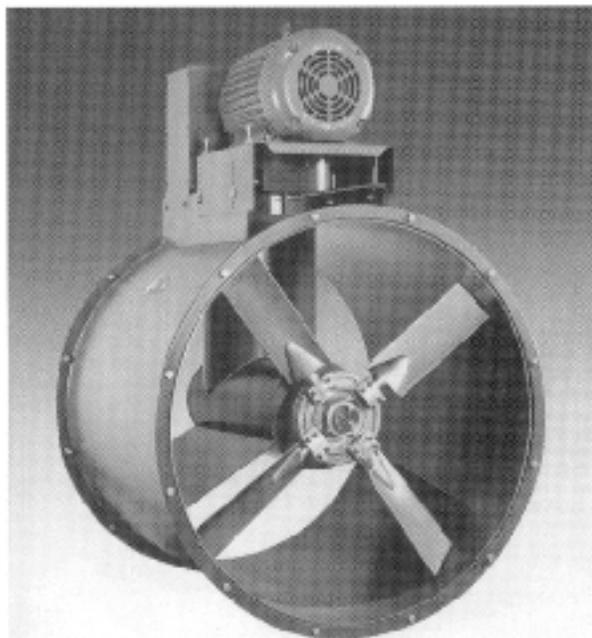


# Type T- Duct Fans



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## Type T Fans—General Information Page 3



## Installation, Selection and Maintenance Page 11

## Accessories Page 11

## Special Performance Requirements Page 2

## Warranty and Caution Back Cover

### Special performance requirements

American Coolair makes axial, propeller and centrifugal type ventilation equipment to meet virtually all requirements.

Units with performance capabilities other than the standard models listed in this form are available.

Custom modifications can also be supplied for unique applications.

If you do not find a standard model in this form that meets your needs contact your nearest American Coolair representative for further information.

American Coolair Corporation has over 65 years of experience in air moving systems and offers you knowledgeable personnel and the very best equipment.

### Additional information available

Octave band sound power levels are available for use by the acoustical engineer in predicting on-the-job noise levels.

American Coolair will provide installation instructions and maintenance information at your request, as well as information on any air movement need you may have. Simply contact your nearest American Coolair representative.

American Coolair wishes to provide you with every assistance in determining your air movement requirements.

## Type TB Fan (Belt Drive)

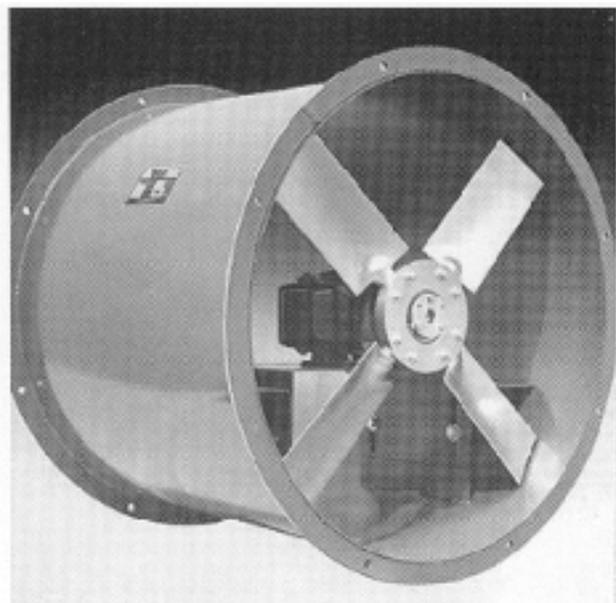
- Application and Features
- Drawings and Dimensions
- Performance Ratings
- Typical Specifications

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## Type TD Fan (Direct Drive)

- Application and Features
- Drawings and Dimensions
- Performance Ratings
- Typical Specifications

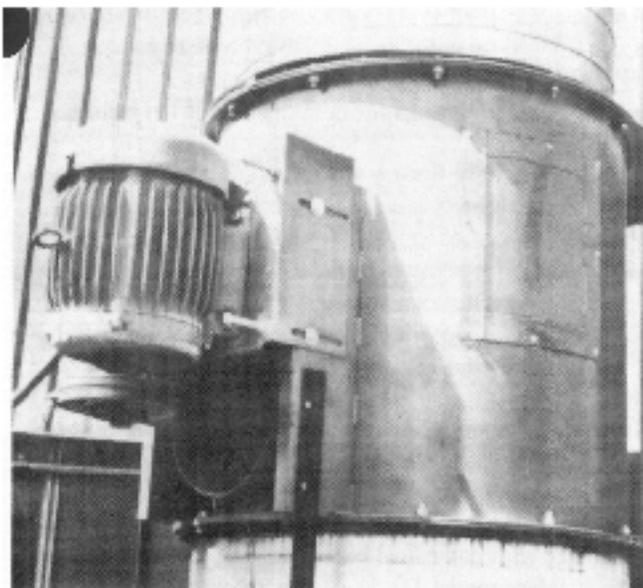
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# Type T Fans



## Application

A high performance, axial flow fan designed for duct connected applications.

Suggested for commercial and industrial uses such as make-up air systems, booster fans, return air fans or to exhaust contaminated or high temperature air.

Type T fans are available in a large selection of CFMs and operate efficiently against static pressures up to 2 inches.

## Construction

**MATERIALS:** The fan housing and motor supports are made of heavy gauge steel plate for maximum strength and durability.

See specific fan type features for information on blade material.

Painted parts are coated with epoxy to provide a protective coating rated excellent for hardness, impact resistance, adhesion and chemical resistance. For protective coating options see Accessories section.

**METHODS:** The fan unit is mounted within the housing with flanged ends to form a complete fan-duct section.

All blade assemblies are dynamically balanced.

Parts requiring painting are processed through the advanced American Coolair five-stage pretreatment system prior to the application of any coatings to ensure maximum finish adhesion.

These parts use a thermosetting epoxy powder paint with an average thickness of 3 mils and baked at 400 degrees Fahrenheit to a smooth, hard, continuous finish.

## Drive mechanism

**BELT DRIVE:** Available in sizes 18 inch to 84 inch.

The belt drive design is recommended where high temperature or contaminated air make it desirable to isolate the motor, bearings and belts from the airstream or for quieter operation by using low fan speed. Standard fan components are suitable for handling air up to 250°F. (For temperatures in excess of 250°F see page 4.)

**VARIABLE PITCH PULLEYS:** Most belt driven models are equipped with a variable pitch motor pulley which allows fan speed adjustment where desirable.

The setting made at the factory allows the fan to operate within the maximum safe capabilities of the motor. The pulley may be opened to reduce fan speed and thus decrease air flow.

If an increase in fan speed is desired, contact your American Coolair representative for information on fan performance and motor load before making any adjustment.

**DIRECT DRIVE:** Available in sizes 18 inch to 60 inch.

The direct drive design is suitable for applications where motor location in the air stream is satisfactory.

Direct driven models require less maintenance, offer longer operating life and increased efficiency.

## Bearings

See specific fan type features for bearing information.

## Motors

Totally enclosed motors are standard for all models.

A selection of motor speeds is available on direct drive units.

Several alternatives are available to fit your specific needs, such as explosion proof motors, two-speed motors, energy efficient motors and severe duty motors.

Only nationally recognized brand motors with nationwide service facilities are used.

## Listings



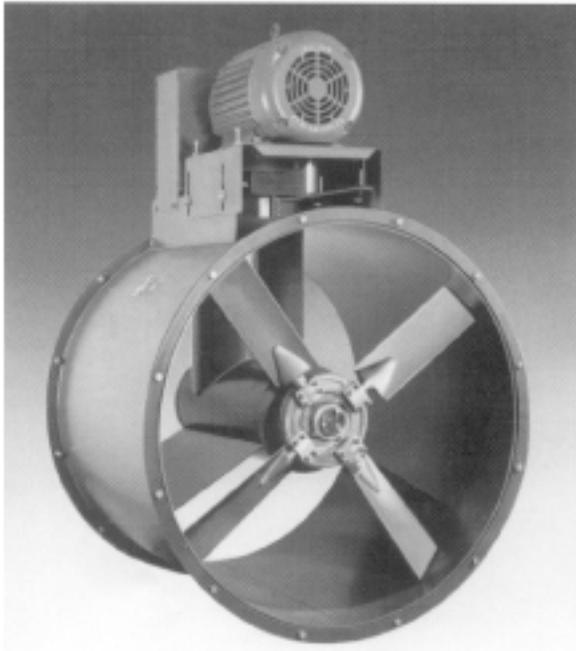
Type TBC and TDC ventilators are Listed by Underwriters Laboratories Inc. to U.S. and Canadian safety standards.

UL705-E39944

Certified ratings authorized by AMCA (Air Movement and Control Association, Inc.) for air performance are available on all Type T fans. These, along with dimension drawings, are included in this form.

# Type TBC

Belt drive – 1,500 to 107,000 CFM – to 2" static pressure



## Features

The motor, belts and bearings are isolated from the air stream.

The steel fan shaft is supported by two pillow-block ball bearings that are mounted in an enclosed tube to provide years of service under harsh conditions.

External grease fittings for relubrication of fan bearings are standard.

TBC models have from 3 to 8 cast aluminum airfoil blades that are securely attached to a heavy cast aluminum hub. Blade pitch is set for catalog performance. The blade pitch should not be adjusted without first contacting your American Coolair representative.

TBC models incorporate specifically engineered airfoil sections and hub sizes for optimum efficiency and physical strength.

Fan speed reduction is conveniently available on most belt drive models by use of variable pitch motor pulley.

If an increase in fan speed is desired, contact your American Coolair representative for information on fan performance and motor load before making any adjustment.

The standard model TB duct fan is recommended for use when ambient temperatures are 250°F or less.

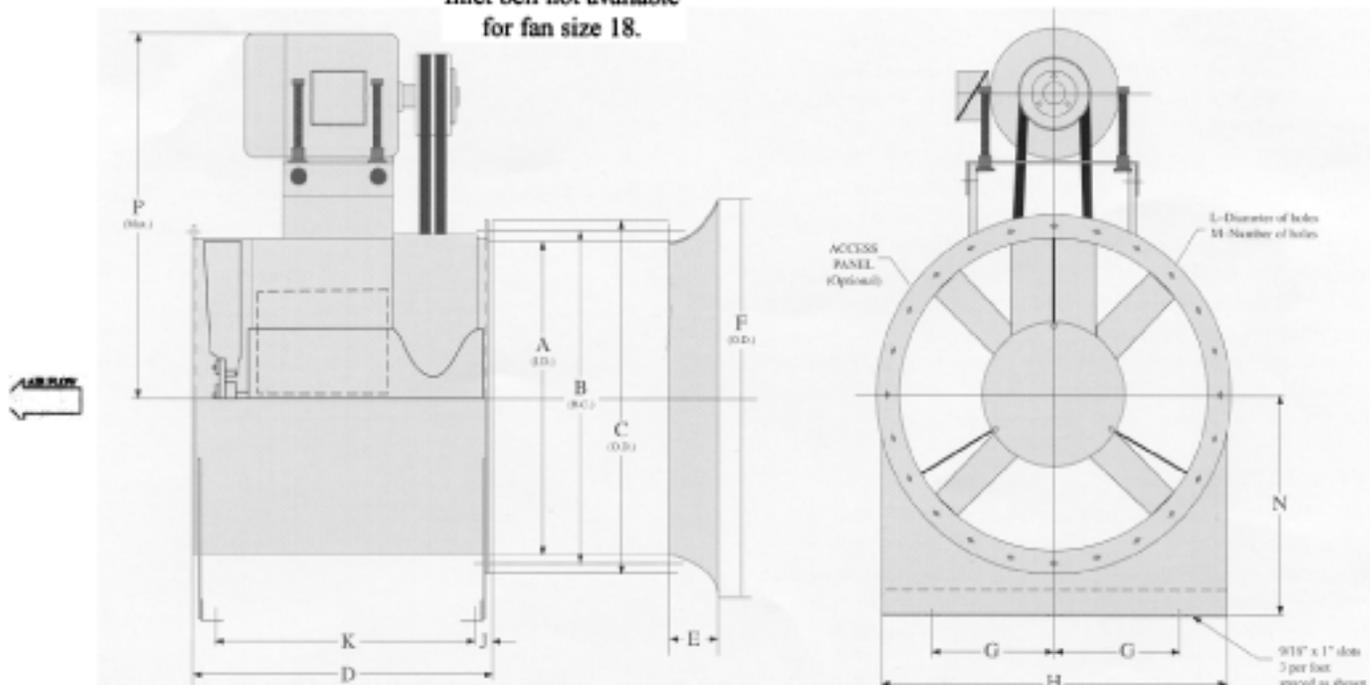
TB models can be furnished for temperatures up to 725°F. Modifications are available for two extended temperature ranges, 250°F to 650°F and 650°F to 725°F. Specify the temperature requirement.

With these modifications, it is required that the electrical controls allow the fan to operate whenever the ambient temperature at the fan exceeds 250°F.

## Application

TB duct fans are designed to operate reliably in hostile environments where high temperatures or contaminated air is present.

Inlet bell not available for fan size 18.



Drawing of belt and drive are schematic. Single belt are used on certain sizes and HP's.

**DIMENSIONS IN INCHES**

Fan Size	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Fan Duct GA	Access Panel Optional	Outlet Area (sq. feet)
8	18 1/4	19 1/4	21 1/4	20	N/A	N/A	7	21 1/4	1 1/2	17	7/16	6	14	24 1/4	1/2	8 x 8	1.79
24	25 1/2	27 1/4	28 1/4	28	6	30 1/4	9	26 1/2	1 1/2	25	7/16	8	17	31 1/4	1/2	10 x 12	3.55
30	31 1/4	33 1/4	34 1/4	28	6	36 1/4	12	33	1 1/2	25	7/16	8	21 1/4	36	1/2	10 x 15	5.33
36	37 1/4	39 1/4	40 1/4	36	6	42 1/4	16	40	1 1/2	32 1/4	7/16	12	25	41 1/4	7/16	12 x 15	7.57
42	43 1/4	45 1/4	46 1/4	36	6	48 1/2	18	45	1 1/16	32 1/4	7/16	12	29 1/4	45 1/4	7/16	16 x 18	10.20
48	49 1/4	51 1/4	52 1/4	36	6	54 1/4	19	47	1 1/16	32 1/4	7/16	16	32 1/2	48 1/4	7/16	16 x 18	13.23
54	55 1/4	57 1/4	58 1/4	36	6	59 1/2	22	53	1 1/4	32 1/2	7/16	16	36 1/2	51 1/2	1/2	16 x 18	16.65
60	61 1/4	63 1/4	65	36	6	65 1/4	25	59	1 1/4	32 1/2	7/16	16	40	54 1/4	1/2	16 x 18	20.55
72	73 1/4	75 1/4	77	48	6	77 1/4	31	72	1 1/4	44 1/2	7/16	20	48	60 1/4	1/2	18 x 20	29.36
84	85 1/4	87 1/2	89	48	6	89 1/4	37	84	1 1/4	44 1/2	7/16	20	56	67	1/2	18 x 20	39.75

**Dimensions**

- Dimension A is I.D. of duct section.
- Dimension B is bolt hole center to bolt hole center.
- Dimension C is O.D. of flange.
- Dimension D is overall length of duct section.
- Dimension E is nominal length of Inlet Bell (Accessory).
- Dimension F is O.D. of Inlet Bell.

- Dimension G is distance between center points of horizontal slots in Mounting Feet.
- Dimension H is overall width of Mounting Feet (Accessory).
- Dimension J is distance from center of slot to outer edge of flange.
- Dimension K is distance between center line of slots in Mounting Feet.
- Dimension L is diameter of bolt holes in flange.
- Dimension M is number of bolt holes.
- Dimension N is distance from center line of propeller to bottom of Mounting Feet.
- Dimension P is distance from center line of propeller to top of motor (Maximum).

**Performance Ratings**



American Coolair Corporation certifies that the Type TB fans shown herein are licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with

the requirements of the AMCA Certified Ratings Program.

**Typical Specifications**

Duct fans shall be American Coolair belt drive Type TBC as manufactured by American Coolair Corporation, Jacksonville, Florida; specific models shall be as shown in the fan schedule. Fan housing to be of heavy gauge steel. Ball bearings shall be of heavy duty pillow-block type. Fans shall be licensed to bear the AMCA Certified Ratings Seal for air performance. (Specify CFM and

static pressure, motor enclosure, phase and volts; and accessories such as inlet bell with guard, drive guard, mounting feet and safety disconnect switch.) Fan blades shall be of high strength cast aluminum airfoil securely attached to a heavy cast aluminum hub.

ITEM NO.	CUBIC FEET PER MINUTE (CFM) AT STATIC PRESSURE <sup>1</sup>												FAN MODEL <sup>2</sup>	FAN SIZE MOTOR HP	FAN RPM <sup>3</sup>	SONES <sup>4</sup>	BRAKE <sup>5</sup> HP	BLADE DESC.		APPROX. SHIP. WT.	
	0"	1/2"	1/4"	3/8"	1/2"	3/4"	3/4"	1"	1 1/4"	1 1/2"	1 3/4"	2"						No.	Pitch		
1	3,226	2,876	-	-	-	-	-	-	-	-	-	-	TBC18H11	1/3	1160	11.9	0.31	6	33	245	
2	2,543	2,406	2,177	1,920	1,579	-	-	-	-	-	-	-	TBC18H17	1/3	1750	15.6	0.32	4	13 1/2	245	
3	3,299	3,123	2,915	2,662	2,326	-	-	-	-	-	-	-	TBC18J17	18	1/2	1750	17.9	0.47	4	20 1/2	252
4	4,085	3,841	3,577	3,271	2,918	-	-	-	-	-	-	-	TBC18K17	3/4	1750	22	0.70	4	25	257	
5	4,507	4,340	4,127	3,863	3,561	-	-	-	-	-	-	-	TBC18L17	1	1750	21	0.94	6	29 1/2	260	
6	5,354	4,540	-	-	-	-	-	-	-	-	-	-	TBC24H8	1/3	870	12.7	0.31	4	24	337	
7	5,925	5,361	4,553	-	-	-	-	-	-	-	-	-	TBC24J8	1/2	870	13.1	0.48	6	25	337	
8	6,877	6,289	5,666	4,914	-	-	-	-	-	-	-	-	TBC24K11	3/4	1160	19.8	0.69	4	22 1/2	337	
9	7,845	7,203	6,500	-	-	-	-	-	-	-	-	-	TBC24L11	1	1160	22	0.93	4	28	343	
10	8,961	8,506	8,006	7,375	-	-	-	-	-	-	-	-	TBC24M11	24	1 1/2	1160	23	1.44	6	30	354
11	8,686	8,224	7,788	7,327	6,813	6,240	5,570	-	-	-	-	-	TBC24M17	1 1/2	1750	32	1.42	3	17 1/2	354	
12	9,868	9,406	8,951	8,470	7,967	7,440	6,818	-	-	-	-	-	TBC24N17	2	1750	34	1.89	3	22	354	
13	11,256	10,895	10,506	10,087	9,635	9,156	8,647	-	-	-	-	-	TBC24P17	3	1750	48	2.84	4	26	386	
14	13,358	13,066	12,765	12,441	12,092	11,730	11,324	-	-	-	-	-	TBC24Q17	5	1750	44	4.81	6	29 1/2	397	
15	9,939	8,854	7,568	-	-	-	-	-	-	-	-	-	TBC30K8	3/4	870	18.2	0.71	4	21	347	
16	11,092	9,959	8,566	-	-	-	-	-	-	-	-	-	TBC30L8	1	870	20	0.92	4	26	347	
17	12,519	11,617	10,621	-	-	-	-	-	-	-	-	-	TBC30M8	1 1/2	870	22	1.39	6	28	398	
18	12,195	11,437	10,586	9,620	8,549	7,130	-	-	-	-	-	-	TBC30M11	1 1/2	1160	27	1.41	4	18	398	
19	13,897	13,052	12,146	11,205	10,117	-	-	-	-	-	-	-	TBC30N11	30	2	1160	30	1.87	4	23	398
20	15,440	14,860	14,243	13,553	12,779	11,783	-	-	-	-	-	-	TBC30P11	3	1160	33	2.79	6	24 1/2	429	
21	19,113	18,452	17,818	17,156	16,451	15,683	14,824	13,003	-	-	-	-	TBC30Q17	5	1750	50	4.72	3	22	442	
22	21,694	21,183	20,642	20,043	19,396	18,745	18,079	16,716	15,179	-	-	-	TBC30R17	7 1/2	1750	66	6.92	4	24 1/2	490	
23	23,601	23,218	22,827	22,427	22,017	21,598	21,164	20,229	19,108	17,662	-	-	TBC30S17	10	1750	66	9.89	6	25	573	

(continued next page)

# Type TBC Performance Ratings (cont'd.)

ITEM NO.	CUBIC FEET PER MINUTE (CFM) AT STATIC PRESSURE <sup>1</sup>												FAN MODEL <sup>2</sup>	FAN SIZE	MOTOR HP	FAN RPM <sup>3</sup>	SONES <sup>4</sup>	BRAKE <sup>5</sup> HP	BLADE DESCR.		APPROX. SHIP. WT.
	0"	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	1"	1 1/4"	1 1/2"	1 3/4"	2"							No.	Pitch	
24	11,922	10,177	6,989	-	-	-	-	-	-	-	-	-	TBC36K6	3/4	680	19.8	0.69	4	18 1/2	696	
25	12,894	11,576	9,849	-	-	-	-	-	-	-	-	-	TBC36L6	1	680	21	0.93	6	18 1/2	696	
26	15,620	14,120	12,063	-	-	-	-	-	-	-	-	-	TBC36M6	1 1/2	680	24	1.43	6	27 1/2	714	
27	16,262	15,258	14,121	12,798	10,890	-	-	-	-	-	-	-	TBC36N8	2	870	32	1.88	6	18	714	
28	19,441	18,344	17,161	15,720	13,698	-	-	-	-	-	-	-	TBC36P8	3	870	36	2.83	6	26	745	
29	16,113	14,949	13,724	12,176	10,653	-	-	-	-	-	-	-	TBC36N11	2	1160	38	1.88	3	12 1/2	714	
30	19,028	17,793	16,467	15,059	13,322	10,530	-	-	-	-	-	-	TBC36P11	3	1160	40	2.74	3	19	745	
31	23,009	21,988	21,000	19,961	18,680	16,968	14,145	-	-	-	-	-	TBC36Q11	36	5	1160	51	4.70	4	25	756
32	26,404	25,555	24,700	23,783	22,758	21,581	20,235	16,667	-	-	-	-	TBC36R11	7 1/2	1160	62	6.97	6	27	806	
33	18,926	18,153	17,383	16,530	15,699	14,858	13,983	11,965	-	-	-	-	TBC36Q17	5	1750	72	4.55	3	7 1/2	756	
34	24,377	23,637	22,887	22,131	21,372	20,587	19,775	17,948	15,632	12,637	-	-	TBC36R17	7 1/2	1750	78	7.19	3	13 1/2	806	
35	27,996	27,277	26,537	25,743	24,954	24,147	23,309	21,493	19,350	-	-	-	TBC36S17	10	1750	76	9.46	3	18	847	
36	32,654	32,035	31,378	30,746	30,110	29,468	28,817	27,464	25,956	-	-	-	TBC36T17	15	1750	93	14.50	4	21 1/2	910	
37	36,809	36,152	35,492	34,866	34,226	33,566	32,880	31,390	-	-	-	-	TBC36U17	20	1750	92	19.02	4	27	962	
38	14,688	12,142	8,843	-	-	-	-	-	-	-	-	-	TBC42K6	3/4	680	23	0.70	3	11	766	
39	16,849	14,339	11,121	-	-	-	-	-	-	-	-	-	TBC42L6	1	680	25	0.93	3	15 1/2	771	
40	19,161	17,034	14,596	-	-	-	-	-	-	-	-	-	TBC42M6	1 1/2	680	28	1.41	4	18	790	
41	18,483	16,530	14,427	11,836	-	-	-	-	-	-	-	-	TBC42M8	1 1/2	870	33	1.43	3	10 1/2	790	
42	21,279	19,372	17,338	14,777	11,079	-	-	-	-	-	-	-	TBC42N8	2	870	37	1.89	3	15	790	
43	25,097	23,073	20,888	18,475	-	-	-	-	-	-	-	-	TBC42P8	3	870	40	2.85	3	22	821	
44	28,512	27,267	25,986	24,619	23,124	-	-	-	-	-	-	-	TBC42Q8	42	5	870	52	4.76	6	21	834
45	22,378	20,912	19,398	17,711	15,990	14,033	11,394	-	-	-	-	-	TBC42P11	3	1160	51	2.79	3	8	821	
46	28,743	27,283	25,822	24,322	22,672	20,749	18,550	-	-	-	-	-	TBC42Q11	5	1160	62	4.64	3	15 1/2	834	
47	32,686	31,535	30,273	28,936	27,569	26,154	24,603	-	-	-	-	-	TBC42R11	7 1/2	1160	71	6.99	4	18	882	
48	35,468	34,564	33,652	32,712	31,712	30,706	29,655	27,310	-	-	-	-	TBC42S11	10	1160	84	9.91	6	18 1/2	905	
49	41,553	40,605	39,656	38,705	37,745	36,760	35,742	33,567	31,166	28,469	25,299	21,091	TBC42T17	15	1750	132	14.39	3	14	952	
50	44,508	43,699	42,902	42,115	41,340	40,573	39,810	38,240	36,517	34,539	32,297	29,816	TBC42U17	20	1750	140	19.55	4	14 1/2	986	
51	18,773	15,649	11,842	-	-	-	-	-	-	-	-	-	TBC48L6	1	680	25	0.93	3	7	885	
52	22,687	19,338	15,782	-	-	-	-	-	-	-	-	-	TBC48M6	1 1/2	680	29	1.41	3	12 1/2	910	
53	24,206	21,800	19,080	15,540	-	-	-	-	-	-	-	-	TBC48N6	2	680	34	1.85	4	13	910	
54	29,405	26,691	23,341	19,808	-	-	-	-	-	-	-	-	TBC48P6	3	680	33	2.80	4	20	941	
55	34,358	32,241	29,876	27,505	-	-	-	-	-	-	-	-	TBC48Q6	5	680	43	4.61	6	23 1/2	953	
56	23,547	21,137	18,621	15,610	-	-	-	-	-	-	-	-	TBC48N8	2	870	37	1.88	3	6 1/2	910	
57	28,138	25,588	23,163	20,348	16,992	-	-	-	-	-	-	-	TBC48P8	3	870	43	2.78	3	11 1/2	942	
58	33,739	31,645	29,688	27,696	25,325	22,346	-	-	-	-	-	-	TBC48Q8	5	870	53	4.68	4	16	953	
59	40,211	37,789	35,333	32,987	30,743	-	-	-	-	-	-	-	TBC48R8	48	7 1/2	870	53	7.10	4	24	1001
60	42,954	41,298	39,532	37,822	36,145	34,338	31,999	-	-	-	-	-	TBC48S8	10	870	65	11.26	6	22 1/2	1025	
61	32,024	30,258	28,430	26,524	24,567	22,338	19,687	-	-	-	-	-	TBC48Q11	5	1160	62	4.67	3	7	953	
62	38,702	36,712	34,702	32,821	30,936	28,854	26,480	19,981	-	-	-	-	TBC48R11	7 1/2	1160	72	7.00	3	12 1/2	1001	
63	41,910	40,439	39,048	37,702	36,207	34,612	32,896	28,834	23,773	-	-	-	TBC48S11	10	1160	87	9.48	4	13 1/2	1053	
64	50,161	48,727	47,142	45,363	43,420	41,424	39,466	35,407	-	-	-	-	TBC48T11	15	1160	86	13.90	4	20	1072	
65	53,924	52,764	51,650	50,576	49,532	48,494	47,430	45,069	41,814	37,379	-	-	TBC48U11	20	1160	110	19.54	6	20	1105	
66	46,415	45,235	44,058	42,820	41,596	40,384	39,168	36,633	33,786	30,664	26,995	-	TBC48T17	15	1750	126	14.85	3	6	1072	
67	53,057	51,918	50,781	49,645	48,508	47,359	46,178	43,654	40,916	38,059	34,946	30,679	TBC48U17	20	1750	148	19.69	3	9 1/2	1105	

(continued next page)

# Type TBC Performance Ratings (cont'd.)

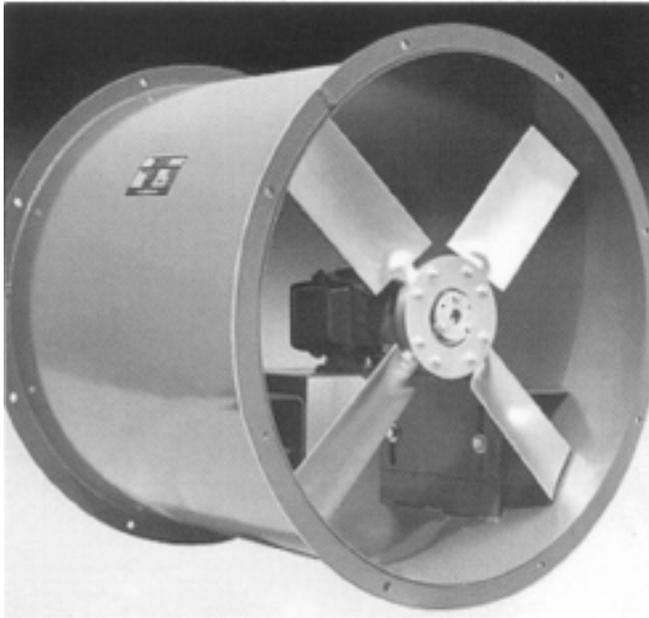
ITEM NO.	CUBIC FEET PER MINUTE (CFM) AT STATIC PRESSURE <sup>1</sup>											FAN MODEL <sup>2</sup>	FAN SIZE MOTOR HP	FAN RPM <sup>3</sup>	SONES <sup>4</sup>	BRAKE <sup>5</sup> HP	BLADE DESCR.		APPROX. SHIP. WT.	
	0"	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	1"	1 1/4"	1 1/2"	1 3/4"						2"	No.		Pitch
68	28,619	24,581	20,410	-	-	-	-	-	-	-	-	-	TBC54N6	2	680	35	1.83	3	9	1129
69	32,710	29,685	26,080	22,606	-	-	-	-	-	-	-	-	TBC54P6	3	680	41	2.78	4	11 1/2	1160
70	38,551	36,216	34,116	31,652	28,345	24,268	-	-	-	-	-	-	TBC54Q6	5	680	48	4.65	6	14 1/2	1173
71	46,291	43,803	41,134	37,957	34,594	-	-	-	-	-	-	-	TBC54R6	7 1/2	680	58	7.05	6	22	1221
72	48,611	46,739	45,021	43,404	41,576	39,390	36,875	30,857	-	-	-	-	TBC54S8	10	870	75	9.46	6	14	1244
73	57,755	55,999	54,083	51,945	49,563	47,002	44,370	-	-	-	-	-	TBC54T8	15	870	89	14.01	6	20 1/2	1291
74	43,287	40,924	38,732	36,621	34,214	31,196	28,520	-	-	-	-	-	TBC54R11	7 1/2	1160	81	7.07	3	6	1221
75	46,760	45,036	43,091	41,292	39,387	37,342	35,146	30,330	23,920	-	-	-	TBC54S11	10	1160	93	9.36	4	6 1/2	1244
76	52,811	51,527	50,216	48,873	47,437	45,978	44,552	41,335	37,413	32,974	26,771	-	TBC54T11	15	1160	112	14.78	6	8	1291
77	61,010	59,626	58,340	57,110	55,744	54,317	52,831	49,708	46,363	42,499	36,899	-	TBC54U11	20	1160	123	19.84	6	12	1350
78	37,507	33,142	29,072	21,859	-	-	-	-	-	-	-	-	TBC60P6	3	680	42	2.78	4	6 1/2	1274
79	47,674	43,942	40,126	34,690	27,328	-	-	-	-	-	-	-	TBC60Q6	5	680	51	4.66	4	13 1/2	1287
80	53,913	51,041	47,135	43,610	40,303	32,074	-	-	-	-	-	-	TBC60R6	7 1/2	680	56	6.91	6	14 1/2	1335
81	61,324	58,400	55,240	51,683	46,755	41,364	-	-	-	-	-	-	TBC60S6	10	680	64	9.36	6	19 1/2	1358
82	56,206	54,061	51,510	48,261	45,782	43,028	39,288	28,824	-	-	-	-	TBC60S8	10	870	78	9.32	6	8 1/2	1358
83	63,983	61,620	59,078	56,299	53,800	51,482	49,162	42,394	32,818	-	-	-	TBC60T11	15	1160	111	13.94	4	6 1/2	1405
84	57,371	51,828	45,126	32,969	-	-	-	-	-	-	-	-	TBC72Q	5	360	33	4.74	8	20	1735
85	65,658	60,910	55,492	48,873	36,200	-	-	-	-	-	-	-	TBC72R	7 1/2	412	43	7.10	8	20	1783
86	72,192	67,920	63,173	57,780	50,700	-	-	-	-	-	-	-	TBC72S	10	453	51	9.46	8	20	1806
87	83,005	78,897	74,700	70,044	64,644	57,323	-	-	-	-	-	-	TBC72TL	15	503	64	14.12	8	22	1853
88	75,590	73,126	70,427	67,037	64,142	60,976	57,470	49,132	-	-	-	-	TBC72TH	15	682	83	14.34	8	7	1853
89	87,276	84,517	81,772	78,941	75,956	72,768	69,301	61,258	50,866	-	-	-	TBC72U	20	682	90	18.99	8	11	1887
90	68,503	61,154	52,913	37,057	-	-	-	-	-	-	-	-	TBC84Q	5	307	31	4.76	8	15	1850
91	78,321	71,857	65,332	56,582	40,135	-	-	-	-	-	-	-	TBC84R	7 1/2	351	40	7.10	8	15	1898
92	85,907	79,987	74,181	67,505	57,385	-	-	-	-	-	-	-	TBC84S	10	385	48	9.40	8	15	1921
93	103,027	96,681	89,986	82,151	70,936	-	-	-	-	-	-	-	TBC84TL	15	385	56	14.58	8	23 1/2	1968
94	91,993	88,239	83,278	79,041	74,314	68,949	62,764	46,285	-	-	-	-	TBC84TH	15	525	70	14.05	8	7	1968
95	107,582	103,314	99,169	94,779	90,022	84,713	78,632	63,363	-	-	-	-	TBC84U	20	525	78	19.19	8	11 1/2	2002

- 1 — Performance shown for installation Type B: free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream.
- 2 — The first three letters of model number identify fan type, drive configuration and style. The next two numbers indicate fan size; the next letter identifies motor horsepower and the last number (or number) indicates RPM in hundreds. Example: Model TBC18H11 is Type T, belt drive, Style "C", 18" size, 1/3 HP motor, 1160 RPM.
- 3 — Fan RPM is maximum for motor horsepower on standard models. Use of a variable pitch motor pulley will permit reduced fan speed; a proportional reduction in air volume results.
- 4 — Some ratings apply to non-ducted application of fan. The sound ratings shown are loudness values in fan sones a 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for Installation Type B: free inlet fan sone levels. The sound ratings shown are at 0" static pressure. The AMCA Certified Ratings Seal applies to air performance ratings only.
- 5 — Maximum brake horsepower (BHP) within the catalog performance range. BHP at most static pressures listed is less than that shown, in some cases substantially less. For specific BHP values at individual static pressure points, contact your American Coolair representative. Power ratings (BHP) does not include drive losses. Bearing losses are included.

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

# Type TDC

Direct drive – 2,000 to 78,000 CFM – to 2" static pressure



## Application

Type TD duct fans are suitable for application where motor location in the air stream is satisfactory.

Direct driven models require less maintenance, offer longer operating life and increased efficiency.

## Features

The propeller assembly is connected directly to the motor shaft. There are no fan bearings or belts that require maintenance.

From 3 to 6 cast aluminum airfoil blades that are securely attached to a heavy cast aluminum hub.

Blade pitch is set for catalog performance. The blade pitch should not be adjusted without first contacting your American Coolair representative.

Type TDC fans incorporate specifically engineered airfoil sections and hub sizes for optimum efficiency and physical strength.

## Dimensions

Dimension A is I.D. of duct section.

Dimension B is bolt hole center to bolt hole center.

Dimension C is O.D. of flange.

Dimension D is overall length of duct section.

Dimension E is nominal length of Inlet Bell (Accessory).

Dimension F is O.D. of Inlet Bell.

Dimension G is distance between center points of horizontal slots in Mounting Feet.

Dimension H is overall width of Mounting Feet (Accessory).

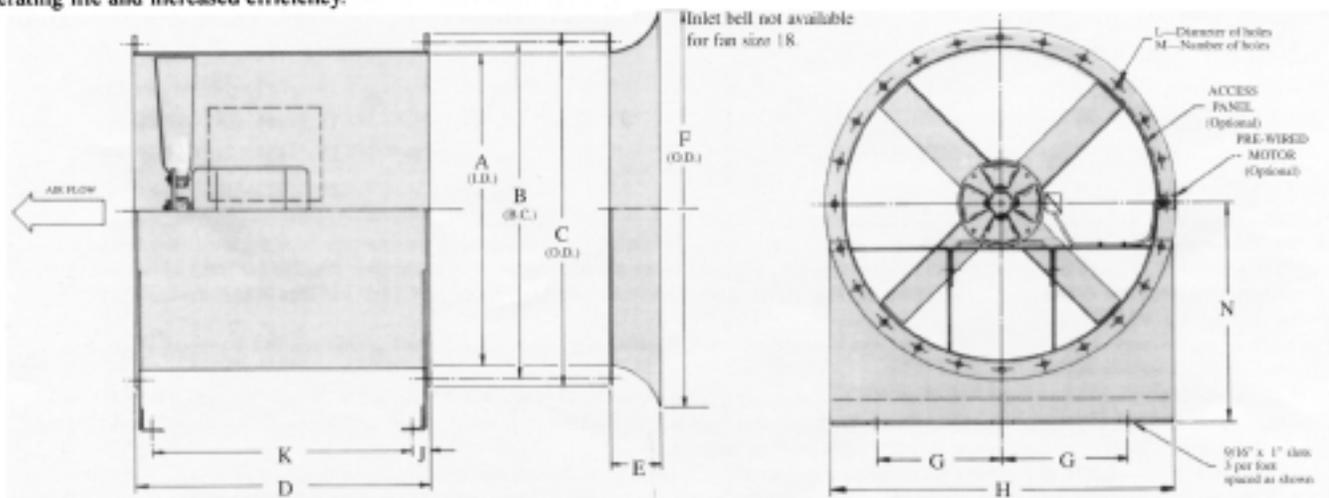
Dimension J is distance from center of slot to outer edge of flange.

Dimension K is distance between center line of slots in Mounting Feet.

Dimension L is diameter of bolt holes in flange.

Dimension M is number of bolt holes.

Dimension N is distance from center line of propeller to bottom of Mounting Feet.



DIMENSIONS IN INCHES

Fan Size	A	B	C	D	E	F	G	H	J	K	L	M	N	Fan Duct GA	Access Panel Optional	Outlet Area (sq. feet)
18	18 <sup>1</sup> / <sub>4</sub>	19 <sup>1</sup> / <sub>4</sub>	21 <sup>1</sup> / <sub>4</sub>	20	N/A	N/A	7	21 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>2</sub>	17	<sup>7</sup> / <sub>16</sub>	6	14	<sup>1</sup> / <sub>8</sub>	8 x 8	1.79
24	25 <sup>1</sup> / <sub>2</sub>	27 <sup>1</sup> / <sub>4</sub>	28 <sup>1</sup> / <sub>4</sub>	28	6	30 <sup>1</sup> / <sub>4</sub>	9	26 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>2</sub>	25	<sup>7</sup> / <sub>16</sub>	8	17	<sup>1</sup> / <sub>8</sub>	10 x 12	3.55
30	31 <sup>1</sup> / <sub>4</sub>	33 <sup>1</sup> / <sub>4</sub>	34 <sup>1</sup> / <sub>4</sub>	28	6	36 <sup>1</sup> / <sub>4</sub>	12	33	1 <sup>1</sup> / <sub>2</sub>	25	<sup>7</sup> / <sub>16</sub>	8	21 <sup>1</sup> / <sub>4</sub>	<sup>1</sup> / <sub>8</sub>	10 x 15	5.33
36	37 <sup>1</sup> / <sub>4</sub>	39 <sup>1</sup> / <sub>4</sub>	40 <sup>1</sup> / <sub>4</sub>	36	6	42 <sup>1</sup> / <sub>4</sub>	16	40	1 <sup>1</sup> / <sub>2</sub>	32 <sup>3</sup> / <sub>4</sub>	<sup>7</sup> / <sub>16</sub>	12	25	<sup>1</sup> / <sub>16</sub>	12 x 15	7.57
42	43 <sup>1</sup> / <sub>4</sub>	45 <sup>1</sup> / <sub>4</sub>	46 <sup>1</sup> / <sub>4</sub>	36	6	48 <sup>1</sup> / <sub>2</sub>	18	45	1 <sup>11</sup> / <sub>16</sub>	32 <sup>3</sup> / <sub>8</sub>	<sup>7</sup> / <sub>16</sub>	12	29 <sup>1</sup> / <sub>4</sub>	<sup>1</sup> / <sub>16</sub>	16 x 18	10.20
48	49 <sup>1</sup> / <sub>4</sub>	51 <sup>1</sup> / <sub>4</sub>	52 <sup>1</sup> / <sub>4</sub>	36	6	54 <sup>1</sup> / <sub>8</sub>	19	47	1 <sup>11</sup> / <sub>16</sub>	32 <sup>3</sup> / <sub>8</sub>	<sup>7</sup> / <sub>16</sub>	16	32 <sup>1</sup> / <sub>2</sub>	<sup>1</sup> / <sub>16</sub>	16 x 18	13.23
54	55 <sup>1</sup> / <sub>4</sub>	57 <sup>1</sup> / <sub>4</sub>	58 <sup>1</sup> / <sub>4</sub>	36	6	59 <sup>1</sup> / <sub>2</sub>	22	53	1 <sup>1</sup> / <sub>4</sub>	32 <sup>1</sup> / <sub>2</sub>	<sup>7</sup> / <sub>16</sub>	16	36 <sup>1</sup> / <sub>2</sub>	<sup>1</sup> / <sub>16</sub>	16 x 18	16.65
60	61 <sup>1</sup> / <sub>4</sub>	63 <sup>1</sup> / <sub>2</sub>	65	36	6	65 <sup>1</sup> / <sub>8</sub>	25	59	1 <sup>1</sup> / <sub>4</sub>	32 <sup>1</sup> / <sub>2</sub>	<sup>7</sup> / <sub>16</sub>	16	40	<sup>1</sup> / <sub>4</sub>	16 x 18	20.55

# Performance Ratings



American Coolair Corporation certifies that the Type TDC fans shown herein are licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with

the requirements of the AMCA Certified Ratings Program.

# Typical Specifications

Duct fans shall be American Coolair direct drive Type TBC as manufactured by American Coolair Corporation, Jacksonville, Florida; specific models shall be as shown in the fan schedule. Fan housing to be of heavy gauge steel. Fan blades shall be of high strength cast aluminum airfoil securely attached to a heavy cast aluminum hub. Fans

shall be licensed to bear the AMCA Certified Ratings Seal for air performance. (Specify CFM and static pressure; motor enclosure, phase and volts; and accessories such as inlet bell with guard, mounting feet and safety disconnect switch.)

ITEM NO.	CUBIC FEET PER MINUTE (CFM) AT STATIC PRESSURE <sup>1</sup>												FAN MODEL <sup>2</sup>	FAN SIZE MOTOR HP	FAN RPM <sup>3</sup>	SONES <sup>4</sup>	BRAKE <sup>5</sup> HP	BLADE DESCR.		APPROX. SHIP. WT.	
	0"	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	1"	1 1/4"	1 1/2"	1 3/4"	2"						No.	Pitch		
1	3,387	3,014	-	-	-	-	-	-	-	-	-	-	TDC18H11	1/3	1160	12.1	0.28	4	35	139	
2	2,991	2,829	2,628	2,393	2,039	-	-	-	-	-	-	-	TDC18H17	1/3	1750	16.3	0.38	4	16 1/2	126	
3	3,922	3,725	3,499	3,205	2,845	-	-	-	-	-	-	-	TDC18J17	18	1/2	1750	19.9	0.57	4	24	135
4	4,854	4,636	4,355	4,030	-	-	-	-	-	-	-	-	TDC18K17	3/4	1750	23	0.85	4	32 1/2	139	
5	5,408	5,235	5,038	4,777	-	-	-	-	-	-	-	-	TDC18L17	1	1750	23	1.14	6	34 1/2	140	
6	5,748	5,067	4,270	-	-	-	-	-	-	-	-	-	TDC24H11	1/3	1160	16.7	0.37	3	16	214	
7	7,144	6,415	5,589	4,624	-	-	-	-	-	-	-	-	TDC24J11	1/2	1160	17.7	0.58	3	23	214	
8	8,050	7,420	6,730	-	-	-	-	-	-	-	-	-	TDC24K11	3/4	1160	21	0.84	4	26 1/2	217	
9	8,253	7,849	7,398	6,869	6,140	-	-	-	-	-	-	-	TDC24L11	24	1	1160	21	1.13	6	25	228
10	10,065	9,613	9,141	8,632	8,090	7,537	6,911	-	-	-	-	-	TDC24M17	1 1/2	1750	33	1.73	3	20 1/2	228	
11	10,654	10,280	9,861	9,448	9,024	8,584	8,110	-	-	-	-	-	TDC24N17	2	1750	43	2.22	4	21 1/2	228	
12	12,959	12,569	12,152	11,664	11,149	10,616	10,032	-	-	-	-	-	TDC24P17	3	1750	50	3.40	4	29	255	
13	9,270	8,183	6,863	-	-	-	-	-	-	-	-	-	TDC30J8	1/2	870	17.1	0.57	4	17 1/2	282	
14	11,047	9,907	8,499	-	-	-	-	-	-	-	-	-	TDC30K8	3/4	870	19.5	0.83	4	24	282	
15	11,593	10,803	9,837	8,603	-	-	-	-	-	-	-	-	TDC30L8	1	870	20	1.11	6	23 1/2	313	
16	12,087	11,120	9,992	8,644	7,302	-	-	-	-	-	-	-	TDC30L11	1	1160	25	1.12	3	18 1/2	282	
17	13,692	12,861	12,007	11,082	9,940	-	-	-	-	-	-	-	TDC30M11	1 1/2	1160	29	1.68	4	21	313	
18	15,544	14,675	13,769	12,708	11,531	-	-	-	-	-	-	-	TDC30N11	30	2	1160	32	2.25	4	26 1/2	325
19	17,457	16,817	16,126	15,340	14,521	13,540	-	-	-	-	-	-	TDC30P11	3	1160	36	3.39	6	28 1/2	374	
20	17,186	16,561	15,870	15,191	14,469	13,710	12,908	11,069	-	-	-	-	TDC30P17	3	1750	48	3.38	3	16 1/2	313	
21	20,656	20,146	19,566	19,001	18,454	17,851	17,247	15,897	14,181	-	-	-	TDC30Q17	5	1750	59	5.78	4	21	325	
22	22,658	22,289	21,910	21,519	21,057	20,561	20,124	19,182	18,082	16,844	-	-	TDC30R17	7 1/2	1750	64	8.59	6	22 1/2	374	
23	26,047	25,630	25,209	24,777	24,309	23,781	23,274	22,255	21,099	-	-	-	TDC30S17	10	1750	71	11.34	6	28	397	
24	10,213	8,623	6,463	-	-	-	-	-	-	-	-	-	TDC36J8	1/2	870	22	0.57	3	7 1/2	460	
25	12,849	11,224	9,150	-	-	-	-	-	-	-	-	-	TDC36K8	3/4	870	24	0.83	3	13 1/2	471	
26	14,826	13,058	11,060	-	-	-	-	-	-	-	-	-	TDC36L8	1	870	25	1.15	3	19	508	
27	16,901	15,471	13,952	11,969	-	-	-	-	-	-	-	-	TDC36M8	1 1/2	870	31	1.69	4	21 1/2	519	
28	18,868	17,320	15,745	13,697	-	-	-	-	-	-	-	-	TDC36N8	2	870	31	2.25	4	28	565	
29	21,678	20,524	19,284	17,715	15,088	-	-	-	-	-	-	-	TDC36P8	3	870	37	3.38	6	30	585	
30	12,019	10,961	9,889	8,192	-	-	-	-	-	-	-	-	TDC36L11	1	1160	33	1.12	3	5	471	
31	15,483	14,415	12,960	11,705	10,057	-	-	-	-	-	-	-	TDC36M11	1 1/2	1160	37	1.68	3	10 1/2	508	
32	18,183	16,926	15,677	14,330	12,522	10,075	-	-	-	-	-	-	TDC36N11	36	2	1160	40	2.28	3	15 1/2	519
33	20,727	19,728	18,625	17,538	16,331	14,783	11,910	-	-	-	-	-	TDC36P11	3	1160	48	3.37	4	18	565	
34	24,988	24,175	23,311	22,457	21,564	20,581	19,423	15,686	-	-	-	-	TDC36Q11	5	1160	57	5.76	6	22 1/2	585	
35	16,873	16,048	15,250	14,470	13,660	12,740	-	-	-	-	-	-	TDC36P17	3	1750	71	3.45	3	5	508	
36	22,397	21,603	20,795	19,972	19,130	18,266	17,379	15,493	-	-	-	-	TDC36Q17	5	1750	74	5.70	3	10 1/2	519	
37	27,320	26,558	25,761	24,961	24,152	23,327	22,482	20,710	18,698	-	-	-	TDC36R17	7 1/2	1750	79	8.51	3	16	565	
38	31,710	30,943	30,091	29,285	28,476	27,649	26,802	25,006	22,913	-	-	-	TDC36S17	10	1750	74	11.42	3	21 1/2	585	
39	36,756	36,138	35,507	34,862	34,202	33,525	32,832	31,377	29,772	27,880	-	-	TDC36T17	15	1750	91	17.17	4	25	635	
40	40,658	39,900	39,152	38,414	37,686	36,967	36,257	34,834	33,306	-	-	-	TDC36U17	20	1750	92	21.84	4	30	668	

(continued next page)

# Type TD Performance Ratings (cont'd.)

ITEM NO.	CUBIC FEET PER MINUTE (CFM) AT STATIC PRESSURE <sup>1</sup>												FAN MODEL <sup>2</sup>	FAN SIZE	MOTOR HP	FAN RPM <sup>3</sup>	SONES <sup>4</sup>	BRAKE <sup>5</sup> HP	BLADE DESC.	APPROX. SHIP. WT.	
	0"	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	1"	1 1/4"	1 1/2"	1 3/4"	2"									
41	18,761	15,968	12,794	-	-	-	-	-	-	-	-	-	TDC42L6	1	680	26	1.11	3	18 1/2	561	
42	20,971	18,890	16,363	-	-	-	-	-	-	-	-	-	TDC42M6	1 1/2	680	29	1.64	4	20 1/2	610	
43	22,494	20,863	19,126	17,116	-	-	-	-	-	-	-	-	TDC42N6	2	680	33	2.24	6	20 1/2	633	
44	16,796	14,737	12,450	9,719	-	-	-	-	-	-	-	-	TDC42L8	1	870	31	1.13	3	7 1/2	549	
45	20,878	18,869	16,695	14,066	-	-	-	-	-	-	-	-	TDC42M8	1 1/2	870	36	1.71	3	13 1/2	561	
46	23,696	21,593	19,308	16,874	-	-	-	-	-	-	-	-	TDC42N8	2	870	39	2.27	3	18	610	
47	26,830	25,223	23,508	21,534	19,159	-	-	-	-	-	-	-	TDC42P8	3	870	45	3.44	4	20 1/2	633	
48	31,405	30,172	28,884	27,494	25,940	-	-	-	-	-	-	-	TDC42Q8	5	870	56	5.55	6	24	680	
49	20,468	18,905	17,346	15,717	13,793	11,591	-	-	-	-	-	-	TDC42N11	42	2	1160	47	2.24	3	5 1/2	561
50	25,237	23,703	22,172	20,616	18,831	16,791	14,653	-	-	-	-	-	TDC42P11	3	1160	55	3.37	3	10 1/2	610	
51	30,222	28,934	27,690	26,485	25,250	23,859	22,215	18,110	-	-	-	-	TDC42Q11	5	1160	64	5.68	4	14 1/2	633	
52	33,465	32,521	31,515	30,565	29,588	28,599	27,580	25,243	-	-	-	-	TDC42R11	7 1/2	1160	79	8.54	6	16	680	
53	38,872	37,938	36,957	35,981	34,975	33,933	32,845	30,475	-	-	-	-	TDC42S11	10	1160	90	11.32	6	21	713	
54	32,332	31,301	30,281	29,240	28,155	27,069	25,985	23,734	21,125	18,044	-	-	TDC42R17	7 1/2	1750	105	8.41	3	6 1/2	610	
55	37,419	36,397	35,385	34,384	33,392	32,403	31,393	29,173	26,578	23,962	21,050	-	TDC42S17	10	1750	117	11.23	3	10	633	
56	45,811	44,835	43,784	42,666	41,610	40,550	39,490	37,354	35,065	32,418	29,399	-	TDC42T17	15	1750	140	16.95	3	16 1/2	680	
57	51,612	50,638	49,576	48,524	47,486	46,410	45,295	42,959	40,526	37,998	-	-	TDC42U17	20	1750	146	22.63	3	21 1/2	713	
58	18,340	15,018	11,093	-	-	-	-	-	-	-	-	-	TDC48K6	3/4	680	24	0.83	3	5 1/2	616	
59	21,076	17,891	14,138	-	-	-	-	-	-	-	-	-	TDC48L6	1	680	27	1.11	3	9	622	
60	24,094	21,378	18,631	15,099	-	-	-	-	-	-	-	-	TDC48M6	1 1/2	680	32	1.70	4	11 1/2	677	
61	27,628	24,722	22,012	18,563	-	-	-	-	-	-	-	-	TDC48N6	2	680	35	2.23	4	16	700	
62	30,558	28,428	26,387	24,062	21,220	-	-	-	-	-	-	-	TDC48P6	3	680	39	3.37	6	17	748	
63	23,464	20,841	18,243	15,147	-	-	-	-	-	-	-	-	TDC48M8	1 1/2	870	36	1.70	3	5 1/2	622	
64	26,464	23,959	21,343	18,404	14,261	-	-	-	-	-	-	-	TDC48N8	2	870	40	2.24	3	8 1/2	677	
65	30,322	28,181	26,086	24,003	21,496	18,642	-	-	-	-	-	-	TDC48P8	48	3	870	47	3.44	4	11	700
66	38,796	36,871	34,557	31,718	28,937	25,990	-	-	-	-	-	-	TDC48Q8	5	870	51	5.69	4	19 1/2	748	
67	43,318	41,567	39,778	38,082	36,477	34,802	32,715	-	-	-	-	-	TDC48R8	7 1/2	870	64	8.64	6	21	781	
68	36,619	34,759	32,911	31,049	29,027	26,793	24,441	-	-	-	-	-	TDC48Q11	5	1160	68	5.73	3	9 1/2	700	
69	43,859	42,105	40,277	38,073	35,532	33,165	30,893	-	-	-	-	-	TDC48R11	7 1/2	1160	75	8.49	3	15 1/2	748	
70	47,788	46,166	44,394	42,626	40,945	39,324	37,678	33,838	-	-	-	-	TDC48S11	10	1160	89	11.38	4	16 1/2	781	
71	56,677	55,037	53,285	51,173	49,097	47,013	45,025	41,303	-	-	-	-	TDC48T11	15	1160	91	16.86	4	24	840	
72	60,491	59,285	58,075	56,844	55,423	53,901	52,422	49,536	46,595	-	-	-	TDC48U11	20	1160	113	22.41	6	23	891	
73	28,803	24,575	20,137	-	-	-	-	-	-	-	-	-	TDC54M6	1 1/2	680	34	1.69	3	8	919	
74	32,845	28,856	23,714	17,996	-	-	-	-	-	-	-	-	TDC54N6	2	680	37	2.26	3	12	942	
75	34,041	31,630	29,188	26,570	23,222	18,202	-	-	-	-	-	-	TDC54P6	3	680	43	3.35	6	9 1/2	989	
76	43,992	41,377	38,431	35,542	32,619	28,869	-	-	-	-	-	-	TDC54Q6	5	680	52	5.65	6	17 1/2	1022	
77	36,146	33,091	29,476	26,102	21,664	-	-	-	-	-	-	-	TDC54P8	3	870	51	3.39	3	7 1/2	942	
78	43,113	40,606	38,095	35,123	32,183	29,285	25,288	-	-	-	-	-	TDC54Q8	5	870	63	5.65	4	11	989	
79	47,753	45,626	43,703	41,843	39,762	37,534	35,162	28,767	-	-	-	-	TDC54R8	54	7 1/2	870	71	8.39	6	12	1022
80	55,573	53,414	51,339	48,984	46,785	44,699	42,532	36,916	-	-	-	-	TDC54S8	10	870	81	11.48	6	17	1083	
81	49,134	46,888	44,635	41,668	39,149	36,677	33,766	26,762	-	-	-	-	TDC54R11	7 1/2	1160	88	8.39	3	8	989	
82	52,529	50,838	49,051	47,133	44,967	42,823	40,797	36,170	29,927	-	-	-	TDC54S11	10	1160	101	11.10	4	8 1/2	1022	
83	59,259	57,828	56,401	54,978	53,558	52,140	50,713	47,758	44,489	40,415	34,587	-	TDC54T11	15	1160	117	17.26	6	10	1082	
84	69,187	67,329	65,613	64,049	62,593	61,222	59,900	57,250	54,010	49,871	45,157	38,495	TDC54U11	20	1160	132	23.08	6	14 1/2	1133	
85	38,352	32,360	27,066	-	-	-	-	-	-	-	-	-	TDC60N6	2	680	40	2.21	3	7 1/2	1045	
86	45,239	39,623	33,828	25,894	-	-	-	-	-	-	-	-	TDC60P6	3	680	47	3.34	3	12 1/2	1093	
87	53,840	48,710	44,491	40,284	33,237	-	-	-	-	-	-	-	TDC60Q6	5	680	55	5.72	4	16 1/2	1126	
88	60,107	57,232	53,861	50,017	44,989	40,546	-	-	-	-	-	-	TDC60R6	7 1/2	680	61	8.30	6	17 1/2	1186	
89	66,882	63,644	60,479	57,193	53,096	46,992	-	-	-	-	-	-	TDC60S6	10	680	72	11.23	6	22 1/2	1236	
90	52,898	49,383	44,201	39,166	34,962	-	-	-	-	-	-	-	TDC60Q8	60	5	870	66	5.53	3	9 1/2	1092
91	55,001	52,933	50,408	47,196	44,606	41,289	37,341	27,845	-	-	-	-	TDC60R8	7 1/2	870	76	8.54	6	7 1/2	1126	
92	63,064	60,835	58,193	55,647	52,735	49,418	46,135	37,654	-	-	-	-	TDC60S8	10	870	83	11.32	6	11	1186	
93	66,700	63,711	60,804	56,283	52,882	49,897	46,793	36,541	-	-	-	-	TDC60S11	10	1160	106	11.50	3	8	1126	
94	78,246	75,832	72,450	68,157	64,723	61,553	58,229	49,080	-	-	-	-	TDC60T11	15	1160	125	17.26	3	13	1186	

- 1 — Performance shown is for Installation Type B: free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream.
- 2 — The first three letters of model number identify fan type, drive configuration and style. The next two numbers indicate fan size; the next letter identifies motor horsepower and the last number (or numbers) indicates RPM in hundreds. Example: Model TDC18H11 is Type T, direct drive, Style "C", 18" size, 1/3 HP, 1160 RPM.
- 3 — Fan RPM is identical to motor speed.
- 4 — Some ratings apply to non-ducted application of fan. The sound ratings shown are loudness values in fan sones a 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for Installation Type B: free inlet fan sone levels. The sound ratings shown are at 1" static pressure. The AMCA Certified Ratings Seal applies to air performance ratings only.
- 5 — Maximum brake horsepower (BHP) within the catalog performance range. BHP at most static pressures listed is less than that shown, in some cases substantially less. For specific BHP values at individual static pressure points, contact your American Coolair representative. Because of the cooling the motor receives from the moving air stream, motor loading beyond the nominal nameplate rating on these American Coolair fans does not overheat the motor and is within NEMA recommended limits and motor service factor. It is not detrimental to the motor and is economically desirable.

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

## Installation, selection and maintenance

**INSTALLATION:** American Coolair's Type T duct fans may be mounted in any position. For convenience in wiring and service, the motor should be readily accessible.

On direct drive units, access through adjacent duct work is recommended.

On belt drive units, the motor position must be considered with regard to service and adjacent objects such as wall or ceiling.

The duct fan has flanged ends on the steel housing for convenient mounting directly to the duct system. Flexible connections or transition pieces may be utilized to reduce noise transmission, simplify duct attachment, and provide access to interior of fan.

If the fan is not adequately supported by duct work or otherwise, optional mounting feet should be utilized. Type of support (floor or ceiling) and location relative to motor or access panel will determine proper type and location of mounts furnished.

Mounting, installation and maintenance instructions are included with fan shipment. Always check blade clearance and check direction of rotation with arrow on housing before operating.

**TEMPERATURE LIMITS:** On direct drive units with motor in airstream, standard motors can be used satisfactorily where the maximum ambient temperature does not exceed 104°F. For belt drive models, see page 4.

**SOUND:** Sound ratings may also be a factor in fan selection. These are provided in sones. If additional information is needed contact your American Coolair representative.

**MAINTENANCE:** Type T duct fans should be cleaned as necessary to remove accumulated dust, dirt and other foreign matter which may collect on the blades or interior surfaces. If belt drive, belt(s) should be inspected and tension adjusted. Check belt(s) for proper alignment.

On all belt drive models fan bearings are factory lubricated for extended service.

External relubrication fan bearing fittings are standard with belt drive models.

Pillow-block ball bearings should be lubricated annually or more frequently, depending upon conditions and operating cycle. Refer to maintenance instructions shipped with fan.

For lubrication of electric motor, see instructions supplied by motor manufacturer.

## Accessories

**INLET BELL WITH GUARD:** If fan inlet is not duct connected, an inlet bell is needed for efficient performance. Bell includes a 1" x 1" galvanized wire guard.

**ACCESS PANEL:** This removable panel allows limited access to fan for inspection and cleaning of fan interior, and lubrication of direct drive motors.

**MOTOR COVER:** (Belt drive only) Galvanized steel housing encloses motor on belt drive models. Cover is open on motor pulley end to allow for ventilation of motor.

**DRIVE GUARD:** (Belt drive only) This guard keeps personnel and foreign objects away from the motor sheave and belts.



**MOUNTING FEET:** When necessary to support fan weight from floor or ceiling, mounting feet should be specified. Applications which involve wall mounting should be referred to your American Coolair representative for recommended fan mounts. Type of support to which fan will be mounted and location relative to motor (or access panel) should be clearly stated.

**SPARK RESISTANT CONSTRUCTION:** For hazardous locations, any Type T fan can be ordered with an explosion-proof motor. Motors only qualify for Class I Group D and Class II Groups F & G hazards.

**PROTECTIVE COATINGS:** For most applications, the American Coolair powder coating system will provide the necessary surface protection for painted parts. This system includes a thermosetting epoxy powder coating to an average thickness of 3 mils and baked at 400 degrees Fahrenheit for hardness, impact resistance, adhesion and chemical resistance.

For applications that require more specialized surface protection, American Coolair offers alternatives: 6 mil epoxy or hot dip galvanizing, and others. For more information about special protective coatings, contact your American Coolair representative.

**PRE-WIRED MOTOR:** (Direct drive only) For convenience in connecting direct drive units to power supply, motor may be pre-wired to conduit box mounted on exterior of fan housing. This accessory must be specified when CSA label is required.

**SAFETY DISCONNECT SWITCH:** This switch is designed to mount near fan and serve as a safety disconnect from power supply.

**COMPANION FLANGE:** It is identical to the fan flange and may be welded to the adjoining duct to simplify fan installation.

## Limited warranty

In the sale of its products, American Coolair Corporation agrees to correct, by repairs or replacement, any defects in workmanship or material that may develop under proper and normal use during the period of one year from date of shipment from the factory. Any product or part proving, upon American Coolair's examination, to be defective during the limited warranty period will be repaired or replaced, at American Coolair's option, f.o.b. factory, without charge.

Deterioration or wear caused by chemicals, abrasive action or excessive heat shall not constitute defects.

Motors are guaranteed only to the extent of the manufacturer's warranty.

American Coolair's limited warranty does not apply to any of its products or parts that have been subject to accidental damage, misuse by the user, unauthorized alterations, improper installation or electrical wiring, or lack of proper lubrication or other service requirements as established by American Coolair.

Repairs or replacements provided under the above terms shall constitute fulfillment of all American Coolair's obligations with respect to this limited warranty.

**THE LIMITED WARRANTY STATED HEREIN IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, STATUTORY OR IMPLIED, INCLUDING WITHOUT LIMITATION THAT OF MERCHANTABILITY AND FITNESS.**

**NO LIABILITY FOR REINSTALLATION COST OR FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OF ANY NATURE IS ASSUMED OR SHALL BE IMPOSED UPON AMERICAN COOLAIR.**

TO CONVERT AIR PERFORMANCE (CFM AND STATIC PRESSURE) AND POWER (BHP) TO METRIC UNITS, MULTIPLY CFM X .000472 TO OBTAIN CUBIC METERS PER SECOND. MULTIPLY STATIC PRESSURE X 248.36 TO OBTAIN PA (PASCAL). MULTIPLY BHP X .7457 TO OBTAIN KILOWATTS.

EXAMPLE: 3,904 CFM X .000472 = 1.84  
CUBIC METERS PER SECOND

0.125 PS X 248.36 = 31.05  
PASCAL

.886 BHP X .7457 = .661  
KILOWATTS

## WARNING

## CAUTION



DO NOT INSTALL FAN WITH MOVING PARTS WITHIN 8 FEET OF FLOOR OR GRADE LEVEL WITHOUT A GUARD THAT COMPLIES WITH OSHA REGULATIONS. **DO NOT** USE UNLESS ELECTRICAL WIRING COMPLIES WITH ALL APPLICABLE CODES. **DO NOT** WIRE WITHOUT PROVIDING FOR A POWER SOURCE DISCONNECT AT THE FAN ITSELF. **DO NOT** SERVICE EXCEPT BY A QUALIFIED MAINTENANCE TECHNICIAN AND ONLY AFTER DISCONNECTING THE POWER SOURCE. FAILURE TO OBSERVE THESE PRECAUTIONS CAN RESULT IN SERIOUS INJURY OR DEATH.



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REPRESENTED BY: