

# LAE Humidity Controller



## Meaco LAE 2 stage controller

### Control Principles

For the purposes of these instructions we are assuming that you wish to achieve 55%RH  $\pm$ 5%RH.




















If you require a different set point then you can change the settings in steps **4** and **9**. If you require closer control then simply change the settings accordingly in steps **6** and **11**.




































The humidifier will come on at 50%RH and below and turn off at 55%RH. The dehumidifier will come on at 60%RH and above and turn off at 55%RH. This is known as the hysteresis.

If you find that either unit keeps on turning on and off too quickly you can put in a time delay of between 1 and 30 minutes at stages **7**, **8**, **12** and **13**. In the procedure below, this is set as 1. The relays within this controller can switch loads up to 12 amps for relay 1 and 7 amps for relay 2. Larger loads should be switched using this controller with a contactor in line.



### Controller Set-up

1. Plug controller in and switch on the power.
2. Press both  and  buttons for 5 seconds.
3. "SCL" should now be displayed, you are ready to begin.
4. Press  three times to display "1SP", then press and hold  and use the   buttons to enter 55.0 for the set point. When you release  1cñ will be displayed.
5. Press button  once, 1ch should be displayed, press and hold  and use   to select 'ref'. When you release  1hy will be displayed.
6. Press and hold  and use   to enter 5 for the hysteresis.
7. When you release  1tO will be displayed, press and hold  and use   to set to 1 and this is the minimum off time in minutes.

8. When you release  1t1 will be displayed, press and hold  and use   to set to 1 and this is the minimum on time in minutes. Release .
9. Press  until oAu is displayed. Press and hold  and use   until thr is displayed. Release . Please note that if you wish to use the controller as a single stage controller you can disable the second stage by selecting 'non' at this point.
10. Press  until 2SP is displayed, then press and hold  and use the   buttons to enter 55.0 for the set point. When you release  2ch will be displayed.
11. Press and hold  and use   to select 'hEA'. When you release  2hy will be displayed.
12. Press and hold  and use   to enter 5 for the hysteresis.
13. When you release  2tO will be displayed, press and hold  and use   to set to 1 and this is the minimum off time in minutes.
14. When you release  2t1 will be displayed, press and hold  and use   to set to 1 and this is the minimum off time in minutes.
15. Press  to exit set up
16. To change any of the settings press both  and  buttons for 5 seconds you can use   to scroll through the various menus.

If the dehumidifier or the humidifier fails they will fail in the off position.

Turn the humidistats on both units to their maximum settings.

To control at a different set-point simply input different values by pressing the L1 and L2 buttons on the front of the controller.

To change the hysteresis from  $\pm 5\%$  simply change the values in stages 6 and 12.

Output 1 = Dehumidifier (Black plug)

Output 2 = Humidifier (White plug)

The alarm function is not used in this controller set up.

**If you have any problems then call Meaco on 01782 565 917**