ROOTS™ RAM X™ Tri-Lobe Rotary Positive Displacement Blowers
Models 155, 225, 280, 400, 500, 600, 770, 800, 1000

The ROOTS™ RAM X™ tri-lobe positive displacement blower has been designed to incorporate the latest technology for reduced noise and vibration and minimal downstream pulse. This series is based upon the field operation success of ROOTS RAM™ blower series and features state-of-the-art engineering based on tri-lobe principles originally designed by Roots.

BLOWER DESCRIPTION
RAM X tri-lobe rotary blowers are heavy-duty units with high strength integral-shaft ductile iron impellers designed for maximum efficiency. The blowers feature ROOTS WHISPAIR™ discharge design which, when combined with tri-lobe impellers, delivers quieter operation than conventional tri-lobe blowers.

The headplates and rigid, one-piece cylinder are cast iron, while the drive-end and gear covers are aluminum (cast iron for models 600-1000). Carburized and ground alloy steel spur timing gears are taper mounted on the shafts and are secured with a locknut (bolt for models 800-1000). Cylindrical roller bearings are used to accept side loads from v-belt drives.

Piston rings reduce air leakage through the shaft openings in the headplates and hydrodynamic oil seals prevent lubricant from entering the air chamber. RAM X blowers incorporate thrust control, with splash oil lubrication at both ends of the blower.

All model sizes are designed with detachable rugged steel mounting feet which permit in-field adaptability to either vertical or horizontal installation requirements.

The top shaft is adaptable for drive on side outlet blowers, and either shaft can be extended for drive on top or bottom outlet blowers.

DESIGN FEATURES AND BENEFITS
• Tri-lobe impellers for less vibration and minimal downstream pulse
• WHISPAIR discharge design combined with tri-lobe impellers for quieter operation than conventional tri-lobe blowers
• Carburized and ground alloy steel timing gears for long life and consistent performance
• Cylindrical roller bearings for longer bearing life
• Piston ring seals for less air leakage
• Splash lubrication from oil sumps with sight glasses on each end for easy maintenance
• Detachable feet and drive shaft extension to adapt to horizontal or vertical configuration

WARRANTY PERIOD
Models 155-500: Twenty-four (24) months from date of original unit start-up or 30 months from date of original shipment, whichever occurs first.

Models 600-1000: Twelve (12) months from date of original unit start-up or 18 months from date of original shipment, whichever occurs first.
OUTLINE DRAWING & DIMENSIONS

Dimensions are in inches (except U and Keyway are mm), weight is in pounds.

<table>
<thead>
<tr>
<th>Model</th>
<th>A</th>
<th>A'</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>D'</th>
<th>O</th>
<th>P</th>
<th>R</th>
<th>U</th>
<th>Keyway</th>
<th>AA</th>
<th>AB</th>
<th>AF</th>
<th>Approx. Wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>155</td>
<td>8</td>
<td>11</td>
<td>13.77</td>
<td>23.50</td>
<td>11.25</td>
<td>7.5</td>
<td>16.63</td>
<td>20.0</td>
<td>9.0</td>
<td>35</td>
<td>10.0</td>
<td>5.0</td>
<td>10.0</td>
<td>7.63</td>
<td>15.25</td>
</tr>
<tr>
<td>225</td>
<td>8</td>
<td>11</td>
<td>17.78</td>
<td>27.50</td>
<td>11.25</td>
<td>7.5</td>
<td>16.63</td>
<td>21.20</td>
<td>9.0</td>
<td>35</td>
<td>10.0</td>
<td>5.0</td>
<td>10.0</td>
<td>7.63</td>
<td>15.25</td>
</tr>
<tr>
<td>280</td>
<td>8</td>
<td>11</td>
<td>21.03</td>
<td>30.75</td>
<td>11.25</td>
<td>7.5</td>
<td>16.63</td>
<td>21.50</td>
<td>9.0</td>
<td>35</td>
<td>10.0</td>
<td>5.0</td>
<td>10.0</td>
<td>7.63</td>
<td>15.25</td>
</tr>
<tr>
<td>400</td>
<td>9</td>
<td>15</td>
<td>22.11</td>
<td>33.56</td>
<td>15.00</td>
<td>9.0</td>
<td>22.0</td>
<td>24.75</td>
<td>12.0</td>
<td>50</td>
<td>14.0</td>
<td>5.5</td>
<td>12.38</td>
<td>10.0</td>
<td>20.0</td>
</tr>
<tr>
<td>500</td>
<td>9</td>
<td>15</td>
<td>27.73</td>
<td>37.50</td>
<td>15.00</td>
<td>9.0</td>
<td>22.0</td>
<td>25.88</td>
<td>12.0</td>
<td>50</td>
<td>14.0</td>
<td>5.5</td>
<td>12.38</td>
<td>10.0</td>
<td>20.0</td>
</tr>
<tr>
<td>600</td>
<td>19</td>
<td>26</td>
<td>28.79</td>
<td>41.17</td>
<td>17.00</td>
<td>10.0</td>
<td>25.13</td>
<td>29.75</td>
<td>13.5</td>
<td>60</td>
<td>18.0</td>
<td>7.0</td>
<td>18.47</td>
<td>11.63</td>
<td>23.26</td>
</tr>
<tr>
<td>770</td>
<td>19</td>
<td>26</td>
<td>34.54</td>
<td>46.92</td>
<td>17.00</td>
<td>10.0</td>
<td>25.13</td>
<td>31.88</td>
<td>13.5</td>
<td>60</td>
<td>18.0</td>
<td>7.0</td>
<td>18.47</td>
<td>11.63</td>
<td>23.26</td>
</tr>
<tr>
<td>800</td>
<td>21.74</td>
<td>29.73</td>
<td>32.54</td>
<td>46.98</td>
<td>19.36</td>
<td>11.37</td>
<td>29.23</td>
<td>35.89</td>
<td>15.37</td>
<td>70</td>
<td>20.0</td>
<td>8.0</td>
<td>17.94</td>
<td>13.86</td>
<td>27.72</td>
</tr>
<tr>
<td>1000</td>
<td>21.74</td>
<td>29.73</td>
<td>38.55</td>
<td>52.98</td>
<td>19.36</td>
<td>11.37</td>
<td>29.23</td>
<td>38.38</td>
<td>15.37</td>
<td>70</td>
<td>20.0</td>
<td>8.0</td>
<td>18.19</td>
<td>13.86</td>
<td>27.72</td>
</tr>
</tbody>
</table>

www.rootsblower.com  Visit “Contact Us” page for your nearest location

Houston, Texas Headquarters  •  U.S. Toll Free Phone: 1-877-363-ROOT(S) (7668)  •  Direct Phone: 832-590-2600

Connersville, Indiana Operations  •  U.S. Toll Free Phone: 1-877-442-7910  •  Direct Phone: 765-827-9285

United Kingdom Operations  •  Phone:  44 (0) 1695 52600

USA/Canada Sales  •  Phone: 773-444-3360

Houston, Texas Factory Service  •  Phone: 713-896-4810

Mexico City Sales and Factory Service  •  Phone: 52 55 8589 5811

Dubai Sales and Factory Service  •  Phone: +971 4-8830831

Malaysia Sales  •  Phone: +60 3 2163 0490

China Sales  •  Phone: +86 10 8486 2440

Shanghai Factory Service  •  Phone: +86 21 5858 7638

©2007 Dresser, Inc. All rights reserved.  •  Printed in the U.S.A.  •  All information subject to change without notice.  •  ROOTS, RAM, RAM X, and WHISPAIR are trademarks of Dresser, Inc.  •  FASYAIR is a registered trademark of Dresser, Inc.