

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.

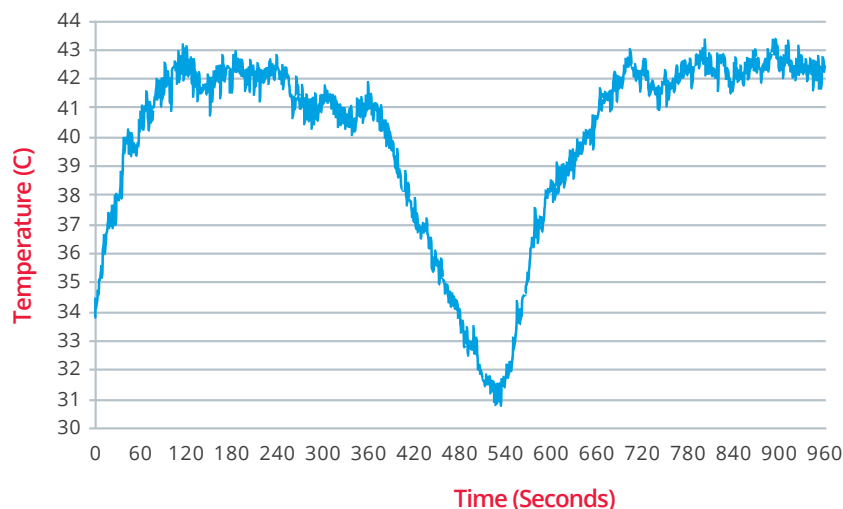
Unlike other fan-assisted low surface temperature units 'Active LST' control actively prevents surface temperature increase by monitoring the casing temperature at its hottest point. An independent valve then opens and closes in direct response to the casing temperature.

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)
BEL/SPR40	700/800	112	3.1
BEL/SPR60	900/1000	172	4.7
BEL/SPR90	1200/1300	231	6.4
BEL/SPR150	1500/1600	289	8.0

Based on water at 80/60°C and 20°C room air.

- 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
- Can be implemented on the full range of available sizes of SPC fan convector
- No additional pipework or wiring required
- LST valve/actuator supplied loose for customer fitting
- Available with rounded ends for enhanced safety
- Available on Classic and Supreme units for A and BS styles'
- LST valve sets terminate in ¾" female connections on the unit tails
- Available on standard 2-row coils only

Contact SPC for further information.

Accessories and options

	Control	Function
THERMOSTAT	ALTC	Adjustable low water temperature fan cut-out
	T1	In-built on-off control
	RT1	Remote mounted on-off control
	TLX1	Tamper-proof on-off stat
SWITCHES	RS1	On-off rocker switch
	RS2	Summer-winter switch
	RS12	Combined on-off / summer-winter rocker switch
BMS	BMS1	Relay for remote enable/disable signal
ELECTRICAL CONNECTIONS	FSB	Fuse spur box
	CCB	Customer connection box
CASE OPTIONS & ACCESSORIES	AF2	Air filter fitted behind the inlet grille
	SPF	Special paint finish
	P	Plinth
	LAP	Lockable access panel
	TAP	Tamper proof access panel
	BOX IF	Metal flush mounting box for single rocker switch
	BOX IS	White plastic surface mounting box for single rocker switches
	BOX 2F	Metal flush mounting box for combined rocker switches
	BOX S2	White plastic surface mounting box for combined rocker switches
	MASTER	Master unit
	SLAVE	Slave unit (controlled by master)