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: ABEC 9 precision bearings, permanently lubricated.
SEALS: Standard: High Performance PTFE Lip High-Speed: (1) Controlled-Gap Labyrinth 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 20 HP
PEAK TEMPERATURE:
- Inlet (°F): To 130°; max. not to exceed 200° at discharge
- Discharge (°F): To 200°
LAYOUT: NEMA C-Face Mount (180 - 256 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
# Vortron's AIRPOWER® Series Of Industrial Blowers

## X-40

![Image of X-40 blower](image.png)

## Table of Specifications

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## Pressure Ratio (P2o/P1o)

- Power at 85°F Inlet:
  - 65%: \( \text{Power} = 240 \times \frac{537}{\text{RPM}} \times \frac{30}{2545} \)
- Power at 85°F Inlet:
  - \( \text{Power} = \text{Lb/Min} \times \text{CFM} \times \frac{2545}{\text{RPM}} \)

## Diagrams

![Diagram of X-40 blower](image.png)

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