

ROTRON® Regenerative Blowers

EN 505M & CP 505M Sealed Regenerative Blower w/Explosion-Proof Motor

FEATURES

- Manufactured in the USA – ISO 9001 compliant
- Maximum flow: 160 SCFM
- Maximum pressure: 62 IWG
- Maximum vacuum: 60 IWG
- Standard motor: 2.0 HP, explosion-proof
- Cast aluminum blower housing, cover, impeller & manifold; cast iron flanges (threaded); teflon lip seal
- UL & CSA approved motor with permanently sealed ball bearings for explosive gas atmospheres Class I Group D minimum
- Sealed blower assembly
- Quiet operation within OSHA standards

MOTOR OPTIONS

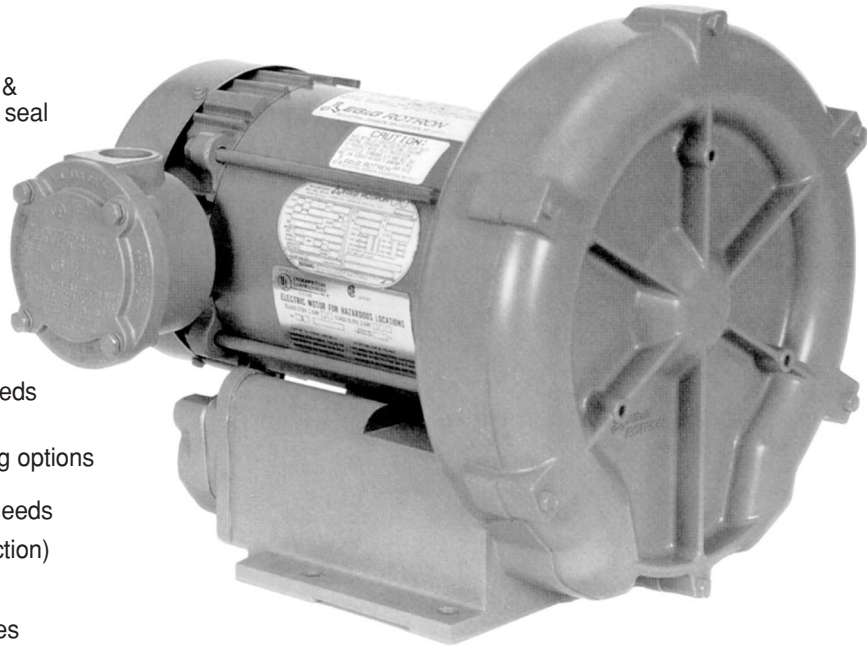
- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepower for application-specific needs

BLOWER OPTIONS

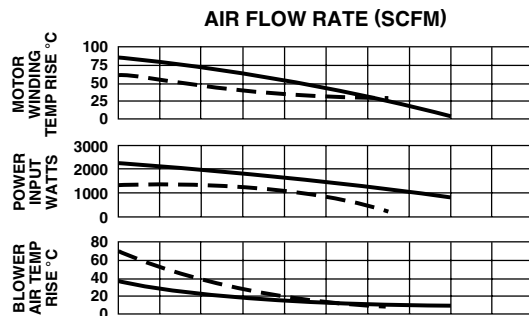
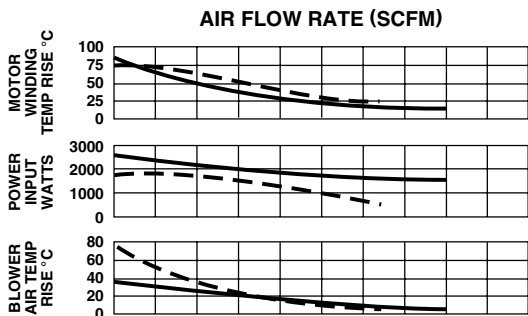
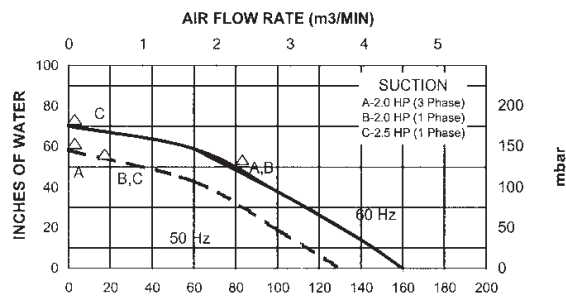
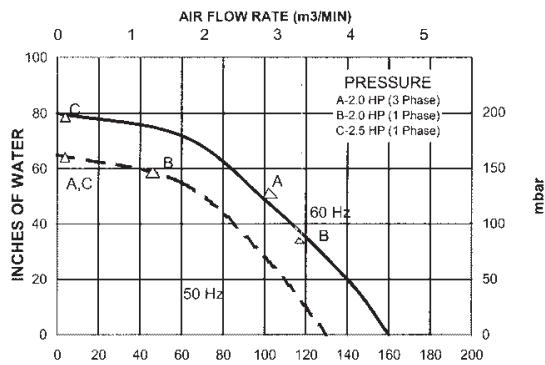
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

ACCESSORIES (See Catalog Accessory Section)

- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges & relief valves
- Switches – air flow, pressure, vacuum or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package



BLOWER PERFORMANCE AT STANDARD CONDITIONS

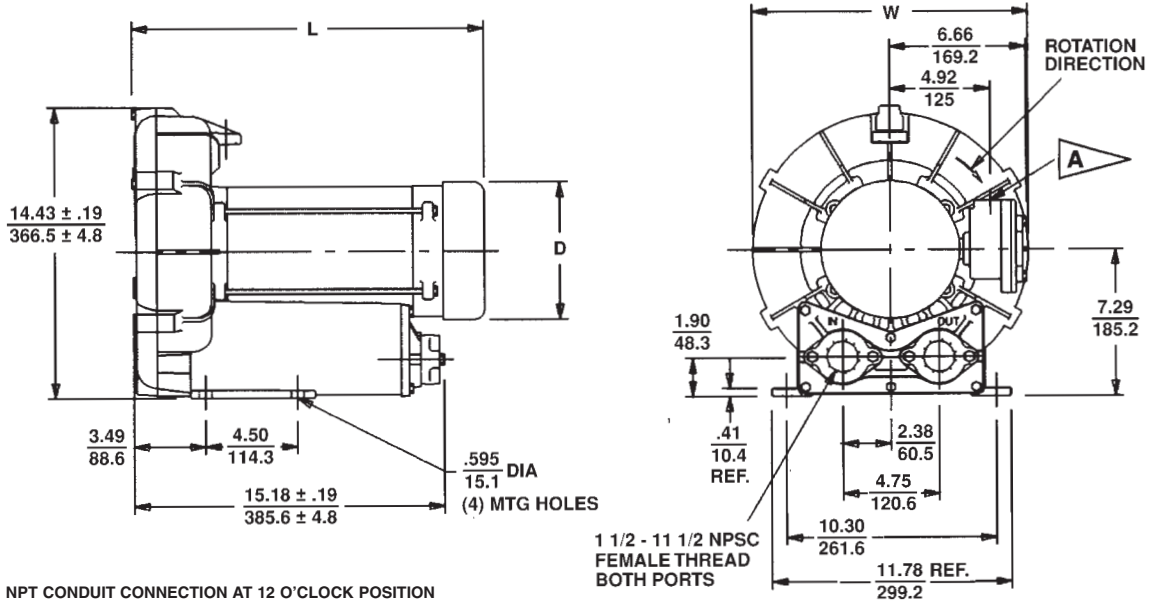


Rev. 2/04

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Scale CAD drawing available upon request.



A 0.75" NPT CONDUIT CONNECTION AT 12 O'CLOCK POSITION

| | |
|--------------------------|-------------|
| DIMENSIONS: | IN |
| | MM |
| TOLERANCES: | .XX ± .08 |
| | 2.0 |
| | .XXX ± .030 |
| | .800 |
| (UNLESS OTHERWISE NOTED) | |

| MODEL | L (IN) ± .30 | L (MM) ± 8 | D (IN) | D(MM) | W(IN) | W(MM) ± 5 MM |
|----------------|--------------|------------|--------|-------|-------|--------------|
| EN/CP505AX72ML | 16.0 | 405 | 6.84 | 173 | 13.53 | 344 |
| EN/CP505AX58ML | 17.21 | 437 | 6.84 | 173 | 13.53 | 344 |
| EN/CP505CJ5ML | 18.57 | 472 | 7.32 | 186 | 13.53 | 344 |

SPECIFICATIONS

| MODEL | EN505AX58ML | EN505AX72ML | EN505CJ5ML | CP505FS58MLR | CP505FS72MLR |
|----------------------------------|----------------------|----------------------|----------------------|---|---|
| Part No. | 038177 | 038178 | 038445 | 080655 | 038962 |
| Motor Enclosure – Shaft Material | Explosion-proof – CS | Explosion-proof – CS | Explosion-proof – CS | Chem XP – SS | Chem XP – SS |
| Horsepower | 2.0 | 2.0 | 2.5 | Same as EN505AX58ML – 038177 except add Chemical Processing (CP) features from catalog inside front cover | Same as EN505AX72ML – 038178 except add Chemical Processing (CP) features from catalog inside front cover |
| Phase – Frequency ¹ | Single - 60 Hz | Three - 60 Hz | Single - 60 Hz | | |
| Voltage ¹ | 115 230 | 230 460 | 230 | | |
| Motor Nameplate Amps | 17.2 8.6 | 5.8 2.9 | 15.5 | | |
| Max. Blower Amps ³ | 22.0 11.0 | 6.4 3.2 | 14.0 | | |
| Inrush Amps | 112 56 | 56 28 | 86 | | |
| Starter Size | 1 0 | 0 0 | 1 | | |
| Service Factor | 1.0 | 1.0 | 1.0 | | |
| Thermal Protection ² | Class B - Pilot Duty | Class B - Pilot Duty | Class B - Pilot Duty | | |
| XP Motor Class – Group | I-D, II-F&G | I-D, II-F&G | I-D, II-F&G | | |
| Shipping Weight | 95 lb (43 kg) | 87 lb (40 kg) | 103 lb (228 kg) | | |

¹ Rotron motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

² Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

³ Maximum blower amps corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

Specifications subject to change without notice. Please consult your Local Field Sales Engineer for specification updates.

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