SPC Fan Convectors with 'Active LST' control

SPC have developed a low surface temperature control system for use with its fan convector range. The new controller ensures that surface temperatures remain below the threshold above which there is a risk to vulnerable occupants. According to NHS guidelines this is taken as being equal to 43°C.

Unlike other fan-assisted low surface temperature units 'Active LST' control actively prevents surface temperature increase by monitoring the casing temperature at its hottest point. An independent valve then opens and closes in direct response to the casing temperature.

The closing of the valve reduces water flowrate and casing surface temperature to maintain it at or below the threshold value.

The chart shows temperatures measured on the outlet grille of an SPC fan convector utilising 'Active LST' control. The outlet grille and top panel are the hottest points on the casing.



Measured surface temperatures



Output Table

Unit size	Nominal length (mm)	Airflow (litres/s)	Capacity (kW)
BEL40	700	112	3.1
BEL60	900	172	4.7
BEL90	1200	231	6.4
BEL150	1500	289	8.0

30 540 600 660 720 780 840 900 960 Based on water at 80/60°C and 20°C room air.

Time (Seconds)

- · Direct sensing of hottest temperature on casing
- Independent control valve modulates to set maximum threshold temperature at 43°C
- Available with a range of capacity control options
- Surface temperature and heating capacity separately controlled
- Ensures compliance with NHS guidelines

Contact SPC for further information.

- Can be implemented on the full range of available sizes of SPC fan convector
- No additional pipework or wiring required; everything is pre-installed
- Available with rounded ends for enhanced safety
- Classic A style casing with bottom, front entry air and top, front outlet

SPC

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