



CIRCULAR DIFFUSERS WITH ADJUSTABLE CONES AND THERMOSTATIC CONTROL

KU5 CT
SERIES

OVERVIEW

The KU5 CT diffusers represent the evolution of the KU5 and KUT5. They work without the need of electricity (e.g. electronically powered) and without a secondary control mechanism (e.g. control motor). What is more, they do not require any specific type of maintenance.

The movement of the intermediary cones is controlled by means of an auto regulating thermostatic spring where the extension and retraction determines the position of the cones in response to the air temperature.

We have therefore a flow of air in direct response to the air temperature, enabling the adjustable cones to always be in the optimum position, both in heating and cooling operations. The extension of the thermostatic spring begins at a temperature of 34°C and reaches full extension at 45°C circa (in heating conditions). Where the bighting process begins at a temperature of 20°C (in cooling conditions).

The minimum duration time of the spring is 100000 cycles. A cycle is given by an extension followed by a compression (tightening) of the spring. If, for example, we wish to switch the system on in the morning and off in the evening, the duration of the spring is of 270 years.

The air flow capabilities do not vary compared to the KU5 and KUT5, as the diffuser does not have any geometric strain in the movement area in the flow of air. As a result the data used in the catalogue can be referred to.

The models currently developed are suitable for diameter of 160, 200, 250 and 315mm.

The diagram show here on the side, show the finishing positions, 0% pos. in cooling conditions and the 100% pos. in heating conditions.

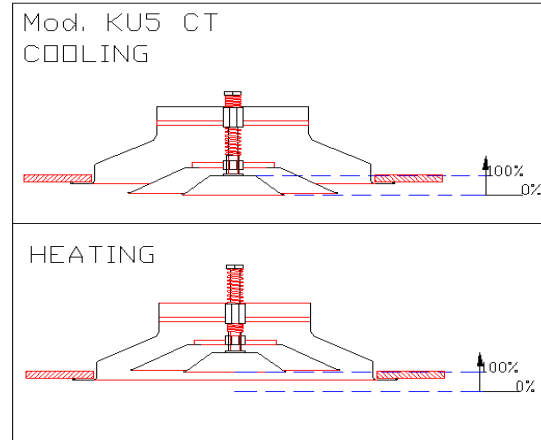
The graph here shown represents the movement of the diffuser with a complete spring cycle. Starting from a temperature of 20°C circa (pos. 0%) heating conditions are simulated while, at the temperature of 33°, the spring begins to move, reaching a temperature of 44°C pos.100%.

The temperature is then cooled to reach 16°C resulting in a movement in the opposite direction (pos. 0%) where the movement starts at 26° C and the stabilization at 18° (pos. 0%).

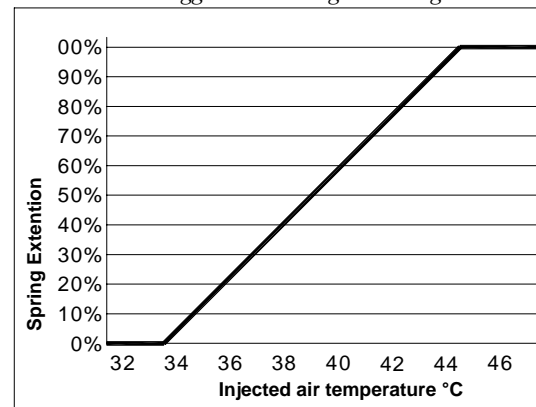
The values shown, indicate a behaviour of the diffuser in medium air flow conditions, representative of the optimum condition of use. None the less it is still true to state that the general function ability of the spring has a

extension range between 32-46°C and compresses in a temperature range between 28-16°C.

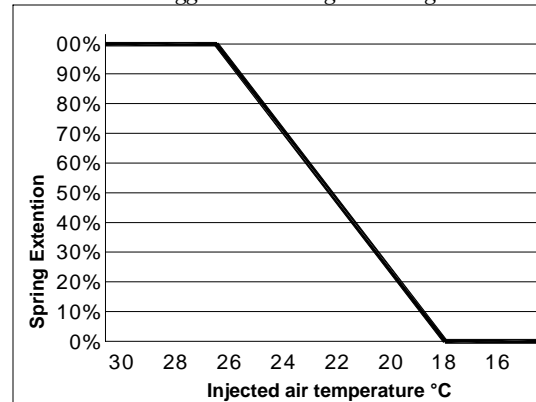
The various positions of the diffuser in response to the temperature is the same for all models. Also, as the diagram shows, the diffusers do not change their geometric shape and therefore the air flow specifications remain unchanged in the standard models.



Passage from cooling to heating



Passage from heating to cooling







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CODES

| Image |  |  |
|-------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Code | KU5 CT | KUT5 CT |
| Model | Circular diffuser with adjustable cones and thermostatic control | Circular diffuser with adjustable cones and thermostatic control ON 595x595 panel |
| 160 | X | X |
| 200 | X | X |
| 250 | X | X |
| 315 | X | X |

KU5 CT Circular diffuser with adjustable cones and thermostatic control
T Diffuser with 595x595 pannel

Example: KUT 5 CT 200
Circular diffuser with adjustable cones and thermostatic control ON 595x595 panel, diameter 200 mm.