



Process drying

Drying by dehumidification

Dehumidifiers suitable for commercial and industrial drying process in an efficient, effective and economic way

Get In Touch



Call: [0845 6880112](tel:08456880112)



Email: info@adremit.co.uk

Our Address

Puravent, Adremit Limited, Unit 5a, Commercial Yard,
Settle, North Yorkshire, BD24 9RH



PROCESS DRYING

Economical, effective drying

Drying by dehumidification is a low maintenance way to provide efficient moisture removal while minimising the power consumption, cost and risk of product damage.

Why choose Calorex dehumidifiers for drying?

Calorex dehumidifiers provide you with a high quality finished product and costs less to operate than other methods of drying.

Air is recirculated within the chamber by a set of fans positioned above a false ceiling – the velocity past the product being critical to the drying speed.

The temperature of the chamber is increased to speed the release of moisture from the product. The higher the temperature the quicker the drying process.

The moisture released by the product is extracted by the dehumidifier. The heat pump dehumidifier converts the latent energy into heat which is returned back into the drying chamber.

This reduces the energy required to maintain the operating temperature. The condensed moisture is rejected to a waste water drain.

Dehumidifier highlights

- Rapid moisture removal at lowest cost per litre extracted
- Latent energy reclaimed to reduce power consumption
- Drying at lower temperatures reduces risk of heat damage
- Even drying improves product quality
- Low maintenance

Key benefits

- Reduced energy costs
- Reduced drying times
- Reduced rejection rates
- Short payback period
- Increased energy efficiency
- Increased product quality
- Increased profits

Applications

- Ceramic
- Timber
- Confectionery
- Brick, block and tile
- Food manufacturing
- Textiles
- Paper/cardboard

Advantages against conventional hot air ovens

- Less aggressive drying process and increased control of the drying environment
- Increases product quality and reduces rejection rate
- Reduced space required for drying gives increased space for production
- Reduced energy costs and increased energy efficiency gives a short payback period

Control options

Calorex can offer control options ranging from a simple control panel to a complex system capable of programming a fully timed drying schedule.

- Single stage
- Four stage
- Six stage
- PLC control

Get In Touch

Call: [0845 6880112](tel:08456880112)
 Email: info@adremit.co.uk

Our Address

Puravent, Adremit Limited, Unit 5a, Commercial Yard,
 Settle, North Yorkshire, BD24 9RH

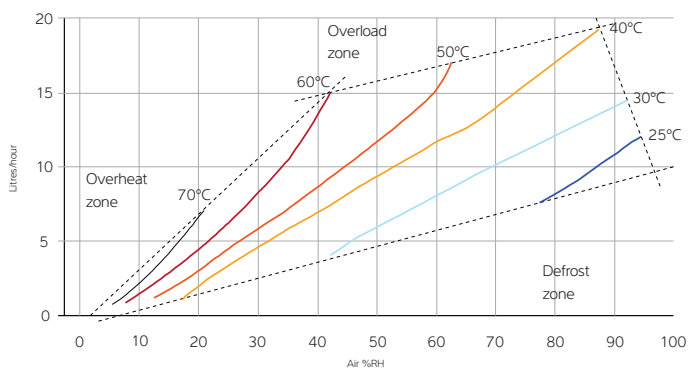


DH334BH

The DH334BH is specifically designed for use in high temperature process drying applications—the unit can operate in temperatures up to 70°C. Used in conjunction with a Calorex process drying control panel, this unit will create the perfect drying environment for your product.

Calorex also manufactures a standard range that can operate at up to 40°C, which have also been used successfully in many process drying applications.

Performance chart



Options available

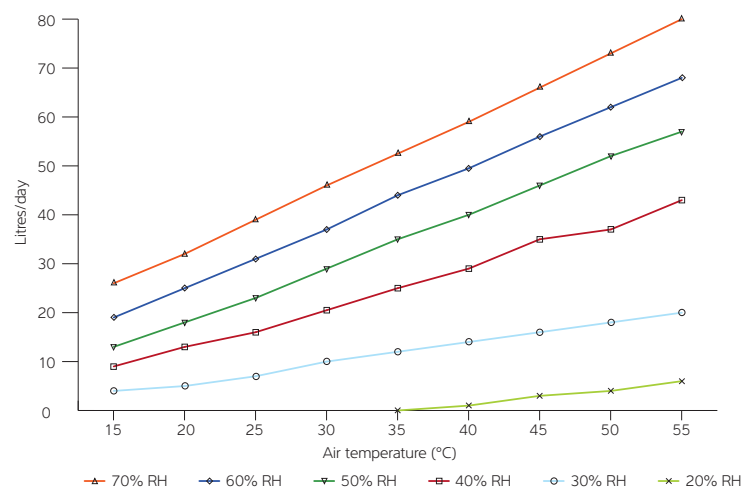
- Range of Calorex control panels
- Stainless steel cabinet
- Steam or LPHW heat exchangers for initial heat input
- Castors for portability to aid cleaning and maintenance
- Air inlet filters

DH60AHP

The DH60AHP dehumidifier is specifically designed for use in low volume process drying applications. The unit can operate in temperatures up to 55°C. Due to the compact size, integral 4kW electric air heater and simple controls, the DH60AHP is an inexpensive drying system.

The unit has found favour in the joinery trade, drying timber for furniture manufacture.

Performance chart



High quality construction

- Plastic coated galvanised steel cover
- Epoxy resin coated Al fin/Cu tube exchangers
- Corrosion resistant galvanised sub-frame

High performance

- High efficiency hermetic compressor
- Tuned for optimum extraction rate per kWh of energy consumed
- Pressure switch and delay timer protection on compressor circuit
- Latest R134a HFC refrigerant used
- Low energy centrifugal fan

Get In Touch

Call: 0845 6880112
Email: info@adremit.co.uk

Our Address

Puravent, Adremit Limited, Unit 5a, Commercial Yard, Settle, North Yorkshire, BD24 9RH



Technical data

Specifications	Units	DH334BH	DH60AHP
Dehumidification duty			
Via heat pump @ 50°C/60%RH	l/h	17	2.6
Heat to air			
Via heat pump	kW	10	2.2
Via resistance heaters and heat pump	kW	18.5	5.1
Compressor			
Nominal power consumed	kW	4.9	1.1
LRA, 3ph N	Amp	72	30
RLA, 3ph N	Amp	12	5.5
Nominal running current	Amp	9	5.3
Refrigerant charge, R134a	kg	6	0.8
Main fan			
Airflow	m ³ /h	5800	1750
Max external static pressure	Pa	0	0
Motor rating	kW	0.75	0.16
FLA, 3ph N	Amp	2.1	1.3
Heaters			
Heater rating	kW	9	4
FLA	Amp	12	16.7
Electrical data			
Voltage		400V, 3ph & N, 50Hz	240V, 1ph & N, 50Hz
Total power consumed (nominal)	Amp	14.1	5.1
Nominal running amps	Amp	-	22.2
Min supply capacity	Amp	29	23
Max supply fuse	Amp	35	35
General data			
Sound level @ 3m	dB(A)	69	57
Width	mm	985	240
Depth	mm	700	1245
Height	mm	1476	653
Weight (approx)	kg	170	70



Calorex Heat Pumps Limited, Maldon, Essex CM9 4XD, United Kingdom
 t. +44 (0)1621 856611 e. sales@calorex.com www.calorex.com



Calorex reserves the right to modify these specifications at any time. For accurate sizing please contact Calorex.

Process Drying v3

Get In Touch

Call: [0845 6880112](tel:08456880112)
 Email: info@adremit.co.uk

Our Address

Puravent, Adremit Limited, Unit 5a, Commercial Yard,
 Settle, North Yorkshire, BD24 9RH