The LD-1000 Air Dryer increases the availability of the entire train by providing clean, dry air with best-in-class lifecycle costs. Braking systems equipped with the Knorr-Bremse Air Dryer improve reliability as well as safety, so that freight rolling stock can keep up with the industry’s increasing demand for on-time arrival.

**Customer Benefits**
- 10-year product life prior to major overhaul due to superior air dryer pre-filtration
- Lengthened life of all downstream components
- Low lifecycle costs
- Visual indication of the proper function of the air dryer through “Blue-Eye” humidity indicator
- Prevention of freezing within the locomotive and train brake system as a result of dry air
- Optimized closed-loop regeneration minimizes purge air losses, providing significant energy savings.

**Applications**
- Conventional locomotives
- Heavy-haul freight locomotives

**LD-1000® Air Dryer System**
**INLET AIR**

- **Pressure**: 75–150 psig
- **Temperature**: -40 °F (-40 °C) to 158 °F (70 °C)
- **Rated flow**: 100 SCFM (2832 l/min) nominal, 240 SCFM (6800 l/min) maximum
- **Oil contamination**: 40 mg/m³ (ISO 12500-1)

**OUTLET AIR**

- **Air quality**: ISO8573-1:2010
  - Oil: Class 3, Particles: Class 3
  - Dew point suppression: >72 °F (40 °C) at 100 SCFM and 95 °F (35 °C)

**ELECTRICAL INTERFACE**

- **Power**: 72 VDC +/- 30%
  - Fault-tolerant during locomotive cranking (20 V DC)
- **Connector**: VEAM CIr06F-16S-1S-F80 or equivalent
- **Connector pin configuration**: Pin “A” DC power in, Pin “C” DC power ground
- **Plating**: black zinc-cobalt or electroless nickel
- **Control**: Automatic, self-contained, no external signal required

**KEY FEATURES**

- Minimized purge air use as well as longer component life due to fewer valve operation cycles, both as a result of intelligent regeneration control
- Easy installation, interchangeable with typical AAR unit
- Single-valve block LRU in which all valve elements controlling the draining of the 3-stage pre-filtration and the switching of the desiccant circuits are co-located, which is replaceable as a single module
- Required service can be completed in less than 15 minutes without disturbing electronics or pneumatics