

# Adaptive Frequency™ Drive R'newal™ Service Program

Renew Your Equipment Performance and Reliability



## AFDB, AFDC, AFDD, AFDF and AFDE

A Trane Adaptive Frequency™ Drive (AFD) is an excellent choice for CentraVac™ chillers. By installing an AFD, the power consumption of a typical chiller system is reduced by 15 percent to 25 percent. The initial cost of investment is recovered four times over by the time the AFD reaches ten years of age. While designed for long life, the drive does have power components that age over time. The most important drive components are the AFD power module and input capacitor bank – these parts allow the drive to take incoming 60 Hz electrical power and convert it to frequencies as low as 38 Hz. This results in long-term energy savings and lower life-cycle costs. Like the rest of the chiller system, these components require maintenance to ensure a lifetime of peak performance.

The AFD R'newal™ service program is a comprehensive factory warranty solution designed to restore the major components of the chiller AFD to their original operating condition and life expectancy. The R'newal program saves time and money and is an excellent alternative to running the major components of an AFD to failure.

## Three Reasons to Consider

### Financial Savings

A planned AFD R'newal can save money because the work can be performed during the off season or during planned downtime. Unplanned failures lead to frustration and expensive repairs. These kind of surprises often require expedited parts shipments and overtime work. With the R'newal service program, the work can be scheduled to minimize business interruptions.

### Reliable Operation

Over the years, your Trane AFD has provided efficient chiller operation. However, all things age and the best way to ensure that your AFD continues to provide the reliability you expect is to utilize the AFD R'newal service program. Critical components are restored to meet current OEM specifications.

### Factory Warranty

Each AFD R'newal includes a long-term parts and labor warranty on the power module and power capacitors. Also, the warranty reduces catastrophic failure cost concerns during the warranty period. To obtain the extended warranty option, the chiller must be under a Trane Service Agreement for the duration of the extended warranty coverage.

## Key Factors to Consider for a R'newal

- Chillers with frequent start and stop routines, high temperature ambient conditions, dirty environments, installations with poor power or high operational hours
- AFDs experiencing a pattern of over-temperature trips
- Installations and operations that are highly sensitive to downtime
- When it makes more sense to maintain an existing AFD or chiller instead of replacing it
- When the preference is to sustain the chiller using planned capital spending instead of unplanned maintenance expense

The CenTraVac chiller AFD R'newal program applies to Trane water- and refrigerant-cooled models AFDB, AFDC, AFDD, AFDE and AFDF. As a requirement of the R'newal process, the existing AFD power module must be returned to Trane after receipt of the remanufactured power module. We will replace worn materials and restore the key AFD components equivalent to new component standards. During the R'newal process, Trane technicians will inspect AFD components such as disconnect switches, contactors and terminals for unexpected wear. Any additional repairs will be quoted separately and will be done upon approval.

### Standard Procedures

- Replace the AFD power module with a new electrolytic capacitors, rectifiers, transistors and control boards
- Replace reactor capacitors (if present)
- Replace unit cooling fans
- Replace water-cooling pump seal
- New Trane R'newal nameplate and serial number
- Trane Standard Warranty on fans and other components
- Trane Extended Warranty on power module and capacitor bank

### Optional Procedures

- AdaptiView controls upgrade from UCP2 controls or CH530 controls
- New water-coolant motor and pump (recommended for water-cooled drives expected to exceed 80,000 hours operation)
- New heat exchange assembly
- Conversion of water-cooled AFD from condenser to evaporator cooling source
- Chiller bearing protection upgrade to standard components used on new Trane CenTraVac AFD chillers

## Trane Expertise

The Trane AFD R'newal service program minimizes downtime, extends useful chiller life, reduces unplanned costs, and ensures continued return on investment. The work is completed by Trane factory-authorized service technicians focusing on minimizing unnecessary downtime and nuisance for building owners and tenants. All of the renewed components meet current Trane AFD specifications. Each R'newal drive includes a new Trane nameplate and a standard parts and labor warranty with options for extended warranty as well.

Learn more at [trane.com](https://trane.com)



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