

**calorex**<sup>®</sup>  
**DEHUMIDIFIERS**



**Condensation control for indoor  
swimming pools and spas**



## Efficient and economical dehumidifiers for condensation control in pools and spas.

**Condensation.** Left unchallenged, it can be a major problem in indoor swimming pools and spas.

Formed as water evaporating from the pool or spa surface pushes up air humidity, it can eventually lead to mould or even structural damage or collapse. In the past, the conventional approach to combating condensation came in the form of wasteful air extraction from the pool hall.

Nowadays, the science of humidity control has moved into another realm. The advanced range of Calorex dehumidifiers provide an efficient and economical solution.

## High-Performance low-cost Calorex

Calorex dehumidifiers minimise the need for costly air extraction.

Operating on the heat pump principle, these high-performance units recirculate pool air - removing the moisture content and delivering warm, dry air back to the pool hall.

By working in this way, they maintain a comfortable humidity, minimise condensation and keep heating costs at the lowest possible level.



## Automatic control, assured comfort

Each Calorex dehumidifier is equipped with a variable humidistat that **automatically** controls the operation of the unit.

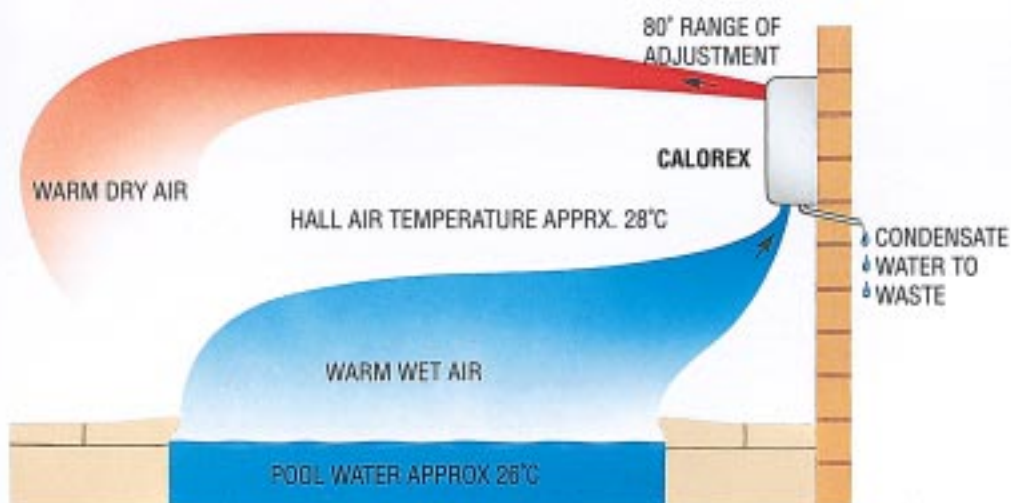
Usually between 55% and 65%, this recommended humidity level ensures a comfortable environment and control of condensation for pool and spa users, providing the building is insulated to current building regulation standards. In pools or spa enclosures with double-glazing, condensation will only start to form when outside temperatures drop to around 5 degrees C or lower

## Rapid installation, flexible operation

Fully self-contained units, Calorex dehumidifiers require minimal installation.

When it comes to operation, units offer quiet, reliable and safe performance. Flexibility is built-in. Each unit comes with a specially styled barrel type discharge that allows air to be directed in an 80° range between horizontal and vertical, thus allowing installation at high or low level.

AIR FLOW DIAGRAM





## Modern, reliable technology purpose designed for pools and spas

The two standard Calorex dehumidifiers, models 33 and 55, form the basis of a wide range of units suitable for many different applications:

### Air heating

Models 33 and 55 can be supplied with additional LPHW heater batteries which will provide pool room air heating when hot water is pumped from a boiler, thus eliminating the need for separate fan heaters or radiators. 3kW heating available on model 33, 5kW on model 55.

Electric Resistance heaters are available on models 30 (2kW) and 50 (4kW).

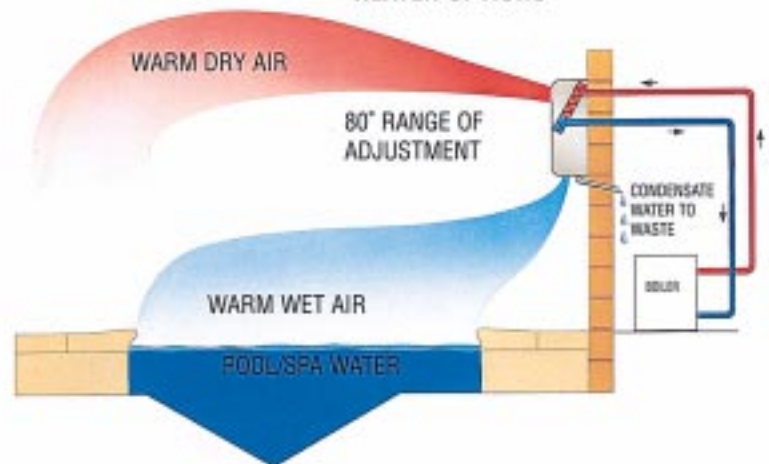
### Water heat recovery

Ideal for spas and small pools, the 33RH and 55RH models are fitted with pool water heat exchangers which allow energy from dehumidification to be recovered to water as well as to air, thus reducing water heating costs.

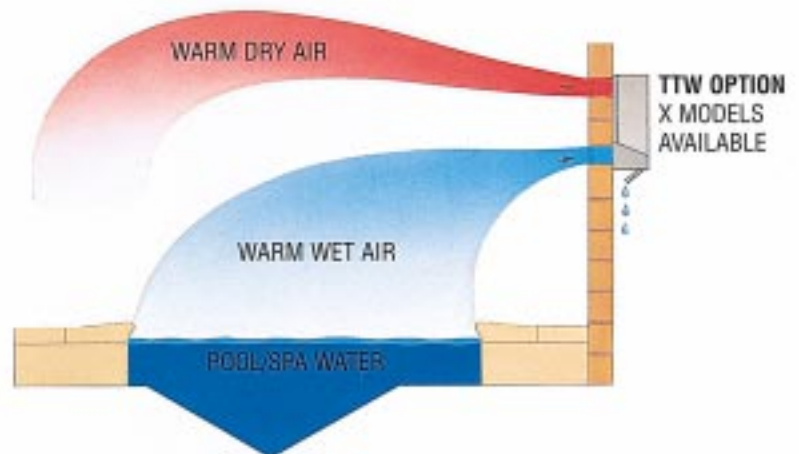
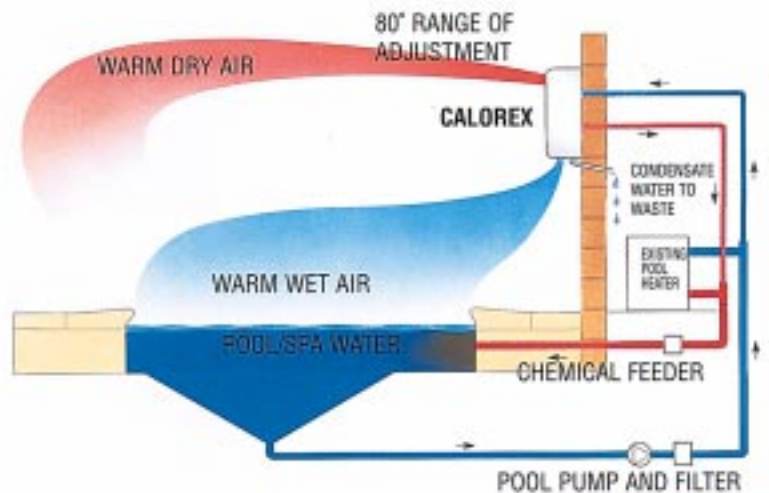
### Through the wall

Where there is a preference to place the dehumidifier in an adjacent plant room, the Calorex 33 and 55 are available in a TTW variant. Supplied with full wall brackets and decorative grills for the air ducts, the TTW is a useful option for confined spaces or particular aesthetic demands.

#### LPHW & ELECTRIC RESISTANCE HEATER OPTIONS



#### HEAT RECOVERY OPTION



### Low temperature operation

Your pool hall still needs protection when you aren't using it, but economy dictates that you drop the air heating levels when you are away. The defrost versions of the models 33 and 55 operate down to temperatures just above freezing to ensure moisture control even in cold conditions.

# Calorex Dehumidifiers and Technical Specifications

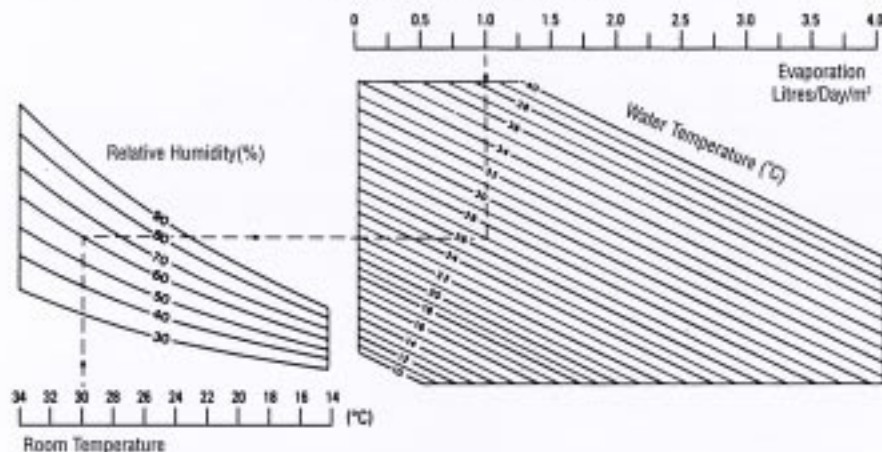
## Calorex 33 and 55 Wall-Mounted

- Highest moisture extraction for lowest power consumption of its type
- Corrosion free, easy to clean one piece GRP casing
- Centrifugal fan for quiet operation
- Heat recovery to water option
- Low operating pressure ensures long-life
- System overload protection and sealed electrics
- Suitable for pools up to 30m<sup>2</sup> and 50m<sup>2</sup> respectively, also spas
- Adjustable air outlet permits installation at varying heights

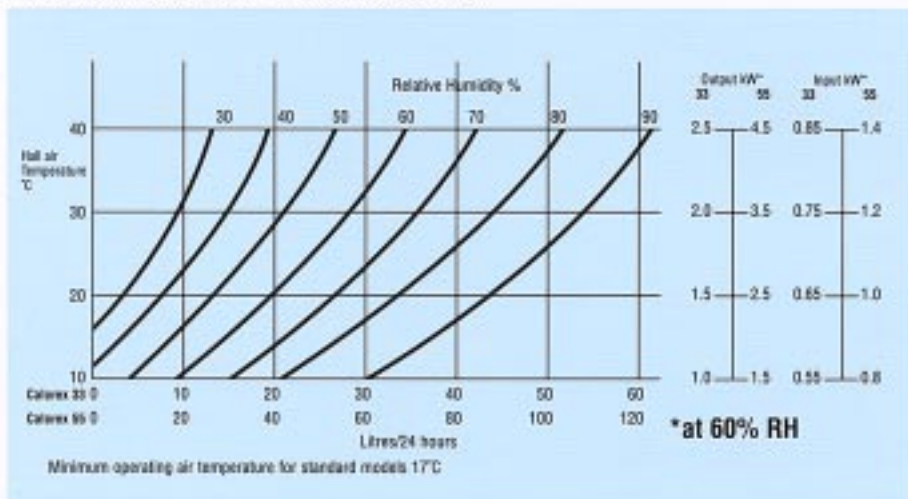
## Calorex 33 and 55 Through the wall

- Unobtrusive installation in room separate from pool or spa
- Only supply and return grilles visible from enclosure
- Simple ductwork connections for easy installation
- All the features of wall-mounted 33 and 55 models

Daily Evaporation Guide Chart (Covered Private Pool)



Performance Chart – Dehumidifiers



### Technical

Model	33	55		
System	Fully Hermetic refrigeration system charged with R407C. The evaporator and condenser coils are refrigeration quality copper tubing with polyester coated aluminium fins mechanically bonded to the tubes.			
Control	Adjustable humidistat: range 20% - 80% R.H.			
Air flow m <sup>3</sup> /hr	440	740		
Electrical	Supply	230V 50 Hz		
	Fuse	10amp	13amp	
	Nominal Running	3.4 A	5.6 A	
Dimensions(mm)	Height	653	653	
	Depth	255	255	
	Length	780	1245	
Weight	Kg	37	58	
Hot Gas Defrost Models - Performance	Temperature	RH	Calorex 33	Calorex 55
	5°C	75%	9 litres/24 h	18 litres/24 h
	0°C	80%	5 litres/24 h	10 litres/24 h



The Causeway, Maldon, Essex CM9 5PU, England  
 Tel: +44 (0)1621 856611 Fax: +44 (0)1621 850871  
 Email: sales@calorex.com Web: http://www.calorex.com