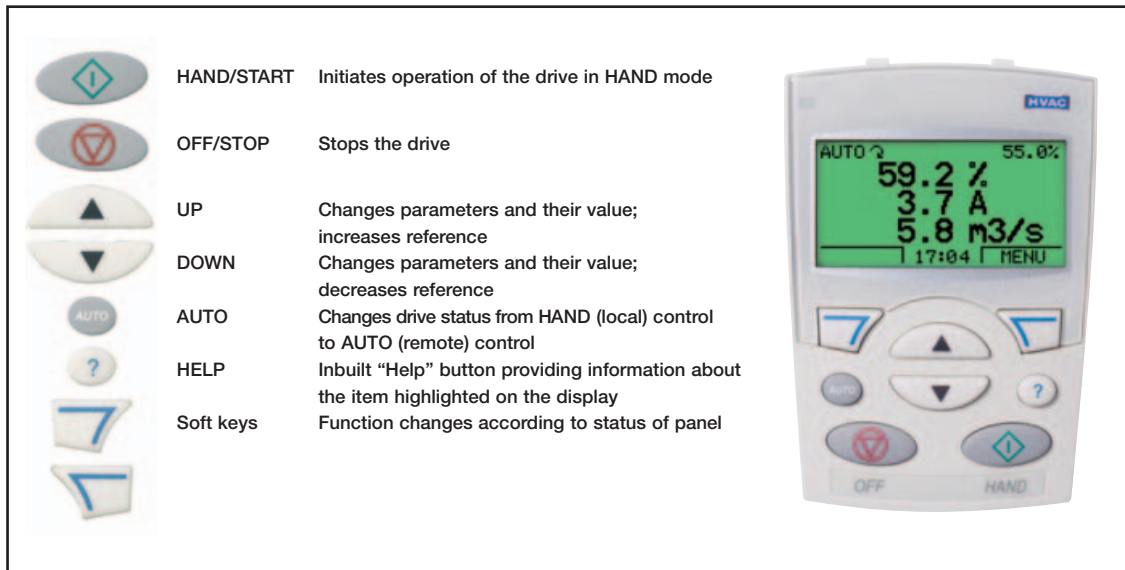


# Enhanced control panel for HVAC applications



The HVAC control panel provides on-board help functions and software assistants, as well as a large graphical display and soft keys, providing greater functionality.

## HVAC control panel

A HVAC control panel that can be navigated as simply as a mobile telephone, has been further improved by ABB for its range of AC drives for HVAC applications.

The result is a control panel that makes drives extremely easy to program, leading to quicker commissioning and set up as well as enabling rapid fault diagnosis.

## Soft keys

The detachable, multi-lingual and alphanumeric control panel features two soft keys, the function of which is shown on the display, depending on the panel status.

Should the user lose their way at any point, an inbuilt "Help" button brings on-screen advice. The ABB drive for HVAC applications is the first on the market to carry this feature.

## Online assistants

The HVAC control panel guides users through the programming process. Parameter setting with the panel is more straightforward, as an assistant menu structure presents the various options in a clear text format.

New and enhanced assistants further improve the control panel functionality.

The inbuilt PID controllers and real-time clock functions have their own assistants.

The new serial communications assistant provides a convenient way to set up drive's fieldbus connectivity.

With the timed functions assistant the drive can be programmed to use the real-time clock as a control source. For example, it can start and stop the drive, change reference and control relay outputs at programmed times. This eliminates the need for an external clock device. The control panel has a battery to ensure the continued operation of the real-time clock even when power is not connected to the drive. The real-time clock adjusts itself automatically for summer and winter time.

Start-up assistant helps with commissioning by guiding the user through all essential settings. This can be done without going directly into the parameter list. The user answers questions given by the drive, which will be setting the corresponding parameter.





PD4 EN REV.C 2007

## Product Notes

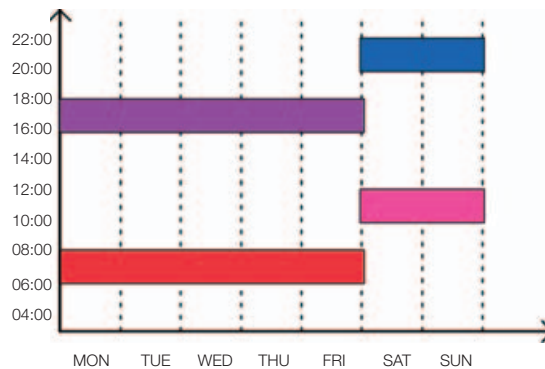
# HVAC

The start-up assistant has an automatic parameter backup function. After start-up the assistant offers the option to backup the parameters to the control panel for extra security.

Maintenance assistant is designed for periodic maintenance. The drive monitors running hours, used energy or motor rotation. The users can set their own limits for each of these items such that the drive gives an alarm whenever these limits are reached. Customers can then do preventive maintenance on the motor or application. For instance, should a belt drive need replacing periodically, the program monitors the time between service intervals and alerts the user before any belts would break.

### Changed parameter menu

The HVAC control panel is able to display ONLY the parameters that have been changed by the drive user. This is an essential feature when trying to diagnose programming errors. It is easy for a non-technical user to determine how the drive has been changed from its default configuration. This information can then be recorded or passed to ABB when technical assistance is required.



External timer circuits are no longer needed. Inbuilt timers - utilizing the real-time clock - allow starting and stopping the drive or changing the speed according to the time of day or night. Relay outputs can be operated with timers to control any auxiliary equipment on site.

### Large display

A large graphic display allows different size fonts for different purposes. The backlight of the display increases readability in low light conditions. In addition, the display shows motor rotation indicator and actual values can be displayed numerically or with a graphical bar display. The display also shows calculated engineering values, such as cubic meters per second.

The panel has been designed to enable use without cross-referencing to the drive's User's Manual. The default language of the control panel is English, with fifteen other languages in full sentences being available.

### Technology advances

With the control panel, application specific parameters can be copied from one drive to another within the whole 0.75 to 355 kW range of ABB drives for HVAC applications.

Advances in control technology has paved the way for the HVAC control panel from ABB. This includes embedded microprocessor, flash memory and graphical high resolution LCD.



ABB's dedicated HVAC control panel makes drives extremely easy to program, giving quicker commissioning and set-up as well as rapid fault diagnosis. Extension kits for different environments are available up to IP66.



ABB Oy  
Drives  
P.O. Box 184  
FI-00381 Helsinki, Finland  
Tel: +358 10 2211  
Fax: +358 10 222 2764  
[www.abb.com/motors&drives](http://www.abb.com/motors&drives)  
e-mail: [hvac@fi.abb.com](mailto:hvac@fi.abb.com)