

cincinnati fan
OEM and Industrial Air Handling Specialist



RADIAL
BLADE
EXHAUSTER

Series 18, 25, 32 & 40

**INDUSTRIAL
EXHAUSTERS**

7697 Snider Road, Mason, OH 45040-9135

Telephone: 513-573-0600

Visit us at www.cincinnatifan.com for more information.

Cat. No. RBE-307
Supersedes RBE-604



cincinnati fan

A Company That Stands Behind Its Product

Since the founding of **Cincinnati Fan** in 1956, the company's mission has been to provide quality products at competitive prices, backed by dependable service.

This mission is carried out by specializing in the market for industrial air handling products up to 125 HP. But specialization does not mean the product line is small. **Cincinnati Fan** offers a wide variety of standard and customized products, production flexibility, and customer responsiveness.

Cincinnati Fan has over 170 experienced sales engineers across the U.S. and Canada ready to serve your air handling needs.

Cincinnati Fan can provide:

- Technical evaluation for correct performance conditions.
- Review of air stream and ambient conditions that require special attention.
- Selection of proper components to meet required design specifications.
- Selection of proper accessories.
- System analysis for proper fan design.

Cincinnati Fan operates in a modern facility specifically designed for world class manufacturing enabling us to build standard products to order, including accessories, and ship within 10 working days.

With support like this, you can be sure your **Cincinnati Fan** product will be well-built and will provide maximum dependability and longevity.

Visit us at www.cincinnatifan.com for more information.

SPECIFICATIONS FOR RBE SERIES

Radial bladed fans shall be Cincinnati model RBE, Size _____, Series _____, Arrangement _____. Capacity: _____ CFM, _____ Static Pressure at standard conditions. Operating conditions: _____ °F, _____ Ft. Altitude.

Wheels shall have welded blades and are designed to meet specified conditions for each series. Wheels shall be dynamically balanced to assure smooth operation. Shafts shall be turned, ground and polished steel (or stainless steel). All fans shall be test run at the factory before shipping.

Housings shall be continuously welded and supported to prevent housing pulsation at all conditions. All bearings shall be grease-lubricated, heavy-duty, self-aligning ball bearing. V-belt drive shall be selected for a minimum of 1.3 times nominal horsepower.

(All parts in contact with airstream shall be standard steel, aluminum or stainless steel as specified.)

Before painting, all steel parts shall be cleaned by detergent wash, phosphatized and painted with machine gray enamel.

The following accessories shall be included: (See page 6 for available accessories).

SEVEN STANDARD ARRANGEMENTS



ARRANGEMENT 1 (V-BELT DRIVE)

- Motor not mounted on bearing base.
- Wheel mounted on fan shaft with two pillow block bearings.
- Maximum temperature:
Standard design: 300°F;
High temperature design: 750°F.



ARRANGEMENT 4HM (DIRECT DRIVE)

- C-Face motor mounted direct to housing.
- Foot mounted motor with angle bracket when C-Face motor is not available.
- Wheel mounted on motor shaft.
- Maximum temperature:
Standard design: 200°F.
High temperature design: 400°F.
- For performance data, see page 19



ARRANGEMENT 4 (DIRECT DRIVE)

- Motor mounted on motor base.
- Wheel mounted on motor shaft.
- Maximum temperature:
Standard design: 200°F
High temperature design: 400°F.
- For performance data, see page 19



(Shown with shaft/coupling guard removed)

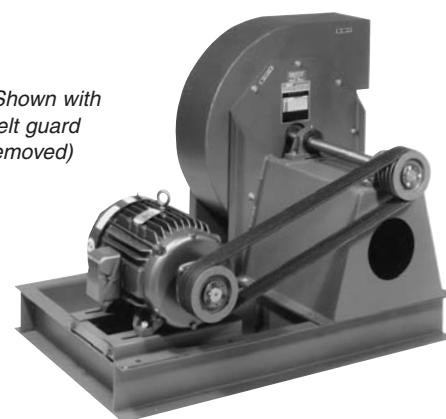
ARRANGEMENT 8 (DIRECT DRIVE)

- Motor mounted on motor base extending beyond the bearing base.
- Wheel mounted on fan shaft with two pillow block bearings.
- Maximum temperature:
Standard design: 300°F;
High temperature design: 750°F.
- Consult factory for dimensions.
- For performance data, see page 19.



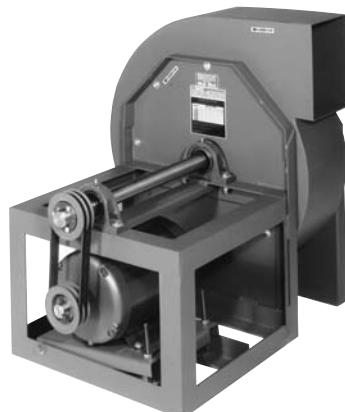
ARRANGEMENT 9 (V-BELT DRIVE)

- Motor mounted on an adjustable slide base on the side of the bearing base.
- Wheel mounted on fan shaft with two pillow block bearings.
- Maximum temperature:
Standard design: 300°F.
High temperature design: 750°F.



ARRANGEMENT 9CB (V-BELT DRIVE)

- Same as Arrangement 9 except motor and fan are mounted on a common channel base.
- Maximum temperature:
Standard design: 300°F;
High temperature design: 750°F.



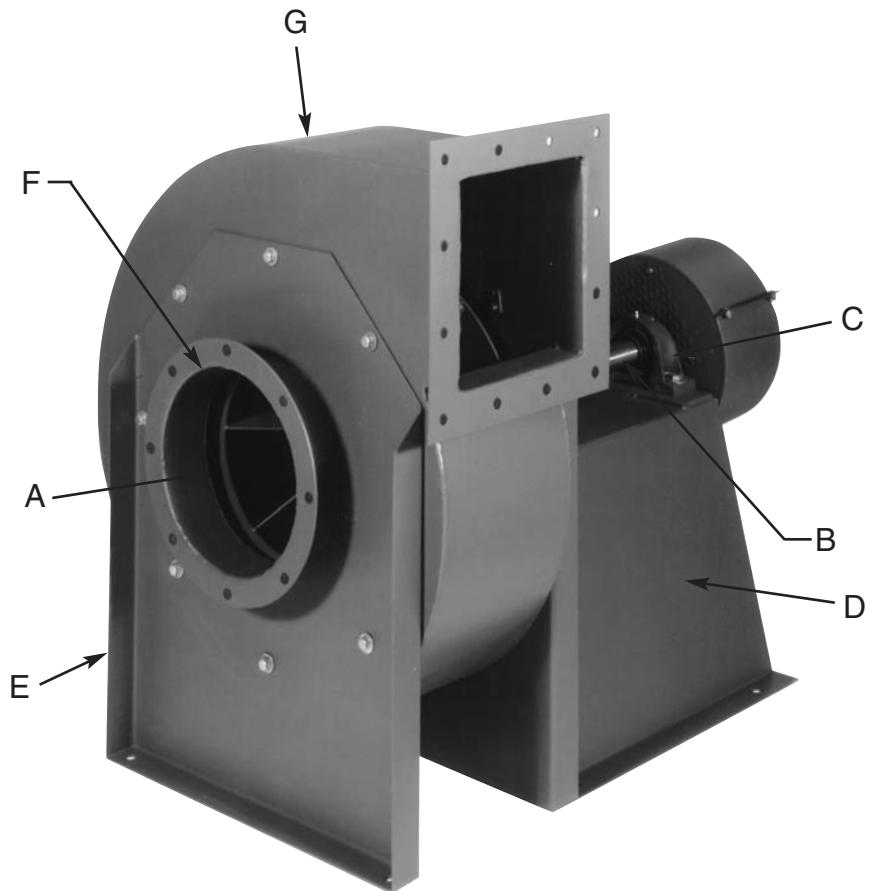
ARRANGEMENT 10 (V-BELT DRIVE)

- Motor mounted on adjustable base under the fan shaft.
- Wheel mounted on fan shaft with two pillow block bearings.
- Maximum temperature:
Standard design: 300°F;
High temperature design not available.
- Consult factory on RBE-21.

(Shown with weather cover removed)

RBE FEATURES

- A) Wheels are fabricated of heavy-gauge, high-strength steel to assure long lasting, efficient operation for each series.
- B) Turned, ground and polished shafting assures smooth operation. A rust preventative coating is applied prior to shipment.
- C) Heavy-duty, self-aligning ball bearings in relubricatable cast-iron pillow blocks. Bearings are selected for optimal performance based on maximum fan speed for each fan size and series. (See page 22.)
- D) Bearing base is heavy steel construction with internal supports to maximize rigidity and assure long equipment life. Arrangement #1 fans can be converted to arrangement #9 with the addition of the motor slide base.
- E) Inlet side support is used to assure a vibration free, stable housing.
- F) Slip collar inlet (not shown) is used for duct work connection. Flanged inlet is optional.
- G) Reversible housing provides increased configuration flexibility. Removable side plates allow the wheel to be removed from the motor or inlet side of the housing. Housings are rotatable in 45 degree increments. (Only shrouded wheels are reversible.) Housing gauges are determined by the fan size and series.



TWO WHEEL TYPES



Shrouded Wheel

Standard fabricated steel wheel used on all sizes and series. Taper lock bushings are standard on sizes 7-13. Sizes 15-21 have cast iron hubs. This type wheel is not recommended for conveying long stringy material, consult factory. All wheels are available in aluminum and stainless steel with straight bore hubs.



Open Wheel

Optional fabricated wheel available on Series 18 and 25 only. Taper lock bushings are standard on all mild steel wheels. Nonreversible. Also available in aluminum and stainless steel with straight bore hubs on most sizes or series. (Consult factory.)

SPARK-RESISTANT CONSTRUCTION

Type A: All parts in contact with airstream are of nonferrous material.
(Consult Factory.)

Type B: Aluminum wheel and aluminum rubbing ring on motor shaft or fan shaft. Maximum Temperature 200°F.

Type C: Consists of an aluminum plate on the inlet and drive side of the fan.

⚠ WARNING

The use of aluminum or aluminum alloys in the presence of steel which has been allowed to rust requires special consideration. Research by the U.S. Bureau of Mines and others has shown that aluminum impellers rubbing on rusty steel may cause high intensity sparking.

The use of the above Standard in no way implies a guarantee of safety for any level of spark resistance. Spark-resistant construction also does not protect against ignition of explosive gases caused by catastrophic failure or from any airstream material that may be present in a system.

MAX. RPM for Aluminum Wheels ①②③	
FAN SIZE	MAX. SPEED
7	4994
9	4383
11	4000
13	3800
15	3500
17	3090
19	2610
21	2080

① Up to 200°F. Consult factory for higher temperatures.

② All wheels are shrouded type, fabricated aluminum.

③ See page 22 for WR² and bearing & shaft limitations.

HIGH TEMPERATURE CONSTRUCTION

Arrangements 4 and 4 HM

Up to 200°F. Standard fan construction.

201°- 400°F. Standard fan with shaft seal, heat slinger and slinger guard.

Arrangement 10

Up to 300°F. Standard fan construction.

Arrangements 1, 8, 9 and 9CB

Up to 300°F. Standard fan construction.

301°- 400°F. Standard fan with heat slinger and shaft/slinger guard.

401°- 600°F. Standard fan with heat slinger, shaft/slinger guard and high temperature shaft seal, gasketing and paint.

601°- 750°F. Standard fan with heat slinger, shaft/slinger guard, 316SS fan shaft and high temperature shaft seal, gasketing and paint.

TEMPERATURE RANGE	MAXIMUM RPM REDUCTION FACTOR†
Up to 175°F.	0%
175°-200°	2%
201°-300°	4%
301°-400°	7%
401°-500°	11%
501°-600°	15%
601°-700°	20%
701°-750°	30%

† Steel wheels only.

TEMPERATURE - ALTITUDE CONVERSIONS

AIR TEMP. °F.	ALTITUDE IN FEET ABOVE SEA LEVEL										
	0	1000	2000	3000	4000	5000	6000	7000	8000	9000	10000
0°	.87	.91	.94	.98	1.01	1.05	1.09	1.13	1.17	1.22	1.26
40°	.94	.98	1.02	0.06	1.10	1.14	1.19	1.23	1.28	1.32	1.36
70°	1.00	1.04	1.08	1.12	1.16	1.20	1.25	1.30	1.35	1.40	1.45
80°	1.02	1.06	1.10	1.14	1.19	1.23	1.28	1.33	1.38	1.43	1.48
100°	1.06	1.10	1.14	1.19	1.23	1.28	1.33	1.38	1.43	1.48	1.54
120°	1.09	1.14	1.18	1.23	1.28	1.32	1.38	1.43	1.48	1.53	1.58
140°	1.13	1.18	1.22	1.27	1.32	1.37	1.42	1.48	1.54	1.58	1.65
160°	1.17	1.22	1.26	1.31	1.36	1.42	1.47	1.53	1.59	1.64	1.70
180°	1.21	1.26	1.30	1.36	1.41	1.46	1.52	1.58	1.64	1.70	1.75
200°	1.25	1.29	1.34	1.40	1.45	1.51	1.57	1.63	1.69	1.75	1.81
250°	1.34	1.39	1.45	1.50	1.56	1.62	1.68	1.74	1.82	1.88	1.94
300°	1.43	1.49	1.55	1.61	1.67	1.74	1.80	1.87	1.94	2.00	2.08
350°	1.53	1.59	1.65	1.72	1.78	1.85	1.92	2.00	2.07	2.14	2.22
400°	1.62	1.69	1.75	1.82	1.89	1.96	2.04	2.12	2.20	2.27	2.35
450°	1.72	1.79	1.86	1.93	2.00	2.08	2.16	2.24	2.33	2.41	2.50
500°	1.81	1.88	1.96	2.03	2.11	2.19	2.28	2.36	2.46	2.54	2.62
550°	1.91	1.98	2.06	2.14	2.22	2.30	2.40	2.49	2.58	2.68	2.77
600°	2.00	2.08	2.16	2.24	2.33	2.42	2.50	2.61	2.71	2.80	2.90
650°	2.10	2.18	2.26	2.35	2.44	2.54	2.63	2.74	2.84	2.94	3.04
700°	2.19	2.27	2.36	2.46	2.55	2.65	2.75	2.86	2.97	3.06	3.18
750°	2.28	2.37	2.47	2.56	2.66	2.76	2.87	2.98	3.10	3.19	3.31

Fan performance tables are developed using standard air which is 70°F., 29.92" barometric pressure and .075 lbs. per cubic foot. Density changes resulting from temperature or barometric pressure variations (such as high altitudes) must be corrected to standard conditions before selecting a fan based on standard performance data.

Temperature and/or altitude conversion factors are used in making corrections to standard conditions.

EXAMPLE:

Select a belt driven RBE to deliver 2661 CFM at 10" SP at 200°F., and 7000' altitude.

STEP 1. From the table, conversion factor is 1.63.

STEP 2. Correct static pressure is: $1.63 \times 10" SP = 16.3"$ SP at standard conditions.

STEP 3. Check RBE catalog for 2661 CFM at 16.3" SP. We select a belt driven RBE-11, Series 18 (on page 9) and interpolation gives 2912 RPM and 11.15 BHP.

STEP 4. Correct the BHP for the lighter air:
 $11.15 \div 1.63 = 6.84$ BHP. A 7.5 HP motor will suffice at 200° F., and 7000' but not at standard conditions. Special motor insulation may be required at altitudes above 3500'.

OPTIONAL ACCESSORIES



Shaft Seal

Teflon shaft seal good to 400°F. Ceramic fiber gasket material with steel cover plate above 400°F.



Outlet Damper

All dampers 1 or 2 blade. Opposed blade construction is standard.



Belt Guard

Belt guard standard on arrangements 9 and 9CB only. **Painted safety yellow.**



Inspection Door

Bolted scroll inspection door position as specified. Rubber gasket standard to 250°F. Ceramic fiber gasket standard at temperatures above 250°F. Quick-release inspection door also available.



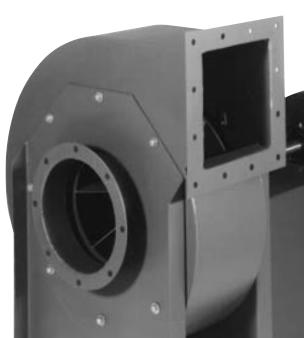
Drain Connection

3/4" pipe coupling welded to lowest point of housing. Not required on BH discharge position.



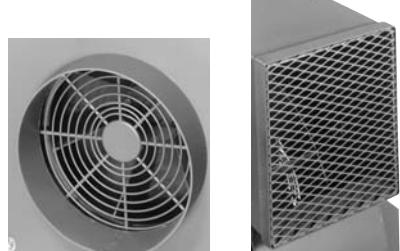
Shaft and/or Heat Slinger Guard

Guard available on arrangement 1, 9, 9CB and 10. Covers bearings and shaft between fan housing and belt guard. Bearings relubricatable through guard. **Painted safety yellow.**



Inlet & Outlet Flanges

Flanges on inlet and outlet available where installation requires tight duct connections. Standard hole pattern furnished. Outlet flange not available on some discharge positions. See page 27 for dimensions and limitations.



Inlet & Outlet Guards

OSHA type.



DANGER

All fans & blowers shown have rotating parts and pinch points. Severe personal injury can result if operated without guards. Stay away from rotating equipment unless it is disconnected from its power source.

Read operating instructions.



RBE - 7

BELT DRIVE RATING TABLES

Ratings at 70°F., .075 Density, Sea Level

WHEEL

Dia. - 12 1/4"

OUTLET O.D.

Size - 6 3/4" X 6 1/8"

Area - .265 Sq. Ft.

INLET O.D.

Size - 7"

Area - .26 Sq. Ft.

Series 18 = light face above Series 25

Series 25 = bold face below Series 18

NOTE: See pages 23, 25 or 26 for minimum motor frame sizes regardless of BHP.

SEE PAGE 22 FOR MAX. WHEEL RPM AND WR².

VOL. CFM	O.V. FPM	1" SP BHP		2" SP BHP		3" SP BHP		4" SP BHP		5" SP BHP		6" SP BHP		7" SP BHP		8" SP BHP		9" SP BHP		10" SP BHP	
		RPM	BHP	RPM	BHP																
450	1698	1292	.15	1660	.25	1970	.38	2233	.51	2471	.65	2700	.80	2910	.96	3106	1.12	3290	1.29	3465	1.46
500	1886	1344	.17	1698	.29	2001	.42	2263	.56	2495	.71	2707	.86	2918	1.03	3114	1.20	3298	1.38	3472	1.56
550	2075	1399	.20	1745	.33	2032	.47	2294	.62	2525	.77	2734	.93	2927	1.10	3122	1.28	3306	1.47	3480	1.66
600	2264	1455	.24	1792	.38	2069	.52	2325	.68	2555	.84	2764	1.01	2957	1.19	3136	1.36	3314	1.56	3488	1.76
650	2452	1514	.27	1840	.43	2115	.58	2356	.74	2586	.91	2795	1.09	2987	1.28	3166	1.47	3335	1.66	3496	1.86
700	2641	1576	.32	1893	.48	2162	.64	2395	.81	2617	.99	2825	1.18	3018	1.37	3196	1.57	3365	1.78	3524	1.98
750	2830	1642	.37	1947	.54	2209	.71	2442	.89	2649	1.07	2856	1.27	3048	1.47	3227	1.68	3395	1.90	3554	2.11
800	3018	1709	.43	2003	.60	2258	.79	2488	.98	2694	1.16	2888	1.36	3079	1.58	3257	1.80	3425	2.02	3584	2.25
850	3207	1777	.49	2059	.67	2310	.87	2536	1.07	2740	1.27	2927	1.47	3110	1.68	3288	1.91	3456	2.15	3615	2.38
900	3396	1846	.56	2118	.74	2365	.95	2584	1.16	2787	1.38	2973	1.59	3145	1.80	3320	2.03	3487	2.28	3645	2.53
950	3584	1915	.63	2178	.82	2420	1.05	2634	1.27	2835	1.49	3020	1.71	3191	1.94	3351	2.16	3518	2.42	3676	2.67
1000	3773	1986	.71	2242	.92	2475	1.15	2688	1.38	2883	1.61	3067	1.85	3237	2.08	3397	2.32	3549	2.56	3707	2.82
1050	3962	2057	.80	2308	1.02	2532	1.25	2742	1.50	2932	1.74	3114	1.99	3284	2.23	3443	2.48	3593	2.73	3739	2.98
1100	4150	2130	.90	2374	1.13	2591	1.36	2797	1.62	2986	1.88	3162	2.13	3331	2.39	3490	2.65	3639	2.91	3781	3.17
1150	4339	2204	1.00	2442	1.25	2650	1.48	2853	1.75	3040	2.02	3212	2.29	3379	2.56	3537	2.83	3686	3.10	3827	3.37
1200	4528	2278	1.12	2510	1.38	2714	1.62	2909	1.89	3094	2.17	3265	2.45	3427	2.73	3584	3.01	3733	3.29	3874	3.57
1250	4716	2353	1.24	2579	1.51	2779	1.77	2968	2.04	3150	2.33	3319	2.62	3477	2.91	3632	3.20	3780	3.50	3920	3.79
1300	4905	2429	1.38	2648	1.65	2845	1.92	3027	2.19	3206	2.49	3374	2.80	3531	3.10	3681	3.40	3828	3.71	3968	4.01
1350	5094	2505	1.52	2718	1.80	2912	2.09	3088	2.36	3262	2.67	3429	2.99	3585	3.30	3732	3.61	3876	3.93	4015	4.25
1400	5283	2581	1.67	2788	1.97	2979	2.27	3153	2.55	3321	2.85	3485	3.18	3640	3.51	3786	3.83	3924	4.16	4063	4.49
1450	5471	2658	1.84	2859	2.14	3047	2.45	3218	2.75	3380	3.05	3541	3.39	3695	3.73	3840	4.06	3978	4.40	4112	4.74
1500	5660	2735	2.01	2931	2.32	3115	2.65	3284	2.96	3440	3.25	3598	3.60	3750	3.95	3895	4.30	4032	4.65	4163	5.00
1550	5849	2812	2.20	3004	2.52	3184	2.85	3350	3.18	3505	3.49	3657	3.83	3806	4.19	3950	4.55	4086	4.91	4216	5.27
1600	6037	2890	2.39	3078	2.73	3254	3.07	3418	3.41	3570	3.73	3717	4.06	3863	4.44	4005	4.81	4141	5.18	4270	5.56
1650	6226	2968	2.60	3152	2.95	3324	3.30	3485	3.65	3636	3.99	3778	4.31	3922	4.69	4061	5.08	4196	5.47	4325	5.85
1700	6415	3047	2.82	3227	3.18	3394	3.54	3553	3.91	3702	4.26	3842	4.59	3981	4.96	4117	5.36	4251	5.76	4379	6.15
1750	6603	3125	3.05	3302	3.43	3465	3.79	3622	4.17	3769	4.54	3907	4.89	4041	5.24	4176	5.65	4307	6.06	4435	6.47
1800	6792	3204	3.30	3377	3.69	3536	4.06	3691	4.45	3836	4.83	3973	5.20	4103	5.55	4235	5.95	4364	6.38	4490	6.80
1850	6981	3283	3.55	3453	3.96	3608	4.34	3761	4.74	3904	5.14	4039	5.52	4168	5.88	4295	6.27	4422	6.70	4546	7.14

VOL. CFM	O.V. FPM	11" SP BHP		12" SP BHP		13" SP BHP		14" SP BHP		15" SP BHP		16" SP BHP		17" SP BHP		18" SP BHP		19" SP BHP		20" SP BHP	
		RPM	BHP																		
450	1698	3630	1.64	3789	1.82	3941	2.01	4086	2.20	4227	2.40	4364	2.60	4496	2.80	4624	3.01	4749	3.22	4871	3.43
500	1886	3638	1.75	3796	1.94	3948	2.14	4094	2.34	4235	2.54	4372	2.75	4504	2.96	4632	3.18	4757	3.40	4878	3.62
550	2075	3646	1.86	3804	2.06	3956	2.26	4102	2.47	4243	2.69	4379	2.90	4512	3.12	4640	3.35	4765	3.58	4886	3.81
600	2264	3654	1.96	3812	2.17	3964	2.39	4110	2.61	4251	2.83	4387	3.06	4519	3.29	4648	3.52	4772	3.76	4894	4.00
650	2452	3662	2.07	3820	2.29	3972	2.52	4118	2.74	4259	2.98	4395	3.21	4527	3.45	4655	3.70	4780	3.94	4902	4.19
700	2641	3676	2.19	3828	2.41	3980	2.65	4125	2.88	4267	3.12	4403	3.37	4535	3.62	4663	3.87	4788	4.13	4910	4.39
750	2830	3705	2.33	3850	2.55	3989	2.78	4133	3.02	4274	3.27	4411	3.53	4543	3.79	4671	4.05	4796	4.31	4917	4.58
800	3018	3736	2.48	3880	2.71	4019	2.94	4153	3.18	4282	3.42	4419	3.69	4551	3.95	4679	4.23	4804	4.50	4925	4.78
850	3207	3766	2.62	3910	2.87	4049	3.11	4183	3.36	4312	3.61	4436	3.86	4559	4.12	4687	4.40	4812	4.69	4933	4.98
900	3396	3796	2.78	3941	3.03	4079	3.29	4213	3.54	4342	3.81	4466	4.07	4587	4.34	4704	4.60	4819	4.88	4941	5.17
950	3584	3827	2.93	3971	3.20	4110	3.46	4243	3.73	4372	4.01	4496	4.28	4617	4.56	4734	4.83	4849	5.12	4960	5.40
1000	3773	3858	3.10	4002	3.37	4140	3.65	4273	3.93	4402	4.21	4527	4.49	4647	4.78	4765	5.07	4878	5.36	4990	5.66
1050	3962	3889	3.26	4033	3.55	4171	3.84	4304	4.13	4433	4.42	4557	4.71	4678	5.01	4795	5.31	4909	5.61		
1100	4150	3920	3.43	4064	3.73	4202	4.03	4335	4.33	4463	4.63	4588	4.94	4708	5.25	4825	5.56	4939	5.87		
1150	4339	3962	3.64	4096	3.92	4233	4.23	4366	4.54	4494	4.85	4618	5.17	4739	5.49	4856	5.81	4969	6.13		
1200	4528	4008	3.86																		



RBE - 9

BELT DRIVE RATING TABLES

Ratings at 70°F., .075 Density, Sea Level

WHEEL

Dia. - 15 3/4"

OUTLET O.D.

Size - 8 3/4" X 7 5/8"
Area - .435 Sq. Ft.

INLET O.D.

Size - 9"
Area - .44 Sq. Ft.Series 18 = light face above Series 25
Series 25 = bold face below Series 18

NOTE: See pages 23, 25 or 26 for minimum motor frame sizes regardless of BHP.

SEE PAGE 22 FOR MAX. WHEEL RPM AND WR².

VOL. CFM	O.V. FPM	2" SP		4" SP		6" SP		8" SP		10" SP		12" SP		13" SP		14" SP		15" SP		16" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
400	919	1210	.24	1699	.56	2074	.92														
500	1149	1221	.28	1707	.63	2082	1.04	2398	1.48	2677	1.95										
600	1379	1249	.34	1714	.71	2089	1.15	2405	1.63	2684	2.14	2936	2.69	3054	2.97	3168	3.26	3277	3.55		
700	1609	1278	.39	1725	.80	2097	1.27	2413	1.78	2691	2.33	2944	2.92	3062	3.22	3175	3.52	3285	3.84	3391	4.16
800	1839	1310	.46	1753	.90	2104	1.39	2420	1.94	2699	2.53	2951	3.15	3069	3.47	3183	3.79	3292	4.12	3398	4.46
900	2068	1353	.54	1782	1.01	2124	1.53	2428	2.10	2706	2.72	2958	3.38	3076	3.72	3190	4.06	3300	4.41	3406	4.77
1000	2298	1397	.63	1811	1.13	2153	1.69	2442	2.27	2714	2.92	2966	3.61	3084	3.97	3197	4.33	3307	4.70	3413	5.08
1100	2528	1443	.73	1840	1.25	2181	1.85	2470	2.48	2725	3.13	2973	3.85	3091	4.23	3205	4.61	3314	5.00	3421	5.39
1200	2758	1494	.84	1882	1.40	2210	2.02	2499	2.69	2753	3.39	2984	4.10	3099	4.48	3212	4.89	3322	5.29	3428	5.71
1300	2988	1546	.96	1925	1.57	2239	2.21	2527	2.92	2782	3.65	3012	4.41	3120	4.79	3224	5.18	3329	5.59	3435	6.02
1400	3218	1599	1.10	1970	1.75	2274	2.41	2556	3.15	2810	3.93	3040	4.72	3148	5.13	3252	5.54	3352	5.95	3449	6.37
1500	3448	1654	1.25	2015	1.95	2318	2.65	2586	3.39	2839	4.21	3069	5.05	3177	5.48	3280	5.91	3381	6.34	3477	6.78
1600	3678	1712	1.42	2063	2.16	2362	2.91	2619	3.66	2868	4.51	3098	5.39	3205	5.83	3309	6.29	3409	6.74	3506	7.20
1700	3908	1773	1.62	2114	2.39	2406	3.18	2662	3.98	2898	4.81	3127	5.74	3234	6.21	3338	6.68	3438	7.15	3534	7.63
1800	4137	1835	1.83	2166	2.63	2451	3.47	2706	4.31	2933	5.16	3156	6.10	3263	6.59	3367	7.08	3466	7.58	3563	8.08
1900	4367	1899	2.07	2218	2.89	2497	3.77	2750	4.67	2976	5.56	3185	6.47	3292	6.98	3396	7.50	3495	8.01	3592	8.54
2000	4597	1963	2.32	2272	3.17	2548	4.10	2795	5.04	3020	5.98	3225	6.91	3322	7.39	3425	7.92	3525	8.46	3621	9.01
2100	4827	2028	2.59	2327	3.47	2599	4.45	2840	5.42	3064	6.41	3268	7.40	3365	7.89	3458	8.38	3554	8.93	3650	9.49
2200	5057	2093	2.89	2383	3.79	2650	4.81	2886	5.83	3109	6.87	3312	7.90	3408	8.42	3501	8.93	3590	9.45	3680	9.99
2300	5287	2159	3.20	2443	4.16	2703	5.20	2937	6.27	3154	7.35	3356	8.43	3452	8.97	3544	9.51	3633	10.05	3720	10.59
2400	5517	2226	3.55	2505	4.56	2756	5.61	2988	6.73	3199	7.84	3401	8.97	3496	9.54	3588	10.10	3677	10.66	3763	11.23
2500	5747	2294	3.92	2567	4.98	2810	6.05	3039	7.21	3247	8.37	3446	9.54	3541	10.13	3632	10.72	3721	11.30	3807	11.89
2600	5977	2363	4.32	2630	5.43	2866	6.50	3092	7.72	3298	8.92	3491	10.13	3586	10.75	3677	11.36	3765	11.97	3851	12.58
2700	6206	2433	4.75	2694	5.91	2922	6.98	3144	8.25	3349	9.50	3538	10.75	3631	11.39	3722	12.02	3810	12.66	3895	13.29
2800	6436	2503	5.21	2758	6.41	2982	7.54	3197	8.80	3401	10.11	3588	11.41	3677	12.05	3767	12.71	3855	13.37	3940	14.03
2900	6666	2573	5.70	2822	6.94	3044	8.13	3252	9.39	3453	10.74	3639	12.09	3728	12.76	3813	13.43	3900	14.11	3985	14.79
3000	6896	2644	6.22	2887	7.50	3106	8.75	3308	10.00	3505	11.40	3691	12.80	3779	13.49	3864	14.19	3946	14.88	4030	15.58

VOL. CFM	O.V. FPM	17" SP		18" SP		19" SP		20" SP		21" SP		22" SP		23" SP		24" SP		25" SP		26" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP		
700	1609	3493	4.48	3594	4.82	3690	5.16	3785	5.50												
800	1839	3501	4.81	3601	5.16	3698	5.52	3792	5.88	3885	6.25	3975	6.62	4063	7.00	4149	7.38	4233	7.77	4316	8.16
900	2068	3508	5.13	3608	5.50	3705	5.88	3800	6.26	3892	6.64	3982	7.04	4070	7.43	4156	7.83	4241	8.24	4323	8.65
1000	2298	3516	5.46	3616	5.85	3713	6.24	3807	6.64	3899	7.05	3989	7.46	4077	7.87	4164	8.29	4248	8.72	4331	9.15
1100	2528	3523	5.79	3623	6.20	3720	6.61	3815	7.03	3907	7.45	3997	7.88	4085	8.31	4171	8.75	4255	9.20	4338	9.64
1200	2758	3531	6.13	3630	6.55	3728	6.98	3822	7.42	3914	7.86	4004	8.31	4092	8.76	4178	9.22	4263	9.68	4345	10.14
1300	2988	3538	6.46	3638	6.91	3735	7.35	3829	7.81	3922	8.27	4012	8.74	4099	9.21	4186	9.68	4270	10.16	4353	10.65
1400	3218	3546	6.80	3645	7.26	3742	7.73	3837	8.21	3929	8.68	4019	9.17	4107	9.66	4193	10.15	4277	10.65	4360	11.16
1500	3448	3572	7.22	3663	7.67	3752	8.12	3844	8.60	3937	9.10	4026	9.60	4114	10.11	4200	10.63	4285	11.14	4367	11.67
1600	3678	3600	7.66	3691	8.13	3780	8.60	3866	9.08	3951	9.56	4034	10.04	4122	10.57	4208	11.10	4292	11.64	4375	12.18
1700	3908	3628	8.12	3719	8.61	3808	9.10	3894	9.59	3979	10.09	4061	10.60	4142	11.10	4221	11.61	4300	12.14	4382	12.70
1800	4137	3657	8.58	3748	9.09	3836	9.61	3923	10.12	4007	10.64	4089	11.17	4170	11.69	4249	12.22	4326	12.76		
1900	4367	3685	9.06	3776	9.59	3865	10.13	3951	10.67	4035	11.21	4118	11.75	4198	12.30	4277	12.85	4354	13.40		
2000	4597	3715	9.56	3805	10.11	3894	10.66	3980	11.22	4064	11.78	4146	12.35	4227	12.92	4305	13.49	4382	14.06		
2100	4827	3744	10.06 </																		



RBE - 11 BELT DRIVE RATING TABLES

Ratings at 70°F, .075 Density, Sea Level

WHEEL

Dia. - 19 1/8"

OUTLET O.D.

Size - 10 3/4" X 9 3/8"

Area - .66 Sq. Ft.

INLET O.D.

Size - 11"

Area - .66 Sq. Ft.

Series 18 = light face above Series 25

Series 25 = bold face

Series 32 = italic face below Series 25

NOTE: See pages 23, 25 or 26 for minimum motor frame sizes regardless of BHP.

SEE PAGE 22 FOR MAX. WHEEL RPM AND WR².

VOL. CFM	O.V. FPM	2" SP RPM BHP		4" SP RPM BHP		6" SP RPM BHP		8" SP RPM BHP		10" SP RPM BHP		12" SP RPM BHP		14" SP RPM BHP		16" SP RPM BHP		18" SP RPM BHP		20" SP RPM BHP		
700	1060	992	.36	1384	.81																	
850	1287	1013	.44	1394	.91	1694	1.47															
1000	1515	1036	.52	1404	1.03	1704	1.64	1958	2.29													
1150	1742	1067	.61	1425	1.18	1715	1.80	1968	2.51	2191	3.26											
1300	1969	1099	.71	1446	1.34	1730	2.00	1978	2.73	2201	3.54	2403	4.37	2588	5.25							
1450	2196	1134	.83	1472	1.51	1751	2.23	1990	2.98	2211	3.81	2413	4.70	2598	5.63	2771	6.59					
1600	2424	1170	.97	1504	1.70	1772	2.47	2011	3.28	2222	4.11	2423	5.04	2608	6.02	2781	7.02	2943	8.06	3097	9.13	
1750	2651	1208	1.12	1535	1.90	1798	2.73	2033	3.59	2243	4.48	2434	5.39	2619	6.41	2791	7.47	2953	8.56	3107	9.67	
1900	2878	1251	1.29	1567	2.11	1829	3.00	2054	3.92	2265	4.87	2455	5.84	2630	6.83	2801	7.92	2963	9.06	3117	10.23	
2050	3106	1298	1.50	1603	2.36	1860	3.29	2082	4.27	2286	5.27	2476	6.30	2651	7.35	2815	8.41	2974	9.57	3127	10.79	
2200	3333	1345	1.72	1640	2.62	1892	3.60	2113	4.64	2309	5.69	2498	6.78	2673	7.89	2836	9.02	2989	10.15	3137	11.35	
2350	3560	1393	1.97	1677	2.90	1925	3.93	2145	5.03	2340	6.14	2519	7.27	2694	8.45	2857	9.63	3010	10.83	3155	12.05	
2500	3787	1443	2.25	1715	3.21	1961	4.30	2176	5.43	2371	6.61	2548	7.80	2715	9.02	2878	10.27	3031	11.53	3176	12.81	
2650	4015	1494	2.55	1758	3.56	1997	4.69	2208	5.86	2403	7.10	2579	8.35	2742	9.62	2900	10.92	3053	12.24	3197	13.58	
2800	4242	1546	2.88	1804	3.96	2034	5.11	2243	6.33	2434	7.61	2610	8.93	2773	10.26	2924	11.60	3074	12.98	3219	14.38	
2950	4469	1598	3.24	1851	4.38	2072	5.55	2279	6.84	2466	8.14	2642	9.52	2804	10.91	2955	12.32	3098	13.73	3240	15.19	
3100	4696	1651	3.63	1899	4.84	2110	6.01	2316	7.37	2501	8.72	2674	10.14	2835	11.60	2986	13.06	3129	14.54	3263	16.03	
3250	4924	1705	4.05	1947	5.33	2155	6.56	2353	7.93	2537	9.35	2706	10.79	2867	12.30	3018	13.83	3160	15.37	3294	16.92	
3400	5151	1759	4.50	1995	5.85	2201	7.15	2391	8.52	2573	10.00	2740	11.49	2899	13.04	3049	14.63	3191	16.23	3325	17.84	
3550	5378	1815	5.01	2045	6.41	2247	7.78	2429	9.13	2610	10.69	2776	12.24	2931	13.80	3081	15.45	3222	17.11	3356	18.79	
3700	5606	1872	5.55	2096	7.01	2295	8.44	2472	9.83	2648	11.40	2813	13.02	2966	14.63	3113	16.30	3254	18.03	3388	19.77	
3850	5833	1929	6.13	2148	7.65	2342	9.15	2518	10.61	2685	12.15	2850	13.83	3003	15.51	3146	17.19	3286	18.97	3419	20.77	
4000	6060	1986	6.75	2200	8.33	2390	9.89	2564	11.42	2723	12.92	2887	14.68	3039	16.43	3182	18.17	3318	19.95	3451	21.81	
4150	6287	2044	7.41	2252	9.05	2439	10.68	2611	12.27	2767	13.83	2924	15.56	3076	17.38	3218	19.19	3353	21.00	3483	22.88	
4300	6515	2103	8.12	2305	9.81	2489	11.51	2658	13.17	2814	14.79	2962	16.48	3113	18.36	3255	20.24	3389	22.12	3516	23.99	
4450	6742	2161	8.87	2359	10.62	2540	12.38	2706	14.11	2860	15.81	3002	17.46	3151	19.38	3292	21.33	3425	23.27	3552	25.21	
4600	6969	2220	9.68	2412	11.47	2591	13.31	2754	15.10	2907	16.86	3048	18.59	3188	20.44	3329	22.46	3462	24.47	3588	26.48	

VOL. CFM	O.V. FPM	22" SP RPM BHP		24" SP RPM BHP		25" SP RPM BHP		26" SP RPM BHP		27" SP RPM BHP		28" SP RPM BHP		29" SP RPM BHP		30" SP RPM BHP		31" SP RPM BHP		32" SP RPM BHP			
1700	2575	3249	10.62	3389	11.77			3463	12.80	3529	13.41	3594	14.03			3601	14.52	3665	15.15	3727	15.79	3789	16.44
1800	2727	3256	11.02	3396	12.20			3402	12.64	3536	13.88	3601	14.52			3611	15.01	3671	15.66	3734	16.32	3795	16.99
1900	2878	3263	11.42	3402	12.64			3470	13.26	3536	13.88	3608	15.01			3614	15.50	3685	16.17	3741	16.85	3802	17.53
2000	3030	3270	11.83	3409	13.08			3476	13.72	3543	14.36	3628	16.50			3621	16.00	3685	16.69	3747	17.38	3809	18.08
2100	3181	3276	12.24	3416	13.53			3483	14.18	3549	14.84	3634	15.50			3622	16.00	3689	16.79	3754	17.92	3816	18.64
2200	3333	3283	12.65	3422	13.97			3490	14.64	3556	15.32	3634	17.01			3628	16.50	3691	17.21	3754	17.92	3816	18.64
2300	3484	3290	13.07	3429	14.42			3497	15.11	3563	15.81	3634	17.01			3634	17.01	3698	17.73	3761	18.46	3822	19.19
2400	3636	3300	13.54	3436	14.88			3503	15.58	3569	16.29	3641	17.52			3641	17.52	3705	18.26	3768	19.01	3829	19.76
2500	3787	3314	14.09	3446	15.39			3510	16.06	3576	16.79	3648	18.03			3648	18.03	3712	18.79	3774	19.55	3836	20.32
2600	3939	3328	14.65	3460	15.99			3523	16.67	3586	17.34	3661	18.69			3661	18.69	3722	19.40	3781	20.10	3842	20.89
2700	4090	3342	15.21	3474	16.60			3538	17.29	3600	17.99	3676	20.09			3676	20.09	3795	20.82	3853	21.55	3910	22.28
2800	4242	3356	15.79	3488	17.21			3552	17.93	3614	18.65	3685	21.24			3685	21.24	3746	22.89	3807	23.72	3866	24.55
2900	4393	3371	16.37	3502	17.84			3566	18.57	3628	19.31	3704	20.75			3694	21.51	3764	21.51	3823	22.28	3881	23.05
3000	4545	3385	16.96	3516	18.47			3580	19.22	3642	19.98	3718	21.45			3695	21.51	3778</b					



RBE - 13 BELT DRIVE RATING TABLES

Ratings at 70°F., .075 Density, Sea Level

WHEEL

Dia. - 22 $\frac{5}{8}$ "

OUTLET O.D.

Size - 12 $\frac{3}{4}$ " X 11"

Area - .93 Sq. Ft.

INLET O.D.

Size - 13"

Area - .92 Sq. Ft.

Series 18 = light face above Series 25

Series 25 = bold face

Series 32 = italic face below Series 25

NOTE: See pages 23, 25 or 26 for minimum motor frame sizes regardless of BHP.

SEE PAGE 22 FOR MAX. WHEEL RPM AND WR².

VOL. CFM	O.V. FPM	2" SP		4" SP		6" SP		8" SP		10" SP		12" SP		13" SP		14" SP		15" SP		16" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
900	967	833	.50																		
1100	1182	847	.59	1173	1.25																
1300	1397	865	.68	1179	1.45	1435	2.23														
1500	1612	888	.79	1193	1.62	1441	2.53	1657	3.43												
1700	1827	914	.92	1211	1.79	1449	2.82	1663	3.83	1854	4.85	2026	5.89								
1900	2043	940	1.06	1229	1.97	1467	3.06	1668	4.23	1859	5.35	2032	6.48	2112	7.06	2190	7.64	2265	8.23		
2100	2258	969	1.23	1253	2.20	1485	3.31	1686	4.55	1865	5.85	2037	7.09	2118	7.71	2196	8.34	2271	8.97	2343	9.61
2300	2473	999	1.41	1279	2.45	1503	3.57	1704	4.89	1880	6.27	2043	7.69	2123	8.37	2201	9.04	2276	9.72	2349	10.41
2500	2688	1029	1.61	1304	2.73	1526	3.91	1722	5.23	1898	6.68	2058	8.19	2133	8.97	2207	9.75	2282	10.48	2354	11.21
2700	2903	1065	1.86	1331	3.02	1551	4.28	1740	5.58	1916	7.10	2076	8.68	2151	9.50	2223	10.32	2293	11.17	2360	12.02
2900	3118	1103	2.14	1360	3.35	1577	4.67	1764	6.05	1934	7.54	2094	9.19	2169	10.03	2241	10.89	2310	11.77	2378	12.66
3100	3333	1141	2.45	1389	3.71	1603	5.09	1789	6.54	1954	8.03	2112	9.70	2187	10.58	2259	11.48	2328	12.39	2395	13.31
3300	3548	1180	2.78	1419	4.09	1629	5.53	1814	7.06	1979	8.63	2130	10.24	2205	11.15	2277	12.08	2346	13.02	2413	13.98
3500	3763	1220	3.15	1450	4.49	1658	6.02	1840	7.61	2005	9.26	2154	10.92	2224	11.76	2295	12.70	2364	13.67	2431	14.66
3700	3978	1261	3.55	1485	4.96	1687	6.55	1866	8.18	2030	9.91	2179	11.66	2249	12.54	2316	13.43	2382	14.34	2450	15.37
3900	4193	1303	3.99	1522	5.49	1717	7.10	1894	8.80	2056	10.59	2204	12.42	2274	13.34	2341	14.27	2407	15.21	2470	16.14
4100	4408	1345	4.46	1560	6.05	1747	7.68	1923	9.47	2082	11.30	2230	13.21	2299	14.18	2367	15.15	2432	16.12	2494	17.10
4300	4623	1388	4.97	1598	6.66	1778	8.29	1953	10.18	2109	12.05	2255	14.03	2325	15.04	2392	16.05	2457	17.07	2519	18.09
4500	4838	1431	5.53	1636	7.30	1813	9.00	1982	10.92	2138	12.88	2281	14.89	2351	15.94	2418	16.99	2482	18.05	2545	19.11
4700	5053	1474	6.12	1675	7.98	1850	9.78	2012	11.69	2167	13.74	2308	15.79	2377	16.86	2443	17.96	2508	19.06	2570	20.16
4900	5268	1519	6.77	1715	8.72	1887	10.60	2043	12.49	2197	14.64	2337	16.78	2404	17.85	2469	18.96	2534	20.10	2596	21.25
5100	5483	1565	7.47	1756	9.50	1925	11.47	2075	13.37	2227	15.58	2367	17.81	2433	18.92	2497	20.03	2560	21.18	2622	22.37
5300	5698	1610	8.22	1798	10.33	1963	12.38	2112	14.38	2257	16.56	2396	18.88	2462	20.04	2526	21.19	2587	22.35	2648	23.53
5500	5913	1656	9.03	1839	11.21	2002	13.35	2150	15.44	2287	17.57	2426	19.99	2492	21.19	2555	22.39	2617	23.59	2676	24.79
5700	6129	1703	9.88	1882	12.14	2041	14.37	2187	16.55	2320	18.68	2456	21.14	2522	22.39	2585	23.63	2646	24.88	2705	26.12
5900	6344	1750	10.79	1924	13.13	2080	15.44	2225	17.72	2357	19.94	2487	22.33	2552	23.63	2614	24.92	2675	26.21	2735	27.50
6100	6559	1797	11.76	1967	14.17	2121	16.58	2263	18.94	2394	21.25	2517	23.57	2582	24.91	2644	26.25	2705	27.59	2764	28.92
6300	6774	1844	12.79	2010	15.27	2162	17.77	2302	20.22	2432	22.62	2552	24.97	2612	26.24	2675	27.63	2735	29.01	2794	30.39
6500	6989	1891	13.88	2053	16.43	2204	19.03	2341	21.56	2469	24.05	2589	26.49	2645	27.70	2705	29.06	2765	30.48	2824	31.91

VOL. CFM	O.V. FPM	17" SP		18" SP		19" SP		20" SP		21" SP		22" SP		23" SP		24" SP		25" SP		26" SP	
		RPM	BHP																		
2150	2311	2415	10.46	2483	11.12	2550	11.78	2619	13.19	2682	13.90	2743	14.61	2808	16.17	2867	16.92	2924	17.68		
2300	2473	2419	11.10	2487	11.79	2554	12.49	2623	13.94	2686	14.68	2747	15.42	2812	17.03	2871	17.82	2928	18.61	2985	19.41
2450	2634	2423	11.74	2492	12.46	2558	13.20	2627	14.69	2690	15.46	2752	16.24								
2600	2795	2427	12.38	2496	13.14																
2750	2956	2432	13.03	2500	13.83	2566	14.63	2631	15.44	2694	16.25	2756	17.07	2816	17.89	2875	18.72	2933	19.54	2989	20.37
2900	3118	2443	13.56	2506	14.47	2570	15.36	2635	16.20	2698	17.05	2760	17.90	2820	18.76	2879	19.62	2937	20.48	2993	21.35
3050	3279	2456	14.07	2520	15.01	2581	15.96	2641	16.93	2702	17.85	2764	18.74	2824	19.63	2883	20.53	2941	21.43	2997	22.33
3200	3440	2470	14.59	2533	15.56	2595	16.53	2655	17.52	2713	18.52	2770	19.53	2828	20.51	2887	21.44	2945	22.37	3002	23.31
3350	3602	2483	15.12			2546	16.11	2608	17.11	2668	18.13	2726	19.15	2784	20.19	2839	21.23	2894	22.29	2949	23.33
3500	3763	2496	15.66			2560	16.68	2621	17.70	2681	18.74	2740	19.79	2797	20.85	2853	21.92	2907	23.01	2961	24.10
3650	3924	2510	16.21			2573	17.25	2635	18.30	2695	19.37	2753	20.44	2810	21.53	2866	22.62	2921	23.73	2974	24.85
3800	4086	2524	16.78			2587	17.84	2648	18.92	2708	20.00	2767	21.10	2824	22.21	2879	23.33	2934	24.47	2988	25.61
3950	4247	2537	17.35			2600	18.44	2662	19.54	2722	20.65	2780	21.78	2837	22.91	2893	24.06	2947	25.21	3001	26.38
4100	4408	2555	18.08			2615	19.07	2675	21.31	2794	22.46	2851	23.62	2906	24.79	2961	25.97	3014	27.17	3067	28.37
4250	4569	2574	18.85			2633	19.87	2691	20.89	2749	21.98	2807	23.16	2864	24.34	2920	25.54	2974	26.75	3028	27.96
4400	4731	2593	19.64			2652	20.69	2710	21.74	2766	22.80	2821	23.86	2878	25.08	2934	26.30	2988	27.53	3041	28.77
4550	4892	2612	20.44			2671	21.52	27													



RBE - 13 BELT DRIVE RATING TABLES

Ratings at 70°F., .075 Density, Sea Level

WHEEL

Dia. - 22 5/8"

OUTLET O.D.

Size - 12 3/4" X 11"

Area - .93 Sq. Ft.

INLET O.D.

Size - 13"

Area - .92 Sq. Ft.

Series 25 = bold face

Series 32 = italic face below Series 25

Series 40 = tinted ratings below Series 32

(Continued from page 10)

SEE PAGE 22 FOR MAX. WHEEL RPM AND WR².

VOL. CFM	O.V. FPM	22" SP RPM BHP	23" SP RPM BHP	24" SP RPM BHP	25" SP RPM BHP	26" SP RPM BHP	27" SP RPM BHP	28" SP RPM BHP	29" SP RPM BHP	30" SP RPM BHP	31" SP RPM BHP
2450	2634	2747 15.42	2808 16.17	2867 16.92	2924 17.68						
2600	2795	2752 16.24	2812 17.03	2871 17.82	2928 18.61	2985 19.41	3041 20.20	3095 21.01	3148 21.81	3205 23.73	3257 24.58
2750	2956	2756 17.07	2816 17.89	2875 18.72	2933 19.54	2989 20.37	3045 21.21	3099 22.05	3153 22.89	3218 27.10	3269 28.05
2900	3118	2760 17.90	2820 18.76	2879 19.62	2937 20.48	2993 21.35	3049 22.22	3103 23.09	3157 23.97	3209 24.85	3261 25.73
3050	3279	2764 18.74	2824 19.63	2883 20.53	2941 21.43	2997 22.33	3053 23.23	3107 24.14	3161 25.06	3214 25.97	3265 26.89
3200	3440	2770 19.53	2828 20.51	2887 21.44	2945 22.37	3002 23.31	3057 24.25	3111 25.20	3165 26.15	3218 27.10	3269 28.05
3350	3602	2784 20.19	2839 21.23	2894 22.29	2949 23.33	3006 24.30	3061 25.28	3116 26.26	3169 27.25	3222 28.23	3273 29.22
3500	3763	2797 20.85	2853 21.92	2907 23.01	2961 24.10	3014 25.20	3065 26.31	3120 27.33	3173 28.35	3226 29.37	3278 30.40
3650	3924	2810 21.53	2866 22.62	2921 23.73	2974 24.85	3027 25.98	3078 27.12	3129 28.26	3179 29.42	3230 30.52	3282 31.58
3800	4086	2824 22.21	2879 23.33	2934 24.47	2988 25.61	3040 26.76	3092 27.93	3142 29.10	3192 30.28	3241 31.48	3289 32.68
3950	4247	2837 22.91	2893 24.06	2947 25.21	3001 26.38	3053 27.56	3105 28.75	3155 29.95	3205 31.15	3254 32.37	3302 33.60
4100	4408	2851 23.62	2906 24.79	2961 25.97	3014 27.17	3067 28.37	3118 29.58	3169 30.81	3218 32.04	3267 33.28	3315 34.53
4250	4569	2864 24.34	2920 25.54	2974 26.75	3028 27.96	3080 29.19	3132 30.43	3182 31.68	3232 32.94	3281 34.20	3329 35.48
4400	4731	2878 25.08	2934 26.30	2988 27.53	3041 28.77	3094 30.03	3145 31.29	3196 32.56	3245 33.85	3294 35.14	3342 36.44
4550	4892	2893 25.88	2947 27.07	3002 28.33	3055 29.60	3107 30.87	3159 32.16	3209 33.46	3259 34.77	3307 36.08	3355 37.41
4700	5053	2912 26.86	2964 27.99	3015 29.14	3069 30.43	3121 31.73	3172 33.05	3223 34.37	3272 35.70	3321 37.05	3369 38.40
4850	5215	2930 27.85	2983 29.01	3034 30.18	3084 31.35	3135 32.61	3186 33.95	3236 35.29	3286 36.65	3334 38.02	3382 39.40
5000	5376	2949 28.87	3001 30.06	3052 31.26		3102 32.46	3152 33.66	3200 34.87	3250 36.23	3299 37.62	3348 39.01
5150	5537	2968 29.91	3020 31.13	3071 32.36		3121 33.59	3170 34.82	3218 36.06	3266 37.30	3313 38.59	3362 40.01
5300	5698	2987 30.97	3039 32.22		3090 33.48	3140 34.74	3189 36.00	3237 37.27	3284 38.54	3331 39.82	3377 41.10
5450	5860	3006 32.05		3058 33.34	3109 34.63	3159 35.92	3208 37.21	3256 38.51	3303 39.81	3350 41.11	3395 42.42
5600	6021		3025 33.16	3077 34.47	3128 35.79	3178 37.11	3227 38.44	3275 39.77	3322 41.10	3368 42.44	3414 43.77
5750	6182		3045 34.29	3096 35.63	3147 36.98	3197 38.34	3246 39.69	3294 41.05	3341 42.41	3387 43.78	3433 45.15
5900	6344		3064 35.44	3116 36.82	3166 38.20	3216 39.58	3265 40.97	3313 42.36	3360 43.75	3406 45.15	3451 46.55
6050	6505	3083 36.61	3135 38.02	3186 39.44	3235 40.85	3284 42.27	3332 43.69	3379 45.12	3425 46.54	3470 47.97	3515 49.41
6200	6666	3103 37.81	3155 39.25	3205 40.70	3255 42.15	3303 43.60	3351 45.05	3398 46.50	3444 47.96	3489 49.43	3534 50.89
6350	6827	3124 39.08	3174 40.51	3225 41.99	3274 43.46	3323 44.95	3370 46.43	3417 47.92	3463 49.41	3509 50.90	3553 52.40
6500	6989	3145 40.43	3195 41.84	3244 43.30	3294 44.81	3342 46.32	3390 47.84	3436 49.36	3483 50.88	3528 52.40	3572 53.93

VOL. CFM	O.V. FPM	32" SP RPM BHP	33" SP RPM BHP	34" SP RPM BHP	35" SP RPM BHP	36" SP RPM BHP	37" SP RPM BHP	38" SP RPM BHP	39" SP RPM BHP	40" SP RPM BHP	41" SP RPM BHP
2750	2956	3308 25.43									
2900	3118	3312 26.62	3362 27.51	3412 28.40	3460 29.30	3508 30.20	3560 32.47	3606 33.41	3652 34.35	3698 35.30	
3050	3279	3316 27.81	3366 28.74	3416 29.67	3464 30.60	3512 31.53	3564 33.85	3610 34.82	3656 35.80	3702 36.78	3747 37.77
3200	3440	3320 29.01	3370 29.97	3420 30.94	3468 31.90	3516 32.87					
3350	3602	3324 30.22	3375 31.21	3424 32.21	3472 33.21	3520 34.22	3568 35.23	3614 36.24	3660 37.25	3706 38.27	3751 39.29
3500	3763	3329 31.43	3379 32.46	3428 33.49	3477 34.53	3525 35.57	3572 36.62	3618 37.66	3665 38.71	3710 39.77	3755 40.82
3650	3924	3333 32.64	3383 33.71	3432 34.78	3481 35.86	3529 36.93	3576 38.01	3623 39.10	3669 40.18	3714 41.27	3759 42.36
3800	4086	3337 33.86	3387 34.97	3436 36.08	3485 37.19	3533 38.30	3580 39.41	3627 40.53	3673 41.65	3718 42.78	3763 43.90
3950	4247	3349 34.84	3396 36.08	3442 37.34	3489 38.52	3537 39.67	3584 40.82	3631 41.98	3677 43.13	3722 44.29	3767 45.46
4100	4408		3409 37.06	3455 38.34	3500 39.63	3544 40.93	3588 42.24	3635 43.43	3681 44.62	3727 45.81	3771 47.01
4250	4569		3426 36.76	3468 39.36	3513 40.68	3558 42.00	3602 43.33	3645 44.67	3688 46.02	3731 47.34	3776 48.58
4400	4731		3438 37.75	3481 40.40	3526 41.74	3571 43.08	3615 44.44	3658 45.80	3701 47.18	3743 48.56	3785 49.95
4550	4892	3402 38.75	3449 40.09	3495 41.45	3540 42.81	3584 44.18	3628 45.56	3671 46.95	3714 48.35	3756 49.75	3798 51.17
4700	5053		3416 41.13	3508 42.51	3553 43.89	3598 45.29	3641 46.69	3685 48.11	3727 49.53	3770 50.96	
4850	5215	3429 40.78	3476 42.18	3522 43.58	3567 44.99	3611 46.42	3655 47.85	3698 49.28	3741 50.73	3783 52.19	
5000	5376	3443 41.82	3489 43.24	3535 44.67	3580 46.11	3625 47.55	3668 49.01	3712 50.47	3754 51.94	3796 53.42	
5150	5537	3457 42.87	3503 44.32	3549 45.77	3594 47.24	3638 48.71	3682 50.19	3725 51.68	3768 53.17		
5300	5698	3470 43.94	3517 45.41	3562 46.89	3607 48.38	3652 49.88	3695 51.38	3738 52.90	3781 54.42		
5450	5860	3484 45.05	<								



RBE - 15 BELT DRIVE RATING TABLES

Ratings at 70°F., .075 Density, Sea Level

WHEEL

Dia. - 26 1/8"

OUTLET O.D.

Size - 14 1/8" X 12 3/4"

Area - 1.24 Sq. Ft.

INLET O.D.

Size - 15"

Area - 1.27 Sq. Ft.

Series 18 = light face above Series 25

Series 25 = bold face

Series 32 = italic face below Series 25

NOTE: See pages 23, 25 or 26 for minimum motor frame sizes regardless of BHP.

SEE PAGE 22 FOR MAX. WHEEL RPM AND WR².

VOL. CFM	O.V. FPM	2" SP RPM BHP	4" SP RPM BHP	6" SP RPM BHP	8" SP RPM BHP	10" SP RPM BHP	12" SP RPM BHP	13" SP RPM BHP	14" SP RPM BHP	15" SP RPM BHP	16" SP RPM BHP
1600	1290	742 .81	1030 1.70								
1850	1491	757 .95	1035 1.90								
2100	1693	774 1.10	1042 2.13	1265 3.29							
2350	1895	796 1.29	1055 2.39	1269 3.60	1459 4.95						
2600	2096	819 1.49	1069 2.67	1278 3.95	1463 5.35	1630 6.87					
2850	2298	842 1.72	1084 2.95	1290 4.35	1469 5.77	1635 7.37	1786 9.03	1857 9.88			
3100	2500	869 1.97	1106 3.31	1305 4.76	1480 6.29	1640 7.87	1791 9.63	1862 10.53	1930 11.44	1995 12.37	
3350	2701	896 2.26	1128 3.69	1319 5.18	1493 6.82	1649 8.49	1796 10.24	1866 11.18	1934 12.14	2000 13.11	2063 14.09
3600	2903	925 2.57	1151 4.09	1337 5.65	1508 7.37	1661 9.15	1804 10.94	1871 11.85	1939 12.85	2005 13.86	2068 14.89
3850	3104	953 2.91	1174 4.52	1359 6.19	1522 7.93	1675 9.82	1815 11.73	1882 12.69	1947 13.65	2010 14.62	2073 15.70
4100	3306	983 3.28	1198 4.98	1382 6.77	1539 8.53	1690 10.51	1828 12.53	1893 13.55	1957 14.57	2020 15.59	2080 16.61
4350	3508	1014 3.70	1225 5.50	1404 7.37	1561 9.25	1705 11.22	1843 13.34	1908 14.42	1970 15.49	2031 16.58	2091 17.66
4600	3709	1046 4.16	1252 6.06	1427 8.01	1583 10.00	1722 11.98	1858 14.18	1922 15.31	1985 16.44	2045 17.57	2103 18.72
4850	3911	1079 4.66	1280 6.66	1451 8.68	1606 10.78	1744 12.88	1873 15.04	1937 16.22	1999 17.40	2060 18.59	2118 19.79
5100	4112	1112 5.20	1309 7.29	1475 9.39	1629 11.60	1766 13.81	1891 16.01	1952 17.16	2014 18.39	2074 19.64	2133 20.88
5350	4314	1145 5.77	1337 7.97	1502 10.18	1652 12.46	1789 14.78	1913 17.09	1972 18.24	2029 19.41	2089 20.71	2147 22.01
5600	4516	1179 6.40	1366 8.68	1530 11.02	1675 13.36	1812 15.79	1936 18.21	1994 19.42	2051 20.63	2105 21.84	2162 23.16
5850	4717	1214 7.07	1396 9.45	1558 11.90	1699 14.29	1835 16.84	1958 19.38	2017 20.64	2073 21.91	2128 23.17	2180 24.43
6100	4919	1250 7.81	1428 10.29	1586 12.83	1726 15.34	1858 17.94	1981 20.59	2039 21.91	2096 23.23	2150 24.54	2203 25.86
6350	5120	1286 8.61	1460 11.19	1615 13.81	1754 16.44	1881 19.07	2004 21.84	2062 23.22	2118 24.59	2172 25.97	2225 27.34
6600	5322	1323 9.45	1492 12.14	1643 14.84	1782 17.59	1906 20.28	2027 23.14	2085 24.58	2141 26.01	2195 27.44	2247 28.86
6850	5524	1360 10.36	1525 13.14	1672 15.92	1810 18.79	1933 21.60	2051 24.49	2108 25.98	2164 27.47	2218 28.96	2270 30.44
7100	5725	1397 11.33	1558 14.20	1702 17.05	1838 20.04	1961 22.98	2074 25.88	2132 27.44	2187 28.98	2241 30.53	2293 32.07
7350	5927	1435 12.36	1591 15.32	1733 18.29	1866 21.35	1989 24.41	2101 27.41	2155 28.94	2211 30.55	2264 32.15	2316 33.75
7600	6129	1473 13.45	1624 16.50	1765 19.59	1895 22.72	2017 25.90	2128 29.02	2181 30.57	2234 32.16	2287 33.82	2339 35.48
7850	6330	1511 14.61	1658 17.74	1797 20.96	1924 24.15	2045 27.45	2156 30.69	2209 32.30	2260 33.89	2311 35.55	2363 37.27
8100	6532	1549 15.84	1692 19.05	1830 22.39	1953 25.65	2073 29.06	2184 32.43	2236 34.09	2287 35.74	2336 37.39	2386 39.11
8350	6733	1587 17.14	1727 20.45	1862 23.89	1984 27.24	2102 30.74	2212 34.22	2264 35.95	2314 37.66	2363 39.37	2411 41.06
8600	6935	1626 18.51	1764 21.94	1895 25.46	2016 28.93	2131 32.49	2240 36.09	2292 37.87	2342 39.64	2391 41.41	2438 43.16

VOL. CFM	O.V. FPM	17" SP RPM BHP	18" SP RPM BHP	19" SP RPM BHP	20" SP RPM BHP	21" SP RPM BHP	22" SP RPM BHP	23" SP RPM BHP	24" SP RPM BHP	25" SP RPM BHP	26" SP RPM BHP
3400	2741	2126 15.26	2186 16.27	2244 17.29							
3600	2903	2130 15.93	2190 16.99	2248 18.05	2304 19.12	2359 20.20	2417 22.16	2470 23.30			
3800	3064	2134 16.62	2193 17.71	2251 18.81	2308 19.91	2363 21.03	2421 23.04	2474 24.22	2525 25.40	2576 26.60	2625 27.80
4000	3225	2137 17.30	2197 18.43	2255 19.57	2312 20.71	2367 21.87	2421 23.04				
4200	3387	2143 18.08	2201 19.16	2259 20.34	2316 21.52	2371 22.71	2425 23.92	2478 25.13	2529 26.36	2580 27.59	2629 28.83
4400	3548	2152 18.97	2209 20.06	2264 21.17	2319 22.33	2375 23.56	2429 24.81	2481 26.06	2533 27.32	2583 28.59	2633 29.87
4600	3709	2160 19.86	2217 21.01	2273 22.15	2327 23.30	2379 24.45	2432 25.70	2485 26.99	2537 28.28	2587 29.59	2637 30.91
4800	3870	2171 20.76	2226 21.96	2281 23.15	2335 24.35	2388 25.54	2439 26.74	2489 27.95	2541 29.26	2591 30.60	2640 31.96
5000	4032	2183 21.67	2238 22.91	2291 24.16	2344 25.40	2396 26.64	2448 27.89	2498 29.14	2547 30.39	2595 31.64	2644 33.01
5200	4193	2195 22.60	2250 23.88	2303 25.17	2355 26.46	2405 27.76	2456 29.05	2507 30.34	2556 31.64	2604 32.93	2651 34.24
5400	4354	2207 23.55	2261 24.87	2315 26.20	2366 27.53	2417 28.87	2467 30.21	2515 31.56	2564 32.90	2612 34.24	2659 35.59
5600	4516	2218 24.51	2273 25.88	2326 27.25	2378 28.62	2429 30.00	2478 31.39	2527 32.78	2574 34.17	2621 35.57	2668 36.96
5800	4677	2230 25.50	2285 26.90	2338 28.32	2390 29.73	2441 31.15	2490 32.58	2538 34.01	2586 35.45	2632 36.89	2677 38.33
6000	4838	2245 26.57	2297 27.95	2350 29.40	2402 30.86	2452 32.32	2502 33.79	2550 35.26	2597 36.74	2644 38.23	2689 39.71
6200	5000	2262 27.78	2312 29.12	2362 30.51	2414 32.01	2464 33.51	2514 35.02	2562 36.54	2609 38.06	2655 39.58	2701 41.11
6400	5161	2280 29.02	2330 30.40	2378 31.78	2426 33.17	2476 34.72	2525 36.28	2574 37.83	2621 39.40	2667 40.96	2712 42.53
6600	5322	2298 30.29	2348 31.71	2396 33.14	2443 34.56	2489 35.98	2537 37.55	2586 39.15			
6800	5483	2316 31.59	2366 33.06	2414 34.53	2461 35.99	2507 37.46	2551 38.92				
7000	5645	2334 32.93	2384 34.44	2432 35.95	2479 37.46	2524 38.97	2569 40.48				
7200	5806	2353 34.29	2402 35.85	2450 37.41	2497 38.97	2542 40.52	2587 42.07	2631 43.62	2673 45.17	2715 46.73	2760 48.43
7400	5967	2371 35.70	2420 37.30	2468 38.90	2515 40.50	2560 42.10	2605 43.70	2648 45.29	2691 46.89	2733 48.48	2774 50.08
7600	6129	2389 37.13	2438 38.78		2533 42.08	2578 43.72	2623 45.36	2666 47.00	2709 48.64	2751 50.28	2792 51.92
7800	6290	2408 38.61	2457 40.30	2505 41.99	2551 43.69	2596 45.37	2641 47.06	2684 48.75	2727 50.43	2769 52.11	2810 53.79
8000	6451	2427 40.11	2475 41.86	2523 43.59	2569 45.33	2615 47.07	2659 48.80	2702 50.53	2745 52.26	2787 53.98	2828 55.71
8200	6612	2445 41.66	2494 43.45	2541 45.23	2588 47.02	2633 48.79	2677 50.57	2721 52.35	2763 54.12	2805 55.89	2846 57.66
8400	6774	2464 43.24	2513 45.07	2560 46.91	2606 48.74	2651 50.56	2696 52.39	2739 54.21	2781 56.03	2823 57.84	2864 59.66
8600	6935	2485 44.91	2532 46.74	2579 48.62	2625 50.50	2670 52.37	2714 54.24	2757 56.10	2800 57.97	2841 59.83	2882 61.69

(Continued on page 13)

Power rating (BHP) does not include drive losses. Performance shown is for installation type D-Ducted inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream.



RBE - 15 BELT DRIVE RATING TABLES

Ratings at 70°F., .075 Density, Sea Level

WHEEL

Dia. - 26 1/8"

OUTLET O.D.

Size - 14 1/2" X 12 3/4"

Area - 1.24 Sq. Ft.

INLET O.D.

Size - 15"

Area - 1.27 Sq. Ft.

Series 25 = bold face*Series 32 = italic face below Series 25*

Series 40 = tinted ratings below Series 32

(Continued from page 12)

SEE PAGE 22 FOR MAX. WHEEL RPM AND WR².

VOL. CFM	O.V. FPM	22" SP RPM BHP		23" SP RPM BHP		24" SP RPM BHP		25" SP RPM BHP		26" SP RPM BHP		27" SP RPM BHP		28" SP RPM BHP		29" SP RPM BHP		30" SP RPM BHP		31" SP RPM BHP	
4000	3225	2421	23.04	2474	24.22	2525	25.40	2576	26.60	2625	27.80	2678	30.08	2725	31.34	2772	32.61	2822	35.07	2867	36.39
4200	3387	2425	23.92	2478	25.13	2529	26.36	2580	27.59	2629	28.83	2681	31.16	2729	32.45	2776	33.76	2826	36.26	2871	37.62
4400	3548	2429	24.81	2481	26.06	2533	27.32	2583	28.59	2633	29.87	2685	32.24	2733	33.57	2780	34.91	2826	36.26	2871	37.62
4600	3709	2432	25.70	2485	26.99	2537	28.28	2587	29.59	2637	30.91										
4800	3870	2439	26.74	2489	27.95	2541	29.26	2591	30.60	2640	31.96	2689	33.32	2737	34.69	2784	36.07	2830	37.46	2875	38.86
5000	4032	2448	27.89	2498	29.14	2547	30.39	2595	31.64	2644	33.01	2693	34.41	2741	35.82	2787	37.24	2833	38.66	2879	40.10
5200	4193	2456	29.05	2507	30.34	2556	31.64	2604	32.93	2651	34.24	2697	35.54	2744	36.96	2791	38.41	2837	39.87	2882	41.35
5400	4354	2467	30.21	2515	31.56	2564	32.90	2612	34.24	2659	35.59										
5600	4516	2478	31.39	2527	32.78	2574	34.17	2621	35.57	2668	36.96	2714	38.35	2760	39.74	2804	41.14	2848	42.54	2891	43.95
5800	4677	2490	32.58	2538	34.01	2586	35.45	2632	36.89	2677	38.33	2723	39.78	2768	41.22	2813	42.66	2857	44.11	2900	45.55
6000	4838	2502	33.79	2550	35.26	2597	36.74	2644	38.23	2689	39.71	2734	41.21	2777	42.70	2821	44.19	2865	45.68	2908	47.18
6200	5000	2514	35.02	2562	36.54	2609	38.06	2655	39.58			2701	41.11	2745	42.65	2789	44.18	2832	45.73	2874	47.28
6400	5161	2525	36.28	2574	37.83	2621	39.40			2667	40.96	2712	42.53	2757	44.11	2801	45.69	2844	47.27	2886	48.86
6600	5322	2537	37.55	2586	39.15	2633	40.75	2679	42.36	2724	43.97	2769	45.59	2812	47.21	2855	48.84	2897	50.47	2939	52.10
6800	5483	2551	38.92			2598	40.49	2645	42.13	2691	43.78	2736	45.44	2781	47.10	2824	48.76	2867	50.43	2909	52.10
7000	5645			2659	40.48	2613	41.99	2657	43.53	2703	45.23	2748	46.92	2792	48.63	2836	50.33	2879	52.04	2921	53.76
7200	5806	2587	42.07	2631	43.62	2673	45.17	2715	46.73	2760	48.43	2804	50.18	2848	51.92	2891	53.68	2933	55.43	2974	57.19
7400	5967	2605	43.70	2648	45.29	2691	46.89	2733	48.48	2774	50.08	2816	51.75	2860	53.54	2903	55.34	2945	57.13	2986	58.94
7600	6129	2623	45.36	2666	47.00	2709	48.64	2751	50.28	2792	51.92	2832	53.55	2872	55.19	2915	57.02	2957	58.86	2998	60.70
7800	6290	2641	47.06	2684	48.75	2727	50.43	2769	52.11	2810	53.79	2850	55.47	2890	57.15	2929	58.83	2969	60.61		
8000	6451	2659	48.80	2702	50.53	2745	52.26	2787	53.98	2828	55.71	2868	57.43	2907	59.16	2946	60.88	2985	62.60	3022	64.33
8200	6612	2677	50.57	2721	52.35	2763	54.12	2805	55.89	2846	57.66	2886	59.43	2925	61.20	2964	62.97	3002	64.74	3040	66.50
8400	6774	2696	52.39	2739	54.21	2781	56.03	2823	57.84	2864	59.66	2904	61.47	2943	63.28	2982	65.10	3020	66.91	3058	68.72
8600	6935	2714	54.24	2757	56.10	2800	57.97	2841	59.83	2882	61.69			2922	63.55	2961	65.41	3000	67.27	3038	69.12
8800	7056	3126	74.58	3162	76.47	3198	78.35	3233	80.24	3268	82.13	3303	84.01	3339	86.08	3376	88.20	3413	90.32	3448	92.45
8900	7177	3139	76.36	3176	78.28	3211	80.20	3247	82.12	3282	84.04	3316	85.95	3350	87.87	3385	89.91	3421	92.06	3457	94.22
9050	7298	3153	78.16	3189	80.12	3225	82.07	3260	84.02	3295	85.97	3329	87.92	3363	89.87	3397	91.82	3430	93.82	3466	96.01
9200	7419	3166	79.99	3202	81.98	3238	83.96	3273	85.95	3308	87.93	3343	89.91	3376	91.90	3410	93.88	3443	95.86	3476	97.84

Power rating (BHP) does not include drive losses. Performance shown is for installation type D-Ducted inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream.



RBE - 17 BELT DRIVE RATING TABLES

Ratings at 70°F., .075 Density, Sea Level

WHEEL

Dia. - 29 5/8"

OUTLET O.D.

Size - 16 1/4" X 14 3/8"

Area - 1.59 Sq. Ft.

INLET O.D.

Size - 17"

Area - 1.57 Sq. Ft.

Series 18 = light face above Series 25

Series 25 = bold face

Series 32 = italic face below Series 25

NOTE: See pages 23, 25 or 26 for minimum motor frame sizes regardless of BHP.

SEE PAGE 22 FOR MAX. WHEEL RPM AND WR².

VOL. CFM	O.V. FPM	2" SP RPM BHP	4" SP RPM BHP	6" SP RPM BHP	8" SP RPM BHP	10" SP RPM BHP	12" SP RPM BHP	13" SP RPM BHP	14" SP RPM BHP	15" SP RPM BHP	16" SP RPM BHP
2700	1698	682 1.42	919 2.74	1115 4.24							
3000	1886	701 1.64	929 3.05	1119 4.60	1286 6.34						
3300	2075	719 1.88	941 3.38	1126 5.02	1290 6.81	1437 8.75					
3600	2264	739 2.15	953 3.72	1135 5.49	1294 7.30	1441 9.34	1574 11.46				
3900	2452	759 2.44	970 4.13	1147 5.98	1302 7.91	1445 9.95	1578 12.18	1641 13.32	1701 14.48	1759 15.65	
4200	2641	782 2.78	988 4.57	1159 6.48	1312 8.55	1451 10.64	1582 12.90	1644 14.10	1704 15.31	1762 16.54	1818 17.79
4500	2830	805 3.14	1007 5.05	1171 7.00	1324 9.19	1460 11.43	1587 13.67	1648 14.88	1708 16.15	1766 17.44	1822 18.74
4800	3018	829 3.53	1026 5.55	1189 7.63	1336 9.86	1471 12.22	1596 14.61	1655 15.80	1712 17.00	1770 18.34	1826 19.70
5100	3207	853 3.96	1045 6.09	1208 8.30	1349 10.55	1483 13.04	1605 15.56	1664 16.83	1721 18.10	1776 19.37	1830 20.67
5400	3396	878 4.43	1065 6.66	1226 9.00	1365 11.34	1496 13.88	1617 16.53	1675 17.87	1730 19.21	1785 20.55	1838 21.89
5700	3584	904 4.95	1088 7.31	1245 9.74	1383 12.21	1508 14.74	1630 17.51	1687 18.92	1742 20.33	1795 21.74	1847 23.16
6000	3773	930 5.51	1111 7.99	1264 10.52	1401 13.12	1523 15.71	1642 18.53	1699 19.99	1754 21.47	1807 22.95	1858 24.43
6300	3962	957 6.12	1134 8.72	1283 11.33	1420 14.07	1542 16.79	1654 19.57	1711 21.10	1766 22.63	1819 24.17	1870 25.73
6600	4150	984 6.77	1157 9.49	1304 12.20	1439 15.06	1560 17.92	1670 20.77	1723 22.23	1778 23.83	1831 25.43	1882 27.05
6900	4339	1012 7.47	1181 10.30	1326 13.16	1458 16.09	1579 19.09	1689 22.07	1741 23.56	1791 25.05	1843 26.72	1895 28.40
7200	4528	1040 8.22	1205 11.17	1349 14.17	1477 17.17	1597 20.30	1707 23.42	1759 24.97	1809 26.53	1857 28.08	1907 29.78
7500	4716	1068 9.03	1229 12.08	1372 15.22	1497 18.29	1616 21.56	1726 24.81	1777 26.44	1827 28.06	1875 29.67	1922 31.29
7800	4905	1098 9.91	1255 13.09	1395 16.33	1519 19.54	1636 22.87	1744 26.26	1796 27.95	1845 29.63	1893 31.32	1940 33.00
8100	5094	1128 10.85	1282 14.15	1419 17.50	1542 20.84	1655 24.22	1763 27.75	1815 29.51	1864 31.26	1912 33.02	1958 34.77
8400	5283	1158 11.85	1308 15.27	1442 18.72	1564 22.21	1674 25.63	1782 29.30	1833 31.12	1883 32.95	1930 34.77	1977 36.58
8700	5471	1188 12.92	1335 16.45	1466 19.99	1587 23.63	1697 27.19	1802 30.89	1852 32.79	1902 34.68	1949 36.57	1995 38.46
9000	5660	1219 14.05	1362 17.70	1490 21.33	1611 25.11	1719 28.82	1821 32.55	1872 34.51	1921 36.47	1968 38.43	2014 40.38
9300	5849	1250 15.26	1389 19.01	1516 22.76	1634 26.66	1742 30.51	1841 34.30	1891 36.29	1940 38.32	1987 40.35	2033 42.37
9600	6037	1281 16.53	1416 20.39	1542 24.29	1658 28.27	1765 32.26	1864 36.19	1911 38.14	1959 40.23	2006 42.32	2052 44.42
9900	6226	1312 17.87	1444 21.83	1568 25.88	1681 29.94	1788 34.08	1886 38.15	1933 40.17	1978 42.19	2025 44.36	2071 46.52
10200	6415	1343 19.30	1472 23.35	1594 27.55	1705 31.69	1812 35.97	1909 40.19	1956 42.27	2001 44.35	2045 46.45	2090 48.69
10500	6603	1375 20.80	1500 24.95	1621 29.29	1730 33.50	1835 37.93	1932 42.29	1978 44.45	2023 46.59	2066 48.73	2109 50.91
10800	6792	1407 22.37	1529 26.66	1648 31.11	1755 35.45	1859 39.96	1955 44.47	2001 46.70	2046 48.91	2089 51.12	2131 53.31
11100	6981	1438 24.04	1559 28.46	1675 33.00	1781 37.49	1882 42.07	1979 46.72	2024 49.02	2069 51.31	2112 53.58	2153 55.85

VOL. CFM	O.V. FPM	17" SP RPM BHP	18" SP RPM BHP	19" SP RPM BHP	20" SP RPM BHP	21" SP RPM BHP	22" SP RPM BHP	23" SP RPM BHP	24" SP RPM BHP	25" SP RPM BHP	26" SP RPM BHP
4200	2641	1873 19.05									
4450	2798	1876 19.89	1929 21.21	1980 22.54	2033 24.88	2082 26.28	2129 27.70	2179 30.27	2225 31.76		
4700	2955	1879 20.73	1932 22.10	1983 23.48	2036 25.87	2085 27.32	2133 28.79				
4950	3113	1882 21.58	1935 23.00	1986 24.43							
5200	3270	1885 22.44	1938 23.90	1989 25.38	2039 26.86	2088 28.36	2136 29.88	2182 31.40	2228 32.94	2272 34.49	2316 36.06
5450	3427	1891 23.46	1942 24.82	1993 26.33	2043 27.87	2091 29.42	2139 30.98	2185 32.55	2231 34.13	2276 35.73	2319 37.34
5700	3584	1899 24.58	1949 25.99	1998 27.42	2046 28.88	2095 30.47	2142 32.08	2189 33.70	2234 35.33	2279 36.98	2322 38.63
5950	3742	1906 25.70	1956 27.18	2005 28.66	2053 30.14	2099 31.63	2145 33.19	2192 34.86	2237 36.53	2282 38.23	2326 39.93
6200	3899	1916 26.83	1964 28.38	2013 29.91	2060 31.45	2106 32.99	2152 34.54	2196 36.09	2240 37.75	2285 39.48	2329 41.23
6450	4056	1926 27.97	1974 29.57	2021 31.17	2068 32.78	2114 34.38	2159 35.98	2203 37.59	2247 39.20	2289 40.81	2332 42.54
6700	4213	1936 29.14	1984 30.78	2031 32.44	2077 34.10	2122 35.77	2167 37.44	2211 39.10	2254 40.76	2296 42.43	2338 44.10
6950	4371	1946 30.32	1995 32.02	2042 33.73	2087 35.45	2132 37.17	2175 38.90	2218 40.63	2261 42.35	2304 44.08	2345 45.80
7200	4528	1957 31.53	2005 33.28	2052 35.04	2097 36.81	2142 38.58	2186 40.36	2228 42.15	2270 43.95	2311 45.74	2353 47.52
7450	4685	1967 32.75	2015 34.56	2062 36.38	2107 38.19	2152 40.02	2196 41.85	2238 43.69	2280 45.54	2321 47.39	2361 49.25
7700	4842	1979 34.09	2025 35.87	2072 37.73	2118 39.60	2162 41.48	2206 43.37	2248 45.26	2290 47.16	2331 49.06	2371 50.97
7950	5000	1994 35.59	2038 37.31	2082 39.11	2128 41.04	2172 42.97	2216 44.91	2258 46.85	2300 48.80	2341 50.76	2381 52.72
8200	5157	2009 37.14	2053 38.90	2096 40.67	2138 42.50	2183 44.48	2226 46.47	2269 48.47	2310 50.47	2351 52.48	2391 54.49
8450	5314	2025 38.72	2068 40.54	2111 42.36	2152 44.19	2193 46.02	2236 48.06	2279 50.11	2320 52.16	2361 54.23	2401 56.29
8700	5471	2040 40.34	2084 42.22	2126 44.10	2167 45.97	2208 47.85	2247 49.72	2289 51.78	2331 53.88	2371 56.00	2411 58.12
8950	5628	2056 42.00	2099 43.93	2141 45.87	2183 47.80	2223 49.73	2263 51.66	2301 53.59	2341 55.63	2382 57.80	2421 59.97
9200	5786	2071 43.70	2115 45.69	2157 47.68	2198 49.67	2238 51.65	2278 53.64	2316 55.62	2354 57.61	2392 59.63	2432 61.85
9450	5943	2087 45.44	2130 47.49	2172 49.53	2214 51.58	2254 53.62	2293 55.66	2332 57.70	2369 59.74	2406 61.78	2443 63.81
9700	6100	2103 47.22	2146 49.33	2188 51.43	2229 53.53	2269 55.63	2309 57.72	2347 59.82	2385 61.91	2422 64.01	2458 66.10
9950	6257	2118 49.05	2162 51.21	2204 53.37	2245 55.53	2285 57.68	2324 59.83	2362 61.98	2400 64.13	2437 66.28	2473 68.43
10200	6415	2134 50.91	2177 53.14	2219 55.35	2260 57.57	2300 59.78	2339 61.99	2378 64.19	2415 66.40	2452 68.60	2488 70.80
10450	6572	2150 52.82	2193 55.11	2235 57.38	2276 59.65	2316 61.92	2355 64.19	2393 66.45	2431 68.71	2468 70.97	2504 73.23
10700	6729	2166 54.78	2209 57.12	2251 59.46	2292 61.79	2332 64.11	2371 66.44	2409 68.76	2446 71.07	2483 73.39	2519 75.70
10950	6886	2183 56.79	2225 59.18	2267 61.57	2308 63.96	2348 66.35	2387 68.73	2425 71.11	2462 73.48	2499 75.85	2535 78.22

(Continued on page 15)

Power rating (BHP) does not include drive losses. Performance shown is for installation type D-Ducted inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream.



RBE - 17 BELT DRIVE RATING TABLES

Ratings at 70°F., .075 Density, Sea Level

WHEEL

Dia. - 29 5/8"

OUTLET O.D.

Size - 16 1/4" X 14 3/8"

Area - 1.59 Sq. Ft.

INLET O.D.

Size - 17"

Area - 1.57 Sq. Ft.

Series 25 = bold face

Series 32 = italic face below Series 25

Series 40 = tinted ratings below Series 32

(Continued from page 14)

SEE PAGE 22 FOR MAX. WHEEL RPM AND WR².

VOL. CFM	O.V. FPM	22" SP RPM BHP		23" SP RPM BHP		24" SP RPM BHP		25" SP RPM BHP		26" SP RPM BHP		27" SP RPM BHP		28" SP RPM BHP		29" SP RPM BHP		30" SP RPM BHP		31" SP RPM BHP		
4700	2955	2129	27.70																			
4950	3113	2133	28.79	2179	30.27	2225	31.76															
5200	3270	2136	29.88	2182	31.40	2228	32.94	2272	34.49	2316	36.06	2359	37.63									
5450	3427	2139	30.98	2185	32.55	2231	34.13	2276	35.73	2319	37.34	2362	38.96	2404	40.59	2446	42.23					
5700	3584	2142	32.08	2189	33.70	2234	35.33	2279	36.98	2322	38.63	2365	40.30	2407	41.98	2449	43.67	2489	45.37	2529	47.08	
5950	3742	2145	33.19	2192	34.86	2237	36.53	2282	38.23	2326	39.93	2368	41.64	2411	43.37	2452	45.10	2492	46.85	2532	48.61	
6200	3899	2152	34.54	2196	36.09	2240	37.75	2285	39.48	2329	41.23	2372	42.99	2414	44.76	2455	46.55	2496	48.34	2536	50.15	
6450	4056	2159	35.98	2203	37.59	2247	39.20	2289	40.81	2332	42.54	2375	44.35	2417	46.17	2458	48.00	2499	49.84	2539	51.69	
6700	4213	2167	37.44	2211	39.10	2254	40.76	2296	42.43	2338	44.10	2379	45.78	2420	47.58	2461	49.46	2502	51.35	2542	53.25	
6950	4371	2175	38.90	2218	40.63	2261	42.35	2304	44.08	2345	45.80	2386	47.53	2426	49.27	2465	51.01	2505	52.86	2545	54.81	
7200	4528	2186	40.36	2228	42.15	2270	43.95	2311	45.74	2353	47.52	2394	49.31	2434	51.10	2473	52.89	2511	54.69	2549	56.49	
7450	4685	2196	41.85	2238	43.69	2280	45.54	2321	47.39	2361	49.25	2401	51.10	2441	52.95	2480	54.79	2519	56.65	2557	58.50	
7700	4842	2206	43.37	2248	45.26	2290	47.16	2331	49.06	2371	50.97	2410	52.89	2449	54.81	2488	56.72	2526	58.63	2564	60.54	
7950	5000	2216	44.91	2258	46.85	2300	48.80	2341	50.76	2381	52.72	2420	54.69	2459	56.66	2497	58.64	2534	60.63	2572	62.60	
8200	5157	2226	46.47	2269	48.47	2310	50.47	2351	52.48	2391	54.49	2430	56.51	2469	58.54	2507	60.57	2544	62.61	2580	64.65	
8450	5314	2236	48.06	2279	50.11	2320	52.16	2361	54.23	2401	56.29	2440	58.36	2479	60.44	2517	62.53	2554	64.61	2590	66.71	
8700	5471	2247	49.72	2289	51.78	2331	53.88	2371	56.00	2411	58.12	2450	60.24	2489	62.37	2527	64.51	2564	66.65	2600	68.80	
8950	5628	2263	51.66	2301	53.59	2341	55.63	2382	57.80	2421	59.97	2461	62.15	2499	64.33	2537	66.52	2574	68.71	2611	70.91	
9200	5786	2278	53.64	2316	55.62	2354	57.61	2392	59.63	2432	61.85	2471	64.08	2509	66.32	2547	68.56	2584	70.80	2621	73.06	
9450	5943	2293	55.66	2332	57.70	2369	59.74	2406	61.78	2443	63.81	2481	66.04	2520	68.33	2557	70.63	2594	72.92	2631	75.23	
9700	6100	2309	57.72	2347	59.82	2385	61.91	2422	64.01	2458	66.10	2494	68.19	2530	70.37	2568	72.72	2605	75.07	2641	77.43	
9950	6257	2324	59.83	2362	61.98	2400	64.13	2437	66.28	2473	68.43	2509	70.57	2544	72.72	2578	74.86	2615	77.25	2651	79.66	
10200	6415	2339	61.99	2378	64.19	2415	66.40	2452	68.60	2488	70.80	2524	73.01	2559	75.21	2627	77.40	2662	81.92	2705	84.50	
10450	6572	2355	64.19	2393	66.45	2431	68.71	2468	70.97	2504	73.23	2539	75.48	2574	77.74	2608	79.99	2642	82.25	2675	84.50	
10700	6729	2371	66.44	2409	68.76	2446	71.07	2483	73.39	2519	75.70	2555	78.01	2589	80.32	2624	82.63	2657	84.94	2690	87.25	
10950	6886	2387	68.73	2425	71.11	2462	73.48	2499	75.85	2535	78.22	2570	80.59	2605	82.96	2639	85.32	2673	87.68	2706	90.05	

VOL. CFM	O.V. FPM	32" SP RPM BHP		33" SP RPM BHP		34" SP RPM BHP		35" SP RPM BHP		36" SP RPM BHP		37" SP RPM BHP		38" SP RPM BHP		39" SP RPM BHP		40" SP RPM BHP		41" SP RPM BHP		
5700	3584	2569	48.80																			
5900	3710	2571	50.06	2610	51.83	2648	53.61	2688	56.78	2725	58.61	2762	60.46	2800	63.81	2836	65.71					
6100	3836	2574	51.32	2612	53.13	2650	54.95	2689	56.16	2728	60.03	2764	61.92	2800	63.81	2836	65.71					
6300	3962	2576	52.60	2615	54.44	2653	56.29	2691	58.16	2728	60.03	2764	61.92	2800	63.81	2836	65.71					
6500	4088	2579	53.87	2617	55.75	2656	57.64	2693	59.55	2730	61.46	2767	63.38	2803	65.31	2838	67.25	2873	69.20	2908	71.16	
6700	4213	2581	55.15	2620	57.07	2658	59.00	2696	60.94	2733	62.89	2769	64.85	2805	66.81	2841	68.79	2876	70.78	2911	72.78	
6900	4339	2584	56.44	2622	58.40	2661	60.36	2698	62.34	2735	64.32	2772	66.32	2808	68.32	2843	70.34	2878	72.36	2913	74.40	
7100	4465	2586	57.73	2625	59.72	2663	61.73	2701	63.74	2738	65.76	2774	67.80	2810	69.84	2846	71.89	2881	73.95	2916	76.03	
7300	4591	2590	59.12	2628	61.06	2666	63.10	2703	65.15	2740	67.21	2777	69.28	2813	71.36	2848	73.45	2884	75.55	2918	77.66	
7500	4716	2596	60.78	2632	62.65	2669	64.53	2706	66.56	2743	68.66	2779	70.77	2815	72.89	2851	75.02	2886	77.15	2921	79.30	
7700	4842	2602	62.45	2638	64.37	2675	66.29	2710	68.22	2746	70.15	2782	72.27	2818	74.4							



RBE - 19 BELT DRIVE RATING TABLES

WHEEL

Dia. - 33"

OUTLET O.D.

Size - 18 $\frac{3}{4}$ " X 15 $\frac{7}{8}$ "

Area - 1.97 Sq. Ft.

INLET O.D.

Size - 19"

Area - 1.96 Sq. Ft.

Ratings at 70°F., .075 Density, Sea Level

Series 18 = light face above Series 25

Series 25 = bold face

Series 32 = italic face below Series 25

NOTE: See pages 23, 25 or 26 for minimum motor frame sizes regardless of BHP.

SEE PAGE 22 FOR MAX. WHEEL RPM AND WR².

VOL. CFM	O.V. FPM	2" SP RPM BHP		4" SP RPM BHP		6" SP RPM BHP		8" SP RPM BHP		10" SP RPM BHP		12" SP RPM BHP		13" SP RPM BHP		14" SP RPM BHP		15" SP RPM BHP		16" SP RPM BHP		
2500	1269	584	1.27																			
2900	1472	596	1.49	810	2.96																	
3300	1675	611	1.73	819	3.35	990	5.13															
3700	1878	627	2.00	830	3.78	994	5.63	1143	7.71													
4100	2081	644	2.30	842	4.22	1005	6.24	1146	8.37	1277	10.71											
4500	2284	661	2.64	858	4.70	1016	6.88	1154	9.13	1280	11.52	1399	14.10									
4900	2487	682	3.03	874	5.20	1028	7.55	1165	9.96	1287	12.42	1402	15.08	1458	16.47	1511	17.87					
5300	2690	703	3.45	890	5.74	1042	8.25	1176	10.82	1298	13.45	1407	16.13	1461	17.53	1514	19.02	1566	20.52	1616	22.04	
5700	2893	724	3.91	907	6.35	1058	8.98	1188	11.72	1309	14.52	1419	17.36	1470	18.79	1520	20.24	1569	21.75	1619	23.35	
6100	3096	746	4.41	924	7.01	1074	9.75	1203	12.65	1320	15.61	1430	18.62	1481	20.14	1531	21.66	1578	23.20	1625	24.75	
6500	3299	770	4.99	942	7.72	1090	10.56	1219	13.63	1332	16.74	1441	19.92	1492	21.52	1542	23.13	1590	24.75	1636	26.38	
6900	3502	796	5.63	963	8.50	1107	11.47	1234	14.64	1348	17.92	1452	21.25	1504	22.94	1553	24.63	1601	26.34	1647	28.05	
7300	3705	821	6.33	984	9.33	1124	12.45	1250	15.70	1364	19.14	1467	22.63	1515	24.40	1564	26.18	1612	27.97	1658	29.77	
7700	3908	847	7.09	1005	10.21	1141	13.47	1267	16.83	1380	20.42	1482	24.07	1530	25.91	1577	27.76	1623	29.64	1669	31.52	
8100	4111	874	7.91	1026	11.15	1161	14.58	1284	18.09	1396	21.74	1498	25.55	1546	27.48	1592	29.41	1637	31.36	1681	33.32	
8500	4314	900	8.80	1048	12.15	1182	15.76	1301	19.40	1412	23.11	1514	27.09	1562	29.10	1608	31.12	1653	33.14	1696	35.18	
8900	4517	928	9.77	1071	13.23	1203	17.00	1318	20.76	1429	24.66	1530	28.68	1578	30.77	1624	32.87	1669	34.98	1712	37.10	
9300	4720	956	10.84	1096	14.44	1224	18.32	1338	22.24	1446	26.27	1546	30.33	1594	32.50	1640	34.69	1684	36.88	1728	39.08	
9700	4923	985	11.99	1121	15.73	1245	19.70	1359	23.80	1463	27.94	1563	32.18	1610	34.29	1656	36.56	1700	38.83	1743	41.12	
10100	5126	1014	13.23	1147	17.10	1267	21.14	1379	25.43	1480	29.68	1580	34.10	1627	36.30	1672	38.50	1716	40.85	1759	43.21	
10500	5329	1043	14.56	1173	18.55	1289	22.66	1400	27.14	1501	31.57	1597	36.08	1644	38.38	1689	40.67	1733	42.96	1775	45.38	
10900	5532	1073	15.97	1199	20.09	1312	24.30	1422	28.93	1522	33.54	1614	38.14	1661	40.53	1706	42.91	1750	45.29	1792	47.67	
11300	5736	1102	17.48	1225	21.71	1337	26.11	1443	30.79	1543	35.59	1634	40.34	1678	42.75	1723	45.23	1767	47.70	1809	50.17	
11700	5939	1132	19.09	1252	23.43	1362	28.01	1465	32.74	1564	42.65	1697	45.11	1741	47.62	1784	50.18	1826	52.74			
12100	6142	1162	20.81	1279	25.25	1387	30.01	1487	34.77	1585	39.94	1675	45.05	1718	47.60	1759	50.14	1801	52.74	1843	55.39	
12500	6345	1192	22.62	1306	27.19	1413	32.11	1509	36.92	1606	42.24	1696	47.55	1739	50.18	1780	52.81	1820	55.43	1860	58.12	
12900	6548	1223	24.54	1334	29.29	1439	34.31	1534	39.29	1628	44.64	1717	50.13	1760	52.86	1801	55.57	1840	58.28	1879	60.99	
13300	6751	1253	26.58	1363	31.50	1465	36.61	1559	41.78	1650	47.13	1739	52.81	1781	55.63	1822	58.44	1861	61.24	1900	64.03	
13700	6954	1284	28.74	1392	33.82	1491	39.02	1585	44.38	1671	49.71	1760	55.58	1802	58.49	1843	61.40	1882	64.29	1920	67.17	

VOL. CFM	O.V. FPM	17" SP RPM BHP		18" SP RPM BHP		19" SP RPM BHP		20" SP RPM BHP		21" SP RPM BHP		22" SP RPM BHP		23" SP RPM BHP		24" SP RPM BHP		25" SP RPM BHP		26" SP RPM BHP		
5300	2690	1665	23.57																			
5600	2842	1667	24.61	1714	26.22	1760	27.84															
5900	2994	1669	25.66	1716	27.32	1762	29.00	1807	30.70	1850	32.41											
6200	3147	1672	26.73	1719	28.43	1765	30.17	1809	31.92	1853	33.69	1895	35.47	1937	37.26							
6500	3299	1681	28.02	1724	29.67	1767	31.35	1811	33.16	1855	34.98	1897	36.82	1939	38.67	1980	40.53	2019	42.41			
6800	3451	1689	29.33	1732	31.04	1775	32.76	1816	34.49	1857	36.28	1900	38.17	1941	40.08	1982	42.00	2022	43.94	2061	45.89	
7100	3604	1697	30.67	1741	32.44	1783	34.22	1824	36.01	1864	37.81	1904	39.61	1944	41.50	1984	43.48	2024	45.48	2063	47.48	
7400	3756	1706	32.03	1749	33.86	1791	35.71	1832	37.56	1873	39.42	1912	41.28	1950	43.16	1988	45.04	2026	47.02	2065	49.08	
7700	3908	1714	33.41	1757	35.31	1800	37.22	1841	39.13	1881	41.05	1920	42.98	1959	44.92	1996	46.86	2033	48.81	2069	50.77	
8000	4060	1723	34.82	1766	36.78	1808	38.75	1849	40.73	1889	42.71	1929	44.70	1967	46.70	2004	48.71	2041	50.72	2077	52.74	
8300	4213	1731	36.25	1774	38.28	1817	40.31	1858	42.35	1898	44.40	1937	46.45	1975	48.51	2013	50.58	2050	52.66	2086	54.74	
8600	4365	1742	37.72	1783	39.80	1825	41.90	1866	44.00	1906	46.11	1945	48.23	1984	50.36	2021	52.49	2058	54.63	2094	56.77	
8900	4517	1754	39.23	1795	41.36	1834	43.51	1875	45.68	1915	47.85	1954	50.04	1992	52.22	2030	54.42	2066	56.62	2102	58.83	
9200	4670	1766	40.77	1806	42.96	1846	45.17	1885	47.39	1923	49.62	1962	51.87	2001	54.12	2042	62.06	2111				



RBE - 19 BELT DRIVE RATING TABLES

Ratings at 70°F., .075 Density, Sea Level

WHEEL

Dia. - 33"

OUTLET O.D.

Size - 18 3/4" X 15 7/8"

Area - 1.97 Sq. Ft.

INLET O.D.

Size - 19"

Area - 1.96 Sq. Ft.

Series 25 = bold face*Series 32 = italic face below Series 25*

Series 40 = tinted ratings below Series 32

(Continued from page 16)

SEE PAGE 22 FOR MAX. WHEEL RPM AND WR².

VOL. CFM	O.V. FPM	22" SP RPM	SP BHP	23" SP RPM	SP BHP	24" SP RPM	SP BHP	25" SP RPM	SP BHP	26" SP RPM	SP BHP	27" SP RPM	SP BHP	28" SP RPM	SP BHP	29" SP RPM	SP BHP	30" SP RPM	SP BHP	31" SP RPM	SP BHP
6750	3426	1899	37.95	1941	39.85	1982	41.76	2021	43.68	2060	45.62	2099	47.57	2101	48.95	2138	50.96	2175	52.98		
7000	3553	1901	39.08	1943	41.03	1983	42.99	2023	44.96	2062	46.95	2102	50.33	2140	52.39	2177	54.46	2213	56.54	2249	58.63
7250	3680	1908	40.44	1946	42.29	1985	44.23	2025	46.25	2064	48.28	2104	51.72	2142	53.82	2179	55.94	2215	58.07	2251	60.22
7500	3807	1915	41.85	1953	43.74	1991	45.64	2027	47.55	2066	49.62										
7750	3934	1922	43.26	1960	45.21	1997	47.17	2034	49.13	2070	51.10	2106	53.11	2144	55.26	2181	57.43	2217	59.61	2253	61.80
8000	4060	1929	44.70	1967	46.70	2004	48.71	2041	50.72	2077	52.74	2113	54.77	2147	56.81	2183	58.93	2219	61.15	2255	63.39
8250	4187	1936	46.16	1974	48.21	2011	50.27	2048	52.33	2084	54.41	2119	56.49	2154	58.57	2188	60.67	2222	62.77	2256	64.99
8500	4314	1943	47.64	1981	49.74	2018	51.85	2055	53.97	2091	56.09	2126	58.22	2161	60.36	2195	62.51	2229	64.66	2262	66.82
8750	4441	1950	49.13	1988	51.29	2025	53.45	2062	55.62	2098	57.80	2133	59.98	2168	62.17	2202	64.37	2236	66.57	2269	68.78
9000	4568	1957	50.64	1995	52.85	2032	55.07	2069	57.29	2105	59.52	2140	61.76	2175	64.00	2209	66.25	2243	68.51	2276	70.77
9250	4695	1964	52.18	2002	54.44	2040	56.71	2076	58.98	2112	61.27	2147	63.56	2182	65.85	2216	68.15	2250	70.46	2282	72.77
9500	4822	1971	53.73	2009	56.05	2047	58.37	2083	60.70	2119	63.03	2154	65.38	2189	67.72	2223	70.08	2257	72.44	2289	74.80
9750	4949	1980	55.32	2016	57.67	2054	60.05	2090	62.43	2126	64.82	2162	67.21	2196	69.62	2230	72.02	2264	74.43	2296	76.85
10000	5076	1990	56.93	2026	59.34	2061	61.75	2097	64.19	2133	66.63	2169	69.08	2203	71.53	2237	73.99	2271	76.46	2303	78.93
10250	5203	2000	58.57	2036	61.03	2071	63.50	2106	65.97	2140	68.46	2176	70.96	2210	73.47	2244	75.98	2278	78.50	2311	81.02
10500	5329	2010	60.24	2046	62.75	2081	65.26	2115	67.79	2149	70.32	2183	72.86	2217	75.42	2251	77.99	2285	80.56	2318	83.14
10750	5456	2020	61.94	2055	64.50	2091	67.06	2125	69.63	2159	72.22	2192	74.81	2225	77.41	2258	80.02	2292	82.65	2325	85.28
11000	5583	2029	63.66	2065	66.27	2100	68.89	2135	71.51	2169	74.14	2202	76.78	2234	79.43	2266	82.09	2309	84.76	2332	87.45
11250	5710	2039	65.41	2075	68.07	2110	70.74	2145	73.41	2178	76.10	2211	78.79	2244	81.49	2276	84.19	2307	86.91	2339	89.63
11500	5837	2049	67.19	2085	69.90	2120	72.62	2154	75.34	2188	78.08	2221	80.82	2254	83.57	2286	86.33	2317	89.09	2348	91.86
11750	5964	2059	68.99	2095	71.76	2130	74.53	2164	77.31	2198	80.09	2231	82.88	2264	85.68	2295	88.49	2327	91.30	2358	94.13
12000	6091	2069	70.83	2105	73.65	2140	76.47	2174	79.30	2208	82.13	2241	84.98	2273	87.83	2305	90.68	2337	93.55	2368	96.42
12250	6218	2079	72.69	2115	75.56	2150	78.43	2184	81.32	2218	84.21	2251	87.10	2283	90.00	2315	92.91	2346	95.83	2377	98.75
12500	6345	2090	74.58	2125	77.51	2160	80.43	2194	83.37	2228	86.31	2261	89.25	2293	92.21	2325	95.17	2356	98.13	2387	101.11
12750	6472	2100	76.59	2135	79.48	2170	82.46	2204	85.45	2238	88.44	2271	91.44	2303	94.44	2335	97.46	2366	100.47	2397	103.50
13000	6598	2110	78.72	2145	81.55	2180	84.52	2214	87.56	2248	90.60	2281	93.65	2313	96.71	2345	99.77	2376	102.84	2407	105.92
13250	6725	2121	80.88	2156	83.77	2190	86.65	2224	89.70	2258	92.80	2291	95.90	2323	99.01	2355	102.13	2386	105.25	2417	108.38
13500	6852	2132	83.08	2167	86.02	2201	88.96	2235	91.90	2268	95.02	2301	98.18	2333	101.34	2365	104.51	2396	107.68	2427	110.86
13750	6979	2142	85.31	2177	88.31	2212	91.31	2245	94.31	2278	97.30	2311	100.49	2343	103.71	2375	106.93	2406	110.15	2437	113.39

VOL. CFM	O.V. FPM	32" SP RPM	SP BHP	33" SP RPM	SP BHP	34" SP RPM	SP BHP	35" SP RPM	SP BHP	36" SP RPM	SP BHP	37" SP RPM	SP BHP	38" SP RPM	SP BHP	39" SP RPM	SP BHP	40" SP RPM	SP BHP	41" SP RPM	SP BHP
7500	3807	2286	62.37	2320	64.53	2354	66.71	2390	70.67	2423	72.92	2457	77.06	2490	79.37	2521	81.69	2555	86.06	2586	88.45
7750	3934	2288	64.00	2322	66.22	2356	68.44	2392	72.46	2425	74.75	2459	78.94	2492	81.31	2523	83.68	2555	86.06	2586	88.45
8000	4060	2290	65.64	2324	67.90	2358	70.18	2392	72.46	2427	76.59	2457	77.06	2490	79.37	2521	81.69	2555	86.06	2586	88.45
8250	4187	2292																			



RBE - 21 BELT DRIVE RATING TABLES

WHEEL

Dia. - 36 1/2"

OUTLET O.D.

Size - 20 5/16" X 17 3/4"

Area - 2.44 Sq. Ft.

INLET O.D.

Size - 21"

Area - 2.41 Sq. Ft.

Ratings at 70°F., .075 Density, Sea Level

Series 18 = light face above Series 25

Series 25 = bold face

Series 32 = italic face below Series 25

NOTE: See pages 23, 25 or 26 for minimum motor frame sizes regardless of BHP.

SEE PAGE 22 FOR MAX. WHEEL RPM AND WR².

VOL. CFM	O.V. FPM	2" SP RPM BHP		4" SP RPM BHP		6" SP RPM BHP		8" SP RPM BHP		10" SP RPM BHP		12" SP RPM BHP		14" SP RPM BHP		16" SP RPM BHP		18" SP RPM BHP		20" SP RPM BHP	
3000	1229	527	1.52	659	2.74	736	3.87	803	5.08	861	6.36	916	7.70	967	9.10	1016	10.57	1060	12.08	1101	13.63
3500	1434	537	1.80	715	3.45	789	4.71	854	6.04	911	7.43	966	8.89	1016	10.40	1063	11.97	1107	13.59	1149	15.25
4000	1639	552	2.10	740	4.06	844	5.69	907	7.14	963	8.66	1016	10.23	1065	11.86	1109	13.54	1155	15.27	1194	17.05
4500	1844	566	2.43	750	4.59	898	6.85	961	8.44	1016	10.08	1069	11.76	1116	13.51	1160	15.31	1204	17.15	1245	19.04
5000	2049	582	2.80	761	5.15	908	7.61	1018	9.90	1072	11.67	1122	13.49	1169	15.36	1212	17.28	1255	19.24	1295	21.25
5500	2254	598	3.22	775	5.74	919	8.41	1043	11.16	1126	13.51	1177	15.44	1221	17.45	1266	19.47	1306	21.57	1345	23.69
6000	2459	617	3.71	790	6.37	929	9.24	1054	12.20	1163	15.21	1231	17.64	1276	19.77	1318	21.93	1361	24.11	1400	26.36
6500	2663	636	4.24	805	7.05	943	10.12	1064	13.28	1174	16.50	1273	19.78	1334	22.30	1374	24.62	1413	26.96	1452	29.32
7000	2868	656	4.81	820	7.81	957	11.04	1074	14.39	1184	17.83	1283	21.32	1374	24.85	1431	27.58	1471	30.03	1507	32.56
7500	3073	676	5.45	836	8.64	972	12.01	1089	15.57	1194	19.20	1293	22.90	1385	26.64	1470	30.43	1527	33.42	1563	36.06
8000	3278	699	6.18	854	9.53	987	13.03	1103	16.79	1206	20.62	1304	24.52	1395	28.48	1480	32.47	1560	36.52	1620	39.92
8500	3483	722	6.99	873	10.51	1003	14.18	1118	18.07	1220	22.10	1314	26.20	1405	30.36	1490	34.57	1570	38.82	1645	43.11
9000	3688	746	7.87	892	11.56	1018	15.40	1133	19.40	1235	23.64	1328	27.93	1416	32.30	1501	36.72	1580	41.17	1656	45.67
9500	3893	770	8.83	912	12.68	1034	16.68	1148	20.84	1250	25.24	1342	29.74	1428	34.29	1511	38.92	1591	43.59	1666	48.29
10000	4098	794	9.87	932	13.86	1053	18.09	1164	22.42	1264	26.90	1357	31.61	1442	36.36	1522	41.17	1601	46.06	1676	50.97
10500	4303	819	11.00	952	15.12	1072	19.59	1179	24.07	1279	28.65	1372	33.54	1457	38.51	1536	43.52	1612	48.58	1687	53.71
11000	4508	845	12.24	973	16.52	1092	21.16	1195	25.79	1295	30.61	1386	35.55	1471	40.72	1551	45.93	1626	51.20	1697	56.51
11500	4713	871	13.61	997	18.06	1111	22.82	1214	27.68	1311	32.64	1402	37.66	1486	43.00	1580	50.99	1655	56.66	1725	62.38
12000	4918	898	15.08	1020	19.69	1131	24.57	1233	29.65	1327	34.75	1417	40.00	1501	45.36	1516	47.87	1595	53.64	1669	59.52
12500	5122	925	16.65	1044	21.43	1151	26.41	1253	31.72	1344	36.98	1433	42.42								
13000	5327	952	18.34	1068	23.28	1171	28.33	1272	33.89	1363	39.37	1449	44.93	1532	50.62	1610	56.37	1684	62.46	1754	68.58
13500	5532	979	20.15	1092	25.24	1193	30.47	1292	36.15	1382	41.86	1465	47.53	1548	53.45	1625	59.34	1699	65.48	1769	71.81
14000	5737	1006	22.09	1116	27.31	1217	32.77	1312	38.52	1402	44.46	1484	50.36	1564	56.38	1641	62.50	1714	68.60	1784	75.13
14500	5942	1034	24.14	1141	29.50	1240	35.19	1332	40.99	1421	47.17	1503	53.29	1580	59.40	1657	65.75	1729	72.08	1799	78.54
15000	6147	1062	26.33	1166	31.81	1264	37.73	1352	43.56	1441	49.98	1522	56.34	1598	62.64	1673	69.10	1745	75.66	1814	82.21
15500	6352	1090	28.66	1192	34.33	1288	40.41	1374	46.38	1461	52.91	1542	59.50	1617	66.03	1689	72.56	1761	79.35	1830	86.12
16000	6557	1118	31.12	1218	37.02	1312	43.21	1397	49.42	1480	55.96	1561	62.78	1636	69.54	1707	76.26	1777	83.15	1846	90.15
16500	6762	1146	33.73	1244	39.85	1336	46.16	1420	52.59	1501	59.12	1581	66.18	1656	73.17	1726	80.12	1793	87.05	1862	94.29
17000	6967	1174	36.52	1271	42.82	1360	49.24	1444	55.90	1521	62.41	1601	69.70	1675	76.93	1745	84.11	1812	91.25	1877	98.54

VOL. CFM	O.V. FPM	22" SP RPM BHP		24" SP RPM BHP		25" SP RPM BHP		26" SP RPM BHP		27" SP RPM BHP		28" SP RPM BHP		29" SP RPM BHP		30" SP RPM BHP		31" SP RPM BHP		32" SP RPM BHP	
9000	3688	1727	50.21	1796	54.78	1815	56.44	1833	57.92	1847	59.54	1861	61.15	1880	62.61	1895	64.20	1906	65.92	1921	67.50
9300	3811	1734	51.90	1802	56.60	1836	58.96	1865	61.16	1883	62.65	1897	64.29	1912	65.92	1927	67.55	1942	69.16	1954	70.92
9600	3934	1740	53.61	1808	58.43	1842	60.86	1874	63.29	1906	65.74	1932	67.61	1947	69.27	1958	71.10	1974	72.74	1989	74.37
9900	4057	1746	55.35	1815	60.29	1848	62.78	1880	65.28	1912	67.78	1944	70.29	1975	72.82	1993	74.70	2008	76.36	2024	78.02
10200	4180	1752	57.10	1821	62.17	1854	64.72	1887	67.28	1918	69.85	1950	72.42	1981	75.01	2011	77.60	2041	80.20	2057	81.87
10500	4303	1758	58.88	1827	64.08	1860	66.69	1893	69.31	1925	71.94	1956	74.58	1987	77.22	2017	79.88	2047	82.54	2076	85.21
10800	4426	1765	60.68	1833	66.01	1866	68.68	1899	71.36	1931	74.06	1962	76.76	1993	79.46	2023	82.18	2053	84.90		
11100	4549	1771	62.50	1839	67.96	1873	70.70	1905	73.44	1937	76.20	1968	78.96	1999	81.73	2029	84.51	2059	87.29		
11400	4672	1777	64.35	1846	69.93	1879	72.73	1911	75.54	1943	78.36	1975	81.19	2005	84.02	2036	86.86	2065	89.71		
11700	4795	1784	66.22	1852	71.93	1885	74.80	1918	77.67	1950	80.55	1981	83.44	2012	86.34	2042	89.24	2072	92.15		
12000	4918	1793	68.14	1858	73.95	1891	76.88	1924	79.82	1956	82.76	1987	85.72	2018	88.68	2048	91.64	2078	94.62		
12300	5040	1801	70.08	1866	76.01	1898	78.99	1930	81.99	1962	85.00	1993	88.02	2024	91.04	2054	94.07				
12600	5163	1810	72.06	1874	78.10	1905	81.14	1936	84.19	1968	87.27	2000	90.35	2030	93.44	2061	96.53				
12900	5286	1819	74.07	1883	80.23	1914	83.33	1945	86.44	1975	89.56	2006	92.70	2037	95.85	2067	99.01				
13200	5409	1827	76.11	1892	82.39	1923	85.55	1953	88.72	1983	91.90	2013	95.09	2043	98.30	2073	101.52				
13500	5532	1836	78.18</																		

DIRECT DRIVE RATING TABLES

CFM and BHP at Static Pressure Shown

Ratings at 70°F., .075 Density, Sea Level

MODEL NO.	RPM	1" SP CFM BHP	2" SP CFM BHP	3" SP CFM BHP	4" SP CFM BHP	5" SP CFM BHP	6" SP CFM BHP	7" SP CFM BHP	8" SP CFM BHP
RBE-7	1750	830 [†] 0.5	556 [†] 0.4						
	2850	1574 2.3	1444 2.2	1304 [†] 2.0	1148 [†] 1.8	966 [†] 1.6	740 [†] 1.3		
	3500	1987 4.4	1881 4.2	1775 4.0	1661 3.8	1546 3.5	1414 3.3	1271 3.0	1111 2.7
RBE-9	1450	1510 [•] 1.0	1113 [†] 0.8						
	1750	1952 1.8	1663 1.6	1310 [†] 1.3	790 [†] 0.9				
	2850	3454 8.3	3288 8.0	3121 7.6	2943 7.2	2763 6.8	2572 6.4	2352 6.0	2122 5.6
RBE-11	1150	2142 [•] 1.3	1517 [•] 0.9						
	1450	2946 2.7	2521 2.3	2026 1.9	1326 [†] 1.4				
	1750	3706 4.9	3375 4.5	3011 4.0	2624 3.5	2114 3.0	1443 2.2		
RBE-13	2850	6360 22.0	6164 21.4	5965 20.7	5763 20.1	5560 19.4	5341 18.7	5118 18.0	4894 17.2
	3500	7892 41.2	7732 40.4	7572 39.6	7412 38.8	7247 38.0	7082 37.1	6917 36.3	6750 35.5
	1150	3797 3.1	3145 2.6	2321 2.0					
RBE-15	1450	5067 6.4	4588 5.8	4065 5.2	3501 4.5	2730 3.7	1463 2.5		
	1750	6289 11.5	5902 10.9	5500 10.2	5069 9.4	4617 8.6	4118 7.8	3495 6.8	2788 5.8
	2850	10626 51.4	10393 50.3	10160 49.3	9927 48.2	9685 47.1	9444 45.9	9202 44.8	8945 43.6
RBE-17	3500	13146 95.8	12956 94.5	12766 93.1	12577 91.8	12387 90.5	12197 89.2	12000 87.8	11803 86.4
	1150	6083 6.6	5385 5.9	4563 5.1	3588 4.1	1423 2.1			
	1450	7972 13.6	7449 12.8	6902 12.0	6274 11.0	5588 9.9	4842 8.7	3958 7.3	
RBE-19	1750	9811 24.4	9395 23.4	8952 22.4	8507 21.4	8002 20.2	7482 19.0	6912 17.7	6318 16.3
	2850	16400 107.7	16144 106.1	15889 104.6	15633 103.0	15377 101.5	15113 99.9	14840 98.3	14566 96.6
	1150	9081 12.6	8322 11.6	7467 10.5	6506 9.3	5414 7.9	3974 6.1		
RBE-21	1450	11786 25.9	11210 24.7	10602 23.5	9964 22.2	9250 20.7	8496 19.2	7682 17.5	6775 15.7
	1750	14441 46.1	13968 44.7	13485 43.3	12981 41.8	12478 40.3	11923 38.7	11331 36.9	10739 35.1
	1150	12789 21.7	11939 20.1	11093 18.7	10148 17.3	9102 15.7	7886 14.0	6336 11.7	4357 8.8
RBE-21	1450	16524 44.7	15848 42.6	15174 40.6	14503 38.9	13832 37.1	13069 35.3	12305 33.5	11428 31.4
	1750	— —	— —	19079 74.6	18520 72.2	17963 70.1	17407 67.9	16851 65.8	16242 63.6
	1150	17516 36.4	16573 34.1	15637 32.2	14683 30.3	13617 28.4	12473 26.3	11128 23.9	9571 21.1
RBE-21	1450	22526 74.6	21778 71.7	21031 68.9	20287 66.5	19545 64.1	18803 61.7	17972 59.2	17127 56.8
	1750	— —	— —	— —	25611 122.4	24993 119.2	24378 116.3	23763 113.4	23148 110.6

MODEL NO.	RPM	9" SP CFM BHP	10" SP CFM BHP	11" SP CFM BHP	12" SP CFM BHP	13" SP CFM BHP	14" SP CFM BHP	15" SP CFM BHP	16" SP CFM BHP
RBE-7	3500	921 2.4	660 [†] 1.9						
RBE-9	2850	1863 5.0	1538 4.4	1100 3.5					
	3500	3167 11.9	2990 11.4	2807 10.9	2620 10.3	2409 9.6	2198 9.0	1916 8.1	1580 7.2
RBE-11	2850	4657 16.4	4418 15.6	4172 14.7	3851 13.9	3530 13.0	3170 12.0	2801 11.0	2301 9.4
	3500	6568 34.6	6386 33.7	6204 32.8	6022 31.9	5830 31.0	5636 30.0	5442 29.0	5247 28.0
RBE-13	2850	8681 42.5	8416 41.3	8152 40.1	7875 38.8	7593 37.5	7311 36.1	7029 34.8	6673 33.3
	3500	11607 85.0	11410 83.7	11213 82.3	10999 80.8	10783 79.4	10568 77.9	10353 76.4	10137 75.0
RBE-15	1750	5653 14.8	4921 13.2	3920 11.0					
	2850	14293 95.0	14020 93.3	13746 91.7	13435 89.7	13115 87.7	12796 85.7	12476 83.8	12156 81.8
RBE-17	1450	5771 13.7	4158 10.6						
	1750	10078 33.1	9404 31.2	8720 29.1	7888 26.7	7056 24.3	5907 21.2		
RBE-19	1450	10463 29.2	9400 26.7	8154 23.8	6817 21.0	6040 12.7			
	1750	15608 61.4	14975 59.2	14314 57.0	13514 54.3	12715 51.6	11915 48.9	10908 45.3	9865 42.0
RBE-21	1150	7794 18.1	6442 10.5						
	1450	16281 54.3	15236 51.4	14169 48.4	13034 45.1	11681 41.1	10264 37.5	8573 32.8	
	1750	22528 107.7	21828 104.7	21127 101.7	20427 98.8	19727 95.8	18888 92.3	18004 88.7	17120 85.1

MODEL NO.	RPM	17" SP CFM BHP	18" SP CFM BHP	19" SP CFM BHP	20" SP CFM BHP	21" SP CFM BHP	22" SP CFM BHP	23" SP CFM BHP	24" SP CFM BHP
RBE-9	3500	788 4.8							
RBE-11	2850	1186 6.6							
	3500	5016 26.9	4755 25.8	4494 24.6	4228 23.5	3927 22.3	3627 21.1	3326 19.8	2885 17.7
RBE-13	2850	6293 31.8	5914 30.2	5503 28.6	5069 27.0	4635 25.4	3936 22.6	3036 18.9	2316 16.3
	3500	9922 73.5	9693 71.9	9463 70.3	9233 68.6	9004 67.0	8774 65.4	8544 63.8	8235 61.9
RBE-15	2850	11830 79.7	11464 77.5	11098 75.3	10732 73.1	10366 70.8	10000 68.6	9597 66.2	9148 63.5
RBE-19	1750	8804 38.7	7433 34.0						
RBE-21	1750	16236 81.5	15150 76.8	14023 72.0	12849 67.6	11675 63.2	10092 56.5	8691 35.1	

Shaded performance in Italics are with 50 cycle motors.

Note: All units cataloged were tested in accordance with AMCA standard 211.

(†) Requires a 143T frame or larger even though BHP is available in 56 frame. See page 24.

(•) Requires a 182T frame or larger even though BHP is available in 56 frame. See page 24.

MATERIAL CONVEYING

Bulky materials such as those shown in Table 1, page 21, can be conveyed pneumatically using a Cincinnati Fan "RBE" series exhauster. Follow the steps below to determine the fan best suited for your application.

EXAMPLE: Assume a requirement to move 2400 pounds per hour of barley through 200 feet of straight, horizontal, round duct. See notes 1 & 2 below.

- I. Convert pounds per hour to pounds per minute: $2400 \text{ lbs/hr} \div 60 = 40 \text{ lbs/min}$
- II. Refer to Table 1, page 21. Find "barley" under material (column A) and read horizontally. Barley weighs 38 pounds per cubic foot (column B), requires 38 CFM of air per pound of material (column C) and a minimum of 5000 feet per minute conveying velocity (column D).
- III. Determine the minimum cubic feet per minute (CFM) requirements:

$$\frac{\text{CFM/LB of Material}}{\text{x } \underline{\text{lbs/Minute}}} = \frac{38 \text{ (from column C)}}{\text{x } \underline{40} \text{ (from step 1)}}$$

1520 Total minimum CFM required @ 5000 ft/min conveying velocity (column D)

- IV. Determine the system duct size and system static pressure requirements from Table 2, page 21. Read across the 5000 ft/min velocity line to the 8" duct size column since this is the first (smallest) duct size column over 1520 CFM.

We have selected 8" duct size with 1745 CFM (actual) and a velocity of 5000 ft/min.

The friction loss is 6.02" SP per 100' $\times 2 = 12.04"$ plus 3.5" SP suction pickup (column E, Table 1) = 15.54" total system static pressure for 200 feet of straight 8" duct.

- V. Check fan rating tables for 1745 CFM at 15.54" SP at the lowest horsepower. We suggest a Model RBE-9 (on page 8).

Interpolate 3499 RPM, 7.59 BHP.

- VI. If material being conveyed will be going through the fan, the fan BHP can be significantly increased. The approximate increase is calculated as:

$$\text{Actual BHP} = \frac{\text{lbs/Minute of air} + \text{lbs/Minute of material}}{\text{lbs/Minute of air}} \times \text{Fan BHP (7.59, Step V)}$$

In this example: $\text{lbs/Minute of air} = 1745$ (Actual CFM, Step IV) $\times .075 \text{ lbs/ft}^3$ (Standard Density) = 130.9
 $\text{lbs/Minute of material} = 40$

See note 3

$$\text{Therefore: } \frac{130.9 + 40}{130.9} = \frac{170.9}{130.9} = 1.31 \times 7.59 = 9.94 \text{ Actual BHP}$$

NOTES:

1. For each 10 feet of vertical duct, add 10 feet to your total straight duct length.
2. For equivalent losses through elbows, see chart on page 9 of our Engineering Data catalog.
3. Make sure you use correct density for location of fan.

YOUR MATERIAL CONVEYING CALCULATIONS

(1) Material Being Conveyed	(2) Pounds Conveyed/Hour	(3) Pounds/Minute	(4) Feet of Straight Horizontal Duct	(5) Number of 90° Elbows	(6) Total Equivalent Feet of Duct	(7) Material Weight, Lbs./Cu. Ft. (col. B)	(8) CFM/Pound of Material (col. C)	(9) Pounds/Minute (step 3)	(10) Total Min. CFM Required	(11) Min. Conveying Velocity in FPM (col. D)	(12) Duct Size to Get Total CFM (step 10) @ Minimum Velocity (step 11) per table 2	(13) Actual CFM for Duct (step 12)	(14) Friction Loss/100 Ft	(15) Total Equivalent Feet of Duct (step 6) (in 100's of feet)	(16) Suction Pickup in Inches of WC (col. E)	(17) Total System SP	(1) _____	NOTE: If conveying long, stringy material, be sure to specify open type wheel. Consult factory.
(2)	(2)	(2) <u>+</u> 60	(4)	(5) <u>+</u>	(6)	(7)	(8) <u> </u>	(9) <u>x</u>	(10)	(11)	(12)	(13)*	(14) <u> </u>	(15) <u>x</u>	(16) <u> </u>	(17)	DUCT SIZE	ACTUAL CFM*
(3)																	TOTAL SYSTEM SP	
(4)																	FAN MODEL TO GET #13 (Actual CFM) & #17 (Total SP) ABOVE	
(5)																	FAN RPM	
(6)																	ACTUAL FAN BHP	
(7)																	(See VI above)	

*Must be equal or greater than Step 10.

TABLE 1

A	B	C	D	E
Material	Approx. Weight (Lbs. per Cu. Ft.)	CFM Per Lb. of Material	Min. Conveying Velocity (In fpm*)	Suction Pickup (Inches of W.C.)
Ashes, Coal	40	42	4500	3.0
Barley	38	38	5000	3.5
Beans, Soy	47	36	5200	4.0
Bran	16	56	3500	2.0
Cement, Portland	100	35	7000	5.0
Cinders, Coal	45	36	6000	4.0
Coal, Powdered	30	42	4000	3.0
Coffee, Beans	48	36	3500	3.0
Cork, Ground	15	59	3500	1.5
Corn, Cobs	25	44	5000	2.5
Corn, Meal	40	38	5500	3.5
Corn, Shelled	45	36	5500	3.5
Cotton, Dry	30	94	4000	2.0
Dust, Grinding	160-175	42	5000	3.0
Fruit, Dried	30	42	4000	3.0
Hair or Feathers, Dry	5	94	3000	1.5
Lime, Hydrated	53-64	42	5000	3.0
Malt, Dry	35	39	4800	3.0
Oats	26	44	4500	3.0
Plastic, Granulated	35	42	5400	3.0
Rags, Dry	30	42	4500	2.5
Salt, Coarse	48	36	5500	4.0
Sand, Dry	99	35	7000	5.0
Sawdust, Dry	7-15	63	3700	2.5
Wheat, Dry	48	37	5800	4.0
Wood Chips, Heavy	15-24	45	4500	3.0
Wood Shavings, Light	7-15	73	3400	2.0
Wool, Dry	5	94	5000	2.0

* Feet per minute

TABLE 2
Friction Loss (FL) in Inches of Water per 100 Feet of Straight, Horizontal, Round Duct

VEL FPM	PIPE DIAMETER & AREA IN SQ. FT.																					
	4" .087		5" .136		6" .196		7" .267		8" .349		10" .545		12" .785		14" 1.069		16" 1.396		18" 1.767		20" 2.182	
	CFM	FL	CFM	FL	CFM	FL	CFM	FL	CFM	FL	CFM	FL	CFM	FL	CFM	FL	CFM	FL	CFM	FL	CFM	FL
SEE "PB" CATALOG	2600		695	1.86	909	1.63	1420	1.30	2040	1.08	2780	.93	3630	.81	4600	.72	5680	.65				
	2800		748	2.15	977	1.89	1530	1.61	2200	1.26	2990	1.07	3910	.93	4950	.83	6110	.75				
	3000		802	2.47	1048	2.08	1638	1.73	2355	1.44	3210	1.24	4180	1.08	5310	.96	6550	.86				
	3200		855	2.82	1118	2.47	1748	1.97	2510	1.64	3420	1.41	4470	1.23	5660	1.09	6980	.96				
	3400		910	3.18	1188	2.78	1855	2.22	2670	1.85	3630	1.59	4750	1.43	6020	1.24	7430	1.11				
	3500		935	3.37	1222	2.95	1908	2.35	2747	1.96	3741	1.68	4886	1.49	6184	1.31	7637	1.18				
	3600		962	3.56	1258	3.12	1965	2.49	2825	2.08	3840	1.78	5025	1.56	6370	1.38	7860	1.25				
	3700		988	3.76	1291	3.30	2017	2.63	2904	2.20	3955	1.88	5165	1.65	6537	1.46	8073	1.32				
	3800		1018	3.97	1327	3.48	2070	2.78	2985	2.32	4060	1.99	5300	1.74	6720	1.54	8300	1.39				
4000	1070	4.40	1396	3.85	2184	3.08	3142	2.57	4280	2.20	5580	1.92	7080	1.71	8740	1.54						
	4200	4.85	1467	4.25	2290	3.49	3300	2.83	4400	2.43	5870	2.12	7430	1.88	9170	1.70						
	4400	5.30	1536	4.63	2400	3.71	3456	3.11	4700	2.66	6140	2.33	7780	2.06	9620	1.85						
4500	1202	5.55	1571	4.86	2453	3.89	3532	3.25	4810	2.78	6282	2.44	7951	2.16	9819	1.94						
	4800	6.32	1676	5.55	2620	4.43	3770	3.69	5130	3.17	6700	2.77	8480	2.46	10460	2.22						
	5000	6.88	1745	6.02	2725	4.82	3925	4.01	5345	3.44	6980	3.01	8835	2.67	10910	2.41						
5200	1390	7.44	1818	6.50	2840	5.21	4080	4.34	5560	3.72	7260	3.25	9200	2.89	11360	2.61						
	5500	8.31	1920	7.28	2997	5.81	4317	4.85	5879	4.17	7678	3.64	9718	3.22	12001	2.91						
	5600	8.61	1954	7.55	3060	6.03	4400	5.05	5980	4.32	7820	3.78	9900	3.35	12220	3.02						
5800	1549	9.25	2024	8.10	3161	6.47	4553	5.40	6200	4.63	8096	4.05	10248	3.60	12655	3.24						
	6000	9.89	2096	8.66	3276	6.92	4710	5.76	6420	4.95	8360	4.33	10620	3.85	13100	3.46						
	7000	13.50	2445	11.80	3820	9.41	5500	7.82	7470	6.74	9770	5.90	12380	5.24	15300	4.72						

WARNING

Whereas fans are used in thousands of material conveying applications around the world, care must be used in their selection and location within each material conveying system. The material should be crushed, shredded or pulverized **before** it passes through the fan to eliminate premature fan housing, fan wheel and/or bearing failure which could cause severe personal injury and/or complete system failure. Please contact a Cincinnati Fan sales engineer in your area for correct, safe selection for your specific application.



DIMENSIONS and SPECIFICATIONS

NOTE: The table below contains blower housing dimensions common to all arrangements on pages 23, 24 and 25. ①②③

DIMENSIONS IN INCHES ±1/16"

MODEL	C ^①	D	E	J ^①	K	M	O	P ^②	R ^②	S ^②	V	AA	DD ^③	FF
RBE-7	3	6 1/8	3	4 1/16	1/16	7 1/4	9	9 7/8	10 5/8	9 1/8	14	7	6 3/4	15 1/2
RBE-9	3	7 5/8	3	4 13/16	1/16	9 3/8	11 3/8	12 3/4	13 3/4	11 3/4	17 1/4	9	8 3/4	18 1/8
RBE-11	3	9 3/8	3	5 11/16	1/16	11 3/8	13 3/4	15 1/2	16 3/4	14 1/4	21 1/2	11	10 3/4	22 3/4
RBE-13	3	11	3	6 1/2	1/16	13 1/2	16 1/8	18 3/8	19 7/8	16 7/8	26 1/8	13	12 3/4	26 1/4
RBE-15	3	12 3/4	3	7 3/8	1/16	15 3/4	18 3/8	21 1/4	23	19 1/2	28 1/4	15	14 1/2	28 1/2
RBE-17	3	14 3/8	3	8 3/16	1/16	17 3/4	20 3/4	24	26	22	31	17	16 1/2	31 1/4
RBE-19	4	15 7/8	3	8 15/16	1/16	19 3/4	24 9/16	26 3/4	28 15/16	24 9/16	34 1/4	19	18 3/8	34 1/2
RBE-21	5	17 3/4	3 1/2	10 7/8	3/4	21 13/16	27 3/16	29 9/16	32	27 3/16	28	21	20 5/16	38 3/4

① Add 1/8" for AMCA "C" Construction and/or Down Blast or Bottom Angular Down discharge positions.

② Add 1/16" for Series 32 and 40 housing.

③ Add 1/8" for Series 32 and 40 housing.

Maximum Shaft and Bearing Speeds for Belt Driven Fans Maximum Wheel Speeds & WR² (lb.-Ft.²) for Direct Driven Fans

FAN MODEL	MAXIMUM FAN SHAFT AND BEARING SPEEDS				MAXIMUM WHEEL SPEEDS				WR ² (lb.-Ft. ²)				
					STEEL ①		ALUMINUM ②		STEEL		ALUMINUM		
	SERIES		SERIES		OPEN	SHROUDED	OPEN	SHROUDED	OPEN	SHROUDED	OPEN	SHROUDED	
	18	25	32	40	18-25	18-25	32-40	18 Only	25-40	18-25	18-25	32-40	
	18	25	32	40	18-25	18-25	32-40	18 Only	25-40	18-25	18-25	32-40	
RBE-7	4680	4994	—	—	4994	4994	—	4100	4994	1.9	2.0	—	1.3
RBE-9	3630	4383	—	—	4383	4383	—	3600	4383	4.7	5.3	—	3.3
RBE-11	3000	3610	4000	—	3610	3610	4000 ③	3000	4000 ③	12.8	13.7	15.7	8.3
RBE-13	2535	3123	3400	3800	3123	3123	3800	2200	3800	24.2	26.3	30.2	16.0
RBE-15	2186	2699	3000	3500	2699	2699	3500	1900	3500	42.8	45.8	52.8	28.9
RBE-17	1935	2367	2610	3090	2367	2367	3090	1600	3090	70.4	75.1	86.9	45.5
RBE-19	1733	2098	2360	2610	2098	2098	2610	1400	2610	108.1	115.0	133.3	69.4
RBE-21	1530	1900	2080	—	1900	1900	2080 ③	—	2080 ③	254.0	180.0	180.0	117.0 ④

① For steel wheels up to 175°F. (80°C.). See page 5 for RPM reduction factors above 175°F. (80° C.).

② For aluminum wheels up to 200°F. (93°C.). Aluminum wheels match the highest design speeds shown for the same size steel wheel.

③ For Series 32 only. Not available in Series 40.

④ Shrouded type only.

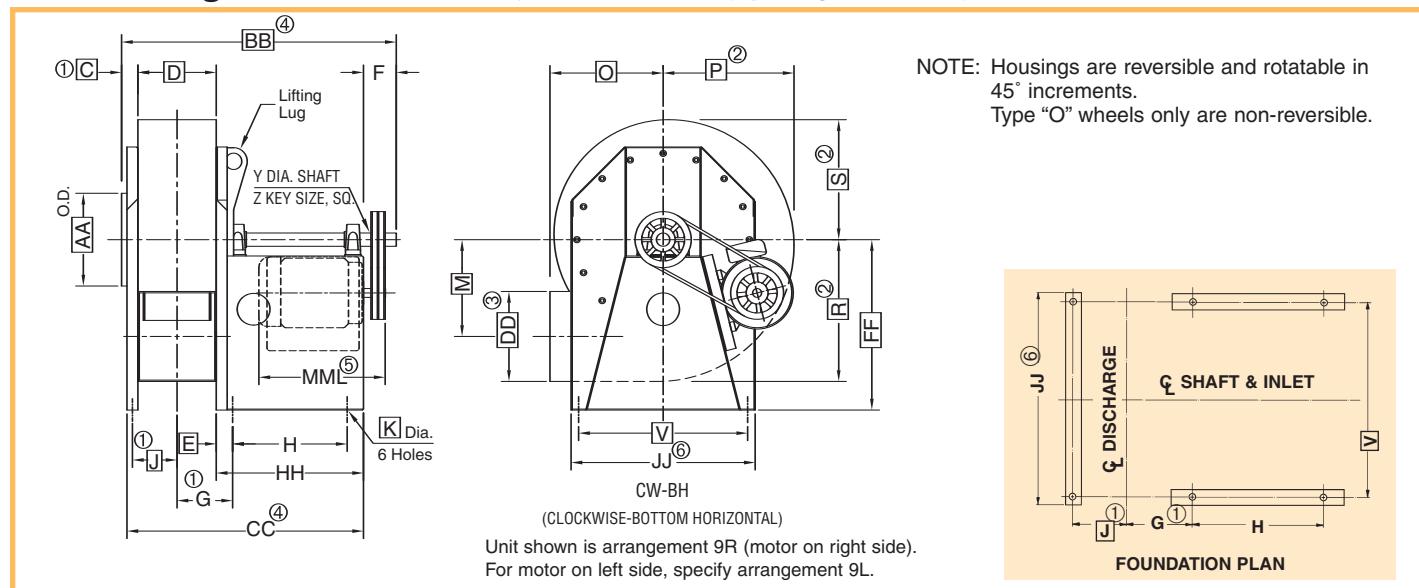
Approximate Shipping Weights Less Motor, Drives and Options

FAN MODEL	ARR.#1		ARR.#4			ARR.#8		ARR.#9				ARR.#9CB				ARR.#10	
	SERIES		SMALL BASE	LARGE BASE	X-LARGE BASE	SERIES		SERIES		SERIES		SERIES		SERIES		SERIES	
	18 & 25	32 & 40				18 & 25	32 & 40	18	25	32	40	18	25	32	40	18	25
RBE-7	150	155	115	—	—	170	175	150	155	—	—	245	250	—	—	220	225
RBE-9	215	225	175	190	—	245	255	215	225	—	—	330	340	—	—	295	305
RBE-11	325	335	255	290	295	355	365	325	335	385	—	470	480	480	—	415	425
RBE-13	450	460	355	410	415	490	500	450	460	470	500	620	630	640	660	630	640
RBE-15	555	565	475	525	540	625	635	620	635	760	800	735	745	810	840	755	765
RBE-17	670	680	580	650	—	760	770	680	700	790	830	880	890	955	965	890	900
RBE-19	850	855	690	770	790	905	945	910	950	1090	1100	1085	1100	1130	1135	1035	1045
RBE-21	1370	1435	1080	1110	1130	—	—	1210	1320	1410	—	1670	1742	1745	—	—	—



DIMENSIONS and SPECIFICATIONS

Arrangement #1 and #9, Belt Drive (specify 9R or 9L)



- ① Add 1/8" for AMCA "C" Construction and/or Down Blast or Bottom Angular Down discharge positions.
- ② Add 1/16" for Series 32 and 40 housing.
- ③ Add 1/8" for Series 32 and 40 housing.
- ④ Add 1/4" for AMCA "C" Construction and/or Down Blast or Bottom Angular Down discharge positions.

- ⑤ MML IS MAXIMUM MOTOR LENGTH ON CUSTOMER SUPPLIED MOTOR. MOTOR MANUFACTURERS "C" DIMENSION CANNOT EXCEED "MML" WITHOUT A SPECIAL BASE.
- ⑥ RBE-21: Inlet side plate is wider than base "JJ" dimension, 41 1/4 versus 30 inches.

Note: For common boxed blower housing dimensions, see Page 22.

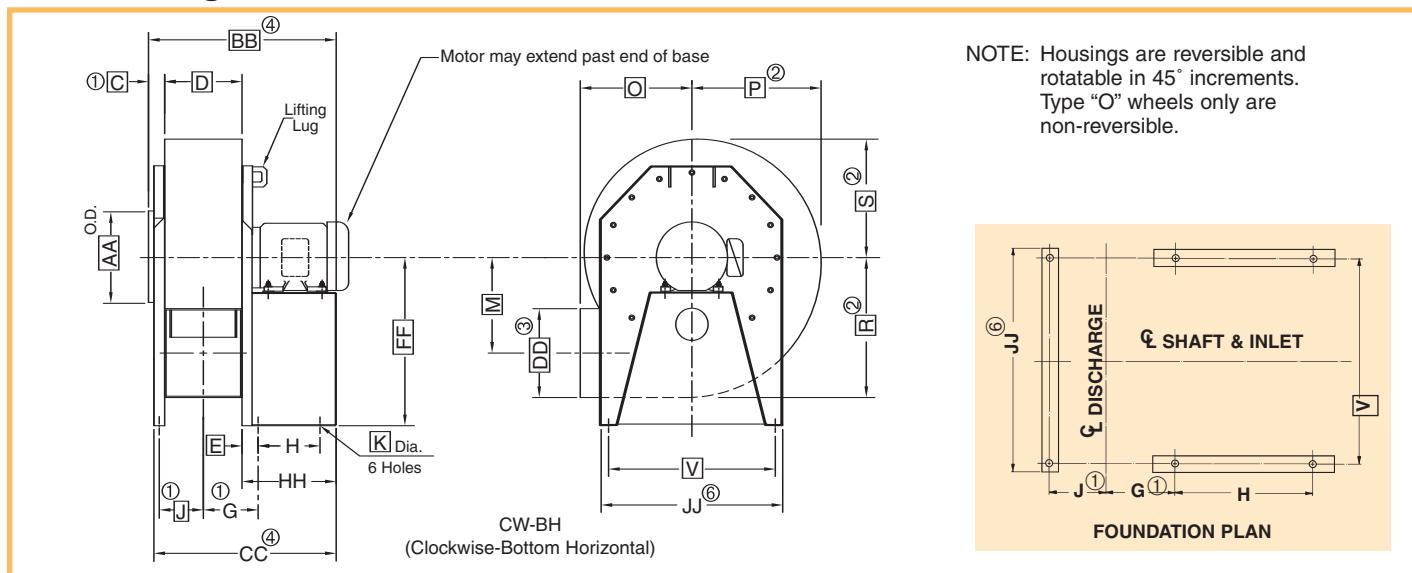
DIMENSIONS IN INCHES ±1/8"

DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE.

MODEL	SERIES	MOTOR FRAME	F	G	H	Y	Z	BB ^④	CC ^④	HH	JJ	MML ^⑤
RBE-7	18	56-215T	4	6 1/16	12 3/4	1 7/16	3/8	31 7/8	26 7/8	18 3/4	16	19 3/8
	25	143T-215T				1 11/16						
RBE-9	18	56-215T	4	6 13/16	17	1 7/16	3/8	37 5/8	32 5/8	23	19 1/4	24 1/4
	25	182T-256T				1 11/16						
RBE-11	18	145T-256T	4	7 11/16	18 1/2	1 11/16	3/8	40 7/8	35 7/8	24 1/2	23 1/2	26 3/8
	25	182T-286T				1 15/16						
	32	213T-286T				2 3/16						
RBE-13	18	145T-286T	5	8 1/2	21	1 11/16	3/8	46	40	27	28 1/8	29 1/2
	25	182T-286T				1 15/16						
	32	213T-324T				2 3/16						
	40	254T-326T				2 11/16						
RBE-15	18	145T-286T	6	9 3/8	21	1 15/16	1/2	48 3/4	41 3/4	27	30 3/4	29 1/2
	25	213T-324T				2 3/16						
	32	254T-364T				2 7/16						
	40	254T-364T				2 11/16						
RBE-17	18	182T-326T	6	10 3/16	21	2 3/16	1/2	50 3/8	43 3/8	27	33 3/4	29 1/2
	25	254T-326T				2 7/16						
	32	254T-364T				2 11/16						
	40	254T-364T				2 11/16						
RBE-19	18	182T-326T	6	10 15/16	24 3/4	2 3/16	1/2	56 5/8	48 5/8	30 3/4	37 1/4	33 1/4
	25	254T-364T				2 7/16						
	32	254T-364T				2 11/16						
	40	254T-365T				2 15/16						
RBE-21	18	182T-326T	6	12 3/8	25	2 7/16	5/8	60 3/4	52 3/4	32	30 ^⑥	32 3/4
	25	254T-364T				2 11/16						
	32	254T-365T				2 11/16						

DIMENSIONS and SPECIFICATIONS

Arrangement #4, Direct Drive



- ① Add 1/8" for AMCA "C" Construction and/or Down Blast or Bottom Angular Down discharge positions.
- ② Add 1/16" for Series 32 and 40 housing.
- ③ Add 1/8" for Series 32 and 40 housing.

- ④ Add 1/4" for AMCA "C" Construction and/or Down Blast or Bottom Angular Down discharge positions.
- ⑤ RBE-21: Inlet side plate is wider than base "JJ" dimension, 41 $\frac{1}{4}$ versus 30 inches.

Note: For common boxed blower housing dimensions, see Page 22.

DIMENSIONS IN INCHES ±1/8"

DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE.

MODEL	MOTOR FRAME	① G	H			BB ^④			CC ^④			HH			JJ
			SM	LG	X-LG										
RBE-7	SM. 143T-184T	6 $\frac{1}{16}$	5 $\frac{1}{2}$	—	—	20 $\frac{5}{8}$	—	—	19 $\frac{5}{8}$	—	—	11 $\frac{1}{2}$	—	—	16
RBE-9	SM. 143T-215T LG. 254T-256T	6 $\frac{13}{16}$	7 $\frac{5}{8}$	16	—	24 $\frac{1}{4}$	32 $\frac{5}{8}$	—	23 $\frac{1}{4}$	31 $\frac{5}{8}$	—	13 $\frac{5}{8}$	22	—	19 $\frac{1}{4}$
RBE-11	SM. 182T-215T LG. 254T-286T X-LG. 324T	7 $\frac{11}{16}$	8 $\frac{3}{8}$	18 $\frac{1}{2}$	21	26 $\frac{3}{4}$	36 $\frac{7}{8}$	39 $\frac{3}{8}$	25 $\frac{3}{4}$	35 $\frac{7}{8}$	38 $\frac{3}{8}$	14 $\frac{3}{8}$	24 $\frac{1}{2}$	27	23 $\frac{1}{2}$
RBE-13	SM. 213T-256T LG. 284T-326T X-LG. 364T-365T	8 $\frac{1}{2}$	11 $\frac{1}{2}$	21	24 $\frac{3}{4}$	31 $\frac{1}{2}$	41	44 $\frac{3}{4}$	30 $\frac{1}{2}$	40	43 $\frac{3}{4}$	17 $\frac{1}{2}$	27	30 $\frac{3}{4}$	28 $\frac{1}{8}$
RBE-15	SM. 213T-256T LG. 284T-326T X-LG. 364T-365T	9 $\frac{3}{8}$	11 $\frac{1}{2}$	21	24 $\frac{3}{4}$	33 $\frac{1}{4}$	42 $\frac{3}{4}$	46 $\frac{1}{2}$	32 $\frac{1}{4}$	41 $\frac{3}{4}$	45 $\frac{1}{2}$	17 $\frac{1}{2}$	27	30 $\frac{3}{4}$	30 $\frac{3}{4}$
RBE-17	SM. 213T-256T LG. 284T-326T	10 $\frac{3}{16}$	11 $\frac{1}{2}$	21	—	34 $\frac{7}{8}$	44 $\frac{3}{8}$	—	33 $\frac{7}{8}$	43 $\frac{3}{8}$	—	17 $\frac{1}{2}$	27	—	33 $\frac{3}{4}$
RBE-19	SM. 213T-256T LG. 284T-326T X-LG. 364T-365T	10 $\frac{15}{16}$	11 $\frac{1}{2}$	21	24 $\frac{3}{4}$	37 $\frac{3}{8}$	46 $\frac{7}{8}$	50 $\frac{5}{8}$	35 $\frac{3}{8}$	44 $\frac{7}{8}$	48 $\frac{5}{8}$	17 $\frac{1}{2}$	27	30 $\frac{3}{4}$	37 $\frac{1}{4}$
RBE-21	SM. 284T-326T LG. 364T-405T X-LG. 444T	12 $\frac{3}{8}$	20	25	29	49 $\frac{3}{4}$	54 $\frac{3}{4}$	58 $\frac{3}{4}$	47 $\frac{3}{4}$	52 $\frac{3}{4}$	56 $\frac{3}{4}$	27	32	36	30 ^⑥

⚠ DANGER

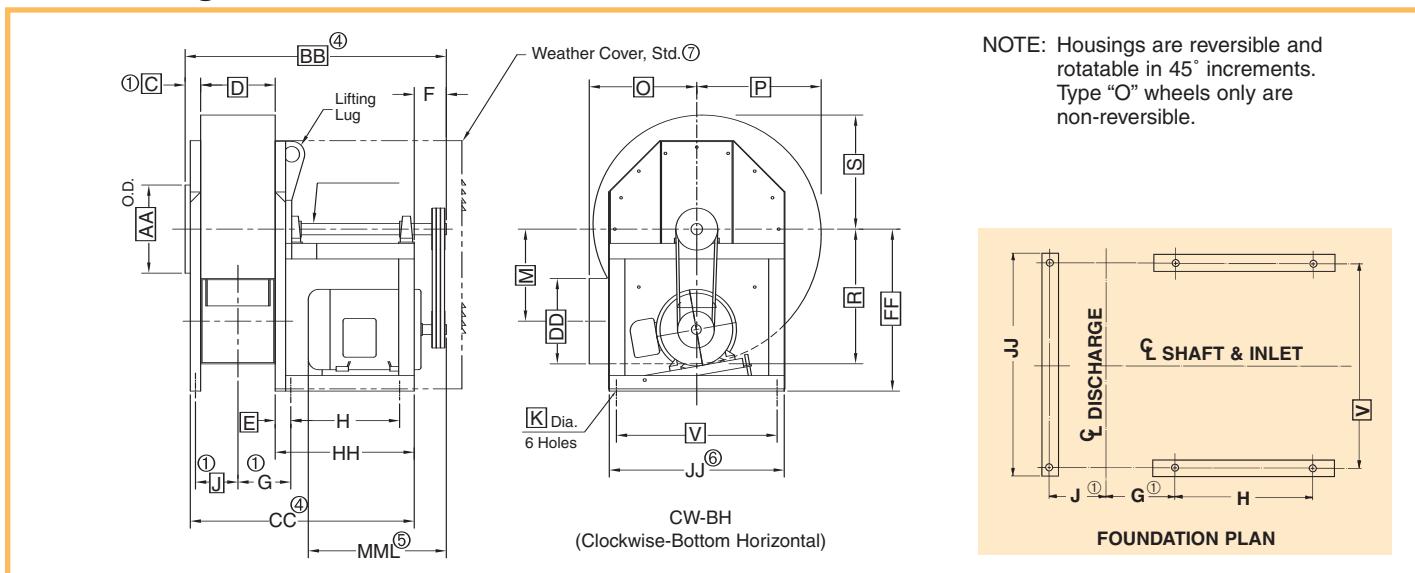
All fans & blowers shown have rotating parts and pinch points. Severe personal injury can result if operated without guards. Stay away from rotating equipment unless it is disconnected from its power source.

Read operating instructions.



DIMENSIONS and SPECIFICATIONS

Arrangement #10, Belt Drive

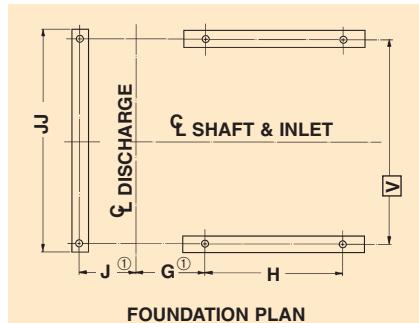


① Add 1/8" for AMCA "C" Construction and/or Down Blast or Bottom Angular Down discharge positions.

④ Add 1/4" for AMCA "C" Construction and/or Down Blast or Bottom Angular Down discharge positions.

⑤ MML IS MAXIMUM MOTOR LENGTH ON CUSTOMER SUPPLIED MOTOR. MOTOR MANUFACTURERS "C" DIMENSION CANNOT EXCEED "MML" WITHOUT A SPECIAL BASE.

⑦ Standard weather cover extends 3" past the "F" dimension.



Note: For common boxed blower housing dimensions, see Page 22.

DIMENSIONS IN INCHES ±1/8"

DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE.

MODEL	MOTOR FRAME	F	① G	H	Y		Z		④ BB	④ CC	HH	JJ	⑤ MML
					SERIES 18	SERIES 25	SERIES 18	SERIES 25					
RBE-7	56-184T	4 1/8	6 1/16	12 3/4	1 7/16	1 11/16	3/8	3/8	31 7/8	26 3/4	18 5/8	16	18 7/8
RBE-9	56-215T	4 1/8	6 13/16	17	1 7/16	1 11/16	3/8	3/8	37 5/8	32 1/2	22 7/8	19 1/4	24 1/4
RBE-11	145T-256T	4 1/8	7 11/16	18 1/2	1 11/16	1 15/16	3/8	1/2	40 7/8	35 3/4	24 3/8	23 1/2	26 5/8
RBE-13	145T-286T	5 1/8	8 1/2	21	1 11/16	1 15/16	3/8	1/2	46	39 7/8	26 7/8	28 1/8	29 3/4
RBE-15	145T-324T	6 3/16	9 3/8	21	1 15/16	2 3/16	1/2	1/2	48 3/4	41 9/16	26 13/16	30 3/4	29 5/8
RBE-17	182T-324T	6 3/16	10 3/16	21	2 3/16	2 7/16	1/2	5/8	50 3/8	43 3/16	26 13/16	33 3/4	29 5/8
RBE-19	182T-324T	6 3/16	10 15/16	24 3/4	2 3/16	2 7/16	1/2	5/8	56 5/8	48 7/16	30 9/16	37 1/4	33 3/8

16 DISCHARGE POSITIONS AVAILABLE. 45° DISCHARGE POSITIONS NOT SHOWN.★

Discharges shown are determined by viewing fan from motor or drive side.



CW-TH
Clockwise
Top
Horizontal
Discharge



CW-DB
Clockwise
Down Blast
Discharge
★



CW-BH
Clockwise
Bottom
Horizontal
Discharge



CW-UB
Clockwise
Up Blast
Discharge



CCW-TH
Counter-
Clockwise
Top
Horizontal
Discharge



CCW-DB
Counter-
Clockwise
Down Blast
Discharge
★



CCW-BH
Counter-
Clockwise
Bottom
Horizontal
Discharge



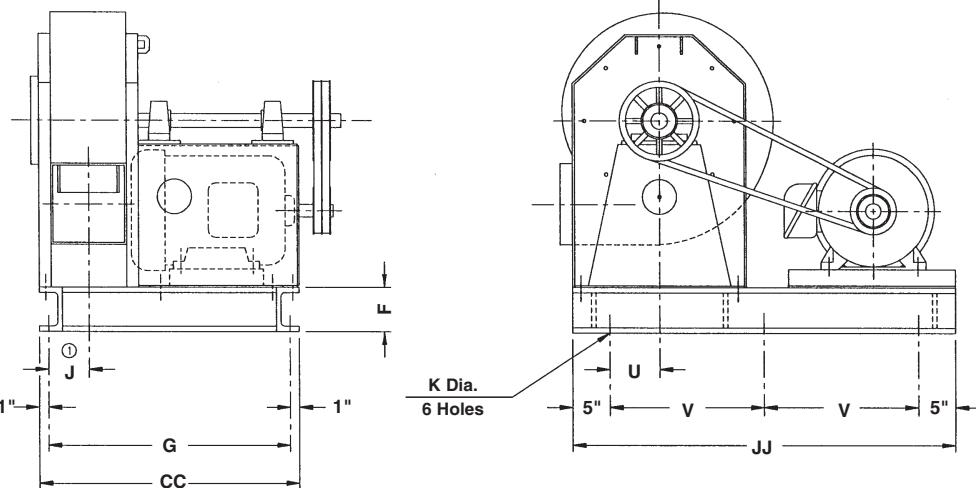
CCW-UB
Counter-
Clockwise
Up Blast
Discharge

★ Not available on any models with discharge flange option without a discharge extension, or any arrangement 9CB units. See (*) on page 27.



DIMENSIONS and SPECIFICATIONS

Arrangement #9RCB or #9LCB Channel Base, Belt Drive



DIMENSIONS IN INCHES $\pm \frac{1}{8}$ "

MODEL	SERIES	MOTOR FRAME	F	G	J	K	U	V	CC	JJ
RBE-7	18-25	182T-215T	4	24 $\frac{7}{8}$	4 $\frac{1}{16}$	$\frac{9}{16}$	3	13 $\frac{15}{32}$	26 $\frac{1}{8}$	36 $\frac{15}{16}$
RBE-9	18 25	213T-215T 213T-284T	4	30 $\frac{5}{8}$	4 $\frac{13}{16}$	$\frac{9}{16}$	4 $\frac{5}{8}$	17 $\frac{3}{4}$	32 $\frac{1}{8}$	45 $\frac{1}{2}$
RBE-11	18 25 32	213T-256T 213T-286T 256T-286T	6	33 $\frac{7}{8}$	5 $\frac{11}{16}$	$\frac{9}{16}$	6 $\frac{3}{4}$	21 $\frac{3}{16}$	35 $\frac{7}{8}$	52 $\frac{3}{8}$
RBE-13	18 25 32 40	213T-286T 254T-286T 254T-324T 254T-365T	6	38	6 $\frac{1}{2}$	$\frac{9}{16}$	9 $\frac{1}{16}$	26 $\frac{11}{16}$	40	63 $\frac{3}{8}$
RBE-15	18 25 32 40	254T-286T 254T-324T 254T-365T 284T-405T	6	39 $\frac{3}{4}$ 46	7 $\frac{3}{8}$	$\frac{9}{16}$	10 $\frac{3}{8}$	26 $\frac{5}{16}$	41 $\frac{3}{4}$ 48	62 $\frac{5}{8}$
RBE-17	18-25 32 40	254T-326T 254T-405T 284T-444T	6	43 $\frac{7}{8}$ 47 $\frac{5}{8}$	8 $\frac{3}{16}$	$\frac{9}{16}$	11 $\frac{7}{8}$	27 $\frac{13}{16}$	45 $\frac{7}{8}$ 49 $\frac{5}{8}$	65 $\frac{5}{8}$
RBE-19	18 25 32 40	254T-326T 254T-364T 284T-405T 324T-444T	6	49 $\frac{1}{8}$	8 $\frac{15}{16}$	$\frac{9}{16}$	13 $\frac{5}{8}$	31 $\frac{1}{4}$	51 $\frac{1}{8}$	72 $\frac{1}{2}$
RBE-21	18 25 32	254T-326T 254T-364T 284T-444T	6	53 $\frac{1}{4}$	10 $\frac{7}{8}$	$\frac{3}{4}$	10	32 $\frac{11}{16}$	55 $\frac{1}{4}$	75 $\frac{3}{8}$

Standard Construction Gauges

MODEL	Housing Scroll & side plates		Inlet Side Plate	Flanges Inlet or Discharge	Bearing & Motor Base	Wheel④				Back Plate	Reinf. Plate
						Shroud		Blades			
	18-25	32-40				18-25	32-40	18-25	32-40		
RBE-7	10	7	10	10	10	10	7⑤	10	7⑤	7	NA
RBE-9	10	7	10	10	10	10	7⑤	10	7⑤	7	NA
RBE-11	10	7	10	10	10	10	7⑤	10	7⑤	7	7
RBE-13	10	7	10	10	10	10	7	10	7	7	7
RBE-15	10	7	7	10	10	7	7	10	7	1/4"	NA
RBE-17	10	7	7	10	7	7	7	10	7	1/4"	NA
RBE-19	10	7	7	10	7	7	7	10	7	1/4"	NA
RBE-21	③	7	7	7	7 & 1/4"	1/4"⑥	1/4"⑥	1/4"⑥	1/4"⑥	1/4"	NA

③ RBE-21 scroll is 10 gauge, welded-on side plates are 7 gauge.

④ Wheel gauges are for shrouded, steel wheels.

⑤ While these fans are not available in some series for belt driven and/or direct driven, the wheels (only) can be supplied in higher series speeds as an option. See "Component Upgrades ONLY" and notes 17 and 23 on page 5 of the RBE price sheet. NOTE: If a higher series wheel is ordered, it can not exceed the max wheel speed for its series as shown on page 22 of the RBE catalog.

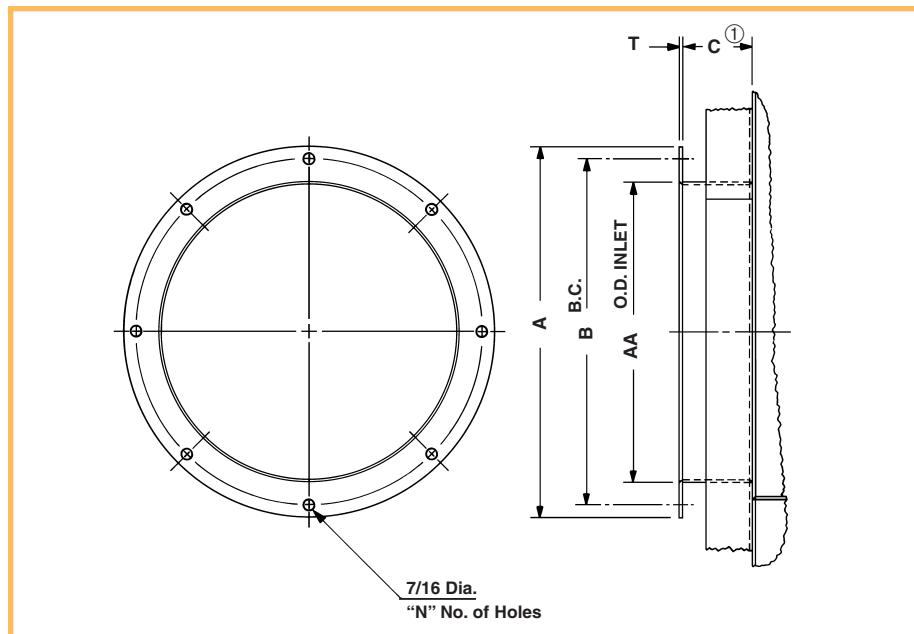
⑥ RBE-21 wheel is Series 18, 25 & 32. Not available in Series 40.



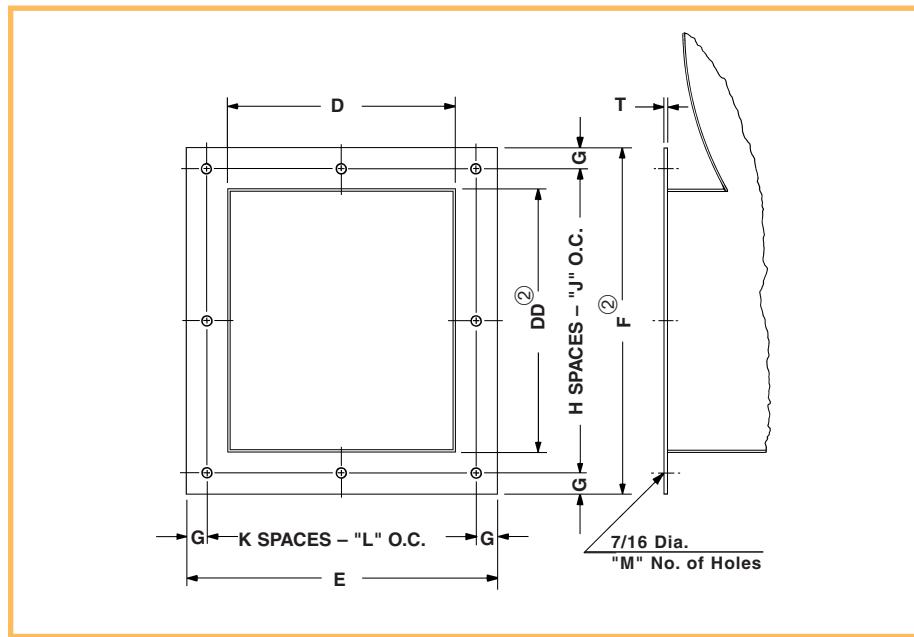
DIMENSIONS and SPECIFICATIONS

Inlet and Outlet Flanges

INLET



OUTLET*



NOTE: FLANGES WILL BE DRILLED UNLESS OTHERWISE SPECIFIED.

DIMENSIONS IN INCHES $\pm 1/16"$

DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE.

MODEL	A	B	C ^①	D	E	F ^②	G	H	J	K	L	M	N	T	AA	DD ^②
RBE-7	9 ³ / ₈	8 ¹ / ₂	3	6 ¹ / ₈	10 ¹ / ₈	10 ³ / ₄	1	2	4 ³ / ₈	2	4 ¹ / ₁₆	8	8	1/ ₈	7	6 ³ / ₄
RBE-9	11 ⁵ / ₈	10 ⁵ / ₈	3	7 ⁵ / ₈	11 ⁵ / ₈	12 ³ / ₄	1	2	5 ³ / ₈	2	4 ¹³ / ₁₆	8	8	1/ ₈	9	8 ³ / ₄
RBE-11	13 ⁷ / ₈	12 ³ / ₄	3	9 ³ / ₈	13 ³ / ₈	14 ⁷ / ₈	1 ¹ / ₁₆	3	4 ¹ / ₄	3	3 ³ / ₄	12	8	1/ ₈	11	10 ³ / ₄
RBE-13	16 ¹ / ₈	15	3	11	15	16 ¹¹ / ₁₆	1 ¹ / ₃₂	3	4 ⁷ / ₈	3	4 ⁵ / ₁₆	12	8	1/ ₈	13	12 ³ / ₄
RBE-15	18 ¹ / ₈	17	3	12 ³ / ₄	16 ³ / ₄	18 ⁵ / ₈	1 ¹ / ₁₆	4	4 ¹ / ₈	3	4 ⁷ / ₈	14	8	1/ ₈	15	14 ¹ / ₂
RBE-17	20 ¹ / ₈	19	3	14 ³ / ₈	18 ³ / ₈	20 ⁵ / ₈	1 ¹ / ₁₆	4	4 ⁵ / ₈	4	4 ¹ / ₁₆	16	8	1/ ₈	17	16 ¹ / ₂
RBE-19	22 ¹ / ₈	21	4	15 ⁷ / ₈	19 ⁷ / ₈	22 ³ / ₈	1 ¹ / ₁₆	4	5 ¹ / ₁₆	4	4 ⁷ / ₁₆	16	8	1/ ₈	19	18 ³ / ₈
RBE-21	24 ¹ / ₂	22 ¹ / ₂	5	17 ³ / ₄	21 ³ / ₄	24 ¹¹ / ₃₂	1	5	4 ¹⁵ / ₃₂	4	4 ¹⁵ / ₁₆	18	12	3/ ₁₆	21	20 ⁵ / ₁₆

① Add 1/8" for AMCA "C" Construction and/or Down Blast or Bottom Angular Down discharge positions.

② Add 1/8" for Series 32 and 40.

NOTE: Dimensions C, D, AA and DD are $\pm 1/8"$.