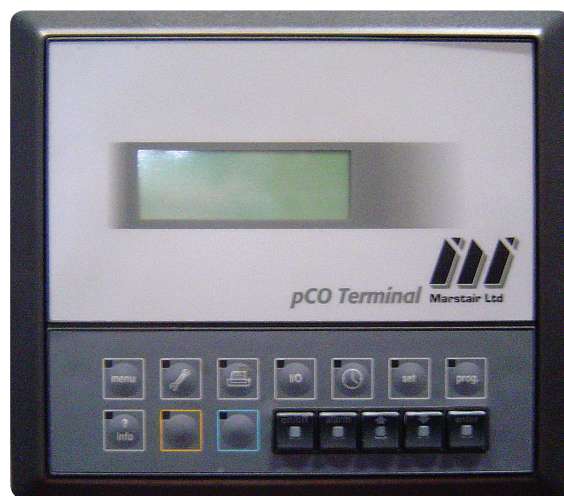


# CD3 tight tolerance

SET POINT, DEAD BAND, HYSTERESIS AND DIFFERENTIAL SETTINGS ON CD3 CLOSE CONTROL UNITS



VARIOUS FACTORS CAN EFFECT THE ABILITY OF THE CD3 TO MAINTAIN THE TIGHTEST TOLERANCE. THESE INCLUDE:-

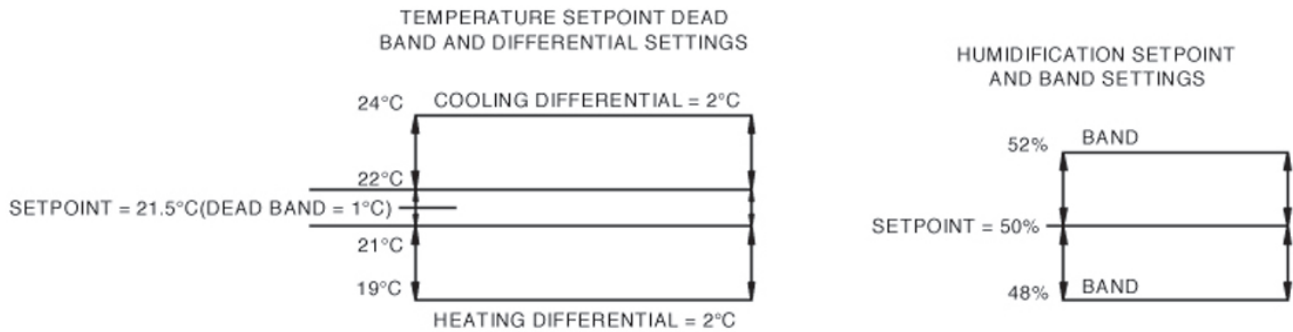
- Conditioned space shape and size
- Sensible and latent loads
- Specific heat capacity of the space
- Air distribution with in the space

The CD3 is supplied with a series of factory set parameters which should be able to maintain the required tolerance in most circumstances. The manipulation of these parameters can improve these tolerances where required, however tightening these parameters can also cause the system to cycle more often and run less efficiently.

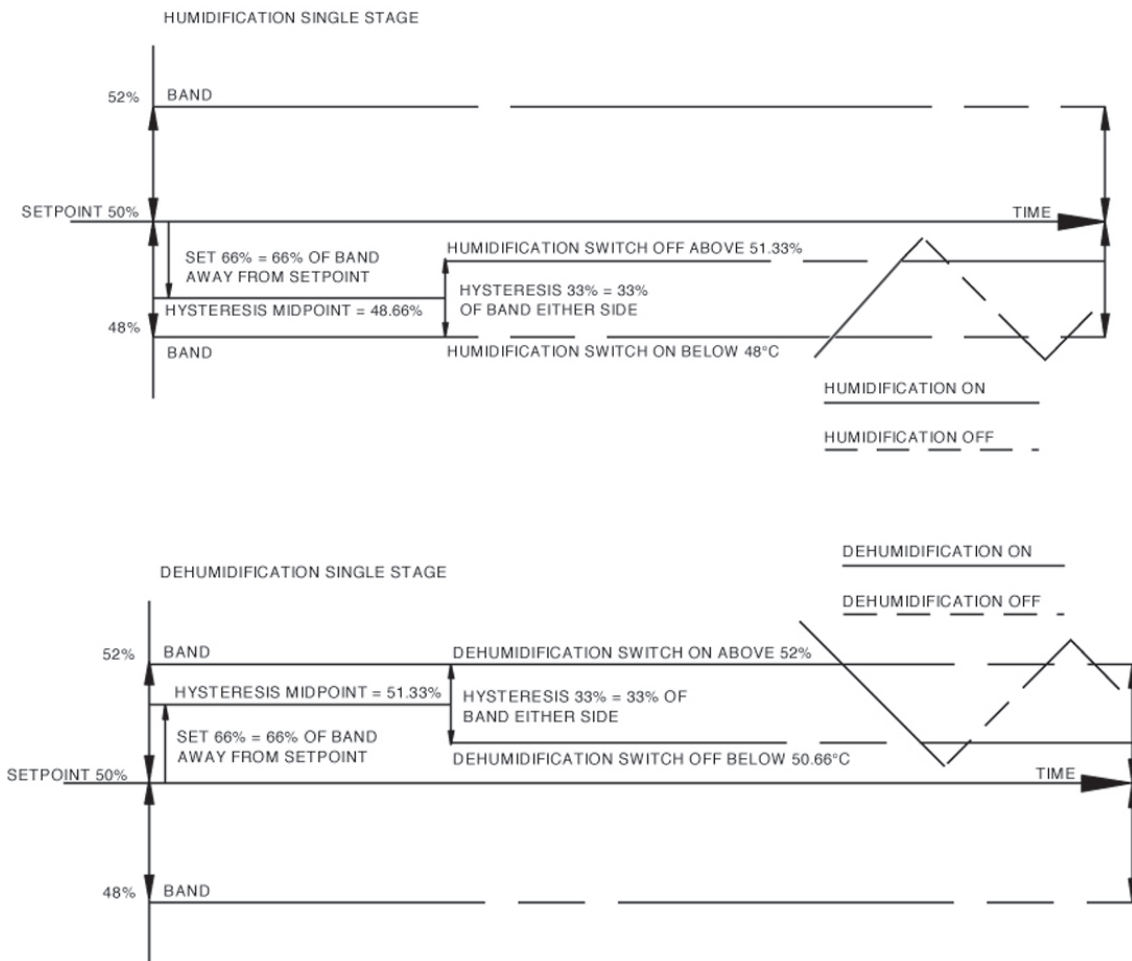
The temperature and humidity set points are set at second user access level

SET POINT	
TEMPERATURE	21.0°C
HUMIDITY	50%

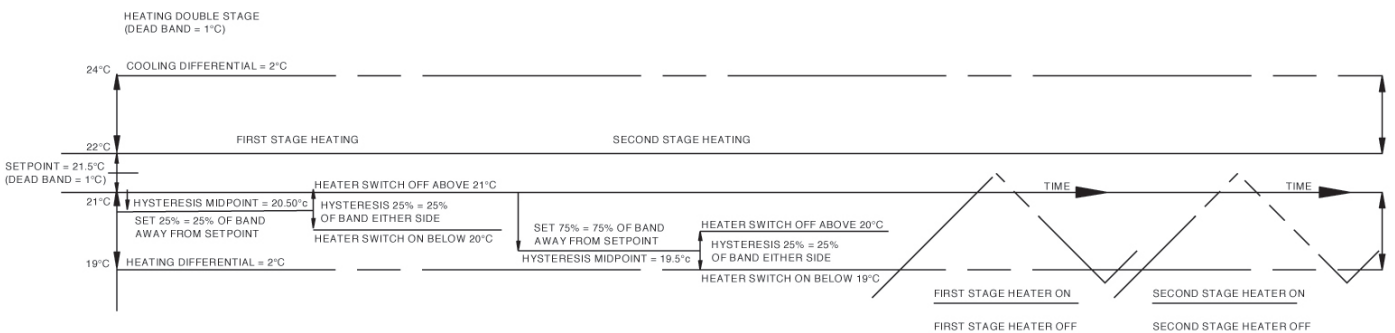
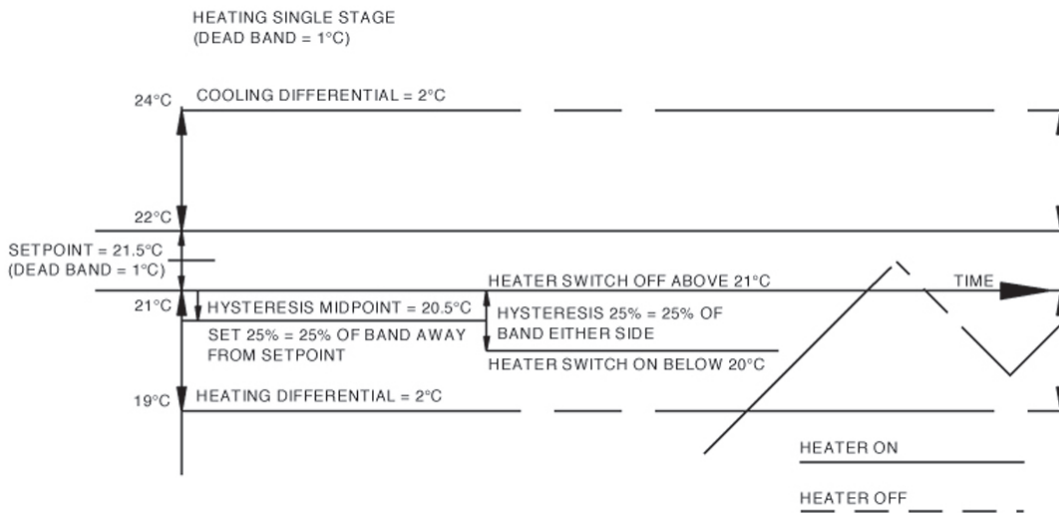
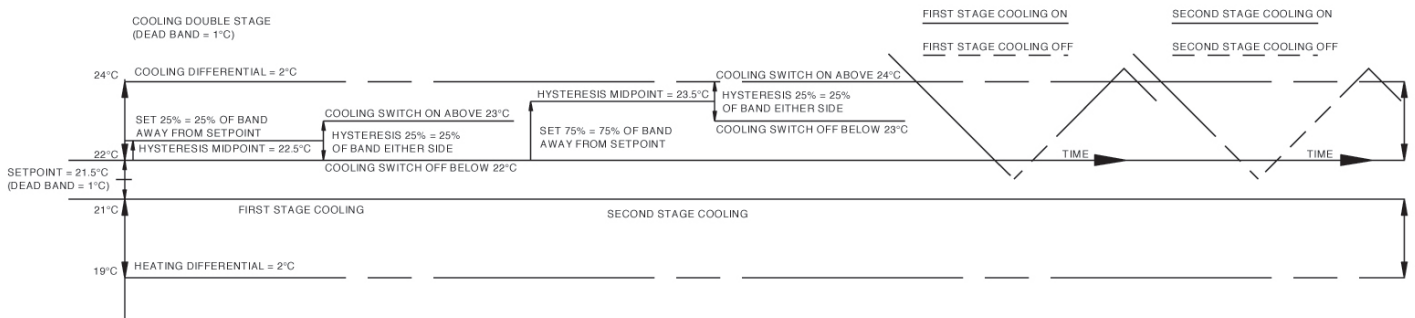
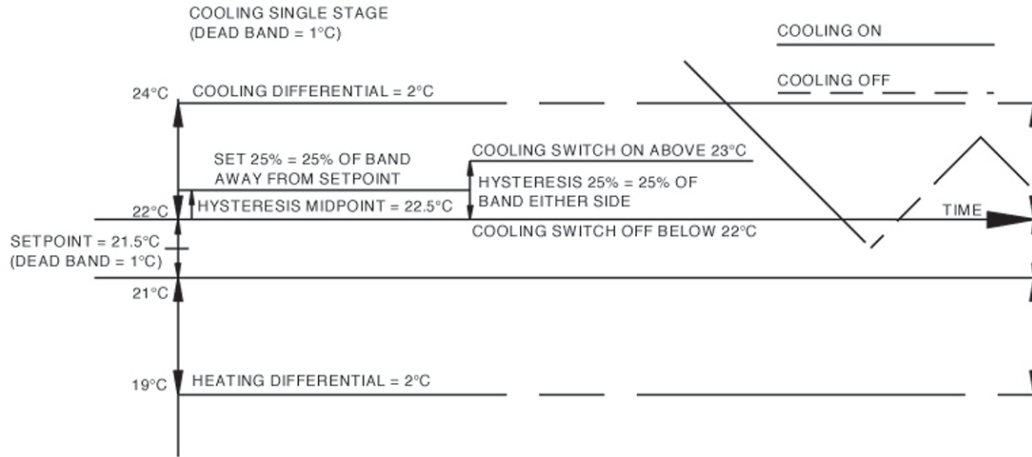
The humidity band, temperature dead band and cool and heat differential can be set at the engineering access level



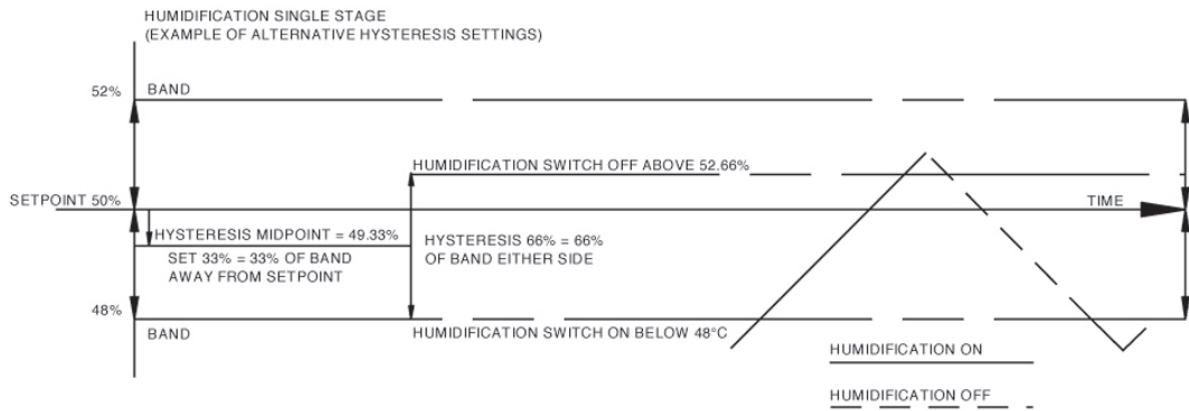
The the actual switch on and switch off humidity points are determined by a combination of the above and the “Set” and “Hysteresis” parameters which are set using the manufacturer password in the parameter section. The interaction of these parameters is shown in the diagrams below.



The the actual switch on and switch off temperature points are also determined by a combination of the above and the “Set” and “Hysteresis” parameters which are set using the manufacturer password in the parameter section. The interaction of these parameters is shown in the diagrams below for both single and double stage units.



It is also possible to use the 'Set' and 'Hysteresis' outside the band range as shown below



To discuss your specific close control requirements please contact our Technical Department on **01484 405666**

There are also timing parameters within the manufacturers parameter settings, these parameters are self explanatory, but a significant one with regards to the tightness of tolerance is the 'Start delay same compressor'. This can be lowered to help keep the room at condition when there is a low heat capacity in the room and a large load allowing the condensing units to cycle more rapidly when cooling or dehumidification is required. However these is a limit to the effective of this parameter as the MCU+ condensing unit themselves are fitted with a 3 minute delay between starts.

Another practical option is to remove the temperature and humidity sensor from inside the unit and position it in the room where you require the tightest tolerance.



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