

Evolution 3 climate control unit

Installation and set-up instructions

Wiring instructions

The installation of all electrical items must be undertaken by a qualified technician.

- Mains power must be supplied via a switched fused spur fitted with a 5 amp fuse.
- Do not use cable thicker than 1.5mm and multi strand if possible for flexibility.
- Do not try to squeeze too much cable into the back box as this may press against the PCB and cause issues with controller operation.
- The controller will fit into any standard 2-gang surface or flush 35mm back box.

Wiring

For ease of installation this controller is fitted with two terminal blocks where all the connections are made, one is marked 'A' and the other is marked 'B' (see fig 1. Evolution 3 climate control PCB).



(fig 1. Evolution 3 climate control PCB)

Terminal block 'A'

Starting from the letter 'A' working down:

1. Earth for metal face plate
2. Yellow or blue wire from the rain sensor
3. Yellow or blue wire from the rain sensor
4. Rain sensor screen
5. Either temperature sensor wire, blue or yellow (you can optionally connect the screen wire to earth)
6. Either temperature sensor wire, blue or yellow
7. Leave empty
8. Leave empty

Terminal block 'B'

Starting from the letter 'B' working down:

1. Close wire from motor
2. Open wire from motor
3. Neutral wire from motor
4. Neutral wire from fused spur
5. Earth wire from fused spur
6. Live wire from fused spur

To ensure you have correctly wired your terminal blocks check your connections with the legend marked on the circuit board next to the sockets.

Set-up instructions

The front of the controller has a digital display which will give you information on the current status in LCD form. There are also three square buttons which program and operate the controller, and finally a lamp to signal that power is present at the module.

With your wiring complete switch on the power at the fused spur. The power lamp should illuminate and a display will appear on the LCD screen.

Before the controller can work you need to set the parameters by which the controller operates.

1. Firstly press the **M/A** button until 'MANUAL' appears on the display.
2. Press the bottom button marked '↓' to fully close the motor.
3. Press and hold the top button marked '↑' and count the number of seconds it takes for the motor to reach the fully open position (for guidance, a TOPPS ACK5 motor takes 13 seconds to reach the full 400mm stroke).
4. With the power still on, press and hold the **M/A** button and switch off the power at the fused spur, count to 10 and switch the power back on. **Only release the M/A button once power is switched back on.**
5. The controller has now entered the 'set-up' menu and the display now requires that you enter the time in seconds that your motor takes to open. Use the '↑' button to increase the figure and the '↓' to decrease. When the correct opening time is set press the **M/A** button.
6. The display will now show the rain sensor sensitivity, please leave this as '05' for normal use, and press **M/A**.
7. The new display relates to only to special functions and should be bypassed, press **M/A**.
8. The final display is only of interest if you have a conflict between the temperature shown on the controller and another device in the room. This display allows you to mimic the second device. To do so, press the '↑' or '↓' buttons to alter the value shown. Press the **M/A** button when finished.
9. You have now returned to the normal working display.

Operating instructions

To switch between manual and automatic operation simply press the M/A button once. The display will show the selected mode.

In manual mode, press the '↑' button to open, and the '↓' button to close. When you release the button the motor will stop and the window will remain in that position.

When the 'automatic' mode is selected (press M/A to select) you will need to input the temperature at which you wish the room to be maintained. When you press either of the 'arrow' buttons a temperature is displayed. This is the current desired room temperature. To raise it, repeatedly press the '↑' button, and to lower it repeatedly press the '↓' button. When the desired temperature is displayed just wait a few seconds and the controller will automatically accept the new value and the display will return to the main 'auto' display.

Your set-up is now complete! If you wish to change anything, follow the procedure through again.

Controller function

Whilst in automatic mode, your controller will try to maintain your chosen room temperature by opening and closing the window/vent. It does this by only opening the motor ¼ of its travel at a time and the motor position is depicted on the display.

Several minutes will elapse between each opening of the motor so as to give the room temperature time to stabilize, putting less strain on the motor itself as it does so.

If you require a quicker temperature drop, open the window/vent in 'manual' mode, but be aware that the rain sensor will not function in this mode

Remote control

If your Evolution 3 is supplied with a remote-control kit, please disconnect the normal temperature sensor (if fitted) as the receiver box has an integral sensor.

Wiring diagram

CLIMATE CONTROL SCHEMATIC WIRING LAYOUT

