

# Oasis

## Over Door Heater



### Features:

- ▶ Attractive compact design.
- ▶ Electric and water versions.
- ▶ Cased and recessed models available.
- ▶ Horizontal or vertical mounting options.
- ▶ Can be mounted up to 3.0m high from finished floor level.
- ▶ A wide range of colours available.
- ▶ Energy saving controls option available.
- ▶ Ambient models available.

# Oasis

## Over Door Heater

### Application

The Diffusion Oasis over door warm air heater range is an ideal choice for reception areas, large retail outlets, supermarkets, hotels and hospitals. With its stylish appearance and high performance, the unit will meet most aesthetic considerations. With its compact dimensions, the unit can be mounted into areas with limited door to ceiling height. The energy saving controls option allows its use where energy/running costs are of a critical consideration.

### Description

The Diffusion Oasis over door heater range has been designed, with its compact shape, to harmoniously integrate into the aesthetics of modern reception areas and entrances. The unit is available in lengths of 1.0m, 1.5m, 1.8m and 2.0m and can be supplied in a wide range of colours. The unit comes in a RAL 9010 finish as standard. The flexibility of water or electric heating, together with horizontal or vertical mounting options, enables use in existing or new buildings. The unit can be supplied as either a recessed or cased type. The Oasis can be wired as a master and slave configuration where multi use installations are required.

### Chassis

The chassis shall be manufactured from a minimum of 1.2mm thick galvanised mild steel. All galvanised mild steel items shall be self finish. The chassis shall be suitably stiffened to prevent flexing and distortion. The units shall have suitable integral hanging brackets to allow for the unit to be supported via drop rods. The casing shall be manufactured from a minimum of 1.2mm thick zintec. The casing shall have a suitable full length removable access panel for maintenance purposes.

### Fan assembly

The unit shall be fitted with a high output permanent split phase capacitor, motor continuously rated and complete with a built in thermal overload protection, complying with BS 2048 1961 part 1 and BS 5000. The fans shall be of the double inlet, double width centrifugal type dynamically balanced in two planes according to DIN standards ISO 1940. The motors shall be insulated to BS 2757 (class B).

### 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. Each 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 air vents and drain connections. The coil shall be pressure tested to 40 bar and be suitable for operation with a static head of up to 30 metres. Coil tails are 28mm plain copper.

### Electric Elements

Each element shall be manufactured from 8mm fully sheathed stainless steel rods, with 4mm pitched spiral fins. A manual re-set high temperature cut-out shall be fitted in accordance with standard safety requirements. The elements comply with BS7351 – 1990.

### Grilles

The discharge and inlet grilles shall be linear type and manufactured from mild steel. As a standard the grilles will be finished in RAL 9010. The recessed model shall only be provided with a discharge grille and spigot. Should the casing colour requirement differ from standard, the grilles shall be finished to match casing colour.

### Function Tests

Each unit shall be function tested at our factory to ensure correct operation. All electrical components shall be tested to ensure each unit and its associated wiring complies with the 16<sup>th</sup> edition of IEE. The unit shall be manufactured in accordance with BS EN ISO 9001:2000 quality standards.



### Standard Controls

**Electric version:** Supplied with a remote control plate housing on/off, speed high/low, heat off, low and high, finished in satin chrome as standard, suitable for fitting onto a standard two gang, recessed or surface mount, electrical back box. The unit can be used in ambient mode, by using the fans only setting.

**LPHW version:** Supplied with a remote control plate housing 4 speeds/off, finished in satin chrome as standard, suitable for fitting onto a standard two gang, recessed or surface mount, electrical back box.

### Energy Controls (Optional)

Our award winning MODBUS compatible energy saving controls system offers state of the art technology that allows the end user closer control of the equipment. The controls function by using an off coil sensor which will restrict the leaving air temperature (solid state relays on electric & 2 or 3 port valves on LPHW) to a set value (40°C as standard but this is adjustable). You can add return and outside temperature sensors into the system making it fully automatic, thus not needing manual changeover of summer/winter operation.

The controller also offers as standard inputs for remote BMS monitoring, common fault signal, BMS on/off, BMS summer/winter, BMS speed control, occupancy sensor/door switch and high heat temperature trip. The LCD remote control plate houses speeds, on/off control, plus fault indications.

### Optional Extras

**Low water temperature cut out:** Provides automatic shutdown of the fan/motor when boilers have been switched off (standard controls only).

**Summer/Winter switch (manual):** Used in conjunction with the room thermostat and/or low water temperature cut out, this will allow the fan only to run for air movement (standard controls only).

**Remote thermostat:** Available in adjustable or tamperproof (standard & Energy saving controls).

**BMS interface relay:** 24vac relay and base (standard controls only).

**Fault indication relay:** current sensitive relay to indicate fault alarm from unit (standard controls only).

**2 or 3 port valves** (standard controls only).

**Return air sensor:** Mounted integral to the unit (energy controls only).

**Outside temperature sensor:** To detect outside conditions (energy controls only).

**PIR Sensor:** To offer automatic on/off control of the unit (energy controls only).

**BMS Fault Signal Relay:** 12VDC relay and base to indicate fault alarm from unit (energy controls only).



# Performance Details

## Oasis Electric

MODEL	SPEED	DUTY	AIR VOL	AIR ON	AIR OFF	ELEC SUPPLY	S.C	F.L.C	WEIGHT	GUIDE NR	dBA
1000E 3/6kW	HIGH	3/6 kW	310 L/s	20 deg C	36 deg C	230-1-50	28.50A	27.00A	41kg	NR59	63dBA
	LOW	3/6 kW	270 L/s	20 deg C	38 deg C	230-1-50				NR55	59dBA
1000E 6/9kW	HIGH	6/9 kW	310 L/s	20 deg C	44 deg C	415-3-50	14.65A	13.50A	42kg	NR59	63dBA
	LOW	6/9 kW	270 L/s	20 deg C	48 deg C	415-3-50				NR55	59dBA
1500E 4/8kW	HIGH	4/8 kW	480 L/s	20 deg C	34 deg C	415-3-50	13.77A	12.50A	60kg	NR61	66dBA
	LOW	4/8 kW	390 L/s	20 deg C	37 deg C	415-3-50				NR56	61dBA
1500E 8/12kW	HIGH	8/12 kW	480 L/s	20 deg C	41 deg C	415-3-50	19.50A	18.00A	62kg	NR61	66dBA
	LOW	8/12 kW	390 L/s	20 deg C	45 deg C	415-3-50				NR56	61dBA
1800E 12/18kW	HIGH	12/18 kW	629 L/s	20 deg C	44 deg C	415-3-50	33.12A	27.00A	69kg	NR58	62dBA
	LOW	12/18 kW	548 L/s	20 deg C	47 deg C	415-3-50				NR54	58dBA
2000E 12/18kW	HIGH	12/18 kW	700 L/s	20 deg C	41 deg C	415-3-50	29.31A	27.00A	80kg	NR58	62dBA
	LOW	12/18 kW	600 L/s	20 deg C	45 deg C	415-3-50				NR54	58dBA

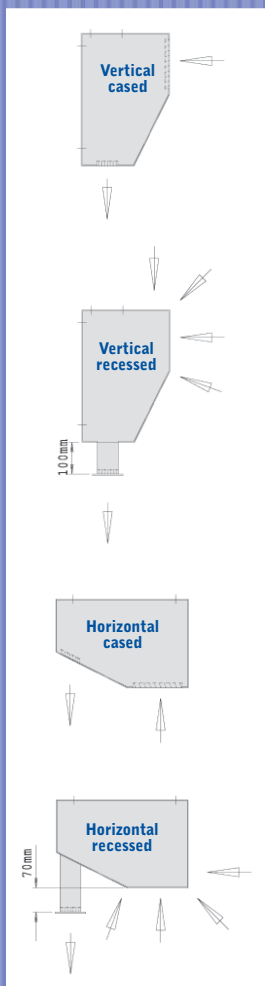
\*Please note that if our energy controller is utilized, the above noise levels can be significantly reduced, as the air volumes can be lowered.

## Oasis LPHW

MODEL	SPEED	DUTY	AIR VOL	AIR ON	AIR OFF	WATER FLOW TEMP	WATER PR DROP	FLOW RATE	ELEC SUPPLY	S.C	F.L.C	WGHT.	GUIDE NR	dBA	PIPE CONNS	WATER CONT LITRES
1000W	BOOST	10.30 kW	320 L/s	20 deg C	46 deg C	82 deg C	4.85 kpa	0.230 L/s	230-1-50	2.12A	0.98A	37kg	NR58	62dBA	28mmOD	1.19
	HIGH	9.50 kW	280 L/s	20 deg C	48 deg C	82 deg C	4.85 kpa	0.230 L/s	230-1-50				NR55	59dBA		
	MED	8.20 kW	220 L/s	20 deg C	50 deg C	82 deg C	4.85 kpa	0.230 L/s	230-1-50				NR49	53dBA		
	LOW	5.70 kW	140 L/s	20 deg C	54 deg C	82 deg C	4.80 kpa	0.230 L/s	230-1-50				NR38	42dBA		
1500W	BOOST	16.00 kW	480 L/s	20 deg C	47 deg C	82 deg C	8.20 kpa	0.356 L/s	230-1-50	2.63A	1.28A	55kg	NR60	64dBA	28mmOD	1.67
	HIGH	14.30 kW	400 L/s	20 deg C	49 deg C	82 deg C	8.20 kpa	0.356 L/s	230-1-50				NR55	60dBA		
	MED	12.40 kW	320 L/s	20 deg C	51 deg C	82 deg C	8.20 kpa	0.356 L/s	230-1-50				NR50	55dBA		
	LOW	8.65 kW	210 L/s	20 deg C	54 deg C	82 deg C	8.15 kpa	0.356 L/s	230-1-50				NR40	44dBA		
1800W	BOOST	20.47 kW	629 L/s	20 deg C	47 deg C	82 deg C	11.50 kpa	0.460 L/s	230-1-50	6.12A	1.88A	62kg	NR58	62dBA	28mmOD	1.95
	HIGH	18.70 kW	548 L/s	20 deg C	48 deg C	82 deg C	11.50 kpa	0.460 L/s	230-1-50				NR54	58dBA		
	MED	14.55 kW	375 L/s	20 deg C	52 deg C	82 deg C	11.50 kpa	0.460 L/s	230-1-50				NR45	49dBA		
	LOW	11.39 kW	278 L/s	20 deg C	54 deg C	82 deg C	11.50 kpa	0.460 L/s	230-1-50				NR36	42dBA		
2000W	BOOST	24.30 kW	750 L/s	20 deg C	46 deg C	82 deg C	13.85 kpa	0.540 L/s	230-1-50	6.12A	1.88A	73kg	NR61	65dBA	28mmOD	2.14
	HIGH	21.60 kW	625 L/s	20 deg C	48 deg C	82 deg C	13.85 kpa	0.540 L/s	230-1-50				NR56	60dBA		
	MED	17.00 kW	435 L/s	20 deg C	52 deg C	82 deg C	13.85 kpa	0.540 L/s	230-1-50				NR48	52dBA		
	LOW	13.60 kW	330 L/s	20 deg C	54 deg C	82 deg C	13.75 kpa	0.540 L/s	230-1-50				NR40	46dBA		

**NOTES** Guide NR values given are based on 1 off unit mounted 2.5m above a typical door within a typical space and measured at 3.0m horizontally from the unit discharge grille.

dBA figures given are calculated from the sound pressure levels measured at 3.0m horizontally from the unit discharge grille.



#### Unit Dimensions – Vertical cased model A

Unit Type	Unit Length	Unit height	Unit depth
1000	1038mm	420mm	279mm
1500	1538mm	420mm	279mm
1800	1838mm	420mm	279mm
2000	2038mm	420mm	279mm

#### Unit Dimensions – Vertical recessed model A

Unit Type	Unit Length	Unit height*	Unit depth
1000	1000mm	519mm	276mm
1500	1500mm	519mm	276mm
1800	1800mm	519mm	276mm
2000	2000mm	519mm	276mm

\* Including discharge spigot of 105mm and this can be made smaller if required.

#### Unit Dimensions – Horizontal cased model B

Unit Type	Unit Length	Unit height	Unit depth
1000	1038mm	276mm	420mm
1500	1538mm	276mm	420mm
1800	1838mm	276mm	420mm
2000	2038mm	276mm	420mm

#### Unit Dimensions – Horizontal recessed model B

Unit Type	Unit Length	Unit height*	Unit depth
1000	1000mm	351mm	414mm
1500	1500mm	351mm	414mm
1800	1800mm	351mm	414mm
2000	2000mm	351mm	414mm

\* Including discharge spigot of 70mm and this can be made smaller if required.

Established in 1960,  
Diffusion has over 50 years  
experience in producing  
environmental solutions  
via the manufacture of heating,  
air conditioning and  
ventilating products.



**Diffusion Environmental Systems**  
47 Central Avenue, West Molesey, Surrey KT8 2QZ  
Tel: (+44) 020 8783 0033 Fax: (+44) 020 8783 0140  
Email: diffusion@etenv.co.uk www.diffusion-group.co.uk

