

Controlling with the standard control panel

The frequency converter can only be controlled via the standard control panel if it has not been previously released through the control terminals or a serial interface (P509 = 0 and P510 = 0).

Press the "START" key to change the frequency converter to status indication (selection P001). It supplies 0 Hz, or a higher, preset minimal frequency (P104) or jog frequency (P113).

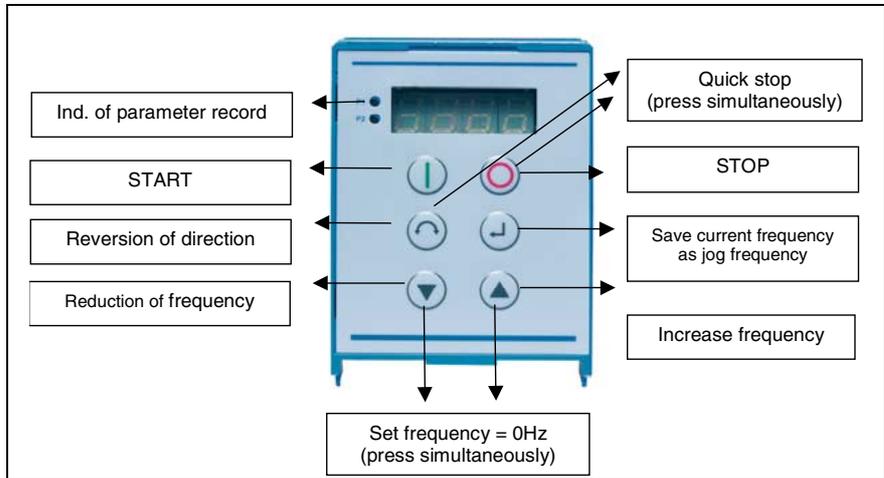


Fig. 9-6: Controlling the frequency converter with the standard control panel

Frequency command value:

The current frequency command value is based on the setting of jog frequency (P113) and minimum frequency (P104) parameters. During operation via keyboard, this value can be changed with the value keys \blacktriangle and \blacktriangledown . Press the ENTER key to permanently save the value in P113 as jog frequency.

Quick stop:

Activate quick stop by simultaneously pressing the STOP key ⊞ and the "direction reversal" key ↺ .

Comfort Control Panel FCC01.1T-CMF-NNNN

This function module is used to comfortably parameterize and control the frequency converter and to indicate current operating values and statuses.

Up to 5 data records (consisting of parameter record 1...4) can be administered and saved in this device. This helps to implement efficient commissioning of serial applications.



Fig. 9-7: Comfort control panel FCC01.1T-CMF-NNNN

Features of the Comfort Control Panel

- Illuminated, high-resolution LCD graphic screen
- Large indication of individual operating parameters
- Display text in 6 languages
- Help texts for trouble shooting.
- 5 complete frequency converter data records can be stored, loaded and edited in the memory.
- Can be used to indicate various operating parameters
- Scaling of individual operating parameters to indicate special system data
- Direct control of a frequency converter

Initial Commissioning

When the frequency converter is switched on for the first time with the plugged-on comfort control panel, the menu language (German, English) is queried. Then, the comfort control panel automatically does a "bus scan" to identify the connected frequency converter. When the frequency converter has been identified, its type, current operating state and current status is indicated.

After release of the frequency converter, the display changes to the three standard operating values (frequency, voltage, power). The indicated current operating values can be selected from a list.

Note: The factory setting for the digital frequency command value is 0Hz. To check whether the drive is working, enter a frequency command value via the  key, or a jog frequency (P113). Settings may only be made by qualified personnel under strict observation of the safety instructions and warnings.

ATTENTION! The drive will possibly start moving immediately after the START key  has been pressed!

Functions of the Comfort Control Panel

<p>LCD display</p>	<p>Background-illuminated LCD display, suitable for graphics, for indication of operating values and parameters of the connected frequency converter and the parameters of the comfort control panel.</p>	
	<p>Use the SELECTION keys to leaf through the menu levels or the individual menu points.</p>	
	<p>Press the selection keys to quit a parameter without saving a changed value. Press the  and  keys simultaneously to go back to the next higher level.</p>	
	<p>Use the VALUE keys to change the contents of individual parameters.</p>	
	<p>Simultaneously press the   keys to load the factory value of the selected parameter.</p>	
	<p>When controlling the frequency converter via the keyboard, use the VALUE keys to set the frequency command value.</p>	
	<p>Press the ENTER key to change into the selected menu group, or to confirm the changed menu points or parameter values.</p>	
	<p>If the frequency converter is currently controlled via the keyboard (and not the control terminals), the current command frequency can be saved to jog frequency parameter P113 by pressing the ENTER key.</p>	
	<p>START key for switching on the frequency converter.</p>	<p>NOTE: Only available if this function has been released in parameter P509 or P540.</p>
	<p>STOP key for switching off the frequency converter.</p>	
	<p>Press the DIRECTION key to change the motor's direction of rotation. "Sense of rotation left" is indicated by a minus sign. Caution! Be careful with pumps, screw conveyors, fans etc.</p>	
	<p>The LEDs signal the current status of the comfort control panel.</p> <p>ON: The comfort control panel is operative.</p> <p>ERROR: An error has occurred in editing the data or in the connected frequency converter.</p>	

LCD Display

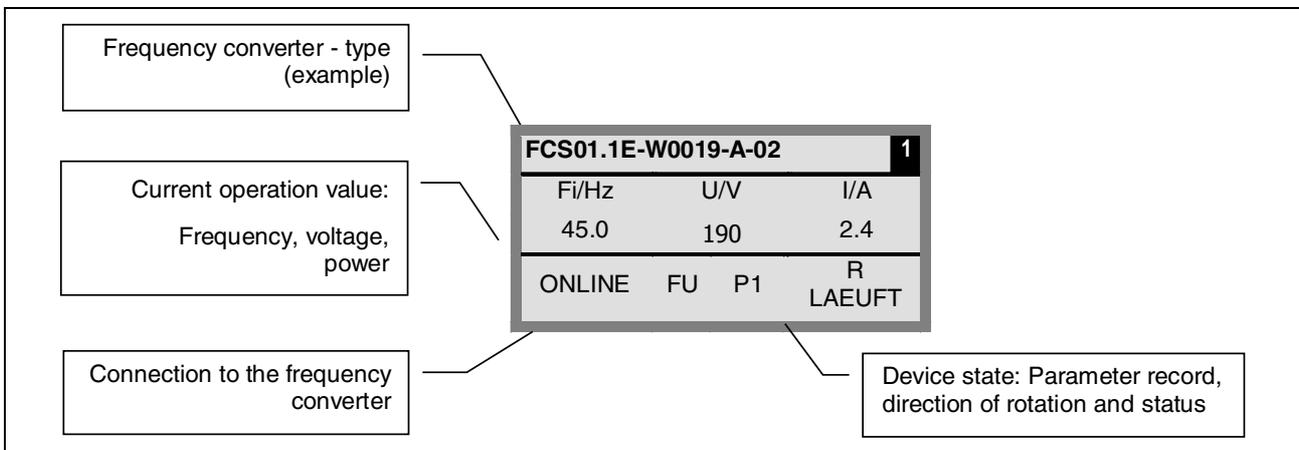


Fig. 9-8: LCD display

Menu Structure

The menu structure comprises various levels, each designed in a ring structure. Press the ENTER key to go to the next level. Go back by simultaneously pressing the SELECTION keys.

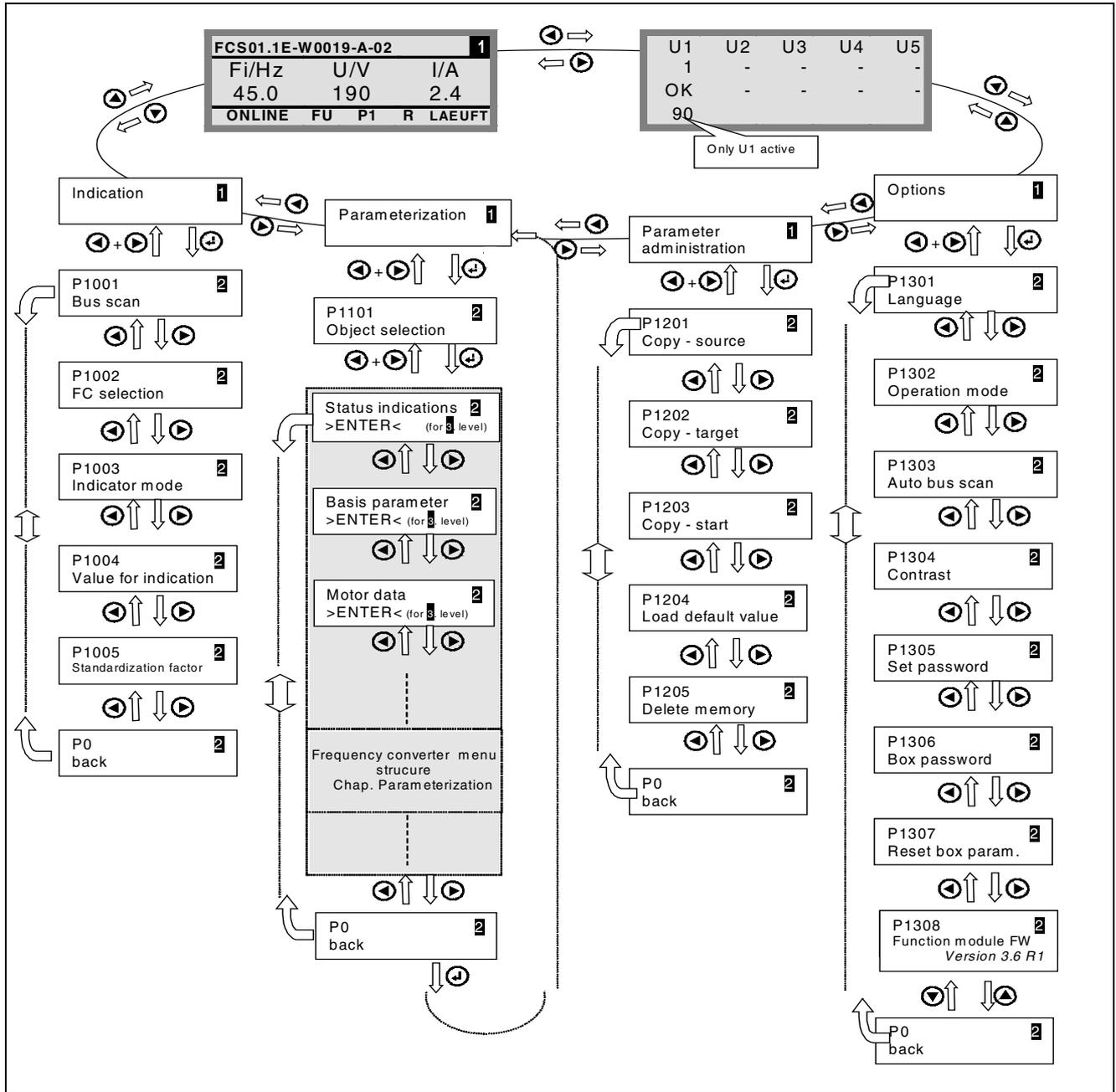


Fig. 9-9: Menu Structure

The menu points >Indication< (P11xx), >Parameter administration< (P12xx) and >Options (P13xx) are only parameters for the comfort control panel. Via the >Parameterization< menu, go to the frequency converter menu structure.

Also refer to Chapter 11, Parameterization.

Language Selection, Brief Description

To change the menu language in the display of the comfort control panel, proceed as follows:

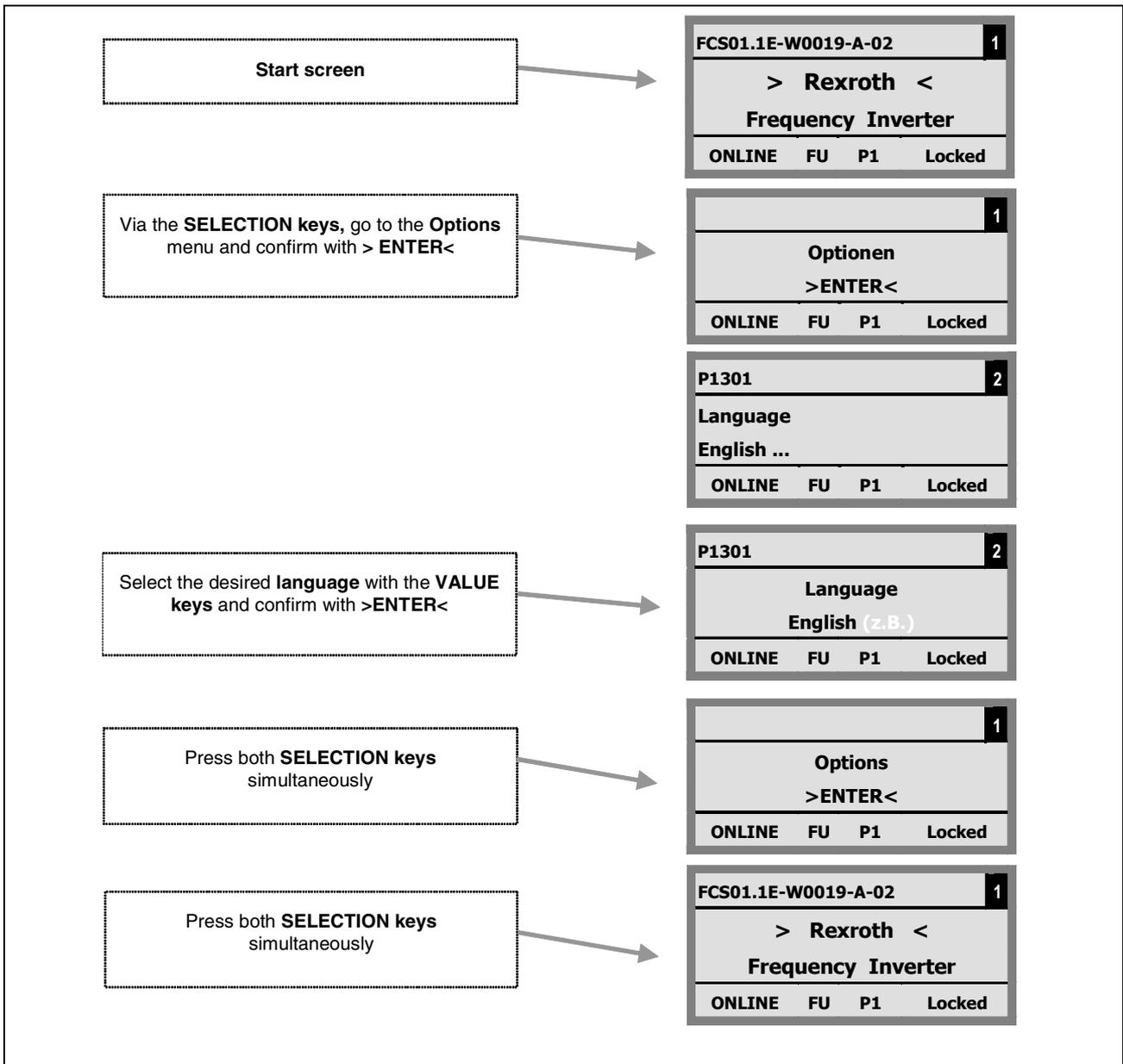


Fig. 9-10: Language selection

Parameterization with the Comfort Control Panel

To get into parameterization mode, select the menu point >Parameterization< in level 1 of the comfort control panel. Press the ENTER key to go to the parameter level of the connected frequency converter.

The following illustrations explains how the operating elements of the comfort control panel are used for parameterization.

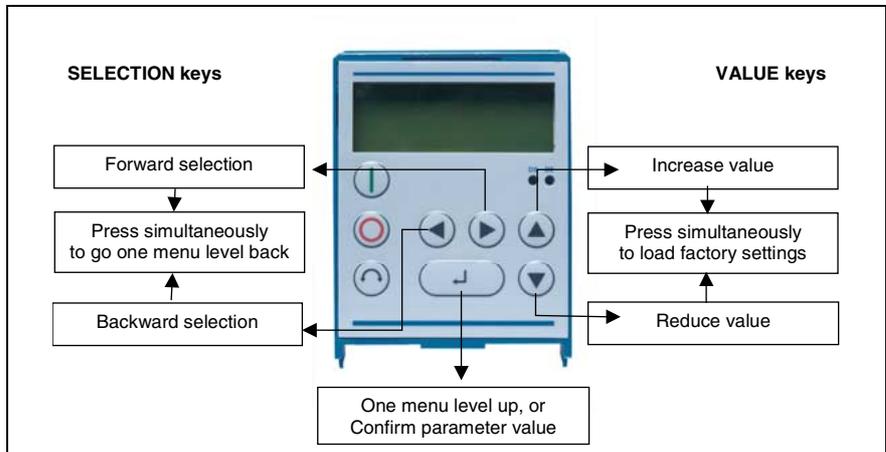


Fig. 9-11: Controlling the frequency converter with the comfort control panel

Screen Layout During Parameterization

If the setting of a parameter is changed, the value will flash until confirmed via the ENTER key. To get the factory settings of the parameter to be edited, press both VALUE keys simultaneously. To change the setting, confirm with the ENTER key.

If you do not wish to confirm the change, press a SELECTION key to call up the value last saved, and press a SELECTION key again to quit the parameter.

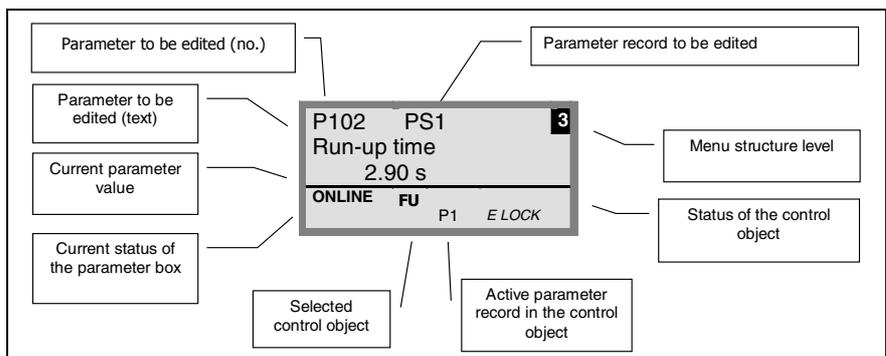


Fig. 9-12: Screen layout during parameterization

Note: The bottom line in the display is used to indicate the current status of the comfort control panel and the frequency converter to be controlled.

Controlling the Frequency Converter with the Comfort Control Panel

The frequency converter can only be fully controlled via the comfort control panel if the >Interface< parameter (P509) is set to the >Keyboard< function (0 = factory setting) and the frequency converter has not been released via the control terminals.

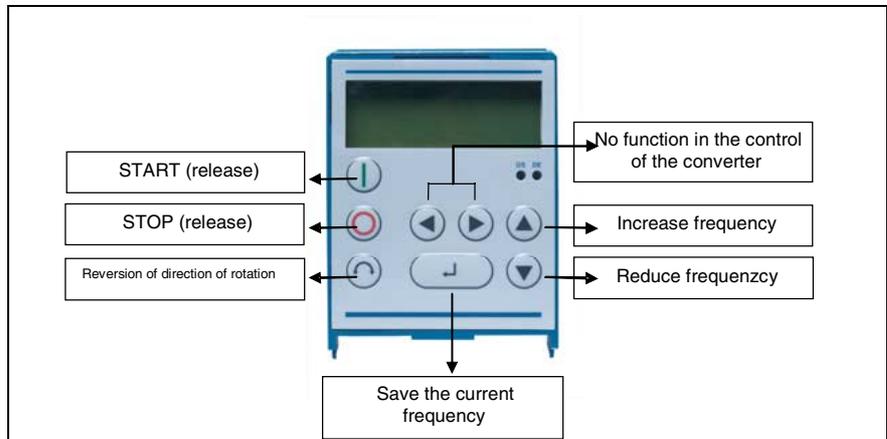


Fig. 9-13: Controlling the frequency converter with the comfort control panel

Note: If the frequency converter is released in this mode, the parameter record selected in parameter P100 is used. To switch to another parameter record during operation, select the new parameter record in P100 and confirm with ENTER.

After removal of release and re-start via the  key, the frequency converter will run in the parameter record selected last.

Note: After the START command, the frequency converter can immediately start with a previously programmed frequency.