



VLT® HVAC Drive unleashes the full HVAC potential

The VLT® HVAC Drive, built on Danfoss' new modular plug-and-play platform and dedicated to HVAC applications is an intelligent part of the intelligent building. VLT® HVAC Drive gives the lowest cost of ownership and makes VLT® HVAC operation pure child's play.

Saves energy

The VLT® HVAC Drive saves energy basically due to its energy efficiency of 98% during operation. This combined with features like Sleep Mode, Automatic Energy Optimisation and Flow Compensation makes it extremely energy efficient.

Save money

The modular design and a host of options allows for low initial investments and low cost upgrade according to future needs. Options can at any time be added or upgraded.

Small investment

The VLT® HVAC Drive is available in a range of versions, from the basic version, serial communication capabilities and I/O configuration right up to a fully equipped and personalized drive with all relevant HVAC I/O points and protocols. Delivered from factory.

No extra assembly work on-site!

Save time

Operators, equipment and control systems all communicate effortlessly with the VLT® HVAC Drive. It is fluent in all common BMS network protocols and displays every alphabet. 27 languages, e.g. English, German, Mandarin or Cantonese are available.

The award-winning Local Control Panel constantly improves on the intuitive man-machine interface and Automatic Motor Adaptation and Automatic Energy optimisation support fast commissioning.

The VLT® HVAC Drive is practically maintenance free due to a series of self protecting and monitoring features and a durable mechanical design. All features that makes set-up and operation quick and easy.

Save space

Due to its small size, the VLT® HVAC Drive is easily mounted inside any HVAC unit or panel. It is designed for close side by side mounting and due to its efficiency and a clever cold plate technology, heat dissipation is no problem. As VLT® HVAC Drive is available with protection class IP66, panels and cabinets can be omitted.

Dedicated to HVAC

Danfoss has unequalled experience in advanced drive technologies for HVAC applications.

This experience was used to optimise features in the VLT® HVAC Drive and make it the perfect match for pumps, fans and water chillers (compressors) in buildings fitted with sophisticated HVAC solutions.

50° C ambient temperature

The robust VLT® HVAC Drive is designed to work at maximum output in an ambient temperature up to 50° C.

Suitable for "slave" operation

The drives modular structure makes it suitable for "slave" operation mastered by BMS, PLC's or DDCs.

Stand-alone unit

VLT® HVAC Drive is also an intelligent stand-alone unit via:

- | Built-in Real Time Clock
- | Programmable actions
- | Smart Logic Controller

| 4 auto-tuned PID controllers

Fire override mode

Fire Override Mode helps the fire escape routes remain free of smoke, overrides the drive's self-protecting features and keeps the fan running as long as possible during a fire.

Automatic Energy Optimisation

The standard feature AEO provides optimized motor magnetisation at all speeds and loads. AEO increase energy efficiency by 5-15% at partial loads.

Flow compensation

Significant energy savings and reduced installation costs comes from flow compensation in both fan and pumps systems. It takes only a pressure sensor mounted close to the fan or pump to give a reference to keep constant pressure at the discharge end of the system. The drive constantly adjusts the pressure reference to follow the system curve.

Energy monitoring

The VLT® HVAC Drive provides a complete range of information on energy consumption. Choose to have the absolute energy consumption divided into hours, days or weeks. Or choose to monitor a load profile for the application.

Energy analysis

This data can even be uploaded to the VLT® Energy Box, the PC software that performs in-depth real life/true energy analysis of your application and displays the payback time for the drive.