

# Calorex DH60AHP Dehumidifier



## High Quality Construction

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



## High Temperature Process Drying Dehumidifier

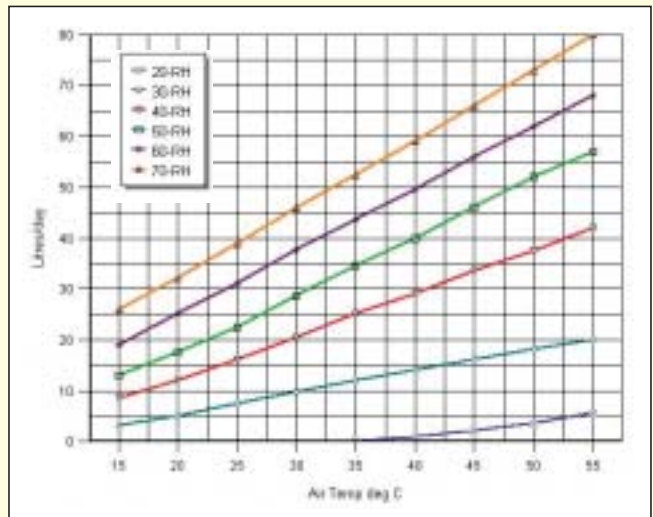
The DH60AHP dehumidifier is specifically designed for use in low volume process drying applications. The unit can operate in temperatures up to 55 °C. The unit's compact size, integral 4kW electric air heater and simple controls allow an inexpensive drying system to be created. The unit has found favour in the joinery trade, drying timber for furniture manufacture

MODEL	UNITS	DH60AHP
<b>COMPRESSOR</b> Nominal Power Consumed LRA - 1 ph RLA - 1 ph Nominal Running Current Refrigerant Charge: R134a	kW Amps Amps Amps kg	1.1 30 5.5 5.3 0.8
<b>MAIN FAN</b> Air Flow Max External Static Pressure Motor Rating FLA:- 1 ph	m <sup>3</sup> /hr Pa kW Amps	1750 0 0.16 1.3
<b>DEHUMIDIFICATION DUTY LITRES/HR</b> Via HEAT PUMP (50deg C/60% RH)	Litre/day	62
<b>HEAT TO AIR KW</b> Via HEAT PUMP Via Resistance heaters and Heat Pump	kW kW	2.2 5.1
<b>HEATERS</b> Heater Rating FLA	kW Amps	4 16.7
<b>ELECTRICAL</b> Voltage Total Power Consumed, Dehum & Heater (nominal) Nominal Running Amps Min' Supply Capacity Max' Supply Fuse	kW Amps Amps Amps Amps	240V, 1 ph, 50Hz 5.1 22.2 23 35
<b>DIMENSIONS</b> Height Length Width	mm mm mm	653 1245 240
<b>Noise@ 3m</b>	dbA	57
<b>WEIGHT APPROX</b>	kgs	70

## High Performance

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

## Performance Chart



CALOREX HEAT PUMPS LIMITED

The Causeway, Maldon, Essex, CM9 5PU United Kingdom

Tel No. +44(0)1621 856611 Fax No. +44(0)1621 850871

e.mail: sales@calorex.com web: www.calorex.com

COMMERCIAL / INDUSTRIAL

# Industrial Process Drying

## Drying by Dehumidification



### Key Benefits

- Reduced Energy Costs
- Reduced Drying Times
- Reduced Rejection Rates
- Short Payback Periods
- Increased Energy Efficiency
- Increased Product Quality
- Increased Profits

### Applications

- Ceramic
- Timber
- Confectionery
- Brick, Block and Tile
- Food Manufacture
- Textile
- Paper/Cardboard
- And Many Others

**calorex**®

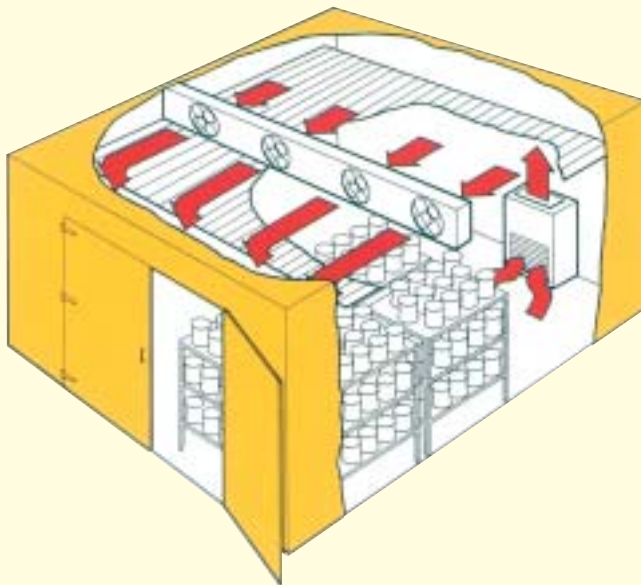
# Industrial Process and Product Drying

## Why Dehumidifiers for Drying

- Rapid water 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

## Method of Operation

Air is re-circulated 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.



## Control Options

Calorex can offer control options 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

## Advantages Against Conventional Hot Air Ovens

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



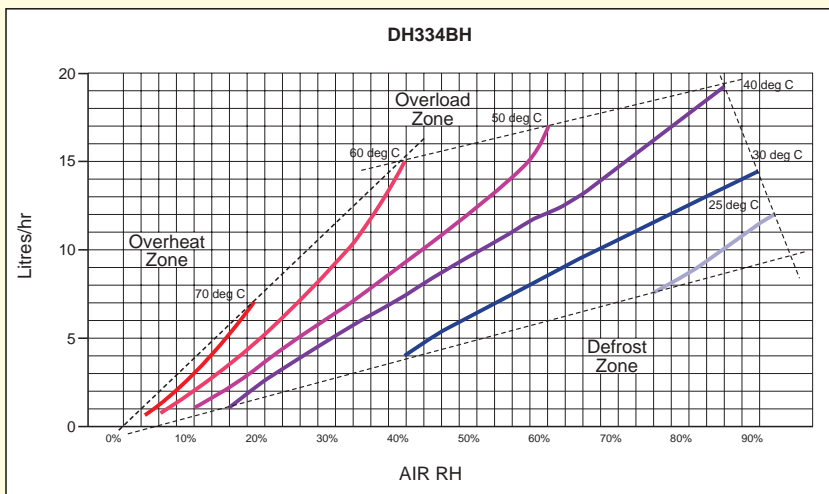
For All Your Process Drying Applications

# Calorex DH334BH Dehumidifier

MODEL	UNITS	DH334BH
<b>COMPRESSOR</b> Nominal Power Consumed LRA, 3 ph N RLA, 3 ph N Nominal Running Current Refrigerant Charge; R134a	kW Amps Amps Amps kg	4.9 72 12 9 6
<b>MAIN FAN</b> Air flow Max External Static Pressure Motor Rating FLA:- 3 ph N	m <sup>3</sup> /hr Pa kW Amps	5800 0 0.75 2.1
<b>DEHUMIDIFICATION DUTY LITRES/HR</b> Via HEAT PUMP (45deg C/80% RH)	Litre/hr	19
<b>HEAT TO AIR KW</b> Via HEAT PUMP Via Resistance Heaters and Heat Pump	kW kW	10 18.5
<b>HEATERS</b> Heater Rating FLA	kW Amps	9 12
<b>ELECTRICAL</b> Voltage Total Power Consumed (nominal) Min Supply Capacity Max Supply Fuse	kW Amps Amps	400V, 3 ph & N, 50Hz 14.1 29 35
<b>DIMENSIONS</b> Width Depth Height	mm mm mm	985 700 1476
<b>Noise@ 3m</b>	dbA	69
<b>WEIGHT APPROX</b>	kgs	170



## Performance Chart



## High Temperature Process Drying Dehumidifier

The DH334BH dehumidifier 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 to 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.

## Options Available

- Full turnkey installation service for complete drying chamber
- 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



**Drying by dehumidification is the most effective, energy efficient and economic way to dry your products**