



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: | <i>NEMA C-Face Mount (180 - 280 Series Frame) Vertical or Horizontal Orientation</i> |
| 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 |

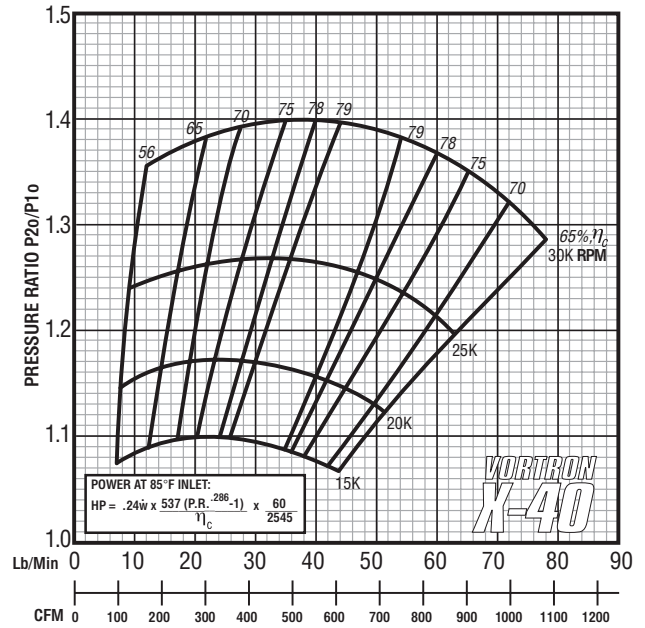
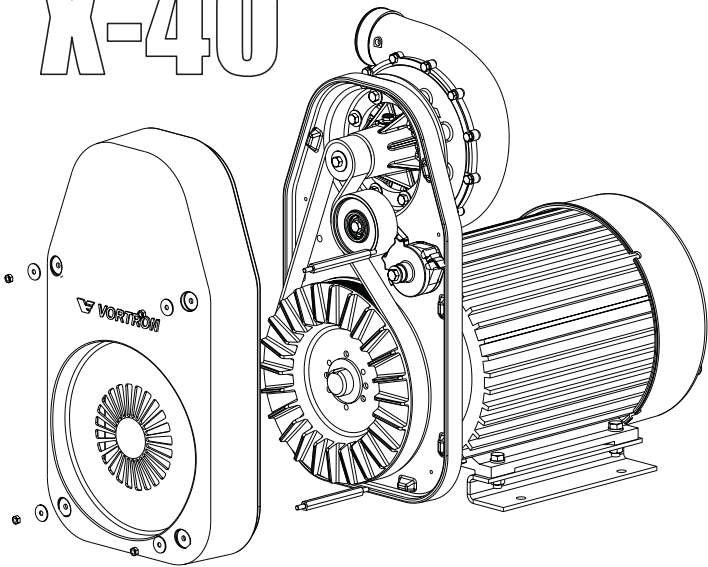


IMPELLER:
Optimized inducer blading with splitter, back-swept discharge

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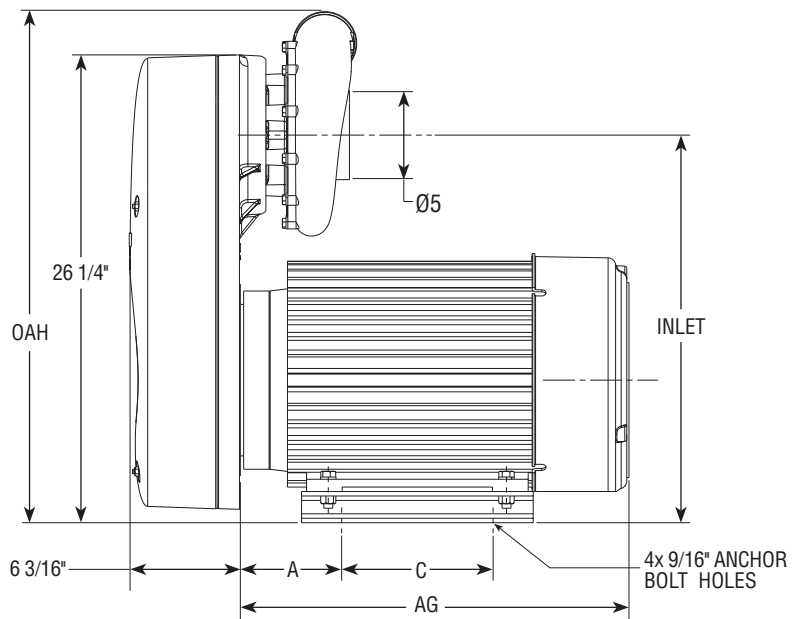
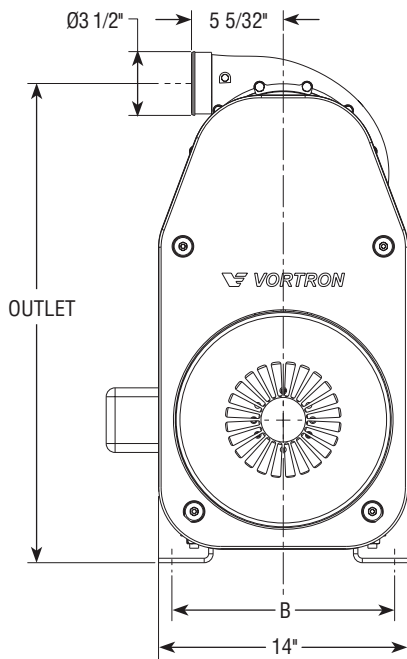
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X-40

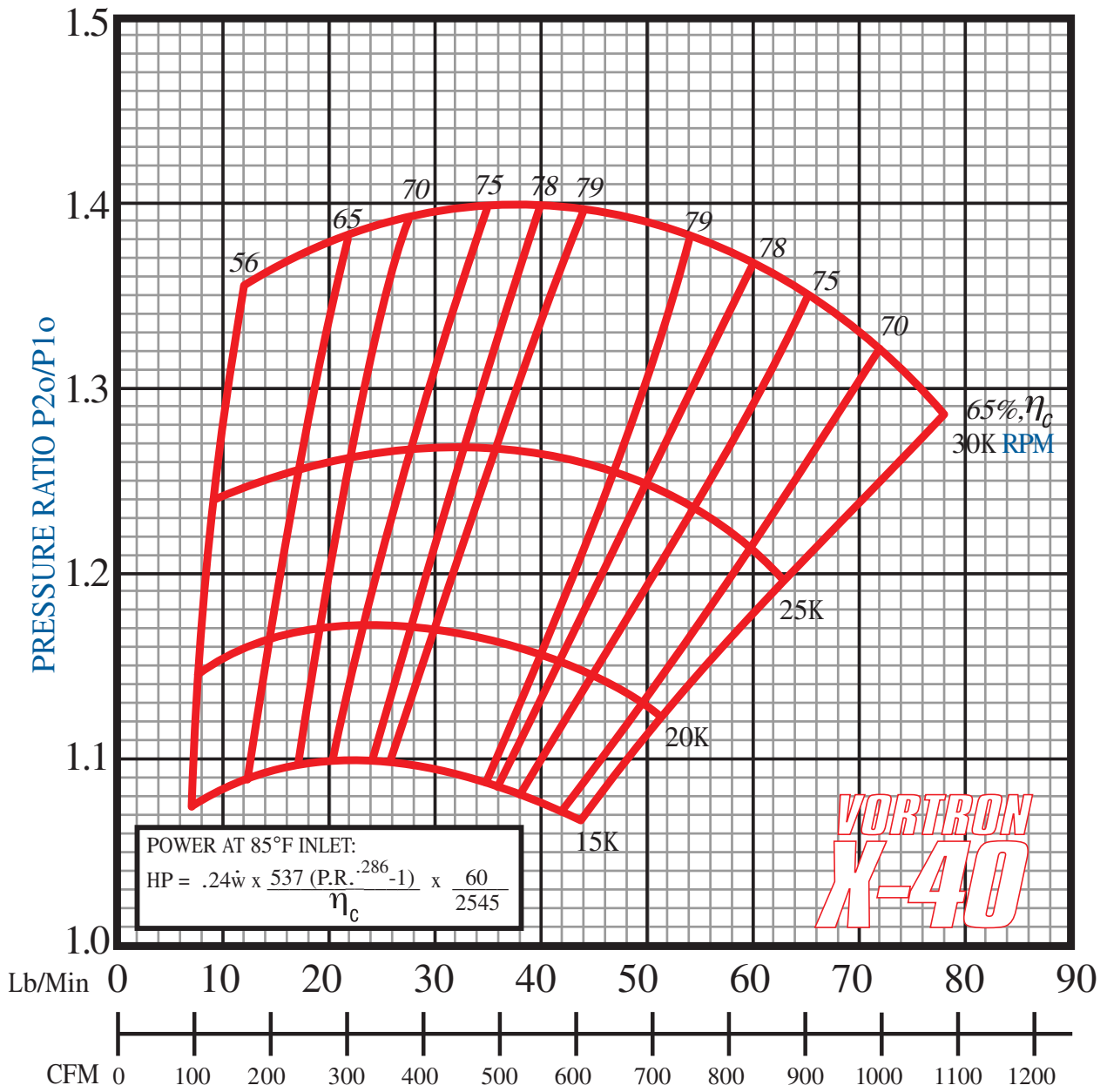


3hp
5hp
7.5hp
10hp
15hp
20hp

| 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 |



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