

Taylor-made control panel for HVAC applications

	HAND/START	Initiates operation of the drive in Hand mode
	OFF/STOP	Stops the drive
	UP	Changes parameters and their value; increases reference
	DOWN	Changes parameters and their value; decreases reference
	AUTO	Changes drive status from HAND (local) control to AUTO (remote) control
	HELP	Built-in HELP button
	Soft key 1	Function changes according to status of panel
	Soft key 2	Function changes according to status of panel

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

An HVAC control panel which can be navigated as simply as a mobile telephone, has been developed by ABB for its range of AC drives for HVAC applications, rated from 0.75 kW to 355 kW.

The control panel is extremely easy to program, and gives quicker commissioning and set-up as well as rapid fault diagnosis.

The key difference between this and earlier panels is the large graphical display and the greater functionality it provides, using soft keys, online help and on-board software assistants.

Soft keys

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

Should the user lose his/her way at any point, pressing the built-in HELP button brings on-screen advice. The ABB drive for HVAC applications is the first on the market to carry this feature.

Online help assistants

The control panel features start-up, maintenance and diagnostic assistants.

Start-up assistant – guides the user through all essential settings at commissioning. This can be done without going directly into the parameter list. The user answers questions given by the drive, sets the corresponding parameter. ABB's research has shown that despite all the functionality in previous panels, only two or three parameters were normally ever altered, indicating that users were under-utilising the product features.

Maintenance assistant – helps with periodic maintenance. The drive monitors running hours or motor rotation. The user can set his/her own limits for each of these parameters, ensuring that the drive gives an alarm whenever these limits are reached. Customers can then carry out preventive maintenance on the motor or the application. For instance, should a drive belt need periodic replacement, the program monitors the time between service intervals and alerts the user before the belt breaks.



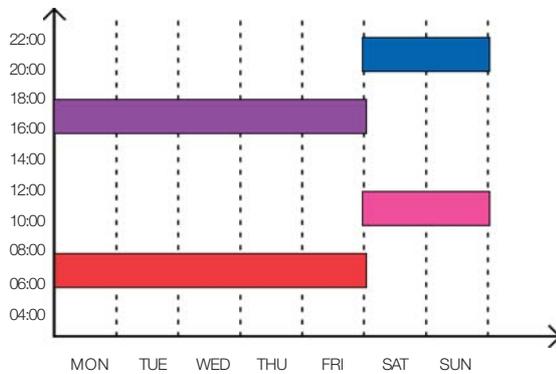
PD4 EN REVA 2004

Product Notes

Diagnostic assistant – finds key reasons for problems and is activated whenever a fault occurs. Pressing the “?” button gives suggestions to the cause of the fault. The program monitors the time of the fault, speed, frequency, DC voltage, current, torque, status information and status of I/O’s. The real-time clock allows timed tracing of faults and setting of parameters to activate at various times of day. The unit’s back-up battery lasts for at least 10 years.

Timed functions

The drive can be programmed to use the real-time clock as a control source. For example, the clock can be used to start and stop the drive, or to change reference and control relay outputs at programmed times. This eliminates the need for an external timer device.



External timer circuits are no longer needed. Built-in 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 the use of different size fonts for different purposes. In addition, the display shows motor rotation indicator. Values can be displayed numerically or with a graphical bar display.

The panel has been designed to be used without cross-referencing to the drive’s User’s Manual. The default language is English, with thirteen other languages, in full sentences, being available.

Technology advances

The new improved control panel has been made possible thanks to advances in control technology. Examples include the embedded micro processor, the flash memory and the graphical high-resolution LCD.



ABB’s dedicated HVAC control panel is extremely easy to program, giving quicker commissioning and set-up as well as rapid fault diagnosis.



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