

## The drive you make fit anywhere

**Danfoss Drives new modular generation covers all applications. You can configure a specialized drive for any application on one common basis and can settle with one supplier, one set-up concept, one parameter set-up and a minimum of spare stock.**

The variety of applications in which variable speed drives are used is constantly expanding. The number of drives especially developed for special applications has of course grown with it, leading to a situation where numerous different drives from several different suppliers is required for each production line or automated facility. This leaves customers in a dilemma: to settle for unspecialised and therefore not optimized drives or to deal with an inappropriate diversity of drives and drives suppliers, several commissioning set-ups and a variety of man-machine interfaces.

Demands vary from one application to another and variable speed drive suppliers purchase products specially developed for specific applications. This way customers are offered optimum solutions for specific applications, but specially developed solutions also imply specialised commissioning and maintenance staff with specific skills, tools, and spares.

### **Common user interface**

Danfoss Drives has developed a new series of frequency converters on a single basic concept: On one common platform the drives can be configured and optimized for almost any application in the industry. Customers will benefit from access to a highly flexible series of products with one common, highly intuitive and easy man-machine interface for every drive in the series. Commissioning staff will feel familiar with the concept and a single drives supplier means only a single contact person. The well-defined hardware/software interface means that one module fits with a row of different drives. The required number of spare parts is therefore minimized.

### **Adapts to the future**

The modular concept of the VLT® AutomationDrive makes it highly adaptable to literally any feature and even future options. It will be able to adapt to any newly developed hardware modules and software options in the foreseeable future, and therefore easy to upgrade. Modularity allows you the benefit of buying on a need-to-have basis without losing future possibilities. You can save the costs of more sophisticated features until you need them.

### **A range in speed- and torque performance**

An application might require precise torque control, precise speed control, neither or both. Demand for accuracy in speed or torque can point to two or three different designs of frequency converters, from simple speed control to advanced flux vector control. The AutomationDrive can be configured to meet your specific demands.

### **A range in control and communication performance**

Variable speed drives are able to control numerous functions in a machine. One drive might feature a simple condition controller for programming input and output signals. Another may feature a free programmable area in the software, where users can make their own programs for controlling the machine. Connected to a fieldbus system the drives might control several parts of the production line or work as an actuator only, responding to commands given through the fieldbus and respond with information on status. Demands to the control are different, but the commissioning staff benefits from a common user interface and common interaction possibilities.

### **A range in safety, enclosure class and influence on environment**

Installing electronic devices in industrial environments calls for precautions. The products must be configured to meet requirements in the actual case. Distortion in the mains power supply, electromagnetic emission, and risk of hygienic pollution threatens the production environment and overload, heat, humidity, detergents and mechanical hazards threaten the drive itself.

The drives must therefore be armed with options and filters to meet the specific demands of the installation and to ensure trouble free function of the drive itself.

A variety of different enclosure grades and conformal coating of the printed circuit boards (if required by corrosive atmosphere) are acknowledged VLT® drives features that of course are found in future VLT® drives series too.