

### 3.2 User levels in the parameter structure

By means of the parameters the inverter module can be fully adapted to the application task. In addition there are parameters for the internal variables of the inverter module which, for the sake of general operating safety, are protected against user access.

The user levels are set by way of parameter 01-MODE in subject area “\_36 KP-KEYPAD”. The number of editable and displayable parameters changes depending on the user level. The higher the user level the greater the number of accessible parameters. In contrast, users are presented with a more concise range of those parameters which are really required, allowing them to find their specific solution more rapidly. Consequently, choosing as low a user level as possible makes operation significantly easier.



**Note:** The user levels protect against unauthorized access. Consequently, to protect the inverter module parameter setting, parameter 01-MODE, in subject area “\_36 KP-KEYPAD”, should always be reset to the lowest user level after adaptation.

Whether a parameter can be only viewed, or viewed and edited, on the current user level is indicated by symbols.

In DRIVEMANAGER	In KEYPAD	Description
	-S-	Parameter display only (shown)
	-E-	Parameter editable (edit)
	-E- (flashing)	Parameter being edited (edit)

Table 3.2 Indication of whether a parameter is editable

#### Error ATT1

If a user attempts to edit a display-only parameter in the KEYPAD, access is denied and a warning message ATT1 is displayed. The warning message can be reset by pressing the **Start/Enter key**.



More user error and fault messages are detailed in the appendix.

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### Changing user level

If a higher user level is selected by way of parameter 01-MODE, a prompt for the associated password is automatically delivered. The password can be changed by way of a password parameter in subject area “\_36 KP-KEYPAD” (setting “000” = password disabled).

Target group	Password parameter	Comments	User level 01-MODE	Password in FS <sup>1)</sup>
Layman	No parameter	No access permission, for status monitoring only <ul style="list-style-type: none"> <li>• No parameter setting</li> <li>• Display of basic parameters</li> </ul>	1	-
Beginner	362-PSW2	With basic knowledge for minimal operation <ul style="list-style-type: none"> <li>• Expanded basic parameters editable</li> <li>• Expanded parameter display</li> </ul>	2	000
Advanced	363-PSW3	For commissioning and field bus connection <ul style="list-style-type: none"> <li>• Parameter setting for standard applications</li> <li>• Expanded parameter display</li> </ul>	3	000
Expert	364-PSW4	With control engineering skills <ul style="list-style-type: none"> <li>• All control parameters editable</li> <li>• Expanded parameter display</li> </ul>	4	000
Other	365-PSW5	For system integrators	5	-
Specialist personnel	367-PSWCT	For operation and commissioning by KEYPAD KP 200	CTRL menu	000

<sup>1)</sup> FS = Factory setting

Table 3.3 Setting user levels via subject area “\_36 KP-KEYPAD”

### Changing the password for a user level

A password can only be changed for the authorized levels - passwords to a higher user level cannot be viewed or changed. The password is changed by selecting the parameter, editing it and then saving it by pressing the Enter key on the KEYPAD KP 200. It can also be changed by way of the DRIVEMANAGER.



**Note:** Please make a note of any change of password and keep your passwords safe from third parties.

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### 3.3 Operation with KEYPAD KP200

#### Mounting and connection of the KEYPAD

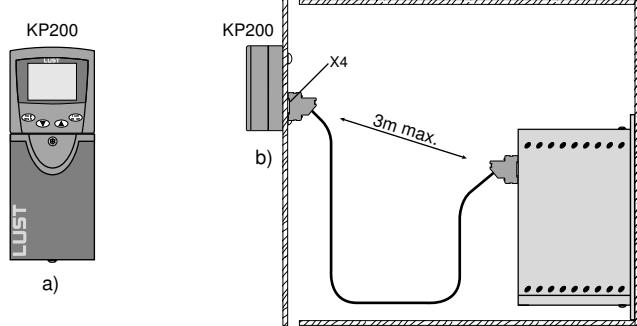
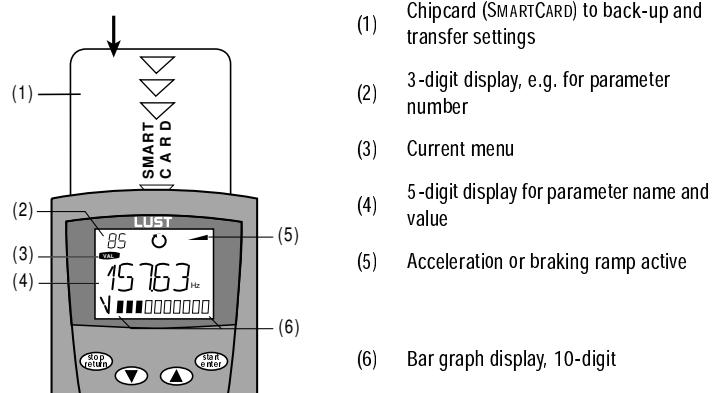


Figure 3.3 Mounting the KEYPAD: a) on the CDA3000 inverter module (connector X4) or b) on the switch cabinet door

#### Controls and displays



Call up menu branches or parameters; save changes;  
Start in "Control drive" mode

Quit menu branches; cancel changes; stop in "Control drive" mode

Select menu, subject area or parameter; increase setting

Select menu, subject area or parameter; reduce setting

Figure 3.4 Controls and displays on the KEYPAD KP200

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### Menu structure

The KEYPAD KP200 has a menu structure which provides for user-friendly operation and is identical to the menu structure of the KP100 for the SMARTDRIVE VF1000 inverters and the MASTERCONTROL servocontrollers.

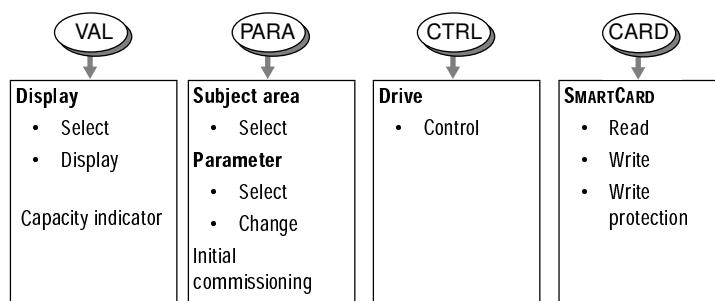


Figure 3.5 Functions of the menus

On the menu level ("MENU" display) you can use the cursor keys to switch between menus. Press the **Start/Enter key** to open a menu and the **Stop/Return key** to quit the menu.

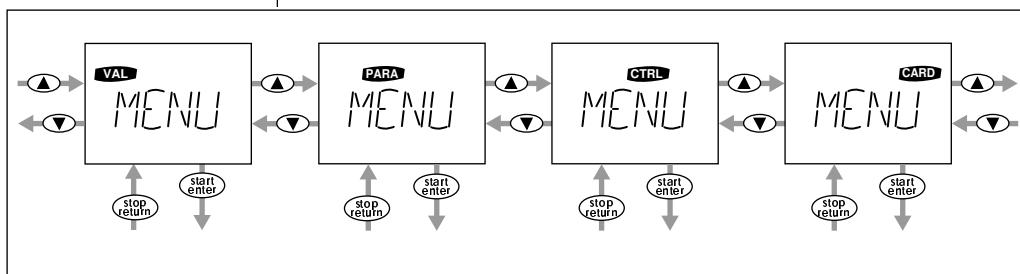
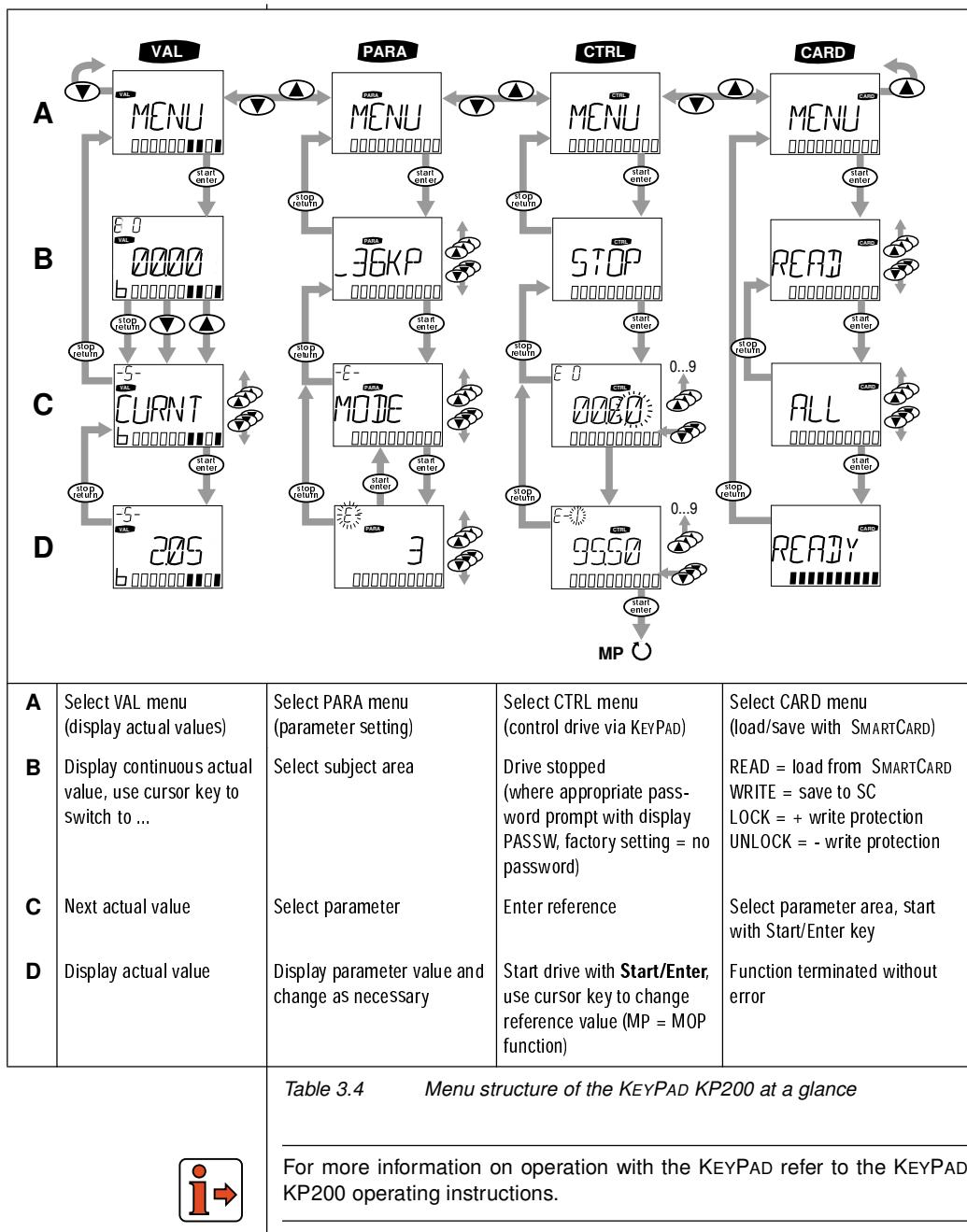


Figure 3.6 Navigation at menu level

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### Exponential value display

The five-digit parameter value display is in exponential format. The reference input in the CTRL menu is likewise entered and displayed in exponential format.

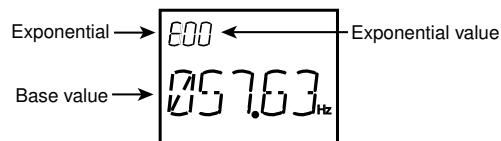


Figure 3.7 Exponential representation on the KP200 display

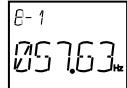
The exponential format is easy to work with if you view the exponential value as a “decimal point shift factor”.

Exponential value	Direction of decimal point shift in base value
positive	to right $\supseteq$ value increases
negative	to left $\supseteq$ value decreases

Table 3.5 Exponential value as “decimal point shift factor”

The decimal point is shifted in the base value by the number of places according to the exponential value.

#### Example:



decimal point shifted by one place to the left  
 $\supseteq 57.63^{-1} \text{ Hz} = 5.763 \text{ Hz}$



decimal point shifted by two places to the right  
 $\supseteq 57.63^2 \text{ Hz} = 5763 \text{ Hz}$