

# **Climate Control Lubricated Reciprocating Air Compressor**

# Specification

#### General

The Powerex lubricated Climate Control Series tank mounted system is designed to provide a source of air to power pneumatic systems for industrial applications where the quality of compressed air is critical.

# **Air Compressor System**

The package shall include one or two lubricated air compressor/s and associated equipment, one ASME air receiver, one optional dryer, and one optional magnetic starter/alternating control panel. The only field connections required will be system discharge, power connection at the control panel and dryer, and condensate drain connection. All interconnecting piping and wiring shall be included and operationally tested prior to shipment. Vibration isolation pads are included with the system.

# **Compressor Pump**

The compressor pump shall be a single stage, oil lubricated, reciprocating design. Each compressor includes individually precision machined cylinders and lap joint rings to provide the lowest oil carryover in the industry. Oil carryover rate shall be guaranteed less than 2 PPM. A fan type flywheel provided to maintain low operating temperatures. Each compressor unit shall be capable of continuous-duty operation. Compressors to be shipped with an initial fill of Mobil DTE Heavy compressor oil.

## Motor

Each compressor shall be belt driven by a 60 cycle, 1750 RPM, ODP NEMA construction motor. Motors operating at speeds higher than 1750 RPM shall not be acceptable. OSHA compliant belt guards shall be provided.

#### Air Receiver

The system shall include a horizontal ASME rated air receiver, rated for 200 PSI MAWP. The air receiver shall be equipped with a pressure gauge, safety relief valve, discharge shut-off valve, and manual tank drain.

Optional drain valves include: 1) 115V "No-loss" type automatic tank drain, 2) 115V automatic solenoid timer drain, or 3) automatic float style drain.

### **Optional Control Panel**

### Simplex

The system shall include a UL listed magnetic starter in a NEMA 1 enclosure with 3-leg overload protection, and overload reset button. A NEMA 1 pressure switch shall control the start/stop operation of the compressor and shall operate in the range of 80-100 psig.

## **Duplex**

The system shall include a UL listed control panel in a NEMA 1 enclosure with alternating relay and pump selector switch. The following accessories are included for each pump: Magnetic

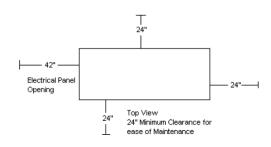
starter with 3-leg overload protection, and overload reset button. Compressor operation is start/stop, with each compressor alternating lead and lag positions. Both compressors will operate simultaneously if system demand requires.

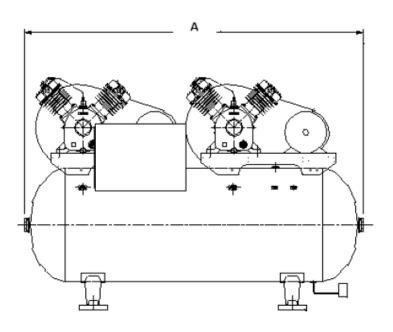
# **Optional Refrigerant Air Dryer**

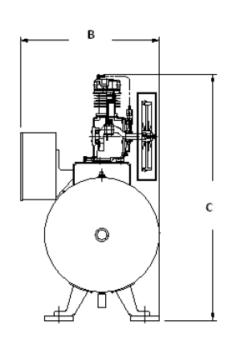
The Powerex air drying system shall be tank mounted with compressor, and shall provide air at a 35-38°F pressure dew point. The refrigerated compressed air dryer is non-cycling, direct expansion, using R-134a refrigerant. A constant pressure expansion valve is provided to maintain a 38°F evaporator temperature. The dryer is self-regulating for large load swings, and includes a 3-micron filter/separator with automatic condensate drain. Option also includes a .01 micron after filter, a dryer bypass valve, a pressure regulator and an installed automatic solenoid timer drain.



| Dimensions |        |        |        |        |  |  |  |  |  |  |
|------------|--------|--------|--------|--------|--|--|--|--|--|--|
| Model      | Dim. A | Dim. B | Dim. C | Outlet |  |  |  |  |  |  |
| AD1101     | 42"    | 26"    | 38"    | 3/″    |  |  |  |  |  |  |
| AD0101     | 42"    | 26"    | 38"    | 3/″    |  |  |  |  |  |  |
| AD0203     | 64"    | 29"    | 45"    | 3/″    |  |  |  |  |  |  |
| AD0303     | 65"    | 29"    | 45"    | 3/″    |  |  |  |  |  |  |
| AD0504     | 72"    | 29"    | 52"    | 1"     |  |  |  |  |  |  |
| AD0754     | 72"    | 29"    | 55"    | 1"     |  |  |  |  |  |  |







| Climate Control Air Compressor |                       |           |          |        |               |      |               |      |              |     |  |
|--------------------------------|-----------------------|-----------|----------|--------|---------------|------|---------------|------|--------------|-----|--|
| Model HP <sup>1</sup>          | HP <sup>1</sup> Phase | Tank Size | SCFM @   | BTU/Hr | DTIL/Ur dB(A) |      | System F.L.A. |      | System       |     |  |
|                                | Pilase                | (gal)     | 100 PSIG |        | Level         | 208V | 230V          | 460V | Weight (lbs) |     |  |
| AD1101                         | 1 (2)                 | 1         | 30       | 6.8    | 5,090         | 72   | 14.8          | 13.4 | -            | 270 |  |
| AD0101                         | 1 (2)                 | 3         | 30       | 6.8    | 5,090         | 72   | 6.2           | 6    | 3            | 270 |  |
| AD0203                         | 2 (2)                 | 3         | 80       | 13.4   | 10,180        | 73   | *11.9         | 10.8 | 5.4          | 500 |  |
| AD0303                         | 3 (2)                 | 3         | 80       | 20.2   | 15,270        | 76   | 17.1          | 15.4 | 7.7          | 650 |  |
| AD0504                         | 5 (2)                 | 3         | 120      | 37.2   | 25,450        | 79   | 28.0          | 25.4 | 12.7         | 930 |  |
| AD0754                         | 7.5 (2)               | 3         | 120      | 56.0   | 38,175        | 81   | 41.0          | 37.0 | 18.5         | 950 |  |

## Notes:

- 1 Actual BHP is less than rated name plate. Contact Powerex for BHP rating.
- 2 3 Year Limited Warranty.
- \* System is usable at 208 volts, but should not be used at any value below that voltage.