

DUNHAM-BUSH

Products that perform...By people who care

AM Comfort



LST Fan Convector



Description

With many years of experience in the UK heating industry, Dunham-Bush has recognised the need for a forced convection low surface temperature (LST) unit capable of delivering duties far in excess of those associated with natural LST convectors.

Providing an effective LST fan convector heater is a challenge Dunham-Bush have met with variants of the highly successful AM and BM ranges of fan convectors.

NHS guidelines require a maximum touch temperature of 43°C.

Both the AM Comfort LST and BM Comfort LST heaters provide the end user with a fan convector that delivers all the functionality and reliability of the much acclaimed products in the existing Dunham-Bush ranges. This, coupled with the assurance that NHS guidelines for safe touch temperatures are being met, ensures that fast and efficient heating can be delivered into safety critical areas.

Dunham-Bush has selected coils to provide true LST heating. When the air in the room is at the required temperature and the fans are either automatically or manually switched off, the fitted 4 port valve diverts hot water away from the coil eliminating the problem of unwanted natural convection increasing the discharge grille temperature.

A 4 port valve is supplied as standard, however a 2 port valve is an available option, thus enabling variable flow pumps to be used to optimise energy efficiency. Note that low temperature cut out (LTC) thermostats cannot be fitted on 2 port valve applications.

The combination of the specifically developed coils and fitted valve ensures that the casing and discharge grille of the heater do not exceed the surface temperature of 43°C required by NHS guidelines; providing total compliance with Health Guidance Note 'Safe' hot water and surface temperatures.

Range

The AM Comfort LST and BM Comfort LST are available in all Series AM and Series BM standard sizes, offering nominal heat outputs from 2kW to 9kW.

Installation is as straightforward as with standard models and since the control valve closes automatically, there is no requirement for any additional control inputs.

LPHW connections use standard 22mm O.D. copper pipe. All options for the standard range of fan convectors are available for the LST variants, including fitted or remote thermostats, switches and relays, allowing most control arrangements, including master and slave operation for groups of 2 to 6 fan convectors.

LST Performance

figure number	Low				Medium				High			
	l/s	output (kW)	air off (°C)	kPa	l/s	output (kW)	air off (°C)	kPa	l/s	output (kW)	air off (°C)	kPa
03	50	1.4	41	0.2	75	2.1	41	0.4	110	2.9	40	0.8
04	75	2.2	42	0.5	110	3.3	43	1.1	150	4.2	41	1.8
06	105	3.1	43	1.0	150	4.2	41	1.8	175	4.7	40	2.2
08	130	3.6	41	0.7	220	6.1	41	1.8	275	7.0	39	2.3
10	205	5.8	41	1.6	270	6.9	39	2.3	290	7.2	39	2.5
12	210	6.2	43	2.0	280	8.0	42	1.3	350	9.2	40	1.6
15	280	8.0	42	1.3	330	8.4	40	1.5	350	9.2	40	1.6

Note: Heat outputs (kW), air volume flow rates (l/s), leaving air temperatures (°C) and hydraulic resistance (kPa)
 Conditions: LTHW 75°C mean, 10K drop across the coil and ambient air temperature 18°C

Space comparison

A typical LST natural convector casing sized to provide 2.1kW of heating would be approximately 2000mm in length. By comparison, the smallest LST fan convector heater, which provides an equivalent heat output, is only 695mm in length, requiring only 35% of the wall space.

An LST natural convector installation that would equal the heat output of the largest LST fan convector heater available, 9.2kW, would require a casing length of 7200mm, occupy 380% more wall space than the fan convector installation and need at least 3 or 4 separate casings, all of which would require connections to the main LPHW supply with a thermostatic radiator valve (TRV) and an isolation valve.

Heat output (kW)	LST fan convector			LST natural convector
	Fig Number	Length (mm)	Quantity	Approximate Quantity of 2000mm casings
2.9/4.2	03/04	695/895		
4.7/7.2	08/06/10	895/1195		
9.2	12/15	1495		



AM13 LST Series fan convector

Please refer to main AM Series catalogue PDS-1000-H-0080-11 for the complete range of casing styles and control options



BM1 LST Series fan convector

Please refer to main BM Series catalogue PDS-1000-H-0081-05 for the complete range of casing styles and control options

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Manufacturer reserves the right to
change any product specification
without notice

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