AIR COMPRESSORS • VACUUM PUMPS

Rocking Piston

Gast oilless Rocking Piston air compressors and vacuum pumps, available in standard, twin, and miniature styles, make them the perfect choice for hundreds of applications. Air flow capabilities from 3.4 lpm to 5.5 cfm (9.35 m³/h) are available as are vacuum capabilities up to 29 in. Hg (31 mbar) and pressure to 175 psig (12 bar). Choose from dual frequency, shaded pole, and permanent split capacitor (psc) electric motors with AC multi-voltages available for worldwide applications as well as 6, 12, and 24 volt DC models in brush and brushless types. Horsepowers range from 1/20 to 1/2 HP (0.04 to 0.37 kW). Tank models and a complete line of recommended accessories are also available.

Here’s how our Rocking Piston performance compares with that of our other popular positive displacement vacuum pumps and compressors. Use these charts to see if a Rocking Piston pump is the right choice for your application.

Why use a Rocking Piston pump?

The rocking piston combines the best characteristics of piston and diaphragm air compressors into a small unit with exceptional performance. Pressure to 175 psi, 12, 0 bar. Units as light as 7 pounds 3.2 kg. Tank-mounted units, DC powered models. AC motors to match North American, European and worldwide power supplies.

Because Gast ROC-R pumps are oil-free, they are ideal for use in applications in laboratories. Hospitals and the food industry where oil mist combination in undesirable.

These pumps are made to stand up through years of use. The piston rod and bearing assembly are bonded together, not clamped; they will not slip, loosen or misalign to cause trouble.

Typical Applications

- Oxygen Concentrators
- Beverage Dispensing
- Body Fluid Analysis
- Automotive Suspension
- Dental Vacuum Ovens
- Vacuum Frames
- Core Drilling

The units that we list in this catalog are a small portion of what we actually make. Those listed are considered “standard units” and are normally available from stock in small quantities. Variations are produced for many customers and by passing on to us the application specifications we might find an existing unit that fits your requirement. If we don’t and the quantity is sufficient, we will design a “special unit” for the application.

Pictorial and dimensional data is subject to change without notice. The information presented in this catalog is based on technical data and test results of nominal units. It is believed to be accurate and is offered as an aid in the selection of Gast products. It is the user’s responsibility to determine suitability of the product for intended use and the user assumes all risk and liability whatsoever in connection therewith.
This catalog presents the models primarily in ascending order of free air flow. The table below will assist you in locating a particular model or series.

<table>
<thead>
<tr>
<th>MODEL/ SERIES</th>
<th>POWER RATING @ 60 Hz</th>
<th>FREE AIR FLOW</th>
<th>MAXIMUM PRESSURE</th>
<th>MAXIMUM VACUUM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>hp</td>
<td>kW</td>
<td>50 Hz</td>
<td>60 Hz</td>
</tr>
<tr>
<td>8R (DC)</td>
<td>-</td>
<td>-</td>
<td>3.4 lpm</td>
<td>-</td>
</tr>
<tr>
<td>20R (AC)</td>
<td>0.025</td>
<td>0.018</td>
<td>14 lpm</td>
<td>14 lpm</td>
</tr>
<tr>
<td>30R (DC)</td>
<td>0.08</td>
<td>0.06</td>
<td>0.61</td>
<td>1.04</td>
</tr>
<tr>
<td>34R (DC)</td>
<td>0.175</td>
<td>0.15</td>
<td>0.08</td>
<td>1.36</td>
</tr>
<tr>
<td>55R (PSC+)</td>
<td>0.04</td>
<td>0.036</td>
<td>0.16</td>
<td>0.25</td>
</tr>
<tr>
<td>55R (DC)</td>
<td>0.07</td>
<td>0.062</td>
<td>0.25</td>
<td>0.42</td>
</tr>
<tr>
<td>LOA (ShP++)</td>
<td>0.05</td>
<td>0.045</td>
<td>-</td>
<td>0.5</td>
</tr>
<tr>
<td>LOA (PSC+)</td>
<td>0.12</td>
<td>0.108</td>
<td>0.52</td>
<td>0.83</td>
</tr>
<tr>
<td>LOA (DC)</td>
<td>0.07</td>
<td>0.063</td>
<td>-</td>
<td>0.62</td>
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<tr>
<td>LAA</td>
<td>0.12</td>
<td>0.108</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>SAA (Staged)</td>
<td>0.12</td>
<td>0.108</td>
<td>-</td>
<td>1.75</td>
</tr>
<tr>
<td>SAA (Parallel)</td>
<td>0.12</td>
<td>0.108</td>
<td>-</td>
<td>3.3</td>
</tr>
<tr>
<td>SAA</td>
<td>0.12</td>
<td>0.108</td>
<td>-</td>
<td>1.95</td>
</tr>
<tr>
<td>R0A (ShP++)</td>
<td>0.09</td>
<td>0.081</td>
<td>1.1</td>
<td>1.25</td>
</tr>
<tr>
<td>R0A (PSC+)</td>
<td>0.19</td>
<td>0.165</td>
<td>1.5</td>
<td>1.6</td>
</tr>
<tr>
<td>R0A (DC)</td>
<td>0.08</td>
<td>0.072</td>
<td>1.5</td>
<td>2.55</td>
</tr>
<tr>
<td>RAA</td>
<td>0.19</td>
<td>0.165</td>
<td>2.5</td>
<td>2.7</td>
</tr>
<tr>
<td>71R/72R (1Cyl)</td>
<td>0.25</td>
<td>0.187</td>
<td>2.1</td>
<td>2.4</td>
</tr>
<tr>
<td>71R/72R (2Cyl)</td>
<td>0.25</td>
<td>0.187</td>
<td>5.5</td>
<td>5.5</td>
</tr>
<tr>
<td>71R (2Cyl)</td>
<td>0.12</td>
<td>0.096</td>
<td>1.7</td>
<td>2.0</td>
</tr>
<tr>
<td>74R</td>
<td>0.19</td>
<td>0.165</td>
<td>1.3</td>
<td>1.5</td>
</tr>
<tr>
<td>75R</td>
<td>0.25</td>
<td>0.187</td>
<td>4.5</td>
<td>5.1</td>
</tr>
<tr>
<td>81R (2Cyl)</td>
<td>0.25</td>
<td>0.187</td>
<td>3.5</td>
<td>4.0</td>
</tr>
<tr>
<td>82R (2Cyl)</td>
<td>0.25</td>
<td>0.187</td>
<td>4.0</td>
<td>4.0</td>
</tr>
<tr>
<td>82R (DC) (2Cyl)</td>
<td>0.25</td>
<td>0.187</td>
<td>3.2</td>
<td>3.9</td>
</tr>
<tr>
<td>85R</td>
<td>0.25</td>
<td>0.187</td>
<td>3.7</td>
<td>3.7</td>
</tr>
</tbody>
</table>

PSC = Permanent Split Capacitor motor • ShP = Shaded Pole motor

Starting Under Load

ROC-R® units will not start under load because the surface area of the piston is much larger than that of a piston pump. To start a ROC-R® unit under load would require a motor too powerful to be cost effective. Instead, a specific volume of air is used to supply the correct zero-pressure-differential pressure gauge. Please note that when you refer to performance curves in this catalog, the solid line indicates continuous operation, while the dashed line shows intermittent duty.

In systems where storage of built-up vacuum is important, check valves should be installed between the pump and the system.

European Community’s Machinery Directive

Given its international perspective, Gast has also pledged to conform to the European Community’s Machinery Directive, a safety certification program for all products targeted for marketing in the European Community. Currently, all Gast products sold in the European Community are in compliance and include a Declaration Certificate.

How does a Rocking Piston pump work?

In reciprocating motion, a flexible cup mounted on top of the connecting rod creates vacuum or pressure as the cup maintains a seal against the cylinder walls in a rocking motion.

Product and Application Information

Unit Life Expectancy

Many variables determine the life expectancy of a unit. Among them are:

1. Ambient temperature
   To determine the ambient temperature reading of the air surrounding the unit, readings should be taken around the unit approximately 4 inches away. Gast’s guarantee applies only to units operating within a temperature range of 32°F (0°C) to 100°F (38°C). Low temperature affects the unit’s ability to start and high temperatures affect its life. Contact the factory for authorization of unusual ambient conditions.

2. Duty level

3. Operating cycle

4. Operating speed

5. Condition of air handled
   - Cleanliness
   - Humidity
   - Heat
   - Chemical vapors present (corrosive, noncorrosive)

6. Unit maintenance
   - Lubrication (if required)
   - Filter maintenance
   - Muffler maintenance

Electric Motors

All electric motors supplied with Gast rocking piston pumps are designed to operate at plus or minus 10% of nameplate voltage. Motors to meet special requirements are available upon request. Various brand-name motors are furnished on any model at the discretion of Gast.

The figures stated in this catalog are nominal approximations for models without accessories. Intake and exhaust mufflers, and the accumulation of contaminants in them during operation, will decrease the flow of air as well as the achievable pressure.

Continuous vs. Intermittent Operation

Continuous vs. intermittent duty usually must be considered. Duty usually must be considered. Our definition of intermittent duty is 10 minutes or less on and 10 minutes or more off. Here again we are dealing with a very general statement. A better method of determining if the unit is applied properly is to measure temperatures of the metal portion of the unit that surrounds the discharge port and top dead center of the electric motor. Please note that when you refer to performance curves in this catalog, the solid line indicates continuous operation, while the dashed line shows intermittent duty.

The specifications listed are that of a unit at sea level with an ambient temperature of 70°F (21°C), operating with normal electrical current conditions.
Miniature Rocking Piston
8R1110 Series

DC MOTOR
22.5 PSI MAX. PRESSURE, 17" HG MAX. VACUUM
3.4 LPM OPEN FLOW

PRODUCT FEATURES

- Use as compressor or vacuum pump (same model)
- Maintenance-free ball bearings are sized for long life
- Cup and valve are easily field serviceable, if required
- Alternate stroke options available
- Custom mounting configurations available
- Head mounts in any of four positions
- Heads available with threaded or barbed ports
- Motor equipped with Electromagnetic Interference (EMI) Suppression

MATERIALS OF CONSTRUCTION

- Head assembly of chemical and heat resistant PPS for corrosion resistance
- EPDM (Ethylene Propylene Diene Monomer) valve and Neoprene valves

Product Specifications

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Motor Type</th>
<th>Amp. Draw</th>
<th>Valve Material</th>
<th>Wt. lbs.</th>
<th>Wt. kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>8R1110-201-1049</td>
<td>12 V DC</td>
<td>0.60</td>
<td>®Neoprene</td>
<td>0.5</td>
<td>0.23</td>
</tr>
<tr>
<td>8R1110-201-1048</td>
<td>24 V DC</td>
<td>0.30</td>
<td>®Neoprene</td>
<td>0.5</td>
<td>0.23</td>
</tr>
<tr>
<td>8R1110-101-1050</td>
<td>6 V DC</td>
<td>1.1</td>
<td>®EPDM</td>
<td>0.5</td>
<td>0.23</td>
</tr>
<tr>
<td>8R1110-101-1049</td>
<td>12 V DC</td>
<td>0.60</td>
<td>®EPDM</td>
<td>0.5</td>
<td>0.23</td>
</tr>
<tr>
<td>8R1110-101-1048</td>
<td>24 V DC</td>
<td>0.30</td>
<td>®EPDM</td>
<td>0.5</td>
<td>0.23</td>
</tr>
</tbody>
</table>

Product Performance (U.S./Imperial, Metric) Note: Performance data taken at nominal voltage
**AC MOTOR**

31 PSI MAX. PRESSURE, 20.5" HG MAX. VACUUM
14,7 LPM OPEN FLOW (20R125-101-C400ASX, 60 HZ )
*35 PSI MAX. PRESSURE, *21" HG MAX. VACUUM
*12.0 LPM OPEN FLOW (20R126-101-C400CSX, 50 HZ)

**PRODUCT FEATURES**

- Oilless operation
- Excellent compressor life with full ball bearing construction
- Single shot thermal and current cutoff protection
- For use as a compressor or vacuum pump (same model)
- Alternate head mounting position available

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**Product Specifications**

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Motor</th>
<th>Type</th>
<th>Amp Draw</th>
<th>RPM</th>
<th>HP</th>
<th>kw</th>
<th>Net Wt. lbs.</th>
<th>Net Wt. kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>20R125-101-C400ASX</td>
<td>120V/60-1 AC</td>
<td>1.5</td>
<td>3000</td>
<td>1/30</td>
<td>.025</td>
<td>.25</td>
<td>2.40</td>
<td>1.09</td>
</tr>
<tr>
<td>20R125-101-C400CX</td>
<td>230V/50-1 AC</td>
<td>0.8</td>
<td>2500</td>
<td>1/30</td>
<td>.025</td>
<td>.25</td>
<td>2.48</td>
<td>1.18</td>
</tr>
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</table>

**Product Performance (U.S./Imperial, Metric)**

*Preliminary data - consult factory for further details*
**Miniature Rocking Piston 30R Series**

**DC MOTOR**
120 PSI MAX. PRESSURE, INTERMITTENT
0.61 CFM OPEN FLOW

**PRODUCT FEATURES**
- Oilless operation
- Customer specific mounting configurations available
- 10% duty cycle (1 minute ON, 9 minutes OFF)
- Long-life cup material
- Custom exhaust port locations available

**Product Specifications**

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Motor</th>
<th>Rated Current at Rated Load (Amps)</th>
<th>Avg. Full Load Speed (RPM)</th>
<th>HP</th>
<th>kw</th>
<th>Net Wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>30R157-P101-L200</td>
<td>12 Volt DC</td>
<td>8.0</td>
<td>3800</td>
<td>1/10</td>
<td>0.08</td>
<td>1.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.8</td>
</tr>
</tbody>
</table>

**Product Performance (Imperial, Metric)**

Duty cycle: At 120 psig, pump is rated for 10% duty (1.0 minutes on, 9.0 minutes off)
**Miniature Rocking Piston 34R Series**

**DC MOTOR**
- 200 PSI MAX. PRESSURE, INTERMITTENT
- 0.8 CFM OPEN FLOW

**PRODUCT FEATURES**
- Oilless operation
- Motor Mounted
- All wetted aluminum parts for corrosion resistance
- IP68 rating available
- Thermal overload protector
- 4-way reversible head
- Optional standard NPT inlet and exhaust port head
- V2G2016 sintered bronze inlet silencer
- Robust intermittent duty cycle
- Bulk or individual pack available

**Product Specifications**

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Motor</th>
<th>Rated Current at Rated Load (Amps)</th>
<th>Avg. Full Load Speed (RPM)</th>
<th>HP</th>
<th>kw</th>
<th>Net Wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>34R156-P101-L100x</td>
<td>12 Volt DC</td>
<td>13.0</td>
<td>2750</td>
<td>1/4</td>
<td>0.175</td>
<td>6.5</td>
</tr>
<tr>
<td>*34R156-P160-L100X</td>
<td>12 Volt DC</td>
<td>13.0</td>
<td>2750</td>
<td>1/4</td>
<td>0.175</td>
<td>7.0</td>
</tr>
</tbody>
</table>

*Accessorized unit includes: braided hose with check valve, vibration isolators and mounting hardware

**Product Performance (U.S./Imperial, Metric)**

Duty cycle: At 150 psig, pump is rated for 30% duty (4.5 minutes on, 10.5 minutes off)
**55R Series**

**BRUSHLESS DC MOTOR**

30 PSI MAX. PRESSURE CONTINUOUS (45 PSI INTER.)

24" HG MAX. VACUUM 0.25 CFM OPEN FLOW (EACH HEAD)

**PSC MOTOR**

30 PSI MAX. PRESSURE CONTINUOUS (45 PSI INTER.)

24" HG MAX. VACUUM 0.20 CFM OPEN FLOW (EACH HEAD)

**PRODUCT FEATURES**

- Pressure/vacuum simultaneously in a very small package
- Very low noise levels approx. 55 dB(a)
- All wetted aluminum parts treated for corrosion protection from moisture
- Very low power consumption (approx. 75 watts – AC version, 50 watts – DC version)
- Long life/non-service life (up to 12,000 hours depending on application)

**RECOMMENDED ACCESSORIES**

- Repair kit part #K531
- Vacuum gauge AA640
- Vacuum relief valve AA204
- Pressure gauge AA644B
- Pressure relief valve AA203
- Filter/Muffler pressure VG2016
- Filter/muffler vacuum AA922H

**Product Specifications**

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Motor Type</th>
<th>Motor Type</th>
<th>RPM 60 Hz</th>
<th>RPM 50 Hz</th>
<th>HP</th>
<th>kw</th>
<th>Net Wt. lbs.</th>
<th>kg</th>
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</thead>
<tbody>
<tr>
<td>55R720-101-TKP</td>
<td>24 Volt</td>
<td>Brushless DC</td>
<td>1900</td>
<td>.</td>
<td>10</td>
<td>0.07</td>
<td>5.0</td>
<td>2.25</td>
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<tr>
<td>55R720-101-STP</td>
<td>100-110/100-115V, 50/60-1</td>
<td>PSC (4 Pole)</td>
<td>1575</td>
<td>1275</td>
<td>.054</td>
<td>0.04</td>
<td>5.0</td>
<td>2.25</td>
</tr>
</tbody>
</table>

*Speed can be varied by customer supplied electronics

Note: These units can be configured for either staged vacuum or parallel pressure operation. Staged vacuum units capable of 27.5" Hg maximum vacuum. Parallel pressure units capable of 20 psi continuous duty (approx. twice the flow shown in graphs)

**Product Performance (Metric, U.S. Imperial)**

A 24 Volt DC B 1575 rpm C 1275 rpm

Note: Pressure flow with one head running at max. vac.

Vacuum flow with one head running at 30 psi.

Dashed lines indicate intermittent duty
**LOA Series**

**SHADED POLE MOTOR**
90 PSI MAX. PRESSURE, 25" HG MAX. VACUUM
.38 CFM OPEN FLOW

**PSC MOTOR**
100 PSI MAX. PRESSURE, 26" HG MAX. VACUUM
.83 CFM OPEN FLOW

**DC MOTOR**
100 PSI MAX. PRESSURE, 27" HG MAX. VACUUM
.62 CFM OPEN FLOW

**PRODUCT FEATURES**
- Oilless Operation
- Motor Mounted
- Rugged construction / low maintenance
- Low noise levels

**INCLUDES**
- Capacitor AG331 (HB, HD motors) AF485A (NL motor)
  AH364 (NQ motor)

**RECOMMENDED ACCESSORIES**
- Muffler/filters AH190
- Pressure gauge AF583 / Vacuum gauge AA640
- Pressure relief valve AF592S / Vacuum relief valve AA207
- (3) Rubber feet AF584A
- Repair Kit K476

Product Dimensions (Inches, mm).

AC Models (capacitor shipped unattached)

DC Models
Product Specification "P" models are

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Motor Type</th>
<th>RPM</th>
<th>HP</th>
<th>kW</th>
<th>lbs.</th>
<th>kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOA-101-AA</td>
<td>115-60-1 Shaded pole</td>
<td>1575</td>
<td>--</td>
<td>1/16</td>
<td>0.05</td>
<td>6.6</td>
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<tr>
<td>LOA-101-HB</td>
<td>115/110-60/50-1 PSC</td>
<td>1575</td>
<td>--</td>
<td>1/16</td>
<td>0.05</td>
<td>8.6</td>
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<tr>
<td>LOA-101-HD</td>
<td>230/220-60/50-1 PSC</td>
<td>1575</td>
<td>1275</td>
<td>1/16</td>
<td>0.05</td>
<td>8.6</td>
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<tr>
<td>LOA-101-NL</td>
<td>100-50/60-1 PSC</td>
<td>1575</td>
<td>1275</td>
<td>1/8</td>
<td>0.09</td>
<td>7.6</td>
</tr>
<tr>
<td>LOA-P103-NL</td>
<td>100-50/60-1 PSC</td>
<td>1575</td>
<td>1275</td>
<td>1/6</td>
<td>0.12</td>
<td>7.6</td>
</tr>
<tr>
<td>LOA-P102-NQ</td>
<td>115-60-1 PSC</td>
<td>1575</td>
<td>1275</td>
<td>1/6</td>
<td>0.12</td>
<td>7.6</td>
</tr>
<tr>
<td>LOA-101-JR</td>
<td>11-15 Volt DC</td>
<td>2000</td>
<td>--</td>
<td>1/10</td>
<td>0.07</td>
<td>6.6</td>
</tr>
</tbody>
</table>

Product Performance (U.S./Imperial, Metric)
LAA Series

PSC MOTOR
60 PSI MAX. PRESSURE, 29" HG MAX. VACUUM
1.5 CFM OPEN FLOW

PRODUCT FEATURES

• Oilless Operation
• Motor Mounted
• Rugged construction / low maintenance
• Low noise levels

INCLUDES

• Capacitor AH364

RECOMMENDED ACCESSORIES

• Muffler/filters AH190
• Pressure gauge AF583 / Vacuum gauge AA640
• Pressure relief valve AF592S / Vacuum relief valve AA207A
• (4) Rubber feet AF584A
• Repair Kits: K767, K773 (LAA-101-NQ, LAA-V103-NQ K767 (LAA-V104-NQ)

Product Dimensions (Inches, mm)

Product Specification "V" models are vacuum only

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Motor</th>
<th>Motor Type</th>
<th>Staged/Parallel</th>
<th>RPM</th>
<th>60 Hz</th>
<th>50 Hz</th>
<th>HP</th>
<th>kW</th>
<th>lbs</th>
<th>kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAA-101-NQ</td>
<td>100-60/50-1:115-60-1</td>
<td>PSC Parallel</td>
<td>1575</td>
<td>1275</td>
<td>0,12</td>
<td>11,3</td>
<td>5,1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LAA-V103-NQ</td>
<td>100-60/50-1:115-60-1</td>
<td>PSC Parallel</td>
<td>1575</td>
<td>1275</td>
<td>0,12</td>
<td>11,3</td>
<td>5,1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LAA-V104-NQ</td>
<td>100-60/50-1:116-60-1</td>
<td>PSC Staged</td>
<td>1575</td>
<td>1275</td>
<td>0,12</td>
<td>11,3</td>
<td>5,1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Product Performance (U.S./Imperial, Metric)

**Vacuum**

- **60 Hz**
- **50 Hz**

**Pressure**

- Bar
- PSIG

---

**Oilless Miniature Rocking Piston** to 1.5 cfm
SAA Series

PSC 4 POLE MOTOR
30 PSI MAX. PRESSURE, 29.5" HG MAX. VACUUM
3.0 CFM OPEN FLOW

PRODUCT FEATURES
• Oilless Operation
• Motor Mounted
• Rugged construction / low maintenance
• Low noise levels

INCLUDES
• Capacitor AH364

RECOMMENDED ACCESSORIES
• Muffler/filter AH190
• Pressure gauge AF583/Vacuum gauge AA640
• Pressure relief valve AA205/Vacuum relief valve AA207
• (4) Rubber feet AF584A
• Repair kit(s): SAA-P107-NQ, SAA-V108-NQ - 1 each K756,K757
  SAA-V109-NQ - 2 each K757

Standard units ship with grilles covering fans

Product Dimensions (Inches, mm)

SAA-P107-NQ

SAA-V108-NQ

Approx. 6 foot long cord asm.
NEMA 5-15P, 15A, 125V plug
Product Specifications "P" models are pressure; "V" models are vacuum

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Motor Type</th>
<th>Motor Type</th>
<th>Parallel/ Staged</th>
<th>RPM 60Hz</th>
<th>HP</th>
<th>kW</th>
<th>lbs.</th>
<th>kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAA-P107-NQ</td>
<td>115-60-1</td>
<td>PSC</td>
<td>--</td>
<td>1575</td>
<td>1/6</td>
<td>0.12</td>
<td>11.1</td>
<td>5.0</td>
</tr>
<tr>
<td>SAA-V108-NQ</td>
<td>115-60-1</td>
<td>PSC</td>
<td>Parallel</td>
<td>1575</td>
<td>1/6</td>
<td>0.12</td>
<td>11.1</td>
<td>5.0</td>
</tr>
<tr>
<td>SAA-V109-NQ</td>
<td>115-60-1</td>
<td>PSC</td>
<td>Staged</td>
<td>1575</td>
<td>1/6</td>
<td>0.12</td>
<td>11.1</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Product Performance (U.S./Imperial, Metric)
ROA Series

SHADED POLE MOTOR
100 PSI MAX. PRESSURE, 26.0" HG MAX. VACUUM
1.6 CFM OPEN FLOW

PSC 4 POLE MOTOR
100 PSI MAX. PRESSURE, 27.0" HG MAX. VACUUM
.78 CFM OPEN FLOW

DC MOTOR
100 PSI MAX. PRESSURE, 26.0" HG MAX. VACUUM
1.1 CFM OPEN FLOW

PRODUCT FEATURES
- Oilless Operation
- Motor mounted
- Rugged construction/low maintenance
- Low noise levels

INCLUDES
- Muffler/filter AH190
- Capacitor AF873A (DB and DD motors)
- Capacitor AF485A (FB motor)

RECOMMENDED ACCESSORIES
- Pressure gauge AF583
- Pressure relief valve AF592S
- Vacuum gauge AA640
- Vacuum relief valve AA550C-V
- (4) Rubber feet AF584A
- Filter vacuum only AA617G
- Repair kits K757

Product Dimensions (Inches, mm)

AC Models

DC Models
Product Specifications "P" models are pressure; "V" models are vacuum

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Motor Type</th>
<th>RPM 60 Hz</th>
<th>HP  50 Hz</th>
<th>kW</th>
<th>Wt lbs</th>
<th>Wt kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA-P201-AA</td>
<td>115-60-1</td>
<td>1575</td>
<td>1/8</td>
<td>0,09</td>
<td>12,0</td>
<td>5,6</td>
</tr>
<tr>
<td>ROA-P201-BN</td>
<td>220/240-50-1</td>
<td>Shaded Pole</td>
<td>1275</td>
<td>1/8</td>
<td>0,09</td>
<td>12,0</td>
</tr>
<tr>
<td>ROA-P108-DD</td>
<td>230/220-60/50-1</td>
<td>PSC</td>
<td>1575</td>
<td>1275</td>
<td>1/8</td>
<td>0,09</td>
</tr>
<tr>
<td>ROA-P108-EB</td>
<td>115/110-60/50-1</td>
<td>PSC</td>
<td>1575</td>
<td>1275</td>
<td>1/4</td>
<td>0,19</td>
</tr>
<tr>
<td>ROA-P208-DB</td>
<td>115/110-60/50-1</td>
<td>PSC (4 Pole)</td>
<td>1575</td>
<td>1275</td>
<td>1/8</td>
<td>0,09</td>
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<tr>
<td>ROA-P208-FB</td>
<td>115/110-60/50-1</td>
<td>PSC (2 Pole)</td>
<td>3000</td>
<td>2500</td>
<td>1/4</td>
<td>0,19</td>
</tr>
<tr>
<td>ROA-P209-DB</td>
<td>115/110-60/50-1</td>
<td>PSC</td>
<td>1575</td>
<td>1275</td>
<td>1/8</td>
<td>0,09</td>
</tr>
<tr>
<td>ROA-P201-JH</td>
<td>12 Volt DC</td>
<td>2100</td>
<td>1/8</td>
<td>0,09</td>
<td>10,0</td>
<td>4,5</td>
</tr>
<tr>
<td>ROA-P201-JK</td>
<td>24 Volt DC</td>
<td>2100</td>
<td>1/8</td>
<td>0,09</td>
<td>10,0</td>
<td>4,5</td>
</tr>
<tr>
<td>ROA-P209-DB</td>
<td>115/110-60/50-1</td>
<td>PSC</td>
<td>1575</td>
<td>1275</td>
<td>1/8</td>
<td>0,09</td>
</tr>
<tr>
<td>ROA-P201-JH</td>
<td>12 Volt DC</td>
<td>2100</td>
<td>1/8</td>
<td>0,09</td>
<td>10,0</td>
<td>4,5</td>
</tr>
<tr>
<td>ROA-P201-JK</td>
<td>24 Volt DC</td>
<td>2100</td>
<td>1/8</td>
<td>0,09</td>
<td>10,0</td>
<td>4,5</td>
</tr>
</tbody>
</table>

*Includes 10 foot cord, switch and plug.
+Includes 2 meter European color coded cord (no plug)

Product Performance (U.S./Imperial, Metric)

**VACUUM**

<table>
<thead>
<tr>
<th>Model</th>
<th>Motor Type</th>
<th>RPM 60 Hz</th>
<th>HP  50 Hz</th>
<th>kW</th>
<th>Wt lbs</th>
<th>Wt kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA-V210-AA</td>
<td>115-60-1</td>
<td>1575</td>
<td>--</td>
<td>1/8</td>
<td>0,09</td>
<td>12,3</td>
</tr>
<tr>
<td>ROA-V210-BN</td>
<td>220/240-50-1</td>
<td>Shaded Pole</td>
<td>--</td>
<td>1/8</td>
<td>0,09</td>
<td>12,3</td>
</tr>
<tr>
<td>ROA-V210-JH</td>
<td>12 Volt DC</td>
<td>2100</td>
<td>1/8</td>
<td>0,09</td>
<td>10,0</td>
<td>4,5</td>
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</table>

**PRESSURE**

<table>
<thead>
<tr>
<th>Model</th>
<th>Motor Type</th>
<th>RPM 60 Hz</th>
<th>HP  50 Hz</th>
<th>kW</th>
<th>Wt lbs</th>
<th>Wt kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA-V210-AA</td>
<td>115-60-1</td>
<td>1575</td>
<td>--</td>
<td>1/8</td>
<td>0,09</td>
<td>12,3</td>
</tr>
<tr>
<td>ROA-V210-BN</td>
<td>220/240-50-1</td>
<td>Shaded Pole</td>
<td>--</td>
<td>1/8</td>
<td>0,09</td>
<td>12,3</td>
</tr>
<tr>
<td>ROA-V210-JH</td>
<td>12 Volt DC</td>
<td>2100</td>
<td>1/8</td>
<td>0,09</td>
<td>10,0</td>
<td>4,5</td>
</tr>
</tbody>
</table>
**RAA Series**

**PSC 4 POLE MOTOR**
100 PSI MAX. PRESSURE, 1.55 CFM OPEN FLOW (60 HZ)

**PSC 4 POLE MOTOR**
27.5" HG MAX. VACUUM, 2.7 CFM OPEN FLOW (60 HZ)

**PSC 4 POLE MOTOR SINGLE STG**
29.0" HG MAX. VACUUM, 1.5 CFM OPEN FLOW (60 HZ)

**PSC 2 POLE MOTOR**
100 PSI MAX. PRESSURE, 2.4 CFM OPEN FLOW (60 HZ)

**PRODUCT FEATURES**
- Oilless Operation
- Motor mounted
- Rugged construction/low maintenance
- Low noise level

**INCLUDES**
- Muffler/filter AH190
- Unattached capacitor
  - AF876 EB motors AF873A EB motors

**RECOMMENDED ACCESSORIES**
- Vacuum gauge AA640
- Vacuum relief valve AA550C-V
- (2) Repair kits K757
- 4 Rubber feet AF584A
- Filter for vacuum only AA617G
- Pressure gauge AF583
- Pressure relief valve AF592S

**Product Dimensions (Inches, mm)**

**EB/ED Motors**

**GB/GD Motors**
Product Specifications "P" models are pressure; "V" models are vacuum

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Motor Type</th>
<th>Motor Type</th>
<th>Stages/ Parallel</th>
<th>RPM 60 Hz</th>
<th>RPM 50 Hz</th>
<th>HP</th>
<th>KW</th>
<th>Wt.</th>
<th>lbs</th>
<th>kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAA-P203-EB</td>
<td>115/110-60/50-1</td>
<td>PSC (4 pole)</td>
<td>--</td>
<td>1575</td>
<td>1275</td>
<td>1/4</td>
<td>0.19</td>
<td>19</td>
<td>8.6</td>
<td></td>
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<tr>
<td>RAA-P203-ED</td>
<td>230/220-60/50-1</td>
<td>PSC (4 pole)</td>
<td>--</td>
<td>1575</td>
<td>1275</td>
<td>1/4</td>
<td>0.19</td>
<td>19</td>
<td>8.6</td>
<td></td>
</tr>
<tr>
<td>RAA-P203-GB</td>
<td>115/110-60/50-1</td>
<td>PSC (2 pole)</td>
<td>--</td>
<td>3000</td>
<td>2500</td>
<td>1/4</td>
<td>0.19</td>
<td>19</td>
<td>8.6</td>
<td></td>
</tr>
<tr>
<td>RAA-P203-GD</td>
<td>230/220-60/50-1</td>
<td>PSC (2 pole)</td>
<td>--</td>
<td>3000</td>
<td>2500</td>
<td>1/4</td>
<td>0.19</td>
<td>19</td>
<td>8.6</td>
<td></td>
</tr>
<tr>
<td>RAA-V210-EB</td>
<td>115/110-60/50-1</td>
<td>PSC (4 pole)</td>
<td>Parallel</td>
<td>1575</td>
<td>1275</td>
<td>1/4</td>
<td>0.19</td>
<td>19</td>
<td>8.6</td>
<td></td>
</tr>
<tr>
<td>RAA-V211-EB</td>
<td>115/110-60/50-1</td>
<td>PSC (4 pole)</td>
<td>Staged</td>
<td>1575</td>
<td>1275</td>
<td>1/4</td>
<td>0.19</td>
<td>19</td>
<td>8.6</td>
<td></td>
</tr>
<tr>
<td>RAA-V210-ED</td>
<td>230/220-60-50-1</td>
<td>PSC (4 pole)</td>
<td>Parallel</td>
<td>1575</td>
<td>1275</td>
<td>1/4</td>
<td>0.19</td>
<td>19</td>
<td>8.6</td>
<td></td>
</tr>
</tbody>
</table>

Product Performance (U.S./Imperial, Metric)
71R/72R Series
Single Cylinder Compressors

MODELS 71R142
100 PSI MAX. PRESSURE, 2.0 CFM OPEN FLOW (60HZ)

MODEL 72R142
50 PSI MAX. PRESSURE, 2.4 CFM OPEN FLOW (60HZ)

PRODUCT FEATURES

• Oilless operation
• All wetted aluminum parts treated for corrosion protection from moisture
• Rugged motor shell construction

INCLUDES

• Filter/muffler B300F

RECOMMENDED ACCESSORIES

• Pressure relief valve AF592S
• Pressure gauge AF583
• Rubber feet (4) AB319A
• In-line filter for vacuum units AA617G
• Vacuum relief valve AA550C-V
• Vacuum gauge AA640
• Repair Kit 71R K704, 72R K705

Product Dimensions (Inches, mm)
Product Specifications

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Motor Type</th>
<th>RPM 60 Hz</th>
<th>RPM 50 Hz</th>
<th>HP</th>
<th>kW</th>
<th>Wt lbs</th>
<th>Wt kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>71R142-P001B-D300X</td>
<td>PSC (4 pole)</td>
<td>1675</td>
<td>1400</td>
<td>1/3</td>
<td>0.25</td>
<td>14</td>
<td>6.4</td>
</tr>
<tr>
<td>71R142-P001B-D301X</td>
<td>PSC (4 pole)</td>
<td>1675</td>
<td>1400</td>
<td>1/3</td>
<td>0.25</td>
<td>14</td>
<td>6.4</td>
</tr>
<tr>
<td>72R142-P0018-D300X</td>
<td>PSC (4 pole)</td>
<td>1675</td>
<td>1400</td>
<td>1/3</td>
<td>0.25</td>
<td>17</td>
<td>7.7</td>
</tr>
<tr>
<td>72R142-P0018-D301X</td>
<td>PSC (4 pole)</td>
<td>1675</td>
<td>1400</td>
<td>1/3</td>
<td>0.25</td>
<td>17</td>
<td>7.7</td>
</tr>
</tbody>
</table>

Product Performance (U.S./ Imperial, Metric)

![Graph showing free air flow vs. pressure for 60 Hz and 50 Hz.]
**71R Series**  
*Twin Cylinder High Pressure Compressor*

**MODEL 71R545 STAGED**  
175 PSI MAX. PRESSURE, 2.0 CFM OPEN FLOW (60HZ)

**PRODUCT FEATURES**
- Oilless operation
- All wetted aluminum parts treated for corrosion protection from moisture
- Rugged motor shell construction

**INCLUDES**
- Capacitor AK385
- Rubber feet (4) AF713A
- Safety valve AS100J
- Interstage filter AT441
- Filter B300F not pictured, shipped unattached

**RECOMMENDED ACCESSORIES**
- Repair kit K634

---

**Product Specifications**

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Motor</th>
<th>Motor Type</th>
<th>RPM 60 Hz</th>
<th>RPM 50 Hz</th>
<th>HP</th>
<th>kW</th>
<th>Wt lbs</th>
<th>Wt kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>71R545-P315B-D401X</td>
<td>100/115-60-1</td>
<td>PSC (4 pole)</td>
<td>1725</td>
<td>1425</td>
<td>1/2</td>
<td>0.37</td>
<td>15.6</td>
<td>7.09</td>
</tr>
<tr>
<td>71R545-P315B-D302CX</td>
<td>220-240-50-1</td>
<td>PSC (4 pole)</td>
<td>--</td>
<td>1425</td>
<td>1/3</td>
<td>0.25</td>
<td>15.6</td>
<td>7.09</td>
</tr>
</tbody>
</table>

**Product Performance (U.S./ Imperial, Metric)**

![Graph showing product performance](chart.png)
71R/72R Series
Twin Cylinder Compressor

MODELS 71R642
100 PSI MAX. PRESSURE, 3.5 CFM OPEN FLOW (60 HZ)

MODELS 71R645/71R655
100 PSI MAX. PRESSURE, 4.35 CFM OPEN FLOW (60 HZ)

MODELS 72R645/72R655
15 PSI MAX. PRESSURE, 5.5 CFM OPEN FLOW (60HZ)

PRODUCT FEATURES
• Oilless operation
• All wetted aluminum parts treated for corrosion protection from moisture
• Rugged motor shell construction

INCLUDES
• Dry-cell capacitor AT250 (D303X Motor), AT251 (D304X Motor) - not pictured, shipped unattached
• Rubber feet (4) AF713A

RECOMMENDED ACCESSORIES
• Relief valve AA600
• Pressure gauge AA644B
• Repair Kit 71R K557/72R K558
Product Specifications

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Motor Type</th>
<th>RPM 60 Hz</th>
<th>RPM 50 Hz</th>
<th>HP</th>
<th>kW</th>
<th>lbs.</th>
<th>Kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>71R645-P112-D303X</td>
<td>PSC (4 pole)</td>
<td>1650</td>
<td>--</td>
<td>1/3</td>
<td>0.25</td>
<td>15.6</td>
<td>7.09</td>
</tr>
<tr>
<td>71R647-P10-C322X</td>
<td>PSC (4 pole)</td>
<td>--</td>
<td>1400</td>
<td>1/2</td>
<td>0.37</td>
<td>23.4</td>
<td>10.6</td>
</tr>
<tr>
<td>71R647-P10-C322</td>
<td>PSC (4 pole)</td>
<td>--</td>
<td>1450</td>
<td>1/3</td>
<td>0.25</td>
<td>19.8</td>
<td>9.0</td>
</tr>
<tr>
<td>71R655-P112-D500X</td>
<td>PSC (4 pole)</td>
<td>1450</td>
<td>--</td>
<td>1/3</td>
<td>0.25</td>
<td>16.0</td>
<td>7.27</td>
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<tr>
<td>71R645-P112-D303X</td>
<td>PSC (4 pole)</td>
<td>1650</td>
<td>--</td>
<td>1/3</td>
<td>0.25</td>
<td>15.6</td>
<td>7.09</td>
</tr>
<tr>
<td>71R655-P112-D304X</td>
<td>PSC (4 pole)</td>
<td>1425</td>
<td>--</td>
<td>1/3</td>
<td>0.37</td>
<td>15.6</td>
<td>7.09</td>
</tr>
<tr>
<td>71R647-P112-D500X</td>
<td>PSC (4 pole)</td>
<td>1650</td>
<td>--</td>
<td>3/4</td>
<td>0.56</td>
<td>15.6</td>
<td>7.09</td>
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<tr>
<td>71R642-P112-D501X</td>
<td>PSC (4 pole)</td>
<td>1650</td>
<td>--</td>
<td>3/4</td>
<td>0.56</td>
<td>15.6</td>
<td>7.09</td>
</tr>
</tbody>
</table>

* Unit with terminal box

Product Performance (U.S./Imperial, Metric)

Dotted line indicates intermittent duty.
71R/72R Series
Twin Cylinder Vacuum Pump

MODEL 71R645/71R655
28" HG MAX. VACUUM, 4.5 CFM OPEN FLOW (60HZ)

MODEL 72R547/72R555 STAGED
29" HG MAX. VACUUM, 2.6 CFM OPEN FLOW (60HZ)

MODEL 72R645/72R655
28" HG MAX. VACUUM, 5.5 CFM OPEN FLOW (60HZ)

PRODUCT FEATURES
• Oilless operation
• All wetted aluminum parts treated for corrosion protection from moisture
• Rugged motor shell construction

INCLUDES
• Dry-cell capacitor AT250 (D303X Motors, AT251 (D304X Motor) - not pictured, shipped unattached
• Rubber feet (4) AF713A

Product Dimensions (Inches, mm)
**Model Number** | **Motor Number** | **Motor Type** | **Parallel/ Staged** | **RPM** | **60 Hz** | **50 Hz** | **HP** | **kW** | **Wt. lbs.** | **Wt. kg**
--- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---
71R645-V114-D303X | 115-60-1 | PSC (4 pole) | Parallel | 1650 | -- | 1/3 | 0.25 | 15.6 | 7.09
71R655-V10-C222X | 220-240-50-1 | Shaded Pole | Parallel | -- | 1450 | 1/3 | 0.25 | 16.0 | 7.27
71R655-V114-C222TX | 220-240-50-1 | Shaded Pole | Parallel | -- | 1450 | 1/3 | 0.25 | 16.0 | 7.27
71R655-V114-D304X | 220-240-50-1 | PSC (4 pole) | Parallel | -- | 1425 | 1/3 | 0.25 | 16.0 | 7.27
72R547-V116-D303X | 115-60-1 | PSC (4 pole) | Staged | 1650 | -- | 1/3 | 0.25 | 15.6 | 7.09
72R555-V10-C222X | 220-240-50-1 | Shaded Pole | Staged | -- | 1450 | 1/3 | 0.25 | 9.0
72R555-V10-C222TX | 220-240-50-1 | Shaded Pole | Staged | -- | 1450 | 1/3 | 0.25 | 9.0
72R555-V116B-D204X | 220-240-50-1 | PSC (4 pole) | Staged | -- | 1425 | 1/3 | 0.25 | 16.0 | 7.27
72R645-V114-D303X | 115-60-1 | PSC (4 pole) | Parallel | 1650 | -- | 1/3 | 0.25 | 15.6 | 7.09
72R655-V10-C222X | 220-240-50-1 | Shaded Pole | Parallel | -- | 1450 | 1/3 | 0.25 | 9.9
72R655-V10-C222TX | 220-240-50-1 | Shaded Pole | Parallel | -- | 1450 | 1/3 | 0.25 | 9.9
72R655-V114-D304X | 220-240-50-1 | PSC (4 pole) | Parallel | -- | 1425 | 1/3 | 0.25 | 16.0 | 7.27

*All model numbers with T have a terminal box attached*

**Product Performance (U.S./Imperial, Metric)**

![Graph of FREE AIR FLOW](image)

- **m³/h**
- **cfm**
- **mbar**
- **"Hg**
74R Series
Single Cylinder Compressor

MODEL 74R130
100 PSI MAX. PRESSURE, 1.50 CFM OPEN FLOW (60 Hz)
100 PSI MAX. PRESSURE, 1.25 CFM OPEN FLOW (50 Hz)

PRODUCT FEATURES
- Oilless operation
- All wetted aluminum parts treated for corrosion protection from moisture
- Rugged motor shell construction
- Includes filter B300A
- The H200 and H201 motors have 3 pigtail wire arrangement
- The H203 has 6 pigtail wire arrangement

RECOMMENDED ACCESSORIES
- (4) Rubber feet AF713A
- Relief/pressure valve AF592S
- Pressure gauge AF583
- Repair kit K806

Product Specifications

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Motor</th>
<th>RPM 60 Cycle</th>
<th>RPM 50 Cycle</th>
<th>HP</th>
<th>kW</th>
<th>lbs.</th>
<th>kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>74R130-P101-H200X</td>
<td>100-115-60/50-1</td>
<td>1625</td>
<td>1375</td>
<td>1/4</td>
<td>0.19</td>
<td>14.2</td>
<td>6.4</td>
</tr>
<tr>
<td>74R130-P101-H201X</td>
<td>220-240/230-50/60-1</td>
<td>1625</td>
<td>1375</td>
<td>1/4</td>
<td>0.19</td>
<td>14.3</td>
<td>6.5</td>
</tr>
<tr>
<td>74R130-P101-H203X</td>
<td>115/230-60-1;220/240-50-1</td>
<td>1625</td>
<td>1375</td>
<td>1/4</td>
<td>0.19</td>
<td>14.3</td>
<td>6.5</td>
</tr>
<tr>
<td><strong>74R130-P101D-H203X</strong></td>
<td>115/230-60-1;220/240-50-1</td>
<td>1625</td>
<td>1375</td>
<td>1/4</td>
<td>0.19</td>
<td>14.3</td>
<td>6.5</td>
</tr>
<tr>
<td>*74R130-P114-H200X</td>
<td>100-115-60/60-1</td>
<td>1625</td>
<td>1375</td>
<td>1/4</td>
<td>0.19</td>
<td>14.2</td>
<td>6.4</td>
</tr>
<tr>
<td>*74R130-P114-H201X</td>
<td>220-240/230-50/60-1</td>
<td>1625</td>
<td>1375</td>
<td>1/4</td>
<td>0.19</td>
<td>14.3</td>
<td>6.5</td>
</tr>
</tbody>
</table>

* Has M5 foot mount
** Biased Valve
Product Performance (U.S./imperial, Metric)

FREE AIR FLOW

<table>
<thead>
<tr>
<th>m³/h</th>
<th>cfm</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>2</td>
<td>1.0</td>
</tr>
<tr>
<td>3</td>
<td>1.5</td>
</tr>
<tr>
<td>4</td>
<td>2.0</td>
</tr>
</tbody>
</table>

**74R130-P101D-H203X

Bar Graph

60 Hz

50 Hz

<table>
<thead>
<tr>
<th>bar</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
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</thead>
<tbody>
<tr>
<td>m³/h</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>0</td>
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<tr>
<td>cfm</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
75R Series Twin Cylinder Vacuum Pump & Compressors

MODEL 75R647
20 PSI MAX. PRESSURE, 27” HG MAX. VACUUM
5.1 CFM OPEN FLOW (60 HZ)

MODEL 75R645
30 PSI MAX. PRESSURE,
4.90 CFM OPEN FLOW (60 HZ)

MODEL 75R640
40 PSI MAX. PRESSURE,
4.45 CFM OPEN FLOW (60 HZ)

MODEL 75R635
30 PSI MAX. PRESSURE,
4.05 CFM OPEN FLOW (60 HZ)

PRODUCT FEATURES
• Oilless operation
• All wetted aluminum parts treated for corrosion protection from moisture
• Rugged motor shell construction

INCLUDES
• Filter/muffler

RECOMMENDED ACCESSORIES
• Pressure gauge AA644B
• Vacuum gauge AA640
• Repair Kit K797
• Rubber feet (4) AF713A
• Pressure relief valve AF592S
• Vacuum relief valve AA204

Product Specifications

<table>
<thead>
<tr>
<th>Number</th>
<th>Motor</th>
<th>Motor Type</th>
<th>RPM 60 Hz</th>
<th>RPM 50 Hz</th>
<th>HP</th>
<th>kW</th>
<th>Wt lbs.</th>
<th>Wt Kg</th>
<th>Capacitor</th>
</tr>
</thead>
<tbody>
<tr>
<td>75R635-P101-H301X</td>
<td>100-115-60/50-1</td>
<td>PSC</td>
<td>1625</td>
<td>1375</td>
<td>1/3</td>
<td>0.25</td>
<td>17.1</td>
<td>7.8</td>
<td>AT546A</td>
</tr>
<tr>
<td>75R640-P101-H301X</td>
<td>115-60-1</td>
<td>PSC</td>
<td>1625</td>
<td>-----</td>
<td>1/3</td>
<td>0.25</td>
<td>17.1</td>
<td>7.8</td>
<td>AT546A</td>
</tr>
<tr>
<td>75R645-P101-H301X</td>
<td>115-60-1</td>
<td>PSC</td>
<td>1625</td>
<td>-----</td>
<td>1/3</td>
<td>0.25</td>
<td>17.1</td>
<td>7.8</td>
<td>AT367</td>
</tr>
<tr>
<td>75R647-P101-H301X</td>
<td>115-60-1</td>
<td>PSC</td>
<td>1625</td>
<td>-----</td>
<td>1/3</td>
<td>0.25</td>
<td>17.5</td>
<td>7.9</td>
<td>AT251</td>
</tr>
<tr>
<td>*75R647-V101-H301X</td>
<td>115-60-1</td>
<td>PSC</td>
<td>1625</td>
<td>-----</td>
<td>1/3</td>
<td>0.25</td>
<td>17.5</td>
<td>7.9</td>
<td>AT251</td>
</tr>
<tr>
<td>75R645-P101-H302CX</td>
<td>220-240/230-50/60-1</td>
<td>PSC</td>
<td>1625</td>
<td>1375</td>
<td>1/3</td>
<td>0.25</td>
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<td>8.0</td>
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<tr>
<td>75R647-P101-H302CX</td>
<td>220-240/230/50/60-1</td>
<td>PSC</td>
<td>1625</td>
<td>1375</td>
<td>1/3</td>
<td>0.25</td>
<td>18.0</td>
<td>8.2</td>
<td>AT251</td>
</tr>
<tr>
<td>75R647-P101A-H311CX</td>
<td>115-60-1</td>
<td>PSC</td>
<td>1625</td>
<td>-----</td>
<td>1/3</td>
<td>0.25</td>
<td>18.0</td>
<td>8.2</td>
<td>AT251</td>
</tr>
</tbody>
</table>

*Parallel Operation
Product Performance (U.S./imperial, Metric)
75R Series
Single Cylinder Vacuum Pump

MODEL 75R135
27" MAX VACUUM, 1.9 CFM OPEN FLOW (60Hz)

PRODUCT FEATURES
- Oilless operation
- All wetted aluminum parts treated for corrosion protection from moisture
- Rugged motor shell construction

INCLUDES
- Filter/muffler

RECOMMENDED ACCESSORIES
- Vacuum gauge AA640
- Repair kit K806
- Vacuum relief valve AA204
- (4) Rubber feet AF713A

Product Specifications

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Motor Type</th>
<th>RPM</th>
<th>HP</th>
<th>kW</th>
<th>lbs.</th>
<th>kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>75R135-V102-H200X</td>
<td>PSC</td>
<td>1625</td>
<td>1/4</td>
<td>0.19</td>
<td>14.3</td>
<td>6.5</td>
</tr>
<tr>
<td>75R135-V103-H203X</td>
<td>PSC</td>
<td>1625</td>
<td>1/4</td>
<td>0.19</td>
<td>14.3</td>
<td>6.5</td>
</tr>
</tbody>
</table>

Product Performance (U.S./Imperial, Metric)
81R Series
Twin Cylinder Compressor

MODEL 81R640
100 PSI MAX. PRESSURE, 3.7 CFM OPEN FLOW (60 Hz)
100 PSI MAX. PRESSURE, 3.0 CFM OPEN FLOW (50 Hz)

PRODUCT FEATURES

- Oilless operation
- All wetted aluminum parts treated for corrosion protection from moisture
- Rugged motor shell construction

RECOMMENDED ACCESSORIES

- Safety valve AP202
- Pressure gauge AA806
- Filter B300A
- Capacitors: AT251dry or AJ594 wet
- Repair kit K934

Product Specifications “P” models are pressure

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Motor</th>
<th>Motor Type</th>
<th>RPM 60 Hz</th>
<th>RPM 50 Hz</th>
<th>HP</th>
<th>kW</th>
<th>Wt lbs</th>
<th>Wt kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>81R640-P101-H311CX</td>
<td>115-60-1</td>
<td>PSC</td>
<td>1725</td>
<td></td>
<td>1/3</td>
<td>0.25</td>
<td>17.1</td>
<td>7.8</td>
</tr>
<tr>
<td>81R640-P101-H302CX</td>
<td>220-240-50-1</td>
<td>PSC</td>
<td>1450</td>
<td></td>
<td>1/3</td>
<td>0.25</td>
<td>17.6</td>
<td>8.0</td>
</tr>
</tbody>
</table>

Product Performance (U.S./Imperial, Metric)
82R Series
Twin Cylinder Compressor

MODEL 82R637 Series
30 PSI MAX. PRESSURE, 4.20 CFM OPEN FLOW (60Hz)

MODEL 82R637 Series
30 PSI MAX. PRESSURE, 3.8 CFM OPEN FLOW
26" HG MAX. VACUUM, 3.3 CFM OPEN FLOW (BLDC)

MODEL 82R645 Series
30 PSI MAX. PRESSURE, 4.5 CFM OPEN FLOW (60Hz)
30 PSI MAX. PRESSURE, 4.20 CFM OPEN FLOW (50Hz)

PRODUCT FEATURES
- Oilless operation
- All wetted aluminum parts treated for corrosion protection from moisture
- Rugged motor shell construction

RECOMMENDED ACCESSORIES
- Relief valve AP202
- Pressure gauge AF583
- Filter B300A
- Capacitors: AT250: 82R645, AT251: 82R637
- Repair kit K797A

Product Dimensions (Inches, mm)

AC Unit

DC Unit
Product Specifications "P" models are pressure

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Motor</th>
<th>Motor Type</th>
<th>RPM 60 Hz</th>
<th>RPM 50 Hz</th>
<th>HP</th>
<th>kW</th>
<th>Wt lbs</th>
<th>Wt kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>82R637-P135-H311CX</td>
<td>115-60-1</td>
<td>PSC</td>
<td>1725</td>
<td>----</td>
<td>1/3</td>
<td>0,25</td>
<td>17.1</td>
<td>7.8</td>
</tr>
<tr>
<td>82R637-P150-H314X</td>
<td>24V DC</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>1/3</td>
<td>0,25</td>
<td>17.9</td>
<td>7.8</td>
</tr>
<tr>
<td>82R645-P135-H302CX</td>
<td>220-240-50-1; 230-60-1</td>
<td>PSC</td>
<td>1450</td>
<td>1/3</td>
<td>0,25</td>
<td>17.6</td>
<td>8.0</td>
<td></td>
</tr>
</tbody>
</table>

Product Performance (U.S./Imperial, Metric)

### Oilless Rocking Piston

- **Model Motor RPM Wt Number Motor Type 60 Hz 50 Hz HP kW lbs. kg**

### Charts

- **Vacuum and Pressure Performance Graphs**
  - Graphs showing cfm (cfm) and m³/h vs. psig (bar) for different motor models (e.g., 82R637, 82R645).
  - Models include 82R637 (BLDC), 82R645 (60 Hz), 82R637 (60 Hz), 82R645 (50 Hz).
85R Series
Twin Cylinder Compressor

MODEL 85R632
25 PSI MAX PRESSURE, 3.7 CFM OPEN FLOW 60 Hz (N211X MOTOR)
40 PSI MAX. PRESSURE, 3.7 CFM OPEN FLOW 60 Hz (N311X MOTOR)

MODEL 85R637
30 PSI MAX. PRESSURE, 4.3 CFM OPEN FLOW 60 Hz

PRODUCT FEATURES
• Oilless operation
• New optional side mount configuration for lower center of gravity
• Rugged motor shell construction
• Long life and lower power consumption
• Multiple porting options
• Light weight design
• All wetted aluminum parts treated for corrosion protection from moisture

RECOMMENDED ACCESSORIES
• Relief Valve AF592S
• Pressure Gauge AA644B
• Capacitor AT251
• Filter B300A
• (4) Rubber feet AF713A

Product Specifications

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Motor Type</th>
<th>RPM 60 Hz</th>
<th>HP</th>
<th>kw</th>
<th>Wt. lbs.</th>
<th>Wt. kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>85R632-P201-N211X</td>
<td>PSC</td>
<td>1750</td>
<td>1/4</td>
<td>0,19</td>
<td>14,6</td>
<td>6,6</td>
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<tr>
<td>85R632-P201-N311X</td>
<td>PSC</td>
<td>1750</td>
<td>1/3</td>
<td>0,25</td>
<td>15,6</td>
<td>7,1</td>
</tr>
<tr>
<td>85R637-P201-N311X</td>
<td>PSC</td>
<td>1750</td>
<td>1/3</td>
<td>0,25</td>
<td>15,6</td>
<td>7,1</td>
</tr>
</tbody>
</table>

Product Performance

FREE AIR FLOW cfm

FREE AIR FLOW m³/h

Product Dimensions (Inches, mm)
LAB MODELS

SHADED POLE
100 PSI MAX. PRESSURE, 25 HG MAX. VACUUM
.8 CFM OPEN FLOW (60HZ)

PRODUCT FEATURES
• Oilless operation
• Motor mounted
• Rugged construction/low maintenance

INCLUDES
• Gauges - Vacuum AE136, Pressure AA806
• Hose barbs - AG613
• Regulators - Vacuum AA550C-V, Pressure AF887
• Carrying handle - AP523A
• Rubber feet - AF584A

RECOMMENDED ACCESSORIES
• Repair kit K757

Product Specifications

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Motor</th>
<th>Motor Type</th>
<th>RPM 60 Hz</th>
<th>RPM 50 Hz</th>
<th>HP</th>
<th>kW</th>
<th>Wt lbs</th>
<th>kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA-P104-AA</td>
<td>115-60-1</td>
<td>Shaded Pole</td>
<td>1725</td>
<td>1425</td>
<td>1/8</td>
<td>0,10</td>
<td>14</td>
<td>6,4</td>
</tr>
<tr>
<td>ROA-P104-BN</td>
<td>220/240-50-1</td>
<td>Shaded Pole</td>
<td>1725</td>
<td>1425</td>
<td>1/8</td>
<td>0,10</td>
<td>14</td>
<td>6,4</td>
</tr>
</tbody>
</table>

CNL UL listed for use in Canada CE conforms to European Standards

Product Performance (U.S., Metric)

<table>
<thead>
<tr>
<th>VACUUM</th>
<th>60 Hz</th>
<th>PRESSURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>psig</td>
<td>bar</td>
<td>m³/h cfm</td>
</tr>
<tr>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>100</td>
<td>7.0</td>
<td>1.0</td>
</tr>
<tr>
<td>200</td>
<td>14.0</td>
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<tr>
<td>300</td>
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<tr>
<td>800</td>
<td>58.0</td>
<td>4.5</td>
</tr>
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<td>900</td>
<td>66.0</td>
<td>5.0</td>
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<tr>
<td>1000</td>
<td>74.0</td>
<td>5.5</td>
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</table>

<table>
<thead>
<tr>
<th>VACUUM</th>
<th>50 Hz</th>
<th>PRESSURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>psig</td>
<td>bar</td>
<td>m³/h cfm</td>
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<td>5.0</td>
</tr>
<tr>
<td>1000</td>
<td>74.0</td>
<td>5.5</td>
</tr>
</tbody>
</table>
COMPRESSED AIR SYSTEMS

PRODUCT FEATURES

- AE163A Pressure Switch
- AE248 Manual Drain
- AS100B Pressure Safety Valve (ASME)
- AA806 Pressure Gauge
- Globe Valve
- Unloading Capability
- 100% Oilless Operation

APPLICATIONS

- Beverage Dispensing
- Lab Use
- Portable Displays
- Commercial Door Actuation
- Portable - Off Site Use

RECOMMENDED ACCESSORIES

- Repair Kit
  ROA-P206T-AA K756
  71R142-P075T-D300X K704
  71R640-P64T-D500X & 716640-P67T-D500X K557D
  71R640-P65DT-D500CX K557D (2 required)

PRODUCT SPECIFICATIONS

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Tank Size Gallons</th>
<th>CFM @ PSIG</th>
<th>ON/OFF psig</th>
<th>0 to 100 Setting</th>
<th>Recovery of Standard Setting</th>
<th>Motor Voltage</th>
<th>HP</th>
<th>Shipping Weight lbs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA-P206T-AA</td>
<td>2</td>
<td>.76 .65 .47 .38 .27 .19</td>
<td>70/100</td>
<td>5.00</td>
<td>1.55</td>
<td>115-60-1</td>
<td>1/8</td>
<td>39</td>
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<tr>
<td>71R142-P075T-D300X</td>
<td>2</td>
<td>2.00 1.80 1.50 1.20 1.10 .90</td>
<td>70/100</td>
<td>1.30</td>
<td>0.25</td>
<td>115-50/60-1</td>
<td>1/3</td>
<td>42</td>
</tr>
<tr>
<td>*71R640-P64T-D500CX</td>
<td>12</td>
<td>3.50 3.15 2.65 2.20 1.85 1.46</td>
<td>90/110</td>
<td>5.43</td>
<td>1.13</td>
<td>115-60-1</td>
<td>3/4</td>
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When to specify a compressed air or vacuum tank system

Many find it difficult to decide whether to use stand-alone pumps or complete tank packages for their applications. The tank system offers many advantages, which satisfy:

- **High Volumes** If your application requires an instantaneous supply of high pressure or vacuum, then the reservoir provided by a tank system is essential. Even the largest of pumps has to start at atmospheric pressure and therefore will not be able to give that instantaneous supply of pressure/vacuum.

- **Cost Savings** Using a tank system can reduce initial maintenance and replacement costs. Here’s why: Applications that require high volumes of air in intermittent cycles can use relatively small pumps. The longer the interval between cycles, the more applicable a tank system can be. For example, a 1 HP compressor on a tank can supply the same amount of flow for one minute as a stand alone 10 HP compressor.

- **Quiet Operation** In a tank system the pump runs on demand, which means that it is not operating a good part of the time. No operation, no operating noise.

- **Pulse Free** Pulse-free air is required by many pneumatic systems for proper operation of pneumatic tools or components. A tank provides pulsation free air from the reciprocating compressor.

- **Central System** Small industrial shops where different tools are required at different times find tank systems ideal, since one tank system can supply air to multiple locations.
Reasons to Call Gast First

• Quality and Satisfaction
Gast’s reputation for quality and customer satisfaction in air-moving products has been setting the industry’s standard of excellence throughout the world since 1921.

• Wide Variety
Gast offers a complete line of air-moving products in a broad range of types and sizes, and includes more extras without adding on extra costs. Utilizing state-of-the-art design, manufacturing processes, and electric motor technology, Gast products can be customized to meet the demands of many applications.

• Literature
Easy-to-follow literature provides a broad overview of Gast’s extensive line of pneumatic products including operating principles, typical applications and general operating parameters and specifications to offer preliminary guidelines for choosing the right Gast pump for the job.

• Vast Network of National and International Distributors
Gast distributors carry a substantial stock of pneumatic products, parts and accessories. For the name and location of your closest representative, visit our website at www.gastmfg.com or contact one of our offices below.

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Fax: 269/925-8288

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