

AirEx Type Air Cooler AX/AXD

Installation, Start-up, Operating, Maintenance and Storage Procedures

GENERAL SAFETY INFORMATION

Never exceed the maximum allowable temperature or pressure ratings.

Maximum Operating Pressure: 250 PSI

Maximum Operating Temperature: 250°F

Never exceed the published maximum allowable flow rate.

Be sure the system pressure is relieved prior to opening the cooler.

Disconnect the electrical power before servicing.

The fluid being cooled should be compatible with Aluminum.

UNPACKING

Prior to installation, unpack the unit and check for loose or missing pieces. Minor damage to the cooling fins can be corrected by gently bending them straight. Caps should be removed from the fluid connections and a visual inspection performed to check for any debris or corrosion that may have occurred during storage or shipment.

STORAGE

Product should be stored in a dry area that has a constant temperature. Temperature changes in the storage area cause condensation to form inside the heat exchanger. This condensation then causes corrosion which causes product failure. This failure is not covered by the guarantee. If this criteria cannot be met, the cooler should be stored in a sealed plastic bag with desiccant added to absorb the moisture.

Storage Term:

6 Months: No specific internal corrosion protection procedures are required. All openings should be sealed with plastic plugs.

7-24 Months: Coolers should be flushed with oil and all openings re-sealed with plastic plugs.

25+ Months: Coolers should be completely filled with oil and sealed. These coolers should be flushed, inspected and re-sealed every 24 months.

INSTALLATION

Mounting: The cooler should be mounted in such a fashion that there is no restriction to the cooling air supply. Recirculation of warmed up air must be avoided. If mounted in a closed area, sufficient ventilation must be provided. Corrosive atmospheres can cause premature failure. If mounted in a location where ambient temperature may be quite cold, allowance has to be made for high oil viscosity, and potential freezeup. A temperature controlled by-pass valve or an additional oil heating system may be installed.

Care should be taken to select a location that has reasonably clean cooling air. Dirty air fouls the unit and causes overheating. The cooler should be securely mounted to avoid injury.

INSTALLATION

Piping: All piping must be properly supported to prevent strain to the cooler. Pipe sizes should be based on the oil flow and pressure drop requirements, not the oil coolers' connection size. Where excessive vibration may be a concern, flexible connectors should be used to eliminate stress.

ELECTRICAL

Electrical connections must comply with all local codes. The fan motors should be connected to a power supply that matches that of the motor nameplate. The fan blade should be spun by hand prior to hookup to make sure it has proper clearance. This step is important as shifting during shipment may have occurred.

START-UP

Check fan rotation to be sure it matches the rotation arrow on the unit. Make sure oil connections are properly sealed. Check for blockage to the air supply.

OPERATION

Once the unit is installed, the system may be operated normally. If the source of air is other than the main engine fan, be sure that the fan is functioning properly.

MAINTENANCE

Be sure to disconnect the power supply prior to servicing.

Inspect the product regularly for corrosion, and dirty or clogged heat transfer surfaces.

External cleaning: this can be done by either washing the cooler with a mild cleaner (compatible with aluminum), or with compressed air. A power spray washer works well. Care should be taken not to damage the fins.

Internal cleaning: The cooler should be disconnected, and a cleaner suitable for removing the type of deposit, yet safe on aluminum should be recirculated through the cooler until clean. Make sure the internals are rinsed thoroughly after cleaning. It may help to blow the unit out with compressed air.

