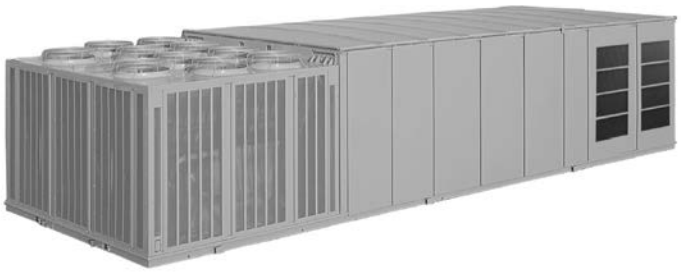
Product Specifications

IntelliPak™ I

eDriveTM Direct-Drive Plenum Supply and Hydronic Heat Pre-Engineered Special (20-75 ton)



March 2020 **RT-PRC072B-EN**

In 2013 we introduced the eDrive™ Direct-Drive Plenum (DDP) supply fan as an option in the 20-75 ton IntelliPak I cooling only units (SAHL & SXHL). Trane now provides the DDP with hydronic heat, either hot water or steam, as a pre-engineered special. This addition helps boost the full load efficiency in order to meet applications requiring focus on energy efficiency. This special is allowed with all DDP widths (80W, 120W, and for 50-55 ton, the 100W), as well as the supply airflow measurement piezometer option. This document can be used as a reference for putting together a submittal.

Mechanical Specifications

The mechanical specifications for both Hydronic heat and Direct Drive plenum supply can be found in the IntelliPak I catalog (RT-PRC036*-EN). For quick reference:

eDrive™ Direct-Drive Plenum Supply Fan

The eDrive™ direct drive plenum supply fan shall be [one] [two] single width, single inlet, 9-blade plenum fan. Fan blades shall be aluminum backward-inclined airfoil. Plenum fans shall be direct driven.

Entire assembly shall be completely isolated from unit and fan board by 2" deflection spring isolation. Multiple fan widths shall be available to optimize efficiency. Fan shall not require routine maintenance such as fan bearing lubrication, belt tensioning and replacement, sheave alignment, and set screw torque checks.

Optional Supply Airflow Measurement (Piezometer)

Plenum supply fan shall have an airflow measurement device to measure differential pressure and to calculate fan airflow. The device shall be capable of measuring airflow within ± 5 percent total accuracy when operating within the stable operating region of the fan curve. Fan airflow performance and noise levels shall not be affected by the installation of the device. The fan inlet shall not be obstructed by the airflow measurement device.

Steam Heating Option

Steam coils shall be Type NS, with non-freeze steam distribution circuits. Distributor tubes shall be located concentrically within condensing tubes to assure even steam distribution. Coils shall be pitched to provide complete drainage. Steam modulating valve with actuator shall be provided.

Hot Water Heating Option

Hot water coils shall be Type 5W and factory-mounted in the rooftop unit to provide complete drainage of coil. Hot water modulating valve with actuator shall be provided.

eDrive, Direct Drive Plenum

- 20-55 ton single fan design
- 60, 70 and 75 ton units will have 2 fans
- Non-banded design
- Piezometer ring option
- Up to 20% higher static efficiency than traditional FC fans
- Reduced maintenance
  - No belts to adjust
  - No fan bearing lubrication
  - Reduced filter change-out (belt particles)
- Startup/ commissioning of max CFM
  - FC- Belts
  - DDP- Variable Frequency Drive

Performance

In order to get the proper performance for the unit, run the selection in TOPSS as a cooling only (extended casing) unit with the required eDrive™ Direct Drive Plenum Supply fan. In order to make sure the DDP fan will work for your application, use the Pressure Drop table in the catalog to get the additional pressure drop for the hydronic heat. Add this value into the supply duct ESP. The output will be the DDP HP and RPM required. The electrical data from this selection will also be what is on the nameplate.

For hydronic heat performance, run the unit in TOPSS as hydronic heat with a Forward Curve (FC) supply fan. The heating outputs will be what the application requires.

Disallowables

The disallowables for each option will hold true to what is in Job Configurator (Lynx).

Ordering

The unit must be ordered as a cooling only, extended casing with the eDrive™ DDP fan needed. Contact Product Support with the pricing table for the cooling only DDP unit and attached the hydronic heat for your application. Pricing for the hydronic heat design special will be handled via DSPA.

Pricing

Please contact Product Support for pricing.

Lead Time

Extended B = Standard + 4 weeks

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