

## Savanna Overdoor Warm Air Heater



Features: **Electric and LPHW version available**

**Wide range of options and accessories**

**Available as a chassis unit**

**Can be supplied in a wide range of colours**

**Stainless steel cases available as option**

**Attractive and modern design**

### ENGINEERING SPECIFICATION

#### DESCRIPTION AND FEATURES

The unit chassis shall be manufactured from minimum 1.2mm galvanised steel. The overall size of the unit shall be as detailed on drawings from 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..

#### FAN AND MOTOR ASSEMBLY

The unit shall be fitted with a high output permanent split phase capacitor, continuously rated motor/s, with built in thermal overload protection, complying with BS 2048 1961 part 1 and BS 5000. The motor frame shall be fitted with maintenance free sealed-for-life sleeve bearings. The motor/s shall be insulated to BS 2757 (Class B).

#### CONTROLS

Each LPHW unit shall be supplied with a remote control box housing an on/off switch and a 3 speed switch. Each electric unit shall be supplied with a remote control box housing a 2 heat selection switch and a 3 position switch giving high/low fan speeds and off, thereby allowing the unit to operate on fan only to provide air movement.

#### HEAT EXCHANGER (LPHW Version)

The coil shall be manufactured from solid drawn copper tubes, mechanically expanded into accurately pre-formed collars in rippled plate type aluminium fins. The coil shall be arranged for multi-circuit operation complete with headers and suitable for a LPHW 2 pipe system. Each coil assembly shall be fitted with an air vent and drain and shall be pressure tested to 20 bar. Coils shall be suitable for operation with a static head of up to 30 metres. The connections shall be 28mm plain copper tails.

#### ELECTRIC ELEMENTS

Electric elements shall be manufactured from 8mm stainless steel rod, with 4mm pitch spiral fins. Each element shall be sheathed for complete safety and be linked to an overheat cut out switch.

#### GRILLES

Fixed linear grille on the inlet and adjustable directional linear grille on the discharge. The grilles shall be manufactured from mild steel and finished in white.

#### OPTIONAL EXTRAS AVAILABLE

Low water temperature cut-out switch <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Provides automatic shut down of the fan motor and eliminates the need for any separate site relay switches or wiring. Factory fitted.
Manual summer/winter switch <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Used in conjunction with the low water temperature cut out switch, this will allow the fan only to run in the summer season, to provide air movement. Suitable for remote fitting on site.
Thermostat <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Room thermostat for remote fitting on site.

## PERFORMANCE

### LPHW - STANDARD CAPACITY

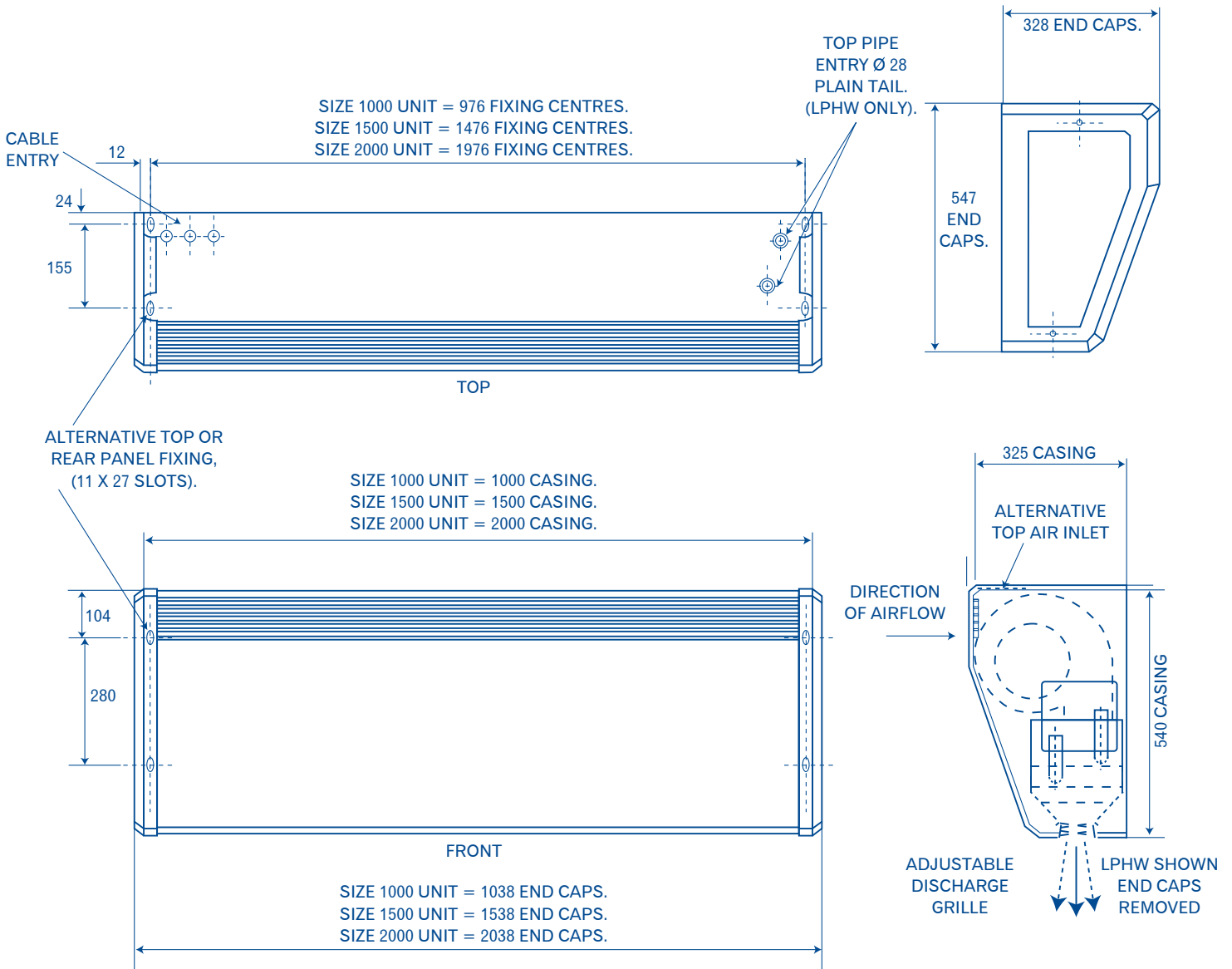
	1000 W			1500 W			2000 W			1000 W			1500 W			2000 W		
	LOW	MED	HIGH	LOW	MED	HIGH	LOW	MED	HIGH	LOW	MED	HIGH	LOW	MED	HIGH	LOW	MED	HIGH
Fan Speed																		
Air Volume m <sup>3</sup> /s	0.24	0.32	0.44	0.36	0.48	0.66	0.47	0.64	0.88	0.23	0.30	0.42	0.34	0.46	0.63	0.45	0.61	0.84
Output kW	8.6	10.6	12.9	13.3	16.3	20.0	17.7	21.9	27.1	12.2	15.0	19.1	18.5	23.4	29.4	24.7	31.2	39.3
Water Flow l/s		0.29			0.45			0.60			0.42			0.65			0.87	
Coil Pressure Drop kPa		8.8			15.3			20.5			14.0			26.6			20.6	
Starting Current Amps	0.95	1.43	2.6	1.42	2.14	3.9	1.9	2.86	5.2	0.95	1.43	2.60	1.42	2.14	3.90	1.9	2.86	5.2
Running Currents	0.87	1.13	1.56	1.3	1.69	2.34	1.74	2.26	3.12	0.87	1.13	1.56	1.3	1.69	2.34	1.74	2.26	3.12
Electrical Supply	230/1ph/50Hz									230/1ph/50Hz								

(All units are designed to operate on 230/1/150 supply)

Selection Criteria: Air On @ 20°C and LPHW @ 82 / 71°C.

### ELECTRICAL VERSION

Electric Range	1000		1500		2000	
	LOW	HIGH	LOW	HIGH	LOW	HIGH
Fan Speed						
Air Volume m <sup>3</sup> /s	0.32	0.44	0.48	0.64	0.64	0.82
Output kW	9/6	9/6	12/8	12/8	18/12	18/12
Starting Current per phase (max) Amps	14.3	15.5	19.3	21.1	28.6	31.0
Running Current Amps	14.0	14.5	17.7	20.3	28.0	28.9
Electrical Supply	415v/3ph/50Hz					



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

