

## COMPRESSOR COOLING REQUIREMENT DOCUMENT

### 1. Compressor Ventilation Information:

When installing a compressor system the most common error is made in the inadequate ventilation of the room and the compressor unit leading to early component failure and a short purification cartridge life. Even a larger room will have an over heating issue if there is not an appropriately sized exhaust fan and the movement of air.

#### **Installation procedures:**

- Place the equipment as close as possible to the fresh cooling air source. It is very important to have a continuous supply of cool air to maintain the compressor at the correct operating temperature.
- It is recommended the inlet source of the cooling air be low as possible in the wall and preferably located close to the compressor mounted cooling fan assembly.
- The opening area of the intake air is to be 2.5 times the area in square feet of the compressor mounted cooling fan.
- A full flow exhaust fan is to be installed high on the wall above the compressor to exhaust the hot air, the fan is to be interlocked to start when the compressor is in operation.
- Enclosed ultra-silent units are to have a duct installed from the compressor to the exhaust fan.

### 2. Fan volume in SCFM based on the compressor size:

- **Compressors of 5 to 7.5 HP** are to have an exhaust fan size of 1200 to 1500 SCFM (for unit size IK100II to IK120II).
- **Compressors of 10 HP** are to have an exhaust fan size of 1800 to 2200 SCFM (for unit size IK12.14II).
- **Compressors of 15 to 20 HP** are to have an exhaust fan size of 3000 to 3500 SCFM (for unit size IK15.1II to IK18.1II).
- **Compressors of 30 to 50 HP** are to have an exhaust fan size of 5000 to 7500 SCFM (for unit size IK22.0 to IK23.0).

Note compressor rooms will always require an exhaust-venting fan in order to stop the recycling of the cooling air and provide reliable compressor service life and the longest filter cartridge process capacity.

JORDAIR - "RELIABILITY & SAFETY" - BAUER

101-7950 Huston Road, Delta, B.C., V4G 1C2

Tel: 604-940-8101 Fax: 604-940-8131

Web site [www.jordair.ca](http://www.jordair.ca)

Doc. Jordair COOLING-2006