

ACNV Curtains - Integral Control (US)

Programs 012-131 and greater (when specified with Integral curtain control).

Integral curtain control is aimed at curtains which have:

- very slow running times and/or

- inconsistent running speeds and/or
- curtains with manufacturers restrictions on allowable amount of running

In these cases, it is not possible to position curtains using absolute reckoning.

How it works

When zone temperature is at or only just above Set Temperature, curtains run in the closed direction.

Just above this temperature is a “dead band”.

When zone temperature is within the dead band, curtains do not move.

When zone temperature is above the dead band, curtains run in the open direction.

The control program decides on ventilation - such as required fans speeds, and which direction to run the

motor (or not to run it) at intervals - the “control interval”. This is normally once a minute (adjustable).

When the curtain is “running”, the amount of running time may be restricted. For example, the motor may be run for only 20 seconds. (This allows for motors which run very quickly, or motors which may over heat if they run for longer.)

The curtain may be operated at every control interval - unless within the dead band - or less frequently, such as every 3 control intervals. (This allows for motors which may overheat if they run too frequently.)

Configuration

Configuration should only be carried out by a trained Dicom service technician.

Curtain Offset and Band

Curtain is in “Opening” mode when Zone temperature is above (Set Temp + Offset + Band).

Curtain is in “Closing” mode when Zone temperature is below (Set Temp + Offset).

Curtain is in “Do Nothing” mode when Zone temperature is between (Set Temp + Offset) and (Set Temp + Offset + Band).

Default settings

Curtain Offset = 2.0°F default

Curtain Band (Width) = 2.0°F

With default settings (and default Set Temp = 70°F) :

- below 72°F = curtain closing
- from 72°F to 74°F = no motor movement (dead band)
- above 74°F = curtain opening

Curtain Run Time & Cycle

Run Time = the motor runs for this long each time the curtain motor is operated.

Run Cycle = the motor runs after this number of control intervals.

Default settings

Run Time = 20 seconds

Run Cycle = 3 (control intervals)

With the default settings (and default control interval = 60 seconds)

- motor runs for 20 seconds every 3 minutes (when outside dead band)