

RTA: BELT DRIVE ROOF EXHAUSTERS



Belt drive, heavy duty construction ideal for industrial and commercial applications.

RTA model suitable for use in clean, dry air with a maximum temperature of 93° C (200° F).
 RWTA models are suitable for use in moisture laden air with a maximum temperature of 93° C (200° F).
 RTWA models feature a Teflon shaft seal, poly housing bearings and stainless steel insert.

FEATURES

- TEFC, ball bearing motor is out of air stream and is accessible from the roof, maximum ambient 40° C (104° F).
- Galvanized steel wind-band and rain-proof butterfly dampers.
- Cast iron pillow block bearings (out of air stream), complete with external grease fittings.
- Cast aluminum blades on 12" to 48" sizes.
- Polypropylene blades reinforced with fiberglass on 54" to 60" sizes.
- Heavy-duty pulleys and belts out of air stream

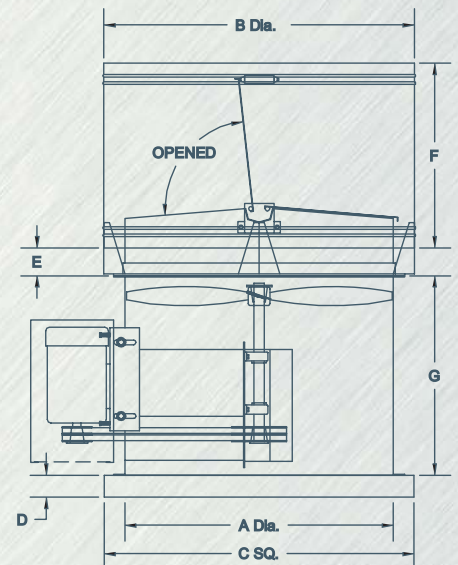


To order RWTA models, replace "RTA" with "RWTA" in the table below.

BLADE DIAMETER	MODEL #		FAN RPM	H.P.	0" S.P.		1/4" S.P.		1/2" S.P.		3/4" S.P.		1" S.P.		Min. CFM	dBA @ 10Ft.
	SINGLE PHASE	THREE PHASE			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP		
18"	RTA18T10050	RTA18T30050*	1556	1/2	3930	0.40	3540	0.45	2830	0.49	-	-	-	-	2600	59
	RTA18T10075	RTA18T30075*	1785	3/4	4530	0.58	4210	0.65	3780	0.73	-	-	-	-	2600	62
	RTA18T10100	RTA18T30100*	1920	1	4890	0.72	4610	0.79	4250	0.86	3680	0.94	-	-	2600	64
	RTA18T10150	RTA18T30150*	2255	1.5	5790	1.15	5550	1.23	5300	1.76	4990	1.40	4530	1.49	2600	68
	RTA18T10200	RTA18T30200*	2510	2	6490	1.59	6280	1.68	6030	1.76	5960	1.86	5510	1.96	2600	72
24"	RTA24T10075	RTA24T30075*	1220	3/4	6325	0.64	5360	0.70	-	-	-	-	-	-	4700	58
	RTA24T10100	RTA24T30100*	1370	1	7020	0.84	6180	0.91	5020	0.96	-	-	-	-	4700	61
	RTA24T10150	RTA24T30150*	1580	1.5	8090	1.22	7390	1.32	6550	1.38	5380	1.42	-	-	4700	65
	RTA24T10200	RTA24T30200*	1720	2	8960	1.60	8330	1.71	7620	1.79	6740	1.86	5460	1.88	4700	67
	RTA24T10300	RTA24T30300*	2340	3	10670	2.49	10060	2.63	9460	2.79	8910	2.84	8240	2.94	4700	72
30"	RTA30T10100	RTA30T30100*	965	1	10050	0.86	8100	0.92	-	-	-	-	-	-	7300	59
	RTA30T10150	RTA30T30150*	1095	1.5	11650	1.26	10130	1.34	7860	1.37	-	-	-	-	7300	62
	RTA30T10200	RTA30T30200*	1225	2	13170	1.74	11930	1.85	10210	1.92	-	-	-	-	7300	65
	RTA30T10300	RTA30T30300*	1380	3	14910	2.48	13930	2.60	12620	2.69	10980	2.74	8240	2.74	7300	67
	RTA30T10500	RTA30T30500*	1635	5	17850	4.08	17160	4.25	16100	4.38	14960	4.48	13570	4.58	7300	72
36"	RTA36T10200	RTA36T30200*	910	2	16650	1.80	13980	1.86	-	-	-	-	-	-	10000	63
	RTA36T10300	RTA36T30300*	1045	3	19220	2.72	17550	2.80	14440	2.8	-	-	-	-	10000	66
	RTA36T10500	RTA36T30500*	1245	5	23610	4.56	21780	4.68	19870	4.75	17380	4.75	12980	4.68	10000	71
	RTA36T10750	RTA36T30750*	1425	7.5	27110	6.81	27790	6.95	22410	7.09	22260	7.13	20080	7.13	10000	75
	42"	RTA42T10200	RTA42T30200*	770	2	19920	1.65	15080	1.80	-	-	-	-	-	-	14000
RTA42T10300		RTA42T30300*	895	3	22840	2.60	19620	2.80	14940	2.9	-	-	-	-	14000	65
RTA42T10500		RTA42T30500*	1005	5	25980	3.66	23230	3.89	19980	4.01	-	-	-	-	14000	67
RTA42T10750		RTA42T30750*	1205	7.5	31520	6.26	29530	6.54	27040	6.78	24230	6.89	20270	7.07	14000	72
RTA42T11000		RTA42T31000*	1335	10	35170	8.49	33410	8.76	31270	9.08	29020	9.32	26230	9.39	14000	75
48"	RTA48T10300	RTA48T30300*	745	3	24330	2.55	20510	2.76	-	-	-	-	-	-	18000	63
	RTA48T10500	RTA48T30500*	885	5	29440	4.10	26370	4.46	22380	4.72	-	-	-	-	18000	67
	RTA48T10750	RTA48T30750*	1005	7.5	33850	5.93	31080	6.47	28330	6.81	24740	6.96	-	-	18000	71
	RTA48T11000	RTA48T31000*	1105	10	37270	7.89	34760	8.54	32520	8.99	29760	9.11	26140	9.29	18000	73
	--	RTA48T31500*	1265	15	42900	11.70	40860	12.30	38790	13.13	36270	13.54	34290	13.66	18000	76
54"	RTA54T10500	RTA54T30500*	710	5	37130	4.26	31680	4.67	-	-	-	-	-	-	23000	68
	RTA54T10750	RTA54T30750*	810	7.5	42890	6.20	38660	6.85	33210	6.99	25390	6.87	-	-	23000	71
	RTA54T11000	RTA54T31000*	905	10	48450	8.54	44640	9.41	40140	9.73	34980	9.78	27220	9.53	23000	74
	--	RTA54T31500*	1025	15	55520	12.10	52110	12.92	48280	13.81	44310	14.17	39660	14.22	23000	78
	60"	RTA60T10750	RTA60T30750*	690	7.5	51240	6.45	45760	7.18	35770	7.09	-	-	-	-	29000
RTA60T11000		RTA60T31000*	755	10	56770	8.48	51490	9.21	40470	9.43	31650	8.72	-	-	29000	70
--		RTA60T31500*	870	15	66320	12.52	61710	13.80	56720	14.43	49520	14.34	38320	13.51	29000	74
--		RTA60T32000*	955	20	73090	16.62	68880	17.70	65690	18.78	59270	18.80	52250	18.83	29000	76

For three phase motors, substitute "*" with "M" for 208-230/460 volt or "P" for 575 volt
 BHP does not include drive losses
 dBA ratings shown are measured at 0" static pressure and should be used as a guideline only

DIMENSIONS



MODEL #	A Dia.	B Dia.	C Sq.	D	E	F	G
RTA18	18 3/8"	24 5/8"	24"	2 1/2"	2	17	18
RTA24	24 3/8"	30 5/8"	30"	2 1/2"	2	19	21
RTA30	30 3/8"	36 5/8"	36"	2 1/2"	2	23	21
RTA36	36 3/8"	42 5/8"	42"	2 1/2"	2	25	27
RTA42	42 3/8"	48 5/8"	48"	2 1/2"	2	27	27
RTA48	48 1/2"	54 5/8"	54"	2 1/2"	2	30	31
RTA54	54 1/2"	60 5/8"	60"	2 1/2"	2	36	40
RTA60	60 1/2"	66 5/8"	68"	2 1/2"	2	36	40

OPTIONS

- Steel Fan Blades
- Two Speed Motors
- Premium Efficiency Motors
- Explosion Proof Motors
- Hot Dipped Galvanizing
- Special Coatings
- Bird Screen

ACCESSORIES

- Roof Curbs
- Disconnect Switch
- Carbon Monoxide Detectors

For more information on Options and Accessories, see page 4.



RD: DIRECT DRIVE ROOF EXHAUSTERS

Sturdily constructed - ideal for industrial and commercial applications.



FEATURES

- Heavy duty galvanized blades.
- Galvanized steel wind band and rain-proof butterfly dampers that rotate easily on brass bushings.
- TEFC, ball bearing motor is in the air stream, within the building, maximum temperature of 40°C (104°F).
- Not recommended for dirty or dust laden applications.

BLADE DIAMETER	MODEL #		FAN RPM	H.P.	0" S.P.		1/8" S.P.		1/4" S.P.		3/8" S.P.		Min. CFM	dBA @ 10Ft.
	SINGLE PHASE	THREE PHASE			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP		
	24"	RD24T1075C	RD24T3075C*	1140	3/4	6549	0.74	6017	0.78	5527	0.83	-	-	4700
RD24T1100B		RD24T3100B*	1725	1	6761	0.89	6453	0.93	6128	1.00	5792	1.09	4700	81
RD24T1300B		RD24T3300B*	1725	3	9909	2.57	9558	2.62	9207	2.68	8886	2.75	4700	84
30"	--	RD30T3150C*	1140	1.5	11600	1.31	10925	1.40	10193	1.49	9127	1.59	7300	79
	RD30T1500B	RD30T3500B*	1725	5	17552	4.53	17106	4.66	16661	4.80	16215	4.94	7300	90
36"	--	RD36T3200D*	860	2	16364	1.87	15172	1.99	13864	2.08	11597	2.15	10000	80
	--	RD36T3500C*	1140	5	21692	4.35	20793	4.52	19893	4.69	18903	4.80	10000	88
42"	--	RD42T3500C*	1140	5	23209	3.04	22619	3.29	21962	3.52	21019	3.70	14000	85
	--	RD42T3750C*	1140	7.5	32476	7.70	31490	7.70	30518	7.76	29586	8.02	14000	88
48"	--	RD48T3750D*	860	7.5	35654	5.93	33411	6.06	31857	6.34	30219	6.62	18000	89
	--	RD48T3750C*	1140	7.5	32564	4.95	31677	5.35	30688	5.68	29636	5.99	18000	92

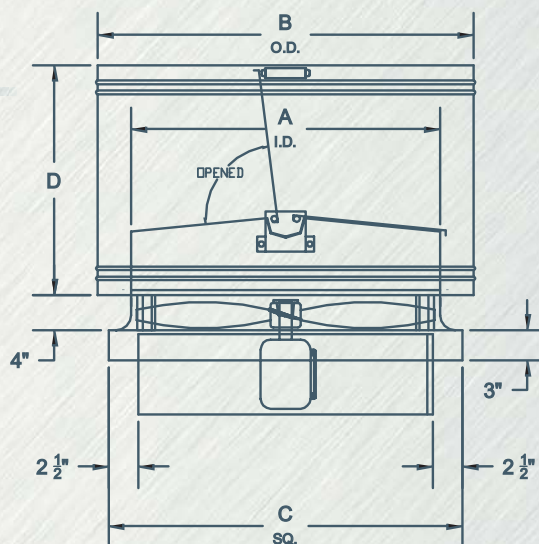
For three phase motors, substitute "*" with "M" for 208-230/460 volt or "P" for 575 volt

Fan blades tested in accordance with AMCA standard 210, figure 12.

dBA ratings shown are measured at 0" static pressure and should be used as a guideline only

DIMENSIONS

MODEL #	A I.D.	B O.D.	C SQ.	D
RD24	25"	31 1/2"	29 1/2"	19"
RD30	31"	37 1/2"	35 1/2"	22"
RD36	37"	43 1/2"	41 1/2"	25"
RD42	43"	49 1/2"	47 1/2"	27"
RD48	49"	55 1/2"	53 1/2"	30"



OPTIONS

- Cast Aluminum Blades
- Two Speed Motors
- Premium Efficiency Motors
- Explosion Proof Motors
- Hot Dipped Galvanizing
- Special Coatings
- Bird Screen

ACCESSORIES

- Roof Curbs
- Disconnect Switch
- Carbon Monoxide Detectors

For more information on Options and Accessories, see page 4.

RB: BELT DRIVE ROOF EXHAUSTERS



Sturdily constructed belt drive roof exhausters ideal for industrial and commercial applications.

FEATURES

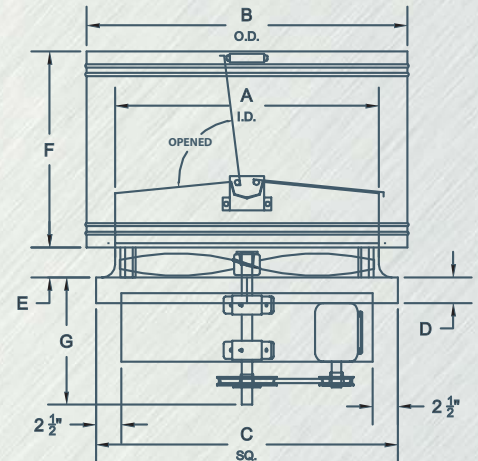
- TEFC, ball bearing motor, maximum temperature 40° C (104° F).
- Heavy duty galvanized blades.
- Galvanized steel wind-band and rain-proof butterfly dampers that rotate easily on brass bushings.
- Cast iron pillow block bearings.
- Heavy duty pulleys and belts.
- Not recommended for dirty or dust laden applications.



BLADE DIAMETER	MODEL #		FAN RPM	H.P.	0" SP		1/8" SP		1/4" SP		3/8" SP		MIN. CFM	Dba @ 5 Ft.
	SINGLE PHASE	THREE PHASE			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP		
	24"	RB24T10075	RB24T30075*	1090	3/4	6261	0.65	5706	0.68	5135	0.73	-	-	4700
RB24T10100		RB24T30100*	1190	1	6836	0.84	6327	0.88	5893	0.93	5035	0.97	4700	74
RB24T10150		RB24T30150*	1370	1.5	7870	1.29	7428	1.33	7018	1.38	6565	1.44	4700	78
RB24T10200		RB24T30200*	1510	2	8674	1.72	8273	1.77	7876	1.82	7549	1.89	4700	81
30"	RB30T10075	RB30T30075*	875	3/4	8903	0.59	8019	0.66	-	-	-	-	7300	71
	RB30T10100	RB30T30100*	965	1	9819	0.79	9022	0.87	7951	0.96	-	-	7300	73
	RB30T10150	RB30T30150*	1005	1.5	11244	1.19	10548	1.28	9775	1.37	8605	1.47	7300	78
	RB30T10200	RB30T30200*	1220	2	12414	1.60	11783	1.70	11136	1.80	10285	1.91	7300	82
	RB30T10300	RB30T30300*	1405	3	14296	2.45	13749	2.56	13201	2.67	12588	2.79	7300	85
36"	RB36T10100	RB36T30100*	660	1	12559	0.84	10953	0.93	-	-	-	-	10000	72
	RB36T10150	RB36T30150*	750	1.5	14271	1.24	12898	1.35	11091	1.41	-	-	10000	75
	RB36T10200	RB36T30200*	835	2	15888	1.71	14661	1.84	13302	1.91	10747	1.97	10000	78
	RB36T10300	RB36T30300*	940	3	17886	2.44	16796	2.58	15636	2.69	14293	2.76	10000	83
42"	RB42T10150	RB42T30150*	620	1.5	17662	1.24	15897	1.31	-	-	-	-	14000	75
	RB42T10200	RB42T30200*	685	2	19514	1.67	17906	1.73	16111	1.89	13318	1.97	14000	78
	RB42T10300	RB42T30300*	780	3	22220	2.47	20794	2.50	19341	2.68	17561	2.87	14000	83
	RB42T10500	RB42T30500*	925	5	26351	4.11	25136	4.11	23977	4.29	22681	4.51	14000	88
RB42T10750	RB42T30750*	1080	7.5	30767	6.55	29726	6.55	28710	6.65	27726	6.89	14000	91	
48"	RB48T10200	RB48T30200*	565	2	23424	1.68	20606	1.82	-	-	-	-	18000	77
	RB48T10300	RB48T30300*	640	3	26533	2.45	23933	2.59	21489	2.80	18256	2.97	18000	81
	RB48T10500	RB48T30500*	745	5	30886	3.86	28495	4.00	26703	4.24	24279	4.48	18000	86
	RB48T10750	RB48T30750*	870	7.5	36068	6.14	33835	6.27	32299	6.55	30723	6.83	18000	90
54"	RB54T10300	RB54T30300*	530	3	30080	2.46	27332	2.58	24060	2.82	-	-	23000	79
	RB54T10500	RB54T30500*	625	5	35472	4.03	33139	4.21	30532	4.41	27599	4.72	23000	84
	RB54T10750	RB54T30750*	720	7.5	40863	6.16	38809	6.44	36754	6.52	34382	6.84	23000	88
RB54T11000	RB54T31000*	795	10	45120	8.29	43236	8.67	41484	8.67	39344	8.99	23000	91	
60"	RB60T10500	RB60T30500*	520	5	42969	4.22	38510	4.50	34050	4.78	-	-	29000	72
	RB60T10750	RB60T30750*	595	7.5	49167	6.32	45269	6.64	41372	6.96	35070	7.02	29000	87
	RB60T11000	RB60T31000*	650	10	53172	8.24	50144	8.59	46576	8.94	43008	9.28	29000	89
--	RB60T31500*	745	15	61562	12.41	58449	12.80	55336	13.20	52223	13.60	29000	92	

For three phase motors, substitute "*" with "M" for 208-230/460 volt or "P" for 575 volt
 BHP does not include drive losses
 dBA ratings shown are measured at 0" static pressure and should be used as a guideline only

DIMENSIONS



MODEL #	A Dia.	B Dia.	C Sq.	D	E	F	G (MAX.)
RB24	25"	31 1/2"	29 1/2"	3"	4"	19"	18 1/2"
RB30	31"	36 1/2"	35 1/2"	3"	4"	22"	18 1/2"
RB36	37"	43 1/2"	41 1/2"	3"	4"	25"	18 1/2"
RB42	43"	49 1/2"	47 1/2"	3"	4"	27"	18 1/2"
RB48	49"	55 1/2"	53 1/2"	3"	4"	30"	18 1/2"
RB54	55"	61 1/2"	59 1/2"	3"	4"	36"	21"
RB60	61"	70"	68"	2"	5"	42"	21"

OPTIONS

- Cast Aluminum Blades
- Two Speed Motors
- Premium Efficiency Motors
- Explosion Proof Motors
- Hot Dipped Galvanizing
- Special Coatings
- Bird Screen

ACCESSORIES

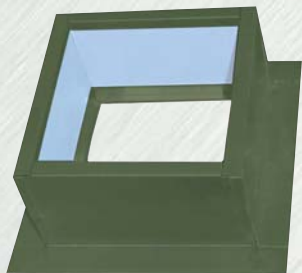
- Roof Curbs
- Disconnect Switch
- Carbon Monoxide Detectors

For more information on Options and Accessories, see page 4.



OPTIONS & ACCESSORIES

ROOF CURBS



- For Canarm Roof Exhaust fans.
- Sturdy powder coated, 16 gauge steel.
- 3" flanges
- 1" SM insulation
- Damper shelf

FAN SIZE	MODEL NUMBER
18"	RC18
24"	RC24
30"	RC30
36"	RC36
42"	RC42
48"	RC48
54"	RC54
60"	RC60

MOTOR OPTIONS

TWO SPEED MOTOR

Two speed motors are available for some of Canarm/LFI's exhaust fans. 1800/1200 or 1800/900 RPM variable torque, single and three phase. Consult factory for available voltages and configurations.

EXPLOSION PROOF MOTORS

Some of Canarm/LFI exhaust fans can be equipped with Explosion Proof Motors for hazardous locations. Class I, Group D - Class II, Group F & G. Consult factory for models.

DISCONNECT SWITCHES

Wire disconnect switches are available.

MODEL	DESCRIPTION	VOLTS
DS1	Single phase up to 3/4 HP	120/240
EL1-3/4 HP	Single phase up to 3/4 HP	120/240
EL1 1/3-25A	Single or three phase moisture resistant - 25 amp	120/240

SPECIAL COATING

For most applications, Canarm LFI's standard enamel paint will provide the necessary surface protection for painted parts. For special requirements, coatings such as hot dipped galvanizing and epoxy, please consult factory.

CARBON MONOXIDE DETECTOR



QAS-101 single point gas detector is an economical, stand alone gas detection and control unit. The detector uses a broad spectrum solid state semiconductor sensor to measure one of a series of hazardous gases. LED status indicator lights at the front provide alarm and fail information. Two DPDT relay outputs are available for alarm and control, as well as an internal radio indicator. The solid state sensor can be either integrally or remotely mounted to the 115 VAC powered electronics encased in a NEMA 1 general purpose wall mount enclosure. Internal DIP switch selections configure relay time delays, relay actuation on sensor fail and disable the audio indicator.

GAS TYPE	STANDARD	CALIBRATION
	LOW ALARM	HIGH ALARM
CARBON MONOXIDE	50ppm in VE*	100ppm in VE*
COMBUSTABLES	10% LEL**	20% LEL**
AMONIA	35ppm	300ppm
FREON R11	500ppm	1000ppm
FREON R12	500ppm	1000ppm
FREON R22	500ppm	1000ppm
FREON R134a	500ppm	1000ppm

PRINCIPLES OF OPERATION

The solid state sensor utilizes a sintered tin dioxide element. When the sensor is heated to a high temperature (typically 400°C), free electrons flow easily when no oxygen is present. In clean air, oxygen is absorbed onto the element surface providing a restriction to the electron flow and therefore increasing the electrical resistance of the element.

As the sensor is exposed to the target gas, the tin dioxide element absorbs molecules of the target gas causing oxidation in the process. This oxidation reduces the resistance of the element in a known and repeatable manner. The controller electronics measures this change in resistance and compares it to two independent set points. Field adjustment of the set points is done multi turn trim potentiometers. When either of the set points is exceeded by the measurement signal, the electronics actuates the associated internal DPDT relay. The contacts of this relay may be used to control ventilation fans, audible devices, visual alarms or other on/off type equipment. Power requirement is 115 VAC, 50/60 Hz. The controller monitors the input signal and indicates a fail condition if the signal drops below a factory preset level. LED status indicator lights are visible at the front of the unit for power on, alarm status and fail condition. The controller is supplied with an internal audio indicator for actuation on high alarm or fail condition. Internal DIP switch settings provide time delay for actuation of the relays, audible deactivation and selection of relay to actuate on fail condition. The enclosure is rated NEMA 1 general purpose for surface mounting.