

**CDP**  
Pool dehumidification for  
comfort and wellness

# Efficient dehumidification for aggressive environments

In swimming pools, spas, shower rooms and gymnasia where high relative humidity and condensation can reduce the well-being of the occupants and cause damage to the building, efficient dehumidification is crucial. Dantherm Air Handling's CDP units are designed for aggressive environments – but are equally suitable for warehouses, archives, production areas, test rooms and all other areas with high temperatures where controlling of humidity is required.

The CDP range of ducted dehumidifiers has been specially designed for dehumidification in commercial pools and spas, in larger private pools and any other aggressive environment where high capacities are required to control the humidity. In smaller swimming pools, spas, shower rooms and gymnasia where the relative humidity is generally lower, the smaller CDP units are the ideal solution.

## Flexible installation of the CDP

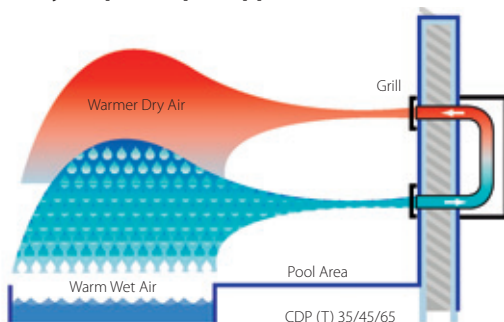
The compact CDP units are highly flexible regarding installation. They are

designed for installation in plant rooms, with ducted supply and return air, but can also be installed directly in the room that needs dehumidification -- with ducting optimizing the air distribution. A range of options are available for the CDP to meet individual requirements, including LPHW air heater reheating

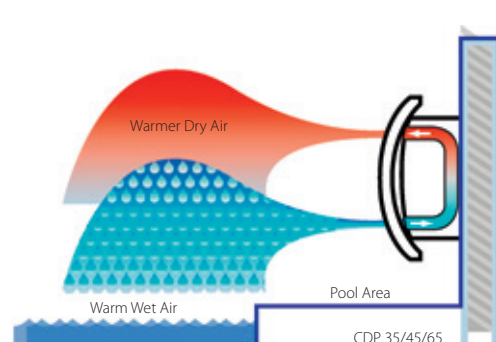
coils, fresh air induction connection, wall-mount kit and floor mount kit. The CDP is also available with a water-cooled condenser allowing the excess heat to be used for pool or sanitary water heating. The supply air discharge can be from the top or from the side opposite the air inlet.



## Primarily for pools up to approx. 40 m<sup>2</sup>



CDP(T) 35/45/65 units are designed for installation in an adjacent room and are supplied with a thorough wall sleeving kit with natural aluminium finish supply and return air grills.



CDP 35/45/65 units are designed for installation directly in the pool hall or area to be dehumidified.

### Applications CDP 35/45/65 and CDP (T) 35/45/65

- Swimming pools
- Spas
- Shower rooms
- Gymnasias
- Work shops
- Warehouses
- Cellars
- Archives
- Museums

### Applications CDP 75/125/165

- Larger private pools
- Commercial pools
- Commercial spas
- Warehouses
- Archives
- Test rooms
- Production areas

### Fully automatic operations

The operation of the CDP units are fully automatic. The CDP is electronically controlled via a remote hygrostat. An electronic module provides a visual display of working modes while the control panel provides push-button selection of air heating and continuous fan run. The control panel can be moved to either side of the unit to suit plant room configuration. Opening panels offer easy access to the unit for inspection and routine filter cleaning. The CDP has an electronic control and an in-built, adjustable hygrostat. An electronic module

on the unit provides a visual display of operating modes. CDP(T) models benefit from exceptionally silent operation.

### How CDP and CDP(T) work

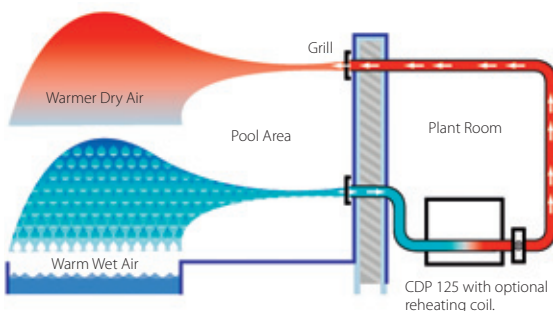
An integral fan draws humid air into the dehumidifier through a filter. Here the air passes through an evaporator, where the water vapour condenses on a cold surface and falls as water droplets, into the drip tray and then into the drain. The cooled air then passes through a condenser and picks up not only the heat equivalent of the previous cooling, but also the heat equivalent of the electrical

input to the unit. Consequently, the air leaves the unit drier and several degrees warmer. The repeated circulation of air through the unit reduces the relative humidity, giving very rapid but gentle drying.

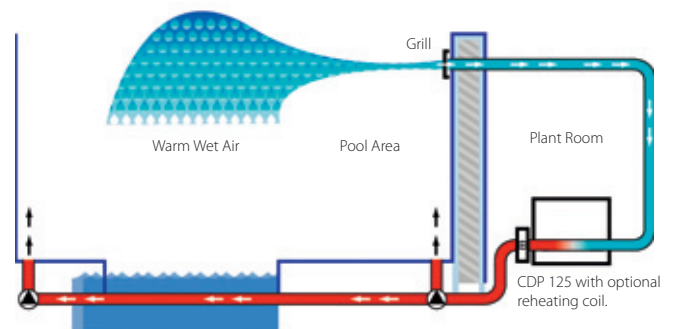


CDP 75/125/165

### Primarily for pools from 40 m<sup>2</sup> to approx. 100 m<sup>2</sup>



The humid air from the water surface passes through a dehumidifier, leaving the supply air drier and several degrees warmer.



In swimming pool halls with large window areas, a solution where the dehumidified and warm supply air is led through pipes under the floor and blown out by the windows is an obvious choice. In this way condensing of the windows can be avoided.

## Technical data CDP(T) 35/45/65



	Dehumidification capacity at 28°C/60% RH	Air flow	Operating range – humidity	Operating range – temperature	Weight
	l/24h	m <sup>3</sup> /h	%RH	°C	kg
CDP 35/35T	29	250	40 – 100	10 - 36	60/57
CDP 45/45T	42	500	40 – 100	10 - 36	74/68
CDP 65/65T	60	750	40 – 100	10 - 36	101/95

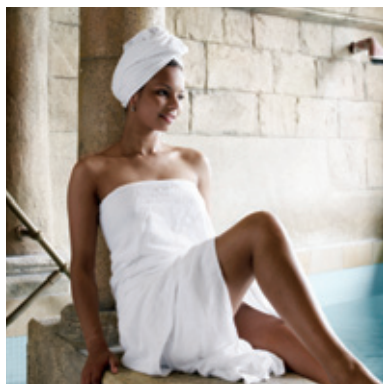
	Height	Width	Depth		Height	Width	Depth
	mm	mm	mm		mm	mm	mm
CDP 35	800	950	315	CDP 35T	680	890	290
CDP 45	800	1260	315	CDP 45T	680	1200	290
CDP 65	800	1800	315	CDP 65T	680	1735	290

Units are supplied complete with a wall-mounting bracket, supplied loose for fixing to the wall.

## Technical data CDP 75/125/165

	Dehumidification capacity at 28°C/60% RH	Air flow	Operating range – humidity	Operating range – temperature	Height	Width	Depth	Weight
	l/24h	m <sup>3</sup> /h	%RH	°C	mm	mm	mm	kg
CDP 75	65	1500	40 – 100	20 - 38	650	1155	725	130
CDP 125	124	2500	40 – 100	20 - 38	850	1300	900	160
CDP 165	162	3600	40 – 100	20 - 38	975	1400	1010	190





**Optional extras for CDP (T) 35/45/65**

- Room hygostat
- Through-wall duct kit with filter (T-models)
- Floor mount kit
- LPHW air reheating coil
- Failure monitoring kit

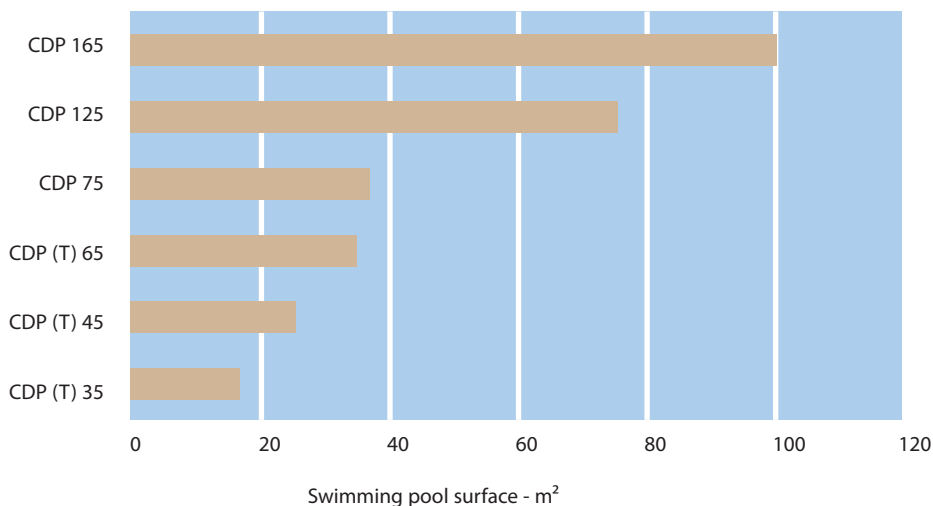
**Features and benefits**

- High quality product manufactured to exact standards
- Low energy consumption and impressive functionality
- High quality design
- Control unit designed to suit any plant room application
- Easy to operate and control
- Designed to meet the requirements of almost every application
- Close to silent operation

**Optional extras for CDP 75/125/165**

- Duct/room hygostat
- Room thermostat
- LPHW air reheating coil
- Wall-mounting kit
- A.V floor mount kit
- Defrosting kit
- Failure monitoring kit

**Quick selection guide**

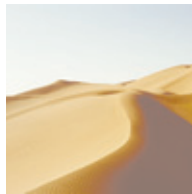
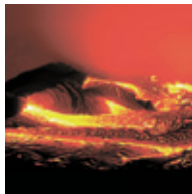


**Technical data CDP(T) 35/45/65/75/125/165**

*Which unit to choose in a swimming pool hall depends on the surface area. This graph is intended as a guide only, providing approximate recommendations. The selection of the correct dehumidifier for swimming pool halls requires that several factors are taken into account, e.g. air and water temperatures, usage levels and whether a floating cover is used. Please consult your supplier for professional guidance as unit selection should be carried out only by qualified personnel to get an optimum solution.*



## Comfortable surroundings in any climate



Since 1958 Dantherm Air Handling has developed and produced climate control and air handling solutions that ensure optimum conditions for people and sensitive equipment alike. No climate is too extreme for us to handle – from the bitter cold at the North and South Poles to the searing heat of the Sahara.

Our core business areas are dehumidification, heating, air conditioning, ventilation and electronics cooling. Innovative, durable and cost-efficient products have secured us a position as a leading global manufacturer of stationary and mobile climate control units. And we are forever pursuing new techniques that will improve our solutions and ultimately your projects.

Dantherm Air Handling's headquarters are situated in Denmark with subsidiaries in Norway, Sweden, the United Kingdom, the United States and China – and an extensive European dealer network.

Dantherm Air Handling is a wholly-owned subsidiary of Dantherm A/S.

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