

Buying is the easy part - commissioning is decisive

The choice of variable speed drives influences the overall economy for a project or production not only by its price. Functionalities and programmable features might complicate installation and commissioning through the whole product lifetime and are therefore equally important for the lifetime economy. Danfoss Drives has done the hard work, designing the simplest to use drive on the market.

In the development and design phase, Danfoss Drives are very focused on factors like easy installation and commissioning. Comprehensive design studies involving key persons from the markets in question and experts in man machine interface design are used to optimise the user interface.

Easy connections

Terminals should be sized for the wires typically used and connections established easily and reliably without special tools. Spring-loaded cage terminals allow connections to the VLT® AutomationDrive using a standard type of screwdriver. The spring cage terminals ensure reliable electrical contacts as these are resistant to vibrations and thereby reduce hazards due to loose power connections.

To facilitate installation, reinstallation and repair, VLT® drives connections are made pluggable. This reduces downtime due to reinstallation and repair.

Easy screening

Screening of motor cables is essential to eliminate electro magnetic disturbance of appliances near the drive. Screening of control and signal cables is important to eliminate malfunction due to induced electrical noise. The VLT® AutomationDrive is designed to guide the installer to an appropriate installation: Well-designed cable tracks, distant from sensitive components, are obvious choices for the installer to use as are the spring-loaded clamps mounted at the cable entry point to make screening and earthing natural and easy.

Easy set-up

When the variable speed drive is installed, its preset default parameters makes it ready to operate a motor, although the performance may be limited.

Motor performance depends on proper settings of the motor specific details. VLT® drives from Danfoss Drives have a quick menu function with only the most important parameters for basic operation available and they have default values for Danfoss Bauer Geared motors.

Motor values for other than Danfoss motors are set easily and accurately using the Automatic Motor Adaptation (AMA) in the quick menu. The AMA function optimises the settings to the actual motor, compensating for tolerances in the electrical characteristics of the motor, including the motor cable. The AMA function makes the setting without turning the motor shaft, which allows the motor to remain connected to the machine during commissioning.

Extended menus are available direct from the Local Control Panel, and all parameters and information displays are in clear text - in any language of your choice. If needed, a comprehensive manual is delivered in your language.

Programming and monitoring can also be done from a PC via the USB port using the user-friendly PC-software MCT10.



VLT® AutomationDrive FC 300 is extremely easy to commission. An example: Cables are connected without screws in spring loaded cage clamps – and these can be unplugged without tools.