



Ametek Rotron Regenerative Blower

Model EN858BD72WL

This environmental EN blower is designed the same as the DR blowers, except added features include: heavy duty cast aluminum manifold, spark resistant housing cover, impeller, muffler tower and manifold are vacuum impregnated, Teflon® lip seal in a stainless steel case standard for leakage containment to 25 cc/min or less, explosion-proof motors standard and available in a variety of world voltages, all metal-to-metal surfaces are sealed with RTV sealant, and various UL explosion-proof listings. Consult factory. Environmental (EN) regenerative blowers are also available in our Chemical Processing (CP) configuration: Chem-Tough(TM) surface conversion corrosion resistant treatment for all castings, Teflon® lip seal in a stainless steel case standard for leakage containment to 25 cc/min or less, stainless steel hardware throughout, and nickel plated flanges and muffler retainers.

Contact us for a price on this refurbished industrial blower.

ROTRON® Regenerative Blowers

EN 858 & CP 858 Sealed Regenerative Blower w/Explosion-Proof Motor

FEATURES

- Manufactured in the USA – ISO 9001 compliant
- Maximum flow: 400 SCFM
- Maximum pressure: 120 IWG
- Maximum vacuum: 98 IWG
- Standard motor: 10 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

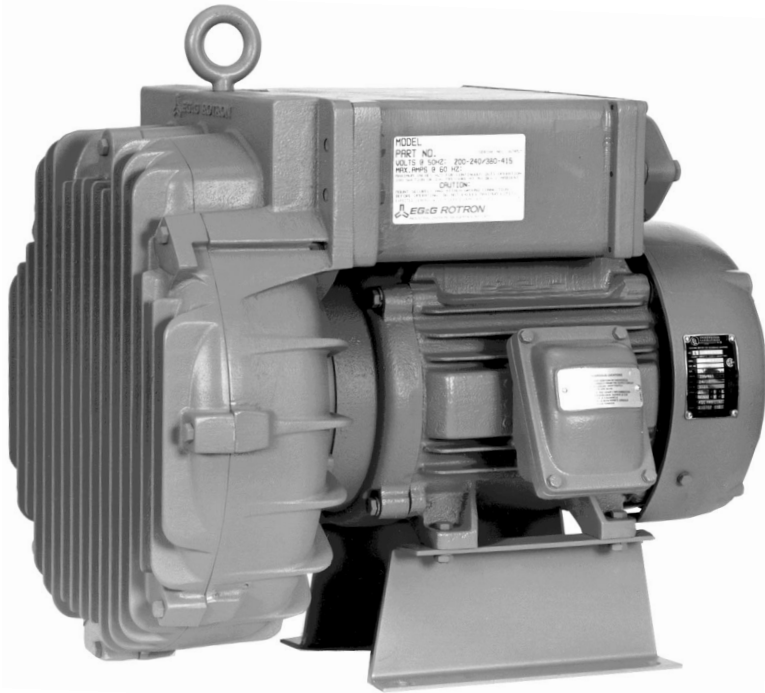
- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepower for application-specific needs

BLOWER OPTIONS

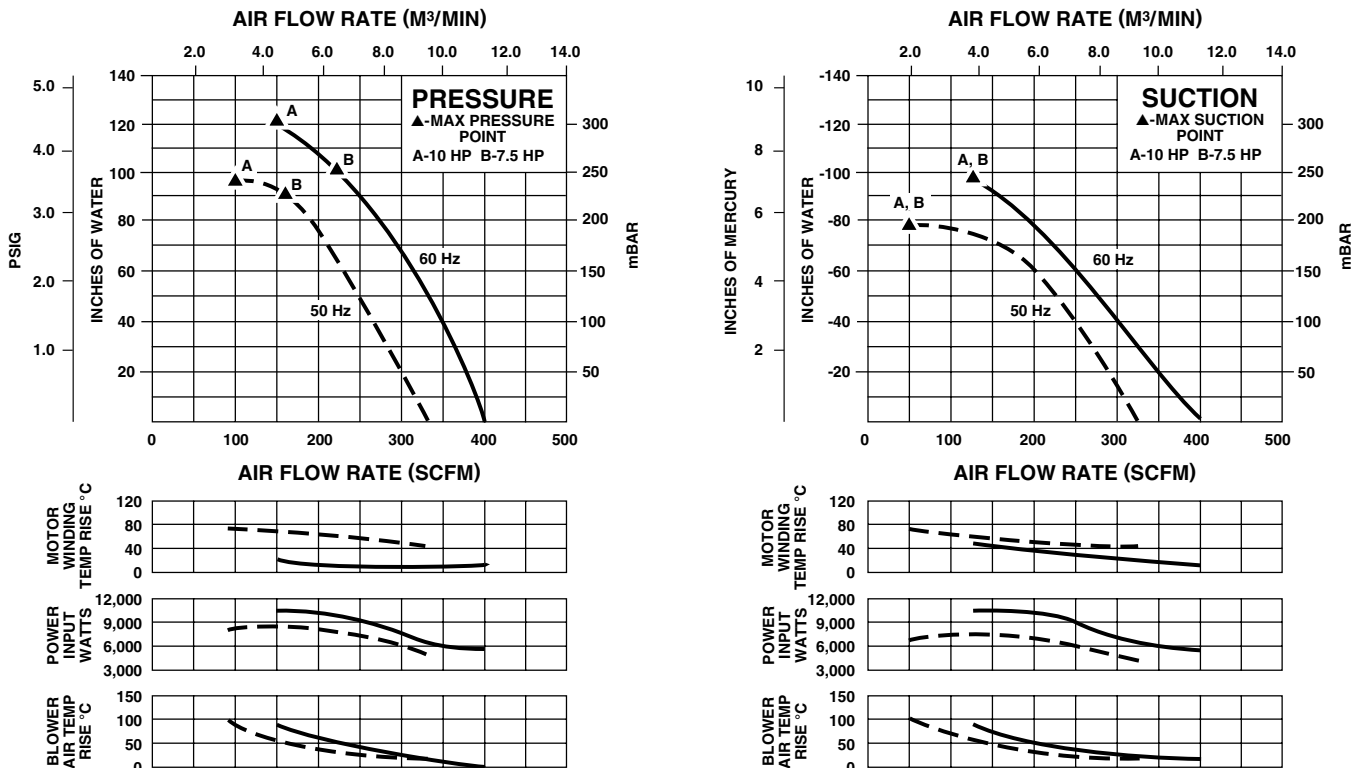
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

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

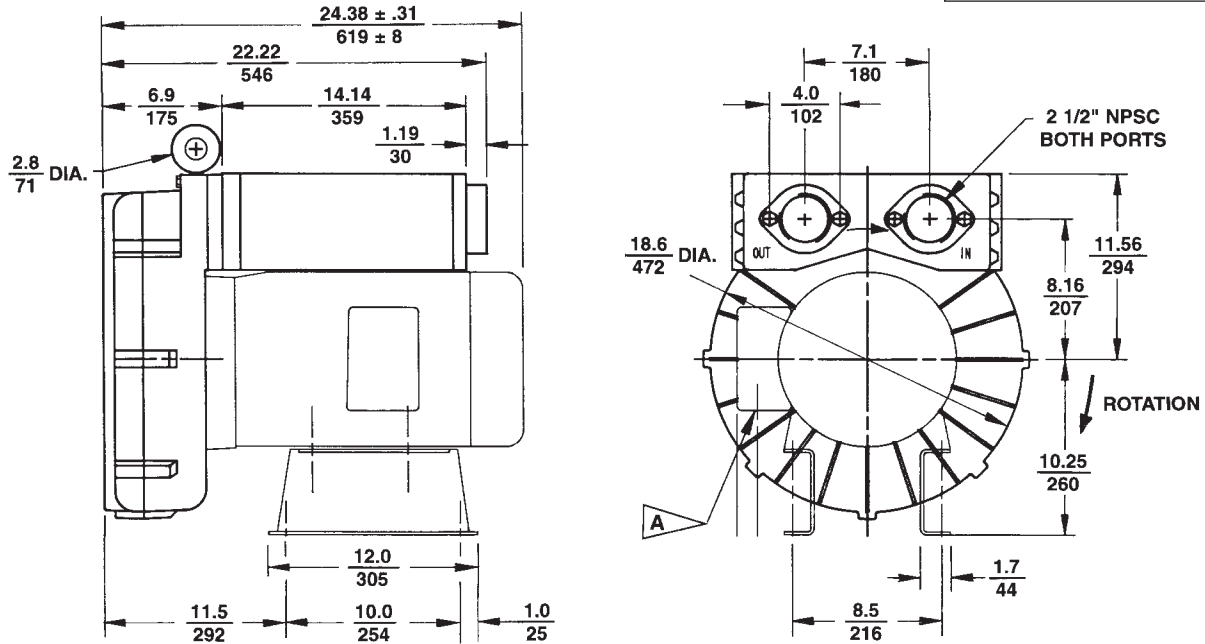


Rev. 2/04

ROTRON® Regenerative Blowers

EN 858 & CP 858 Sealed Regenerative Blower w/Explosion-Proof Motor

Scale CAD drawing available upon request.



DIMENSIONS: $\frac{\text{IN}}{\text{MM}}$
TOLERANCES: .XX ± $\frac{.1}{2.5}$
(UNLESS OTHERWISE NOTED)

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

SPECIFICATIONS

| MODEL | EN858BD72WL | EN858BD86WL | EN858BA72WL | CP858FZ72WLR |
|----------------------------------|-----------------------------|-----------------------------|-----------------------------|---|
| Part No. | 038744 | 038745 | 080070 | 038980 |
| Motor Enclosure – Shaft Material | Explosion-proof – CS | Explosion-proof – CS | Explosion-proof – CS | Chem XP – SS |
| Horsepower | 10.0 | 10.0 | 7.5 | Same as EN858BD72WL – 038744 except add Chemical Processing (CP) features from catalog inside front cover |
| Phase – Frequency ¹ | Three - 60 Hz | Three - 60 Hz | Three - 60 Hz | |
| Voltage ¹ | 230 460 | 575 | 230 460 | |
| Motor Nameplate Amps | 24 12 | 9.6 | 17 8.5 | |
| Max. Blower Amps ³ | 24 12 | 11.6 | 26 13 | |
| Inrush Amps | 162 81 | 93 | 126 63 | |
| Starter Size | 2 1 | 1 | 1 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 | 332 lb (151 kg) | 332 lb (151 kg) | 320 lb (145 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.

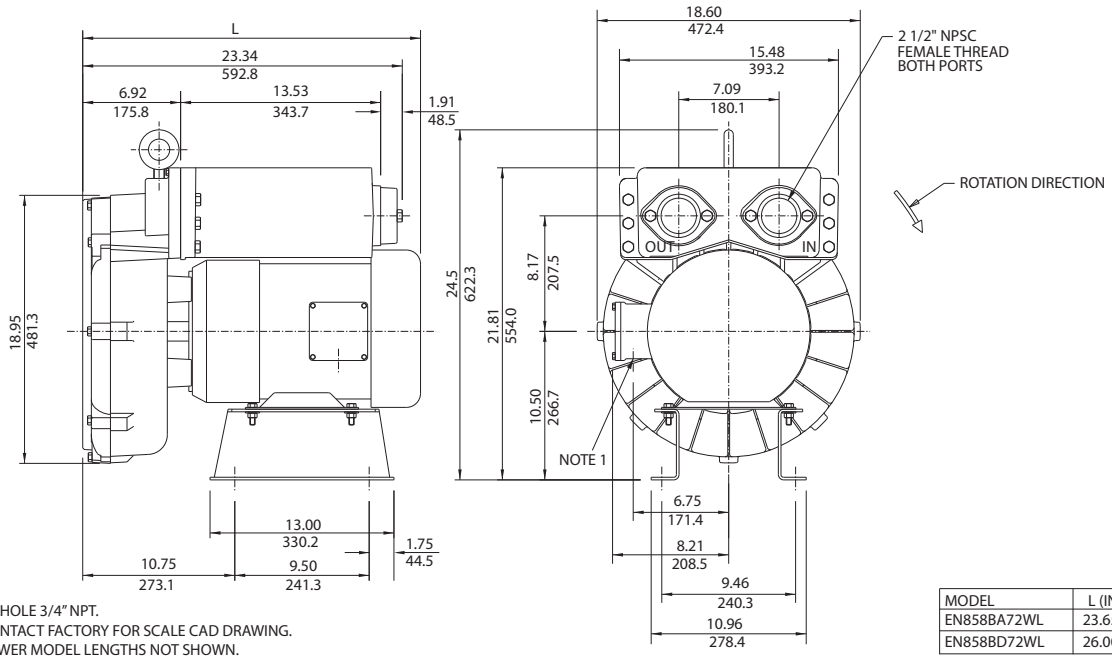
² Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure 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.

Rev. 2/04

7.5 / 10.0 HP Sealed Regenerative w/Explosion-Proof Motor



- NOTES
- 1 TERMINAL BOX CONNECTOR HOLE 3/4" NPT.
 - 2 DRAWING NOT TO SCALE, CONTACT FACTORY FOR SCALE CAD DRAWING.
 - 3 CONTACT FACTORY FOR BLOWER MODEL LENGTHS NOT SHOWN.

| Specification | Units | Part/ Model Number | | | |
|------------------------------|----------|-----------------------|-----------------------|-----------------------|------------------------|
| | | EN858BD72WL 038744 | EN858BD86WL 038745 | EN858BA72WL 080070 | CP858FZ72WLR 038980 |
| Motor Enclosure - Shaft Mtl. | - | Explosion-proof-CS | Explosion-proof-CS | Explosion-proof-CS | Chem XP-SS |
| Horsepower | - | 10.0 | 10.0 | 7.5 | 10.0 |
| Phase - Frequency | - | Three-60 hz | Three-60 hz | Three-60 hz | Three-60 hz |
| Voltage | AC | 230/460 | 575 | 230/460 | 230/460 |
| Motor Nameplate Amps | Amps (A) | 24/12 | 9.6 | 18.6/9.3 | 24/12 |
| Max. Blower Amps | Amps (A) | 30/15 | 11.6 | 26/13 | 30/15 |
| Inrush Amps | Amps (A) | 234/117 | 93 | 126/63 | 234/117 |
| Service Factor | - | 1.0 | 1.0 | 1.0 | 1.0 |
| Starter Size | - | 2/1 | 1 | 1/1 | 2/1 |
| Thermal Protection | - | Class B - Pilot Duty | 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 | I-D, II-F&G |
| Shipping Weight | Lbs | 338 | 338 | 326 | 338 |
| | Kg | 153.3 | 153.3 | 147.9 | 153.3 |

Voltage - 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.

Operating Temperatures - 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.

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.

XP Motor Class - Group - See Explosive Atmosphere Classification Chart in Section I

This document is for informational purposes only and should not be considered as a binding description of the products or their performance in all applications. The performance data on this page depicts typical performance under controlled laboratory conditions. AMETEK is not responsible for blowers driven beyond factory specified speed, temperature, pressure, flow or without proper alignment. Actual performance will vary depending on the operating environment and application. AMETEK products are not designed for and should not be used in medical life support applications. AMETEK reserves the right to revise its products without notification. The above characteristics represent standard products. For product designed to meet specific applications, contact AMETEK Technical & Industrial Products Sales department.

FEATURES

- Manufactured in the USA - ISO 9001 and NAFTA compliant
- Maximum flow: 380 SCFM
- Maximum pressure: 120 IWG
- Maximum vacuum: 95 IWG
- Standard motor: 10 HP, explosion-proof
- Cast aluminum blower housing, impeller, cover & 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
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MOTOR OPTIONS

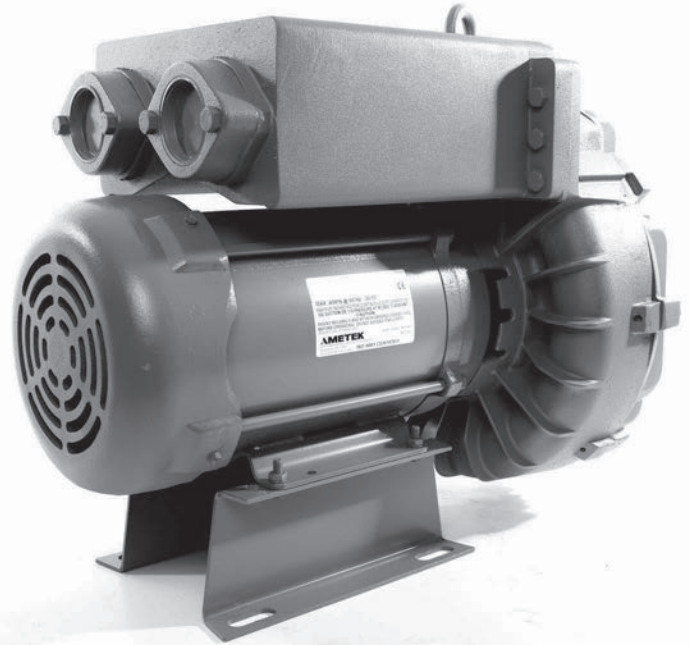
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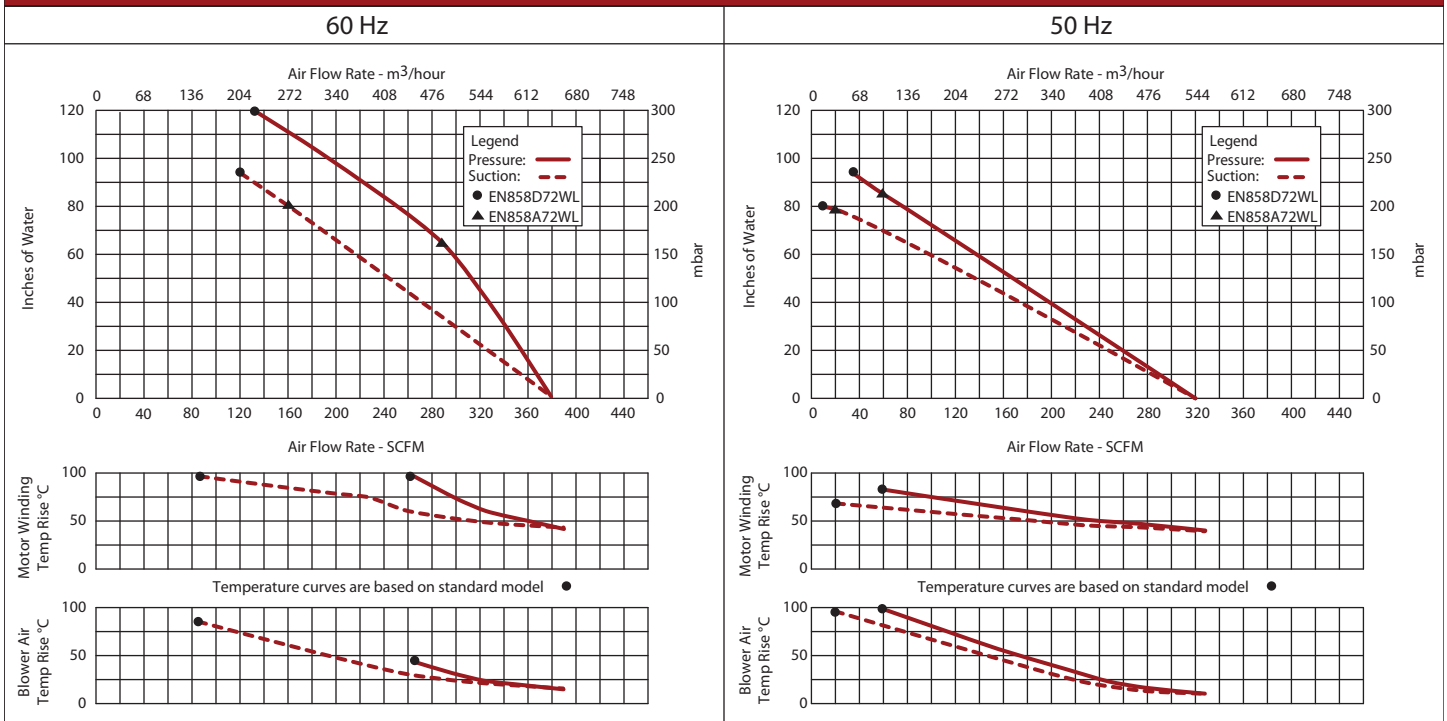
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Blower Performance at Standard Conditions



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