



Vortron Industrial Data Sheet

Centrifugal Blowers, Dryers, Aerators, Forced-Air Cleaners

Vortron's AIRPOWER™ Series Of Industrial Blowers

X-40

Vortron's highest efficiency **AIRPOWER™** model for intermediate flow applications at moderate pressures (60-90 in-H₂O). At 79% peak efficiency, the X40 outclasses all others by a wide margin! The best choice where high duty or extended "on time" impresses the need for energy conservation. Applications include high-performance air knives, blow-off, or de-watering nozzles used in compact, high throughput process cleaners; air evacuation, aeration, fluidized beds; air or non-corrosive process gas.

MODEL DESIGNATION: X-40

- DESCRIPTION:** Single-stage centrifugal compressor, belt driven, permanently-lubed high-speed spindle.
- DRIVE SYSTEM:** Micro-groove multi-ribbed belt with dual-bearing backside automatic tensioner. Integral Fresh-Aire™ cooling system for belt, tensioner/idler, spindle assembly longevity.
- SPINDLE ASSEMBLY:** **Standard:** ABEC 9 precision bearings, permanently lubricated.
Optional: (1) Re-circulating oil lubricated bearing system.
- SEALS:** **Standard:** High Performance PTFE Lip
Optional: (1) Controlled-Gap Labyrinth Seal.
(2) Spring-Energized Carbon Face Seal.

MATERIALS of CONSTRUCTION:

- Housing, Volute, Mounting Plate:** A356-T6 Aluminum
- Impeller:** Investment Cast Aluminum
- Shaft:** **Standard:** Alloy Steel, Heat-treated
Optional: Stainless Steel
- Main Drive Pulley:** A356-T6, Hard Anodized
- Compressor Pulleys:** Stainless Steel
- Cover:** High-Impact Cross-Linked PE
- OPERATING SPEED:** 16,000 to 28,400 RPM
- PERFORMANCE:** See Compressor Map For Actual Performance At Specific Operating Point:
- Max. Flow (SCFM):** 1000
- Max. Pressure (in-H₂O):** 140
- Peak Isentropic Effy (%):** 79
- Ratings:** To 30 HP

PEAK TEMPERATURE:

- Inlet (°F):** 120° minimum; max. not to exceed 200° at discharge
- Discharge (°F):** To 200°

LAYOUT: NEMA C-Face Mount (180 - 280 Series Frame) Vertical or Horizontal Orientation

Connections (Tubular O.D.):

- Inlet:** 5.0 in.
- Discharge:** 3.5 in.; Full 360° Discharge Orientation
- Rotation:** Clockwise (as viewed from inlet)
- Dimensions:** Refer to installation drawing

SYSTEM OPTIONS:

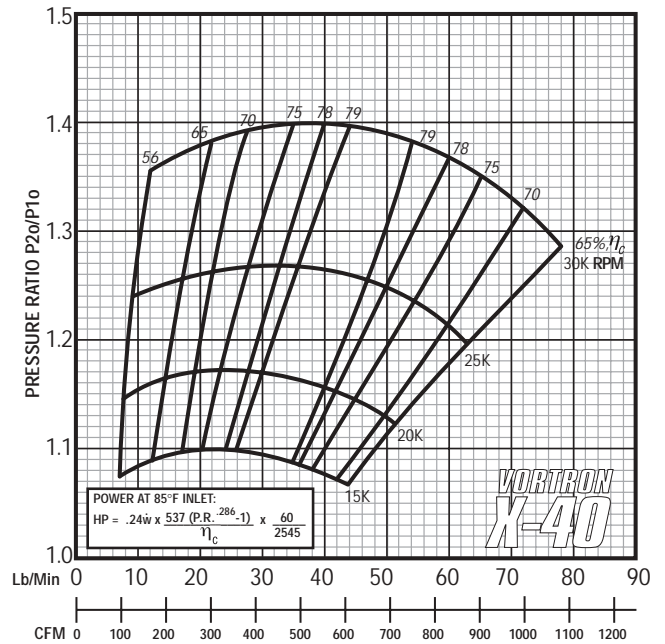
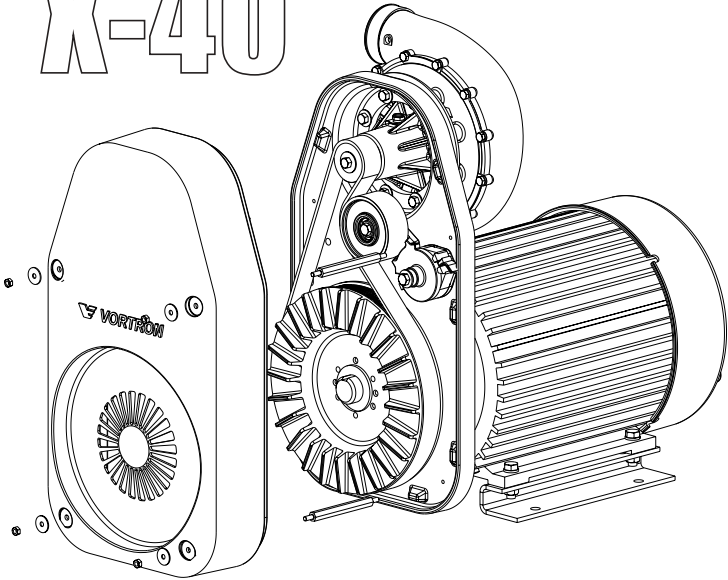
- Suction Filters:** (1) High-Performance washable element or HEPA.
(2) Integrated filter/silencer.
- Mounts:** (1) Rigid steel rails.
(2) Compliant vibration isolation mounts.
- Motors:** Inverter duty, premium efficient, washdown, explosion proof



IMPELLER:
Optimized inducer blading with splitter, back-swept discharge

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MOTOR SERIES	STANDARD MOUNTS			ISOLATION MOUNTS			AG	A	B	C	Wt(lbs)
	OAH	INLET	OUTLET	OAH	INLET	OUTLET					
182TC, 182TCH	28-3/4	21-3/4	26-7/8	28-3/4	21-3/4	26-7/8	13-1/2	3	10	8-1/2	123
184TC, B184TC, 184TCH, B184TCH	28-3/4	21-3/4	26-7/8	28-3/4	21-3/4	26-7/8	13-1/2	3-1/2	10	8-1/2	140
213TC	28-3/4	21-3/4	26-7/8	28-3/4	21-3/4	26-7/8	15-1/2	3-1/2	11	8-1/2	170
215TC	28-3/4	21-3/4	26-7/8	28-3/4	21-3/4	26-7/8	17	4-1/4	11	8-1/2	180
254TC	28-3/4	21-3/4	26-7/8	29-1/4	22-5/16	27-3/8	20-1/8	4-7/8	12-1/2	8-1/2	280
256TC, B256TC	28-3/4	21-3/4	26 7/8	29-1/4	22-5/16	27-3/8	21-7/8	5-3/4	12-1/2	8-1/2	300

