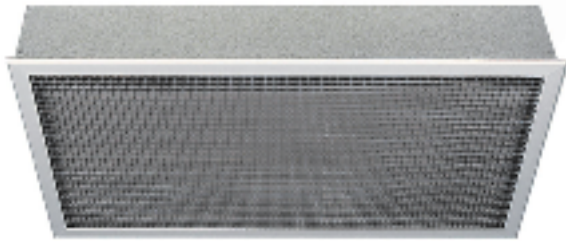




TR Overdoor Warm Air Heater



Features: **Electric or LPHW versions available**
Highly Effective
Easy, Rapid Installation
Compact, Slim Design

ENGINEERING SPECIFICATION

DESCRIPTION

TR packaged overdoor and general purpose warm air heaters are suitable for use in such applications as Banks, Building Societies, Shops, Assembly Halls, Showrooms and Leisure Centres. Available in either low pressure hot water or electric models, the units can be either recessed into a suspended ceiling or fitted with a case for surface mounting.

GENERAL

Units shall be manufactured from 1.2mm (minimum) hot dipped galvanised steel. The overall size of the unit will be as detailed on the drawing and wiring diagram overleaf. All bearings and moving surfaces in contact will operate without requiring further lubrication. The unit shall be constructed with bolts and captive fastenings, no self-tapping screws will be used. All gasket materials used within the unit shall be Class "O" fire rated and CFC and HCFC friendly. Each unit shall be manufactured in accordance with ISO 9001 procedures and functionally tested before leaving the factory, to ensure that it will perform with the minimum of maintenance, throughout its life. All electrical components will be tested to ensure that each unit and its associated wiring comply with the 16th edition of IEE (BS7671) regulations. All key components will be fitted to allow easy access for removal and maintenance. Each model is CE approved.

FAN AND MOTOR ASSEMBLY

The fans are of the draw through tangential type, manufactured in aluminium and complete with a flexible drive coupling and a sealed for life ballrace. All Diffusion tangential fan drive couplings and long life ballraces are housed in neoprene, to prevent the transmission of vibration. Each motor is of the high output permanent split capacitor type, complete with a built in thermal overload protection, which complies with BS 2048 and BS 5000 1973 part II. The motor frame is totally enclosed and fitted with a maintenance free sealed for life sleeve bearing. All motors are insulated to Class 'B' BS 2757.

HEAT EXCHANGERS (LPHW VERSION ONLY)

All coils shall be manufactured from 9mm solid drawn copper tubes, mechanically expanded into accurately pre-formed collars in rippled aluminium fins. To ensure long life, the coil tube thickness shall not be less than 0.35mm and aluminium fins not less than 0.12mm. The coil shall have multiple/single circuits with headers. Each coil shall be fitted with an air vent and drain point. All coils shall be tested after manufacture to 20 Bar and shall be suitable for an operating pressure of up to 12 Bar static head.

HEAT EXCHANGE

The condensate drip tray shall be manufactured from a minimum 1.2mm hot dipped galvanised steel, welded at each corner. The tray shall be degreased before a fire Class O anti-condensation insulation is applied to all internal and external surfaces. The tray shall be fitted with 15mm o/d as standard (22mm, also available) plain tail brass connection.

The condensate tray shall be fitted to ensure that all condensate drains effectively when the unit back plate is installed level. The condensate tray is retained with a maximum of four bolts, allowing easy access for regular cleaning in wetted coil applications.

ELECTRIC ELEMENTS

Stainless steel sheathed elements, encased in stainless steel spiral wound fins, complete with manual reset high temperature safety cutout. Elements are always designed to operate at black heat temperatures.

PERFORMANCE

Model	Duty kW	Air		Water		NR Level Guide	Starting Current* amps	Starting Current* amps	Running Current amps	Electrical Date
		Volume m ³ /s	Velocity m/s	Flow kg/sec	P.D. kPa					
TRW-6 (LPHW)	3.70	0.09	5.0	0.08	16	45	0.70	0.34	0.34	230v/ 1Ph/ 50Hz
TRW-9 (LPHW)	7.20	0.19	5.0	0.16	10.6	45	0.70	0.35	0.35	
TRW-12 (LPHW)	11.20	0.28	5.0	0.25	31.7	45	0.70	0.40	0.40	
TRW-9 (Electric)	3.0	0.19	5.0	-	-	45	13.0	12.50	12.50	
	6.0	0.19	5.0	-	-	45	25.50	25.0	25.0	

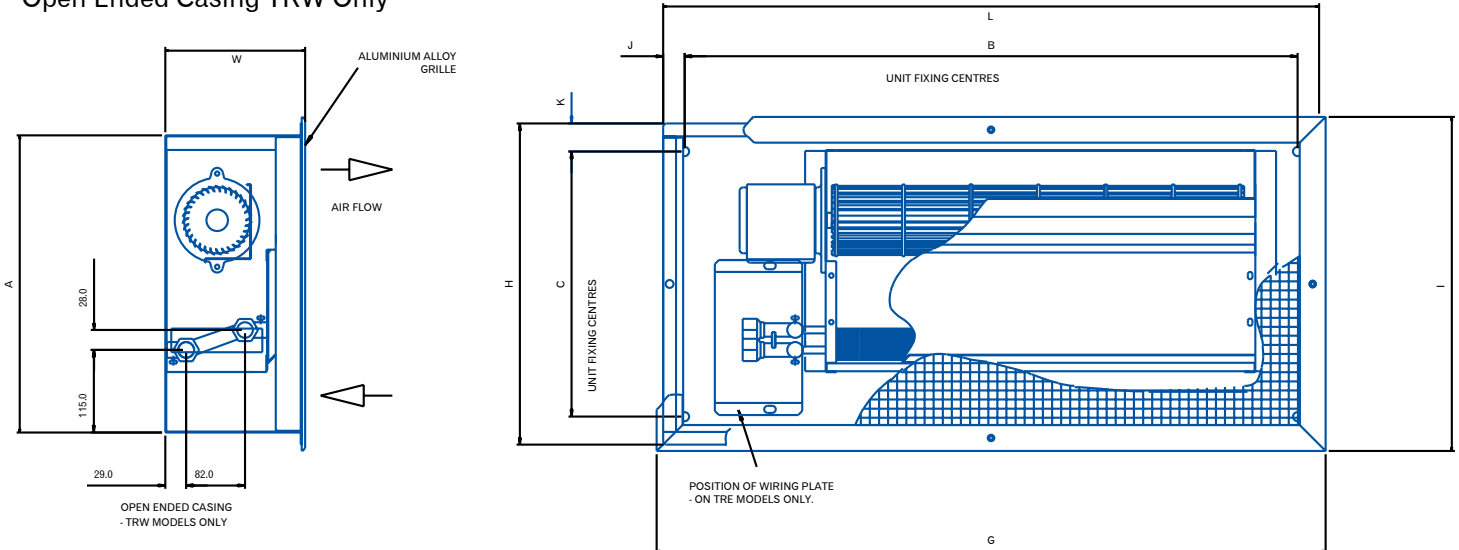
*The above starting & running currents are for 230V.
Note!: The air volumes shown above are for boot speed

DIMENSIONS & WIRING DIAGRAMS

Models TRW & TRE

(TRE Size 9 Only)

Open Ended Casing TRW Only



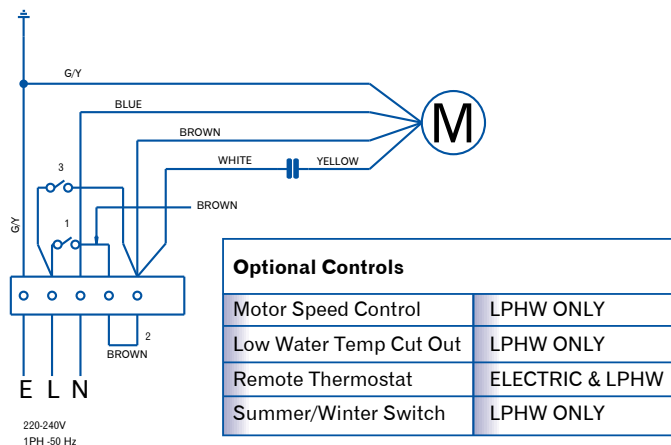
Chassis units

Size	L	W	H	A	B	C	G	I	J	K	FIXING HOLE	WEIGHT	PIPE CONNECTIONS
6	610	195	448	415	550	370	868	466	30	22	12.7	15kg	1/2 BSP F
9	915	195	448	415	855	370	1088	466	30	22	12.7	20kg	3/4 BSP F
12	1220	195	448	415	1160	370	1243	466	30	22	12.7	26kg	

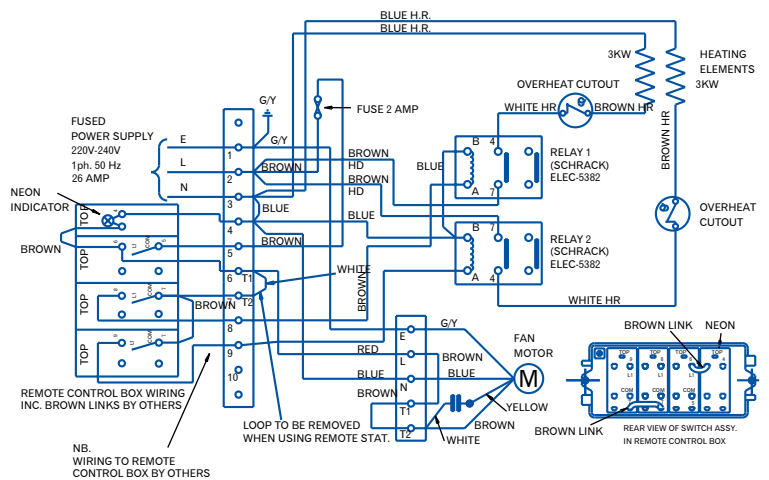
ELECTRICAL DATA

All units are designed to operate on 230/1/50 supply.

MODEL TRW



MODEL TRE



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



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