

5 Display and Keypad

The display and keypad are used for the following:

- Changing parameter values
- Stopping and starting the Drive
- Displaying the operating status of the Drive
- Displaying fault or trip codes

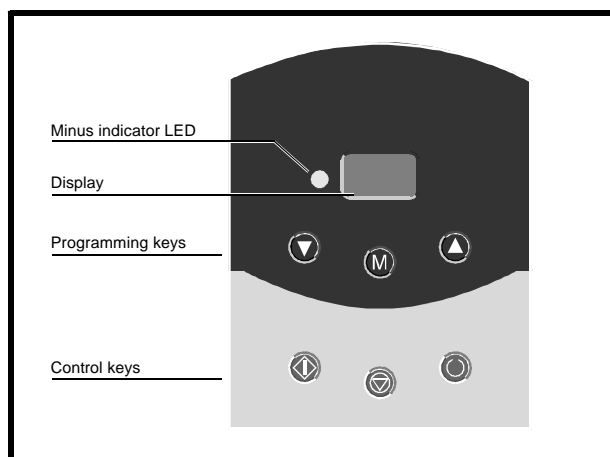


Figure 5–1 Display and keypad

5.1 Display

The display has three digits used for the following:

- Reading parameter values
- Reading status messages
- Reading trip codes

The display has three modes of operation which are selected using the keypad. The modes are as follows:

Status mode

This is the normal working mode of operation. The display is constant and shows the current status of the Drive (eg **rdY** or a trip code).

Parameter mode

Parameter mode allows a parameter to be displayed. The display alternates between the parameter number and the parameter value.

Edit mode

Edit mode allows the displayed parameter to be edited (change a numeric value, or a character string). The parameter value is shown as a constant display.

Display behaviour

The behaviour of the display when it is in Parameter mode can be selected using parameter **b10** *Display time-out mode*, as follows:

b10 set at 0

The display alternately shows the parameter number and the parameter value. The display returns to Status mode 8 seconds after no key has been pressed.

b10 set at 1

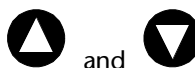
The display returns to Status mode after the Mode key is pressed for 1 second.

Display indication

When the display is in Status mode and the Drive is running, depending on the setting of parameter **b8** *Display mode selector*, the display can indicate either of the following:

b8	Displayed function
0	Output frequency of the Drive
1	% full load current (FLC)

The display can be quickly switched to show the function that is not selected by parameter **b8**. To do this, press the following keys simultaneously for as long as you wish to display the function:



5.2 Keypad

Programming keys

The programming keys are used for the following:

- Changing the mode of operation of the display
- Selecting a parameter to edit
- Editing a parameter value

The functions of the keys are as follows:



Display in Parameter mode

Change displayed parameter number.

Display in Edit mode

Change a parameter value.



(Mode)

Display in Status mode

Select Parameter mode.

Display in Parameter mode

Select Edit mode.

Display in Edit mode

Select Parameter mode.

Control keys

Depending on the settings of the following parameters...

b9 Terminal or keypad mode selector

b55 Stop/Reset key selector

...the control keys are used to control the motor, as follows:



(Green key) Drive run



(Red key) Stop or reset the Drive



(Blue key) Reverse the direction of the motor to the same speed

5.3 Status indicators

When in Status mode, the display shows one of the following:

rdY

The Drive is waiting for a command.

inh

At the moment this indication appears, the IGBT bridge is disabled and the selected deceleration ramp is started, even though it cannot control the motor. If the motor is spinning, it coasts to rest. The display will show **inh** until one second after the selected deceleration ramp is completed. At this point, the display shows **rdY** and the Drive can be re-started (see parameters **b2** and **b7** *Stopping mode selector* in Chapter 10 *List of parameters*). To re-start the Drive while the motor is still spinning, parameter **b52** *Synchronise to a spinning motor* should be set at 1.

dc

DC injection braking is being applied.

Scn

The Drive is synchronizing to a spinning motor (see parameter **b52** *Synchronise to a spinning motor* in chapter 10 *List of parameters*).

...

When the output current of the Drive exceeds for a time the level set in parameter **p5** *Maximum continuous current*, the decimal points flash. If the overload is subsequently removed, or the Drive stopped, the decimal points continue to flash for a period that depends on the extent of the [$I \times t$] overload.

When a trip occurs, the display indicates the fault code (see *Trip codes* in Chapter 11 *Diagnostics*).