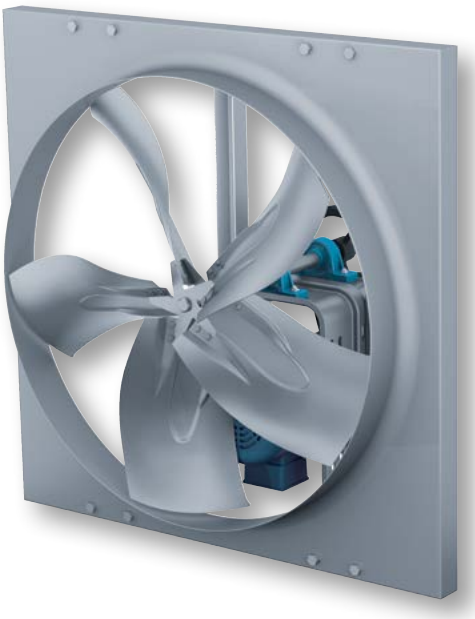
TURNING AIR INTO SOLUTIONS.

Fan & Blower

Twin City



PROPELLER WALL FANS (DIRECT & BELT DRIVEN)

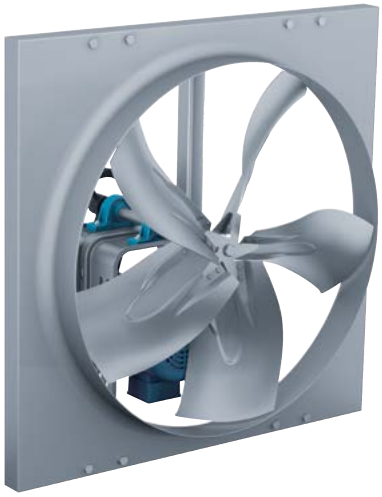
WPD | WPB

CATALOG 4820
March 2017

Overview

WPB | WPD

Model WPD
with "E" Series Propeller



Model WPB
with "L1" Series Propeller

Twin City Fan & Blower Model WPD Medium Duty and Model WPB Light and Medium Duty Propeller Wall Fans are specifically designed for cost effective, general-purpose ventilation. All models are available in either exhaust or supply configurations. The steel panel design is available with cast aluminum or fabricated steel propellers to meet specific application requirements. Regardless of the application, the WPD and WPB Series offers a high quality, cost competitive propeller fan solution.

Typical Applications Include

Warehouse Ventilation, Restroom Exhaust, Elevator Shaft, Stairwell Exhaust, Attic Exhaust, Data Center Ventilation, Gymnasium Ventilation, Filtered Supply, Garage Exhaust, General HVAC, Farm Exhaust, Foundry Ventilation, Factory Ventilation, Greenhouse Ventilation

Configurations

Available in Both Direct and Belt Driven Configurations

Propeller Types

"L1" and "L2" Fabricated Steel Propellers; "B" and "E" Die Cast Aluminum Propellers; "C" Cast Aluminum Propellers; "Z" Fabricated Steel Propellers

Certifications

AMCA Sound/Air and FEG, UL 705 Listed for Electrical

Fan & Blower Twin City

c UL us

Models WPD and WPB are UL/cUL 705 listed for electrical, File No. E158680.

FS10 For complete product performance, drawings, and available accessories, Download Fan Selector at tcf.com.

Twin City Fan & Blower, a Twin City Fan Company certifies that the WPD and WPB Wall Propeller Fans 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 AMCA Certified Ratings Program.

The AMCA Certified Ratings Seal applies to air and sound performance for Model WPD Sizes 14E4, 14E8, 14B105, 16E4, 16E8, 16B105, 18E4, 18E8 and 18B105 on page 11 and Model WPB Sizes 21L1, 21L2, 21E4, 21E8, 21B105 and 24L1 on pages 14-15.

The AMCA Certified Ratings Seal applies to the Fan Efficiency Grade for Model WPD Sizes 21B105, 21E4, 21E8, 24B105, 24E4, 24E8, 24Z5, 30B105, 30E4, 30E8, 30Z5, 36B206, 36E4, 36E8, 36Z5, 42B304, 42E4, 42E8, 42Z5, 48B304, 48E4, 48E8 and 48Z5 on pages 11-13 and Model WPB Sizes 21L2, 21B105, 21E4, 24L2, 24B105, 24E4, 24E8, 24Z5, 30L1, 30L2, 30B105, 30E4, 30E8, 30Z5, 36L1, 36L2, 36B206, 36E4, 36E8, 36Z5, 42L1, 42L2, 42B304, 42E4, 42E8, 42Z5, 48L1, 48L2, 48B304, 48E4, 48E8, 48Z5, 54L1, 54L2, 54B406, 54C3, 54C6, 54Z5, 60L1, 60L2, 60C3, 60C6 and 60Z5 on pages 15-22.

Overview

WPB | WPD

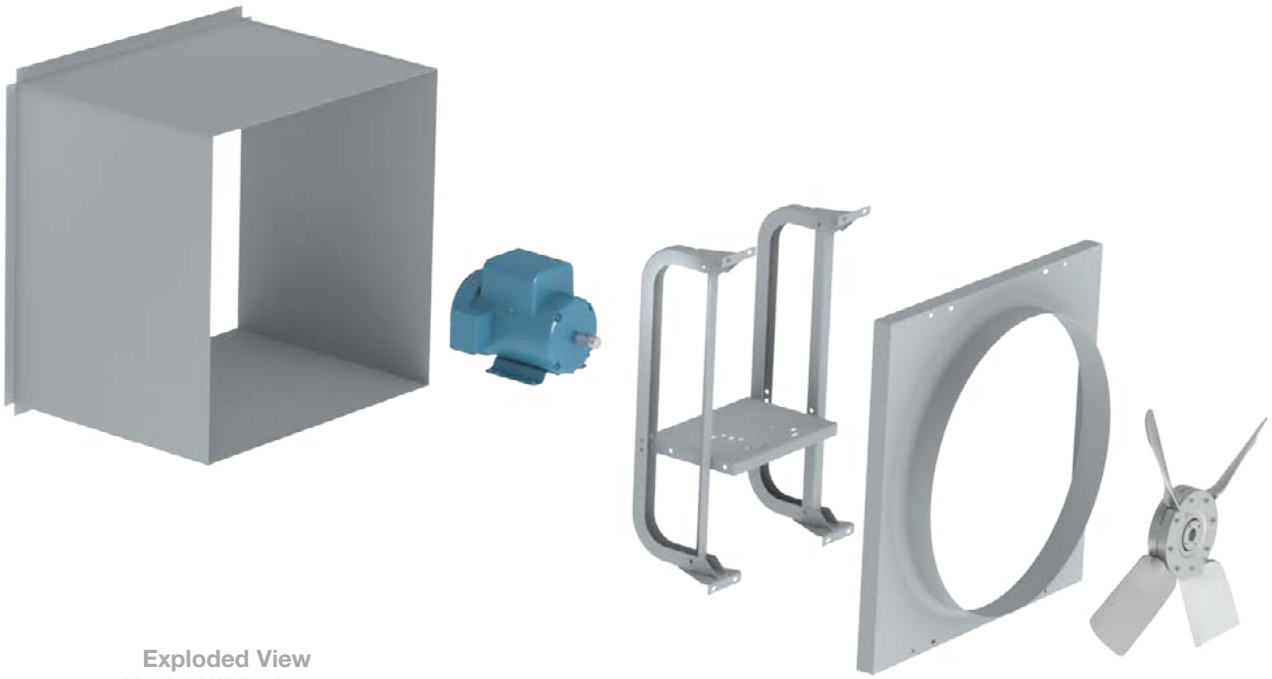
Construction Features

- Cast aluminum or fabricated steel propellers.
- Steel panel with deep formed inlet venturi which distributes air velocity uniformly.
- Pre-punched mounting holes for ease of installation.
- Motor supports are constructed of heavy-gauge galvanized steel.
- Fans designed for exhaust and supply service are provided with motor and drive located on the interior side of the building.
- Pre-engineered accessories to accommodate any installation.
- Dynamically balanced propellers for quiet, vibration-free operation.
- Designed for continuous duty.
- Cast iron pillow block bearings selected for L50 average life of 200,000 hours at maximum cataloged operating speeds.

WPB
21" to 60" wheel diameters
Airflow to 62,800 CFM
Static pressure to 1" w.g.

WPD
14" to 48" wheel diameters
Airflow to 35,300 CFM
Static pressure to 1" w.g.

Fan & Blower
Twin City



Exploded View
Model WPD, Arr. 4

Propellers

WPB | WPD

FAN SIZE	DIRECT DRIVE	BELT DRIVEN
14	B, E	—
16	B, E	—
18	B, E	—
21	B, E	L1, L2, B, E
24	B, E, Z	L1, L2, B, E, Z
30	B, E, Z	L1, L2, B, E, Z
36	B, E, Z	L1, L2, B, E, Z
42	B, E, Z	L1, L2, B, E, Z
48	B, E, Z	L1, L2, B, E, Z
54	—	L1, L2, B, C, Z
60	—	L1, L2, C, Z

Propeller Availability

WPD and WPB propeller fans are available with either fixed pitch fabricated steel (sizes 21 through 60) or adjustable pitch cast aluminum propellers (sizes 14 through 60). Each propeller type is designed for a wide variety of commercial market applications with static pressure capabilities from 0" to 1". Regardless of the application requirement, WPD and WPB propellers offer the right choice.

"L1 & L2" Fabricated Steel Propellers

The "L1" and "L2" series features fixed pitch, fabricated steel, 5-bladed propellers. Galvanized steel propeller blades are riveted to galvanized steel hubs. Available in 8 sizes from 21" to 60" diameters in either standard L1 construction or reinforced L2 construction.

"B" Die Cast Aluminum Propellers

The "B" series features a die cast aluminum propeller available in 4, 5 and 6 blade designs. Blade angles are factory set and mounted in a die cast aluminum hub. "B" propellers are available in 14" through 54" diameters.

"E" Die Cast Aluminum Propellers

The "E" series features a die cast aluminum propeller available in 4 and 8 blade designs. Blade angles are factory set and mounted in a die cast aluminum hub. "E" propellers are available in 14" through 48" diameters.

"C" Cast Aluminum Propellers

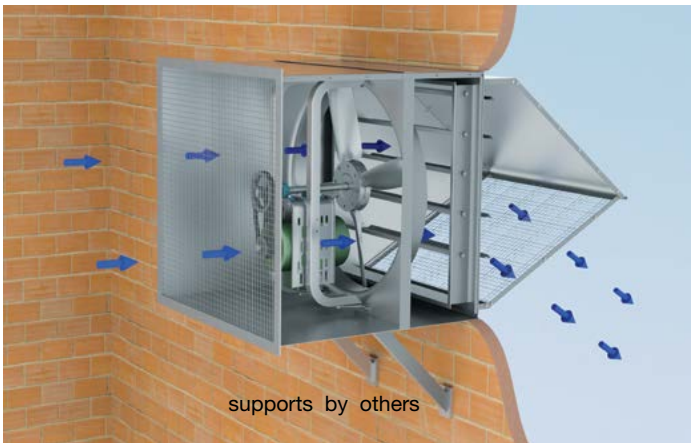
The "C" series is a cast aluminum propeller available in 4 and 6 blade designs, and is available in 54" and 60" diameters only. Blade angles are factory set and mounted in a cast aluminum hub.

"Z" Fabricated Steel Propeller

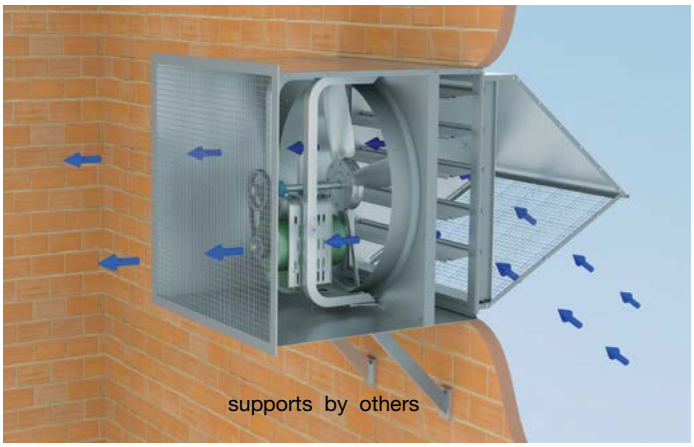
The "Z" series features a fixed pitch, fabricated steel, 5-bladed propeller. Steel blades are continuously welded to a heavy gauge hub at the customer's selected blade angle. "Z" propellers are available in 24" through 60" diameters.

Pressure Drops

Supply & Exhaust



EXHAUST FAN
in Wall Box with Backdraft Damper & Weatherhood



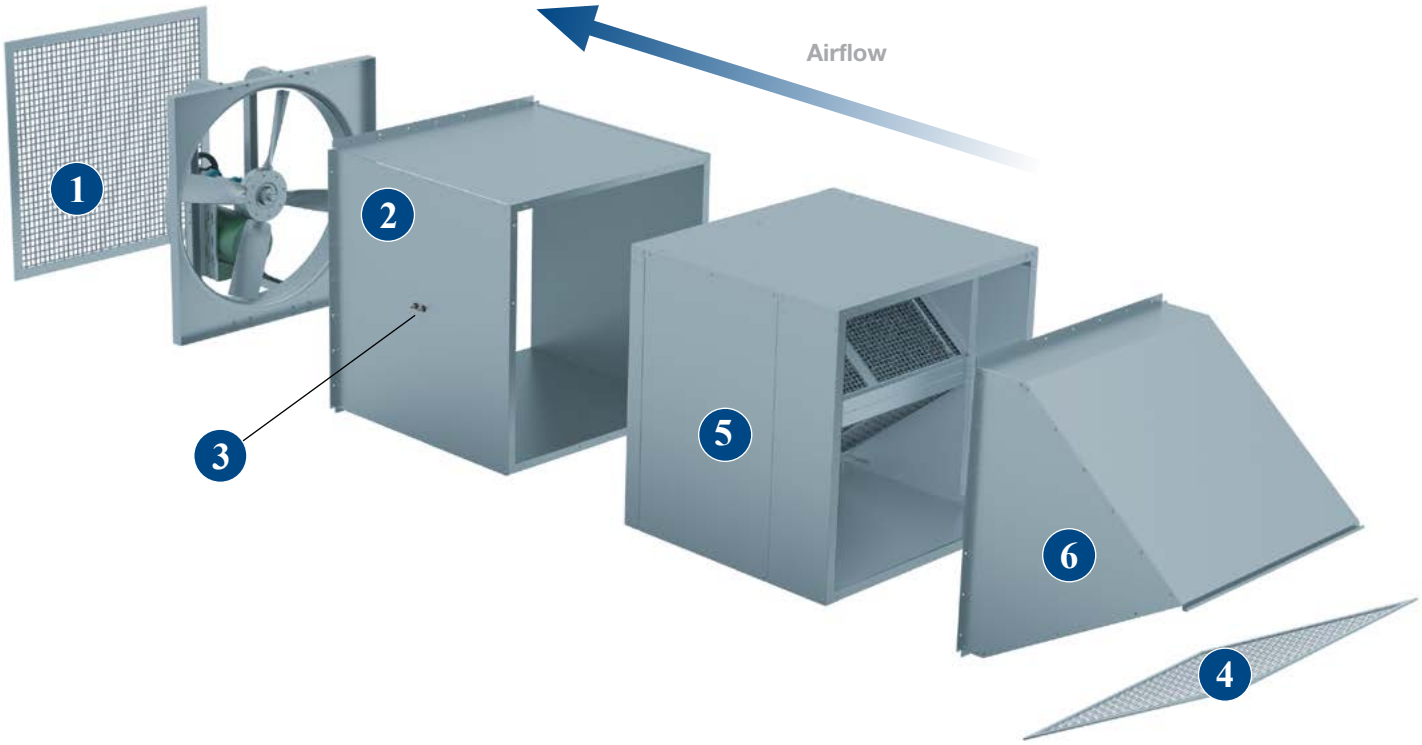
SUPPLY FAN
in Wall Box with Backdraft Damper & Weatherhood

FAN SIZE	CFM	PRESS. DROP (IN. W.G.)	
		EXHAUST	SUPPLY
14	1000	0.04	0.06
	1200	0.06	0.09
	1400	0.09	0.12
	1600	0.11	0.16
	1800	0.14	0.20
	2000	0.18	0.25
	2200	0.22	0.30
	2400	0.26	0.36
16	1600	0.07	0.10
	1800	0.09	0.12
	2000	0.11	0.15
	2200	0.13	0.18
	2400	0.15	0.21
	2600	0.18	0.25
	2800	0.21	0.29
	3000	0.24	0.34
	3500	0.32	0.46
18	2000	0.07	0.09
	2200	0.08	0.11
	2400	0.10	0.13
	2600	0.11	0.16
	2800	0.13	0.18
	3000	0.15	0.21
	3500	0.20	0.29
	4000	0.27	0.37
	4500	0.34	0.47
	5000	0.41	0.58
21	2400	0.05	0.07
	2600	0.06	0.09
	2800	0.07	0.10
	3000	0.08	0.11
	3500	0.11	0.16
	4000	0.15	0.20
	4500	0.18	0.26
	5000	0.23	0.32
	5500	0.27	0.39
	6000	0.33	0.46
	6500	0.38	0.54
24	3500	0.07	0.09
	4000	0.09	0.12
	4500	0.11	0.15
	5000	0.13	0.19
	6000	0.19	0.27
	7000	0.26	0.37
	8000	0.34	0.48
	9000	0.43	0.61
	10000	0.53	0.75

FAN SIZE	CFM	PRESS. DROP (IN. W.G.)	
		EXHAUST	SUPPLY
30	5000	0.05	0.08
	6000	0.08	0.11
	7000	0.11	0.15
	8000	0.14	0.20
	9000	0.18	0.25
	10000	0.22	0.31
	11000	0.26	0.37
	12000	0.31	0.44
	13000	0.37	0.52
	14000	0.43	0.60
	15000	0.49	0.69
36	7000	0.05	0.07
	8000	0.07	0.09
	9000	0.09	0.12
	10000	0.11	0.15
	11000	0.13	0.18
	12000	0.15	0.21
	13000	0.18	0.25
	14000	0.21	0.29
	16000	0.27	0.38
	18000	0.34	0.48
	20000	0.42	0.59
	22000	0.51	0.72
42	10000	0.06	0.08
	11000	0.07	0.10
	12000	0.08	0.12
	13000	0.10	0.14
	14000	0.11	0.16
	16000	0.15	0.21
	18000	0.19	0.26
	20000	0.23	0.32
	22000	0.28	0.39
	24000	0.33	0.46
	26000	0.39	0.55
	28000	0.45	0.63
48	14000	0.07	0.09
	16000	0.09	0.12
	18000	0.11	0.15
	20000	0.13	0.19
	22000	0.16	0.23
	24000	0.19	0.27
	26000	0.23	0.32
	28000	0.26	0.37
	30000	0.30	0.43
	32000	0.35	0.49
	34000	0.39	0.55
	36000	0.44	0.62

FAN SIZE	CFM	PRESS. DROP (IN. W.G.)	
		EXHAUST	SUPPLY
54	11000	0.03	0.04
	12000	0.03	0.04
	13000	0.04	0.05
	14000	0.04	0.06
	15000	0.05	0.07
	16000	0.05	0.08
	18000	0.07	0.10
	20000	0.08	0.12
	22000	0.10	0.14
	24000	0.12	0.17
	26000	0.14	0.20
	28000	0.17	0.23
	30000	0.19	0.27
	32000	0.22	0.30
	34000	0.24	0.34
	36000	0.27	0.39
	38000	0.30	0.43
	40000	0.34	0.48
	42000	0.37	0.52
	44000	0.41	0.58
60	12000	0.02	0.03
	13000	0.02	0.03
	14000	0.03	0.04
	15000	0.03	0.04
	16000	0.04	0.05
	18000	0.04	0.06
	20000	0.06	0.08
	22000	0.07	0.09
	24000	0.08	0.11
	26000	0.09	0.13
	28000	0.11	0.15
	30000	0.12	0.17
	32000	0.14	0.20
	34000	0.16	0.22
	36000	0.18	0.25
	38000	0.20	0.28
	40000	0.22	0.31
	42000	0.24	0.34
	44000	0.27	0.38
	46000	0.29	0.41
	50000	0.34	0.49
	52000	0.37	0.52
	54000	0.40	0.57
	56000	0.43	0.61
	58000	0.46	0.65

OPTIONS/ACCESSORIES



1 **Removable Screen** Standard component of wall box and motor side guard. Screen is available with bolted removable or hinged construction. Allows for access to motor, bearings and drive components.

2 **Wall Box** is used to mount the fan and accessories cleanly into a wall, and provides the strongest and safest way to mount wall fans. Wall boxes are constructed of 16-gauge galvanized steel and are provided with heavy-gauge mounting flanges with prepunched mounting holes for ease of installation. Available fully assembled or as a kit (field assembly required) to reduce shipping costs. Wall supports are provided by others.

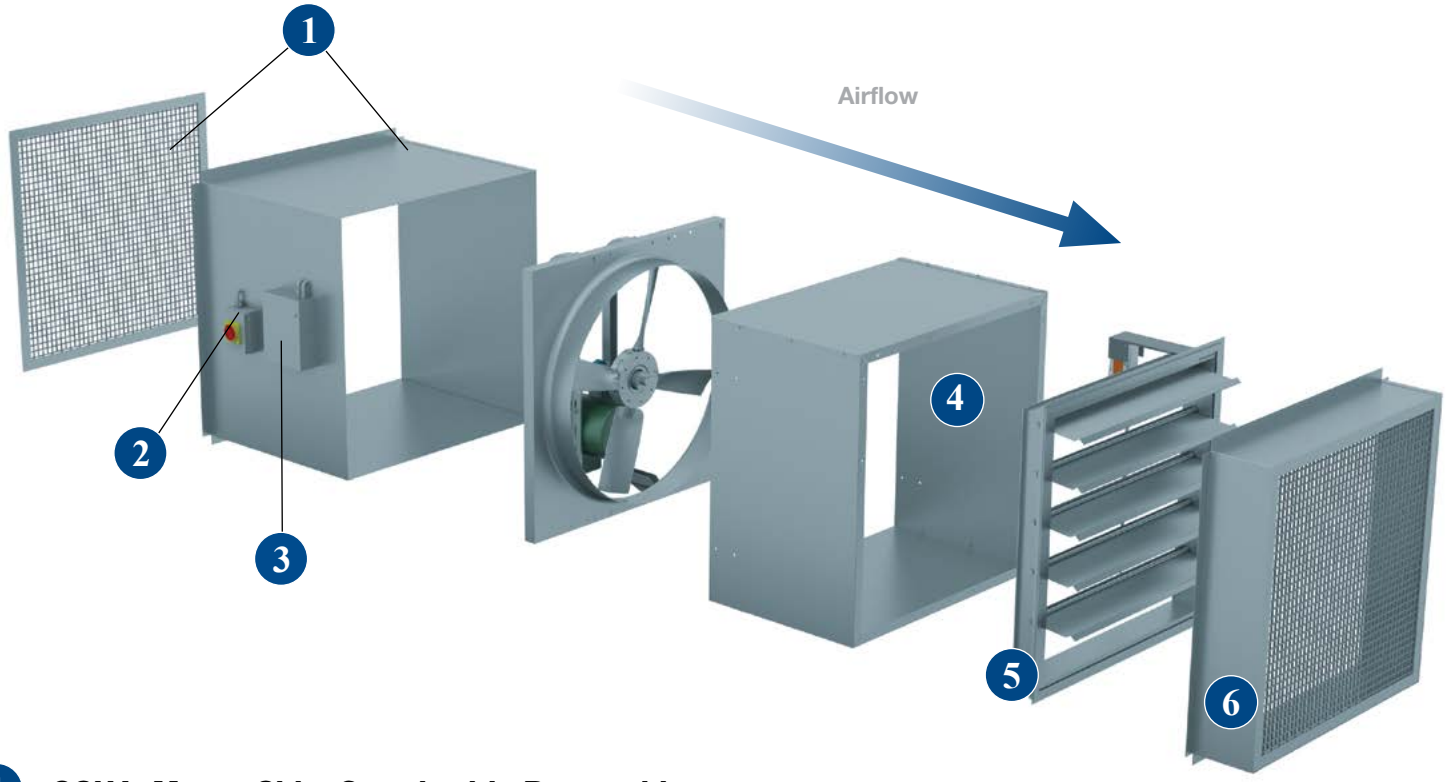
3 **Extended Lube Lines** with grease fittings are extended to the outside of the fan housing.

4 **Birdscreen** protects the fan's internal components from entry of birds.

5 **Filter Box** For applications requiring filtered air, filter boxes are available with wall box or wall collar and fan in supply configuration. Filter box contains 2" thick aluminum washable filters and access panels as standard. Disposable filters and 1" options are also available upon request. Contact factory for more information.

6 **Weatherhood** keeps snow and rain from entering the building and to prevent wind from altering the performance of the fan and backdraft damper. The weatherhood is designed to fit over the backdraft damper and can be installed to a wall collar via the mounting flanges and prepunched mounting holes. Weatherhoods are constructed of G90 galvanized steel and are standard with a removable galvanized steel, wire mesh, bird screen. Available fully assembled or as a kit (field assembly required) to reduce shipping costs. Weatherhoods are not weather tight when used with supply fans.

Fan & Blower Twin City



1 **OSHA Motor Side Guard with Removable Screen** meets OSHA standards by completely enclosing the motor and drive components. Motor side guards are constructed of galvanized steel side sheets and a removable wire mesh screen. Prepunched mounting holes allow for easy installation to the fan. Can be used with or without a wall collar.

2 **NEMA 4 Disconnect Switch** provides positive electrical shutoff when fan cleaning or maintenance of fan and is water and dust tight. Switch is available shipped loose for field mounting and wiring or factory mounted and wired. See page 8 for other available disconnect switches.

3 **Single Point Wiring** Available with factory assembled motor side guard or wall box, wired disconnect switch and motorized backdraft damper. Single point wiring option provides a single location for making connections to the damper actuator and disconnect switch.

4 **Wall Collars** are an economical alternative to the wall box. Wall collars are constructed of 16-gauge galvanized steel. Heavy-gauge mounting flanges with prepunched mounting holes are provided for ease of installation. Available fully assembled or as a kit (field assembly required) to reduce shipping costs. If motor side of fan is to be enclosed, add OSHA motor side guard. Wall supports by others.

5 **Backdraft Dampers** are used to keep the elements and unwanted air out of the building when the fan is not in use. They are constructed to easily fasten to the wall box or wall collar so that the weatherhood or damper guard can easily fit over it. The standard damper frame is constructed of .062 extruded aluminum and the blades are constructed of 26-gauge mill finished aluminum. The leading edge of each damper blade is flanged with a vinyl seal for effective weather protection and quiet closing. Heavy duty/high velocity dampers are provided when the fan is selected at higher air volumes (see velocity table on page 10). Frame and blades are .080 extruded aluminum. The blades freely pivot open or close on stainless steel pivot pins on both types. Motorized options are available. See page 10 for additional information on backdraft damper limits.

6 **Damper Guard** protects the backdraft damper when a weatherhood is not used. It is constructed of 18-gauge G90 galvanized steel side sheets and a galvanized steel screen. The screening complies with OSHA standards and will keep birds out of the fan and building. Mounting flanges and prepunched mounting holes are provided for ease of installation.

DISCONNECT SWITCHES

NEMA 1 Disconnect Switch

Disconnect switches provide positive electrical shutoff during fan cleaning or maintenance.

NEMA 1 Disconnect Switch (Standard)

A NEMA 1 disconnect switch is available shipped loose for field mounting and wiring or factory mounted and wired with ODP or TEFC motors.

NEMA 3R Disconnect Switch

A NEMA 3R, rain proof, disconnect is available shipped loose for field mounting and wiring or factory mounted and wired externally.

NEMA 3R Disconnect Switch

NEMA 4 Disconnect Switch

A NEMA 4, water and dust tight, disconnect is available shipped loose for field mounting and wiring or factory mounted and wired externally.

NEMA 7/9 Disconnect Switch

A NEMA 7/9 disconnect switch is recommended on fans with explosion proof motors. The NEMA 7/9 switch is designed for use with fans operating in hazardous environments. Available shipped loose for field mounting and wiring. (Not shown.)

NEMA 4 Disconnect Switch

Fan & Blower Twin City

MODEL NOMENCLATURE

WPB - E - 24 - B - 1 - 05 - 25

Model
WPD = Wall Propeller Fan, Direct Drive
WPB = Wall Propeller Fan, Belt Driven

E = Exhaust, S = Supply

Fan Size

Propeller Type
L1 & L2 = Level 1 & Level 2, Fabricated Steel, Fixed Pitch (5-Bladed)
B = Cast Aluminum, Adjustable Pitch (4, 5, and 6-Bladed)
E = Cast Aluminum, Adjustable Pitch (4 and 8-Bladed)
C = Cast Aluminum, Adjustable Pitch (4 and 6-Bladed)
Z = Fabricated Steel, Fixed Pitch (5-Bladed)

Hub Designation (B Propellers Only)

No. of Blades

Propeller Blade Angle (B, C, E, and Z Propellers Only)

TCF Model Comparison

Twin City Fan & Blower offers a full line of propeller fans available in both direct drive and belt driven. Each model and propeller type has been designed for a wide variety of commercial market applications. No matter what the requirements are, Twin City Fan & Blower has the propeller fan to suit the application.

Direct Drive

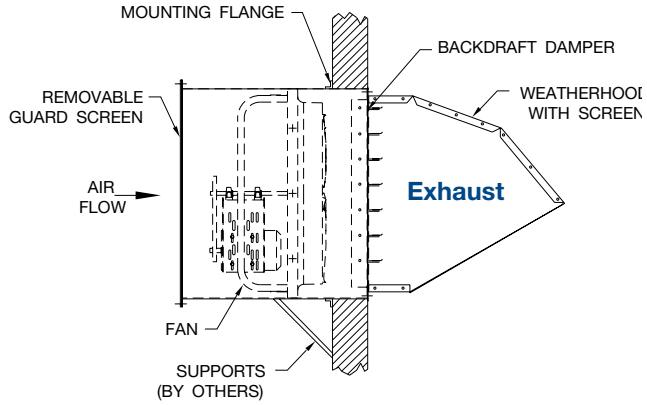
LEVEL	PROPELLER CONSTRUCTION	MODEL	SIZE RANGE	PERFORMANCE RANGE CFM	STATIC PRESSURE CAPABILITY	PERFORMANCE DATA LOCATION
1	Fabricated Aluminum Blades Riveted to Steel Hubs	TCPE	8-24	131 to 7,320	Up to 0.625 in. w.g.	Catalog 4800
3	Cast Aluminum Blades and Hubs	WPD	14-48	883 to 35,350	Up to 1.00 in. w.g.	Pages 11-13
	Steel Blades and Hubs		24-48	3,100 to 32,200		
4	Cast Aluminum Blades and Hubs	TCWP	12-48	686 to 39,980	Up to 1.50 in. w.g.	Catalog AX500
		TCWPX	24-60	1,640 to 72,000		

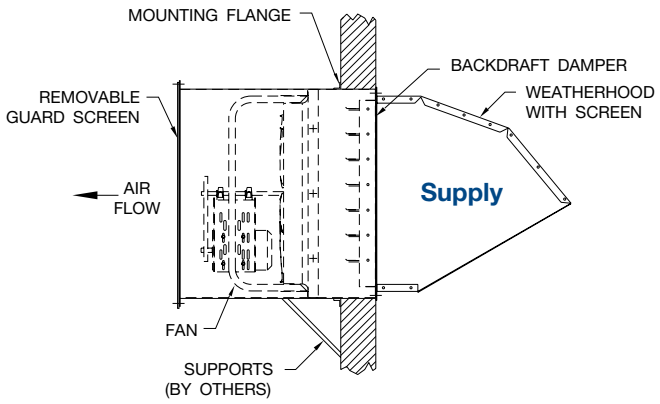
Belt Driven

LEVEL	PROPELLER CONSTRUCTION	MODEL	SIZE RANGE	PERFORMANCE RANGE CFM	STATIC PRESSURE CAPABILITY	PERFORMANCE DATA LOCATION
1	Galvanized Steel Blades Riveted to Galvanized Hubs	WPB L1	21-60	2,970 to 35,100	Up to 0.375 in. w.g.	Pages 14-22
2	Reinforced Galvanized Steel Blades Riveted to Galvanized Hubs	WPB L2	21-60	3,450 to 47,600	Up to 0.75 in. w.g.	Pages 14-22
3	Cast Aluminum Blades and Hubs	WPB L3	21-60	2,200 to 56,700	Up to 1.00 in. w.g.	Pages 14-22
	Steel Blades and Hubs		24-60	3,300 to 62,800		Pages 15-22
4	Cast Aluminum Blades and Hubs	TCWP	24-48	3,600 to 38,000	Up to 1.50 in. w.g.	Catalog AX500
		TCWPX	24-72	4,000 to 75,000		

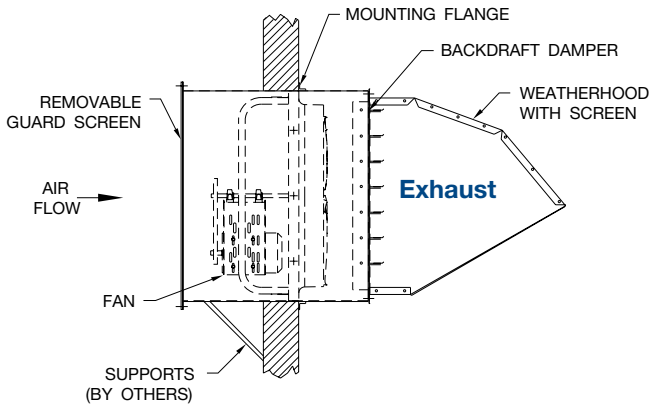
MOUNTING ARRANGEMENTS

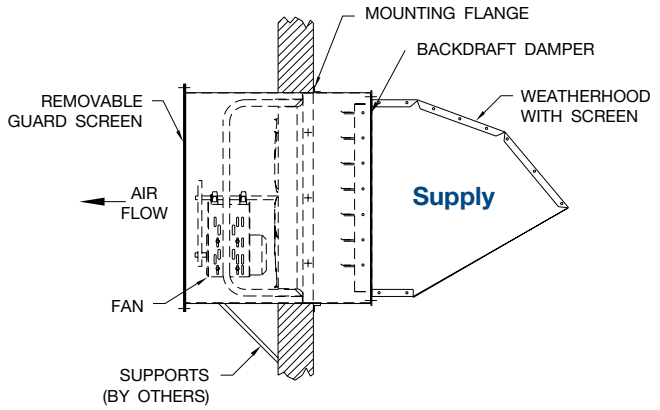
Flush with Outside Wall



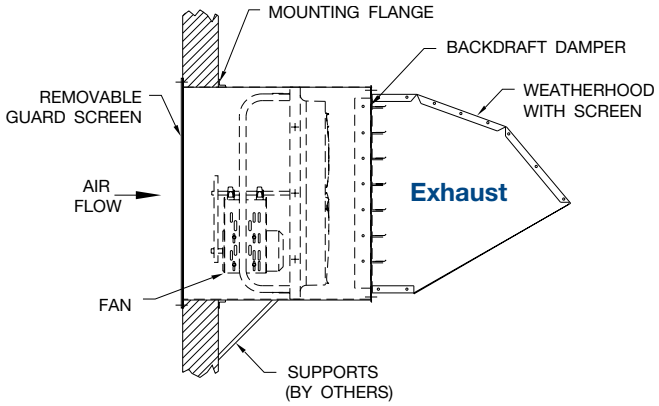


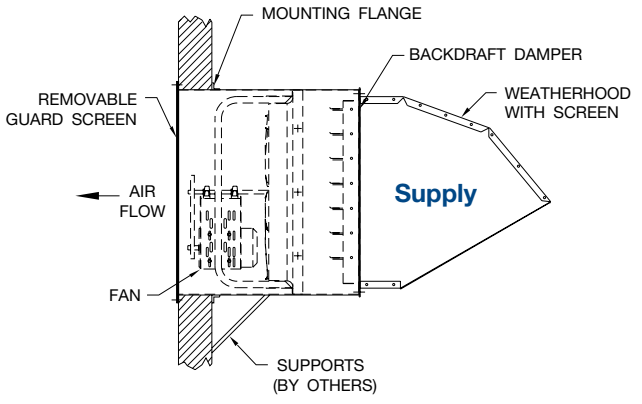
Middle of Wall



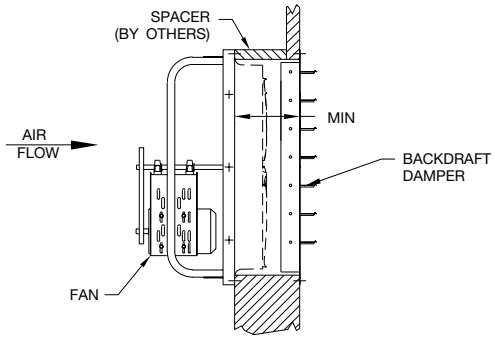


Flush with Interior Wall





Mounting without Accessories



SIZE	MIN.
14	16
16	16
18	16
21	16
24	16
30	16
36	16
42	16
48	16
54	19
60	19

Dimensions are in inches.

TO ACHIEVE THE MINIMUM DIMENSION, THIS INSTALLATION REQUIRES A SPACER (BY OTHERS) BETWEEN THE FAN AND THE WALL.

IF THE WALL IS EQUAL TO OR GREATER THAN THE MINIMUM DIMENSION, THE FAN CAN BE MOUNTED DIRECTLY TO THE WALL.

Approx. Shipping Weight (LB.)

FAN SIZE	WPD				WPB							
	B	E4	E8	Z5	L1	L2	B	E4	E8	C3	C6	Z5
14	41	41	45	—	—	—	—	—	—	—	—	—
16	47	47	49	—	—	—	—	—	—	—	—	—
18	50	50	52	—	—	—	—	—	—	—	—	—
21	58	58	69	—	61	69	72	72	75	—	—	—
24	74	74	77	78	69	74	80	80	86	—	—	90
30	99	99	105	111	90	100	103	103	118	—	—	124
36	127	127	154	175	115	127	139	139	146	—	—	161
42	195	195	210	229	147	167	197	197	212	—	—	267
48	208	208	224	247	160	248	273	273	289	—	—	324
54	—	—	—	—	184	276	345	—	—	345	369	440
60	—	—	—	—	261	368	—	—	—	423	438	470

Material Specification

FAN SIZE	GAUGE OF MATERIAL													SHAFT SIZE (IN.)		
	FAN PANEL			DRIVE FRAME			PROPELLERS					HUBS		WPB		
	WPD	WPB		WPD	WPB		L1/L2	B	E	C	Z	L1/L2	Z	L1	L2	B/E/C/Z
		L1/L2	B/E/C/Z		L1/L2	B/E/C/Z										
14	18	—	—	14	—	—	—	DIE CAST ALUM.	DIE CAST ALUM.	—	—	—	—	—	—	—
16	18	—	—	14	—	—	—			—	—	—	—	—	—	—
18	18	—	—	14	—	—	—			—	—	—	—	—	—	—
21	18	18	18	14	14	14	16			—	—	14	—	3/4	3/4	1
24	16	18	16	12	14	14	16			—	14	14	12	3/4	3/4	1
30	16	18	16	12	12	12	16			—	14	14	12	3/4	1	1
36	16	18	16	12	12	12	16			—	12	14	12	3/4	1	1
42	14	16	14	10	12	12	14			—	10	12	10	1	1 3/16	1 3/16
48	14	16	14	10	12	12	14			—	10	12	10	1	1 3/16	1 7/16
54	—	16	14	—	12	10	14	—	—	CAST	10	12	7	1	1 3/16	1 7/16
60	—	14	14	—	12	10	12			ALUM.	10	3/16	7	1 3/16	1 1/2	1 11/16

Outlet Velocities

FAN SIZE	STANDARD DAMPER	HEAVY DUTY DAMPER
	OUTLET VELOCITY	
	MAX. FPM	MIN. FPM
14	2673	2674
16	2540	2541
18	2863	2864
21	2980	2981
24	2619	2620
30	2999	3000
36	3122	3123
42	2828	2829
48	2937	2938
54	2818	2819
60	2907	2908

Backdraft Damper Limits

FAN SIZE	STANDARD DAMPER		HEAVY DUTY DAMPER	
	CFM MAX.	VELOCITY MAX. (FPM)	CFM MAX.	VELOCITY MAX. (FPM)
14	2960	2673	Not Required	
16	3658	2540		
18	5200	2863		
21	7340	2980	7644	3104
24	8400	2619	10932	3408
30	15090	2999	16785	3336
36	22530	3122	25355	3513
42	27700	2828	30777	3143
48	37493	2937	42636	3340
54	45450	2818	53989	3348
60	57800	2907	62829	3160

Fan & Blower
Twin City

WPD – Sizes 14-21

MODEL INFO							CFM / STATIC PRESSURE (IN. W.G.)												FAN
SIZE	PROPELLER	BLADE ANGLE	MOTOR HP	FAN RPM	MAX BHP	SONES @ 0" SP	0.000	0.100	0.125	0.150	0.200	0.250	0.300	0.375	0.500	0.625	0.750	1.000	EFF. GRADE
Max RPM B105 = 1750 E4 = 1750 E8 = 1750							Max Motor Frame Size = 56									Outlet Area (ft^2) = 1.11			
14	B105 Cast Aluminum	10	1/4	1750	0.10	14.5	975	883	862	842	801	754	701	628	478	381	299		N/A
		15		1750	0.14	15.2	1320	1236	1214	1192	1149	1105	1055	949	813				
		20		1750	0.19	15.1	1645	1558	1535	1512	1465	1418	1367	1271	1077				
		25		1750	0.25	15.9	1951	1855	1830	1804	1751	1696	1639	1535	1298	1109			
		30	1/3	1750	0.30	16.8	2236	2124	2095	2064	2000	1931	1857	1723	1454				
	E4 Cast Aluminum	20	1/4	1750	0.19	16.1	1911	1793	1760	1725	1649	1561	1456	1271	883				N/A
		24		1750	0.22	13.0	2126	2002	1968	1931	1850	1755	1653	1480	1113				
		28		1750	0.26	13.8	2308	2172	2135	2097	2018	1931	1832	1637	1215				
		32	1/3	1750	0.31	14.9	2482	2325	2283	2241	2153	2061	1954	1741	1256				
	E8 Cast Aluminum	16	1/4	1750	0.21	14.6	1596	1529	1511	1493	1454	1412	1365	1286	1149				N/A
		20		1750	0.26	15.0	1857	1783	1763	1743	1701	1657	1608	1527	1388	1178			
		24	1/3	1750	0.32	14.7	2121	2042	2022	2001	1956	1910	1860	1776	1622	1437			
Max RPM B105 = 1750 E4 = 1750 E8 = 1750							Max Motor Frame Size = 56									Outlet Area (ft^2) = 1.44			
16	B105 Cast Aluminum	10	1/4	1750	0.16	18.0	1432	1322	1295	1269	1219	1169	1112	1017	870	679	563		N/A
		15		1750	0.25	19.0	1942	1841	1815	1789	1736	1684	1631	1541	1335	1174			
		20	1/3	1750	0.35	19.3	2424	2319	2292	2264	2208	2151	2094	2004	1780	1570	1368		
		25	1/2	1750	0.44	19.6	2870	2756	2726	2696	2634	2570	2504	2401	2166	1895	1665		
		30		1750	0.54	21	3286	3154	3120	3084	3011	2934	2853	2722	2436	2121	1817		
	E4 Cast Aluminum	16	1/4	1750	0.23	18.1	2361	2217	2178	2138	2053	1962	1855	1643					N/A
		20	1/3	1750	0.29	18.7	2709	2564	2524	2484	2397	2300	2193	2017	1604				
		24	1/2	1750	0.37	19.7	3040	2888	2847	2805	2715	2615	2504	2315	1933				
		28		1750	0.45	20	3367	3192	3146	3099	3002	2901	2794	2608	2186				
		32		1750	0.52	21	3617	3437	3390	3341	3238	3129	3011	2816	2406	1832			
	E8 Cast Aluminum	16	1/3	1750	0.34	13.6	2291	2210	2189	2167	2122	2075	2025	1943	1787	1591			N/A
		20	1/2	1750	0.43	15.2	2698	2603	2579	2555	2505	2455	2404	2329	2194	1995	1695		
		24		1750	0.54	15.4	3085	3001	2979	2956	2909	2860	2808	2722	2551	2348	2091		
Max RPM B105 = 1750 E4 = 1750 E8 = 1750							Max Motor Frame Size = 56									Outlet Area (ft^2) = 1.82			
18	B105 Cast Aluminum	10	1/4	1750	0.25	22	2006	1876	1844	1812	1751	1692	1632	1527	1343	1150	928	670	N/A
		15	1/2	1750	0.39	23	2732	2611	2580	2549	2487	2424	2362	2266	2056	1826	1629		
		20		1750	0.53	23	3409	3285	3253	3221	3156	3088	3020	2917	2724	2425	2193		
		25	3/4	1750	0.68	24	4036	3901	3866	3830	3758	3684	3607	3490	3274	2957	2653		
		30	1	1750	0.85	25	4611	4456	4416	4375	4291	4204	4114	3971	3704	3342	2971		
	E4 Cast Aluminum	16	1/3	1750	0.34	19.8	3295	3107	3059	3009	2908	2804	2696	2520	2174				N/A
		20	1/2	1750	0.43	21	3768	3602	3558	3512	3416	3312	3194	3006	2687	2223			
		24		1750	0.54	23	4293	4081	4027	3974	3865	3757	3650	3479	3113	2689	2113		
		28	3/4	1750	0.65	24	4686	4499	4450	4400	4296	4187	4072	3887	3522	3067	2510		
		32		1750	0.80	23	5129	4928	4875	4822	4711	4597	4477	4286	3916	3447	2839		
	E8 Cast Aluminum	12	1/2	1750	0.42	24	2585	2476	2449	2421	2364	2306	2248	2158	1982	1760			N/A
		16		1750	0.52	23	3162	3064	3039	3013	2960	2906	2850	2763	2606	2410	2134		
		20	3/4	1750	0.68	24	3761	3641	3611	3581	3523	3465	3407	3324	3196	3054	2762		
Max RPM B105 = 1750 E4 = 1750 E8 = 1750							Max Motor Frame Size = 145T									Outlet Area (ft^2) = 2.46			
21	B105 Cast Aluminum	10	1/2	1750	0.43	27	3115	2952	2912	2872	2791	2713	2636	2515	2285	2051	1796	1284	FEG63
		15	3/4	1750	0.68	29	4265	4110	4071	4031	3952	3871	3790	3670	3456	3167	2874		
		20	1	1750	0.98	29	5325	5166	5125	5085	5001	4917	4831	4700	4477	4218	3846	3229	
		25	1 1/2	1750	1.26	30	6296	6125	6081	6037	5947	5855	5760	5615	5364	5084	4704	3928	
		30		1750	1.57	32	7177	6984	6935	6885	6782	6677	6568	6399	6099	5761	5337	4359	
	E4 Cast Aluminum	12	1/2	1750	0.40	25	3976	3712	3646	3580	3453	3327	3190	2940	2404				FEG71
		16		1750	0.53	27	4744	4513	4452	4390	4263	4128	3987	3761	3346				
		20	3/4	1750	0.71	29	5624	5391	5330	5268	5141	5009	4872	4653	4245	3740			
		24	1	1750	0.89	32	6328	6081	6017	5952	5817	5677	5530	5295	4881	4422	3750		
		28		1750	1.10	33	7042	6769	6699	6629	6484	6336	6185	5951	5528	5047	4432		
		32	1 1/2	1750	1.34	34	7644	7382	7313	7244	7103	6956	6804	6564	6121	5567	4932		
	E8 Cast Aluminum	12	3/4	1750	0.68	22	3773	3641	3607	3572	3501	3427	3349	3227	2999	2720	2413		FEG67
		16	1	1750	0.87	23	4725	4586	4551	4515	4443	4369	4295	4180	3987	3767	3478		
		20	1 1/2	1750	1.16	26	5661	5518	5482	5445	5372	5298	5224	5111	4926	4739	4517	3711	
		24		1750	1.45	28	6524	6397	6365	6332	6264	6195	6123	6011	5810	5585	5326	4615	

NOTES:
1. Performance certified is for installation type A: Free inlet, free outlet.
2. Performance ratings do not include the effects of appurtenances (accessories).
3. The sound ratings shown are loudness values in fan sone at 5 ft. (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation Type A: Free inlet hemispherical sone levels.
4. The AMCA Certified Ratings Seal applies to sone ratings only.

WPD – Sizes 24-36

MODEL INFO			MOTOR	FAN	MAX	SONES	CFM / STATIC PRESSURE (IN. W.G.)												FAN
SIZE	PROPELLER	BLADE ANGLE	HP	RPM	BHP	@ 0" SP	0.000	0.100	0.125	0.150	0.200	0.250	0.300	0.375	0.500	0.625	0.750	1.000	EFF. GRADE
Max RPM B105 = 1750 E4 = 1750 E8 = 1750 Z5 = 1750 Max Motor Frame Size = 184T Outlet Area (ft^2) = 3.21																			
24	B105 Cast Aluminum	10	3/4	1750	0.68	39	4555	4352	4301	4250	4148	4046	3946	3794	3520	3218	2916	2175	
		15	1 1/2	1750	1.12	36	6267	6070	6021	5971	5869	5767	5664	5508	5244	4946	4564	3869	
		20		1750	1.55	35	7830	7628	7576	7525	7420	7314	7205	7040	6761	6466	6117	5245	FEG67
		25	2	1750	2.03	34	9245	9030	8975	8919	8807	8692	8576	8396	8088	7765	7404	6426	
		30	3	1750	2.57	37	10514	10276	10215	10154	10029	9901	9770	9568	9214	8833	8412	7344	
	E4 Cast Aluminum	12	1/2	1750	0.55	36	5320	5008	4925	4841	4665	4476	4281	3979	3427				
		16	3/4	1750	0.80	37	6722	6406	6325	6244	6078	5908	5736	5466	4966	4386	3661		
		20	1	1750	1.06	40	7842	7545	7468	7390	7228	7059	6882	6596	6096	5565	4904		
		24	1 1/2	1750	1.37	42	8950	8637	8556	8475	8309	8139	7964	7694	7212	6665	6043		FEG71
		28	2	1750	1.70	46	9914	9605	9525	9444	9278	9108	8931	8652	8148	7624	7068		
		32		1750	2.15	47	10932	10611	10528	10445	10276	10103	9927	9654	9175	8661	8119	6528	
	E8 Cast Aluminum	12	1	1750	0.98	40	5260	5103	5062	5020	4933	4841	4745	4586	4278	3928	3553		
		16	1 1/2	1750	1.34	39	6720	6527	6479	6430	6332	6234	6136	5987	5747	5494	5181	4324	FEG71
		20	2	1750	1.76	42	8101	7936	7894	7851	7765	7677	7586	7447	7205	6948	6668	5930	
		24		1750	2.22	47	9392	9216	9171	9126	9034	8941	8846	8701	8450	8191	7920	7252	
	Z5 Fabricated Steel	30	1/4	860	0.22	14.3	4461	3997	3887	3778	3527	3137							
		35	1/3	860	0.32	14.5	5295	4872	4749	4615	4304	3913	3350						
		40	1/2	860	0.42	15.6	6140	5661	5520	5360	4985	4623	4173						
		45		860	0.50	16.4	6703	6163	6010	5844	5471	5030							
		30	1/2	1160	0.54	24	6017	5673	5587	5501	5332	5170	5005	4705					FEG71
		35	3/4	1160	0.77	25	7142	6844	6764	6681	6507	6319	6109	5749	4951				
		40	1	1160	1.02	27	8281	7945	7855	7761	7562	7343	7087	6661	5979				
		45	1 1/2	1160	1.24	28	9041	8659	8557	8452	8233	7997	7742	7312	6410				
		30	2	1750	1.89	46	9077	8849	8792	8735	8621	8507	8393	8223	7947	7680	7391	6544	
Max RPM B105 = 1160 E4 = 1160 E8 = 1160 Z5 = 1160 Max Motor Frame Size = 184T Outlet Area (ft^2) = 5.03																			
30	B105 Cast Aluminum	10	1/2	1160	0.41	28	5734	5252	5124	4991	4715	4431	4137	3636	2626	1558	671		
		15	3/4	1160	0.65	28	7972	7473	7344	7213	6946	6672	6380	5881	4955				
		20	1	1160	0.96	27	9977	9460	9326	9191	8915	8635	8346	7870	6904	5764			FEG75
		25	1 1/2	1160	1.30	27	11751	11214	11075	10933	10644	10347	10042	9555	8591	7267			
		30	2	1160	1.69	29	13292	12733	12587	12439	12133	11814	11481	10948	9953	8345			
	E4 Cast Aluminum	12	3/4	1160	0.68	29	7308	6811	6681	6548	6273	5984	5683	5197					
		16	1	1160	0.92	28	8876	8353	8221	8088	7821	7556	7283	6843	5965				
		20	1 1/2	1160	1.20	30	10346	9890	9771	9650	9401	9142	8872	8439	7629	6565			FEG67
		24		1160	1.54	30	11830	11344	11218	11089	10826	10553	10268	9817	9007	8029	6540		
		28	2	1160	1.92	33	13346	12845	12716	12584	12313	12034	11744	11287	10437	9409	8064		
	E8 Cast Aluminum	12	1 1/2	1160	1.12	31	7126	6857	6786	6714	6564	6407	6239	5966	5430				
		16		1160	1.45	32	8774	8520	8454	8386	8247	8102	7950	7706	7242	6696			FEG67
		20	2	1160	1.93	32	10678	10361	10281	10201	10040	9877	9713	9467	9069	8627	7961		
	Z5 Fabricated Steel	30	1/2	860	0.46	19.3	7877	7049	6878	6717	6385	5980	5477						
		35	3/4	860	0.65	19.4	9238	8568	8395	8220	7877	7505	6996	5996					
		40	1	860	0.89	20	10821	10070	9869	9662	9230	8761	8246	7243					
		45		860	1.08	21	11760	10955	10741	10522	10066	9579	9071	8089					FEG75
		30	1 1/2	1160	1.14	30	10624	9978	9829	9686	9414	9169	8932	8552	7752	6515			
		35		1160	1.60	30	12461	11969	11844	11719	11464	11206	10950	10568	9818	8653	7222		
		40	2	1160	2.17	31	14596	14052	13911	13768	13476	13174	12863	12375	11479	10428			
Max RPM B206 = 1160 E4 = 1160 E8 = 1160 Z5 = 1160 Max Motor Frame Size = 215T Outlet Area (ft^2) = 7.22																			
36	B206 Cast Aluminum	10	1	1160	0.96	43	9257	8692	8545	8396	8093	7780	7450	6893	5868	4690	3395	1250	
		15	1 1/2	1160	1.45	44	12663	12137	12001	11861	11574	11276	10966	10471	9487	8360	6996		
		20	2	1160	2.14	45	15876	15341	15202	15061	14771	14471	14158	13666	12754	11625	10312		FEG71
		25	3	1160	2.93	46	18896	18323	18174	18023	17715	17397	17067	16549	15608	14523	13186		
		30	5	1160	3.90	49	21722	21083	20918	20751	20409	20057	19693	19124	18097	16954	15656		
	E4 Cast Aluminum	12	1	1160	1.04	41	10005	9294	9114	8933	8575	8208	7817	7177					
		16	1 1/2	1160	1.38	39	12415	11752	11582	11410	11060	10706	10341	9752	8613	7205			
		20	2	1160	1.86	43	15239	14648	14493	14334	14005	13658	13286	12678	11562	10278	8753		FEG71
		24	3	1160	2.44	44	17666	17043	16881	16715	16374	16019	15644	15035	13948	12819	11431		
		28		1160	3.15	48	20116	19482	19317	19149	18804	18444	18069	17460	16335	15184	13870		
	E8 Cast Aluminum	12	2	1160	1.84	41	10148	9681	9564	9448	9215	8984	8762	8422	7719				
		16	3	1160	2.45	48	12968	12627	12538	12447	12259	12062	11855	11519	10847	10113	9341		FEG67
		20		1160	3.31	51	15986	15625	15532	15438	15247	15051	14849	14535	13977	13367	12666	10750	
	Z5 Fabricated Steel	30	1 1/2	860	1.15	27	13611	12583	12351	12130	11730	11345	10927	10170	8241				
		35		860	1.61	28	15963	15165	14961	14755	14338	13925	13511	12813	11002				
		40	2	860	2.20	28	18699	17812	17580	17344	16857	16350	15819	14960	13273				FEG75
		45	3	860	2.71	29	20322	19369	19121	18869	18351	17815	17258	16369	14788				
		30	3	1160	2.81	43	18359	17566	17380	17198	16846	16509	16195	15759	15033	14169	13121		

NOTES:
1. Performance certified is for installation type A: Free inlet, free outlet.
2. Performance ratings do not include the effects of appurtenances (accessories).
3. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation Type A: Free inlet hemispherical sone levels.
4. The AMCA Certified Ratings Seal applies to sone ratings only.

WPD – Sizes 42-48

MODEL INFO			MOTOR	FAN	MAX	SONES	CFM / STATIC PRESSURE (IN. W.G.)												FAN
SIZE	PROPELLER	BLADE ANGLE	HP	RPM	BHP	@ 0" SP	0.000	0.100	0.125	0.150	0.200	0.250	0.300	0.375	0.500	0.625	0.750	1.000	EFF. GRADE
Max RPM B304 = 860 E4 = 860 E8 = 860 Z5 = 860 Max Motor Frame Size = 254T Outlet Area (ft^2) = 9.79																			
42	B304 Cast Aluminum	10	1	860	0.77	30	12608	11535	11257	10976	10386	9724	8998	7816	5417	2918			FEG71
		15	1½	860	1.22	32	16381	15289	14990	14680	14029	13348	12625	11508	9509				
		20	2	860	1.75	33	19663	18535	18222	17894	17200	16472	15726	14553	12558				
		25	3	860	2.37	36	22455	21271	20940	20594	19865	19098	18312	17071	14832				
		30		860	3.08	39	24765	23494	23140	22775	22011	21208	20373	19037	16279				
	E4 Cast Aluminum	12	1½	860	1.32	27	13985	13003	12747	12488	11959	11408	10826	9873					FEG67
		16	2	860	1.77	28	17074	16069	15814	15558	15045	14534	14008	13149					
		24	3	860	3.03	31	23132	22197	21953	21705	21196	20667	20111	19229	17656	15814	13085		
		28	5	860	3.80	37	26159	25203	24954	24701	24182	23642	23079	22184	20539	18632	16081		
		32		860	4.57	41	28752	27691	27418	27140	26574	25991	25391	24461	22750	20684	18163		
	E8 Cast Aluminum	12	2	860	2.22	24	13769	13218	13074	12928	12626	12311	11983	11458	10403				FEG67
		16	3	860	2.88	27	17111	16617	16488	16356	16084	15801	15503	15021	14097	13034			
		20	5	860	3.89	31	20894	20304	20154	20003	19698	19388	19074	18597	17804	16931	15701	12575	
		24		860	4.94	30	23995	23492	23362	23231	22961	22684	22396	21946	21132	20214	19115	15785	
	Z5 Fabricated Steel	30	3	860	3.15	35	21994	21428	21278	21125	20807	20471	20112	19515	18229	16809	15127		FEG71
		35	5	860	4.30	38	27263	25785	25480	25192	24657	24183	23773	23203	22221	20821	18852		
Max RPM B304 = 860 E4 = 860 E8 = 860 Z5 = 860 Max Motor Frame Size = 254T Outlet Area (ft^2) = 12.76																			
48	B304 Cast Aluminum	10	1½	860	1.12	34	17361	16045	15702	15356	14652	13892	13005	11573	8992	5264	2119		FEG80
		15	2	860	1.78	38	22801	21497	21149	20791	20039	19224	18366	16995	14740				
		20	3	860	2.62	40	27584	26239	25882	25515	24747	23914	23015	21613	19151	16696			
		25	5	860	3.61	43	31707	30277	29900	29514	28714	27864	26952	25497	22870	19908			
		30		860	4.89	47	35174	33602	33193	32777	31922	31035	30115	28642	25814	21527			
	E4 Cast Aluminum	12	2	860	1.79	42	17582	16303	15979	15655	15010	14348	13637	12468					FEG71
		16	3	860	2.37	41	21818	20625	20319	20008	19378	18740	18080	17009	14925	12354			
		20		860	3.20	47	26780	25717	25437	25150	24555	23927	23252	22149	20122	17773	14943		
		24	5	860	4.18	46	31044	29924	29631	29332	28717	28075	27396	26291	24331	22278	19685		
		28		860	5.40	53	35350	34210	33912	33610	32986	32337	31657	30550	28516	26440	23972		
	E8 Cast Aluminum	12	3	860	3.14	45	17833	16994	16784	16574	16155	15742	15343	14728					FEG67
		16	5	860	4.21	51	22788	22175	22014	21850	21510	21155	20780	20168	18942	17620	16204		
		20	5	860	5.56	51	28093	27444	27277	27108	26763	26408	26044	25476	24467	23356	22064		
	Z5 Fabricated Steel	30	5	860	4.83	47	32263	30838	30504	30178	29548	28944	28386	27605	26290	24703	22762		FEG75

NOTES:
1. Performance certified is for installation type A: Free inlet, free outlet.
2. Performance ratings do not include the effects of appurtenances (accessories).
3. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation Type A: Free inlet hemispherical sone levels.
4. The AMCA Certified Ratings Seal applies to sone ratings only.

Fan & Blower
Twin City

WPB – Size 21

MODEL INFO		MOTOR	FAN	MAX	SONES	CFM / STATIC PRESSURE (IN. W.G.)												FAN
PROPELLER	BLADE ANGLE	HP	RPM	BHP	@ 0" SP	0.000	0.100	0.125	0.150	0.200	0.250	0.300	0.375	0.500	0.625	0.750	1.000	EFF. GRADE
Level 1 Performance			Max RPM L1 = 1085						Max Motor Frame Size = 56					Outlet Area (ft^2) = 2.46				
L1 Fabricated Steel	—	1/4	729	0.22	10.7	4200	3693	3473	3231									N/A
			761	0.25	11.4	4384	3915	3728	3497	2974								
			785	0.28	12.0	4522	4077	3911	3693	3220								
	—	1/3	812	0.30	12.7	4678	4254	4108	3913	3473								
			837	0.33	13.4	4822	4417	4283	4110	3691	3182							
			864	0.37	14.1	4978	4590	4467	4314	3917	3460							
	—	1/2	914	0.43	15.2	5266	4906	4797	4672	4326	3938	3454						
			959	0.50	16.9	5525	5187	5087	4977	4688	4321	3919						
			989	0.55	17.2	5698	5373	5278	5174	4917	4568	4204						
Level 2 Performance			Max RPM L2 = 1241						Max Motor Frame Size = 145T					Outlet Area (ft^2) = 2.46				
L2 Fabricated Steel	—	1/2	914	0.43	15.2	5266	4906	4797	4672	4326	3938	3454						FEG67
			959	0.50	16.9	5525	5187	5087	4977	4688	4321	3919						
			989	0.55	17.2	5698	5373	5278	5174	4917	4568	4204						
	—	3/4	1046	0.65	19.3	6026	5723	5636	5543	5329	5033	4696	4113					
			1097	0.75	21	6320	6034	5953	5868	5677	5432	5115	4620					
			1133	0.83	22	6527	6252	6175	6094	5916	5699	5409	4941					
Level 3 Performance			Max RPM B105 = 1890 E4 = 1890 E8 = 1280							Max Motor Frame Size = 145T					Outlet Area (ft^2) = 2.46			
B105 Cast Aluminum	20	1/4	1142	0.27	15.5	3444	3201	3134	3063	2914	2751	2570	2273					FEG60
	25		1048	0.27	13.8	3727	3434	3351	3264	3073	2860	2603	2241					
	30		977	0.27	13.0	3948	3584	3477	3362	3107	2812	2474						
	20	1/3	1252	0.36	17.8	3776	3557	3498	3436	3306	3167	3017	2758	2332				
	25		1150	0.35	15.9	4089	3827	3755	3679	3516	3338	3142	2796					
	30		1072	0.36	15.0	4332	4007	3915	3817	3602	3364	3091	2625					
	20	1/2	1438	0.54	22	4337	4149	4099	4048	3942	3829	3711	3521	3149	2778			
	25		1320	0.55	20	4694	4470	4410	4348	4217	4076	3925	3678	3187	2696			
	30		1231	0.55	18.7	4974	4698	4622	4544	4376	4190	3988	3655	2983				
	20	3/4	1646	0.79	28	4964	4802	4760	4717	4628	4535	4438	4286	4010	3699	3347		
	25		1511	0.81	25	5373	5180	5129	5077	4969	4855	4735	4542	4184	3748	3336		
	30		1409	0.82	23	5694	5456	5393	5328	5191	5045	4888	4630	4145	3562			
E4 Cast Aluminum	20	1/4	1309	0.27	15.9	3960	3641	3556	3468	3286	3093	2890	2458					FEG71
	28		1116	0.27	14.6	4432	4004	3894	3784	3551	3282	2968	2262					
	32		1043	0.28	13.6	4529	4118	3989	3835	3527	3247	2875						
	20	1/3	1440	0.37	18.4	4356	4068	3993	3916	3756	3587	3411	3130					
	28		1228	0.37	16.8	4876	4490	4390	4290	4089	3871	3625	3190					
	32		1147	0.37	15.8	4980	4616	4511	4393	4106	3838	3584	3060					
	20	1/2	1650	0.55	23	4991	4743	4678	4613	4478	4339	4195	3967	3559				
	28		1407	0.55	22	5587	5252	5166	5079	4905	4730	4546	4238	3611				
	32		1314	0.55	19.5	5705	5397	5311	5220	5018	4769	4521	4192	3447				
	20	3/4	1888	0.82	29	5711	5495	5440	5384	5269	5152	5032	4845	4515	4165	3693		
	28		1610	0.82	25	6393	6101	6027	5952	5801	5649	5497	5261	4815	4278	3551		
	32		1504	0.82	24	6530	6266	6195	6121	5964	5790	5583	5248	4764	4138			
E8 Cast Aluminum	32	1/4	886	0.28	12.0	4154	3811	3721	3630	3441	3200	2860						N/A
	32	1/3	975	0.37	14.2	4571	4262	4182	4099	3934	3758	3536	3072					
	32	1/2	1116	0.55	17.0	5232	4965	4896	4825	4682	4538	4389	4127	3466				
	32	3/4	1278	0.83	22	5991	5760	5700	5640	5518	5392	5267	5075	4695	4121			

NOTES:
1. Performance certified is for installation type A: Free inlet, free outlet.
2. Power rating (BHP) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation Type A: Free inlet hemispherical sone levels.
5. The AMCA Certified Ratings Seal applies to sone ratings only.

Fan & Blower Twin City

WPB – Size 24

MODEL INFO		MOTOR	FAN	MAX	SONES	CFM / STATIC PRESSURE (IN. W.G.)												FAN
PROPELLER	BLADE ANGLE	HP	RPM	BHP	@ 0" SP	0.000	0.100	0.125	0.150	0.200	0.250	0.300	0.375	0.500	0.625	0.750	1.000	EFF. GRADE
Level 1 Performance			Max RPM L1 = 907							Max Motor Frame Size = 56				Outlet Area (ft^2) = 3.21				
L1 Fabricated Steel	—	1/4	584	0.22	9.6	5022	4219	3874	3476									N/A
			609	0.25	10.3	5237	4508	4183	3843									
			629	0.28	10.6	5409	4729	4427	4108									
	—	1/3	651	0.30	11.4	5599	4961	4694	4384	3650								
			671	0.33	12.2	5771	5166	4928	4629	3963								
			692	0.37	12.9	5951	5375	5164	4886	4281								
	—	1/2	732	0.43	13.9	6295	5765	5590	5363	4816	4150							
			768	0.50	15.2	6605	6109	5953	5766	5263	4703							
			809	0.59	16.3	6957	6495	6354	6197	5763	5264	4658						
	—	3/4	838	0.65	17.1	7207	6765	6633	6489	6109	5630	5102						
			879	0.75	18.5	7559	7143	7022	6891	6573	6132	5672						
			907	0.83	19.5	7800	7400	7285	7161	6874	6474	6030						
Level 2 Performance			Max RPM L2 = 986							Max Motor Frame Size = 145T				Outlet Area (ft^2) = 3.21				
L2 Fabricated Steel	—	1/2	732	0.43	13.9	6295	5765	5590	5363	4816	4150							FEG67
			768	0.50	15.2	6605	6109	5953	5766	5263	4703							
			809	0.59	16.3	6957	6495	6354	6197	5763	5264	4658						
	—	3/4	838	0.65	17.1	7207	6765	6633	6489	6109	5630	5102						
			879	0.75	18.5	7559	7143	7022	6891	6573	6132	5672						
			907	0.83	19.5	7800	7400	7285	7161	6874	6474	6030	5247					
	—	1	938	0.91	20	8067	7682	7573	7457	7195	6843	6413	5721					
			967	1.00	22	8316	7945	7841	7731	7486	7174	6767	6132					
			986	1.06	22	8480	8117	8016	7909	7674	7384	7000	6384					
Level 3 Performance			Max RPM B105 = 1930 E4 = 1930 E8 = 1175 Z5 = 1450								Max Motor Frame Size = 145T			Outlet Area (ft^2) = 3.21					
B105 Cast Aluminum	20	1/3	1067	0.35	17.9	4727	4395	4304	4209	4008	3791	3554	3151					FEG63
	25		977	0.36	15.7	5098	4703	4592	4475	4222	3943	3614	3101					
	30		910	0.36	14.3	5382	4900	4760	4611	4283	3917	3446						
	20	1/2	1226	0.53	22	5431	5147	5072	4993	4829	4656	4472	4174	3599				
	25		1122	0.55	19.1	5855	5518	5427	5332	5130	4911	4676	4278	3526				
	30		1045	0.55	18.0	6180	5772	5659	5540	5283	5000	4696	4140					
	20	3/4	1403	0.82	26	6215	5970	5906	5840	5704	5562	5412	5176	4744	4231	3744		
	25		1285	0.82	23	6705	6416	6339	6260	6095	5920	5734	5433	4855	4209			
	30		1197	0.82	30	7079	6729	6635	6538	6332	6110	5869	5480	4681				
	20	1	1544	1.06	29	6840	6619	6561	6503	6383	6258	6128	5924	5558	5155	4680		
	25		1414	1.09	26	7378	7117	7049	6979	6834	6683	6523	6268	5801	5247	4664		
	30		1317	1.10	25	7789	7474	7390	7305	7126	6936	6733	6403	5799	5011			
E4 Cast Aluminum	16	1/3	1336	0.37	25	4987	4596	4493	4390	4177	3947	3690	3232					FEG71
	24		1110	0.37	20	5644	5103	4970	4841	4571	4254	3890	3221					
	32		964	0.37	16.5	5904	5276	5110	4940	4571	4150	3683						
	16	1/2	1531	0.55	32	5715	5376	5289	5200	5019	4835	4640	4317	3657				
	24		1272	0.55	25	6468	5996	5878	5761	5533	5300	5039	4583					
	32		1104	0.55	21	6761	6219	6077	5933	5638	5319	4966	4383					
	16	3/4	1752	0.82	43	6540	6246	6171	6094	5940	5782	5622	5372	4905	4341	3582		
	24		1456	0.82	32	7404	6991	6888	6785	6580	6381	6181	5855	5196	4388			
	32		1263	0.82	26	7735	7265	7143	7020	6769	6512	6241	5794	4946				
	16	1	1929	1.10	52	7201	6935	6867	6798	6659	6518	6375	6157	5770	5330	4815		
	24		1602	1.10	39	8146	7771	7677	7583	7396	7211	7031	6757	6237	5614	4873		
	32		1391	1.10	30	8518	8094	7985	7875	7650	7421	7187	6816	6115	5311			
E8 Cast Aluminum	32	1/3	813	0.37	14.0	5545	5107	4984	4855	4571	4203	3688						FEG67
	32	1/2	931	0.55	17.0	6350	5975	5874	5768	5545	5300	5012	4399					
	32	3/4	1066	0.82	21	7271	6949	6863	6775	6592	6398	6191	5839	4968				
	32	1	1173	1.10	24	8001	7710	7634	7556	7395	7227	7050	6766	6185	5318			
Z5 Fabricated Steel	30	1/3	1004	0.37	18.9	5239	4811	4708	4610	4423	4219	3952	3326					FEG71
	45		766	0.37	14.7	5851	5210	5048	4879	4384								
	30	1/2	1150	0.55	23	6001	5624	5533	5443	5270	5107	4937	4622	3721				
	45		878	0.55	18.5	6707	6154	6009	5867	5574	5177	4482						
	30	3/4	1316	0.82	28	6867	6536	6455	6375	6217	6065	5922	5705	5250	4531			
	45		1005	0.82	23	7677	7198	7074	6948	6698	6446	6149	5366					
	30	1	1448	1.10	32	7556	7254	7180	7107	6962	6818	6681	6485	6146	5696	5035		
	45		1106	1.10	27	8449	8015	7904	7791	7562	7336	7107	6689					

NOTES:
1. Performance certified is for installation type A: Free inlet, free outlet.
2. Power rating (BHP) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation Type A: Free inlet hemispherical sone levels.
5. The AMCA Certified Ratings Seal applies to sone ratings only.

WPB – Size 30

MODEL INFO		MOTOR	FAN	MAX	SONES	CFM / STATIC PRESSURE (IN. W.G.)												FAN
PROPELLER	BLADE ANGLE	HP	RPM	BHP	@ 0" SP	0.000	0.100	0.125	0.150	0.200	0.250	0.300	0.375	0.500	0.625	0.750	1.000	EFF. GRADE
Level 1 Performance			Max RPM L1 = 696									Max Motor Frame Size = 145T			Outlet Area (ft^2) = 5.03			
L1 Fabricated Steel	—	1/4	402	0.22	7.9	6752	5014											FEG67
			420	0.25	8.4	7054	5466	4765										
			433	0.28	8.9	7273	5780	5154										
	—	1/3	448	0.30	9.4	7525	6138	5568	4833									
			462	0.33	9.7	7760	6471	5925	5276									
			477	0.37	10.0	8012	6817	6292	5723									
	—	1/2	504	0.43	11.3	8465	7406	6937	6438									
			529	0.50	12.2	8885	7917	7524	7048	5959								
			546	0.55	13.0	9171	8252	7905	7453	6468								
	—	3/4	577	0.65	14.3	9691	8846	8560	8185	7309	6186							
			605	0.75	15.4	10162	9371	9120	8809	7998	7066							
			625	0.83	16.4	10498	9741	9507	9232	8475	7645							
	—	1	646	0.91	17.4	10850	10126	9907	9659	8977	8194	7242						
			666	1.00	18.6	11186	10490	10283	10054	9445	8690	7840						
			696	1.20	20	11690	11032	10840	10631	10116	9409	8677						
Level 2 Performance			Max RPM L2 = 950									Max Motor Frame Size = 184T			Outlet Area (ft^2) = 5.03			
L2 Fabricated Steel	—	3/4	577	0.65	14.3	9691	8846	8560	8185	7309	6186							FEG67
			605	0.75	15.4	10162	9371	9120	8809	7998	7066							
			625	0.83	16.4	10498	9741	9507	9232	8475	7645							
	—	1	646	0.91	17.4	10850	10126	9907	9659	8977	8194	7242						
			666	1.00	18.6	11186	10490	10283	10054	9445	8690	7840						
			696	1.20	20	11690	11032	10840	10631	10116	9409	8677						
	—	1 1/2	727	1.30	22	12211	11587	11408	11216	10770	10149	9457	8239					
			762	1.50	23	12799	12209	12043	11866	11471	10954	10297	9268					
			787	1.65	24	13218	12651	12493	12325	11956	11500	10895	9929					
	—	2	814	1.83	25	13672	13127	12976	12817	12472	12065	11529	10602	8666				
			839	2.00	27	14092	13566	13421	13270	12942	12570	12095	11205	9500				
			866	2.20	28	14545	14038	13899	13755	13445	13100	12681	11849	10307				

NOTES:
1. Performance certified is for installation type A: Free inlet, free outlet.
2. Power rating (BHP) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation Type A: Free inlet hemispherical sone levels.
5. The AMCA Certified Ratings Seal applies to sone ratings only.

Fan & Blower
Twin City

WPB – Size 30 (continued)

MODEL INFO		MOTOR	FAN	MAX	SONES	CFM / STATIC PRESSURE (IN. W.G.)												FAN
PROPELLER	BLADE ANGLE	HP	RPM	BHP	@ 0" SP	0.000	0.100	0.125	0.150	0.200	0.250	0.300	0.375	0.500	0.625	0.750	1.000	EFF. GRADE
Level 3 Performance			Max RPM B105 = 1565	E4 = 1565	E8 = 975	Z5 = 1295	Max Motor Frame Size = 184T			Outlet Area (ft^2) = 5.03								
B105 Cast Aluminum	20	1/2	964	0.55	22	8186	7569	7403	7230	6869	6487	6081	5352					FEG71
	25		871	0.55	18.2	8686	7967	7769	7561	7121	6650	6114	4949					
	30		799	0.55	16.5	8986	8148	7909	7655	7109	6530	5418						
	20	3/4	1104	0.83	25	9375	8844	8704	8560	8260	7946	7618	7100	6054				
	25		997	0.82	22	9943	9326	9161	8990	8630	8247	7842	7188	5516				
	30		914	0.82	21	10280	9564	9367	9163	8723	8248	7752	6634					
	20	1	1215	1.10	28	10318	9839	9714	9586	9322	9047	8761	8312	7499	6495			
	25		1098	1.10	26	10950	10396	10249	10098	9785	9454	9105	8553	7461				
	30		1006	1.10	23	11314	10672	10499	10321	9944	9536	9103	8428					
	20	1 1/2	1390	1.65	34	11804	11389	11282	11173	10950	10720	10483	10113	9460	8761	7933		
	25		1257	1.65	30	12536	12057	11932	11805	11543	11270	10985	10536	9735	8822	7523		
	30		1152	1.65	28	12957	12403	12257	12108	11798	11470	11122	10566	9584	7781			
	20	2	1530	2.20	39	12993	12618	12521	12424	12225	12021	11812	11488	10920	10319	9682	8117	
	25		1383	2.20	35	13793	13360	13248	13134	12901	12661	12413	12023	11331	10591	9759		
	30		1268	2.20	32	14261	13762	13632	13499	13226	12941	12643	12167	11309	10401	8701		
	30	**3**	1451	3.30	39	16319	15887	15775	15662	15430	15192	14947	14562	13872	13125	12345	9643	
E4 Cast Aluminum	16	1/2	984	0.55	23	7327	6784	6639	6491	6180	5844	5475	4789					FEG67
	24		827	0.55	18.1	8262	7546	7358	7168	6772	6311	5752						
	32		716	0.55	15.2	8790	7914	7661	7390	6802	6118	5070						
	16	3/4	1126	0.82	28	8384	7915	7792	7667	7408	7138	6853	6385	5392				
	24		946	0.83	22	9451	8831	8670	8506	8175	7832	7450	6765					
	32		820	0.83	18.8	10066	9320	9115	8900	8431	7920	7368	6148					
	16	1	1239	1.10	33	9226	8802	8692	8581	8351	8114	7868	7477	6739	5751			
	24		1041	1.10	26	10400	9839	9695	9548	9250	8949	8636	8110	6981				
	32		902	1.10	22	11073	10404	10223	10036	9638	9202	8736	7972					
	16	1 1/2	1418	1.65	43	10558	10191	10097	10001	9806	9606	9401	9083	8515	7879	7114		
	24		1191	1.65	34	11898	11411	11286	11161	10905	10645	10382	9979	9217	8259	6908		
	32		1033	1.65	27	12681	12105	11953	11797	11472	11127	10756	10157	9047	7307			
	16	2	1561	2.19	51	11623	11291	11206	11120	10946	10768	10586	10306	9818	9290	8710	7186	
	24		1311	2.20	42	13097	12656	12544	12430	12201	11968	11731	11373	10750	10025	9149		
	32		1137	2.20	33	13958	13438	13302	13164	12879	12580	12266	11758	10834	9771	8136		
	24	3	1502	3.30	54	15005	14621	14524	14426	14229	14029	13827	13518	12998	12458	11861	10374	
	28		1393	3.30	48	15556	15144	15039	14933	14716	14496	14270	13921	13308	12650	11943	10089	
	32		1302	3.31	45	15983	15533	15417	15299	15058	14810	14553	14149	13413	12610	11747	9125	
E8 Cast Aluminum	32	1/2	614	0.55	15.6	8105	7584	7426	7249	6764	6091	5383						FEG67
	32	3/4	703	0.82	19.1	9280	8841	8715	8581	8277	7866	7336	6354					
	32	1	774	1.10	22	10218	9825	9717	9603	9354	9065	8688	7952	6569				
	32	1 1/2	886	1.64	26	11696	11360	11269	11176	10978	10763	10525	10077	9014	7765			
	32	2	975	2.19	31	12871	12568	12488	12406	12234	12051	11855	11527	10772	9727	8596		
Z5 Fabricated Steel	35	1/2	815	0.55	18.9	8549	7905	7724	7530	7094	6605	6038						FEG71
	45		682	0.55	15.3	9232	8192	7923	7643	7002								
	35	3/4	933	0.82	24	9787	9237	9087	8931	8596	8218	7804	7107					
	45		781	0.82	19.3	10572	9673	9439	9205	8718	8164	7464						
	35	1	1027	1.10	27	10773	10279	10147	10011	9724	9412	9067	8500	7359				
	45		859	1.10	22	11627	10816	10605	10392	9964	9513	9005						
	35	1 1/2	1174	1.63	34	12315	11889	11776	11662	11424	11174	10909	10471	9647	8676			
	45		984	1.64	28	13319	12616	12435	12252	11881	11508	11125	10485					
	35	2	1294	2.18	40	13574	13190	13090	12988	12778	12561	12334	11971	11287	10521	9637		
	45		1082	2.19	32	14646	14008	13845	13681	13347	13008	12670	12144	11138				
	45	3	1240	3.30	40	16785	16231	16090	15948	15661	15371	15076	14633	13869	13000	11927		

NOTES:
1. Performance certified is for installation type A: Free inlet, free outlet.
2. Power rating (BHP) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation Type A: Free inlet hemispherical sone levels.
5. The AMCA Certified Ratings Seal applies to sone ratings only.

WPB – Size 36

MODEL INFO			FAN	MAX	SONES	CFM / STATIC PRESSURE (IN. W.G.)												FAN
PROPELLER	BLADE ANGLE	MOTOR HP	RPM	BHP	@ 0" SP	0.000	0.100	0.125	0.150	0.200	0.250	0.300	0.375	0.500	0.625	0.750	1.000	EFF. GRADE
Level 1 Performance			Max RPM L1 = 551							Max Motor Frame Size = 145T				Outlet Area (ft²) = 7.22				
L1 Fabricated Steel	—	1/3	332	0.30	9.1	9324	6863	4457										FEG67
			344	0.33	9.7	9661	7394	5678										
			355	0.36	9.8	9970	7857	6790										
	—	1/2	381	0.45	10.9	10700	8953	8112	6641									
			395	0.50	11.7	11094	9522	8706	7826									
			407	0.55	12.4	11431	9977	9204	8424									
	—	3/4	436	0.68	14.0	12245	10985	10423	9674	7265								
			452	0.75	14.9	12694	11509	11043	10343	8793								
			466	0.83	15.7	13088	11958	11549	10939	9541								
	—	1	480	0.90	16.4	13481	12400	12032	11514	10177	7394							
			497	1.00	17.3	13958	12931	12596	12166	10901	9161							
			512	1.10	18.1	14380	13395	13081	12705	11525	10215	6653						
Level 2 Performance			Max RPM L1 = 693							Max Motor Frame Size = 184T				Outlet Area (ft²) = 7.22				
L2 Fabricated Steel	—	1	480	0.90	16.4	13481	12400	12032	11514	10177	7394							FEG67
			497	1.00	17.3	13958	12931	12596	12166	10901	9161							
			513	1.10	18.5	14408	13425	13113	12740	11567	10268	6761						
	—	1 1/2	549	1.35	20	15419	14522	14250	13947	13083	11908	10445						
			569	1.50	22	15980	15124	14870	14590	13865	12743	11602						
			587	1.65	23	16486	15663	15422	15160	14522	13501	12426	8968					
	—	2	605	1.80	23	16991	16199	15970	15722	15147	14265	13196	10806					
			626	2.00	25	17581	16821	16604	16372	15845	15113	14071	12453					
			646	2.20	26	18143	17411	17204	16985	16494	15866	14917	13433					
Level 3 Performance			Max RPM B206 = 1395 E4 = 1395 E8 = 915 Z5 = 1095								Max Motor Frame Size = 184T				Outlet Area (ft²) = 7.22			
B206 Cast Aluminum	20	3/4	844	0.82	27	11429	10681	10474	10256	9784	9264	8707	7728					FEG71
	25		761	0.83	23	12229	11328	11075	10806	10219	9573	8882	7197					
	30		692	0.83	22	12737	11615	11295	10953	10209	9424	7737						
	20	1	926	1.09	31	12540	11867	11684	11495	11091	10650	10173	9407	7795				
	25		837	1.10	27	13451	12644	12423	12192	11696	11148	10559	9591					
	30		761	1.10	25	14007	13005	12727	12435	11802	11112	10398	8097					
	20	1 1/2	1064	1.65	39	14409	13832	13679	13522	13195	12846	12474	11868	10763	9403			
	25		958	1.65	33	15395	14702	14517	14326	13926	13495	13030	12275	10852				
	30		872	1.66	31	16050	15192	14961	14722	14217	13669	13079	12148	9006				
	20	2	1171	2.20	46	15858	15338	15202	15063	14775	14474	14157	13646	12706	11675	10425		
	25		1055	2.20	39	16954	16330	16166	15998	15648	15279	14887	14251	13084	11689			
	30		959	2.20	36	17651	16879	16674	16464	16025	15557	15057	14250	12816				
	20	3	1340	3.30	57	18146	17696	17579	17461	17219	16968	16709	16301	15560	14743	13868	11758	
	25		1207	3.30	50	19396	18857	18717	18574	18281	17976	17659	17156	16233	15217	14133		
	30		1098	3.30	45	20210	19543	19368	19191	18825	18443	18043	17403	16233	14998	12415		
	30	5	1302	5.51	60	23965	23407	23264	23119	22822	22517	22204	21714	20838	19881	18860	16228	
E4 Cast Aluminum	20	3/4	877	0.82	26	11363	10424	10186	9949	9473	8958	8380	7383					FEG71
	28		738	0.83	24	12837	11770	11469	11142	10425	9705	8913	7195					
	32		686	0.82	23	13129	11907	11569	11216	10441	9525	8416						
	20	1	966	1.10	31	12516	11666	11450	11234	10805	10369	9900	9107					
	28		812	1.10	27	14124	13171	12909	12634	12026	11366	10713	9608					
	32		755	1.10	27	14450	13355	13058	12751	12098	11372	10534	8991					
	20	1 1/2	1105	1.65	40	14317	13576	13388	13200	12822	12447	12071	11474	10325	8946			
	28		930	1.65	31	16176	15359	15140	14914	14438	13911	13341	12481	10879				
	32		865	1.65	31	16555	15614	15364	15108	14574	14009	13399	12358	10134				
	20	2	1217	2.20	46	15769	15096	14926	14756	14414	14071	13731	13217	12282	11201	9944		
	28		1023	2.20	34	17794	17058	16863	16664	16249	15809	15327	14549	13245	11673	9271		
	32		952	2.20	34	18220	17372	17149	16922	16453	15963	15447	14610	12946	10754			
	20	3	1392	3.29	61	18036	17449	17301	17153	16856	16557	16257	15809	15060	14251	13345	11189	
	28		1171	3.30	43	20368	19732	19566	19397	19050	18689	18313	17701	16574	15439	14203		
	32		1089	3.30	41	20842	20107	19917	19723	19328	18919	18496	17832	16616	15183	13454		
	28	5	1391	5.47	59	24195	23664	23527	23389	23108	22819	22523	22062	21235	20311	19344		
	32		1292	5.47	53	24728	24113	23955	23796	23473	23142	22805	22283	21368				
E8 Cast Aluminum	32	3/4	575	0.83	19.7	12118	11223	10974	10711	10137	9453	8555						FEG67
	32	1	633	1.10	24	13340	12540	12321	12095	11610	11073	10448	9202					
	32	1 1/2	724	1.65	30	15258	14569	14386	14197	13803	13382	12928	12155	10357				
	32	2	797	2.20	34	16797	16176	16013	15846	15501	15138	14754	14132	12876	11072			
	32	3	913	3.30	40	19241	18705	18565	18424	18134	17833	17521	17029	16128	15061	13665		
Z5 Fabricated Steel	35	3/4	688	0.82	20	12471	11558	11301	11028	10416	9730	8948						FEG71
	45		576	0.82	16.6	13473	11997	11615	11221	10325								
	35	1	757	1.09	23	13722	12905	12681	12448	11940	11367	10741	9653					
	45		634	1.10	19.1	14829	13499	13152	12805	12072	11228							
	35	1 1/2	868	1.64	29	15734	15034	14847	14654	14250	13811	13329	12533	10966				
	45		726	1.65	24	16981	15829	15531	15229	14622	13990	13279	11944					
	35	2	954	2.19	34	17293	16662	16495	16325	15971	15597	15197	14533	13288	11760			
	45		799	2.19	28	18689	17647	17379	17108	16558	16006	15430	14457					
	35	3	1092	3.26	43	19795	19248	19106	18962	18665	18357	18036	17525	16565	15487	14265		
	45		915	3.30	34	21402	20497	20266	20033	19561	19080	18600	17861	16458				
	45	5	1084	5.49	47	25355	24595	24402	24208	23817	23420	23018	22409	21384	20257	18990		

NOTES:
1. Performance certified is for installation type A: Free inlet, free outlet.
2. Power rating (BHP) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation Type A: Free inlet hemispherical sone levels.
5. The AMCA Certified Ratings Seal applies to sone ratings only.

WPB – Size 42

MODEL INFO		MOTOR	FAN	MAX	SONES	CFM / STATIC PRESSURE (IN. W.G.)												FAN
PROPELLER	BLADE ANGLE	HP	RPM	BHP	@ 0" SP	0.000	0.100	0.125	0.150	0.200	0.250	0.300	0.375	0.500	0.625	0.750	1.000	EFF. GRADE
Level 1 Performance			Max RPM L1 = 424							Max Motor Frame Size = 145T				Outlet Area (ft^2) = 9.79				
L1 Fabricated Steel	—	1/3	257	0.30	7.8	11462	5841											FEG67
			266	0.33	8.3	11863	7266											
			275	0.37	8.8	12264	8565											
	—	1/2	295	0.45	9.8	13156	10074	7750										
			305	0.50	10.4	13602	10742	9324										
			315	0.55	11.0	14048	11405	10207	7194									
	—	3/4	337	0.68	12.4	15030	12863	11745	10509									
			349	0.75	13.2	15565	13589	12538	11476									
			361	0.83	14.1	16100	14268	13348	12318	7850								
	—	1	371	0.90	14.1	16546	14809	14012	12988	9474								
			385	1.00	15.0	17170	15540	14886	13914	11703								
			397	1.10	15.9	17705	16153	15583	14727	12799								
Level 2 Performance			Max RPM L2 = 723							Max Motor Frame Size = 184T				Outlet Area (ft^2) = 9.79				
L2 Fabricated Steel	—	1	371	0.90	14.1	16546	14809	14012	12988	9474								FEG67
			385	1.00	15.0	17170	15540	14886	13914	11703								
			397	1.10	15.9	17705	16153	15583	14726	12799								
	—	1 1/2	425	1.35	18.1	18954	17551	17092	16500	14771	12300							
			440	1.50	19.1	19623	18287	17863	17357	15762	13999	9252						
			454	1.65	20	20247	18968	18571	18117	16706	15065	11545						
	—	2	468	1.80	21	20872	19643	19269	18850	17641	16035	13868						
			484	2.00	22	21585	20409	20058	19670	18648	17100	15499						
			500	2.20	23	22299	21170	20838	20477	19589	18164	16692	11695					
	—	3	535	2.70	26	23860	22822	22525	22207	21486	20473	19048	16812					
			555	3.00	27	24752	23759	23478	23180	22516	21670	20391	18377					
			572	3.30	29	25510	24552	24284	24001	23376	22626	21528	19559	12616				
	—	5	635	4.50	33	28320	27471	27239	26998	26482	25908	25243	23772	20792	13339			
			657	5.00	35	29301	28484	28263	28034	27546	27009	26406	25183	22347	16926			
			679	5.50	38	30282	29495	29283	29064	28601	28097	27539	26498	23821	20495			
Level 3 Performance			Max RPM B304 = 965 E4 = 965 E8 = 660 Z5 = 870								Max Motor Frame Size = 215T				Outlet Area (ft^2) = 9.79			
B304 Cast Aluminum	20	1	736	1.10	26	16573	15214	14824	14416	13569	12711	11821	10420					FEG71
	25		666	1.10	23	17071	15448	14974	14483	13485	12429	11275						
	30		610	1.10	22	17187	15246	14682	14105	12888	11305							
	20	1 1/2	842	1.65	32	18959	17806	17483	17147	16439	15699	14953	13798	11750				
	25		763	1.65	29	19557	18189	17798	17390	16538	15667	14776	13310					
	30		698	1.65	27	19667	18031	17560	17072	16067	15027	13736	11269					
	20	2	927	2.20	38	20873	19842	19560	19266	18649	17998	17325	16308	14549	12600			
	25		839	2.20	34	21505	20287	19944	19587	18839	18056	17263	16037	13727				
	30		768	2.20	32	21639	20186	19773	19344	18451	17533	16589	14805					
	25	3	961	3.31	43	24632	23593	23309	23013	22395	21744	21068	20031	18248	16263	13580		
	30		880	3.30	39	24795	23564	23219	22862	22119	21341	20543	19332	16786				
E4 Cast Aluminum	20	1	669	1.10	21	15505	14110	13772	13446	12793	12071	11260	9539					FEG67
	28		568	1.09	16.8	16914	15395	14975	14534	13584	12559	11264						
	32		530	1.09	16.3	17354	15657	15171	14651	13514	12200	10287						
	20	1 1/2	768	1.65	26	17799	16579	16279	15982	15410	14844	14242	13229	10810				
	28		651	1.65	21	19386	18085	17735	17375	16611	15787	14915	13412					
	32		608	1.65	21	19908	18464	18068	17654	16758	15775	14704	12521					
	20	2	841	2.19	30	19491	18374	18099	17825	17287	16770	16253	15415	13776				
	28		718	2.20	25	21381	20213	19904	19587	18927	18223	17475	16286	13676				
	32		668	2.19	24	21873	20574	20225	19864	19099	18264	17365	15882	12150				
	20	3	964	3.28	38	22342	21364	21122	20882	20405	19933	19478	18805	17594	16199	14294		
	28		820	3.29	30	24419	23406	23142	22874	22321	21744	21139	20176	18442	16266			
	32		767	3.30	30	25115	23999	23705	23404	22779	22118	21411	20266	18128	14979			
	32	5	909	5.51	38	29764	28834	28593	28348	27846	27327	26788	25934	24373	22660	20658		
E8 Cast Aluminum	32	1	453	1.09	13.9	16053	14991	14675	14325	13421	12231	10819						FEG67
	32	1 1/2	520	1.65	17.9	18427	17532	17280	17012	16412	15649	14701	12874					
	32	2	572	2.20	21	20269	19469	19249	19019	18523	17955	17253	15944	13237				
	32	3	655	3.30	27	23211	22524	22340	22151	21752	21322	20851	20000	18112	15681			
Z5 Fabricated Steel	30	1	603	1.07	22	15756	14584	14283	13980	13376	12731	11988	10538					FEG75
	45		467	1.10	21	18011	16108	15579	15017	13585	11258							
	30	1 1/2	690	1.61	26	18030	17011	16750	16488	15959	15433	14887	13960	11851				
	45		534	1.65	26	20595	18968	18523	18066	17090	15878	14155						
	30	2	760	2.10	31	19859	18936	18702	18465	17988	17508	17030	16283	14805				
	45		588	2.20	29	22678	21218	20826	20422	19585	18674	17564	15158					
	30	3	870	3.20	38	22733	21930	21726	21522	21109	20693	20273	19647	18560	16713	15708		
	45		673	3.30	37	25956	24697	24366	24027	23324	22595	21827	20488	17035				
	40	5	850	5.40	47	30189	29226	28981	28734	28235	27728	27213	26442	25124	22702	21254		
	45		798	5.49	47	30777	29728	29456	29180	28615	28031	27427	26495	24746	21016			

NOTES:
1. Performance certified is for installation type A: Free inlet, free outlet.
2. Power rating (BHP) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation Type A: Free inlet hemispherical sone levels.
5. The AMCA Certified Ratings Seal applies to sone ratings only.

WPB – Size 48

MODEL INFO		MOTOR	FAN	MAX	SONES	CFM / STATIC PRESSURE (IN. W.G.)												FAN
PROPELLER	BLADE ANGLE	HP	RPM	BHP	@ 0" SP	0.000	0.100	0.125	0.150	0.200	0.250	0.300	0.375	0.500	0.625	0.750	1.000	EFF. GRADE
Level 1 Performance			Max RPM L1 = 355								Max Motor Frame Size = 145T				Outlet Area (ft²) = 12.76			
L1 Fabricated Steel	—	1/2	236	0.45	8.9	15711	10361											FEG67
			245	0.50	9.4	16310	11746											
			252	0.55	9.8	16776	12525	8674										
	—	3/4	270	0.68	11.1	17974	14337	12642										
			280	0.75	11.8	18640	15338	13817	10453									
			289	0.83	12.4	19239	16238	14753	12680									
	—	1	297	0.90	12.8	19772	16998	15550	14010									
			308	1.00	13.6	20504	17975	16638	15273									
			318	1.10	14.2	21170	18810	17648	16303	10785								
Level 2 Performance			Max RPM L2 = 608								Max Motor Frame Size = 184T				Outlet Area (ft²) = 12.76			
L2 Fabricated Steel	—	1	297	0.90	12.8	19772	16998	15550	14010									FEG67
			308	1.00	13.6	20504	17975	16638	15273									
			318	1.10	14.2	21170	18810	17648	16303	10785								
	—	1 1/2	340	1.35	15.9	22634	20536	19719	18489	15779								
			352	1.50	16.9	23433	21446	20740	19696	17240	11170							
			364	1.65	18.0	24232	22342	21709	20842	18503	14077							
	—	2	375	1.80	19.1	24964	23154	22566	21824	19603	16783							
			388	2.00	20	25830	24104	23559	22917	20886	18646	12842						
			400	2.20	20	26629	24973	24461	23880	22098	19968	15706						
	—	3	429	2.70	23	28559	27048	26600	26107	24849	22875	20881	13141					
			444	3.00	24	29558	28111	27688	27230	26131	24382	22477	16826					
			458	3.30	26	30490	29097	28696	28264	27267	25777	23882	20288					
	—	5	508	4.50	31	33819	32589	32246	31885	31093	30161	28841	26298	18323				
			526	5.00	33	35017	33836	33510	33168	32426	31579	30485	28074	22742				
			543	5.50	34	36149	35010	34698	34373	33672	32884	31938	29782	25674				
Level 3 Performance			Max RPM B304 = 1025			E4 = 1025		E8 = 670		Z5 = 805	Max Motor Frame Size = 215T				Outlet Area (ft²) = 12.76			
B304 Cast Aluminum	20	1 1/2	738	1.64	31	23327	21731	21295	20840	19858	18797	17715	16063					FEG75
	25		662	1.65	28	23978	22066	21536	20976	19766	18488	17164	14868					
	30		598	1.65	25	23942	21627	20972	20280	18803	17186	14609						
	20	2	812	2.19	36	25667	24233	23848	23451	22612	21701	20734	19259	16774				
	25		729	2.21	33	26404	24693	24229	23746	22714	21596	20433	18609	14640				
	30		658	2.20	30	26344	24275	23706	23109	21834	20471	19004	15460					
	20	3	929	3.30	46	29365	28128	27802	27469	26779	26050	25271	24024	21874	19697	17300		
	25		834	3.30	41	30207	28734	28343	27942	27103	26206	25248	23736	21078	17843			
	30		754	3.31	37	30188	28414	27939	27449	26416	25310	24140	22301	17344				
	25	5	989	5.51	54	35822	34596	34277	33952	33284	32590	31864	30705	28617	26459	24070		
	30		893	5.50	50	35753	34279	33892	33498	32683	31829	30930	29502	26966	23495			
	30	7 1/2	1023	8.27	63	40958	39682	39352	39017	38331	37622	36887	35732	33662	31454	28957		
E4 Cast Aluminum	20	1 1/2	685	1.65	31	21038	19437	19031	18625	17818	16972	16030	14428					FEG71
	28		575	1.65	26	23707	21895	21390	20849	19649	18411	17145	14637					
	32		535	1.65	25	24271	22194	21625	21033	19753	18280	16539						
	20	2	753	2.19	35	23127	21673	21305	20935	20199	19463	18690	17394	14830				
	28		633	2.20	32	26099	24477	24035	23575	22571	21458	20334	18588	14140				
	32		589	2.20	29	26721	24858	24357	23840	22749	21558	20213	17807					
	20	3	862	3.29	45	26475	25207	24888	24567	23921	23278	22638	21648	19773	17572			
	28		725	3.30	40	29892	28499	28128	27747	26949	26080	25129	23650	21106	17488			
	32		674	3.29	38	30577	28972	28548	28114	27214	26266	25256	23571	20091				
	20	5	1022	5.49	61	31389	30322	30054	29784	29244	28701	28155	27344	25976	24473	22783		
	28		860	5.50	50	35458	34300	33998	33690	33057	32397	31705	30573	28509	26447	24072		
	32		800	5.51	51	36294	34957	34611	34259	33537	32790	32016	30797	28543	25851	22536		
	28	7 1/2	985	8.25	59	40612	39609	39350	39088	38552	38001	37432	36542	34904	33103	31305	27257	
	32		916	8.27	60	41556	40397	40099	39798	39185	38556	37911	36909	35140	33194	30975	25350	
E8 Cast Aluminum	32	1 1/2	448	1.63	22	22380	20858	20438	19998	19048	17956	16586	13640					FEG67
	32	2	494	2.20	25	24678	23317	22949	22568	21760	20878	19885	17993					
	32	3	565	3.29	32	28225	27052	26741	26423	25760	25057	24308	23062	20331				
	32	5	670	5.51	46	33471	32494	32240	31982	31452	30902	30330	29424	27751	25716	23008		
Z5 Fabricated Steel	35	1 1/2	537	1.65	23	23073	21524	21094	20641	19637	18503	17254	14855					FEG71
	45		449	1.64	19.1	24894	22377	21725	21063	19592	17779							
	35	2	591	2.17	27	25393	24006	23629	23238	22399	21459	20423	18701					
	45		495	2.20	22	27444	25179	24588	23996	22779	21400	19766						
	35	3	677	3.27	34	29089	27896	27580	27254	26575	25849	25056	23742	21247				
	45		567	3.31	27	31436	29475	28968	28455	27421	26365	25214	23248					
	35	5	802	5.46	44	34460	33467	33208	32945	32403	31839	31251	30308	28529	26535	24205		
	45		671	5.49	35	37202	35557	35136	34711	33849	32975	32101	30737	28117				
	45	7 1/2	769	8.24	45	42636	41206	40843	40476	39736	38986	38224	37081	35101	32840	29917		

NOTES:
1. Performance certified is for installation type A: Free inlet, free outlet.
2. Power rating (BHP) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation Type A: Free inlet hemispherical sone levels.
5. The AMCA Certified Ratings Seal applies to sone ratings only.

WPB – Size 54

MODEL INFO		MOTOR	FAN	MAX	SONES	CFM / STATIC PRESSURE (IN. W.G.)											FAN
PROPELLER	BLADE ANGLE	HP	RPM	BHP	@ 0" SP	0.000	0.100	0.125	0.150	0.200	0.250	0.300	0.375	0.500	0.625	0.750	1.000	EFF. GRADE
Level 1 Performance			Max RPM L1 = 343			Max Motor Frame Size = 145T								Outlet Area (ft^2) = 16.13				
L1 Fabricated Steel	—	3/4	222	0.68	10.0	21043	15547	10268										FEG67
			230	0.75	10.7	21801	16734	12988										
			237	0.83	11.1	22465	17726	15360										
	—	1	244	0.90	11.4	23128	18710	16708	11538									
			253	1.00	12.2	23981	20003	18105	14572									
			261	1.10	12.9	24739	21114	19258	17142									
	—	1½	280	1.35	14.6	26540	23495	21954	20250	12696								
			290	1.50	15.4	27488	24643	23361	21673	16131								
			299	1.65	16.1	28341	25639	24550	22938	19232								
Level 2 Performance			Max RPM L2 = 508			Max Motor Frame Size = 184T								Outlet Area (ft^2) = 16.13				
L2 Fabricated Steel	—	1½	280	1.35	14.6	26540	23495	21954	20250	12696								FEG67
			290	1.50	15.4	27488	24643	23361	21673	16131								
			299	1.65	16.1	28341	25639	24550	22938	19232								
	—	2	308	1.80	17.0	29194	26617	25667	24233	21027								
			319	2.00	18.1	30237	27794	26958	25771	22750	16296							
			329	2.20	19.1	31185	28850	28083	27079	24198	19722							
	—	3	352	2.70	22	33365	31240	30580	29822	27457	24734	18716						
			365	3.00	23	34597	32573	31958	31270	29300	26650	23226						
			377	3.30	23	35735	33793	33214	32576	30899	28345	25716						
	—	5	418	4.50	27	39621	37914	37427	36906	35726	34092	31753	28140					
			433	5.00	29	41043	39407	38946	38456	37364	35986	33900	30581					
			447	5.50	31	42370	40795	40354	39890	38867	37648	35880	32635	21605				
Level 3 Performance			Max RPM B406 = 985 C3 = 985 C6 = 795 Z5 = 665			Max Motor Frame Size = 254T								Outlet Area (ft^2) = 16.13				
B406 Cast Aluminum	20	1½	556	1.65	30	26343	24259	23696	23111	21878	20597	19332	17068					FEG75
	25		502	1.65	28	27738	25315	24636	23918	22379	20748	18824						
	30		455	1.66	26	28221	25374	24518	23586	21457	18368							
	20	2	612	2.20	34	28996	27122	26624	26113	25039	23904	22739	21010	17279				
	25		553	2.21	32	30555	28391	27799	27181	25861	24440	22958	20296					
	30		501	2.21	30	31074	28555	27827	27047	25312	23281	20423						
	20	3	700	3.29	42	33165	31546	31122	30690	29799	28864	27885	26365	23831	20627			
	25		632	3.30	38	34921	33057	32560	32048	30974	29823	28602	26680	22825				
	30		573	3.31	36	35540	33395	32801	32177	30826	29323	27645	24301					
	20	5	830	5.50	55	39325	37973	37624	37271	36550	35808	35042	33841	31730	29590	27341		
	25		750	5.50	50	41440	39894	39489	39077	38228	37341	36410	34928	32276	29369	25611		
	30		679	5.50	48	42114	40345	39872	39384	38358	37253	36062	34094	29937				
	20	7½	950	8.25	69	45010	43836	43535	43232	42616	41987	41344	40353	38608	36768	34890	30980	
	25		858	8.26	64	47408	46067	45720	45369	44651	43910	43145	41945	39793	37482	35068	28757	
	30		778	8.28	60	48255	46730	46330	45921	45073	44182	43240	41723	38878	35424	30608		
	25	10	944	10.96	74	52160	50947	50635	50320	49678	49021	48347	47301	45450	43458	41352	36755	
	30		856	11.02	72	53093	51717	51359	50994	50245	49467	48655	47366	45002	42332	39181		
C3 Cast Aluminum	10	1½	660	1.62	19.9	24897	22252	21406	20463	18492	16529	14648	11913					FEG60
	20		530	1.64	14.6	26603	22935	21902	20868	18757	15888							
	10	2	725	2.17	24	27349	25008	24318	23541	21815	19992	18214	15646					
	20		582	2.17	16.9	29213	25933	25022	24079	22211	20203	17535						
	10	3	830	3.25	30	31310	29323	28768	28183	26852	25342	23784	21402	17658				
	20		667	3.27	21	33480	30667	29916	29133	27497	25863	24212	21058					
	10	5	985	5.44	38	37157	35524	35085	34631	33672	32614	31412	29489	26128	22950	19821		
	20		791	5.45	27	39704	37367	36756	36134	34842	33480	32086	30035	26073	20366			
	20	7½	908	8.25	34	45577	43559	43037	42508	41427	40308	39138	37326	34338	31021	26557		
	25		854	8.26	37	46257	42923	42224	41562	40393	39334	38284	36519	32920	28580	22600		
	25	10	940	11.02	42	50915	47810	47145	46512	45336	44309	43349	41913	39085	35683	31709		
C6 Cast Aluminum	10	1½	531	1.63	17.4	23717	20785	20290	19808	18723	17310	15962	13879					FEG63
	20		436	1.63	13.4	26006	23300	22545	21753	20097	18319	16305						
	25		403	1.63	12.4	26437	22711	21996	21254	19651	17571							
	10	2	585	2.17	20	26129	23321	22832	22383	21500	20457	19163	17344	13369				
	20		480	2.17	15.9	28630	26206	25549	24863	23409	21890	20271	17467					
	25		443	2.17	14.7	29061	25525	24856	24207	22824	21343	19420						
	10	3	669	3.24	25	29881	27282	26778	26332	25538	24770	23927	22321	19649	16345			
	20		550	3.27	19.4	32805	30721	30169	29603	28413	27150	25839	23779	19710				
	25		508	3.27	18.6	33325	30081	29429	28833	27696	26499	25237	23048					
	10	5	794	5.44	34	35464	33138	32665	32219	31415	30724	30075	29091	27041	24642	22560		
	20		652	5.44	25	38889	37154	36703	36244	35301	34318	33287	31665	28835	25678			
	25		602	5.45	24	39492	36626	36012	35428	34378	33411	32450	30896	28062	23554			
	20	7½	749	8.25	33	44675	43176	42790	42399	41603	40785	39943	38620	36278	33832	31198		
	25		691	8.24	30	45330	42757	42190	41646	40619	39696	38840	37590	35355	32947	29620		
	20	10	761	8.65	34	45391	43917	43537	43154	42372	41570	40745	39454	37164	34771	32225		
Z5 Fabricated Steel	30	1½	444	1.61	19.1	25343	23243	22717	22205	21186	20035	18608						FEG71
	45		341	1.64	17.6	28632	25310	24419	23447	20507								
	30	2	489	2.16	22	27911	26006	25528	25050	24125	23191	22141	20162					
	45		376	2.20	21	31570	28597	27799	26991	25127	22117							
	30	3	560	3.24	27	31964	30301	29884	29467	28633	27824	27021	25718	22866				
	45		430	3.30	27	36105	33545	32864	32167	30757	29170	26927						
	30	5	663	5.42	36	37843	36439	36087	35736	35031	34327	33627	32610	30849	28684	25812		
	45		510	5.50	34	42822	40693	40138	39573	38411	37234	36013	33842	27629				
	40	7½	622	8.22	42	48183	46661	46266	45865	45042	44190	43306	41917	39360	36186	31966		
	45		584	8.27	43	49035	47191	46715	46233	45249	44236	43209	41641	38496	33296			
	45	10	643	11.04	50	53989	52322	51894	51462	50583	49684	48763	47364	44931	41823	37003		

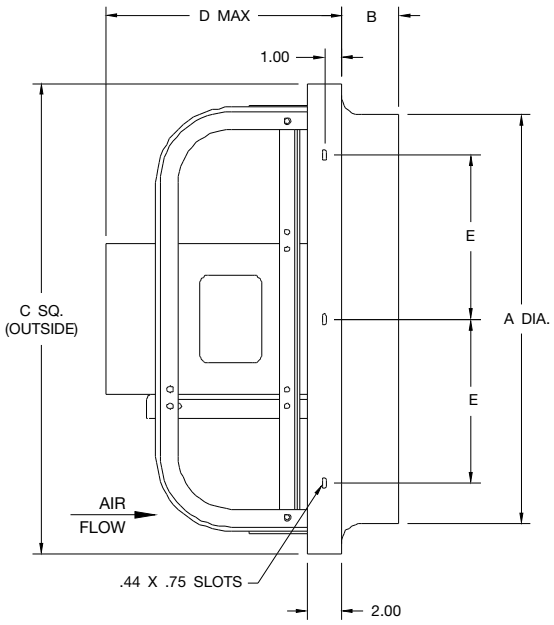
NOTES:
1. Performance certified is for installation type A: Free inlet, free outlet.
2. Power rating (BHP) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation Type A: Free inlet hemispherical sone levels.
5. The AMCA Certified Ratings Seal applies to sone ratings only.

WPB – Size 60

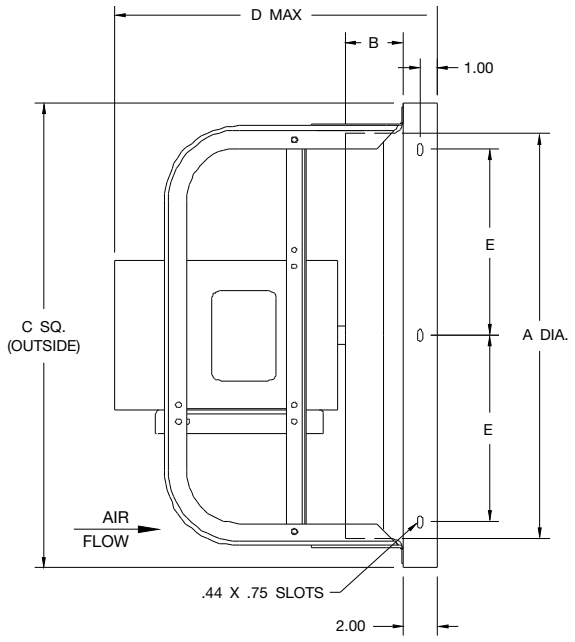
MODEL INFO		MOTOR	FAN	MAX	SONES	CFM / STATIC PRESSURE (IN. W.G.)												FAN
PROPELLER	BLADE ANGLE	HP	RPM	BHP	@ 0" SP	0.000	0.100	0.125	0.150	0.200	0.250	0.300	0.375	0.500	0.625	0.750	1.000	EFF. GRADE
Level 1 Performance			Max RPM L1 = 300							Max Motor Frame Size = 145T				Outlet Area (ft^2) = 19.96				
L1 Fabricated Steel	—	3/4	186	0.68	9.0	24184	14729											FEG67
			193	0.75	9.5	25094	17616											
			199	0.83	10.1	25875	19022	12280										
	—	1	205	0.90	10.8	26655	20262	15146										
			212	1.00	11.4	27565	21633	18491										
			219	1.10	11.8	28475	22982	20489	13950									
	—	1 1/2	235	1.35	13.4	30555	26085	23795	21192									
			243	1.50	14.2	31596	27510	25336	23141									
			251	1.65	14.7	32636	28844	26906	24801	15176								
	—	2	258	1.80	15.5	33546	29958	28273	26177	18560								
			268	2.00	16.5	34846	31488	30115	28104	23325								
			276	2.20	17.5	35886	32683	31488	29680	25678								
Level 2 Performance			Max RPM L2 = 399							Max Motor Frame Size = 215T				Outlet Area (ft^2) = 19.96				
L2 Fabricated Steel	—	1 1/2	235	1.35	13.4	30555	26085	23795	21192									FEG67
			243	1.50	14.2	31596	27510	25336	23141									
			251	1.65	14.7	32636	28844	26906	24801	15176								
	—	2	258	1.80	15.5	33546	29958	28273	26177	18560								
			268	2.00	16.5	34846	31488	30115	28104	23325								
			276	2.20	17.5	35886	32683	31488	29680	25678								
	—	3	296	2.70	19.4	38487	35603	34655	33414	29854	24294							
			306	3.00	21	39787	37036	36158	35097	31784	28072							
			316	3.30	22	41087	38455	37635	36693	33739	30366	22738						
	—	5	350	4.50	26	45508	43204	42527	41789	39977	37069	34066	23868					
			363	5.00	27	47198	44997	44360	43673	42074	39625	36657	30016					
			375	5.50	28	48759	46643	46039	45392	43924	41872	38971	34440					
Level 3 Performance			Max RPM C3 = 955 C6 = 850 Z5 = 685							Max Motor Frame Size = 256T				Outlet Area (ft^2) = 19.96				
C3 Cast Aluminum	10	2	678	2.17	25	30035	27023	26045	24932	22979	21173	18919	16137					FEG56
	20		534	2.19	21	32758	28971	27904	26768	24162	21149							
	25		489	2.18	18.4	33067	27434	26035	24491									
	10	3	777	3.27	31	34421	31888	31161	30360	28456	26729	25184	22460	18205				
	20		610	3.27	26	37420	34177	33293	32374	30401	28144	25584	20748					
	25		560	3.27	23	37868	32806	31695	30526	27854								
	10	5	920	5.43	41	40756	38680	38113	37521	36242	34699	33072	31006	27486	23625	19738		
	20		724	5.46	34	44413	41734	41024	40296	38779	37168	35429	32446	26591				
	25		664	5.45	29	44901	40487	39491	38546	36640	34493	32027						
	10	7 1/2	955	6.07	43	42306	40317	39777	39217	38024	36625	35042	32921	29712	25734	22544		
	20		828	8.17	42	50793	48476	47871	47255	45986	44664	43283	41064	36750	31767			
	25		760	8.18	37	51393	47478	46558	45669	44005	42351	40538	37508					
	20	10	912	10.92	50	55946	53855	53313	52764	51639	50477	49275	47388	43921	39844	35318		
	25		839	11.00	43	56735	53157	52308	51475	49886	48394	46897	44428	39446				
C6 Cast Aluminum	10	2	547	2.18	25	28817	26144	25462	24771	23386	22056	20729	18189	12819				FEG63
	20		438	2.18	20	32181	28717	27911	27114	25322	22951	20897						
	25		400	2.18	18	32733	29503	28422	27144	24834	22497	19265						
	10	3	626	3.26	31	32978	30651	30061	29468	28263	27051	25865	24153	20515	15979			
	20		501	3.26	26	36809	33761	33017	32303	30908	29379	27404	24500					
	25		458	3.27	23	37479	34775	33984	33103	30928	28893	26977	23300					
	10	5	742	5.42	41	39089	37132	36638	36142	35144	34133	33111	31581	29154	26443	22965		
	20		594	5.44	34	43642	41058	40422	39791	38557	37381	36188	34114	29840	25958			
	25		543	5.45	31	44435	42231	41622	40984	39588	37861	35968	33508	28906				
	10	7 1/2	849	8.16	52	44726	43019	42589	42157	41291	40420	39540	38204	35976	33854	31667	25817	
	20		680	8.16	43	49961	47696	47137	46581	45477	44393	43358	41813	38810	34978	31752		
	25		621	8.15	38	50818	48926	48418	47892	46783	45578	44165	41694	38056	34138			
	15	10	833	11.03	63	51930	50146	49704	49263	48386	47515	46649	45388	43319	41106	38587	33676	
	20		752	11.04	53	55251	53199	52691	52186	51181	50184	49203	47799	45436	42561	39054	32917	
	25		687	11.04	45	56219	54527	54079	53619	52662	51646	50558	48638	44957	41770	38245		
Z5 Fabricated Steel	30	1 1/2	395	1.60	17.9	29048	26492	25773	25004	23326	21516	19156						FEG71
	45		302	1.64	15.9	33289	28777	27520	26067									
	30	2	435	2.14	21	31989	29706	29080	28426	27004	25452	23807	20453					
	45		333	2.20	18.8	36706	32664	31581	30440	27683								
	30	3	498	3.22	26	36622	34661	34137	33598	32463	31229	29902	27796	22958				
	45		381	3.29	23	41996	38523	37594	36654	34675	32312	29036						
	30	5	591	5.32	33	43462	41834	41408	40974	40079	39144	38156	36560	33668	30341			
	45		452	5.50	31	49823	46939	46184	45414	43839	42219	40458	37264					
	40	7 1/2	554	8.22	39	56047	53811	53242	52669	51511	50336	49172	47420	44030	39113			
	45		517	8.23	39	56987	54488	53841	53185	51843	50466	49068	46841	42214				
	35	10	673	11.03	47	58165	56751	56385	56015	55257	54476	53669	52403	50097	47506	44629	37471	
	40		608	10.86	45	61510	59477	58962	58443	57397	56338	55267	53678	50961	47634	43043		
	45		569	10.46	44	62719	60459	59878	59290	58093	56865	55612	53703	50172	45645			

NOTES:
1. Performance certified is for installation type A: Free inlet, free outlet.
2. Power rating (BHP) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation Type A: Free inlet hemispherical sone levels.
5. The AMCA Certified Ratings Seal applies to sone ratings only.

Direct Drive - WPD



Exhaust Airflow



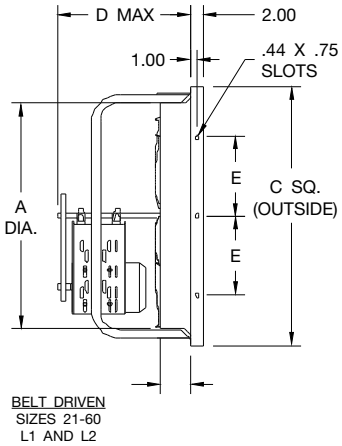
Supply Airflow

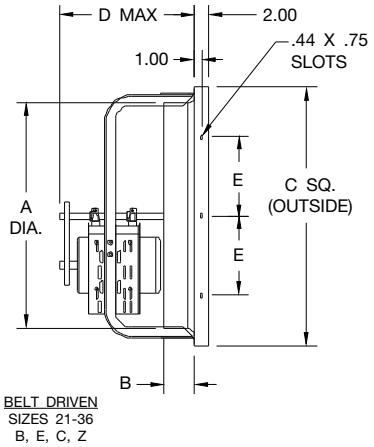
SIZE	A	B	C SQ.	D MAX		DAMPER SIZE	MAX MOTOR FRAME
				EXHAUST	SUPPLY		
14	14.25	2.75	17.00	11.18	14.88	14 x 14	56
16	16.25	3.00	20.00	11.18	14.88	17 x 17	56
18	18.25	3.00	22.00	11.18	14.88	19 x 19	56
21	21.25	3.50	25.00	14.41	17.36	22 x 22	145T
24	24.25	3.50	28.00	14.55	17.36	25 x 25	184T
30	30.38	4.00	36.00	14.74	19.05	33 x 33	184T
36	36.38	5.00	42.00	15.67	19.93	39 x 39	215T
42	42.38	5.50	48.00	23.59	30.00	45 x 45	254T
48	48.38	6.00	54.00	23.59	30.00	51 x 51	254T

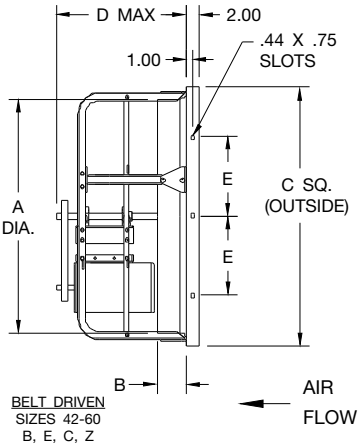
D4810-12A
D4810-13A

Belt Driven - WPB

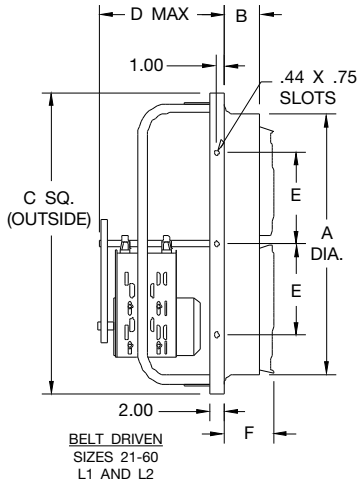
Supply Airflow

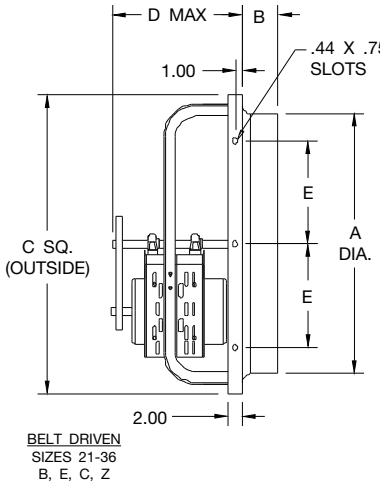


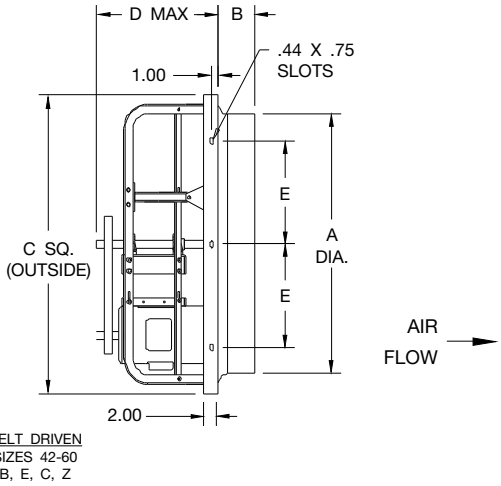




Exhaust Airflow







WPB
Levels 1 & 2

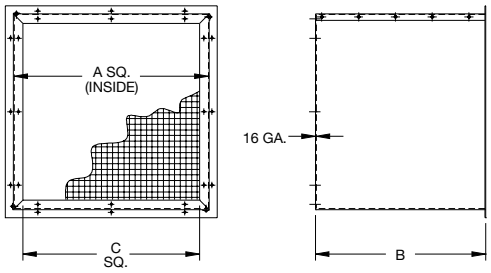
WPB
Level 3
Sizes 21-36

WPB
Level 3
Sizes 42-60

SIZE	A	B	C	D MAX						E	F (EXHAUST ONLY)	SHAFT SIZE			MAX MOTOR FRAME			DAMPER SIZE
				EXHAUST			SUPPLY											
				L1	L2	B, E, C, Z	L1	L2	B, E, C, Z		L1, L2	L1	L2	B, E, C, Z	L1	L2	B, E, C, Z	
21	21.25	3.50	25.00	14.19	14.19	17.25	20.00	20.00	20.50	6.75	5.19	.75	.75	1.00	56	145T	145T	22 x 22
24	24.25	3.50	28.00	14.38	14.38	17.25	20.78	20.78	20.50	9.25	5.73	.75	.75	1.00	56	145T	145T	25 x 25
30	30.38	4.00	36.00	15.68	17.06	18.31	22.63	24.25	20.93	11.25	6.87	.75	1.00	1.00	145T	184T	184T	33 x 33
36	36.38	5.00	42.00	16.25	17.44	18.31	22.75	24.32	21.93	13.25	6.57	.75	1.00	1.00	145T	184T	184T	39 x 39
42	42.38	5.50	48.00	16.44	17.94	20.44	23.57	25.00	26.75	15.19	7.44	1.00	1.19	1.19	145T	184T	215T	45 x 45
48	48.38	6.00	54.00	17.06	18.44	20.44	24.75	26.32	26.75	20.58	8.33	1.00	1.19	1.44	145T	184T	215T	51 x 51
54	54.38	6.50	60.00	17.13	18.44	26.13	25.44	26.94	32.30	23.06	9.21	1.00	1.19	1.44	145T	184T	254T	57 x 57
60	60.38	7.25	66.00	17.44	22.68	26.13	26.44	31.82	32.30	25.06	10.11	1.19	1.50	1.69	145T	215T	256T	63 x 63

D4820-12A
D4820-13A

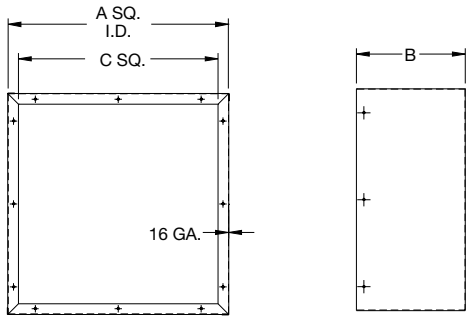
Wall Box with Removable Screen



SIZE	A SQ.	B	C SQ.	MINIMUM WALL OPENING
14	17.25	33.50	14.63	18
16	20.25	34.00	17.63	21
18	22.25	34.00	19.63	23
21	25.25	36.00	22.63	26
24	28.25	37.00	25.63	29
30	36.25	40.00	33.63	37
36	42.25	40.00	39.63	43
42	48.25	43.00	45.63	49
48	54.25	43.00	51.63	55
54	60.25	49.00	57.63	61
60	66.25	50.00	63.63	67

D4820-6B

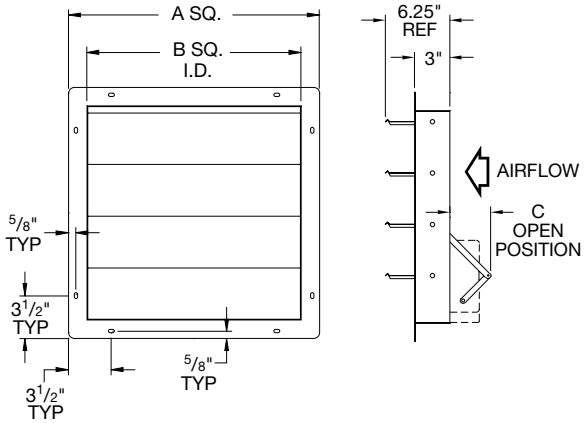
Wall Collar



SIZE	A SQ.	B	C SQ.	MINIMUM WALL OPENING
14	17.25	20.00	14.63	18
16	20.25	20.00	17.63	21
18	22.25	20.00	19.63	23
21	25.25	21.00	22.63	26
24	28.25	22.00	25.63	29
30	36.25	23.00	33.63	37
36	42.25	23.00	39.63	43
42	48.25	24.00	45.63	49
48	54.25	25.00	51.63	55
54	60.25	26.00	57.63	61
60	66.25	26.00	63.63	67

D4820-7B

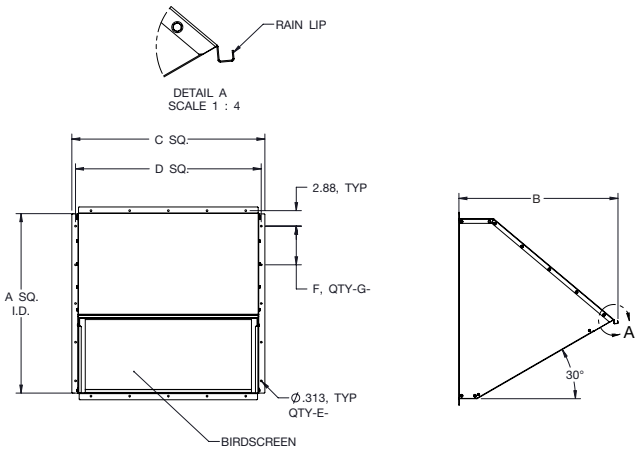
Backdraft Damper



SIZE	A SQ. FLANGE	B SQ.	C	NO. OF PANELS
14	17.00	14	3.50	1
16	20.00	17	3.50	1
18	22.00	19	3.50	1
21	25.00	22	3.50	1
24	28.00	25	3.50	1
30	36.00	33	3.50	1
36	42.00	39	4.50	2
42	48.00	45	4.50	2
48	54.00	51	4.50	2
54	60.00	57	4.50	2
60	66.00	63	4.50	2

Exhaust Damper shown (with front flange).
Supply damper has rear flange.

Weatherhood with Bird Screen

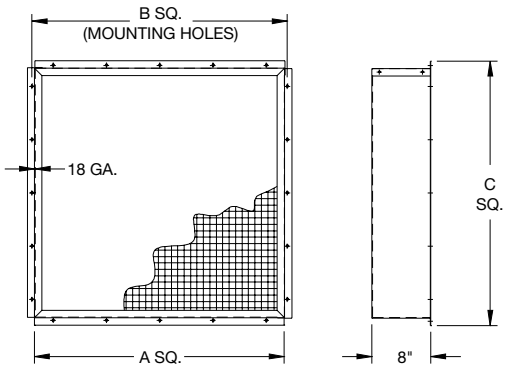


SIZE	A SQ.	B	C		D		GA.
			STD.	EXT.	STD.	EXT.	
14	14.63	16.43	17.13	21.13	15.75	19.75	20
16	17.63	18.43	20.13	24.13	18.75	22.75	20
18	19.63	19.80	22.13	26.13	20.75	24.75	20
21	22.63	22.55	25.13	29.13	23.75	27.75	18
24	25.63	25.68	28.13	32.13	26.75	30.75	18
30	33.63	33.30	36.13	40.13	34.75	38.75	18
36	39.63	40.80	42.13	46.13	40.75	44.75	18
42	45.63	45.93	48.13	52.13	46.75	50.75	18
48	51.63	51.98	54.13	58.13	52.75	56.75	18
54	57.63	56.98	60.13	64.13	58.75	62.75	16
60	63.63	62.98	66.13	70.13	64.75	68.75	16

Standard flange weatherhood shown.

D4820-9C

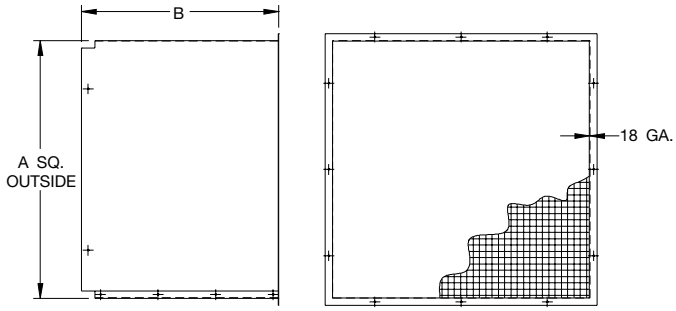
Damper Guard



SIZE	A SQ.	B SQ.	C SQ.
14	15	15.75	17
16	18	18.75	20
18	20	20.75	22
21	23	23.75	25
24	26	26.75	28
30	34	34.75	36
36	40	40.75	42
42	46	46.75	48
48	52	52.75	54
54	58	58.75	60
60	64	64.75	66

D4820-5A

OSHA Motor Side Guard



SIZE	A SQ.	B
14	16.84	15.25
16	19.84	15.50
18	21.84	15.50
21	24.84	24.00
24	27.81	24.50
30	35.81	28.00
36	41.81	28.00
42	47.81	31.50
48	53.81	31.50
54	59.81	36.00
60	65.81	36.00

D4820-10B

TYPICAL SPECIFICATIONS

Model
WPD

Wall propeller fans shall be Model WPD direct drive as manufactured by Twin City Fan & Blower, Minneapolis, Minnesota.

PERFORMANCE - Fans shall be tested in accordance with AMCA 210 and AMCA 300 test codes for air moving devices and shall be guaranteed by the manufacturer to deliver rated published performance levels. Fans shall be licensed to bear the AMCA certified ratings seal for both sound and air.

CONSTRUCTION - Fan panels and motor mount assemblies shall be constructed of heavy gauge steel for durability and appearance. Panels shall have a deep formed inlet venturi and pre-punched holes for easy mounting.

PROPELLERS - Propellers shall be constructed of fabricated steel or cast aluminum blades and hubs. Propellers on direct drive units shall be mounted directly on the motor shaft with a taperlock bushing. Propellers on belt driven units shall be welded to the fan shaft or secured with a taperlock bushing.

MOTORS - All motors shall be split phase and capacitor start single phase or three phase induction, permanently lubricated, heavy-duty, ball bearing type, closely matched to the fan load and provided at the voltage, phase, hertz, and enclosure as provided on the fan schedule.

FINISH AND COATING - Fans shall have galvanized steel or painted steel orifice panels and motor supports.

ACCESSORIES - When specified, accessories such as wall boxes, wall collars, OSHA motor side guards, weatherhoods, backdraft dampers, damper guards, and disconnect switches shall be provided by Twin City Fan to maintain one source responsibility.

FACTORY RUN TEST - All fans prior to shipment shall be completely assembled and test run as a unit at operating speed or maximum RPM allowed for the particular construction type. Each propeller shall be statically and dynamically balanced in accordance with ANSI/AMCA 204-96 “Balance Quality and Vibration Levels for Fans” to Fan Application Category BV-3, Balance Quality Grade G6.3. Balance readings shall be taken by electronic type equipment in the axial, vertical, and horizontal directions on each of the bearings. Records shall be maintained and a written copy shall be available upon request.

GUARANTEE - The manufacturer shall guarantee the workmanship and materials for its WPD wall propeller fans for at least one (1) year from startup or eighteen (18) months from shipment, whichever occurs first.

Fan & Blower Twin City

Model

WPB

Wall propeller fans shall be Model WPB belt driven as manufactured by Twin City Fan & Blower, Minneapolis, Minnesota.

PERFORMANCE - Fans shall be tested in accordance with AMCA 210 and AMCA 300 test codes for air moving devices and shall be guaranteed by the manufacturer to deliver rated published performance levels. Fans shall be licensed to bear the AMCA certified ratings seal for both sound and air.

CONSTRUCTION - Fan panels and motor mount assemblies shall be constructed of heavy gauge steel for durability and appearance. Panels shall have a deep formed inlet venturi and pre-punched holes for easy mounting.

PROPELLERS - Propellers shall be constructed of fabricated steel or cast aluminum blades and hubs. Propellers on direct drive units shall be mounted directly on the motor shaft with a taperlock bushing. Propellers on belt driven units shall be welded to the fan shaft or secured with a taperlock bushing.

SHAFTS - Shafts shall be AISI 1045 cold rolled steel, accurately turned, ground, polished, and ring gauged for accuracy. Shafts shall be sized for the first critical speed of at least 1.43 times the maximum speed.

BEARINGS - Bearings are to be pillow block, heavy-duty, anti-friction, self-aligning, grease lubricated, ball type. Each fan's bearings are sized with a minimum average life, per AFBMA, in excess of 200,000 hours when operating at the maximum RPM of the class.

DRIVES - Motor sheaves shall be cast iron, and supplied as variable pitch standard. Drives and belts shall be rated for a minimum of 150% of the required motor HP.

MOTORS - All motors shall be split phase and capacitor start single phase or three phase induction, permanently lubricated, heavy-duty, ball bearing type, closely matched to the fan load and provided at the voltage, phase, hertz, and enclosure as provided on the fan schedule.

FINISH AND COATING - Fans shall have galvanized steel or painted steel orifice panels and motor supports.

ACCESSORIES - When specified, accessories such as wall boxes, wall collars, OSHA motor side guards, weatherhoods, backdraft dampers, damper guards, and disconnect switches shall be provided by Twin City Fan to maintain one source responsibility.

FACTORY RUN TEST - All fans prior to shipment shall be completely assembled and test run as a unit at operating speed or maximum RPM allowed for the particular construction type. Each propeller shall be statically and dynamically balanced in accordance with ANSI/AMCA 204-96 "Balance Quality and Vibration Levels for Fans" to Fan Application Category BV-3, Balance Quality Grade G6.3. Balance readings shall be taken by electronic type equipment in the axial, vertical, and horizontal directions on each of the bearings. Records shall be maintained and a written copy shall be available upon request.

GUARANTEE - The manufacturer shall guarantee the workmanship and materials for its WPB wall propeller fans for at least one (1) year from startup or eighteen (18) months from shipment, whichever occurs first.

Fan & Blower Twin City

INDUSTRIAL & COMMERCIAL FANS

Centrifugal Fans | Utility Sets | Plenum & Plug Fans | Inline Centrifugal Fans
Mixed Flow Fans | Tubeaxial & Vaneaxial Fans | Propeller Wall Fans | Propeller Roof Ventilators
Centrifugal Roof & Wall Exhausters | Ceiling Ventilators | Gravity Ventilators | Duct Blowers
Radial Bladed Fans | Radial Tip Fans | High Efficiency Industrial Fans | Pressure Blowers
Laboratory Exhaust Fans | Filtered Supply Fans | Mancoolers | Fiberglass Fans | Custom Fans

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