

## Fan Convector Heater



- Features: **Electric and LPHW version available**
- Wide range of options and accessories**
  - Robust and attractive design**
  - Easy to install and commission**
  - Cases can be painted in a wide range of colours**

### ENGINEERING SPECIFICATION

#### DESCRIPTION AND FEATURES

The units shall be manufactured from minimum 1.2mm galvanised steel. The overall size of the unit shall be as detailed on drawings for the particular model. Each model shall be tested before leaving the factory to ensure it will continue to meet the specified performance with a minimum of maintenance, throughout its life. All bearings and moving surfaces in contact shall operate without requiring lubrication. All electrical components shall be tested to ensure each unit and its associated wiring complies with the 16th edition of I.E.E. The LPHW unit shall have a 3-speed switch and step transformer fitted as standard. The electric unit shall have a three-position switch giving two stages of heat and fan only operation. All bearings and moving surfaces in contact shall operate without requiring lubrication.

#### CASING

The casing shall be manufactured from 1.2mm Stelvetite finish steel, designed to minimise distortion and vibration. The standard finish is an attractive light grey - other Stelvetite finishes are available.

#### CHASSIS

Each chassis shall be manufactured from 1.2mm galvanised steel and be mounted on a heavy gauge galvanised steel rear panel.

#### FANS

The coils shall be of the draw through tangential type, manufactured from aluminium and complete with a flexible drive coupling and a sealed-for-life ballrace. Each fan shall be specifically developed to produce a high air volume with low sound levels. The assembly shall be housed in neoprene, to prevent the transmission of vibration.

#### MOTOR

Each motor shall be of the high output permanent split phase capacitor type complete with a built-in thermal overload protection, with shall comply with BS 2048 and BS 5000 1973 part II. The motor frame shall be totally enclosed and fitted with a maintenance-free sealed-for-like sleeve bearing. All motors shall be insulated to Class 'B' BS 2757

#### HEAT EXCHANGER

The coil assembly shall be manufactured with solid drawn copper tubes mechanically expanded into accurately preformed collars in rippled plate-type aluminium fins. The coils shall be built for multi-circuit operation complete with headers and suitable for LPHW. The coils shall be fitted with air vents and drains, be tested to 15 bar and be suitable for operation with a static head of up to 30 metres. The coil connections shall be plain tail type, 15mm on size 6 models and 22mm on all other models.

#### ELECRIC ELEMENTS

Each element shall be sheathed for complete safety and shall have individually separated stainless steel fins.

#### FILTER (LPHW version only)

The filter shall be constructed from a fine mesh screen, housed within a frame assembly, which can be easily washed or vacuum cleaned.

#### GRILLE

All cabinet models shall have extruded aluminium fixed deflection grilles.

## PERFORMANCE

### ELECTRICAL SUPPLY DATA

Size	L.P.H.W.				Electric
	6	9	12	15	
Starting current Amps	0.7	0.7	0.7	0.7	13.2
Running current Amps	High	0.26	0.31	0.35	0.42
	Med	0.23	0.27	0.31	0.37
	Low	0.20	0.25	0.29	0.31
Electrics	240 / 1 / 50				-
Pipe connection mm Plain tail	15	22	22	22	-
Weight - chassis kg	10.2	12.0	17.6	19.2	-
With 'L' casing kg	14.7	17.6	24.8	28	-
With 'F' casing kg	16.7	20.2	28.2	31.6	16

### ELECTRICAL VERSION

Unit Size	Speed	Air Volume l/s	Output kW	Guide* NR
6	M	70	3	34

Please note: The electric heat model is single speed only with 2 heating stages (ie 1.5kW + 1.5kW).

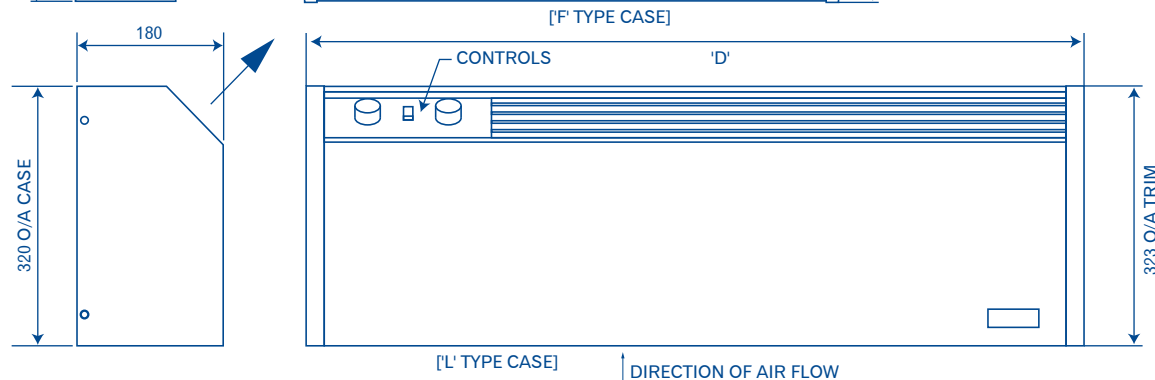
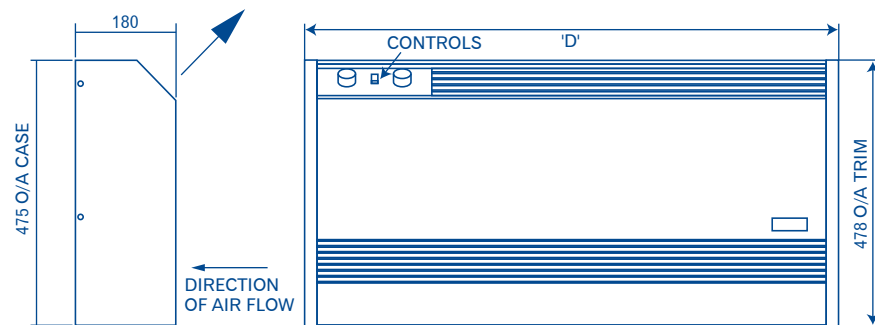
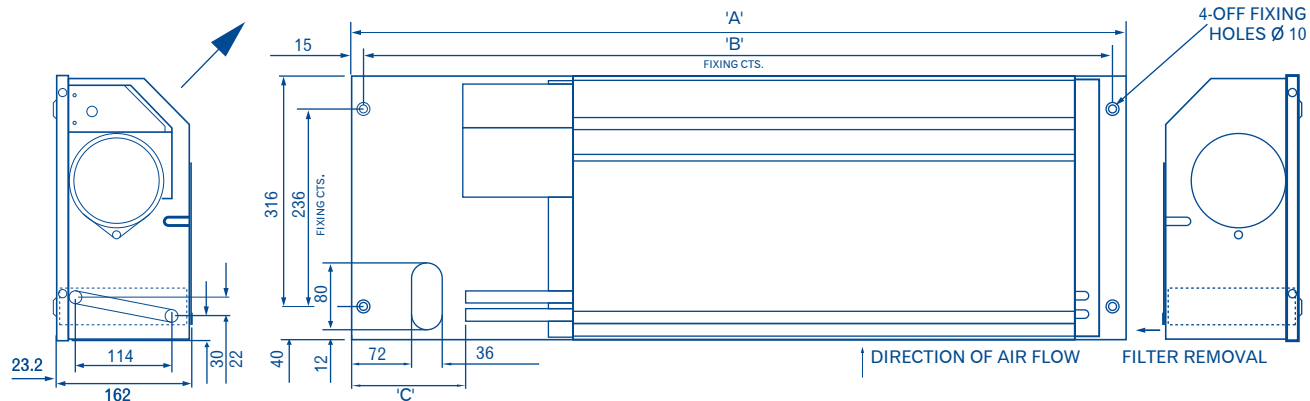
### LOW PRESSURE HOT WATER UNIT

Size	Speed	Air Volume l/s	Output kW	Water Flow l/s	Pressure drop kPa	Guide* NR
6	L	50	2.5			29
6	M	70	3.2	0.7	14.6	34
6	H	100	4.1			41
9	L	70	3.5			29
9	M	90	4.4	0.10	5.0	34
9	H	170	6.7			41
12	L	100	5.0			28
12	M	130	6.3	0.14	4.5	34
12	H	260	10.2			40
15	L	140	7.0			28
15	M	180	8.9	0.20	9.8	34
15	H	280	12.0			40

Selection Criteria: Based on LPHW @ 82°C flow and EAT of 20°C.

### DIMENSIONS

Unit	A	B	C	D
6	662	632	115	700
9	922	892	136	960
12	1262	1232	119	1300
15	1522	1492	136	1560



### CONTROL OPTIONS

Control Type	Chassis Mounted	Surface Mounted	Remote
Thermostat	✓	✓	✓
Summer / Winter Switch	✗	✓	✓
Low Water Tempset Out	✓	✗	✗
3 Speed Control	✓	✓	✓

\*The Guide NR level predictions are based upon extensive tests conducted by independent acoustic consultants within a calibrated test chamber. We would like to highlight that these figures are only indications, we recommend that the advice of an independent acoustic consultant is sought on individual projects to obtain accurate NR levels. For full sound power levels please refer to Diffusions fan coil sales department.

Diffusion Environmental Systems have a policy of continuous development. We therefore reserve the right to alter information contained in this leaflet, without prior notice.

CE Approved



Diffusion Environmental Systems, 47 Central Avenue, West Molesey, Surrey KT8 2QZ  
Tel: (+44) 020 8783 0033 Fax: (+44) 020 8783 0140 E-mail: sales@bensonenv.co.uk

