**General Safety Information**

1. **Release all air pressure from intended airline before installation.**
2. **Install unit in air line before opening desiccant container.** After unit installation, add desiccant following steps in desiccant replacement instructions on page 2.
3. **Always make sure bowl, bowl guard, and clamp ring are in place and the clamp ring is securely locked before pressurization.**
4. **DO NOT exceed the pressure and temperature ratings as shown in the specifications.**
5. **Follow all local, state and federal EPA, OSHA, and similar codes regarding disposal of old desiccant.**

### Specifications

<table>
<thead>
<tr>
<th></th>
<th>X06</th>
<th>X03 Plastic Bowl</th>
<th>X03 Metal Bowl</th>
<th>X04</th>
<th>X25 Metal Bowl</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Maximum Pressure</strong></td>
<td>150 psig (10.3 bar)</td>
<td>150 psig (10.3 bar)</td>
<td>150 psig (10.3 bar)</td>
<td>150 psig (10.3 bar)</td>
<td>150 psig (10.3 bar)</td>
</tr>
<tr>
<td><strong>Maximum Temperature</strong></td>
<td>125°F (52°C)</td>
<td>125°F (52°C)</td>
<td>150°F (66°C)</td>
<td>125°F (52°C)</td>
<td>150°F (66°C)</td>
</tr>
<tr>
<td><strong>Atmospheric Dewpoint</strong></td>
<td>000 Model: -45°F (-43°C)</td>
<td>000 Model: -45°F (-43°C)</td>
<td>M00 Model: -45°F (-43°C)</td>
<td>000 Model: -45°F (-43°C)</td>
<td>000 Model: -45°F (-43°C)</td>
</tr>
<tr>
<td><strong>U00 Model: 4A Molecular Sieve</strong></td>
<td>-100°F (-73°C)</td>
<td>-100°F (-73°C)</td>
<td>MU0 Model: -100°F (-73°C)</td>
<td>U00 Model: -100°F (-73°C)</td>
<td>U00 Model: -100°F (-73°C)</td>
</tr>
<tr>
<td><strong>Maximum Continuous Airflow</strong></td>
<td>5 scfm (2.3 dm³/s)</td>
<td>10 scfm (4.7 dm³/s)</td>
<td>10 scfm (4.7 dm³/s)</td>
<td>10 scfm (4.7 dm³/s)</td>
<td>25 scfm (11.8 dm³/s)</td>
</tr>
<tr>
<td><strong>Total Airflow</strong></td>
<td>600 scf (283 dm³)</td>
<td>4400 scf (2076 dm³)</td>
<td>4400 scf (2076 dm³)</td>
<td>4400x2 scf (2076x2 dm³)</td>
<td>11,000 scf (5191 dm³)</td>
</tr>
<tr>
<td><strong>Total Min. of Operation @ Max Continuous Airflow</strong></td>
<td>120 min.</td>
<td>440 min.</td>
<td>440 min.</td>
<td>880 min.</td>
<td>440 min.</td>
</tr>
<tr>
<td><strong>Unit Weight With Desiccant</strong></td>
<td>1.13 lbs. (0.51 kg)</td>
<td>7.4 lbs. (3.4 kg)</td>
<td>6.8 lbs. (3.1 kg)</td>
<td>15.0 lbs. (6.8 kg)</td>
<td>11.2 lbs. (5.1 kg)</td>
</tr>
<tr>
<td><strong># of Desiccant Bags/Charge</strong></td>
<td>1 Bag **</td>
<td>2 Bags ***</td>
<td>2 Bags***</td>
<td>4 Bags***</td>
<td>5 Bags***</td>
</tr>
<tr>
<td><strong>Pipe Connections</strong></td>
<td>1/4” NPT (BSPP)</td>
<td>1/4”, 1/2” NPT (BSPP)</td>
<td>1/4”, 1/2” NPT (BSPP)</td>
<td>1/4”, 1/2” NPT (BSPP)</td>
<td>1/2” NPT (BSPP)</td>
</tr>
</tbody>
</table>

*With Dry Desiccant at 100 psig (7 bar) and 70°F (21°C)

** Each bag weighs .25 lbs. (.11kg)

*** Each bag weighs .88 lbs. (.40kg)
Models X06, X03, X04, and X25

- **Coalescing Filter**: Should be used prior to the manual desiccant dryer in any lubricated compressor system which does not utilize a system coalescing filter. The coalescing filter removes oil from the compressed air, which prevents the oil from coating the silica gel or mole sieve and destroying its ability to dry the air. Oil contaminated desiccant must be replaced and disposed of properly, as it cannot be regenerated.

- **Afterfilter**: Should be used after the manual desiccant dryer in any system where any amount of desiccant dust, however insignificant, is undesirable. The afterfilter prevents the very slight desiccant dusting, which occurs over time, from proceeding downstream into the compressed air system.

- **Pre-Dryers**: Both the silica gel and mole sieve manual desiccant dryers can have their drying lives extended through the use of a pre-dryer. The silica gel ("000"/"M00") models will typically last over three times as long if a refrigerated air dryer is placed in the compressed air system prior to it. (A plant air system refrigerated dryer will provide the same extended life.) The mole sieve ("U00"/"MU0") models will typically last three times as long if a silica gel ("000"/"M00") model dryer installed prior to the mole sieve dryer. (A plant air system desiccant dryer will provide the same extended life.) Users of either type of manual desiccant dryer who expect a high air flow demand may wish to consider using a pre-dryer. Please see page 4 for exact model recommendations.

### Operation

1. The silica gel desiccant, when visible through the clear polycarbonate plastic bowl, contains a color indicator. It changes from Blue (meaning dry) to Pink (meaning wet) to indicate the need to replace or regenerate the desiccant. (An X05-02-000 moisture indicator can be used with 4A molecular sieve units to perform the same function.) On units with metal bowls, a moisture indicator mounted on the cover performs the same color changing function.

2. The 4A molecular sieve does not change color. For moisture indication an X05-02-000 is recommended. See page 4.

3. Environment friendly desiccant changes color from yellow (meaning dry) to green (meaning wet).

4. By installing two or more units in parallel, higher dry airflows can be achieved.

### Maintenance

1. The only servicing required for silica gel units is when the desiccant color or moisture indicator has changed from Blue (meaning dry) to Pink (meaning wet). Should this color change occur:
   a. **Turn off and depressurize the line containing the dryer unit.**
   b. Loosen the clamp ring and remove the bowl from the top housing. (Figure 1) Proceed to step 2 or 3, as required.

2. Desiccant replacement:
   a. Pour out used desiccant.
   b. Open new container and refill bowl. (Figure 2)
   c. Shake or tap bowl to settle desiccant. Add or remove sufficient quantity to fill Model X03 and X25 unit bowl to 1/8" below inner step, and for Model X06 fill bowl to within 1/2" of the top. (Figure 3)
   d. See replacement parts list for specifics on kit numbers for replacement desiccant.

3. Desiccant regeneration:
   a. — For silica gel ("000") units: Pour out used Pink desiccant onto flat pan. Place Pink desiccant in 350°F (176°C) oven for approximately three hours or until the desiccant color has changed back to Blue.
      — For 13x molecular sieve ("X00") units cannot be regenerated. See page 5 for replacement kits.
   b. Remove desiccant from oven and allow to cool down to ambient temperature.
   c. Pour desiccant back into unit bowl, periodically shaking and tapping to settle the desiccant.

4. Replace bowl and bowl guard, or metal bowl, and clamp ring onto the unit. Be sure clamp ring is securely locked in place before repressurizing the unit.

### CAUTION

Polycarbonate bowls, being transparent and tough, are ideal for use with Filters and Lubricators. They are suitable for use in normal industrial environments, but should not be located in areas where they could be subjected to direct sunlight, an impact blow, nor temperatures outside of the rated range. As with most plastics, some chemicals can cause damage. Polycarbonate bowls should not be exposed to chlorinated hydrocarbons, ketones, esters and certain alcohols. They should not be used in air systems where compressors are lubricated with fire-resistant fluids such as phosphate ester and di-ester types.

Metal bowls are recommended where ambient and/or media conditions are not compatible with polycarbonate bowls. Metal bowls resist the action of most such solvents, but should not be used where strong acids or bases are present or in salt laden atmospheres. Consult the factory for specific recommendations where these conditions exist.

**TO CLEAN POLYCARBONATE BOWLS USE MILD SOAP AND WATER ONLY! DO NOT use cleansing agents such as acetone, benzene, carbon tetrachloride, gasoline, toluene, etc., which are damaging to this plastic.**

Bowl guards are recommended for added protection of polycarbonate bowls where chemical attack may occur.

### WARNING

FAILRE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from The Company, its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application, including consequences of any failure and review the information concerning the product or systems in the current product catalog. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the application are met.

The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by The Company and its subsidiaries at any time without notice.

EXTRA COPIES OF THESE INSTRUCTIONS ARE AVAILABLE FOR INCLUSION IN EQUIPMENT / MAINTENANCE MANUALS THAT UTILIZE THESE PRODUCTS. CONTACT YOUR LOCAL REPRESENTATIVE.
**Recommended Liquid Separators, Filters and Pre-Dryers**

(Use as necessary for specific system requirements)

<table>
<thead>
<tr>
<th>Manual Desiccant Dryer Model Used</th>
<th>Liquid Separator</th>
<th>Particulate Filter/Separator (5 micron)</th>
<th>Coalescing Filter (0.5 micron)</th>
<th>Afterfilter (0.5 micron)</th>
<th>Pre-Drying Manual Desiccant or Refrigerated Air Dryer, For Extended Life Pre-Drying Dryer Used</th>
<th>Total Desiccant Life if Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>X06-02-000</td>
<td>WSA-02-FM0</td>
<td>F16-02-F00</td>
<td>M16-02-MS0</td>
<td>AF1-02-S00</td>
<td>WRA-0010</td>
<td>2,200 SCF</td>
</tr>
<tr>
<td>X03-XX-000/M00</td>
<td>WSA-XX-FM0</td>
<td>F16-XX-F00</td>
<td>M16-XX-MS0/MS0</td>
<td>AF1-XX-S00</td>
<td>WRA-0010</td>
<td>16,000 SCF</td>
</tr>
<tr>
<td>X04-02-000</td>
<td>WSA-02-FM0</td>
<td>F16-02-F00</td>
<td>M16-02-MS0</td>
<td>AF1-02-S00</td>
<td>WRA-0010</td>
<td>(16,000x2) 32,000 SCF</td>
</tr>
<tr>
<td>X25-04-000</td>
<td>WSA-04-FM0</td>
<td>F26-04-F00</td>
<td>M26-04-MS0</td>
<td>AF2-04-S00</td>
<td>WRA-0025</td>
<td>40,000 SCF</td>
</tr>
</tbody>
</table>

**Type 4A Molecular Model Sieve For -100°F (-73°C) Atmospheric Dewpoint:**

<table>
<thead>
<tr>
<th>Manual Desiccant Dryer Model Used</th>
<th>Liquid Separator</th>
<th>Particulate Filter/Separator (5 micron)</th>
<th>Coalescing Filter (0.5 micron)</th>
<th>Afterfilter (0.5 micron)</th>
<th>Pre-Drying Manual Desiccant or Refrigerated Air Dryer, For Extended Life Pre-Drying Dryer Used</th>
<th>Total Desiccant Life if Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>X06-02-U00</td>
<td>WSA-02-FM0</td>
<td>F16-02-F00</td>
<td>M16-02-MS0</td>
<td>AF1-02-S00</td>
<td>X06-02-000</td>
<td>1,800 SCF</td>
</tr>
<tr>
<td>X03-XX-U00/M00</td>
<td>WSA-XX-FM0</td>
<td>F16-XX-F00</td>
<td>M16-XX-MS0/MS0</td>
<td>AF1-XX-S00</td>
<td>X03-XX-000/M00</td>
<td>13,200 SCF</td>
</tr>
<tr>
<td>X04-02-U00</td>
<td>WSA-02-FM0</td>
<td>F16-02-F00</td>
<td>M16-02-MS0</td>
<td>AF1-02-S00</td>
<td>X04-02-000</td>
<td>26,400 SCF (13,200x2)</td>
</tr>
<tr>
<td>X25-04-U00</td>
<td>WSA-04-FM0</td>
<td>F26-04-F00</td>
<td>M26-04-MS0</td>
<td>AF2-04-S00</td>
<td>X25-04-000</td>
<td>33,000 SCF</td>
</tr>
</tbody>
</table>

**Typical Installation Arrangement For Manual Dryers**

**“U00”/“MU0” Models:**

- Prefilter(s) (If desired)
- “U00” Model Pre-Dryer (If desired)
- “U00” Model Dryer
- Afterfilter
- Slight restriction (if necessary) to assure at least 1 SCFM through X05 Moisture Indicator

**“000”/“M00” Models:**

- Prefilter(s) (If desired)
- Refrigerated Air Dryer (If desired)
- “000” Model Dryer

---

**X04-02-000 Dryer**

- **Outlet Port (On Bottom Of Shuttle Valve)**
- **Upper Port In 4-Way Valve To Be Open To Atmosphere**
- **1/4” NPT**
- **Shuttle Valve**
- **4-Way Valve**
- **X03-02-000 Desiccant Dryer (2 Required)**
- **X05-02-000 Moisture Indicator**
- **Coalescing Filter**
- **Liquid Separator (If desired)**

Dimensions:

- **14.42” (366 mm)**
- **12.65” (322 mm)**
- **0.94” (23.8 mm)**
### Replacement Parts List – METAL BOWL Units with Moisture Indicators

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No. X03</th>
<th>Qty.</th>
<th>Part No. X25</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Cover</td>
<td>NNR</td>
<td>—</td>
<td>NNR</td>
<td>—</td>
</tr>
<tr>
<td>2 Screen Assembly</td>
<td>GRP-96-434</td>
<td>1</td>
<td>GRP-96-434</td>
<td>1</td>
</tr>
<tr>
<td>3 Bowl O-Ring</td>
<td>GRP-95-256</td>
<td>1</td>
<td>GRP-95-256</td>
<td>1</td>
</tr>
<tr>
<td>4 Tube Assembly w/s</td>
<td>DRP-96-451</td>
<td>1</td>
<td>DRP-96-451</td>
<td>1</td>
</tr>
<tr>
<td>5 Metal Bowl</td>
<td>DRP-96-450</td>
<td>1</td>
<td>NNR</td>
<td>—</td>
</tr>
<tr>
<td>6 Silica Gel (000)</td>
<td>DRP-85-059</td>
<td>8</td>
<td>DRP-85-280</td>
<td>8</td>
</tr>
<tr>
<td>4A Molecular Sieve</td>
<td>DRP-85-060</td>
<td>8</td>
<td>DRP-85-624</td>
<td>8</td>
</tr>
<tr>
<td>(U00)</td>
<td>DRP-85-061</td>
<td>8</td>
<td>N/A</td>
<td>—</td>
</tr>
<tr>
<td>13x Molecular Sieve</td>
<td>DRP-85-447</td>
<td>8</td>
<td>DRP-85-447</td>
<td>8</td>
</tr>
<tr>
<td>(X00)</td>
<td>N/A</td>
<td>—</td>
<td>N/A</td>
<td>—</td>
</tr>
<tr>
<td>Environment Friendly</td>
<td>DRP-85-447</td>
<td>8</td>
<td>DRP-85-447</td>
<td>8</td>
</tr>
<tr>
<td>7 Moisture Indicator</td>
<td>DRP-95-623</td>
<td>1</td>
<td>DRP-95-623</td>
<td>1</td>
</tr>
<tr>
<td>8 Clamp Ring</td>
<td>GRP-96-404</td>
<td>1</td>
<td>GRP-96-404</td>
<td>1</td>
</tr>
</tbody>
</table>

**NKR**: Not normally replaced

**The moisture indicator contains a weep orifice to provide an air sample to the moisture indicating paper. Air leakage from this indicator is necessary and normal.**
WILKERSON WARRANTY

Wilkerson products are warranted to be free from defects in material and workmanship, under proper use, installation, application and maintenance in accordance with Wilkerson’s written recommendations and specification for a period of one year from the date of shipment from the factory (refrigerated dryers are warranted for 2 years). Wilkerson’s obligation under this warranty is limited to, and the sole remedy for any such defect shall be, the repair or replacement (at Wilkerson’s option) of unaltered products returned to Wilkerson and proven to have such defect, provided such defect is promptly reported to Wilkerson within said one-year period.

This is the only authorized Wilkerson Warranty and is in lieu of all other express or implied warranties or representations, including any implied warranties of merchantability or fitness, or of any other obligations on the part of Wilkerson.

Warranty claims must be submitted and shall be processed in accordance with Wilkerson’s established warranty claim procedure. In no event will Wilkerson be liable for business interruptions, loss of profits, personal injury, costs of delay or for any other special, indirect, incidental or consequential losses, cost or damages.

WARNING: USE LIMITATIONS

Wilkerson’s warranties are void, and Wilkerson assumes no responsibility for any resulting cost, loss, injury or any other damages whatsoever, with respect to any plastic bowl unit for which a bowl guard is standard equipment if the unit is placed in service without the bowl guard and, except as otherwise specified in writing by Wilkerson, with respect to any Wilkerson products which are used in other than compressed air service. Specific warnings with respect to these and other use limitations appear elsewhere in this catalog.

Wilkerson maintains a policy of ongoing product development and improvement. We therefore reserve the right to change dimensions specification and design without notice.

DO NOT PLACE PLASTIC BOWL UNIT IN SERVICE WITHOUT BOWL GUARD INSTALLED

Plastic bowl units are sold only with bowl guards with the exception to miniature units (C04, F00, L00, and M00). To minimize the danger of flying fragments in the event of plastic bowl failure, the bowl guards should not be removed. If the unit is in service without the bowl guard installed, manufacturer’s warranties are void, and the manufacturer assumes no responsibility for any resulting loss.

If the unit has been in service and does not have a bowl guard, order one and install before placing back in service.

CAUTION

Certain compressor oils, chemicals, household cleaners, solvents, paints and fumes will attack plastic bowls and can cause bowl failure. Do not use near these materials. When bowl becomes dirty replace bowl or wipe only with a clean, dry cloth. Reinstall bowl guard or buy and install a bowl guard. Immediately replace any crazed, cracked, damaged or deteriorated plastic bowl with a bowl or a new plastic bowl and bowl guard.

CAUTION

Except as otherwise specified by the manufacturer, this product is specifically designed for compressed air service, and use with any other fluid (liquid or gas) is a misapplication. For example, use with or injection of certain hazardous liquids or gases in the system (such as alcohol or liquid petroleum gas) could be harmful to the unit or result in a combustible condition or hazardous external leakage. Before using with fluids other than air, or for non-industrial applications, or for life support systems, consult Wilkerson Corporation for written approval.

SOME OF THE MATERIALS THAT WILL ATTACK POLYCARBONATE PLASTIC BOWLS.

Acetaldehyde  Chlorobenzene  Methylen chloride
Acetic acid (conc.)  Chloroform  Methylen salicylate
Acetone  Cressol  Milk of lime (CaOH)
Acrylonitrile  Cyclohexanol  Nitric acid (conc.)
Ammonia  Cyclohexene  Nitrobenzene
Ammonium fluoride  Dimethyl formamide  Nitrocellulose lacquer
Ammonium sulfide  Dioxane  Phenol
Anaerobic adhesives and sealants  Ethane tetrachloride  Phosphorous hydroxy chloride
Antifreeze  Ethyl acetate  Phosphorous trichloride
Benzene  Ethyl ether  Propionic acid
Benzonitrile  Ethylamine  Pyridine
Benzyl alcohol  Ethylene chlorohydrin  Sodium hydroxide
Brake fluids  Ethylene dichloride  Sodium sulfide
Bromobenzene  Ethylene glycol  Styrene
Butyric acid  Formic acid (conc.)  Sulfuric acid (conc.)
Carbolic acid  Freon (refrig. & Propell.)  Sulphural chloride
Carbon disulfide  Gasoline (high aromatic)  Tetrahydro napthalene
Carbon tetrachloride  Hydrazine  Taphene
Cautious potash solution  Hydrochloric acid (conc.)  Toluene
Cautious soda solution  Lacquer thinner  Turpentine
Methyl alcohol  Xylene  Xylol

TRADE NAMES OF SOME COMPRESSOR OILS, RUBBER COMPOUNDS AND OTHER MATERIALS THAT WILL ATTACK POLYCARBONATE PLASTIC BOWLS.

Atlas “Perma-Guard”  National Compound #11
Buna N  “Nyloflex” VC-3
Cellulose #150 and #220  Parco #1306 Neoprene
Crylex #5 cement  “Permabond” 910
*Eastman 910  Pertron PD287
Garlock #98403 (polyurethane)  Prestone
Haskel #568-023  Pydraul AC
Hilgard Co.’s Hil phene  Sears Regular Motor Oil
Houghton & Co. oil #1120, #1130 & #1055  Sinclair oil “Lily White”
Houkansaite  Stauffer Chemical FYRQUEL #150
Kano Kroil  Stillman #269-75 (polyurethane)
Keystone penetrating oil #2  Stillman #513-70 (neoprene)
*Loctite 271  Tennergas
*Loctite 290  Telar
*Loctite 601  Tenerco anderol #495 & #500 oils
*Loctite Teflon-Sealant  Titon
Marvel Mystery Oil  “Vibra-tite”
Minn. Rubber 368Y  Zerez

*When in raw liquid form.

We cannot possibly list all harmful substances, so check with Mobay or the General Electric office for further information on poly carbonate plastic.

The trade names “EconOmist” and “Flow-Guide” are registered at the United States Patent Office; “Auto-Fill,” “Dial-Air,” “Flex-Drain,” “Mainliner” and “Whirl-Flo” are trade names of the Wilkerson Corporation.

WILKERSON PRODUCTS ARE PROTECTED BY THE FOLLOWING U.S. PATENT AND PATENTS IN OTHER COUNTRIES, ADDITIONAL PATENTS ARE PENDING.

3,631,578  3,667,403  3,762,224  4,215,790
3,215,790  3,793,803  4,718,245  3,793,803
3,858,403  D-292-310  D-229-629  4,215,790
4,289,335  3,452,511  4,559,065  4,631,073
4,689,969  4,696,320  3,889,484  3,945,465
4,631,073  D-294-848

WILKERSN

Customer/Technical Service  Tel: (269) 629-2550
Pneumatic Division  Fax: (269) 629-2475
Richland, MI 49083