

The Porta Range

HIGH PERFORMANCE

Mobile Dehumidifiers

A range of robust fully mobile dehumidifiers designed specifically to provide rapid drying solutions and humidity control



calorex[®]

Specialist designers and manufacturers of heat pumps and dehumidifiers

How Does A Porta-Dry Dehumidifier Work?

Porta-Dry dehumidifiers are fully contained, packaged units which incorporate a fan and totally CFC free refrigeration circuit. A fan draws room air through the machine which firstly passes across a refrigerated heat exchanger (evaporator) that cools and allows moisture contained within the air to condense. The cooled, dry air then passes across a warm heat exchanger (condenser) where it is reheated as a result of the dehumidification process before being returned to the room in a dry, warm state. Moisture removed from the air is collected in a reservoir where it is fed away to waste.

Due to the unique nature of a refrigeration circuit, energy removed from the air during the dehumidification process is converted into usable heat. Typically for every 1kW of energy that a dehumidifier consumes, it will give out 2.5kW of heat and by removing moisture from the air, rather than heating it to high temperatures, Porta-Dry dehumidifiers will dry in a gentle more controllable manner, alleviating possible material shrinkage and cracking problems associated with heating methods.

Drying By Dehumidification

Dry air is a laboratory phenomenon. Atmospheric air will always contain moisture, often in quantities that prevent natural ventilation from providing an effective answer to drying buildings. Whether it be during construction, after fire or flood damage, even after a period of disuse, moisture will build up within buildings, often with damaging consequences. These problems can be disguised by the use of heat or ventilation (when the weather is occasionally suitable) but are unpredictable, slow and potentially energy inefficient.

Dehumidifiers are the only method of positively removing moisture in a controllable, efficient manner from a space, and at a speed that can be dictated to suit the application.

During building construction dehumidifiers can be used to accelerate the rate of drying wet processes such as concrete floors and plaster, not only allowing the construction work to proceed more rapidly but in a way that ensures the drying will not encourage cracking and distortion. Further, concrete floors that are dried by dehumidifiers will always settle at the correct moisture level.

Why Porta-Dry Dehumidifiers

Porta-Dry dehumidifiers are a British designed and manufactured product evolved from over 25 years of manufacturing experience.

Porta-Dry dehumidifiers are specifically designed for mobile dehumidification and are built to withstand the rigours of construction sites and wear and tear of hire.

Porta-Dry dehumidifiers are supported by a nationwide service network and technical support team to ensure the correct product is selected for your needs.

- CFC free - Porta-Dry dehumidifiers use R407C

- Operation down to 0°C Porta-Dry are supplied with hot gas defrost
- Dual voltage - Porta-Dry can be supplied with 110/240 volt option
- Non-marking wheels - Porta Dry leave no tyre marks on floors
- Comprehensive Service Department - Porta-Dry are manufactured in the UK and supported by 36 nationwide service engineers

Our product is our reputation. And both are the best.



The Porta Range **Porta-Cal** MODELS 25, 65 & 95

Portable electric fan heaters

Specifically designed to withstand the rigors of industrial/commercial space heating, Porta-Cal electric fan heaters are available in a range of sizes to suit most heating requirements.

- 3 heat settings and a 'summer cooling' fan only switch (Models 65 & 95)
- Thermal safety cut outs fitted as standard
- Double skinned for low outer case temperature
- Innovative reflector plates to prevent radiant heat damaging surfaces immediately around the heater
- Internal baffle plates to protect the fan motor from residual heat after switching off
- Castors and handles for easy manoeuvrability



Model		Porta-Cal 25	Porta-Cal 65	Porta-Cal 95
Heating Capacity	Kw	3	6-9-12	9-13-18
Voltage	V/Hz	230/1ph/50Hz	400/3ph/50Hz	400/3ph/50Hz
Max Current Draw	Amps	13.6	18	27.2
Air Volume	m ³ /hr	360	600	1520
Maximum Ducting	m	5	5	5
Ø Air Outlet	mm	155	300	300
Dimensions				
Length	mm	350	610	470
Width	mm	260	360	410
Height	mm	360	450	580
Weight	Kg	11	25	32

The Porta Range **Porta-Air** AIR MOVERS

Portable electric fans

Designed for a wide range of application, Porta-Air fans are a robust, lightweight (less than 15kg) solution for:

- Office ventilation/cooling
- Air distribution to maintain constant conditions throughout larger buildings
- Fume extraction
- Fresh air ventilation in confined spaces

Porta-Air fans are supplied with an optional duct flange. The powerful fan motors and efficient, quiet blade design allows up to 15m of ducting to be connected without loss of performance.

Porta-Air fans use 3 speed IP55 motors enabling them to be jet washed without danger of water ingress

Porta-Air fans can be stacked for minimal floor space usage.



	Unit	Porta-Air 4500	Porta-Air 4500HP	Porta-Air 7000
Electrical supply	v/Hz	230/50	230/50	230/50
Power consumed	kW	0.23	0.35	0.39
Airflow:				
Speed 1 without/with grille	m ³ /hr	2170/1900	2170/1900	3300/3000
Speed 2 without/with grille	m ³ /hr	3250/2900	3250/2900	5000/4500
Speed 3 without/with grille	m ³ /hr	5050/4500	5050/4500	7760/7000
Maximum pressure available	pa	86	250	86
Blade diameter	mm	450	450	550
Maximum ducting (300mm)	m	15	30	15
	(3x100mm)	m	-	15
Dimensions	mm	510x510x210	510x510x210	620x620x240
Weight	kg	12.5	12.5	15

SPECIFICATION

	Model	Porta-Dry 150	Porta-Dry 300	Porta-Dry 600
Capacities				
Maximum	Litres/per day	23	53	100
Nominal 20°C/70%RH	Litres/per day	15	31	59
Electrical				
Voltage		230v/1ph/50Hz		
Dual voltage option		110/230v/1ph/50Hz		
Supply fuse	Amps	13		
Recommended size of dual voltage transformer	VA	600	800	1400
Airflow	M ³ /hour	200	380	750
Dimensions				
Height	mm	570	820	1020
Width	mm	356	363	630
Depth	mm	356	365	585
Weight	Kg	30	38	65
Drainage				
Type		Reservoir 6.2L/Permanent		Permanent
Drain size	mm/id	12	12	12
Options				
Condensate pump kit			Hours run meter	
Humidistat		Site wheels and handle (standard on Porta-Dry 300 and 600)		

Sizing Guide

For drying buildings following construction, fire and flood damage or simply preventing damp

Model	Porta-Dry 150	Porta-Dry 300	Porta-Dry 600
Internal temperature greater than 15°C	175m ³	350m ³	700m ³
Internal temperature less than 15°C	150m ³	300m ³	600m ³

Note: By operating Porta-Dry dehumidifiers in conjunction with Porta-Air ventilation fans to provide greater air distribution, drying times will decrease by up to 40%



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