USER MANUAL – ABB PROJECT

Group 3

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3. **Overview**

The device is an air conditioner with adjustable fan speed. There are two modes available.

The device is ready to use constantly when the device is connected to the electric current.

The device is controlled with three buttons next to the LCD screen. The current mode is indicated via the screen.

1. **Using the device**

When the system starts, the LCD screen reads:

*manual mode right*

*auto mode left*

Choose the automatic mode by pressing the left button.  
Choose the manual mode by pressing the right button.

**2.1) Automatic mode**

When the screen shows *automatic mode*, the device reads the air pressure sensor and sets the speed automatically when perceived. The air pressure values are shown in Pascals (Pa). No extra action is needed from the user.

The desired air pressure can be adjusted higher by pressing the left button and lower by pressing the right button down for at least 1 second.

The screen prints the following:

*AM to y is x*

*AM* stands for *Automatic Mode* and the variable y stands for the desired air pressure in integers. The variable *x* indicatesthe current air pressure and is constantly refreshed to the screen.

If the desired air pressure is not reached in 20 seconds, the screen prints a message to indicate an error in the device:

*AM to 70 is 20*

*took too long*

In this case, use the manual mode.

To toggle to the manual mode, press the middle button.

**2.2) Manual mode**

When the screen indicates ‘*manual mode’*, the user chooses the desired speed of the fan between the values 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100. The number 0 indicates zero fan speed (does not operate at all) and the number 100 indicates the maximum fan speed.

The screen indicates the following during manual mode:

*Manual mode: x*

Where the variable *x* indicates the current fan speed.

The controls are the following:

1. The right button decreases the speed of the fan.
2. The left button increases the speed of the fan.

To toggle to the automatic mode, press the middle button.