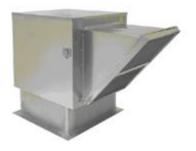
Installation, Operation, and Maintenance Manual







Standard Untempered Supply Fan

Modular Untempered Supply Fan



INLINE Filtered Supply Fan

RECEIVING AND INSPECTION

Upon receiving unit, check for any interior and exterior damage, and if found, report it immediately to the carrier. Also check that all accessory items are accounted for and are damage free. Turn the blower wheel by hand to verify free rotation and check the damper (if supplied) for free operation.

WARNING!!

Installation of this ventilator should only be performed by a qualified professional who has read and understands these instructions and is familiar with proper safety precautions. Improper installation poses serious risk of injury due to electric shock, contact with rotating equipment, and other potential hazards. Read this manual thoroughly before installing or servicing this equipment. ALWAYS disconnect power prior to working on fan.

Save these instructions. This document is the property of the owner of this equipment and is required for future maintenance. Leave this document with the owner when installation or service is complete.

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WARRANTY

This equipment is warranted to be free from defects in materials and workmanship, under normal use and service, for a period of 12 months from date of shipment. This warranty shall not apply if:

- 1. The equipment is not installed by a qualified installer per the MANUFACTURER'S installation instructions shipped with the product,
- 2. The equipment is not installed in accordance with federal, state and local codes and regulations,
- 3. The equipment is misused or neglected,
- 4. The equipment is not operated within its published capacity,
- 5. The invoice is not paid within the terms of the sales agreement.

The MANUFACTURER shall not be liable for incidental and consequential losses and damages potentially attributable to malfunctioning equipment. Should any part of the equipment prove to be defective in material or workmanship within the 12-month warranty period, upon examination by the MANUFACTURER, such part will be repaired or replaced by MANUFACTURER at no charge. The BUYER shall pay all labor costs incurred in connection with such repair or replacement. Equipment shall not be returned without MANUFACTURER'S prior authorization and all returned equipment shall be shipped by the BUYER, freight prepaid to a destination determined by the MANUFACTURER.

INSTALLATION

It is imperative that this unit is installed and operated with the designed airflow and electrical supply in accordance with this manual. If there are any questions about any items, please call the service department at **1-866-784-6900** for warranty and technical support issues.

Mechanical

WARNING: DO NOT RAISE VENTILATOR BY THE INTAKE HOOD, BLOWER OR MOTOR SHAFT, OR BEARINGS – USE LIFTING LUGS PROVIDED OR A SLING

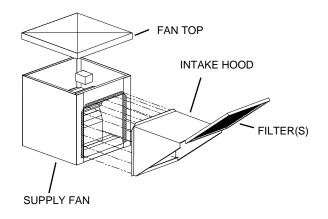
Site Preparation

- 1. Provide clearance around installation site to safely rig and lift equipment into its final position. Supports must adequately support equipment. Refer to manufacturer's estimated weights.
- 2. Consider general service and installation space when locating unit.
- 3. Locate unit close to the space it will serve to reduce long, twisted duct runs.
- 4. Do not allow air intake to face prevailing winds. Support unit above ground or at roof level high enough to prevent precipitation from being drawn into its inlet. The inlet must also be located at least 10 feet away from any exhaust vents. The fan inlet shall be located in accordance with the applicable building code provisions for ventilation air.

Intake Assembly

Filters and intake hoods for standard supply fans are shipped inside the supply fan housing for protection during shipping. Modular intakes are shipped on a separate skid. Upon unit arrival, follow the following procedure to assemble the intake to the fan:

- 1. Remove the fan top (standard supply fans only).
- 2. Remove the intake hood and filters from the fan housing.
- 3. Re-install the fan top (standard supply fans only).
- 4. Apply silicone or weather-proof gasket on the back side of the flanges of the intake hood.
- Screw the flanges of the intake hood to the unit at the hatched areas shown with the supplied sheet metal screws. Place caulk on the outside of the screws to prevent water leaks. Slide the filters down the filter track as shown.



Curb and Ductwork

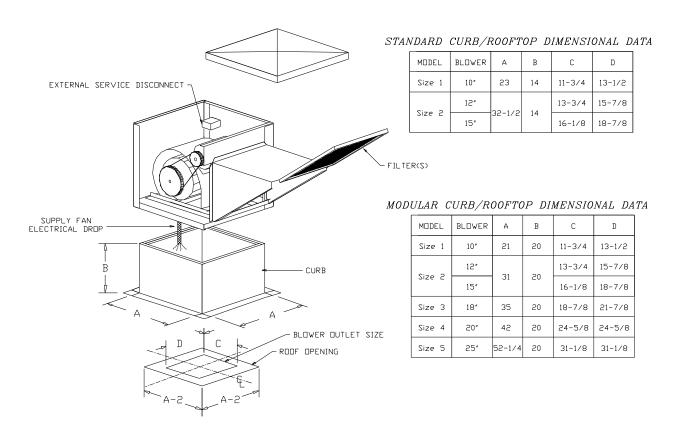
This fan was specified for a specific CFM and static pressure. The ductwork attached to this unit will significantly affect the airflow performance. Flexible ductwork and square elbows should not be used. Also, transitions and turns in ductwork near the fan outlet will cause system effect and will drastically increase the static pressure and reduce airflow. The chart to the right shows the minimum fan outlet duct sizes and straight lengths recommended for optimal fan performance.

Recommended Supply Ductwork Sizes

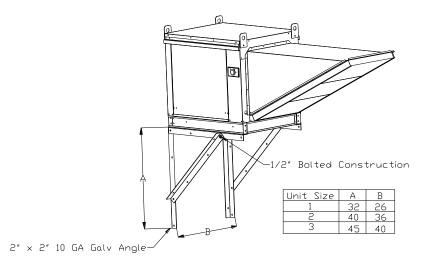
Blower Size	Duct Size	Straight Duct Length
10	14 x 14	48 in.
12	16 x 16	54 in.
15	20 x 20	72 in.
18	24 x 24	86 in.
20	26 x 26	108 in.
25	32 x 32	168 in.

Follow SMACNA guides and recommendations for the remaining duct run. Fans designed for rooftop installation should be installed on a prefabricated or factory built roof curb. Follow curb manufacturer's instructions for proper curb installation. The unit should be installed on a curb and/or rail elevated not less than 14" above any surface. Be sure duct connection and fan outlet are properly aligned and sealed. Secure fan to curb through vertical portion of the ventilator base assembly flange using a minimum of eight (8) lug screws, anchor bolts, or other suitable fasteners (not furnished). Shims may be required depending upon curb installation and roofing material. Check all fasteners for tightness. The diagrams below show different mechanical installation configurations.

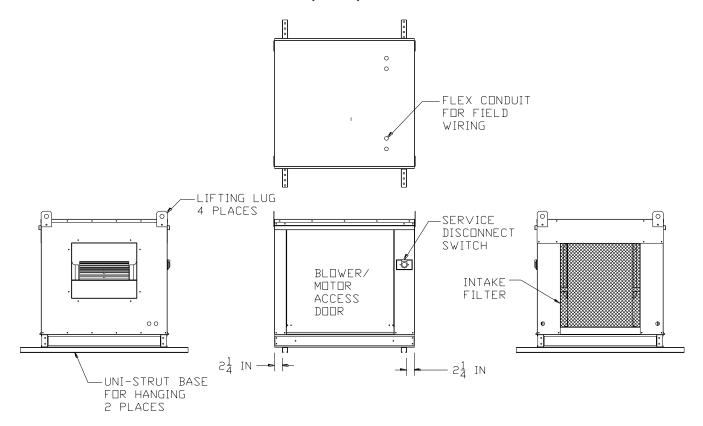
Roof Mount Installation



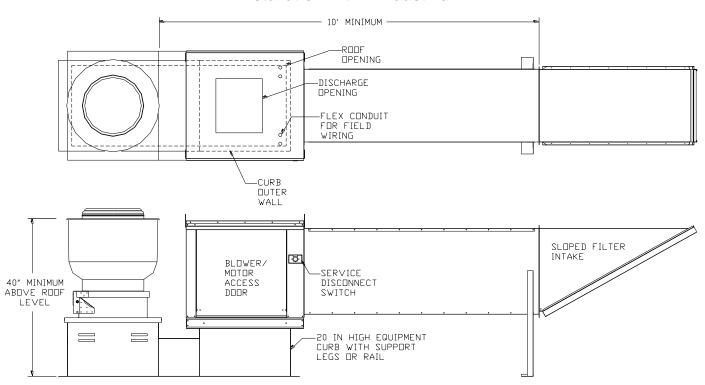
Wall Mount Installation



Indoor (Inline) Installation



Installation with Exhaust Fan



Electrical

Before connecting power to the fan, read and understand this entire section of this document. As-built wiring diagrams are furnished with each fan by the factory, and are attached either to the door of the unit or the blower.

Electrical wiring and connections should be done in accordance with local ordnances and the National Electric Code, ANSI/NFPA70. Be sure the voltage and phase of the power supply and the wire amperage capacity is in accordance with the motor nameplate. For additional safety information refer to AMCA publication 410-96, Recommended Safety Practices for Users and Installers of Industrial and Commercial Fans.

- 1. Always **disconnect power** before working on or near a fan. Lock and tag the disconnect switch or breaker to prevent accidental power up.
- An electrical drop containing the line voltage power wiring is shipped with every fan. The electrical drop should be brought through one of the conduit openings located in the base of the unit, run through the curb, and connected to a junction box inside the building.
- 3. A dedicated branch circuit should supply the motor circuit with short circuit protection according to the National Electric Code. This dedicated branch should be run to the junction box mentioned above and connected as shown in a following illustration labeled "Fan to Building Wiring Connection".
- Make certain that the power source is compatible with the requirements of your equipment. The fan nameplate identifies
- equipment. The fan nameplate identifies the **proper phase and voltage** of the motor.

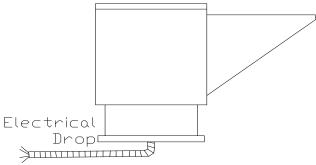
 5. Before connecting fan to building power source, verify power line wiring is de-energized.
- 6. Secure the power cable to prevent contact with sharp objects.
- 7. Do not kink power cable and never allow the cable to come in contact with oil, grease, hot surfaces or chemicals.
- 8. Before powering up fan check fan wheel for free rotation and make sure that the interior of the fan is free of loose debris or shipping materials.
- 9. If any of the original wire supplied with the fan must be replaced, it must be replaced with type THHN wire or equivalent.

WARNING!!

Disconnect power before installing or servicing fan. High voltage electrical input is needed for this equipment. This work should be performed by a qualified electrician.

Copper Wire Ampacity

Wire Size AWG	Maximum Amps
14	15
12	20
10	30
8	50
6	65
4	85



PSC (Permanent Split Capacitor) Motor Speed Control

Some single phase direct drive fans contain speed controls that regulate the amount of voltage going to the motor. Specific PSC motors must be used in conjunction with speed controls. The speed control has a knob with an off position, and high to low range. At high speed, the speed control allows all of the line voltage to pass right to the motor.

A minimum speed adjustment is provided to allow independent control of the minimum speed setting. Minimum speed adjustment ensures motor runs with sufficient torque to prevent stalling. To adjust this:

- 1) Motor must be in actual operating conditions to achieve proper speed adjustment. Motor will not slow down unless proper load is applied.
- 2) Turn main control knob to lowest speed position.
- 3) Locate and adjust minimum speed setting and adjust with small screw driver. This can be found under the speed control faceplate. (rotate clockwise to decrease minimum speed; counterclockwise to increase minimum speed).
- 4) Motor will now operate from this preset minimum speed to full speed.

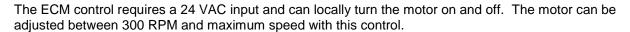
The lowest minimum voltage that may be applied to these motors is 65VAC. Running lower voltages to the motor can cause premature failure and overheating problems.

ECM (Electronically Controlled Motor) Speed Control

ECM motors and control allows accurate manual adjustment of fan speed. The benefit of ECM motors is exceptional efficiency, performance, and motor life.

The control used with ECM motors features a 4 digit LED numerical display. The blue knob on the control allows the user to set the flow index with a screwdriver. Twenty seconds later, the display shows the motor RPM. Then, the display periodically alternates between the flow index and

motor RPM. The flow index has a range of 0 to 100% and is typically linear with motor RPM.



NOTE: To adjust the speed of 3 phase direct drive motors, a variable frequency drive is required.

Motorized Intake Damper

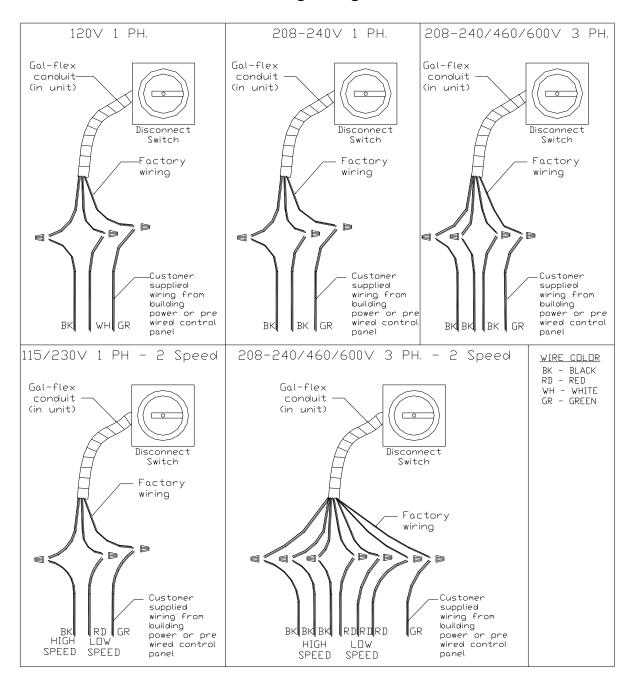
On units shipped with the optional motorized intake damper, a power transformer is supplied with the unit if the main incoming voltage is greater than 120V. The damper motor is automatically energized when the main disconnect switch is in the ON position. **No external wiring to the damper motor is required**.



Evolution Controls Inc.



Fan to Building Wiring Connection



Variable Frequency Drive (VFD) Installation Instructions

Input AC Power

- 1. Circuit breakers feeding the VFDs are recommended to be thermal-magnetic and fast acting. They should be sized based on the VFD amperage and according to the table below. Refer to the installation schematic for exact breaker sizing.
- 2. Each VFD should be fed by its own breaker. If multiple VFDs are to be combined on the same breaker, each drive should have its own protection measure (fuses or miniature circuit breaker) downstream from the breaker.
- 3. Input AC line wires should be run in conduit from the breaker panel to the drives. AC input power to multiple VFDs can be run in a single conduit if needed. **Do not combine input and output power cables in the same conduit.**
- 4. The VFD should be grounded on the terminal marked PE. A separate insulated ground wire must be provided to each VFD from the electrical panel. This will reduce the noise being radiated in other equipment.

ATTENTION!

DO NOT CONNECT INCOMING AC POWER TO OUTPUT TERMINALS U, V, W. SEVERE DAMAGE TO THE DRIVE WILL RESULT. INPUT POWER MUST ALWAYS BE WIRED TO THE INPUT L TERMINAL CONNECTIONS (L1, L2, L3)

VFD Output Power

- Motor wires from each VFD to its respective motor MUST be run in a separate steel conduit away from control wiring and incoming AC power wiring to avoid noise and crosstalk between drives. An insulated ground must be run from each VFD to its respective motor. Do not run different fans output power cables in the same conduit.
- 2. Load reactors: If the distance between the VFD and the motor is great, a load reactor should be used between the VFD and the motor. The output reactor should be sized accordingly and installed within 10 feet of the output of the VFD. 208/230V Load reactor should be used when distance exceeds 250 feet. 460/480V Load reactor should be used when distance exceeds 50 feet. 575/600V– Load reactor should be used when distance exceeds 25 feet.
- 3. If the distance between the VFD and the motor is extremely long, up to 1000 FT, a dV/dT filter should be used and the VFD should be increased by 1 HP or to the next size VFD. The dV/dT filter should be sized accordingly and installed within 10 feet of the output of the VFD. 208/230V dV/dT filter should be used when distance exceeds 400 feet. 460/480V dV/dT filter should be used when distance exceeds 250 feet. 575/600V dV/dT filter should be used when distance exceeds 150 feet.
- 4. No contactor should be installed between the drive and the motor. Operating such a device while the drive is running can potentially cause damage to the power components of the drive.
- 5. When a disconnect switch is installed between the drive and motor, the disconnect should only be operated when the drive is in a STOP state.

VFD Programming

Programming

- The Drive should be programmed for the proper motor voltage. P107 is set to 0 (Low) if motor voltage is 120 VAC, 208 VAC or 400 VAC. P107 is set to 1 (High) if motor voltage is 230 VAC,480 VAC or 575 VAC.
- 2. The Drive should be programmed for the proper motor overload value. P108 is calculated as Motor FLA x 100 / Drive Output Rating (available in table below).

To enter the PROGRAM mode to access the parameters:

- 1. Press the Mode (M) button. This will activate the password prompt (PASS).
- 2. Use the Up and Down buttons to scroll to the password value (the factory default password is "0225") and press the Mode (M) button. Once the correct password is entered, the display will read "P100", which indicates that the PROGRAM mode has been accessed at the beginning of the parameter menu.
- 3. Use the Up and Down buttons to scroll to the desired parameter number..
- 4. Once the desired parameter is found, press the Mode (M) button to display the present parameter setting. The parameter value will begin blinking, indicating that the present parameter setting is being displayed. The value of the parameter can be changed by using the Up and Down buttons.
- 5. Pressing the Mode (M) button will store the new setting and also exit the PROGRAM mode. To change another parameter, press the Mode (M) button again to re-enter the PROGRAM mode. If the Mode button is pressed within 1 minute of exiting the PROGRAM mode, the password is not required to access the parameters. After one minute, the password must be re-entered in order to access the parameters again.

P500 parameter provides a history of the last 8 faults on the drive. It can be accessed without getting into PROGRAM mode.

ACTECH SMV VFD CROSS-REFERENCE TABLE

					Input Amps 1Ø	Input Amps 1Ø	Output	Breaker 1Ø	Breaker 1Ø
Model Number	Volts	1Ø input	3Ø input	HP	120VAC	240VAC	Amps	120VAC	240VAC
ESV251N01SXB	120/240V	X	0.2	0.33	6.8	3.4	1.7	15	15
ESV371N01SXB	120/240V	Х		0.5	9.2	4.6	2.4	15	15
ESV751N01SXB	120/240V	X		1	16.6	8.3	4.2	25	15
ESV112N01SXB	120/240V	X		1.5	20	10	6	30	20
					Input Amps 1Ø	input Amps 3Ø		Breaker 1Ø	Breaker 3Ø
ESV371N02YXB	240V	Х	Х	0.5	5.1	2.9	2.4	15	15
ESV751N02YXB	240V	Х	Χ	1	8.8	5	4.2	15	15
ESV112N02YXB	240V	Х	Х	1.5	12	6.9	6	20	15
ESV152N02YXB	240V	Х	Х	2	13.3	8.1	7	25	15
ESV222N02YXB	240V	Х	Х	3	17.1	10.8	9.6	30	20
ESV402N02TXB	240V	7.	X	5		18.6	16.5	- 55	30
ESV552N02TXB	240V		X	7.5		26	23		40
ESV752N02TXB	240V		X	10		33	29		50
ESV113N02TXB	240V		X	15		48	42		80
ESV153N02TXB	240V		X	20		59	54		90
2011001102112			,			00	0.		- 55
ESV751N04TXB	480V		Х	1		2.5	2.1		15
ESV112N04TXB	480V		X	1.5		3.6	3		15
ESV152N04TXB	480V		Х	2		4.1	3.5		15
ESV222N04TXB	480V		Х	3		5.4	4.8		15
ESV402N04TXB	480V		Х	5		9.3	8.2		15
ESV552N04TXB	480V		Х	7.5		12.4	11		20
ESV752N04TXB	480V		Х	10		15.8	14		25
ESV113N04TXB	480V		Х	15		24	21		40
ESV153N04TXB	480V		Х	20		31	27		50
ESV183N04TXB	480V		Х	25		38	34		70
ESV223N04TXB	480V		Х	30		45	40		80
ESV303N04TXB	480V		Х	40		59	52		100
ESV373N04TXB	480V		Х	50		74	65		125
ESV453N04TXB	480V		Х	60		87	77		150
ESV751N06TXB	600V		Χ	1		2	1.7		15
ESV152N06TXB	600V		Χ	2		3.2	2.7		15
ESV222N06TXB	600V		Χ	3		4.4	3.9		15
ESV402N06TXB	600V		Χ	5		6.8	6.1		15
ESV552N06TXB	600V		Χ	7.5		10.2	9		20
ESV752N06TXB	600V		Х	10		12.4	11		20
ESV113N06TXB	600V		Х	15		19.7	17		30
ESV153N06TXB	600V		Х	20		25	22		40
ESV183N06TXB	600V		Х	25		31	27		50
ESV223N06TXB	600V		Х	30		36	32		60
ESV303N06TXB	600V		Х	40		47	41		70
ESV373N06TXB	600V		Х	50	·	59	52		90
ESV453N06TXB	600V		Χ	60		71	62		110

OPERATION

Prior to starting up or operating the ventilator, check all fasteners for tightness. In particular, check the set screw in the wheel hub, bearings and the fan sheaves (pulleys). With power to the fan **OFF** or prior to connecting ventilator to power, turn the fan wheel by hand to be sure it is not striking the inlet or any obstacles. Re-center if necessary.

Start Up

Special Tools Required

- AC Voltage Meter
- Tachometer
- Amperage Meter
- Standard Hand Tools

Start Up Procedure

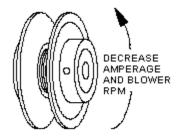
- 1. Check all electrical connections for tightness and continuity.
- 2. Check pulley alignment and belt tension as described below.
- 3. Inspect the condition of the intake damper and damper linkage, if provided.
- 4. Inspect the air-stream for obstructions and install intake filters if missing.
- 5. Compare the supplied **voltage** with the fan's nameplate voltage. If this does not match, correct the problem.
- 6. Start the fan up, by turning the external disconnect to the **ON** position, and shut it **OFF** immediately to **check rotation of the wheel** with the directional arrow on the blower scroll. Reversed rotation will result in poor air performance, motor overloading and possible burnout. For units equipped with a single-phase motor check the motor wiring diagram to change rotation. For 3-phase motors, any two power leads can be interchanged to reverse motor direction.
- 7. When the fan is started up, observe the operation and check for any unusual noises.
- 8. Switch the external disconnect back to the **ON** position and with the air system in full operation and all ducts attached, measure the system airflow. Motor sheave (pulley) is variable pitch, and allows for an increase or decrease of the fan RPM to adjust the airflow, as shown in the illustration below. For your convenience, a RPM chart is included in the following pages.
- 9. Once the proper airflow is achieved, measure and record the fan speed with a reliable tachometer. Caution Excessive speed will result in motor overloading or bearing failure.

 Do not set fan RPMs higher than specified in the maximum RPM chart. See the troubleshooting guide for more information.
- 10. Measure and record the **voltage** and **amperage** to the motor and compare with the motor nameplate to determine if the motor is operating under safe load condition.
- 11. Once the rpm of the ventilator has been properly set, disconnect power and recheck belt tension and pulley alignment as described below.

Maximum RPM and HP Chart

Blower Size	Maximum RPM	Maximum HP
10"	1800	2
12"	1500	3
15"	1400	5
18"	1200	5
20"	1000	10
25"	900	20

Pulley Adjustment Illustration



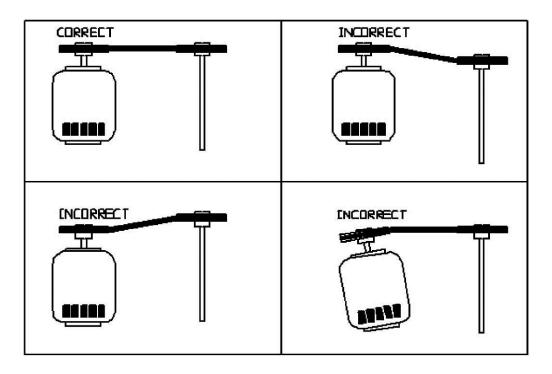
Pulley Adjustment

The adjustable motor pulley is factory set for the RPM specified. Speed can be increased by closing or decreased by opening the adjustable motor sheave. Two groove variable pitch pulleys must be adjusted an equal number of turns open or closed. Any increase in speed represents a substantial increase in horsepower required by the unit. Motor amperage should always be checked to avoid serious damage to the motor when the speed is varied. Always torque setscrews according to the setscrew torque chart.

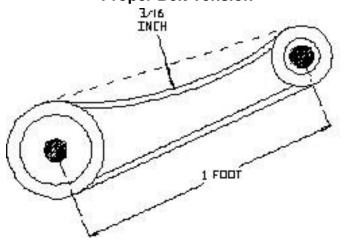
Pulley Setscrew Torque

Thread Size	Torque (IN/Lb)
No. 10 (bushing)	32
1/4" (bushing)	72
5/16"	130

Pulley Alignment



Proper Belt Tension



Pulley Combination Chart

	Motor RPM		1725													
	1/3 to 1-1/2 HP		MOTOR PULLEY 1VL34	Dd1	Dd2	Pd1	Pd2									
	AX BELTS		1VL34	1.9 Open	2.9	2	3	TURNS	ON MOTOR	PULLEY				Closed		
	BLOWER PULLEY	DATUM DIAMETER	PITCH DIAMETER	5	4 1/2	4	3 1/2	3	2 1/2	2	1 1/2	1	1/2	0		
	AK114	11	11.2	308	323	339	354	370	385	400	416	431	447	462		
	1/3 to 2 HP		MOTOR PULLEY	Dd1	Dd2	Pd1	Pd2									
	AX BELTS		1VL40	2.4	3.4	2.6	3.6									
		7		Open					ON MOTOR					Closed		
	BLOWER PULLEY	DATUM DIAMETER	PITCH DIAMETER	5	4 1/2	4	3 1/2	3	2 1/2	2	1 1/2	1	1/2	0		
	AK114 AK94	11 9	11.2 9.2	400 488	416 506	431 525	447 544	462 563	477 581	493 600	508 619	524 638	539 656	554 675		
	AK79	7.5	7.7	582	605	627	650	672	694	717	739	762	784	806		
	AK66	6.2	6.4	701	728	755	782	809	836	863	889	916	943	970		
.,	AK54	5	5.2	863	896	929	962	995	1028	1062	1095	1128	1161	1194		
*	AK46	4.2	4.4	1019	1059	1098	1137	1176	1215	1255	1294	1333	1372	1411		
~	AK39	3.5	3.7	1212	1259	1305	1352	1399	1445	1492	1539	1585	1632	1678		
ER	AK32	3	3.2	1402	1455	1509	1563	1617	1671	1725	1779	1833	1887	1941		
>			MOTOR BUILTY	0.14	0.10	0.14	0.10									
MO.	3 to 5 HP BX BELTS		MOTOR PULLEY 2VP42	Dd1 2.9	Dd2 3.9	Pd1 3	Pd2 4									
)]	DX DEETS		20142	Open	3.3		-		TURNS	ON MOTOR	PULLEY					Closed
В	BLOWER PULLEY	DATUM DIAMETER	PITCH DIAMETER	6	5 1/2	5	4 1/2	4	3 1/2	3	2 1/2	2	1 1/2	1	1/2	0
	2BK160H	15.4	15.7	330	339	348	357	366	375	385	394	403	412	421	430	439
ΙN	2BK140H	13.4	13.7	378	388	399	409	420	430	441	451	462	472	483	493	504
	2BK120H	11.4	11.7	442	455	467	479	491	504	516	528	541	553	565	577	590
20	2BK110H	10.4	10.7	484	497	511	524	537	551	564	578	591	605	618	631	645
	2BK100H	9.4	9.7	534	548	563	578	593	608	622	637	652	667	682	697	711
- (2BK90H	8.4	8.7	595	611	628	644	661	677	694	710	727	744	760	777	793
01	2BK80H 2BK70H	7.4 6.4	7.7 6.7	672 772	691 794	709 815	728 837	747 858	765 880	784 901	803 923	821 944	840 965	859 987	877 1008	896 1030
	2BK60H	5.4	5.7	908	933	958	984	1009	1034	1059	1084	1110	1135	1160	1185	1211
	2BK55H	4.9	5.2	995	1023	1050	1078	1106	1133	1161	1189	1216	1244	1272	1299	1327
	2BK50H	4.4	4.7	1101	1132	1162	1193	1223	1254	1285	1315	1346	1376	1407	1438	1468
	7-1/2 to 10 HP		MOTOR PULLEY	Dd1	Dd2	Pd1	Pd2									
	BX BELTS		2VP60	4.3	5.5	4.7	5.9									
		r	r	Open						ON MOTOR						Closed
	BLOWER PULLEY	DATUM DIAMETER	PITCH DIAMETER	6	5 1/2	5	4 1/2	4	3 1/2	3	2 1/2	2	1 1/2	1	1/2	0
	2BK160H 2BK140H	15.4 13.4	15.7 13.7	516 592	527 604	538 617	549 630	560 642	571 655	582 667	593 680	604 693	615 705	626 718	637 730	648 743
	2BK140H	11.4	11.7	693	708	722	737	752	767	781	796	811	826	840	855	870
	2BK110H	10.4	10.7	758	774	790	806	822	838	854	871	887	903	919	935	951
	2BK100H	9.4	9.7	836	854	871	889	907	925	943	960	978	996	1014	1031	1049
	2BK90H	8.4	8.7	932	952	972	991	1011	1031	1051	1071	1091	1110	1130	1150	1170
	2BK80H	7.4	7.7	1053	1075	1098	1120	1143	1165	1187	1210	1232	1255	1277	1299	1322
	3 to 5 HP BX BELTS		MOTOR PULLEY 2VP42	Dd1 2.9	Dd2 3.9	Pd1 3	Pd2 4									
	DA DELIG									ON MOTOR	PULLEY					
									TURNS							Closed
	BLOWER PULLEY	DATUM DIAMETER	PITCH DIAMETER	Open 6	5 1/2	5	4 1/2	4	3 1/2	ON MOTOR	2 1/2	2	1 1/2	1	1/2	Closed 0
	BLOWER PULLEY 2B5V278	DATUM DIAMETER 27.8	PITCH DIAMETER 28.1	Open	5 1/2 189	5 194	4 1/2 200	4 205			2 1/2 220	2 225	1 1/2 230	1 235	1/2 240	
				Open 6					3 1/2	3						0
	285V278 285V250 285V234	27.8 25 23.4	28.1 25.3 23.7	Open 6 184 205 218	189 210 224	194 216 230	200 222 237	205 227 243	3 1/2 210 233 249	3 215 239 255	220 244 261	225 250 267	230 256 273	235 261 279	240 267 285	0 246 273 291
	2B5V278 2B5V250 2B5V234 2B5V200	27.8 25 23.4 20	28.1 25.3 23.7 20.3	Open 6 184 205 218 255	189 210 224 262	194 216 230 269	200 222 237 276	205 227 243 283	3 1/2 210 233 249 290	3 215 239 255 297	220 244 261 304	225 250 267 312	230 256 273 319	235 261 279 326	240 267 285 333	0 246 273 291 340
	285V278 285V250 285V234 285V200 285V184	27.8 25 23.4 20 18.4	28.1 25.3 23.7 20.3 18.7	Open 6 184 205 218 255 277	189 210 224 262 284	194 216 230 269 292	200 222 237 276 300	205 227 243 283 307	3 1/2 210 233 249 290 315	3 215 239 255 297 323	220 244 261 304 331	225 250 267 312 338	230 256 273 319 346	235 261 279 326 354	240 267 285 333 361	0 246 273 291 340 369
	285V278 285V250 285V234 285V200 285V184 285V160	27.8 25 23.4 20 18.4 16	28.1 25.3 23.7 20.3 18.7 16.3	Open 6 184 205 218 255 277 317	189 210 224 262 284 326	194 216 230 269 292 335	200 222 237 276 300 344	205 227 243 283 307 353	3 1/2 210 233 249 290 315 362	3 215 239 255 297 323 370	220 244 261 304 331 379	225 250 267 312 338 388	230 256 273 319 346 397	235 261 279 326 354 406	240 267 285 333 361 414	0 246 273 291 340 369 423
	285V278 285V250 285V234 285V200 285V184 285V160 285V154	27.8 25 23.4 20 18.4 16 15.4	28.1 25.3 23.7 20.3 18.7 16.3 15.7	Open 6 184 205 218 255 277 317 330	189 210 224 262 284 326 339	194 216 230 269 292 335 348	200 222 237 276 300 344 357	205 227 243 283 307 353 366	3 1/2 210 233 249 290 315 362 375	3 215 239 255 297 323 370 385	220 244 261 304 331 379 394	225 250 267 312 338 388 403	230 256 273 319 346 397 412	235 261 279 326 354 406 421	240 267 285 333 361 414 430	0 246 273 291 340 369 423 439
	285V278 285V250 285V234 285V200 285V184 285V160	27.8 25 23.4 20 18.4 16	28.1 25.3 23.7 20.3 18.7 16.3	Open 6 184 205 218 255 277 317	189 210 224 262 284 326	194 216 230 269 292 335	200 222 237 276 300 344	205 227 243 283 307 353	3 1/2 210 233 249 290 315 362	3 215 239 255 297 323 370	220 244 261 304 331 379	225 250 267 312 338 388	230 256 273 319 346 397	235 261 279 326 354 406	240 267 285 333 361 414	0 246 273 291 340 369 423
	285V278 285V250 285V234 285V200 285V184 285V160 285V154 285V136	27.8 25 23.4 20 18.4 16 15.4 12.6	28.1 25.3 23.7 20.3 18.7 16.3 15.7 12.9	Open 6 184 205 218 255 277 317 330 401	189 210 224 262 284 326 339 412	194 216 230 269 292 335 348 423	200 222 237 276 300 344 357 435	205 227 243 283 307 353 366 446	3 1/2 210 233 249 290 315 362 375 457	3 215 239 255 297 323 370 385 468	220 244 261 304 331 379 394 479	225 250 267 312 338 388 403 490	230 256 273 319 346 397 412 501	235 261 279 326 354 406 421 513	240 267 285 333 361 414 430 524	0 246 273 291 340 369 423 439 535
	285V278 285V250 285V234 285V234 285V200 285V184 285V160 285V154 285V136 285V124 285V110	27.8 25 23.4 20 18.4 16 15.4 12.6 12.4	28.1 25.3 23.7 20.3 18.7 16.3 15.7 12.9 12.7 11.3	Open 6 184 205 218 255 277 330 401 407 458	189 210 224 262 284 326 339 412 419	194 216 230 269 292 335 348 423 430 483	200 222 237 276 300 344 357 435 441 496	205 227 243 283 307 353 366 446 453	3 1/2 210 233 249 290 315 362 375 457	3 215 239 255 297 323 370 385 468 475	220 244 261 304 331 379 394 479 487	225 250 267 312 338 388 403 490 498	230 256 273 319 346 397 412 501 509	235 261 279 326 354 406 421 513 521	240 267 285 333 361 414 430 524 532	0 246 273 291 340 369 423 439 535 543
~	285V278 285V250 285V234 285V200 285V184 285V160 285V154 285V136 285V124 285V110 7-1/2 to 10 HP	27.8 25 23.4 20 18.4 16 15.4 12.6 12.4	28.1 25.3 23.7 20.3 18.7 16.3 15.7 12.9 12.7 11.3	Open 6 184 205 218 255 277 317 330 401 407 458	189 210 224 262 284 326 339 412 419 471	194 216 230 269 292 335 348 423 430 483	200 222 237 276 300 344 357 435 441 496	205 227 243 283 307 353 366 446 453	3 1/2 210 233 249 290 315 362 375 457	3 215 239 255 297 323 370 385 468 475	220 244 261 304 331 379 394 479 487	225 250 267 312 338 388 403 490 498	230 256 273 319 346 397 412 501 509	235 261 279 326 354 406 421 513 521	240 267 285 333 361 414 430 524 532	0 246 273 291 340 369 423 439 535 543
ш	285V278 285V250 285V234 285V234 285V200 285V184 285V160 285V154 285V136 285V124 285V110	27.8 25 23.4 20 18.4 16 15.4 12.6 12.4	28.1 25.3 23.7 20.3 18.7 16.3 15.7 12.9 12.7 11.3	Open 6 184 205 218 255 277 317 330 401 407 458 Dd1 4.3	189 210 224 262 284 326 339 412 419	194 216 230 269 292 335 348 423 430 483	200 222 237 276 300 344 357 435 441 496	205 227 243 283 307 353 366 446 453	3 1/2 210 233 249 290 315 362 375 457 464 522	3 215 239 255 297 323 370 385 468 475 534	220 244 261 304 331 379 394 479 487 547	225 250 267 312 338 388 403 490 498	230 256 273 319 346 397 412 501 509	235 261 279 326 354 406 421 513 521	240 267 285 333 361 414 430 524 532	0 246 273 291 369 423 439 535 543 611
ш	2B5V278 2B5V250 2B5V234 2B5V234 2B5V200 2B5V184 2B5V160 2B5V154 2B5V156 2B5V124 2B5V110 7-1/2 to 10 HP BX BELTS	27.8 25 23.4 20 18.4 16 15.4 12.6 12.4	28.1 25.3 23.7 20.3 18.7 16.3 15.7 12.9 12.7 11.3	Open 6 184 205 218 255 277 317 330 401 407 458	189 210 224 262 284 326 339 412 419 471	194 216 230 269 292 335 348 423 430 483	200 222 237 276 300 344 357 435 441 496	205 227 243 283 307 353 366 446 453	3 1/2 210 233 249 290 315 362 375 457 464 522	3 215 239 255 297 323 370 385 468 475	220 244 261 304 331 379 394 479 487 547	225 250 267 312 338 388 403 490 498	230 256 273 319 346 397 412 501 509	235 261 279 326 354 406 421 513 521	240 267 285 333 361 414 430 524 532	0 246 273 291 340 369 423 439 535 543
OWER	2B5V278 2B5V250 2B5V234 2B5V200 2B5V184 2B5V160 2B5V154 2B5V154 2B5V116 2B5V116 7-1/2 to 10 HP BX BELTS BLOWER PULLEY	27.8 25 23.4 20 18.4 16 15.4 12.6 12.4 11	28.1 25.3 23.7 20.3 18.7 16.3 15.7 12.9 12.7 11.3 MOTOR PULLEY 2VP60 PITCH DIAMETER	Open 6 184 205 218 255 218 255 317 330 401 407 458 Dd1 4.3 Open 6	189 210 224 262 284 326 339 412 419 471 Dd2 5.5	194 216 230 269 292 335 348 423 430 483 Pd1 4.7	200 222 237 276 300 344 357 435 441 496 Pd2 5,9	205 227 243 283 307 353 366 446 453 509	3 1/2 210 233 249 290 315 362 375 457 464 522	3 215 239 255 297 323 370 385 468 475 534	220 244 261 304 331 379 394 479 487 547	225 250 267 312 338 388 403 490 498 560	230 256 273 319 346 397 412 501 509 572	235 261 279 326 354 406 421 513 521 585	240 267 285 333 361 414 430 524 532 598	0 246 273 291 340 369 423 439 535 543 611
LOWE	2B5V278 2B5V250 2B5V234 2B5V234 2B5V200 2B5V184 2B5V160 2B5V154 2B5V156 2B5V124 2B5V110 7-1/2 to 10 HP BX BELTS	27.8 25 23.4 20 18.4 16 15.4 12.6 12.4	28.1 25.3 23.7 20.3 18.7 16.3 15.7 12.9 12.7 11.3	Open 6 184 205 218 255 277 317 330 401 407 458 Dd1 4.3 Open	189 210 224 262 284 326 339 412 419 471	194 216 230 269 292 335 348 423 430 483	200 222 237 276 300 344 357 435 441 496	205 227 243 283 307 353 366 446 453 509	3 1/2 210 233 249 290 315 362 375 457 464 522	3 215 239 255 297 323 370 385 468 475 534	220 244 261 304 331 379 394 479 487 547	225 250 267 312 338 388 403 490 498 560	230 256 273 319 346 397 412 501 509 572	235 261 279 326 354 406 421 513 521 585	240 267 285 333 361 414 430 524 532 598	0 246 273 291 340 369 423 439 535 543 611
ш	2BSV278 2BSV250 2BSV234 2BSV234 2BSV200 2BSV184 2BSV160 2BSV154 2BSV116 2BSV116 7-1/2 to 10 HP BX BELTS BLOWER PULLEY 2BSV278	27.8 25 23.4 20 18.4 16 15.4 12.6 12.4 11	28.1 25.3 23.7 20.3 18.7 16.3 15.7 12.9 12.7 11.3 MOTOR PULLEY 2VP60 PITCH DIAMETER 28.1	Open 6 184 205 218 255 277 317 330 401 407 458 Dd1 4.8 Open 6 289	189 210 224 224 326 339 412 419 471 Dd2 5.5	194 216 230 292 335 348 423 430 483 Pd1 4.7	200 222 237 276 300 344 357 435 441 496 Pd2 5.9	205 227 243 283 307 353 366 446 453 509	3 1/2 210 233 249 290 315 362 375 457 464 522 TURNS 3 1/2 319	3 215 239 255 297 323 370 385 468 475 534	220 244 261 304 331 379 394 479 487 547	225 250 267 338 388 403 490 498 560	230 256 273 319 346 397 412 501 509 572	235 261 279 326 354 406 421 513 521 585	240 267 285 333 361 414 430 524 532 598	0 246 273 291 340 369 423 429 535 543 611
. BLOWE	2BSV278 2BSV250 2BSV234 2BSV234 2BSV200 2BSV184 2BSV160 2BSV154 2BSV154 2BSV116 2BSV175 2BSV175 2BSV175 3BLOWER PULLEY 2BSV250 2BSV250 2BSV234 2BSV230	27.8 25 23.4 20 18.4 16 15.4 12.6 12.4 11 DATUM DIAMETER 27.8 25 23.4 20	28.1 25.3 23.7 20.3 18.7 16.3 15.7 12.9 12.7 11.3 MOTOR PULLEY 2VP60 PITCH DIAMETER 28.1 25.3 23.7 20.3	Open 6 184 205 218 255 277 317 330 401 407 458 Dd1 4,3 Open 6 289 320 320 340 399	189 210 224 262 284 326 339 412 419 471 Dd2 5.5 5 1/2 295 327 349 408	194 216 230 269 292 335 348 423 430 483 Pd1 4.7	200 222 237 276 300 344 357 435 441 496 Pd2 5.9 4 1/2 307 341 364 425	205 227 243 307 353 366 446 453 509 4 4 313 348 371 433	3 1/2 210 233 249 290 315 362 375 457 464 522 TURNS 3 1/2 319 355 378 442	3 215 239 255 297 323 370 385 468 475 534	220 244 261 304 331 379 394 479 487 547 PULLEY 2 1/2 331 368 393 459	225 250 267 312 338 388 403 490 498 560 2 338 375 400	230 256 253 319 346 397 412 501 509 572 1 1/2 344 382 408 476	235 261 279 326 354 406 421 513 521 585	240 267 285 333 361 414 430 524 532 598 1/2 356 395 422 493	0 246 273 273 291 340 369 423 439 554 611 Closed 0 362 402 402 501
LOWE	2B5V278 2B5V250 2B5V250 2B5V234 2B5V200 2B5V184 2B5V160 2B5V154 2B5V116 2B5V116 7-1/2 to 10 HP BX BELTS BLOWER PULLEY 2B5V278 2B5V278 2B5V224 2B5V234 2B5V200 2B5V344	27.8 25 23.4 20 18.4 16 15.4 12.6 12.4 11 DATUM DIAMETER 27.8 25 23.4 20 18.4	28.1 25.3 23.7 20.3 18.7 16.3 15.7 12.9 12.7 11.3 MOTOR PULLEY 2VP60 PITCH DIAMETER 28.1 25.3 23.7 20.3 18.7	Open 6 184 205 218 255 277 317 330 401 407 457 408 401 409 409 409 409 409 409 409 409 409 409	189 210 224 262 284 339 412 419 471 Dd2 5,5 5 1/2 295 327 349 408	194 216 230 269 292 335 348 423 430 483 Pd1 4.7 5 301 334 357 416 452	200 222 237 276 300 344 357 435 441 496 Pd2 5.9 4 1/2 307 341 364 425 461	205 227 243 283 307 353 366 446 453 509 4 313 348 371 433 470	3 1/2 210 233 249 290 315 362 375 457 464 522 TURNS 3 1/2 3 19 3 55 3 78 442 448	3 215 239 255 297 323 370 385 468 475 534 ON MOTOR 3 325 361 386 450 489	220 244 261 304 331 379 394 479 487 547 PULLEY 2 1/2 331 368 393 459 498	225 250 267 312 338 403 490 498 560 2 2 338 375 400 467	230 256 273 319 346 347 3412 501 509 572 1 1/2 344 382 408 476 517	235 261 279 326 354 406 421 513 521 585	240 267 285 333 361 414 430 524 532 598 1/2 356 395 422 423 535	0 246 273 291 340 423 429 501 422 429 544 544 544 544 544 544 544 544 544 54
. BLOWE	2BSV278 2BSV250 2BSV250 2BSV234 2BSV200 2BSV184 2BSV160 2BSV154 2BSV110 7-1/2 to 10 HP BX BELTS BLOWER PULLEY 2BSV278 2BSV234 2BSV234 2BSV200 2BSV184	27.8 25 23.4 20 18.4 16 15.4 12.6 12.4 11 DATUM DIAMETER 27.8 25 23.4 20 18.4 16	28.1 25.3 23.7 20.3 18.7 16.3 15.7 12.9 12.7 11.3 MOTOR PULLEY 2VP60 PITCH DIAMETER 25.3 23.7 20.3 18.7 16.3	Open 6 184 205 218 255 277 330 401 407 458 Dd1 4,3 Open 6 289 320 342 399 434 497	189 210 224 262 284 326 339 412 419 471 Dd2 5.5 5 1/2 295 327 349 408 443 508	194 216 230 269 292 335 348 423 430 483 Pd1 4.7 5 301 334 416 452	200 222 237 276 300 344 357 435 441 496 Pd2 5.9 4 1/2 307 341 364 425 461 529	205 227 243 283 307 353 366 446 453 509 4 4 313 348 371 433 437 540	3 1/2 210 233 249 290 315 362 375 464 522 TURNS 3 1/2 319 3378 442 440	3 215 239 255 297 323 370 385 468 475 534 ON MOTOR 3 325 361 386 450 489 561	220 244 261 304 331 379 487 547 PULLEY 2 1/2 331 368 393 459 498	225 250 267 312 338 403 490 490 498 560 2 338 375 400 467 507 507 582	230 256 273 319 346 397 412 501 509 572 1 1/2 344 408 476 577 593	235 261 279 326 354 406 421 513 521 585	240 267 285 333 361 414 430 524 532 598 1/2 356 395 422 493 535 614	0 246 273 291 340 369 423 439 535 543 611 Closed 0 362 402 429 501 544 624
IN. BLOWE	2BSV278 2BSV250 2BSV250 2BSV234 2BSV200 2BSV184 2BSV160 2BSV154 2BSV154 2BSV116 2BSV116 2BSV124 2BSV110 7-1/2 to 10 HP BX BELTS BLOWER PULLEY 2BSV278 2BSV250 2BSV234 2BSV200 2BSV184 2BSV160 2BSV160	27.8 25 23.4 20 18.4 16 15.4 21.2.6 12.4 11 DATUM DIAMETER 27.8 25 23.4 20 18.4 16 15.5 25 20 18.4 16	28.1 25.3 20.3 18.7 16.3 15.7 12.9 12.7 11.3 MOTOR PULLEY 2VP60 PITCH DIAMETER 25.3 23.7 20.3 18.7 16.3 15.7	Open 6 184 205 218 255 277 317 330 401 407 458 Dd1 4.3 Open 6 289 320 349 349 434 494 516	189 210 224 262 284 326 339 412 419 471 Dd2 5.5 5 1/2 295 327 349 408 443 527	194 216 230 269 292 335 348 423 430 483 Pd1 4.7 5 301 334 456 452 519 538	200 222 237 276 300 344 357 435 441 496 41/2 5.9 4 1/2 307 341 364 425 461 529	205 227 243 283 307 353 366 446 445 509 4 313 348 371 433 470 560	3 1/2 210 233 249 290 315 362 375 457 464 522 TURNS 3 1/2 319 355 378 442 480 550	3 215 239 255 297 323 370 385 468 475 534 ON MOTOR 3 325 361 386 450 489 561 582	220 244 261 304 331 379 394 479 487 547 PULLEY 2 1/2 331 368 393 459 498 571 593	225 250 267 312 338 403 490 498 560 2 2 338 375 406 497 507 507	230 256 273 319 346 397 412 501 509 572 1 1/2 344 382 476 517 517	235 261 279 326 354 406 421 513 521 585 1 1 350 389 415 484 526 603	240 267 285 333 361 414 430 524 532 598 1/2 356 395 493 535 493 535 614 637	0 246 273 291 340 369 423 439 535 543 611 Closed 0 362 402 429 501 544 648
5 IN. BLOWE	2BSV278 2BSV250 2BSV250 2BSV234 2BSV234 2BSV200 2BSV184 2BSV160 2BSV154 2BSV1154 2BSV1154 2BSV110 7-1/2 to 10 HP BX BELTS BLOWER PULLEY 2BSV278 2BSV278 2BSV250 2BSV24 2BSV250 2BSV184 2BSV160 2BSV154 2BSV154 2BSV154	27.8 25 23.4 20 18.4 16 15.4 12.6 12.4 11 DATUM DIAMETER 27.8 25 23.4 20 18.4 16 15.4 11 11	28.1 25.3 23.7 20.3 18.7 16.3 15.7 12.9 12.7 11.3 MOTOR PULLEY 2VP60 PITCH DIAMETER 28.1 25.3 23.7 20.3 18.7 16.3 15.7 11.9	Open 6 184 205 218 255 277 330 401 407 458 Dd1 4,3 Open 6 289 320 342 399 434 497 516 628	189 210 224 262 284 326 339 412 471 Dd2 5.5 5 1/2 295 327 349 408 403 508 527 642	194 216 230 269 292 335 348 423 430 483 Pd1 4.7 5 301 334 357 416 452 519 559	200 222 237 276 300 344 357 441 496 Pd2 5.9 4 1/2 307 341 364 425 461 529 549	205 227 243 283 307 353 366 4453 509 4 4 313 348 371 433 470 540 560	3 1/2 210 233 249 290 315 362 375 457 464 522 TURNS 3 1/2 319 355 378 442 480 550 550	3 215 239 255 297 323 370 385 468 475 534 ON MOTOR 3 325 361 386 450 450 489 561 582 709	220 244 261 304 331 379 394 479 487 547 PULLEY 2 1/2 331 368 393 459 498 571 593 722	225 250 267 312 338 403 490 490 498 560 2 338 375 400 467 507 507 582	230 256 273 319 346 397 412 501 509 572 1 1/2 344 408 476 517 593 615	235 261 279 326 354 406 421 513 521 585	240 267 285 285 333 361 414 430 524 532 598 1/2 356 395 422 493 535 614 637 776	0 246 273 291 340 369 4223 439 535 543 611 Closed 0 362 402 429 501 544 624 624 628 789
5 IN. BLOWE	2BSV278 2BSV250 2BSV250 2BSV234 2BSV200 2BSV184 2BSV160 2BSV154 2BSV154 2BSV116 2BSV116 2BSV124 2BSV110 7-1/2 to 10 HP BX BELTS BLOWER PULLEY 2BSV278 2BSV250 2BSV234 2BSV200 2BSV184 2BSV160 2BSV160	27.8 25 23.4 20 18.4 16 15.4 21.2.6 12.4 11 DATUM DIAMETER 27.8 25 23.4 20 18.4 16 15.5 25 20 18.4 16	28.1 25.3 20.3 18.7 16.3 15.7 12.9 12.7 11.3 MOTOR PULLEY 2VP60 PITCH DIAMETER 25.3 23.7 20.3 18.7 16.3 15.7	Open 6 184 205 218 255 277 317 330 401 407 458 Dd1 4.3 Open 6 289 320 349 349 434 494 516	189 210 224 262 284 326 339 412 419 471 Dd2 5.5 5 1/2 295 327 349 408 443 527	194 216 230 269 292 335 348 423 430 483 Pd1 4.7 5 301 334 456 452 519 538	200 222 237 276 300 344 357 435 441 496 41/2 5.9 4 1/2 307 341 364 425 461 529	205 227 243 283 307 353 366 446 445 509 4 313 348 371 433 470 560	3 1/2 210 233 249 290 315 362 375 457 464 522 TURNS 3 1/2 319 355 378 442 480 550	3 215 239 255 297 323 370 385 468 475 534 ON MOTOR 3 325 361 386 450 489 561 582	220 244 261 304 331 379 394 479 487 547 PULLEY 2 1/2 331 368 393 459 498 571 593	225 250 267 312 338 403 499 560 2 338 375 400 467 507 582 604	230 256 273 319 346 397 412 501 509 572 1 1/2 344 382 476 517 517	235 261 279 326 354 406 421 513 521 585 1 350 389 415 484 603 626 603	240 267 285 333 361 414 430 524 532 598 1/2 356 395 493 535 493 535 614 637	0 246 273 291 340 369 423 439 535 543 611 Closed 0 362 402 429 501 544 648
5 IN. BLOWE	2BSV278 2BSV250 2BSV234 2BSV202 2BSV184 2BSV160 2BSV154 2BSV160 2BSV154 2BSV110 7-1/2 to 10 HP BX BELTS BLOWER PULLEY 2BSV250 2BSV250 2BSV234 2BSV200 2BSV184 2BSV154 2BSV150 2BSV154 2BSV154 2BSV154 2BSV154 2BSV154	27.8 25 23.4 20 18.4 16 15.4 12.6 12.4 11 DATUM DIAMETER 27.8 25 23.4 20 18.4 16 15.4 12.6 12.4 20 18.4 20 18.4 20 20 20 20 20 20 20 20 20 20 20 20 20	28.1 25.3 23.7 20.3 18.7 16.3 15.7 12.9 12.7 11.3 MOTOR PULLEY 2VP60 PITCH DIAMETER 28.1 25.3 23.7 20.3 18.7 21.9 12.9 12.7 16.3 15.7 12.9 12.7	Open 6 184 205 218 255 277 317 330 401 407 458 Dd1 4,3 Open 6 289 320 342 349 349 434 434 434 628 638	189 210 224 262 284 326 339 412 419 471 Dd2 5.5 5 1/2 295 327 349 408 443 508 527 642	194 216 230 269 292 335 348 423 430 483 Pd1 4.7 5 301 334 452 519 538 655	200 222 237 276 300 344 357 435 445 441 496 Pd2 5.9 4 1/2 307 341 364 425 461 529 549 669	205 227 243 283 307 353 366 446 445 3509 4 313 348 371 433 470 560 682 693	3 1/2 210 233 249 290 315 362 375 457 464 522 TURNS 3 1/2 3 1/2 3 1/2 3 1/2 3 1/2 3 1/2 3 1/2 3 1/2 3 1/2 5	3 215 239 255 297 323 370 385 468 475 534 ON MOTOR 3 325 361 386 450 489 561 582 709 720	220 244 261 304 331 379 394 479 487 547 PULLEY 2 1/2 331 368 393 459 498 571 593 722 733	225 250 267 312 338 388 403 499 498 560 2 338 375 407 507 507 507 507 507 507 507 507 507 5	230 256 273 319 346 397 412 501 509 572 1 1/2 344 382 408 476 517 593 615 749	235 261 279 326 324 406 421 513 521 585 1 350 389 415 526 603 626 762	240 267 285 333 361 414 430 524 532 598 1/2 356 395 422 493 532 422 493 535 637 776	0 246 273 291 369 423 439 535 543 611 Closed 0 362 402 429 501 544 648 789 801
5 IN. BLOWE	2BSV278 2BSV250 2BSV234 2BSV200 2BSV184 2BSV160 2BSV154 2BSV160 2BSV1124 2BSV110 7-1/2 to 10 HP BX BELTS BLOWER PULLEY 2BSV250 2BSV234 2BSV250 2BSV234 2BSV2160 2BSV154 2BSV1160 2BSV154 2BSV1160 2BSV154 2BSV110	27.8 25 23.4 20 18.4 16 15.4 12.6 12.4 11 DATUM DIAMETER 27.8 25 23.4 20 18.4 16 15.4 12.6 12.4 20 18.4 20 18.4 20 20 20 20 20 20 20 20 20 20 20 20 20	28.1 25.3 23.7 20.3 18.7 16.3 15.7 12.9 12.7 11.3 MOTOR PULLEY 2VP60 PITCH DIAMETER 28.1 25.3 23.7 20.3 18.7 16.3 15.7 12.9 11.3	Open 6 184 205 218 255 277 317 330 407 458 Dd1 407 458 Open 6 289 320 342 399 434 497 516 628 638 717	189 210 224 262 284 326 339 412 419 471 Dd2 5.5 5 1/2 295 327 349 408 443 508 527 642 652 733	194 216 230 269 292 335 348 423 430 483 Pd1 4.7 5 301 334 357 416 452 519 538 655 666 748	200 222 237 276 303 344 357 441 496 Pd2 5.9 4 1/2 307 341 364 425 461 529 669 679 763	205 227 243 283 307 353 366 446 445 3509 4 313 348 371 433 470 560 682 693	3 1/2 210 233 249 290 315 362 375 457 464 522 TURNS 3 1/2 3 1/2 3 1/2 3 1/2 3 1/2 3 1/2 3 1/2 3 1/2 3 1/2 5	3 215 239 255 297 323 370 385 468 475 534 ON MOTOR 3 325 361 386 450 489 561 582 709 720	220 244 261 304 331 379 394 479 487 547 PULLEY 2 1/2 331 368 393 459 498 571 593 722 733	225 250 267 312 338 388 403 499 498 560 2 338 375 407 507 507 507 507 507 507 507 507 507 5	230 256 273 319 346 397 412 501 509 572 1 1/2 344 382 408 476 517 593 615 749	235 261 279 326 324 406 421 513 521 585 1 350 389 415 526 603 626 762	240 267 285 333 361 414 430 524 532 598 1/2 356 395 422 493 532 422 493 535 637 776	0 246 273 273 291 369 423 439 535 543 611 Closed 0 362 402 429 501 544 648 789 801
5 IN. BLOWE	2BSV278 2BSV278 2BSV250 2BSV234 2BSV200 2BSV184 2BSV160 2BSV154 2BSV1154 2BSV110 7-1/2 to 10 HP BX BELTS BLOWER PULLEY 2BSV278 2BSV250 2BSV24 2BSV200 2BSV184 2BSV160 2BSV154 2BSV160 2BSV154 2BSV160 2BSV154 2BSV154 2BSV154 2BSV1160 2BSV1	27.8 25 23.4 20 18.4 16 15.4 12.6 12.4 11 DATUM DIAMETER 27.8 25 23.4 20 18.4 16 15.4 12.6 12.4 20 18.4 20 18.4 20 20 20 20 20 20 20 20 20 20 20 20 20	28.1 25.3 23.7 20.3 18.7 16.3 15.7 12.9 12.7 11.3 MOTOR PULLEY 2VP60 PITCH DIAMETER 25.3 23.7 20.3 18.7 16.3 15.7 16.3 15.9 12.9 12.7 11.3	Open 6 184 205 218 205 218 255 277 330 401 407 458 Dd1 4,3 Open 6 289 320 342 399 342 399 494 497 516 628 638 717 Dd1 5,8	189 210 224 262 284 326 339 412 419 471 D02 5.5 5 1/2 295 327 349 408 443 508 527 642 652 733	194 216 230 269 292 335 348 423 430 483 430 483 344 47 5 301 334 45 5 19 47 47	200 222 237 276 300 344 357 441 496 62 5.9 4 1/2 307 341 364 425 469 679 763	205 227 243 283 307 353 366 446 445 3509 4 313 348 371 433 470 560 682 693	3 1/2 210 213 249 290 315 362 375 457 464 522 TURNSS 3 1/2 319 355 378 442 480 550 5706 794	3 215 239 255 297 323 370 385 468 475 534 ON MOTOR 3 325 361 386 450 450 450 450 561 582 709 720 809	220 244 261 304 331 379 394 479 487 547 PULLEY 2 1/2 331 368 571 593 722 733 824	225 250 267 312 338 388 403 499 498 560 2 338 375 407 507 507 507 507 507 507 507 507 507 5	230 256 273 319 346 397 412 501 509 572 1 1/2 344 382 408 476 517 593 615 749	235 261 279 326 324 406 421 513 521 585 1 350 389 415 526 603 626 762	240 267 285 333 361 414 430 524 532 598 1/2 356 395 422 493 532 422 493 535 637 776	0 246 273 291 340 369 423 439 535 543 611 Closed 0 362 402 429 501 544 624 628 789 801 901
5 IN. BLOWE	2BSV278 2BSV250 2BSV234 2BSV200 2BSV184 2BSV160 2BSV154 2BSV110 7-1/2 to 10 HP BX BELTS BLOWER PULLEY 2BSV278 2BSV250 2BSV24 2BSV200 2BSV184 2BSV210 2BSV184 2BSV210 2BSV184 2BSV210 2BSV184 2BSV2184 2BSV2184 2BSV2184 2BSV2184 2BSV2184 2BSV2184 2BSV2184 2BSV2184 2BSV1184 2BSV1186 2BS	27.8 25 23.4 20 18.4 16 15.4 12.6 12.4 11 DATUM DIAMETER 27.8 25 23.4 20 18.4 16 15.4 11 11	28.1 25.3 23.7 20.3 18.7 16.3 15.7 12.9 12.7 11.3 MOTOR PULLEY 22.3 16.3 15.7 20.3 18.7 20.3 18.7 21.3 22.3 22.3 22.3 23.7 24.3 25.3 25.3 25.3 26.3 27.3 27.3 28.7 29.3 29.3 29.3 29.3 20.3 20.3 20.3 20.3 20.3 20.3 20.3 20	Open 6 184 205 188 255 277 317 330 401 407 458 Dd1 4,3 Open 6 289 320 342 399 434 497 516 638 717 Dd1 58 Open	189 210 224 262 284 326 339 412 419 471 Dd2 5,5 5 1/2 295 327 349 408 443 508 527 642 652 733	194 216 230 269 292 335 348 423 430 483 Pd1 4.7 5 301 334 452 519 538 656 748 Pd1 6.2	200 222 237 276 300 344 357 441 496 Pd2 5.9 4 1/2 307 341 425 461 529 549 669 679 763	205 227 243 283 307 353 366 446 453 509 4 4 313 348 371 433 470 560 660 660 660 660 660 660	3 1/2 210 223 249 249 315 362 375 457 464 522 TURNS 3 1/2 319 355 378 442 480 570 695 706 794	3 215 239 255 297 323 370 385 468 475 534 325 361 386 450 489 720 809 720 809	220 244 261 304 331 379 394 479 487 547 PULLEY 2 1/2 331 368 393 459 498 571 593 722 733 824	225 250 267 312 338 388 403 490 498 560 2 338 375 400 467 507 582 604 737 747 840	230 256 273 319 346 397 412 501 509 572 1 1/2 344 382 408 476 517 593 615 761 855	235 261 279 326 406 421 513 521 585 1 359 415 484 526 603 626 762 774 870	240 267 285 333 361 414 430 532 598 1/2 356 395 493 535 614 637 788 885	0 246 273 291 340 369 423 439 535 543 611 Closed 0 362 402 429 501 564 801 901 Closed 624 648 789 801 901 Closed
5 IN. BLOWE	2BSV278 2BSV250 2BSV250 2BSV234 2BSV200 2BSV184 2BSV160 2BSV154 2BSV154 2BSV110 7-1/2 to 10 HP BX BELTS 2BSV250 2BSV250 2BSV234 2BSV250 2BSV234 2BSV250 2BSV234 2BSV2160 2BSV250 2BSV250 2BSV250 2BSV250 2BSV250 2BSV250 2BSV250 2BSV184 2BSV210 15 to 20 HP BX BELTS BLOWER PULLEY	27.8 25 23.4 20 18.4 16 15.4 12.6 12.4 11 DATUM DIAMETER 27.8 25 23.4 20 18.4 11 DATUM DIAMETER	28.1 25.3 23.7 20.3 18.7 16.3 15.7 12.9 12.7 11.3 MOTOR PULLEY 2VP60 PITCH DIAMETER 28.1 25.3 23.7 20.3 18.7 16.3 15.7 12.9 12.7 11.3	Open 6 184 205 184 205 218 255 277 317 330 401 407 458 Dd1 4.3 Open 6 289 434 497 516 628 638 717 Dd1 5.8 Open 6	189 210 224 262 284 326 339 412 419 471 Dd2 5.5 5 1/2 295 327 349 408 443 508 443 508 7 642 652 733	194 216 230 269 292 335 348 423 430 483 Pd1 4.7 5 301 334 452 519 519 666 748	200 222 237 276 303 344 357 441 496 Pd2 5,9 4 1/2 307 341 364 425 461 529 669 679 763	205 227 243 283 307 353 366 446 453 509 4 4 313 348 371 433 470 540 682 682 683 779	3 1/2 210 223 249 290 315 362 375 457 464 522 TURNS 3 1/2 319 355 378 442 480 550 706 794	3 215 239 255 297 323 370 385 468 475 534 ON MOTOR 3 325 361 489 561 386 450 489 561 389	220 244 261 304 331 379 394 479 487 547 PULLEY 2 1/2 331 368 393 459 498 571 593 722 733 824	225 250 267 312 338 338 403 499 498 560 2 338 375 400 467 507 507 840 840	230 256 273 319 346 397 412 501 509 572 1 1/2 344 382 408 476 517 591 691 691 691 691 691 691 691 691 691 6	235 261 279 326 354 406 421 513 521 585 1 1 350 389 415 484 526 603 627 774 870	240 267 285 333 361 414 430 524 532 598 1/2 356 395 422 493 535 614 613 776 788 885	0 246 273 291 340 369 423 439 439 611 Closed 0 362 402 429 501 544 624 648 789 801 901 Closed 0 Closed 0
5 IN. BLOWE	2BSV278 2BSV278 2BSV250 2BSV234 2BSV200 2BSV184 2BSV160 2BSV154 2BSV110 7-1/2 to 10 HP BX BELTS BLOWER PULLEY 2BSV278 2BSV200 2BSV124 2BSV100 2BSV154 2BSV100 2BSV154 2BSV100 2BSV154 2BSV100 2BSV154 2BSV100 2BSV154 2BSV110 15 to 20 HP BX BELTS BLOWER PULLEY 2BSV278 BLOWER PULLEY 2BSV278	27.8 25 23.4 20 18.4 16 15.4 12.6 12.4 11 DATUM DIAMETER 27.8 25 23.4 20 18.4 16 15.4 11 DATUM DIAMETER 11 DATUM DIAMETER 27.8 27 20 18.4 16 15.4 11 11 DATUM DIAMETER 27.8 27 20 20 20 20 20 20 20 20 20 20 20 20 20	28.1 25.3 23.7 20.3 18.7 16.3 15.7 12.9 12.7 11.3 MOTOR PULLEY 2VP60 PITCH DIAMETER 25.3 23.7 20.3 18.7 16.3 15.7 16.3 15.7 16.3 15.7 11.3 MOTOR PULLEY 2VP60 PITCH DIAMETER 25.1 25.3 20.3 20.3 20.3 20.3 20.3 20.3 20.3 20	Open 6 8 184 205 218 255 217 317 330 401 407 458 Dd1 4,3 Open 6 289 320 342 399 434 497 516 628 638 717 Dd1 5,8 Open 6 6 381	189 210 224 262 284 326 339 412 419 471 Dd2 5.5 5 1/2 295 327 349 408 443 508 527 642 652 733 Dd2 7	194 216 220 269 292 335 348 423 430 483 430 483 301 334 47 5 301 334 45 519 538 666 748 Pd1 6.2	200 222 237 276 300 344 357 441 496 62 5.9 4 1/2 307 341 529 549 669 679 763 Pd2 7.4	205 227 223 283 307 353 366 453 509 4 4 313 348 371 433 470 540 560 682 693 779	3 1/2 210 223 249 315 362 375 457 464 522 TURNS 3 1/2 319 355 706 794 TURNS 3 1/2 411	3 215 239 255 297 323 370 385 468 475 534 ON MOTOR 3 325 450 450 450 450 489 561 561 582 709 720 809	220 244 261 304 331 379 394 479 487 547 PULLEY 2 1/2 331 368 393 459 498 571 593 722 733 824 PULLEY	225 250 267 312 338 388 403 499 560 2 2 338 375 400 467 507 582 604 735 747 840	230 256 273 319 346 397 412 501 509 572 11/2 344 382 408 476 517 593 615 749 761 855	235 261 279 326 354 406 421 513 521 585 1 359 415 484 526 603 626 762 774 870	240 267 285 333 361 414 430 524 532 598 1/2 356 395 422 493 535 614 637 776 788 885	0 246 273 291 340 369 423 355 543 611 Closed 0 362 402 429 501 544 624 624 624 624 624 624 624 624 624 6
5 IN. BLOWE	2BSV278 2BSV278 2BSV250 2BSV234 2BSV200 2BSV184 2BSV160 2BSV154 2BSV1164 2BSV117 2BSV110 7-1/2 to 10 HP BX BELTS BLOWER PULLEY 2BSV278 2BSV234 2BSV250 2BSV184 2BSV160 2BSV154 2BSV160 2BSV154 2BSV154 2BSV154 2BSV154 2BSV154 2BSV154 2BSV110 15 to 20 HP BX BELTS BLOWER PULLEY 2BSV278 2BSV278	27.8 25 23.4 20 18.4 16 15.4 11 DATUM DIAMETER 27.8 25 21.4 20 20 21.4 21 20 21.4 21 20 21.4 21 20 21.4 20 21.4 20 21.4 20 20 21.4 20 20 21.4 21 20 20 21.4 21 21 21 22 20 22 23.4 20 20 23.4 20 20 20 20 20 20 20 20 20 20 20 20 20	28.1 25.3 23.7 20.3 18.7 16.3 15.7 12.9 12.7 11.3 MOTOR PULLEY 2VP60 PITCH DIAMETER 28.1 15.7 20.3 18.7 20.3 18.7 20.3 19.7 20.3 23.7 20.3 20.3 20.3 20.3 20.3 20.3 20.3 20.3	Open 6 184 205 184 205 218 255 277 330 401 407 458 Dd1 4.3 Open 6 289 320 342 342 349 3516 628 717 Dd1 5.8 Open 6 6 38 717	189 210 224 262 284 326 339 412 419 471 Dd2 5,5 5 1/2 295 327 349 443 508 527 642 7 51/2 387	194 216 230 269 292 335 348 423 430 483 Pd1 4.7 5 301 334 455 519 538 655 748 Pd1 6.2	200 222 237 276 303 344 357 441 496 Pd2 4 1/2 307 341 364 425 461 529 549 669 763 Pd2 7.4 4 1/2 399 443	205 227 243 283 307 353 366 446 453 509 4 313 348 37 470 560 682 779	3 1/2 210 223 249 290 315 362 375 457 464 522 TURNS 3 1/2 319 355 378 442 480 550 794 TURNS 3 1/2 411 457	3 215 239 255 297 323 370 385 468 475 534 534 5534 5534 5534 5534 5536 25 66 67 67 67 67 67 67 67 67 67 67 67 67	220 244 261 304 331 379 394 479 487 547 PULLEY 2 1/2 331 368 393 459 498 571 593 722 733 824 PULLEY 2 1/2 424 470	225 250 267 312 338 388 403 490 498 560 2 338 375 407 507 582 604 735 747 840	230 256 273 319 346 397 412 501 509 572 1 1/2 344 382 476 517 593 615 749 615 749 1 1/2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	235 261 279 326 324 406 421 513 521 585 1 350 389 415 526 603 626 762 774 870	240 267 285 333 361 414 430 524 532 598 1/2 356 395 422 493 535 614 637 776 885	0 246 273 291 340 369 423 555 543 611 Closed 0 362 402 429 501 544 624 8789 801 901 Closed 0 454 505
5 IN. BLOWE	2BSV278 2BSV278 2BSV250 2BSV234 2BSV200 2BSV184 2BSV160 2BSV154 2BSV110 7-1/2 to 10 HP BX BELTS BLOWER PULLEY 2BSV278 2BSV200 2BSV124 2BSV100 2BSV154 2BSV100 2BSV154 2BSV100 2BSV154 2BSV100 2BSV154 2BSV100 2BSV154 2BSV110 15 to 20 HP BX BELTS BLOWER PULLEY 2BSV278 BLOWER PULLEY 2BSV278	27.8 25 23.4 20 18.4 16 15.4 12.6 12.4 11 DATUM DIAMETER 27.8 25 23.4 20 18.4 16 15.4 11 DATUM DIAMETER 11 DATUM DIAMETER 27.8 27 20 18.4 16 15.4 11 11 DATUM DIAMETER 27.8 27 20 20 20 20 20 20 20 20 20 20 20 20 20	28.1 25.3 23.7 20.3 18.7 16.3 15.7 12.9 12.7 11.3 MOTOR PULLEY 2VP60 PITCH DIAMETER 25.3 23.7 20.3 18.7 16.3 15.7 16.3 15.7 16.3 15.7 11.3 MOTOR PULLEY 2VP60 PITCH DIAMETER 25.1 25.3 20.3 20.3 20.3 20.3 20.3 20.3 20.3 20	Open 6 8 184 205 218 255 217 317 330 401 407 458 Dd1 4,3 Open 6 289 320 342 399 434 497 516 628 638 717 Dd1 5,8 Open 6 6 381	189 210 224 262 284 326 339 412 419 471 Dd2 5.5 5 1/2 295 327 349 408 443 508 527 642 652 733 Dd2 7	194 216 220 269 292 335 348 423 430 483 430 483 301 334 47 5 301 334 45 519 538 666 748 Pd1 6.2	200 222 237 276 300 344 357 441 496 62 5.9 4 1/2 307 341 529 549 669 679 763 Pd2 7.4	205 227 223 283 307 353 366 453 509 4 4 313 348 371 433 470 540 560 682 693 779	3 1/2 210 223 249 315 362 375 457 464 522 TURNS 3 1/2 319 355 706 794 TURNS 3 1/2 411	3 215 239 255 297 323 370 385 468 475 534 ON MOTOR 3 325 450 450 450 450 489 561 561 582 709 720 809	220 244 261 304 331 379 394 479 487 547 PULLEY 2 1/2 331 368 393 459 498 571 593 722 733 824 PULLEY	225 250 267 312 338 388 403 499 560 2 2 338 375 400 467 507 582 604 735 747 840	230 256 273 319 346 397 412 501 509 572 11/2 344 382 408 476 517 593 615 749 761 855	235 261 279 326 354 406 421 513 521 585 1 359 415 484 526 603 626 762 774 870	240 267 285 333 361 414 430 524 532 598 1/2 356 395 422 493 535 614 637 776 788 885	0 246 273 291 340 369 423 439 535 543 611 Closed 0 362 429 501 544 624 624 624 624 624 624 624 624 624 6
5 IN. BLOWE	2BSV278 2BSV2750 2BSV2750 2BSV234 2BSV234 2BSV200 2BSV184 2BSV160 2BSV154 2BSV1154 2BSV110 7-1/2 to 10 HP BX BELTS BLOWER PULLEY 2BSV278	27.8 25 23.4 20 18.4 16 15.4 12.6 12.4 11 DATUM DIAMETER 27.8 25 23.4 20 18.4 16 11.4 11 DATUM DIAMETER 27.8 25 21.4 20 20 20 20 20 20 20 20 20 20 20 20 20	28.1 25.3 23.7 20.3 18.7 16.3 15.7 12.9 12.7 11.3 MOTOR PULLEY 2VP60 PITCH DIAMETER 28.1 25.3 23.7 20.3 18.7 16.3 11.7 11.3 MOTOR PULLEY 2VP60 PITCH DIAMETER 28.1 25.3 29.3 18.7 16.3 11.7 11.3 MOTOR PULLEY 2VP75 PITCH DIAMETER 28.1 28.1 29.3 29.3 20.3 20.3 20.3 20.3 20.3 20.3 20.3 20	Open 6 184 205 184 205 218 255 277 317 330 401 407 458 Dd1 4.3 Open 6 289 434 497 516 628 638 717 Dd1 5.8 Open 6 381 423 451 557	189 210 224 262 284 326 339 412 419 471 Dd2 5.5 5 1/2 295 327 349 408 443 508 527 733 Dd2 7 5 1/2 387 430	194 216 230 269 292 335 348 423 430 483 Pd1 4,7 5 301 334 357 416 452 519 538 655 666 748 Pd1 6,2	200 222 237 276 303 344 357 445 441 496 496 41/2 307 341 529 549 679 679 763 Pd2 7,4 4 1/2 399 443 443	205 227 243 283 306 366 446 453 509 4 4 313 348 470 540 560 662 693 779	3 1/2 210 223 249 315 362 375 457 464 522 TURNS 3 1/2 319 355 378 442 480 550 571 695 706 794 TURNS 3 1/2 411 457	3 215 239 255 297 323 370 385 468 475 534 ON MOTOR 3 325 361 386 450 450 9720 809 720 800 800 800 800 800 800 800 800 800 8	220 2444 261 304 331 379 394 479 487 547 PULLEY 2 1/2 331 368 393 459 498 571 593 722 733 824 PULLEY 2 1/2 424 470 502	225 250 267 312 338 388 403 499 498 560 2 338 375 400 467 507 507 840 735 747 840	230 256 273 319 346 397 412 501 509 572 11/2 344 382 476 517 593 615 761 855	235 261 279 326 354 406 421 513 521 585 1 1 350 389 415 484 526 603 626 762 774 870	240 267 285 333 361 414 430 524 532 598 1/2 356 395 422 493 535 614 637 776 788 885	0 246 273 291 340 369 423 355 543 611 Closed 0 362 442 429 501 544 624 648 789 801 901 Closed 0 4595 539 629 629 689
5 IN. BLOWE	2BSV278 2BSV278 2BSV250 2BSV234 2BSV200 2BSV184 2BSV160 2BSV154 2BSV110 7-1/2 to 10 HP BX BELTS BLOWER PULLEY 2BSV278 2BSV200 2BSV184 2BSV110 2BSV114 2BSV110 15 to 20 HP BX BELTS BLOWER PULLEY 2BSV278 2BSV250 2BSV184 2BSV110	27.8 25 23.4 20 18.4 16 15.4 12.6 12.4 11 DATUM DIAMETER 27.8 25 23.4 20 18.4 16 15.4 11 DATUM DIAMETER 27.8 25 23.4 20 18.4 16 15.4 11 11 DATUM DIAMETER 27.8 25 23.4 20 18.4 16 15.4 11 11 DATUM DIAMETER 27.8 18.4 16 18.4 11	28.1 25.3 23.7 20.3 18.7 16.3 15.7 12.9 12.7 11.3 MOTOR PULLEY 2VP60 PITCH DIAMETER 25.3 23.7 20.3 18.7 16.3 15.7 11.3 MOTOR PULLEY 2VP60 PITCH DIAMETER 25.1 25.3 20.3 18.7 16.3 15.7 12.9 12.7 11.3 MOTOR PULLEY 2VP60 PITCH DIAMETER 25.3 23.7 20.3 18.7 16.3 15.7 16.3 15.9 12.9 12.7 11.3	Open 6 184 205 184 205 218 255 277 317 330 401 407 458 Dd1 4,3 Open 6 289 320 342 399 434 497 516 628 638 717 Dd1 5,8 Open 6 61 5,8 Open 6 62 62 63 638 717	189 210 224 262 284 326 339 412 419 471 D02 5.5 51/2 295 327 349 408 443 508 527 642 652 733 D02 7 5 1/2 387 430 459 535 581	194 216 220 269 292 335 348 423 430 483 430 483 301 334 47 55 301 334 47 59 58 666 748 Pd1 6.2 5 393 436 466 544 590	200 222 237 276 300 344 357 435 441 496 25.9 4 1/2 307 341 364 425 461 529 549 669 679 763 84 41/2 399 443 473 473 552 600 688	205 227 223 283 307 353 366 453 509 4 4 313 348 371 433 470 540 560 693 779	3 1/2 210 223 249 290 315 362 375 457 464 522 TURNS 3 1/2 319 355 378 442 480 550 571 TURNS 480 569 618	3 215 239 255 297 323 370 385 468 475 534 361 386 450 489 561 582 709 720 809 ON MOTOR 3 417 464 495 578 627 720	220 244 261 304 331 379 394 479 487 547 PULLEY 2 1/2 331 368 393 459 498 571 593 722 733 824 PULLEY 2 1/2 424 470 502 586 636 730	225 250 267 312 338 388 403 499 560 2 2 338 490 498 560 2 2 338 375 400 467 507 582 604 735 747 840	230 256 273 319 346 397 412 501 509 572 11/2 344 382 408 476 517 593 615 749 761 855	235 261 279 326 354 406 421 513 521 585 1 359 415 484 526 603 626 762 774 870	240 267 285 333 361 414 430 524 532 598 1/2 356 395 422 493 531 614 637 776 788 885	0 246 273 291 340 369 423 355 543 551 543 6111 Closed 0 362 429 501 544 555 551 562 562 663 783 763 763 763 763
5 IN. BLOWE	2BSV278 2BSV278 2BSV250 2BSV234 2BSV200 2BSV184 2BSV160 2BSV154 2BSV116 2BSV116 2BSV117 2BSV110 7-1/2 to 10 HP BX BELTS BLOWER PULLEY 2BSV278 2BSV234 2BSV200 2BSV184 2BSV154 2BSV110 15 to 20 HP BX BELTS BLOWER PULLEY 2BSV278 2BSV278 2BSV250 2BSV184 2BSV100 2BSV114 2BSV110 2BSV154 2BSV150 2BSV154 2BSV150 2BSV154 2BSV150 2BSV154	27.8 25 23.4 20 18.4 16 15.4 12.6 12.4 11 DATUM DIAMETER 27.8 25 23.4 20 18.4 16 15.4 11.4 11 DATUM DIAMETER 27.8 20 18.4 16 15.4 11 11 DATUM DIAMETER 27.8 20 18.4 16 15.4 11 11	28.1 25.3 23.7 20.3 18.7 16.3 15.7 12.9 12.7 11.3 MOTOR PULLEY 2VP60 PITCH DIAMETER 28.1 15.7 20.3 18.7 20.3 18.7 20.3 18.7 20.3 18.7 20.3 20.7 20.3 20.7 20.8 20.7 20.8 20.7 20.8 20.7 20.8 20.7 20.8 20.7 20.8 20.8 20.8 20.8 20.8 20.8 20.8 20.8	Open 6 184 205 184 205 218 255 277 330 401 407 458 Dd1 4.3 Open 6 289 320 342 342 342 345 516 628 717 Dd1 528 Open 6 6 381 497 516 638 717	189 210 224 262 284 326 339 412 419 471 Dd2 5,5 5 1/2 295 327 408 443 508 527 642 7 5 1/2 5 1/2 6 5 1/2 7 5 1/2 6 6 5 2 7 3 3	194 216 230 269 292 335 348 423 430 483 Pd1 4.7 5 301 334 455 416 452 519 538 655 748 Pd1 6.2	200 222 237 276 303 344 357 441 496 Pd2 5.9 4 1/2 307 341 364 425 461 529 549 669 763 Pd2 7.4 4 1/2 399 4 1/2 399 4 1/2 399 668 714	205 227 243 283 307 353 366 446 453 509 4 4 313 348 373 470 560 682 779 4 4 0 560 480 561 693 693 779	3 1/2 210 213 249 290 315 362 457 457 464 522 TURNS 3 1/2 319 355 378 442 480 550 794 TURNS 3 1/2 481 706 794	3 215 239 255 297 323 370 385 468 475 534 325 361 386 450 489 561 582 709 720 609 609 609 609 609 609 609 609 609 60	220 244 261 304 331 379 394 479 487 547 PULLEY 2 1/2 331 368 393 459 498 571 593 722 733 824 PULLEY 2 1/2 424 470 502 586 636 730 758	225 250 267 312 338 388 403 499 498 560 2 338 375 407 467 507 582 604 735 407 840 407 735 840	230 256 273 319 346 397 412 501 509 572 1 1/2 344 382 476 517 615 749 484 484 517 603 655 751 780	235 261 279 326 324 406 421 513 521 585 1 350 389 415 526 603 626 762 774 870	240 267 27 285 333 361 414 430 524 532 598 1/2 356 395 422 493 535 614 637 776 885 1/2 488 531 620 673 773 882	0 246 273 291 340 369 423 369 423 369 423 361 1
25 IN. BLOWE	2BSV278 2BSV278 2BSV250 2BSV234 2BSV200 2BSV184 2BSV160 2BSV154 2BSV1154 2BSV1154 2BSV110 7-1/2 to 10 HP BX BELTS BLOWER PULLEY 2BSV278 2BSV250 2BSV160 2BSV154 2BSV160 2BSV154 2BSV160 2BSV154 2BSV160 2BSV154 2BSV160 2BSV154 2BSV124 2BSV124 2BSV278 2BSV278 2BSV278 2BSV278 2BSV278 2BSV278 2BSV278 2BSV284 2BSV160 2BSV154 2BSV110 BLOWER PULLEY 2BSV278	27.8 25 23.4 20 18.4 16 15.4 12.6 12.4 11 DATUM DIAMETER 27.8 25 23.4 20 18.4 16 15.4 11 DATUM DIAMETER 27.8 25 23.4 20 18.4 16 15.4 11 11 DATUM DIAMETER 27.8 25 23.4 20 18.4 16 15.4 11 11 DATUM DIAMETER 27.8 18.4 16 18.4 11	28.1 25.3 23.7 20.3 18.7 16.3 15.7 12.9 12.7 11.3 MOTOR PULLEY 2VP60 PITCH DIAMETER 28.1 25.3 23.7 20.3 18.7 16.3 15.7 11.3 MOTOR PULLEY 2VP50 PITCH DIAMETER 28.1 25.3 29.3 18.7 16.3 15.7 12.9 12.7 11.3	Open 6 184 205 184 205 218 255 277 317 330 401 407 458 Dd1 4,3 Open 6 289 320 342 399 434 497 516 628 638 717 Dd1 5,8 Open 6 61 5,8 Open 6 62 62 63 638 717	189 210 224 262 284 326 339 412 419 471 D02 5.5 51/2 295 327 349 408 443 508 527 642 652 733 D02 7 5 1/2 387 430 459 535 581	194 216 220 269 292 335 348 423 430 483 430 483 301 334 47 55 301 334 47 59 58 666 748 Pd1 6.2 5 393 436 466 544 590	200 222 237 276 300 344 357 435 441 496 25.9 4 1/2 307 341 364 425 461 529 549 669 679 763 84 41/2 399 443 473 473 552 600 688	205 227 223 283 307 353 366 453 509 4 4 313 348 371 433 470 540 560 693 779	3 1/2 210 223 249 290 315 362 375 457 464 522 TURNS 3 1/2 319 355 378 442 480 550 571 TURNS 480 569 618	3 215 239 255 297 323 370 385 468 475 534 361 386 450 489 561 582 709 720 809 ON MOTOR 3 417 464 495 578 627 720	220 244 261 304 331 379 394 479 487 547 PULLEY 2 1/2 331 368 393 459 498 571 593 722 733 824 PULLEY 2 1/2 424 470 502 586 636 730	225 250 267 312 338 388 403 499 560 2 2 338 490 498 560 2 2 338 375 400 467 507 582 604 735 747 840	230 256 273 319 346 397 412 501 509 572 11/2 344 382 408 476 517 593 615 749 761 855	235 261 279 326 354 406 421 513 521 585 1 359 415 484 526 603 626 762 774 870	240 267 285 333 361 414 430 524 532 598 1/2 356 395 422 493 531 614 637 776 788 885	0 246 273 291 340 369 423 355 543 551 543 6111 Closed 0 362 429 501 544 555 551 562 562 663 783 763 763 763 763

Re-Circulating Control Options

Manual Positioning Control (Potentiometer)

The dampers can be controlled at a remote location by a manual potentiometer to any position from 20% to 100% fresh air. This will allow manually setting the dampers to match the building ventilation requirements. It will take an extra 3 control wires at the remote location. On a power failure, or if the unit is turned off, the return air damper will close by spring return.



Two Position Control

The dampers can be controlled by a two position switch (a field supplied switching device) to open the fresh air to 100%. On opening of the circuit, power failure, or if the unit is shutoff, the return air damper will close by spring return.

Static Pressure Control (Photohelic)

The dampers can be controlled by a building static pressure control. This controller will sense the difference between pressure inside the building, and pressure outside the building (sensed at the A306 outdoor sensor), and position the dampers to maintain the pressure setting on the controller. The controller has two set points and an indicator. The two set points are a minimum desired static pressure point, and a maximum static pressure point.

The actual building static pressure will be shown by a visual indicator between these two settings. The controller will modulate the dampers to maintain a static pressure between these set points.

When building static pressure is below the minimum setting, the damper motor will proportionally open the fresh air damper and close the return air damper until static increases above the minimum setting. At this point, the damper motor will stop and hold this proportion.

If the building static continues to climb and goes above maximum setting, the damper motor will reverse proportion, closing the fresh air damper and opening the return air damper until static drops below maximum setting.

During the "OFF" or "Night" cycle of the unit, an internal switching circuit will close the return air damper.

See additional wiring and installation information on the static pressure controller and A306 outdoor sensor.

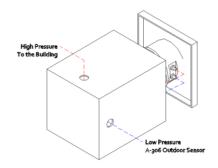
Static Pressure Controller Installation Instructions

Avoid locating the front of the static pressure controller in sun light or other areas with high ambient light or corrosive levels. Bright light shining on the photocells can cause false actuation of the load relays.

The static pressure controller should be zeroed out before attaching the low and high pressure hoses. The zero adjustment is located between the minimum and maximum dials.



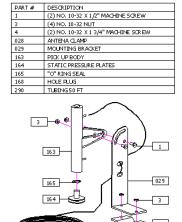
Using the supplied rubber tubing the high side of the static pressure controller should be plumbed to the inside of the building. The low side of the static pressure controller should be plumbed to the A306 outdoor sensor. See the A306 installation instructions.

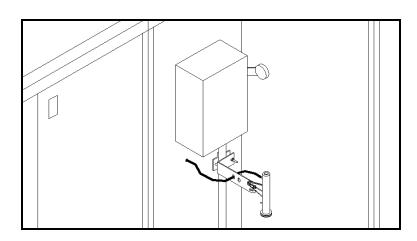




A306 Outdoor Sensor

Use the installation instructions shipped with the A306 outdoor sensor.





Building Signal Damper Control

When this option is ordered, the supply and return dampers will modulate based on a 0-10 VDC signal from the Building automation system.

Troubleshooting

The following table lists causes and corrective actions for possible problems with the fan units. Review this list prior to consulting manufacturer.

Troubleshooting Chart

Problem	Potential Cause	Corrective Action
Fan Inoperative	Blown fuse or open circuit breaker	Replace fuse or reset circuit
		breaker and check amps
	Disconnect switch in "Off" position	Turn to "On" position
	Motor wired incorrectly	Check motor wiring to wiring
		diagram located on fan motor
	Broken fan belt	Replace belt
	Motor starter overloaded	Reset starter and check amps
Motor Overload	Fan rotating in the wrong direction	Be sure fan is rotating in the
		direction shown on rotation label
	Fan speed is too high	Reduce fan RPM
	Motor wired incorrectly	Check motor wiring to wiring
	-	diagram located on fan motor
	Overload in starter set too low	Set overload to motor FLA value
	Motor HP too low	Determine if HP is sufficient for
		job
	Duct static pressure lower than design	Reduce fan RPM
Insufficient Airflow	Fan rotating in the wrong direction	Be sure fan is rotating in the
		direction shown on rotation label
	Poor outlet conditions	There should be a straight clear
		duct at the outlet
	Intake damper not fully open	Inspect damper linkage and
		replace damper motor if needed
	Duct static pressure higher than	Improve ductwork to eliminate or
	design	reduce duct losses
	Blower speed too low	Increase fan RPM. Do not
		overload motor
	Supply grills or registers closed	Open and adjust
	Dirty or clogged filters	Clean and/or replace
	Belt slippage	Adjust belt tension
Excessive Airflow	Blower speed to high	Reduce fan RPM
	Filters not installed	Install filters
	Duct static pressure lower than	Reduce fan RPM
	design	
Excessive Vibration and Noise	Misaligned pulleys	Align pulleys
	Damaged or unbalanced wheel	Replace wheel
	Fan is operating in the unstable	Refer to performance curve for
	region of the fan curve	fan
	Bearings need lubrication or	Lubricate or replace
	replacement	•
	Fan speed is too high	Reduce fan RPM
	Belts too loose, worn or oily	Inspect and replace if needed

MAINTENANCE

To guarantee trouble free operation of this fan, the manufacturer suggests following these guidelines. Most problems associated with fan failures are directly related to poor service and maintenance.

Please record any maintenance or service performed on this fan in the documentation section located at the end of this manual.

WARNING: DO NOT ATTEMPT MAINTENANCE ON THE FAN UNTIL THE ELECTRICAL SUPPLY HAS BEEN COMPLETELY DISCONNECTED

General Maintenance

- 1. Fan inlet and approaches to ventilator should be kept clean and free from any obstruction.
- 2. Motors are normally permanently lubricated. Check bearings periodically. If they have grease fittings lubricate each season. Use caution when lubricating bearings, wipe the fittings clean, the unit should be rotated by hand while lubricating. Caution: Use care when touching the exterior of an operating motor. Motors normally run hot and may be hot enough to be painful or cause injury.
- 3. All fasteners should be checked for tightness each time maintenance checks are preformed prior to restarting unit.
- 4. Blowers require very little attention when moving clean air. Occasionally oil and dust may accumulate causing imbalance. If the fan is installed in a corrosive or dirty atmosphere, periodically inspect and clean the wheel, inlet and other moving parts to ensure smooth and safe operation.

2 weeks after startup

- 1. Belt tension should be checked after the first 2 weeks of fan operation. Belts tend to stretch and settle into pulleys after an initial start-up sequence. Do not tension belts by changing the setting of the motor pulley, this will change the fan speed and may damage the motor. To retension belts, turn the power to the fan motor OFF. Loosen the fasteners that hold the blower scroll plate to the blower. Rotate the motor to the left or right to adjust the belt tension. Belt tension should be adjusted to allow 1/64" of deflection per inch of belt span. Exercise extreme care when adjusting V-belts as not to misalign pulleys. Any misalignment will cause a sharp reduction in belt life and produce squeaky noises. Over-tightening will cause excessive belt and bearing wear as well as noise. Too little tension will cause slippage at startup and uneven wear. Whenever belts are removed or installed, never force belts over pulleys without loosening motor first to relieve belt tension. When replacing belts, use the same type as supplied by the manufacturer. On units shipped with double groove pulleys, matched belts should always be used.
- 2. All fasteners should be checked for tightness each time maintenance checks are preformed prior to restarting unit.

Every 3 months

- 1. Belt tension should be checked quarterly. See instructions in the previous maintenance section. Over-tightening will cause excessive bearing wear and noise. Too little tension will cause slippage at startup and uneven wear.
- 2. Filters need to be cleaned and/or replaced quarterly, and more often in severe conditions. Washable filters can be washed in warm soapy water. When re-installing filters, be sure to install with the **airflow in the correct direction** as indicated on the filter.

Filter Quantity Chart

Intake	16" x 20"	20" x 25"
Size 1 Standard Sloped	2	
Size 2 Standard Sloped		2
Size 1 Modular Sloped	3	
Size 2 Modular Sloped		3
Size 3 Modular Sloped	6	
Size 4 Modular Sloped	10	
Size 5 Modular Sloped		8
Size 1 V-Bank		3
Size 2 V-Bank	8	
Size 3 V-Bank		8
Size 4 V-Bank	15	
Size 5 V-Bank		12
Size 1 INLINE	1	
Size 2 INLINE		1
Size 3 INLINE		2

Optional Mixing Box Filters

Diagonal Filters

Unit Size	Filter Quantity	Filter Size
1	4	10 x 16
2	2	20 x 25
3	4	15 X 20
4	4	18 X 25
5	9	14.5 x 19

Vertical Filters

Unit Size	Filter Quantity	Filter Size
1	1	10 x 16
2	1	16 x 25
3	2	15 x 15
4	2	16 x 20
5	3	14.5 x 19

Yearly

- 1. Inspect bearings for wear and deterioration. Replace if necessary.
- 2. Inspect belt wear and replace torn or worn belts.
- 3. Inspect bolts and set screws for tightness. Tighten as necessary.
- 4. Inspect motor for cleanliness. Clean exterior surfaces only. Remove dust and grease from the motor housing to ensure proper motor cooling. Remove dirt and grease from the wheel and housing to prevent imbalance and damage.

Start-Up and Maintenance Documentation

START-UP AND MEASUREMENTS SHOULD BE PERFORMED AFTER THE SYSTEM HAS BEEN AIR BALANCED (Warranty will be void without completion of this form)

Job Information

Job Name	Service Company
Address	Address
City	City
State	State
Zip	Zip
Phone Number	Phone Number
Fax Number	Fax Number
Contact	Contact
Purchase Date	Start-Up Date

Fan Unit Information

Refer to the start-up procedure in this manual to complete this section.

Name Plate and Unit Information	Field Measured Information	
Model Number	Voltage	
Serial Number	Amperage**	
Volts	RPM	
Hertz		
Phase		
FLA	Blower Rotation Correct	
HP	Incorrect	
Blower Pulley		
Motor Pulley		
Belt Number		

^{**}If measured amps exceed the FLA rating on the nameplate, fan RPM must be reduced to decrease the measured amps below the nameplate FLA rating.

Maintenance Record

Date	Service Performed