	10.00	69	69968	67229	66464	65699	64169	62660	61202	59001	54465	48597	41207			
		694	12.00	77	74361	71806	71103	70384	68944	67504	66111	64053	60168	55291	49391			
SBCE/SBCS-3L72-150	15	544	15.00	63	81907	76884	75751	74618	70920	67400	63833	56750	44689					
		578	18.00	72	87026	82239	81173	80107	77299	73547	70545	64621	53266	42050				
SBCE/SBCS-3H72-150	15	748	15.00	90	80147	77777	77176	76508	75172	73836	72500	70580	67340	63488	58637	46264		
		795	18.00	104	85183	82953	82395	81804	80547	79290	78033	76179	73186	69826	65974	55871		

Performance certified is for Models SBCE/SBCS for installation type A: free inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Speed (RPM) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are loudness values in fan sones at 5 ft (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation type A: free inlet hemispherical sone levels. *Sones shown apply to the highest cataloged CFM in black type at each fan RPM. For selections at other CFM and static pressure points, refer to the CAPS computerized selection program. Numbers in blue have a larger BHP and require the next size larger motor.

24-72 Belt Drive SBCR

Reversible (Exhaust and Supply)



Model Number	Motor HP	Fan RPM	Max BHP	Sones	CFM / Static Pressure in Inches WG												
					0.00	0.05	0.10	0.125	0.15	0.20	0.25	0.30	0.375	0.50	0.625	0.75	
24 Performance					Max RPM = 1623				Max Motor Frame Size = 145T				TS = RPM x 6.283				
SBCR-24-4	1/4	841	0.24	14.2	4792	4447	4061	3827	3413								
SBCR-24-4		893	0.28	15.0	5088	4766	4411	4216	3961								
SBCR-24-3	1/3	983	0.39	16.6	5601	5312	5001	4829	4651	4127							
SBCR-24-5	1/2	1126	0.59	19.4	6416	6165	5898	5763	5618	5308	4892	3875					
SBCR-24-7	3/4	1288	0.89	23	7339	7119	6893	6774	6656	6406	6135	5807	4756				
SBCR-24-10	1	1418	1.13	27	8080	7880	7680	7572	7465	7249	7015	6769	6313				
SBCR-24-15	1½	1623	1.77	35	9248	9074	8899	8812	8719	8531	8343	8148	7825	7171	5560		
30 Performance					Max RPM = 1506				Max Motor Frame Size = 184T				TS = RPM x 7.854				
SBCR-30-3	1/3	681	0.33	15.2	7420	6809	6030	5422									
SBCR-30-3		724	0.40	16.1	7889	7323	6622	6141	5545								
SBCR-30-5	1/2	829	0.60	18.8	9033	8553	8000	7667	7305	6276							
SBCR-30-7	3/4	949	0.90	23	10341	9921	9461	9217	8944	8304	7416						
SBCR-30-10	1	1045	1.20	27	11387	11006	10606	10385	10163	9650	9027	8221					
SBCR-30-15	1½	1196	1.78	32	13032	12699	12367	12185	11992	11604	11160	10680	9682				
SBCR-30-20	2	1316	2.39	37	14339	14037	13735	13584	13417	13065	12713	12303	11634	10018			
SBCR-30-30	3	1506	3.58	47	16410	16146	15881	15749	15617	15332	15025	14717	14215	13217	11824		
36 Performance					Max RPM = 1420				Max Motor Frame Size = 184T				TS = RPM x 9.424				
SBCR-36-5	1/2	620	0.49	16.7	10384	9580	8639	8115	7177								
SBCR-36-5		659	0.57	18.1	11037	10299	9409	8967	8440								
SBCR-36-7	3/4	755	0.85	22	12645	12019	11258	10874	10495	9613							
SBCR-36-10	1	830	1.13	26	13901	13332	12675	12316	11969	11265	10429						
SBCR-36-15	1½	951	1.79	30	15927	15431	14915	14602	14289	13677	13074	12361	10104				
SBCR-36-20	2	1046	2.26	35	17519	17067	16615	16359	16074	15505	14955	14407	13436				
SBCR-36-30	3	1198	3.40	44	20064	19670	19276	19079	18875	18378	17881	17396	16678	15294			
SBCR-36-50	5	1420	5.75	64	23782	23450	23117	22951	22784	22452	22043	21624	20995	19985	18886	17393	
42 Performance					Max RPM = 1212				Max Motor Frame Size = 215T				TS = RPM x 10.995				
SBCR-42-5	1/2	530	0.50	17.2	12939	11634	9951	8604									
SBCR-42-5		563	0.60	18.6	13744	12530	11087	10017									
SBCR-42-7	3/4	644	0.90	23	15722	14691	13502	12884	12009								
SBCR-42-10	1	709	1.19	26	17308	16398	15341	14780	14218	12542							
SBCR-42-15	1½	812	1.80	32	19823	19030	18145	17684	17200	16213	14810	12626					
SBCR-42-20	2	893	2.39	37	21800	21079	20306	19887	19467	18585	17625	16359	12952				
SBCR-42-30	3	1023	3.59	48	24974	24344	23715	23354	22988	22255	21484	20706	19154				
SBCR-42-50	5	1212	5.96	67	29588	29056	28525	28259	27983	27365	26747	26122	25137	23184	20457		
48 Performance					Max RPM = 1166				Max Motor Frame Size = 215T				TS = RPM x 12.566				
SBCR-48-7	3/4	509	0.74	21	18042	16152	13446	11755									
SBCR-48-7		541	0.89	22	19176	17432	15068	13528	11927								
SBCR-48-10	1	596	1.20	26	21126	19601	17641	16402	15002	11943							
SBCR-48-15	1½	682	1.79	32	24174	22893	21309	20403	19418	16986	14441						
SBCR-48-20	2	750	2.38	37	26584	25419	24052	23305	22476	20552	18308	15990					
SBCR-48-30	3	859	3.58	45	30448	29431	28350	27706	27062	25649	24004	22085	19067				
SBCR-48-50	5	1018	5.97	62	36083	35225	34367	33934	33390	32303	31152	29930	27688	23511			
SBCR-48-75	7½	1166	8.96	83	41329	40580	39831	39457	39082	38184	37235	36278	34678	31491	27851	24113	
54 Performance					Max RPM = 920				Max Motor Frame Size = 254T				TS = RPM x 14.135				
SBCR-54-15	1½	460	1.43	22	23743	22064	20143	18932	17613								
SBCR-54-15		489	1.78	24	25240	23683	21901	20962	19670	17383							
SBCR-54-20	2	538	2.38	27	27769	26390	24802	23961	23108	20807	18809						
SBCR-54-30	3	616	3.51	34	31795	30593	29260	28567	27848	26350	24285	22504					
SBCR-54-50	5	730	5.72	44	37679	36665	35622	35037	34451	33270	32012	30560	28033				
SBCR-54-75	7½	836	8.97	56	43151	42265	41379	40921	40409	39387	38365	37273	35559	31893	27638		
SBCR-54-100	10	920	11.90	69	47486	46681	45876	45474	45058	44129	43200	42271	40785	37864	34642	31024	
60 Performance					Max RPM = 811				Max Motor Frame Size = 256T				TS = RPM x 15.691				
SBCR-60-20	2	446	1.97	25	29819	27584	25099	23718	22220	18365							
SBCR-60-20		474	2.39	27	31691	29584	27337	26059	24741	21272							
SBCR-60-30	3	543	3.56	34	36304	34455	32649	31594	30479	28197	25170	22150					
SBCR-60-50	5	644	5.98	44	43057	41498	39960	39199	38438	36561	34662	32715	28612				
SBCR-60-75	7½	737	8.96	56	49275	47912	46554	45889	45224	43877	42233	40590	38048	32357			
SBCR-60-100	10	811	11.90	69	54222	52984	51746	51134	50530	49321	48049	46555	44314	40222	34832		
72 Performance					Max RPM = 771				Max Motor Frame Size = 256T				TS = RPM x 18.802				
SBCR-72-20	2	371	2.00	26	38286	34158	29734	27617	25593								
SBCR-72-20		394	2.39	28	40659	36985	32714	30490	28675	24224							
SBCR-72-30	3	451	3.59	35	46542	43988	39709	37916	35972	32605	28738						
SBCR-72-50	5	535	5.99	47	55210	53296	49520	48026	46562	43398	40355	37687	31512				
SBCR-72-75	7½	612	8.97	59	63156	61483	59068	57107	55633	53073	50315	47451	43930	33516			
SBCR-72-100	10	674	12.00	71	69554	68035	66516	64788	63007	60429	58104	55580	51763	46218			
SBCR-72-150	15	771	17.90	94	79564	78236	76908	76244	74957	71843	69602	67569	64763	58868	54239	48179	

Performance certified is for Model SBCR for installation type A: free inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Speed (RPM) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are loudness values in fan sones at 5 ft (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation type A: free inlet hemispherical sone levels.

Belt Drive

Belt driven, axial type sidewall fans shall be provided as follows:

Propellers shall be constructed with fabricated steel, fabricated aluminum, or cast aluminum blades and hubs. Propellers shall be securely attached to fan shafts. All propellers shall be statically and dynamically balanced to AMCA standard 204-05.

Motors shall be permanently lubricated, heavy duty type, carefully matched to the fan load and furnished at the specified voltage, phase, and enclosure.

Ground and polished steel fan shafts shall be mounted in permanently lubricated, sealed ball bearing pillow blocks and coated with an anti-corrosive coating. Bearings shall be selected for a minimum (L10) life in excess of 100,000 hours (L50 average life of 500,000 hours) at maximum cataloged operating speeds. Drives shall be sized for a minimum of 150 percent of driven horsepower. Pulleys shall be of the fully machined cast iron type, keyed and securely attached to wheel and motor shafts. Motor sheaves shall be adjustable for system balancing.

Drive frame and panel assemblies shall be galvanized steel or painted steel. Drive frames shall be formed channels and fan panels shall have prepunched mounting holes, formed flanges, and a deep formed inlet venturi. Drive frames and panels shall be bolted construction or welded construction (level 3 fans only).

The axial exhaust or supply fans shall bear the AMCA Certified Ratings Seals for both sound and air performance.

Fans shall be Model SBE-1, SBE-2, SBE-3, SBS-1, SBS-2, SBS-3, SBCE and SBCE as manufactured by Greenheck, Schofield, Wisconsin.

Reversible Belt Drive

Belt driven, axial type sidewall fans shall be provided as follows:

Propellers shall be constructed with cast aluminum blades and hubs. Propellers shall be securely attached to fan shafts. All propellers shall be statically and dynamically balanced to AMCA standard 204-05.

Motors shall be permanently lubricated, heavy duty type, carefully matched to the fan load and furnished at the specified voltage, phase, and enclosure.

Ground and polished steel fan shafts shall be mounted in permanently lubricated, sealed ball bearing pillow blocks, and coated with an anti-corrosive coating. Bearings shall be selected for a minimum (L10) life in excess of 100,000 hours (L50 average life of 500,000) at maximum cataloged operating speeds. Drives shall be sized for a minimum of 150 percent of driven horsepower. Pulleys shall be of the fully machined cast iron type, keyed and securely attached to wheel and motor shafts. Motor sheaves shall be adjustable for system balancing.

Drive frame and panel assemblies shall be galvanized steel or painted steel. Drive frames shall be formed channels and fan panels shall have prepunched mounting holes, formed flanges, and a deep formed double inlet venturi. Drive frames and panels shall be bolted construction or welded construction.

The axial exhaust or supply fans shall be tested in accordance AMCA Standard 301 in both sound and air performance.

Fans shall be Model SBCR as manufactured by Greenheck, Schofield, Wisconsin.

Direct Drive Specifications

Direct Drive

Direct drive, axial type sidewall fans shall be provided as follows:

Propellers shall be constructed with fabricated steel, fabricated aluminum, or cast aluminum blades and hubs. A standard square key and set screw or tapered bushing shall lock the propeller to the motor shaft. All propellers shall be statically and dynamically balanced to AMCA standard 204-05.

Motors shall be permanently lubricated, heavy duty type, carefully matched to the fan load and furnished at the specified RPM, voltage, phase, and enclosure.

Motor drive frame assemblies and fan panels shall be galvanized steel or painted steel. Drive frame assemblies shall be welded wire or formed channels and fan panels shall have prepunched mounting holes, formed flanges, and a deep formed inlet venturi. Drive frames and panels shall be bolted construction or welded construction (level 2 & 3 fans only).

The axial exhaust or supply fans shall bear the AMCA Certified Ratings Seals for both sound and air performance.

Fans shall be Model SE1, SE2, SCE3, SS1, SS2, SCE3 and SCS3 as manufactured by Greenheck, Schofield, Wisconsin.

Reversible Direct Drive

Direct drive, axial type sidewall fans shall be provided as follows:

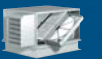
Propellers shall be constructed with cast aluminum blades and hubs. A standard square key and set screw or tapered bushing shall lock the propeller to the motor shaft. All propellers shall be statically and dynamically balanced.

Motors shall be permanently lubricated, heavy duty type, carefully matched to the fan load and furnished at the specified RPM, voltage, phase, and enclosure.

Motor drive frame assemblies and fan panels shall be galvanized steel or painted steel. Drive frame assemblies shall be welded wire or formed channels and fan panels shall have prepunched mounting holes, formed flanges, and a deep formed double inlet venturi. Drive frames and panels shall be bolted construction or welded construction.

The axial exhaust or supply fans shall be tested in accordance AMCA Standard 301 in both sound and air performance.

Fans shall be Model SCR3 as manufactured by Greenheck, Schofield, Wisconsin.



Our Warranty

Greenheck warrants this equipment to be free from defects in material and workmanship for a period of one year from the purchase date. Any units or parts which prove defective during the warranty period will be replaced at our option when returned to our factory, transportation prepaid. Motors are warranted by the motor manufacturer for a period of one year. Should motors furnished by Greenheck prove defective during this period, they should be returned to the nearest authorized motor service station. Greenheck will not be responsible for any removal or installation costs.

As a result of our commitment to continuous improvement, Greenheck reserves the right to change specifications without notice.



Prepared to Support

Green Building Efforts

Sidewall Propeller Rev. 4 December 2007 SP
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