

## 2022 CLIMATE CONTROL

FOR POOLS, SPAS, LEISURE CENTRES AND COMMERCIAL BUILDINGS

**DANTHERM**GROUP

### Dantherm<sup>®</sup> CLIMATE SOLUTIONS

#### About the Dantherm Group

Originally founded in 1954, the Dantherm Group is a European leader in portable and installed climate control solutions for a wide range of industries and uses. Based on the work of more than 500 passionate climate control experts and more than three million installations, our competence centres around Europe design and build exceptional heating, cooling, dehumidification and ventilation units that form the backbone of these climate solutions. In everything they do, they remain focused on creating healthy and comfortable climate surroundings in a sustainable, energy-efficient and cost-effective way.



Five competence centres in Denmark, Germany, Italy, Spain and UK.





#### **Competence centre**

for air handling and dehumidification: Skive, Denmark.



#### **Pool & Commercial**

Established in 1958 and home to Dantherm Group's biggest manufacturing facility, the competence centre in Skive, Denmark, is highly specialised in the development of high-end air handling and dehumidification solutions. Renowned for their energy efficiency, durability and low lifecycle costs, the solutions are suitable for all pool sizes.



## CONTENT

Based on the extensive knowhow of our climate solution experts across the Group, we have developed an industry-leading range of products and solutions all characterised by reliability, sustainability, efficiency and ease of use.

Being able to source everything from just one supplier will help streamline your purchasing supply lines and reduce your costs for internal handling. To that end, you'll also find our local presence with an extensive network of professional dealers across Europe helpful. It means support in your time zone and language – from people who understand your local market requirements.

Enjoy the read!

Our solutions rest on these four pillars:

**Reliability** has always been at the heart of everything we do. So we still use long-lasting, solid components that have been through extensive testing.

**Sustainability** is an integral part of how we work. We aim to create solutions that are at least as good for the environment as any comparable solution.

**Efficiency** is about delivering impressive performance while generating savings in the form of reduced energy costs.

**Usability** is key to any solution. Our experts do many usability tests to make sure ours are easy to install and hassle-free to operate.







## **SWIMMING POOL DEHUMIDIFIERS**

When moisture is left unchallenged, this can present a major problem for an indoor pool.

Not only does it create an uncomfortable atmosphere for swimmers and bathers, but encourages mould growth and structural damage that can leave your pool area looking less than luxurious. Our pool dehumidifiers physically remove moisture from the air to ensure the environment stays controlled and your home pool projects are protected.

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### **DEHUMIDIFICATION SOLUTIONS FOR:**

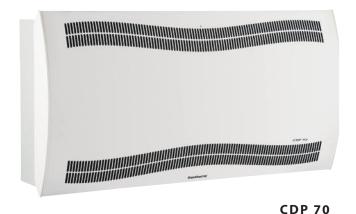
PRIVATE AND COMMERCIAL SWIMMING POOLS

QUICK (	GUIDE	CDP 40-50-70	CDP 40T-50T-70T	CDP 75-125-165	DANX AF
POOL TYPE					
	INDOOR	•	•	•	•
INSTALLATI	ON				
	WALL-MOUNTED	•	•		
	THROUGH-THE-WALL		•		
	FLOOR-STANDING	•			
	DUCTED			•	•
APPLICATIO	INS				
	PRIVATE POOLS	•	•	•	
	SPA & THERAPY	•	•	•	
<b>S</b>	HOLIDAY PARKS & CAMPSITES	•	•	•	•
	HOTELS, SCHOOLS & HEALTH CLUBS	•	•	•	•



## wall-mounted/floor-standing swimming pool dehumidifiers CDP 40-50-70





The wall-mounted or floor-standing CDP 40-50-70 condensation dehumidifiers have been designed to blend well with any modern pool interior. Offering energy-efficient and near-silent humidity control, the units were conceived with a view to quality and ease of operation. Combined with highly efficient fans and compressors, the advanced remote control and monitoring options contribute to cost-efficient operation and significant energy savings.

The range is also available in wall-mounted or floor-standing versions.



- Low sound level
- Low energy consumption
- Evaporator and condenser coils are epoxy coated
- Metal parts are powder coated before assembly
- Optional remote control
- Integrated control of heating and humidity (ON/OFF)
- BMS Communication (Modbus)
- 230 V connection for exhaust fan , control valve and pump

#### **Optional accessories**



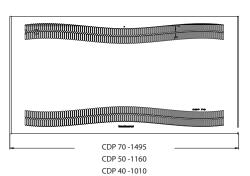
Specifications	Units	CDP 40	CDP 50	CDP 70
Operating temperature range	°C	10-36	10-36	10-36
Operating humidity range	% RH	40-100	40-100	40-100
Dehumidification @ 28°C/60% RH	l/24h	34	52	69
SEC @ 28°C/60% RH	kWh/l	0.47	0.48	0.43
Air flow	m³/h	400	680	900
Sound pressure level	dB(A)	46	47	50
R407c gas weight/CO <sub>2</sub> equivalent	kg/t	0.7/1.24	0.9/1.60	1/2/2.13
Power supply	V/Hz	230/1ph/50	230/1ph/50	230/1ph/50
Product size (w x d x h)	mm	1010 x 326 x 770	1160 x 326 x 770	1495 x 326 x 770
Weight	kg	56.5	65.0	75.5

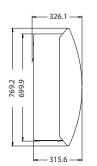


## wall-mounted/floor-standing swimming pool dehumidifiers CDP 40-50-70



#### Dimensions



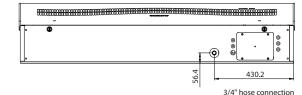


950.5

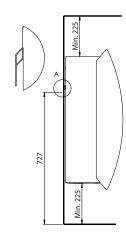
913

298

#### **Drain outlet position**



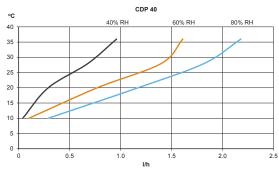
#### **Recommended installation**



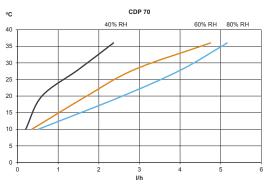
All measurements are in mm

#### Performance data

**Floor mounting kit** 

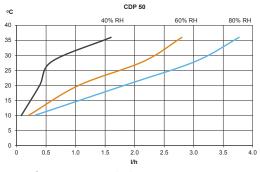


Specific energy consumption (SEC): 0.47 kWh/l at 28°C & 60% RH



Specific energy consumption (SEC): 0.43 kWh/I at 28°C & 60% RH







## wall-mounted swimming pool dehumidifiers CDP 40T-50T-70T





The CDP 40T-50T-70T condensation dehumidifiers have been designed for through-the-wall mounting in your swimming pool plant room. Designed as highly durable units, the dehumidifiers come with intuitive remote control and monitoring options for easy operation. Combined with very efficient fans and compressors this secures efficient operation and significant energy savings.

The range is also available in wall-mounted or floor-standing versions.



- Low sound level
- Low energy consumption
- Evaporator and condenser coils are epoxy coated
- Metal parts are powder coated before assembly
- Optional remote control
- Integrated control of heating and humidity (ON/OFF)
- BMS Communication (Modbus)
- Direct connection of 230 V

#### **Optional accessories**



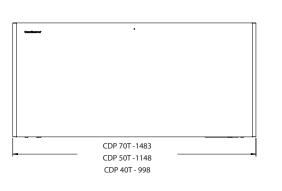
Specifications	Units	CDP 40T	CDP 50T	CDP 70T
Operating temperature range	°C 10-36		10-36	10-36
Operating humidity range	% RH	40-100	40-100	40-100
Dehumidification @ 28°C/60% RH	l/24h	34	52	69
SEC @ 28°C/60% RH	kWh/l	0.47	0.48	0.43
Air flow	m³/h	400	680	900
R407c gas weight/CO₂ equivalent	kg/t	0.7/1.24	0.9/1.60	1.2/2.13
Sound pressure level	dB(A)	43	44	47
Power supply	V/Hz	230/1ph/50	230/1ph/50	230/1ph/50
Product size (w x d x h)	mm	998 x 304 x 700	1148 x 304 x 700	1483 x 304 x 700
Weight	kg	57.5	66.0	77.5



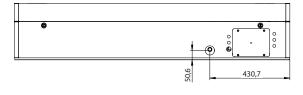
### WALL-MOUNTED SWIMMING POOL DEHUMIDIFIERS CDP 40T-50T-70T



#### Dimensions



**Drain outlet position** 



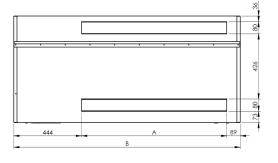
#### **Duct kits**

304

294 L

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700

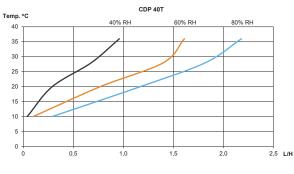


#### 80 235 с

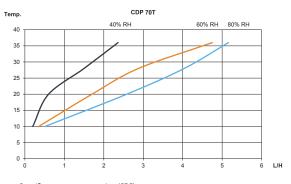
			146	106
Model	A	В	С	Wall opening
CDP 40T	465	998	642	610 x 110
CDP 50T	616	791	40-100	760 x 110
CDP 70T	950	1483	1126	1095 x 110

All measurements are in mm

#### **Performance data**

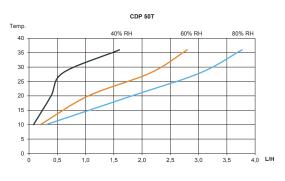


Specific energy consumption (SEC): 0.47 kWh/l at 28°C & 60% RH



Specific energy consumption (SEC): 0.43 kWh/l at 28°C & 60% RH





Specific energy consumption (SEC): 0.48 kWh/l at 28°C & 60% RH

## high capacity ducted swimming pool dehumidifiers CDP 75-125-165





The CDP 75-125-165 condensation dehumidifiers have been designed for ducted installation in your swimming pool plant room. Ideal for hotel pools, private pools and therapy pools, this dehumidifier range is renowned for its build quality and energy efficiency.



- Hot-galvanized, powder painted and double-skinned canbinet with 50mm insulation
- Corrosion-protected evaporator and condenser coils
- The condensate outlet is located on the air inlet side
- The outlet stub can be connected to a water hose
- Air inlet through a filter placed in a removable frame
- Dry air outlet positioned either horizontally (through the side) or vertically (through the top) of the unit
- Moveable inspection access
- Fresh air (15%) inlet possible through fresh air duct
- Optional water-cooled condenser on request
- Rotary/reciprocating compressor
- Radial fan

#### **Optional accessories**

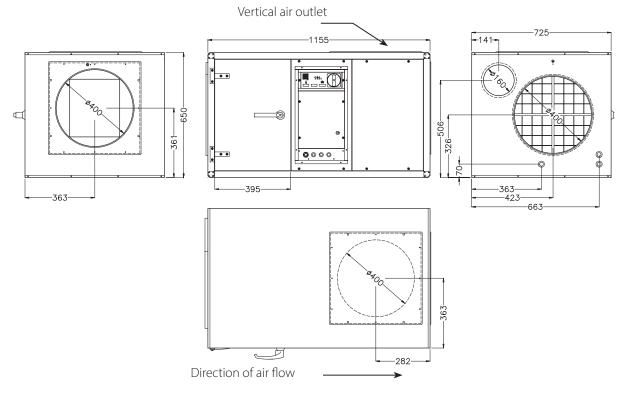


Specifications	Units	CDP 75	CDP 125	CDP 165
Operating temperature range	°C	20-38	20-38	20-38
Operating humidity range	%	40-100	40-100	40-100
Dehumidification @ 28°C/60% RH	l/24h	74	124	162
Air flow	m³/h	1,500	2,500	3,600
Power supply	V/Hz	230/1ph/50	230/1ph/50 + 400/3ph/50	400/3ph/50
Sound level	dB(A)	58	60	63
R407c gas weight/CO₂ equivalent	kg/t	2.1/3.73	5.2/9.22	6.8/12.06
Water-cooled condenser		Optional	Optional	Optional
Product size (w x d x h)	mm	1155 x 725 x 650	1300 x 900 x 850	1400 x 1010 x 975
Weight	kg	130	160	190

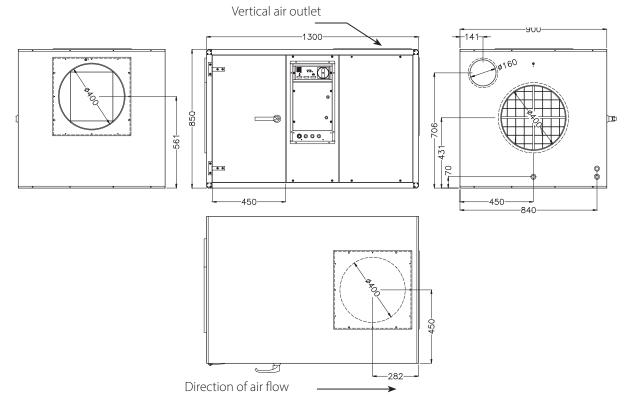




#### **CDP 75 dimensions**



#### **CDP 125 dimensions**

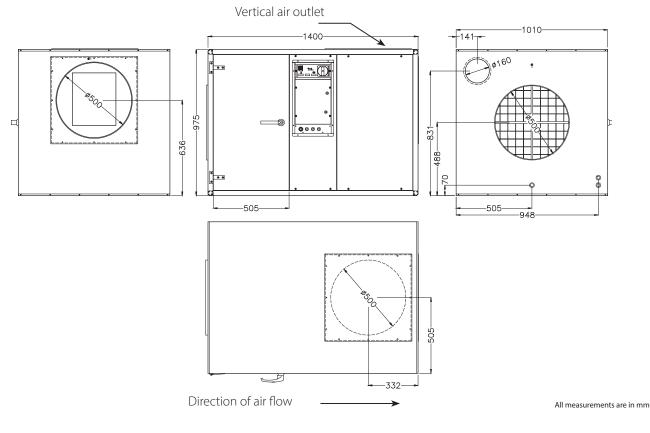


All measurements are in mm

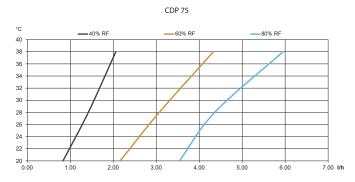




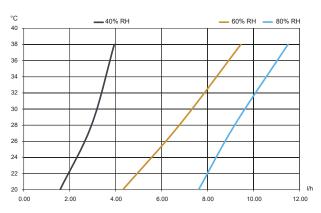
#### **Dimensions CDP 165**

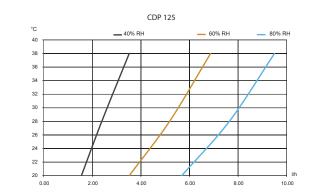


#### **Performance data**











# high capacity ducted swimming pool dehumidifiers $\mathsf{DANX}\ \mathsf{AF}$





The DanX AF is a very effective heat pump dehumidification system, which perfectly controls the humidity and indoor temperature while offering significant running cost reductions. This system is the obvious choice where only limited space is available, or for pools with limited use, for instance hotel pools. Optionally it is also possible to install the unit suspended under the ceiling of the pool room.

For further energy optimization, a water cooled condenser can be integrated into the heat pump. This allows the excess heat to be transferred to the pool or the hot water supply, where it is efficiently reused.



- User-friendly control system that monitors and controls temperature and humidity automatically. The custom-built software runs the unit as efficiently as possible under different conditions.
- BMS communication with either Modbus or BACnet. All internal terminal wiring done from factory.
- Refrigerant circuit with optional built-in water cooled condenser for heating of domestic water and external condenser for hot countries.
- Optional DX or water-cooling coil.
- Highly energy-efficient EC plug fans.
- Highly efficient bag filters with a low pressure drop.
- Fresh air (30%) inlet possible through fresh air duct.
- Load-bearing frame construction module with galvanised, powderpainted sandwich panels with 50mm mineral wool insulation and bottom frame with adjustable feet.
- Specifically designed to withstand the aggressive environments (Corrosion class C4 according to EN/ISO 12944-2), with epoxy coated, coils with aluminium frame, pre-painted fins and with all fasteners, bolts and nuts specially protected.
- Large inspection doors with strong hinges and tongue locks and handles for easy access for service.
- Modular unit for easy and quick installation with all sensors and electrical components already connected. Separate control panel fitted with cables and plugs for quick electrical connection between unit and panel.

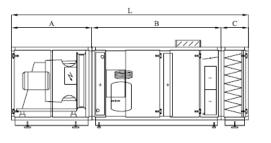
Specifications	Units	AF 3/6	AF 5/10	AF 5/10s	AF 7/14	AF 7/14s	AF 12/24	AF 12/24s
Operating temperature range	°C	22-36	22-36	22-36	22-36	22-36	22-36	22-36
Operating humidity	%	50-80	50-80	50-80	50-80	50-80	50-80	50-80
Dehumidification @ 28°C/60% RH	l/h	13	20	25	33	39	52	62
Air flow	m³/h	4,850	7,300	9,500	12,000	14,000	19,000	24,000
External duct pressure	Pa	300	300	300	300	300	300	300
Outdoor air	%	0-30	0-30	0-30	0-30	0-30	0-30	0-30
Power supply	V/Hz	400/3ph/50						
R407c gas weight/CO <sub>2</sub> equivalent	kg/t	9/15.97	14/24.84	14/24.84	22/39.03	22/39.03	32/56.77	32/56.77
Max. power consumption	kW	8.6	12.3	16.1	22.1	24.1	31.7	42.8
Height	mm	1115	1115	1115	1195	1195	1485	1485
Width	mm	3380	3380	3380	3850	3850	4125	4125
Depth	mm	880	1400	1400	1900	1900	2200	2200
Weight	kg	575	800	800	1125	1200	1650	1675

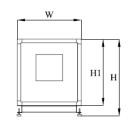


# high capacity ducted swimming pool dehumidifiers $\mathsf{DANX}\ \mathsf{AF}$



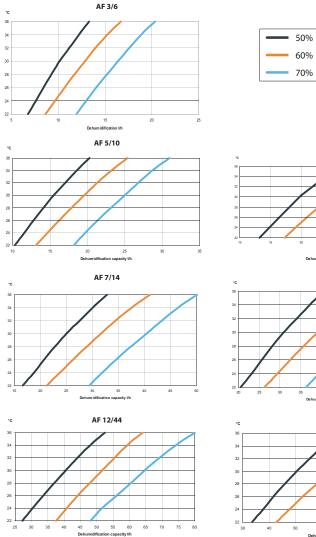
#### Dimensions



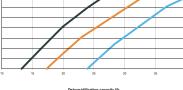


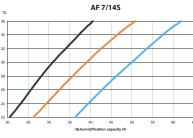
DanX AF	A: mm	B: mm	C: mm	L: mm	W: mm	H: mm	H1:mm	Weight: kg
3/6	985	1920	475	3380	880	1115	915	575
5/10	985	1920	475	3380	1400	1115	915	800
5/10s	985	1920	475	3380	1400	1115	915	800
7/14	1125	2250	475	3850	1900	1195	995	1125
7/14s	1125	2250	475	3850	1900	1195	995	1200
12/24	1400	2250	475	4125	2200	1485	1275	1650
12/24s	1400	2250	475	4125	2200	1485	1275	1675

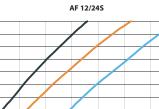
#### **Performance data**



AF 5/10S







70 spacity l/h





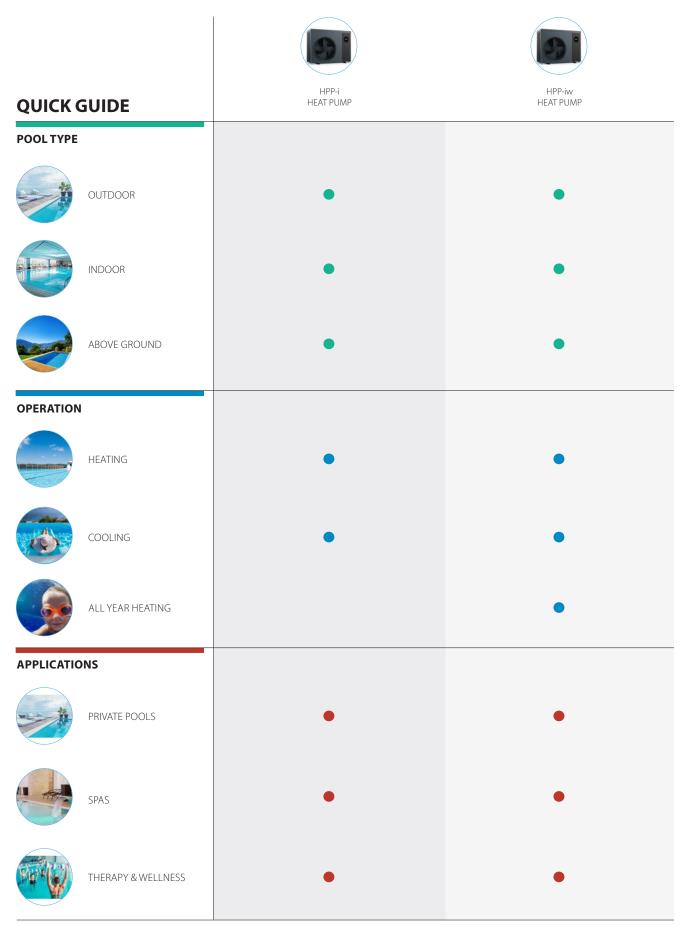
## **SWIMMING POOL HEAT PUMPS**

Outdoor pools need heating for comfort, but as heat is lost to the atmosphere, new energy must be constantly supplied to keep the pool warm. Heat pumps are recognised as the most sustainable way to dynamically heat swimming pool water, and with a Dantherm heat pump, you ensure this with reduced operating and energy costs

Our residential swimming pool heaters are easy to install on new pools and to retrofit for existing swimming pool systems, with minimal maintenance required.

## **HEATING AND COOLING SOLUTIONS FOR:**

PRIVATE AND DOMESTIC POOLS UP TO 120M<sup>2</sup>



Dantherm®

### INVERTER HEAT PUMPS HPP-i 8-12-16



The low energy consumption coupled with high heat production makes the HPP-i heat pump an environmentally friendly way to heat your swimming pool.

Unlike alternative ways of heating pools, the HPP-i heat pump requires no fuel storage tank or high capacity electrical supply. It produces no smell, fumes or CO<sub>2</sub> gases.

HPP-i heat pumps are designed to work all year round when temperatures are above -5°C. Thus, the pool season can be extended for several months.

#### Rapid installation, flexible operation

Dantherm HPP-i heat pumps are easy to install and fully selfcontained units. When it comes to operation, the HPP-i units offer a quiet, high efficient, reliable, and safe performance.

#### **Temperature control chart**



#### **Optional accessories**



Remote LED control kit



- Inverter heat pump
- Average COP 9.7 = 2 x more efficient than on/off heat pumps
- Eco-friendly refrigerant R32 = 675 GWP, (Global Warming Potential)
- Performance ratings from 9.5 to 25kW
- 9-11 dB(A) sound reduction compared to an equivalent on/off heat pump, with 'Whisper Mode'
- Multifunction operation functions can be set to heating, heat/cool and cooling
- Soft start-up
- Aluminium alloy
- Built-in Wi-Fi module
- Winter cover included

#### Controls

The HPP-i heat pump has an integrated controller with a touchscreen user interface.

The basic functions are:

- Function settings for: Heating, Cooling or Heat/Cool
  - Parameter adjustment



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The PoolTherm App for our Dantherm HPP-i inverter heat pumps is available on Android and iOS. Simply search for 'PoolTherm' in App Store or Google Play and download it today!



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# INVERTER HEAT PUMPS

#### New refrigerant gas

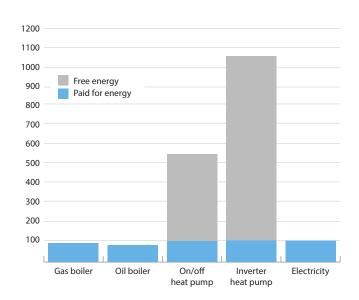
With the introduction F-gas regulations in Europe, our new heat pump will use the low Global Warming Potential (GWP) refrigerant R32.

This refrigerant:

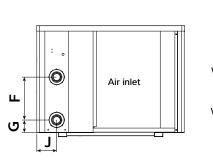
- Has a low GWP (675)
- Has zero ozone depleting potential (ODP)
- Is F-gas phase down compliant
- Requires less refrigerant volume per kW
- Is easier to reuse and recycle

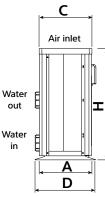
Great value, and environmentally conscious heating option, with energy consumption half that of a traditional on/off heat pump, and 1/10 of that for gas or electric pool heating.

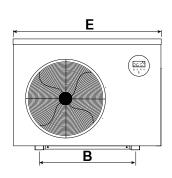
#### Heating method efficiency chart



#### Dimensions







Model	А	В	с	D	E	F	G	н	J
HPP-i 8	334	560	318	359	864	250	74	648	116
HPP-i 12	334	560	318	359	864	290	74	648	116
HPP-i 16	334	590	318	359	954	390	74	748	116



### INVERTER HEAT PUMPS HPP-i 8-12-16

Specifications	Units	HPP-i 8	HPP-i 12	HPP-i 16						
Air temperature range	°C	-5-43	-5-43	-5-43						
Water temperature range	°C	12-40	12-40	12-40						
Performance – air 27°C 80% RH, water 27°C										
Heating capacity	kW	9.5	13.0	20.0						
COP range		13.2-5.4	13.5-5.6	13.5-5.7						
Average COP at 50% speed		8.9	9.7	9.3						
Performance – air 15°C 70% RH, water 26°C										
Heating capacity	kW	7.0	9.5	13.5						
Performance @ air 5°C 70% RH, water 10°C										
Heating capacity	kW	4.1	5.6	7.9						
Performance – air 35°C 80% RH, water 28°C										
Cooling capacity	kW	3.9	5.2	7.4						
Power supply	V/Hz	230/1ph/50	230/1ph/50	230/1ph/50						
Rated input power	kW	0.3-1.79	0.40-2.38	0.57-3.21						
Rated input current	А	1.38-7.58	1.82-10.80	2.60-14.61						
Maximum input current	А	9.5	12.5	19.5						
Water flow	m³/h	3.0-5.0	4.0-6.0	7.0-10.0						
Water connection	"/mm	11⁄2/50	11⁄2/50	11⁄2/50						
Compressor		Inverter	Inverter	Inverter						
Condenser		Titanium	Titanium	Titanium						
R32 gas weight/CO <sub>2</sub> equivalent	kg/t	0.6/0.41	0.9/0.61	1.1/0.74						
Sound level @ 10m	dB(A)	19.6-31.5	21.9-32.0	24.3-36.1						
Sound level @ 1m	dB(A)	39.6-51.5	41.9-52.0	44.3-56.1						
Product size (w x d x h)	mm	864 x 359 x 648	864 x 359 x 648	954 x 359 x748						
Weight	kg	47	49	68						



### INVERTER HEAT PUMPS HPP-iw 12-16-22-28



The low energy consumption coupled with high heat production makes the HPP-iw heat pump an environmentally friendly way to heat your swimming pool.

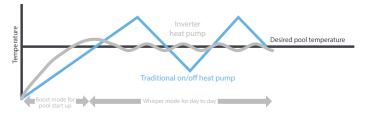
Unlike alternative ways of heating pools, the HPP-iw heat pump requires no fuel storage tank or high capacity electrical supply. It produces no smell, fumes or CO<sub>2</sub> gases.

HPP-iw heat pumps are designed to work all year round when temperatures are above -10°C. Thus, the pool season can be extended for several months.

#### Rapid installation, flexible operation

Dantherm HPP-iw heat pumps are easy to install and fully selfcontained units. When it comes to operation, the HPP-iw units offer a quiet, high efficient, reliable, and safe performance.

#### **Temperature control chart**





- Inverter heat pump
- Average COP 10.3 = 2 x more efficient than on/off heat pumps
- Eco-friendly refrigerant R32 = 675 GWP, (Global Warming Potential)
- Increased range of performance ratings from 15 to 36kW
- 9-11 dB(A) sound reduction compared to an equivalent on/off heat pump, with 'Whisper Mode'
- Multifunction operation functions can be set to heating, heat/cool and cooling
- Soft start-up
- Aluminium alloy
- Built-in Wi-Fi module
- Winter cover included

#### **Benefits**

- All year heating for outdoor and indoor pools
- Can operate down to -10°C ambient air temperature
- High heating performance at lower temperatures ideal for quick pool heat up at the start of the season
- Pool heating at altitude
- Higher cooling capacity
- Most efficient models highest COP

The PoolTherm App for our Dantherm HPP-i inverter heat pumps is available on Android and iOS. Simply search for 'PoolTherm' in App Store or Google Play and download it today!

#### **Optional accessories**



Y



PoolTherm

### INVERTER HEAT PUMPS HPP-iw 12-16-22-28

#### New refrigerant gas

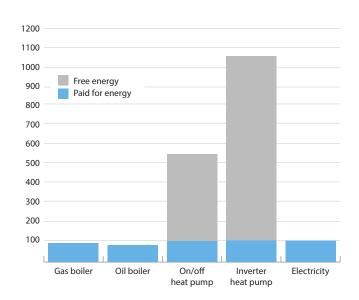
With the introduction F-gas regulations in Europe, our new heat pump will use the low Global Warming Potential (GWP) refrigerant R32.

This refrigerant:

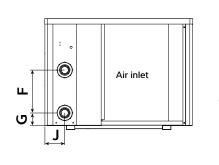
- Has a low GWP (675)
- Has zero ozone depleting potential (ODP)
- Is F-gas phase down compliant
- Requires less refrigerant volume per kW
- Is easier to reuse and recycle

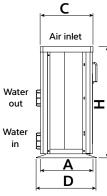
Great value, and environmentally conscious heating option, with energy consumption half that of a traditional on/off heat pump, and 1/10 of that for gas or electric pool heating.

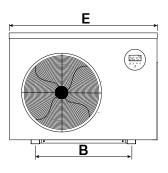
#### Heating method efficiency chart



#### Dimensions







Model	А	В	с	D	E	F	G	н	J
HPP-iw 12	334	590	318	359	954	340	74	648	107
HPP-iw16	404	590	388	429	954	460	74	755	107
HPP-iw 22	404	720	388	429	1084	620	74	948	107
HPP-iw 28	514	790	498	539	1154	650	74	948	128



### INVERTER HEAT PUMPS HPP-iw 12-16-22-28

Specifications	Units	HPP-iw 12	HPP-iw 16	HPP-iw 16	HPP-iw 22	HPP-iw 28			
Air temperature range	°C	-10-43	-10-43	-10-43	-10-43	-10-43			
Water temperature range	°C	12-40	12-40	12-40	12-40	12-40			
Performance – air 27°C 80% RH, water 27	″°C								
Heating capacity	kW	15.0	21.0	21.0	27.5	36.0			
COP range		15.0-6.6	14.8-6.4	14.8-6.4	15.0-6.5	14.8-6.0			
Average COP at 50% speed		10.6	10.3	10.3	10.3	10.2			
Performance – air 15°C 70% RH, water 26°C									
Heating capacity	kW	10.5	14.5	14.5	18.0	23.9			
Performance – air 5°C 70% RH, water 10°C									
Heating capacity	kW	7.5	9.6	9.6	11.9	16.0			
Performance – air -10°C 70% RH, water 2	3°C								
Heating capacity	kW	4.6	5.9	5.9	7.3	8.8			
Performance – air 35°C 80% RH, water 2	8°C								
Cooling capacity	kW	6.7	9.5	9.5	11.9	16.0			
Power supply	V/Hz	230/1ph/50	230/1ph/50	400/3ph/50	400/3ph/50	400/3ph/50			
Rated input power	kW	0.27-2.28	0.41-3.15	0.41-3.15	0.48-3.91	0.64-5.20			
Maximum input current	А	13.5	17.0	5.8	9.5	0.92-7.53			
Water flow	m³/h	5.0-7.0	8.0-10.0	8.0-10.0	10.0-12.0	12.0-18.0			
Water connection	"/mm	11⁄2/50	11⁄2/50	11⁄2/50	11⁄2/50	11⁄2/50			
Compressor		Inverter	Inverter	Inverter	Inverter	Inverter			
Condenser		Titanium	Titanium	Titanium	Titanium	Titanium			
R32 gas weight/CO <sub>2</sub> equivalent	kg/t	0.9/0.61	1.2/0.81	1.2/0.81	2/1.35	2.7/1.82			
Sound level @ 10m	dB(A)	20.8-24.5	20.4-33.7	20.4-33.7	23.0-34.4	22.1-34.2			
Product size (w x d x h)	mm	954 x 359 x 648	954 x 429 x 755	954 x 429 x 755	1084 x 429 x 948	1154 x 539 x 948			
Weight	kg	52	68	68	93	120			



## SWIMMING POOL AIR HANDLING UNITS

High levels of relative humidity can be extremely damaging to a pool environment, but with a carefully designed ventilation solution, humidity is kept at a comfortable level.

A swimming pool air handling unit must carry out its primary task of dehumidifying the pool space air, be designed and constructed to withstand the pool air environment, and provide a continuously modulated quantity of heated or cooled fresh air for the comfort of all who use it. We can advise on the most effective domestic or commercial pool ventilation products from our selection of heat pump and fresh air technologies.

## **ENVIRONMENTAL CONTROL SOLUTIONS FOR:**

PRIVATE AND COMMERCIAL SWIMMING POOLS

QUICK (	GUIDE	DANX 1-2-3 XD	DANX XKS	DANX CF	DANX 1-2-3 HP	DANX XWPS/XWPRS
POOL TYPE						
	INDOOR	•	•	•	•	•
OPERATION						
	WITH HEAT RECOVERY	•	•	•		
	WITH HEAT RECOVERY AND HEAT PUMP				•	•
APPLICATIO	DNS					
	PRIVATE POOLS	•			•	
	PUBLIC POOLS	•	•	•	•	•
	HOTELS, SCHOOLS & HEALTH CLUBS	•	•	•	•	•
	HOLIDAY & WATER PARKS		•	•		•
	LEISURE CENTRES		•	•		•



# swimming pool air handling units with heat recovery DANX 1-2-3 XD





#### DanX XD with double crossflow heat exchanger

The DanX XD is a very effective ventilation system that uses outdoor air to provide dehumidification using a double heat exchanger that delivers up to a 95% heat recovery. This reduces energy consumption and total operating costs, thus making the unit perfect for managing humidity and temperature in the pool room.

#### For both DanX HP and DanX XD

The built-in mixing function takes care not to add any more outdoor air than necessary to provide a comfortable indoor climate. Free cooling is also an option during the summer, when the unit can add up to 100% outdoor air into the pool area through a bypass. The unit's compact, integrated design enables optimal installation in the technical room. Convenient top or side connections ensure easy access to ducts.

#### **Optional accessories**



Touchscreen



- Built-in user friendly control system for high-quality demand management. Automatic monitoring and control of pool hall temperature and humidity. The custom-built software runs the unit as efficiently as possible under different conditions.
- Double crossflow heat exchangers with a high efficiency of up to 95% and a low pressure drop.
- Built-in bypass for free cooling in summertime.
- Highly energy-efficient EC plug fans.
- Efficient M5/ePM10 70% and F7/ePM1 55% compact filters with low pressure drop.
- Self-bearing cabinet with hot-dip galvanised, powderpainted sandwich panels with 50mm mineral wool insulation, internal partition walls with 30mm and bottom frame with adjustable feet.
- Designed to withstand the aggressive swimming pool environment (Corrosion class C4 according to EN/ISO 12944-2), with epoxy-coated crossflow heat exchanger, heating coil with aluminium frame, pre-painted fins and epoxy coating to protect all fasteners, bolts, nuts.
- Two large inspection doors with strong hinges and tongue locks and handles for easy access for service.
- All-in-one box solutions for easy and quick installation – all sensors and electrical components pre-connected.
- BMS communication with either Modbus or BACnet.

Specifications	Units	DANX 1 XD	DANX 2 XD	DANX 3 XD
Nominal air volume	m³/h	1,000	1,750	2,750
Max. air volume	m³/h	1,300	2,100	3,700
Max. external duct pressure*	Pa	350	350	350
Outdoor air volume	%	0-100	0-100	0-100
Dehumidification capacity VDI 2089**	kg/h	7	11	18
Max. total power consumption	kW	1.1	1.2	1.9
Power supply	V/Hz	230/1ph/50	230/1ph/50	230/1ph/50
Product size (w x d x h)	mm	1750 x 515 x 1570	1750 x 780 x 1570	2250 x 890 x 1990
Weight	kg	254	344	465

\* at nominal air volume, \*\* at 30°C/54% indoor

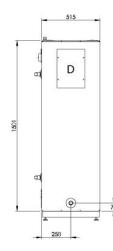


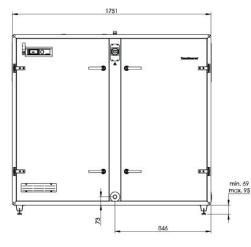
## swimming pool air handling units with heat recovery DANX 1-2-3 XD

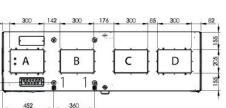
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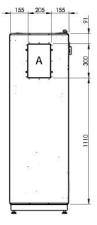
#### DanX 1 XD dimensions







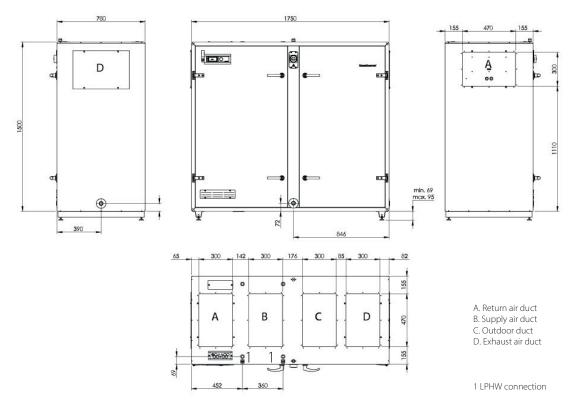
The unit shown in the picture is left hand position.



A. Return duct air B. Supply duct air C. Outdoor duct D. Exhaust air duct

1 LPHW connection

#### DanX 2 XD dimensions

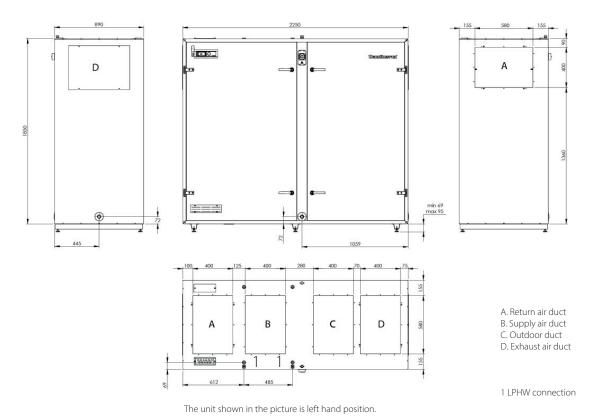


The unit shown in the picture is left hand position.





#### DanX 3 XD dimensions



# swimming pool air handling units with heat recovery $\mathsf{DANX}\ \mathsf{XKS}$





DANX XKS

#### DanX XKS with cross flow heat exchanger

The DanX XKS is a very effective outdoor air dehumidification system with highly efficient crossflow heat exchanger. This system perfectly controls the humidity and indoor temperature while offering significant running cost reductions due to real energy savings of up to 80%. The integrated mixing function ensures that only the exact quantity of outdoor air needed is supplied – which keeps running costs at a minimum.

Free cooling is also an option during summer, when the unit can add up to 100% outdoor air into the pool area through the integrated bypass.

For countries with high outdoor summer temperatures, the system can be equipped with an additional cooling coil for further dehumidification and air cooling.

Optionally, we offer various fan types, filter qualities and coils to perfectly match to the requirements.



- User-friendly control system for high-quality demand management. Automatic monitoring and control of temperature and humidity of the pool hall.
- Crossflow heat exchanger with a high efficiency of more than 75% and a low pressure drop.
- Built-in bypass for free cooling in the summertime.
- Highly energy-efficient EC plug fans.
- Efficient bag filters in different lengths and qualities with low pressure drops are available.
- Load-bearing frame construction module with hot-dip galvanised, powder-painted sandwich panels with 50mm mineral wool insulation, internal partition walls with 30mm and bottom frame with adjustable feet.
- Designed to withstand the aggressive swimming pool environment (Corrosion class C4 according to EN/ISO 12944-2), with epoxy-coated crossflow heat exchanger, heating coil with aluminium frame, pre-painted fins and epoxy coating to protect all fasteners, bolts, nuts.
- IP66 damper motors designed for swimming pool use.
- Large inspection doors with strong hinges and tongue locks and handles for easy access for service.
- Modular unit for easy and quick installation with all sensors and electrical components already connected. Separate control panel fitted with cables and plugs for quick electrical connection between unit and panel.
- BMS communication with either Modbus or BACnet.

Specifications	Units	2/4 XKS	3/6 XKS	5/10 XKS	7/14 XKS	9/18 XKS	12/24 XKS	16/32 XKS
Nominal air volume	m³/h	3,350	4,500	8,400	12,500	15,500	21,500	25,500
Max. air volume	m³/h	4,500	6,000	10,000	14,000	20,000	26,000	32,000
Outdoor air volume	%	0-100	0-100	0-100	0-100	0-100	0-100	0-100
Dehumidification capacity VDI 2089*	kg/h	22	29	54	81	100	139	165
Max. total power consumption**	kW	2.2	3.0	6.0	11.0	15.0	22.0	60.0
Power supply	V/Hz	400/3ph/50						
Height	mm	1600	1960	1960	2120	2250	2760	3010
Width	mm	3101	3572	3572	3712	4080	4270	5100
Depth	mm	880	880	1400	1900	1800	2200	2200
Weight	kg	850	925	1300	1675	1925	2550	3300

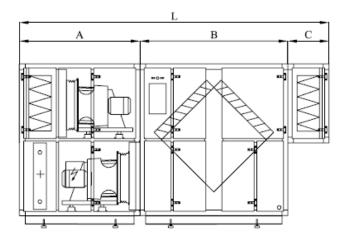
\* at 30°C/54% indoor, \*\* at nominal air volume

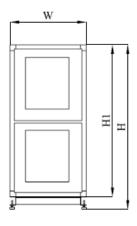


## swimming pool air handling units with heat recovery $\mathsf{DANX}\ \mathsf{XKS}$

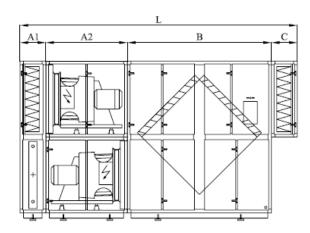


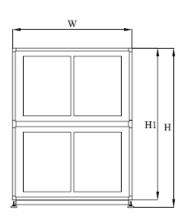
#### **DanX XKS dimensions**





DanX XKS	А	В	С	L	W	н	H1	Weight
	mm	mm	mm	mm	mm	mm	mm	kg
2/4	1285	1341	475	3101	880	1600	1400	850
3/6	1390	1707	475	3572	880	1960	1760	925
5/10	1390	1707	475	3572	1400	1960	1760	1300
7/14	1530	1707	475	3712	1900	2120	1920	1675
9/18	1685	1920	475	4080	1800	2550	2350	1925





DanX XKS	A	A2	B	C	L	W	H	H1	Weight
	mm	mm	mm	mm	mm	mm	mm	mm	kg
12/24	475	1400	1920	475	4270	2200	2760	2550	2550
16/32	475	1500	2650	475	5100	2200	3010	2800	3300



# SWIMMING POOL AIR HANDLING UNITS



#### DANX CF

The DanX CF is a very effective outdoor air dehumidification system with a highly efficient cross flow heat exchanger. This system perfectly controls the humidity and indoor temperature while offerring significant running cost reductions due to real energy savings of up to 80%. The integrated mixing function ensures that only the exact quantity of outdoor air needed is supplied. This keeps running costs at a minimum.

Free cooling is also an option during summer, when the unit can add up to 100% outdoor air into the pool area through the integrated by-pass.

For countries with high outdoor summer temperatures the system can be equipped with an additional cooling coil for further dehumidification and air cooling.

A wide range of fan types, filter qualities and coils are is available on request, enabling you to create the perfect solution for your requirements.



- User-friendly control system for high-quality demand management. Automatic monitoring and control of temperature and humidity of the pool hall
- Double counter-flow heat exchangers with a high efficiency of more than 90% and a low pressure drop
- Built-in bypass for free cooling in the summertime.
- Highly energy-efficient EC plug fans
- Efficient bag filters in different lengths and qualities with low pressure drops are available
- Load-bearing frame construction module with hot-dip galvanised, powder-painted sandwich panels with 50mm mineral wool insulation, internal partition walls with 30mm and bottom frame with adjustable feet
- Designed to withstand the aggressive swimming pool environment (corrosion class C4 according to EN/ISO 12944-2), with epoxy-coated crossflow heat exchanger, heating coil with aluminium frame, pre-painted fins and epoxy coating to protect all fasteners, bolts, nuts
- Large inspection doors with strong hinges and tongue locks and handles for easy access for service
- Modular unit for easy and quick installation
   all sensors and electrical components pre-connected.
- BMS communication with either Modbus or BACnet



# swimming pool air handling units $\mathsf{DANX}\ \mathsf{CF}$

Specifications	Units	DANX CF 3/5	DANX CF 4/7	DANX CF 6/9	DANX CF 8/12
Nominal air volume	m³/h	3,100	4,400	6,300	8,000
Max air volume	m³/h	4,500	6,500	9,000	11,500
Outdoor air volume	%	0-100	0-100	0-100	0-100
Dehumidification capacity VDI 2089*	kg/h	20	29	41	52
Power supply	V/Hz	400/3ph/50	400/3ph/50	400/3ph/50	400/3ph/50
Height	mm	1700	1700	2300	2300
Width	mm	3790	3790	4490	4490
Depth	mm	880	1185	1185	1473
Weight	kg	800	960	1335	1530

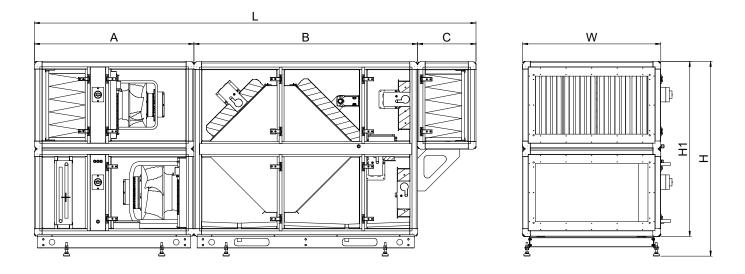
Specifications	Units	DANX CF 10/14	DANX CF 12/17	DANX CF 16/23	DANX CF 19/28	DANX CF 22/32
Nominal air volume	m³/h	9,800	11,600	16,000	19,000	22,000
Max air volume	m³/h	14,000	17,000	23,000	28,000	32,000
Outdoor air volume	%	0-100	0-100	0-100	0-100	0-100
Dehumidification capacity VDI 2089*	kg/h	63	75	104	123	142
Power supply	V/Hz	400/3ph/50	400/3ph/50	400/3ph/50	400/3ph/50	400/3ph/50
Height	mm	2300	2300	3000	3600	3600
Width	mm	4490	4490	4760	4760	4760
Depth	mm	1778	2066	1964	2066	2370
Weight	kg	1730	1950	2365	2685	2755

\* at 30°C/54% indoor



# swimming pool air handling units $\mathsf{DANX}\ \mathsf{CF}$

#### DanX CF dimensions



DanX CF	А	В	С	L	W	H1	н	Weight
	mm	kg						
3/5	1370	1920	500	3790	880	1500	1700	800
4/7	1370	1920	500	3790	1185	1500	1700	960
6/9	1490	2500	500	4490	1185	2100	2300	1335
8/12	1490	2500	500	4490	1473	2100	2300	1530
10/14	1490	2500	500	4490	1778	2100	2300	1730
12/17	1490	2500	500	4490	2066	2100	2300	1950
16/23	1490	2770	500	4760	1964	2800	3000	2365
19/28	2770	500	4760	2066	3400	3600	2685	2685
22/32	2770	500	4760	2370	3400	3600	2755	2755







## DanX HP with double cross flow heat exchanger and heat pump

The DanX HP combines the strengths of a heat pump system with a system that dehumidifies using outdoor air. The combined heat pump and highly effective double cross flow heat exchanger precisely regulate both humidity and temperatures in the pool room.

In addition to heat recovery exceeding 100% the heat pump optimises dehumidification, so that the proportion of outdoor air never exceeds what is necessary to ensure comfort. For further energy optimization, a water-cooled condenser can be integrated into the heat pump. This allows the excess heat to be transferred to the pool or the hot water supply, where it is reused.

#### **Optional accessories**



Touchscreen



- Built-in heat pump with rotary compressor and high COP. Optional built-in water cooled condenser for heating of the pool or domestic water.
- Built-in user friendly control system for high-quality demand management. Automatic monitoring and control of pool hall temperature and humidity.
- Double crossflow heat exchangers with a high efficiency of more than 85% and a low pressure drop.
- Built-in bypass for free cooling in the summertime.
- Highly energy-efficient EC plug fans.
- Efficient M5/ePM10 70% and F7/ePM1 55% compact filters with low pressure drop.
- Self-bearing cabinet with hot-dip galvanised, powderpainted sandwich panels with 50mm mineral wool insulation, internal partition walls with 30mm and bottom frame with adjustable feet.
- Designed to withstand the aggressive swimming pool environment (Corrosion class C4 according to EN/ISO 12944-2), with epoxy-coated crossflow heat exchanger, coils with aluminium frame, pre-painted fins and epoxy coating to protect all fasteners, bolts and nuts.
- Two large inspection doors with strong hinges and tongue locks and handles for easy access for service.
- All-in-one box solutions for easy and quick installation with all sensors and electrical components already connected.
- BMS communication with either Modbus or BACnet.

Specifications	Units	DANX 1 HP	DANX 2 HP	DANX 3 HP
Nominal air volume	m³/h	1,000	1,750	2,750
Max. air volume	m³/h	1,300	2,100	3,500
Max. external duct pressure*	Pa	350	350	350
Outdoor air volume	%	0-100	0-100	0-100
Dehumidification capacity recirculation**	kg/h	1.7	4.2	6.9
Dehumidification capacity VDI 2089**	kg/h	7	11	18
Power consumption compressor**	kW	0.6	1.2	1.9
Max. total power consumption	kW	1.7	2.9	4.6
Power supply	V/Hz	230/1ph/50	400/2ph/50	400/2ph/50
Product size (w x d x h)	mm	1750 x 515 x 1570	1750 x 780 x 1570	2250 x 890 x 1990
Weight	kg	279	379	500

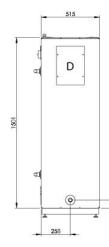
\* at nominal air volume, \*\* at 30°C/54% indoor



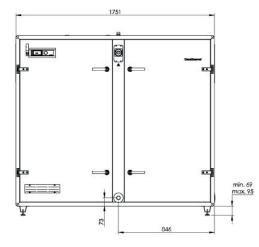
swimming pool air handling units with heat recovery and heat pump DANX 1-2-3 HP

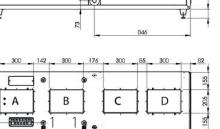


#### **DanX 1 HP dimensions**



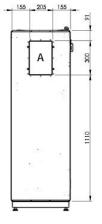
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360

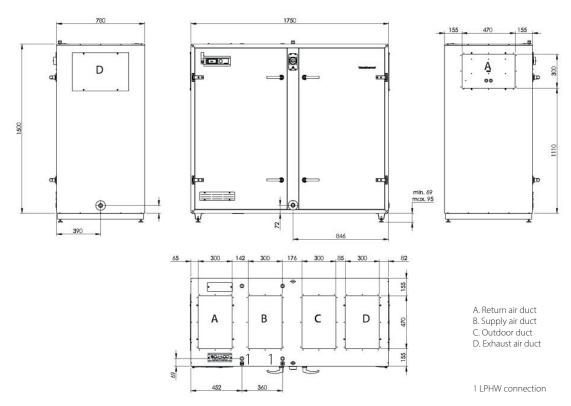
The unit shown in the picture is left hand position.



A. Return duct air B. Supply duct air C. Outdoor duct D. Exhaust air duct

1 LPHW connection

### DanX 2 HP dimensions

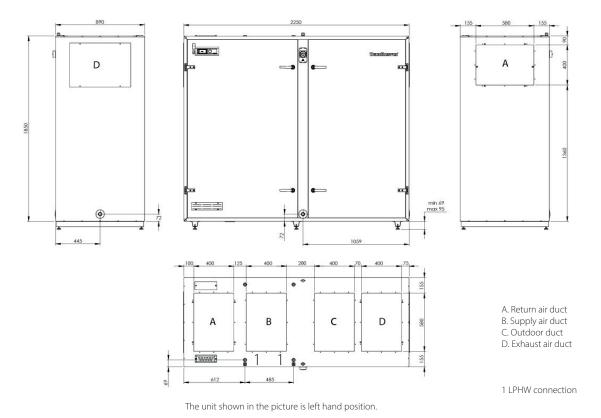


The unit shown in the picture is left hand position.



swimming pool air handling units with heat recovery and heat pump DANX 1-2-3 HP

#### DanX 3 HP XD dimensions





CE

## swimming pool air handling units with heat recovery and heat pump $\mathsf{DANX}\ \mathsf{XWPS}$





DANX XWPS

## DanX XWPS with heat pump and cross flow heat exchanger

The DanX XWPS combines the best of heat pumps and outside air dehumidification systems. The combination of heat pump and a highly efficient crossflow heat exchanger with an efficiency that exceeds 75% enables you to take full control of both humidity and indoor temperature.

Significant running cost reductions due to energy savings may exceed 100%.

The integrated mixing function ensures that only the exact quantity of outdoor air required to sustain comfortable conditions is supplied.



- Built-in heat pump with scroll compressor and high COP.
   Optional built-in water-cooled condenser for heating of pool or domestic water.
- User-friendly control system for high-quality demand management. Automatic monitoring and control of pool hall temperature and humidity.
- Very efficient crossflow heat exchanger.
- Built-in by pass for free cooling in the summertime.
- Highly energy-efficient EC plug fans.
- Efficient bag filters in different lengths and qualities with low pressure drops are available.
- Load-bearing frame construction module with hot-dip galvanised, powder-painted sandwich panels with 50mm mineral wool insulation, internal partition walls with 30mm and bottom frame with adjustable feet.
- Designed to withstand the aggressive swimming pool environment (Corrosion class C4 according to EN/ISO 12944-2), with epoxy-coated crossflow heat exchanger, coils with aluminium frame, pre-painted fins and epoxy coating to protect all fasteners, bolts and nuts.
- IP66 damper motors designed for pool environments.
- Large inspection doors with strong hinges and tongue locks and handles for easy access for service.
- Modular unit for easy and quick installation with all sensors and electrical components already connected.
- BMS communication with either Modbus or BACnet.

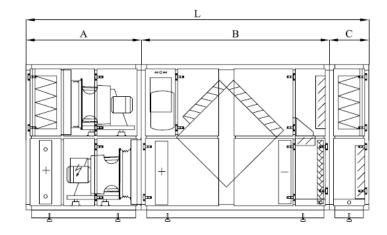
Specifications	Units	2/4 XWPS	3/6 XWPS	5/10 XWPS	7/14 XWPS	9/18 XWPS	12/24 XWPS	16/32 XWPS
Nominal air volume	m³/h	3,350	4,500	8,400	12,500	15,500	21,500	25,500
Max. air volume	m³/h	4,500	6,000	10,000	14,000	20,000	26,000	32,000
Outdoor air volume	%	0-100	0-100	0-100	0-100	0-100	0-100	0-100
Dehumidification capacity recirculation*	kg/h	9	16	24	31	40	64	71
Dehumidification capacity VDI 2089*	kg/h	22	29	54	81	100	139	165
Max. power consumption compressor	kW	4.4	5.7	8.8	12.0	16.0	24.0	30.0
Max. total power consumption**	kW	7.4	10.1	16.8	23.0	31.0	46.0	60.0
Power supply	V/Hz	400/3ph/50	400/3ph/50	400/3ph/50	400/3ph/50	400/3ph/50	400/3ph/50	400/3ph/50
R407c gas weight/CO₂ equivalent	kg/t	9/15.97	11/19.51	13/23.06	15/26.61	20/35.48	25/44.35	30/53.22
Height	mm	1600	1960	1960	2120	2250	2760	3010
Width	mm	3665	4135	4135	4275	4660	4950	5868
Depth	mm	880	880	1400	1900	1800	2200	2200
Weight	kg	1150	1300	1800	2300	2700	3650	4600

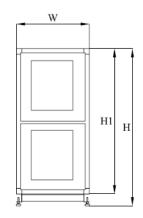
\* at 30°C/54% indoor, \*\* at nominal air volume



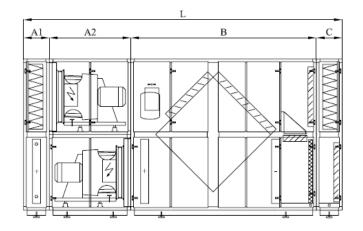
## swimming pool air handling units with heat recovery and heat pump $\mathsf{DANX}\ \mathsf{XWPS}$

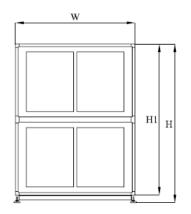
### DanX XWPS dimensions





DanX XWPS	А	В	С	L	W	Н	H1	Weight
	mm	mm	mm	mm	mm	mm	mm	kg
2/4	1285	1905	475	3665	880	1600	1400	1150
3/6	1390	2270	475	4135	880	1960	1760	1300
5/10	1390	2270	475	4135	1400	1960	1760	1800
7/14	1530	2270	475	4275	1900	2120	1920	2300
9/18	1685	2500	475	4660	1800	2550	2350	2700





DanX XWPS	A1	A2	B	C	L	W	H	H1	Weight
	mm	mm	mm	mm	mm	mm	mm	mm	kg
12/24	475	1400	2600	475	4950	2200	2760	2550	3650
16/32	475	1500	3418	475	5868	2200	3010	2800	4600



## swimming pool air handling units with heat recovery and heat pump $\mathsf{DANX}\ \mathsf{XWPRS}$





DANX XWPRS

## DanX XWPRS with heat pump and cross flow heat exchanger

The DanX XWPRS combines the advantages of heat pumps and outside air dehumidification systems. The combination of the heat pump and a highly efficient crossflow heat exchanger gives you full control of the humidity as well as the indoor temperature. The reversible heat pump offers the possibility of active cooling in the summer.

The potential running cost reductions are significant and may well exceed 100%.

The integrated mixing function ensures that only the exact quantity of outdoor air required to sustain comfortable conditions is supplied.



- Built-in heat pump with scroll compressor and high COP.
   Optional built-in water-cooled condenser for heating of pool or domestic water.
- User-friendly control system for high-quality demand management. Automatic monitoring and control of pool hall temperature and humidity.
- Crossflow heat exchanger with a +75% efficiency.
- Built-in bypass for free cooling in the summertime.
- Reversible heat pump for active summer cooling.
- Highly energy-efficient EC plug fans.
- Efficient bag filters in different lengths and qualities with low pressure drops are available.
- Load bearing frame construction module with hot-dip galvanised, powder-painted sandwich panels with 50mm mineral wool insulation, internal partition walls with 30mm and bottom frame with adjustable feet.
- Designed to withstand the aggressive swimming pool environment (Corrosion class C4 according to EN/ISO 12944-2), with epoxy-coated crossflow heat exchanger, coils with aluminium frame, pre-painted fins and epoxy coating to protect all fasteners, bolts and nuts.
- IP66 damper motors designed for swimming pool use.
- Large inspection doors with strong hinges and tongue locks and handles for easy access for service.
- Modular unit for easy and quick installation with all sensors and electrical components already connected.
- BMS communication with either Modbus or BACnet.

Specifications	Units	2/4 XWPRS	3/6 XWPRS	5/10 XWPRS	7/14 XWPRS	9/18 XWPRS	12/24 XWPRS	16/32 XWPRS
Nominal air volume	m³/h	3,350	4,500	8,400	12,500	15,500	21,500	25,500
Max. air volume	m³/h	4,500	6,000	10,000	14,000	20,000	26,000	32,000
Outdoor air volume	%	0-100	0-100	0-100	0-100	0-100	0-100	0-100
Dehumidification capacity recirculation*	kg/h	9	16	24	33	43	68	81
Dehumidification capacity VDI 2089*	kg/h	22	29	54	81	100	139	165
Max. power consumption compressor	kW	4.4	5.7	8.8	12.0	16.0	24.0	30.0
Max. total power consumption**	kW	7.4	10.1	16.8	23.0	31.0	46.0	60.0
Power supply	V/Hz	400/3ph/50	400/3ph/50	400/3ph/50	400/3ph/50	400/3ph/50	400/3ph/50	400/3ph/50
R407c gas weight/CO₂ equivalent	kg/t	9/15.97	11/19.51	13/23.06	15/26.61	20/35.48	25/44.35	30/53.22
Height	mm	1600	1960	1960	2120	2250	2760	3010
Width	mm	3665	4135	4135	4275	4660	4950	5868
Depth	mm	880	880	1400	1900	1800	2200	2200
Weight	kg	1150	1300	1800	2300	2700	3650	4600

\* at 30°C/54% indoor, \*\* at nominal air volume



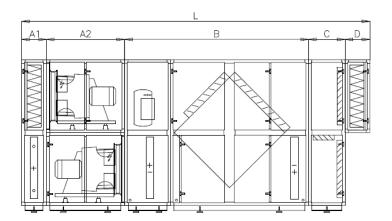
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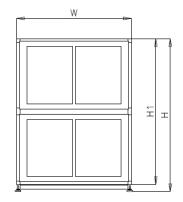
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### **DanX XWPRS dimensions**

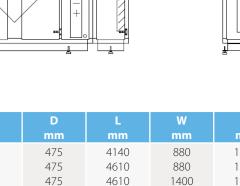
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DanX XWPRS	A mm	B mm	C mm	D mm	L mm	W mm	H mm	H1 mm	Weight kg
2/4	1285	2270	475	475	4140	880	1600	1400	1215
3/6	1390	2270	475	475	4610	880	1960	1760	1420
5/10	1390	2270	475	475	4610	1400	1960	1760	1925
7/14	1530	2270	475	475	4750	1900	2120	1920	2600
9/18	1685	2500	600	475	5260	1800	2550	2350	2910





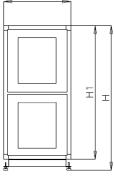
DanX XWPRS	A	B	C	D	L	W	H	H1	Weight
	mm	mm	mm	mm	mm	mm	mm	mm	kg
12/24	475	1400	2600	600	475	2200	2760	2550	3990
16/32	475	1500	3530	700	475	2200	3010	2800	4940



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## **CONDENSE DEHUMIDIFIERS**

Dantherm's range of powerful dehumidifiers provides the ideal means of preserving and protecting your valuables from humidity damage. They are suited for humidity control in warehouses, museums, churches, archives and waterworks.

## **DEHUMIDIFICATION SOLUTIONS FOR:**

BUILDINGS, STORAGE, PRESERVATION, FOOD & BEVERAGE

			Landard Landard			
QUICK	GUIDE	CDF 10	CD 15	CDF 40-50-70	CDP 75-125-165	DANX AF
INSTALLATI	ON					
11-0	WALL-MOUNTED	•	•	•		
	FLOOR-STANDING			•		
	DUCTED				•	•
APPLICATIO	ONS					
	WATERWORKS	•	•	•		
	DRYING ROOMS	•	•	•	•	
	PRESERVATION STORAGE & WAREHOUSING	•	•	•	•	
	MUSEUMS, ARCHIVES & GALLERIES	•	•	•	•	
	GARAGES & CAR STORAGE	•	•	•	•	
	DRY STORAGE, INDUSTRIAL PROCESS DRYING					•



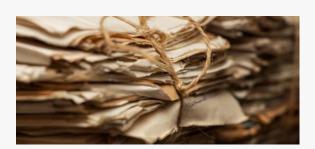
# WALL-MOUNTED DEHUMIDIFIERS





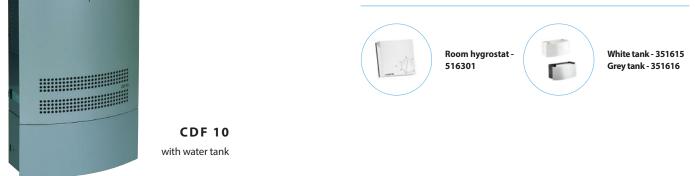
The CDF 10 dehumidifier is ideal for protecting furnishings and equipment stored at low temperatures. Being fully automatic with electronic control and a built-in, adjustable hygrostat, the unit has a clear display that indicates the current status of operation.

Defrosting is incorporated in the electronic control. The CDF 10 dehumidifier is operational at temperatures down to 3°C, where the electronic control switches off the dehumidifier.



- Built into a strong and robust powder-coated and hotgalvanised sheet metal cabinet
- Evaporator and condenser coils are epoxy-coated for high corrosion resistance
- The condensate outlet is located at the bottom of the CDF dehumidifier. The outlet stub can be connected to a water hose
- Easy accessible washable air filters from front cover
- Reciprocating compressor
- Axial fan
- Electronic control and user-friendly display panel
- Active, demand-controlled defrosting
- Available in white and grey

### **Optional accessories**



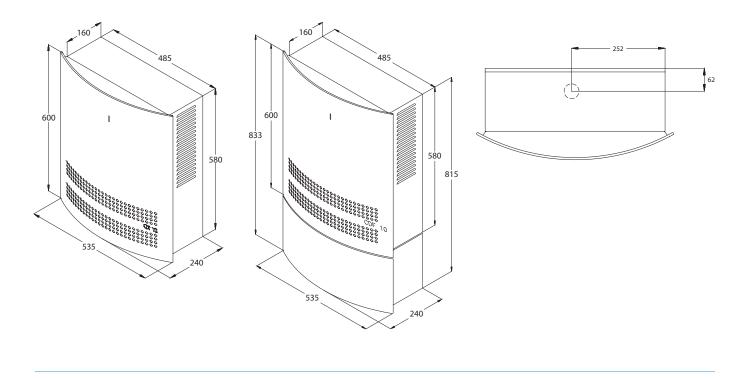
Specifications	Units	CDF 10
Operating temperature range	°C	3-30
Operating humidity range	% RH	40-100
Dehumidification @ 30°C/60% RH	l/24h	7.5
Air flow	m³/h	220
Power supply	V/Hz	230/1ph/50
Max. power consumption	kW	0.3
Sound pressure level @ 1m	dB(A)	46
R134a gas weight/CO₂ equivalent	kg/t	0.19/0.27
Water container capacity	1	5.5
Product size (w x d x h)	mm	535 x 240 x 600
Weight	kg	28



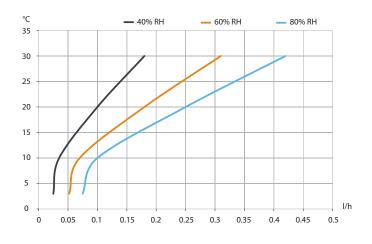
## WALL-MOUNTED DEHUMIDIFIERS



#### **CDF 10 dimensions**



#### Performance data



#### **Electronic control**

The CDF 10 has a built-in hygrostat and is fully automatic with electronic control. The hygrostat is placed behind the front panel and the required relative humidity level can be adjusted by moving the set screw. On delivery the CDF 10 is set at approx. 60% RH.

The CDF 10 is switched on and off by the switch on the side of the unit. A green LED on the front panel lights when the compressor is operating.

If the CDF 10 is used with a water container, it switches off automatically when the water tank is full. A red LED on the front panel lights when the water container needs to be emptied.

### Defrosting

Active, demand-controlled defrosting is incorporated in the electronic control. A sensor on the evaporator coil ensures that the evaporator is only defrosted when required. The evaporator coil is defrosted by means of hot refrigerant bypassing the condenser and being fed through the evaporator.

The CDF 10 is automatically switched off when the temperature is lower than 3°C. It restarts when the room temperature has increased to more than 3°C.



# wall-mounted dehumidifiers $CD \ 15$





The CD 15 is compact, lightweight, robust and quiet. Powerful and highly efficient, it constitues a great and versatile solution for a number of different dehumidification tasks.

Fitted with a bracket for fast and simple wall mounting it is ideally suited for use in water management facilities, car storage, preservation, museums, archives, cellars, spas, domestic use and more.



- Built into a strong and brushed stainless steel cabinet
- Built-in hygrostat
- Operating hour counter
- Easy accessible air filters from front cover
- Reciprocating compressor
- F-gas directive compliant
- Energy efficient axial fan
- Electronic control and user-friendly display panel
- Active, demand-controlled defrosting
- Automatic pump-out with overflow protection
- Wall bracket included
- On-demand hot gas defrost system

### **Optional accessories**





Replacement air filter 490146



Condensate drainage hose 490100 12 x 2mm

Specifications	Units	CD 15
Operating temperature range	°C	5-30
Operating humidity range	% RH	40-100
Dehumidification @ 30°C/80% RH	l/24h	15.0
Dehumidification @ 20°C/60% RH	l/24h	8.5
Air flow	m³/h	225
Power supply	V/Hz	230/1ph/50
Max. power consumption	kW	0.3
Sound pressure level @ 1m	dB(A)	46
Refrigerant		R1234yf
R1234yf gas weight/CO₂ equivalent	kg/t	0.14/0.0006
Product size (w x d x h)	mm	330 x 280 x 490
Weight	kg	18.5

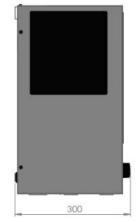


## wall-mounted dehumidifiers $CD \ 15$



### CD 15 dimensions







Dimensions above include external fittings All measurements are in mm

### **Electronic control**

The CD 15 is fully automatic with electronic control, avoiding unnecessary operating times and helping to save energy. Controls include:

- LED for "Pump error"
- LED for "Temperature warning
- LED for Relative humidity OK"



## wall-mounted/floor-standing dehumidifiers CDF 40-50-70





The energy-efficient and quiet CDF range of powerful dehumidifiers is ideal for preserving and protecting your valuables from humidity damage. They are suitable for humidity control in garages, warehouses, museums, churches, archives and waterworks.

### Controls

- Built in electronic hygrostat and thermostat
- Integrated ON/OFF control of humidity and temperature (electric or water heating coils as accessories)
- 230 V for control valve, exhaust fan and pump/boiler
- RS485 for Modbus communication

### **Optional accessories**



- Modern design
- Low sound level
- Low energy consumption
- Integrated control of humidity and temperature
- BMS communication (Modbus RTU)
- Built into a strong and robust powder-coated and hotgalvanised sheet metal cabinet
- Evaporator and condenser coils epoxy-coated to maximise corrosion resistance



Specifications	Units	CDF 40	CDF 50	CDF 70
Operating temperature range	°C	3-32	3-32	3-32
Operating humidity range	% RH	40-100	40-100	40-100
Dehumidification @ 30°C/60% RH	l/24h	30	53	55
SEC @ 28°C/60% RH	kWh/l	0.80	0.63	0.58
Air flow	m³/h	400	680	900
Power supply	V/Hz	230/1ph/50	230/1ph/50	230/1ph/50
Max. power consumption	kW	0.78	1.37	1.5
Sound pressure level @ 1m	dB(A)	46	47	50
R407c gas weight/CO₂ equivalent		0.7/1.24	0.9/1.60	1/2/2.13
Filter		G3 PPI 15	G3 PPI 15	G3 PPI 15
Condensate drain size (stub)	inch	3⁄4	3⁄4	3⁄4
Product size (w x d x h)	mm	1010 x 326 x 770	1160 x 326 x 770	1495 x 326 x 770
Weight	kg	56.5	65.0	75.5

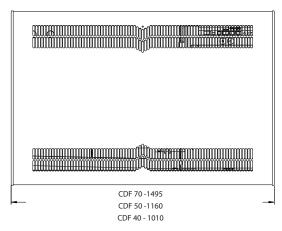


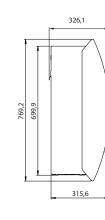
## wall-mounted/floor-standing dehumidifiers CDF 40-50-70

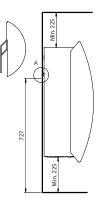


#### Dimensions

Recommended installation

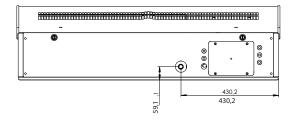


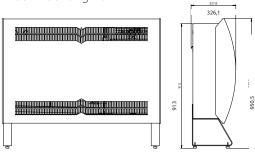




Floor mounting kit

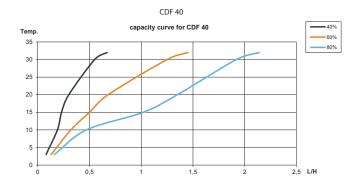
Drain outlet position

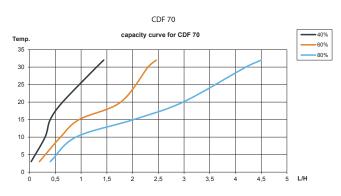


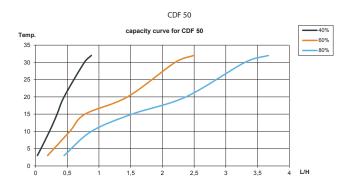


All measurements are in mm

### Performance data







# LARGE CAPACITY DUCTED DEHUMIDIFIERS





CDP 75, CDP 125, CDP 165

The CDP 75-125-165 condensation dehumidifiers have been designed for ducted installation in plant rooms for a wide range of commercial installations.

Renowned for their build quality and energy efficiency, the compact units can be wall-mounted or placed on the floor.

### Mounting

- CDP 75 and CDP 125 can be wall-mounted with a wall-mount kit
- CDP 75, CDP 125 and CDP 165 can be placed on the floor using a shock-absorbing floor mount kit (accessory)
- A water heating coil can be mounted in the air outlet duct for further heating of the dry air (accessory)



- The CDP 75-125-165 are built into a cabinet made of hot-galvanised, powder-painted and double-skinned panels with 50mm insulation
- Corrosion-protected evaporator and condenser coils
- The condensate outlet is located on the air inlet side
- The outlet stub can be connected to a water hose
- Air inlet through a filter placed in a removable frame
- Dry air outlet positioned either horizontally (through the side) or vertical (through the top) of the unit
- The access for inspection can be moved to the opposite side
- Fresh air (15%) inlet possible through fresh air duct
- Can be supplied with an optional water-cooled condenser
- Rotary/reciprocating compressor
- Radial fan



Specifications	Units	CDP 75	CDP 125	CDP 165
Operating temperature range	°C	20-38	20-38	20-38
Operating humidity range	%	40-100	40-100	40-100
Dehumidification @ 28°C/60% RH	l/24h	74	124	162
Air flow	m³/h	1,500	2,500	3,600
Power supply	V/Hz	230/1ph/50	230/1ph/50 + 400/3ph/50	400/3ph/50
Sound level	dB(A)	58	60	63
R407c gas weight/CO₂ equivalent	kg/t	2.1/3.73	5.2/9.22	6.8/12.06
Water-cooled condenser		Optional	Optional	Optional
Product size (w x d x h)	mm	1155 x 725 x 650	1300 x 900 x 850	1400 x 1010 x 975
Weight	kg	130	160	190

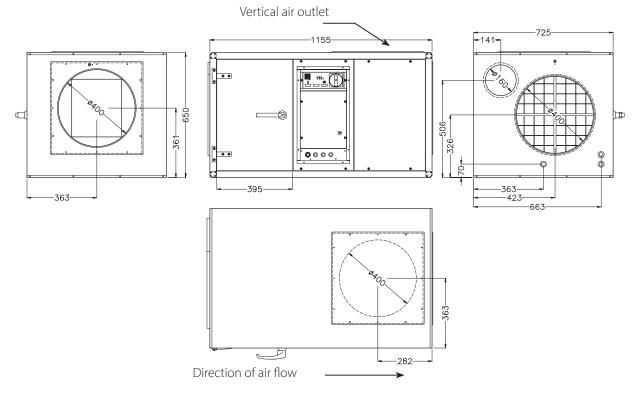
### **Optional accessories**



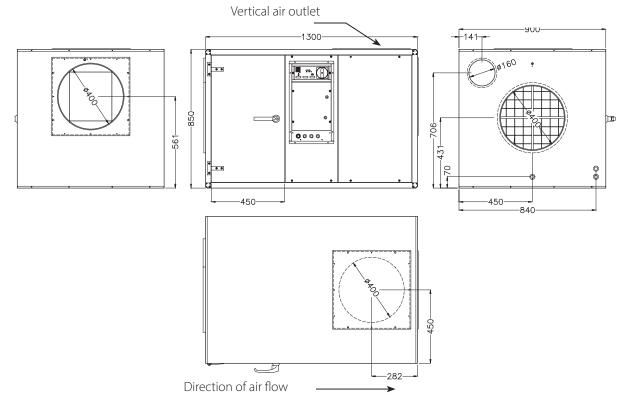
## LARGE CAPACITY DUCTED DEHUMIDIFIERS CDP 75-125-165



### **CDP 75 dimensions**



### **CDP 125 dimensions**



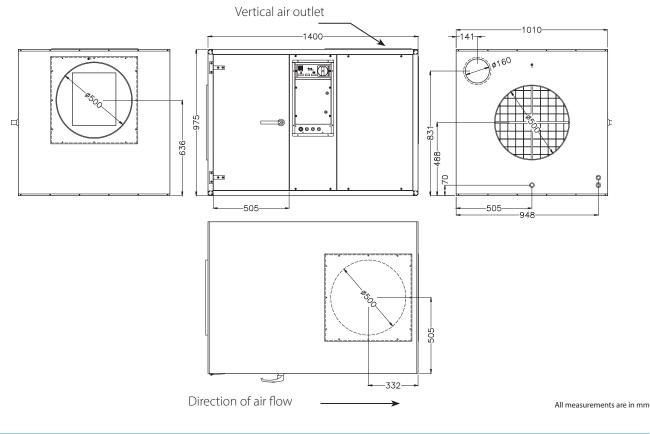
All measurements are in mm



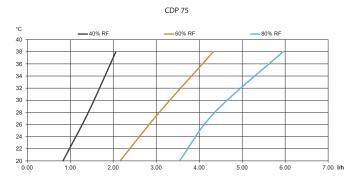
## LARGE CAPACITY DUCTED DEHUMIDIFIERS CDP 75-125-165



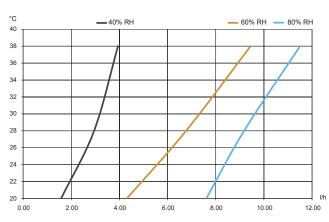
#### **CDP 165 dimensions**

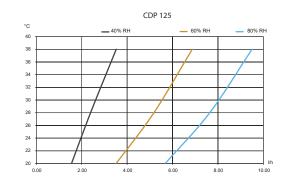


#### **Performance data**











# LARGE CAPACITY DUCTED DEHUMIDIFIERS





With its ability to significantly reduce the energy consumption, the DanX AF heat pump dehumidification system enables you to control humidity as well as indoor temperature in your building. Ideally suited for installation where space is limited, the system can even be installed suspended under the ceiling.

To reduce energy consumption even further, the DanX AF can be fitted with an optional water-cooled condenser. With this, the unit reuses all excess heat by transferring it to your hot water supply instead of letting it go to waste.



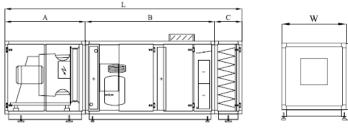
- User-friendly control system that monitors and controls temperature and humidity automatically. The custom-built software runs the unit as efficiently as possible under different conditions.
- BMS communication with either Modbus or BACnet. All internal terminal wiring done from factory.
- Refrigerant circuit with optional built-in water cooled condenser for heating of domestic water and external condenser for hot countries.
- Optional DX or water-cooling coil.
- Highly energy-efficient EC plug fans.
- Highly efficient bag filters with a low pressure drop.
- Fresh air (30%) inlet possible through fresh air duct.
- Load-bearing frame construction module with galvanised, powder-painted sandwich panels with 50mm mineral wool insulation and bottom frame with adjustable feet.
- Specifically designed to withstand the aggressive environments (Corrosion class C4 according to EN/ISO 12944-2), with epoxy coated, coils with aluminium frame, pre-painted fins and with all fasteners, bolts and nuts specially protected.
- Large inspection doors with strong hinges and tongue locks and handles for easy access for service.
- Modular unit for easy and quick installation with all sensors and electrical components already connected. Separate control panel fitted with cables and plugs for quick electrical connection between unit and panel.

Specifications	Units	AF 3/6	AF 5/10	AF 5/10s	AF 7/14	AF 7/14s	AF 12/24	AF 12/24s
Operating temperature range	°C	22-36	22-36	22-36	22-36	22-36	22-36	22-36
Operating humidity	%	50-80	50-80	50-80	50-80	50-80	50-80	50-80
Dehumidification @ 28°C/60% RH	l/h	13	20	25	33	39	52	62
Air flow	m³/h	4,850	7,300	9,500	12,000	14,000	19,000	24,000
External duct pressure	Pa	300	300	300	300	300	300	300
Outdoor air	%	0-30	0-30	0-30	0-30	0-30	0-30	0-30
Power supply	V/Hz	400/3ph/50						
Max. power consumption	kW	8.6	12.3	16.1	22.1	24.1	31.7	42.8
R407c gas weight/CO <sub>2</sub> equivalent	kg/t	9/15.97	14/24.84	14/24.84	22/39.03	22/39.03	32/56.77	32/56.77
Height	mm	1115	1115	1115	1195	1195	1485	1485
Width	mm	3380	3380	3380	3850	3850	4125	4125
Depth	mm	880	1400	1400	1900	1900	2200	2200
Weight	kg	575	800	800	1125	1200	1650	1675





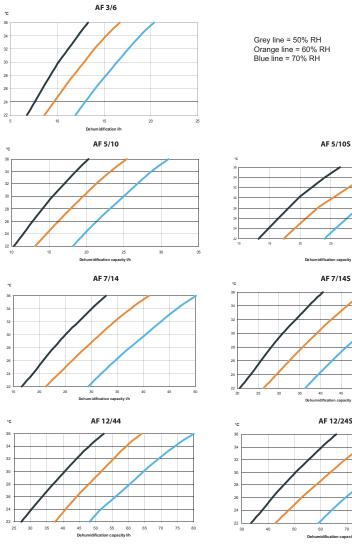
### **DanX AF dimensions**

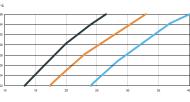


A: mm	B: mm	C: mm	L: mm	W: mm	H: mm	H1:mm	Weight: kg
985	1920	475	3380	880	1115	915	575
985	1920	475	3380	1400	1115	915	800
985	1920	475	3380	1400	1115	915	800
1125	2250	475	3850	1900	1195	995	1125
1125	2250	475	3850	1900	1195	995	1200
1400	2250	475	4125	2200	1485	1275	1650
1400	2250	475	4125	2200	1485	1275	1675
	985 985 1125 1125 1400	98519209851920112522501125225014002250	98519204759851920475112522504751125225047514002250475	9851920475338098519204753380112522504753850112522504753850140022504754125	985192047533801400985192047533801400112522504753850190011252250475385019001400225047538502200	98519204753380140011159851920475338014001115112522504753850190011951125225047538501900119514002250475412522001485	985192047533801400111591598519204753380140011159151125225047538501900119599511252250475385019001195995140022504754125220014851275

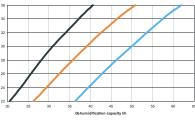
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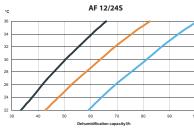
### **Performance data**









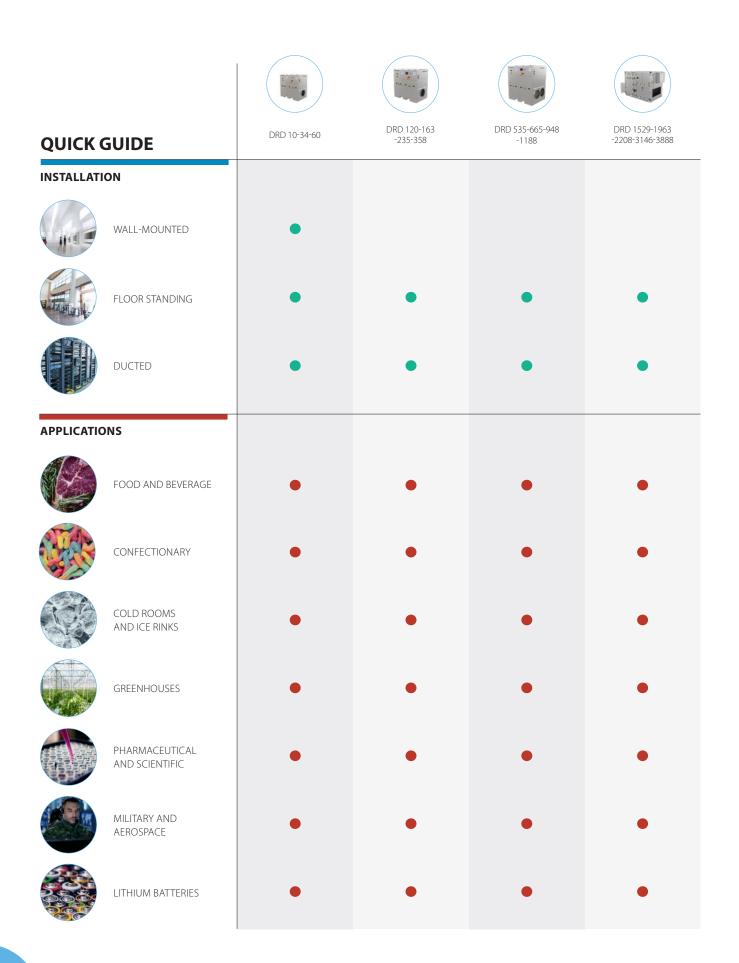




## **ADSORPTION DEHUMIDIFIERS**



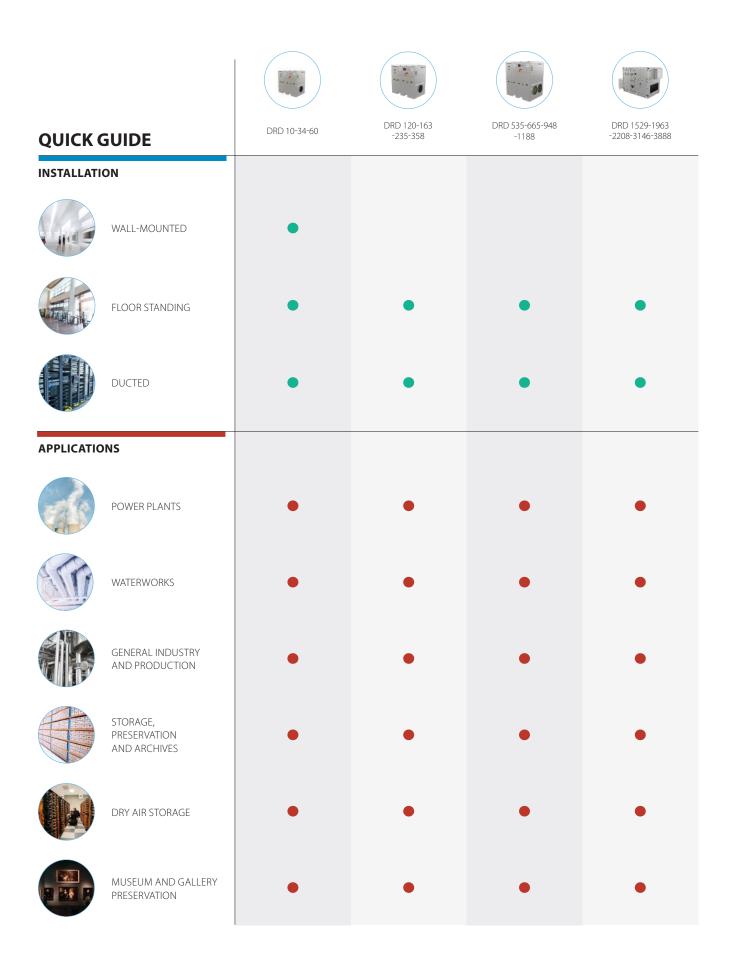
### **ADSORPTION DEHUMIDIFICATION SOLUTIONS FOR:** FOOD AND AGRICULTURE, PHARMACEUTICAL & COLD STORAGE





## ADSORPTION DEHUMIDIFICATION SOLUTIONS FOR:

POWER PLANTS, GENERAL PRODUCTION & STORAGE





# small air flow adsorption dehumidifiers $DRD \ 10-34-60$





Ideally suited for dehumidification tasks where space is limited, this range of small air flow adsorption dehumidifiers is characterised by its high performance due to two air inlets, two air outlets and two fans as well as robustness due to the insulated stainless-steel cabinet.

The dehumidifier range is suitable for several fields of application, in particular where space is limited. The stainless-steel housing with corrosion resistance class C5-I makes the units ideal for both hygienic and aggressive environments.



- Corrosion class for the interior is C3 (Aluzink 150, ISO 12944) and C5-I for stainless steel housing
- Single phase 50 or 60Hz
- Reactivation air in/out on same side
- Hour counter included as standard
- Coarse filter 60% (G4) for process and reactivation
- Effective dehumidification with very low dew-point, even under extreme conditions (-20°C/+40°C)
- Sturdy and non-flammable rotor capable of withstanding heat and saturated air
- The integrated alarm notifies you when filters are dirty and required replacement
- PLC control with intuitive touch-screen terminal and remote connection via RS485 or TCP/IP
- EC fans on process and regeneration air
- The units can be customised to your installation requirements on request

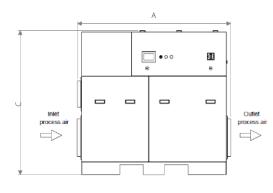
Specifications	Units	DRD 10	DRD 34	DRD 60
Dehumidification capacity @ 20°C/60% RH	kg/h	0.4	1.4	2.5
Process air flow	m³/h	90	300	450
Available pressure	Pa	150	200	200
Regeneration air flow	m³/h	25	75	120
Available pressure	Pa	150	150	200
Power consumption	kW	0.7	1.8	3.6
Power supply	V/Hz	230/1ph/50-60	230/1ph/50-60	400/3ph/50-60
Sound level*	dB(A)	42	44	46
Reactivation power	kW	0.6	1.7	3.3
Electric, steam		E/S	E/S	E/S
Filter	class	Coarse 60% (G4)	Coarse 60% (G4)	Coarse 60% (G4)
Product size (I x w x h)	mm	400 x 500 x 450	500 x 600 x 600	500 x 600 x 600
Weight	kg	25	32	33

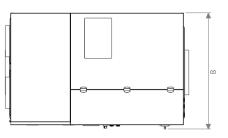


### SMALL AIR FLOW ADSORPTION DEHUMIDIFIERS DRD 10-34-60



### Dimensions





Dimensions	Units	DRD 10	DRD 34	DRD 60
A	mm	400	500	500
В	mm	500	600	600
С	mm	450	600	600

Part	Units	DRD 10	DRD 34	DRD 60
Process air inlet	Ømm	125	160	200
Dry air outlet	Ømm	125	160	200
Reactivation air inlet	Ømm	80	125	160
Wet air outlet	Ømm	80	125	160

Legend

•

### **Performance data**

0.6

0.5

0.4

\$ 0.3

0.2

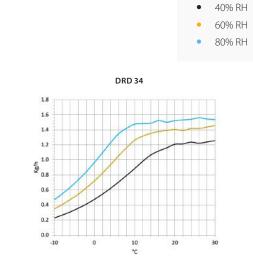
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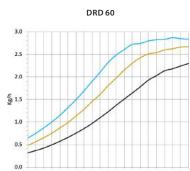
0.0

DRD 10

10 °C

20





10 °C

20

-10

0

Dantherm

## MEDIUM AIR FLOW ADSORPTION DEHUMIDIFIERS DRD 120-163-235-358





This range of medium air flow and high-capacity adsorption dehumidifiers has been designed with an insulated stainless-steel casing for maximum robustness and with the regeneration inlet and outlet placed on the same side to simplify installation. The units are very suitable for several fields of application, including those that offer limited installation space. The stainless-steel used is corrosion resistance class C5-I, thus making the adsorption dehumidifiers ideal for both hygienic and aggressive environments.

Delivered with an advanced user interface and fully ready for site installation, the dehumidifiers need only be connected ducting before they are ready for operation.



- Corrosion class for the interior is C3 (Aluzink 150, ISO 12944) and C5-I for stainless steel housing
- Three-phase 50 or 60Hz
- Reactivation air in/out on same side
- Advanced user interface with RS485 and/or TCP/IP protocol
- Coarse filter 60% (G4) for process and reactivation
- Ventilated electric panel
- Effective dehumidification with very low dew-point, even under extreme conditions (-20°C/+40°C)
- Sturdy and non-flammable rotor capable of withstanding heat and saturated air
- The integrated alarm notifies you when filters are dirty and required replacement
- PLC control with intuitive touch-screen terminal and remote connection via RS485 or TCP/IP
- EC fans on process and regeneration air
- The units can be customised to your installation requirements on request

Specifications	Units	DRD 120	DRD 163	DRD 235	DRD 358
Dehumidification capacity @ 20°C/60% RH	kg/h	5.0	6.8	9.8	14.9
Process air flow	m³/h	800	1,100	1,300	2,300
Available pressure	Pa	200	400	350	180
Regeneration air flow	m³/h	250	370	400	680
Available pressure	Pa	200	350	300	400
Power consumption	kW	6.9	10.4	13.9	20.8
Power supply	V/Hz	400/3ph/50-60	400/3ph/50-60	400/3ph/50-60	400/3ph/50-60
Sound level*	dB(A)	65	66	68	68
Reactivation power	kW	6.6	9.7	13.2	19.8
Electric, steam		E/S	E/S	E/S	E/S
Filter	class	Coarse 60% (G4)	Coarse 60% (G4)	Coarse 60% (G4)	Coarse 60% (G4)
Product size (I x w x h)	mm	1300 x 800 x 1300	1300 x 800 x 1300	1400 x 900 x 1400	1400 x 900 x 1400
Weight	kg	220	230	320	330

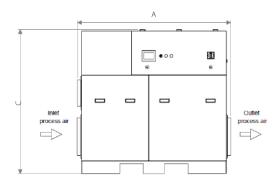
\* Sound pressure level calculated in free field, 10m from unit, direction factor Q2 , according to ISO 9614

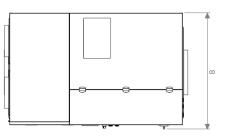


## MEDIUM AIR FLOW ADSORPTION DEHUMIDIFIERS DRD 120-163-235-358



### Dimensions





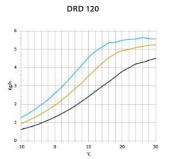
Dimensions	Units	DRD 120	DRD 163	DRD 235	DRD 358
A	mm	1300	1300	1400	1400
В	mm	800	800	900	900
С	mm	1300	1300	1400	1400

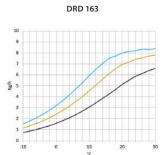
Parts	Units	DRD 120	DRD 163	DRD 235	DRD 358
Process air inlet	Ømm	315	315	355	355
Dry air outlet	Ømm	315	315	355	355
Reactivation air inlet	Ømm	160	160	250	250
Wet air outlet	Ømm	160	160	250	250

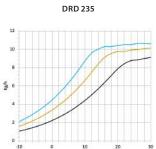
### **Performance data**

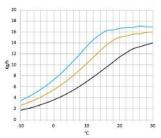


- 40% RH
- 60% RH
- 80% RH









DRD 358



# LARGE AIR FLOW ADSORPTION DEHUMIDIFIERS DRD 535-665-948-1188





This range of large air flow, high-capacity adsorption dehumidifiers has a cabinet built from robust insulated stainless steel. To simplify installation, regeneration inlets and outlets are placed on the same side.

Suitable for several fields of application, the compact units will fit nicely in installation areas that offer limited space. The stainless-steel housing with corrosion resistance class C5-I makes them ideal for both hygienic and aggressive environments.

The dehumidifiers come standard fitted with an advanced user interface and are fully prepared for site installation.



- Corrosion class for the interior is C3 (Aluzink 150, ISO 12944) and C5-I for stainless steel housing
- Three-phase 50 or 60Hz
- Reactivation air in/out on same side
- Advanced user interface with RS485 and/or TCP/IP protocol
- Coarse filter 60% (G4) for process and reactivation
- Ventilated electric panel
- Effective dehumidification with very low dew-point, even under extreme conditions (-20°C/+40°C)
- Sturdy and non-flammable rotor capable of withstanding heat and saturated air
- The integrated alarm notifies you when filters are dirty and required replacement
- PLC control with intuitive touch-screen terminal and remote connection via RS485 or TCP/IP
- EC fans on process and regeneration air
- The units can be customised to your installation requirements on request

Specifications	Units	DRD 535	DRD 665	DRD 948	DRD 1188
Dehumidification capacity @ 20°C/60% RH	kg/h	22.3	27.7	39.5	49.5
Process air flow	m³/h	3,500	4,500	5,800	7,000
Available pressure	Pa	300	200	450	450
Regeneration air flow	m³/h	870	1,300	1,630	2,150
Available pressure	Pa	450	250	250	450
Power consumption	kW	30.0	37.5	54.0	67.5
Power supply	V/Hz	400/3ph/50-60	400/3ph/50-60	400/3ph/50-60	400/3ph/50-60
Sound level*	dB(A)	69	71	72	73
Reactivation power	kW	31.6	39.3	57.4	71.5
Electric, steam		E/S	E/S	E/S	E/S
Filter	class	Coarse 60% (G4)	Coarse 60% (G4)	Coarse 60% (G4)	Coarse 60% (G4)
Product size (I x w x h)	mm	1480 x 1110 x 1630	1480 x 1110 x 1630	1730 x 1395 x 1980	1730 x 1395 x 1980
Weight	kg	470	485	670	690

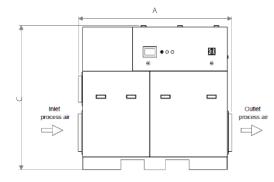
\* Sound pressure level calculated in free field, 10m from unit, direction factor Q2 , according to ISO 9614

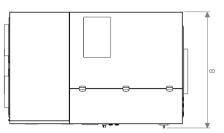


# LARGE AIR FLOW ADSORPTION DEHUMIDIFIERS DRD 535-665-948-1188



### Dimensions





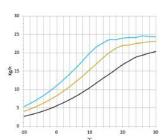
Dimensions	Units	DRD 535	DRD 665	DRD 948	DRD 1188
А	mm	1550	1600	1650	1800
В	mm	1050	1150	1350	1500
С	mm	1500	1650	1900	2100

Part	Units	DRD 535	DRD 665	DRD 948	DRD 1188
Process air inlet	Ømm	450	400	500	500 x2
Dry air outlet	Ømm	450	400	500	500 x2
Reactivation air inlet	Ømm	280	315	315	355
Wet air outlet	Ømm	280	315	315	355

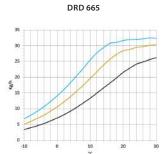
#### **Performance data**

#### Legend

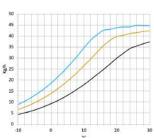
- 40% RH
- 60% RH
- 80% RH



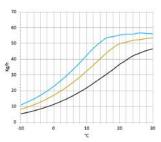
DRD 535













# EXTRA-LARGE AIR FLOW ADSORPTION DEHUMIDIFIERS DRD 1529-1963-2208-3146-3888





DRD 1529

These extra-large air flow, high-capacity adsorption dehumidifiers are manufactured with an insulated epoxy-painted casing and are fitted with an advanced controller interface as standard.

The range is highly suitable for all fields of application, especially those requiring extra high volumes of air to be treated.

The dehumidifiers are delivered pre-fitted with factory-mounted flanges. Once connected to ducting, they are ready for operation.



- Corrosion class for the interior is C3 (Aluzink 150, ISO 12944) and C4 for painted housing
- Three-phase 50 or 60Hz
- Reactivation air in/out on same side
- Advanced user interface with RS485 and/or TCP/IP protocol
- Coarse filter 60% (G4) for process and reactivation
- Ventilated electric panel
- Effective dehumidification with very low dew-point, even under extreme conditions (-20°C/+40°C)
- Sturdy and non-flammable rotor capable of withstanding heat and saturated air
- The integrated alarm notifies you when filters are dirty and required replacement
- PLC control with intuitive touch-screen terminal and remote connection via RS485 or TCP/IP
- EC fans on process and regeneration air
- The units can be customised to your installation requirements on request

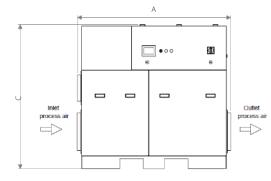
Specifications	Units	DRD 1529	DRD 1963	DRD 2208	DRD 3146	DRD 3888
Dehumidification capacity @ 20°C/60% RH	kg/h	63.7	81.8	92.0	131.0	162.0
Process air flow	m³/h	9,000	11,000	13,000	19,000	25,000
Available pressure	Pa	400	400	400	400	400
Regeneration air flow	m³/h	2,700	3,700	4,300	5,500	7,900
Available pressure	Pa	400	400	400	400	400
Power consumption	kW	98.7	131.0	155.0	195.0	273.0
Power supply	V/Hz	400/3ph/50-60	400/3ph/50-60	400/3ph/50-60	400/3ph/50-60	400/3ph/50-60
Sound level*	dB(A)	72	74	74	76	76
Reactivation power	kW	90	120	144	180	252
Electric, steam		E/S	E/S	E/S	E/S	E/S
Filter	class	Coarse 60% (G4)				
Product size (I x w x h)	mm	2350 x 1350 x 1750	3050 x 1600 x 1850	3050 x 1600 x 1850	3850 x 1950 x 2150	3850 x 1950 x 2150
Weight	kg	700	1350	1390	1980	2150

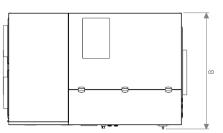
\* Sound pressure level calculated in free field, 10m from unit, direction factor Q2 , according to ISO 9614





### Dimensions

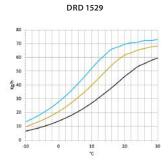


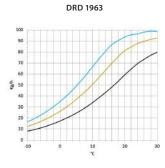


Dimensions	Units	DRD 1529	DRD 1963	DRD 2208	DRD 3146	DRD 3888
A	mm	2350	3050	3050	3850	3850
В	mm	1350	1600	1600	1950	1950
С	mm	1750	1850	1850	2150	2150

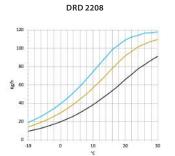
Part	Units	DRD 1529	DRD 1963	DRD 2208	DRD 3146	DRD 3888
Process air inlet	Ømm	1155 x 560	1250 x 600	1250 x 600	1500 x 800	1500 x 900
Dry air outlet	Ømm	1155 x 560	1250 x 600	1250 x 600	1500 x 800	1500 x 900
Reactivation air inlet	Ømm	560 x 460	600 x 600	600 x 600	800 x 800	800 x 800
Wet air outlet	Ømm	350	400	400	500	630

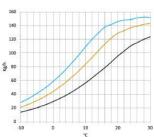
### Performance data





DRD 3146

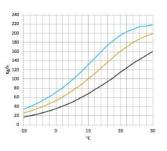




#### Legend

- 40% RH
- 60% RH
- 80% RH

### DRD 3888







## CDP 40-50-70 | CDP 40T-50T-70T

Illustration	Accessory	Description	Products	Code
	Remote control, DRC1	<ul> <li>DRC1 is a wireless RH and temperature controller.</li> <li>Frequency: 433 mhz</li> <li>Range: Up to 50m depending on the conditions Protection class: IP20</li> <li>Functionalities: <ul> <li>Reading and setting of RH, temperature, alarms and service information</li> <li>Locking of settings</li> </ul> </li> </ul>	CDP 40 CDP 50 CDP 70 CDP 40T CDP 50T CDP 70T	093455
	External RH/t sensor	Remote sensor with 10 meter wire Protection class: IPX7	CDP 40 CDP 50 CDP 70 CDP 40T CDP 50T CDP 70T	051710
6	Floor mounting kit, 2 pcs	Each bracket to be mounted on each side of the dehumidifier	CDP 40 CDP 50 CDP 70	094322
	Water heating coil 2.6 kW* Water heating coil 4.2 kW* Water heating coil 6.2 kW*	Comprises water heating coil, flexible hose, fittings and gasket *at 80/60° C (See technical specifications for water heating coils on separate page).	CDP 40, 40T CDP 50, 50T CDP 70, 70T	094333 094334 094335
	DN 10 control valve and actuator for water heating coils	Comprises valve and actuator 230 V, ON/OFF (180 seconds from closed to fully open), includes union nut for Ø 12 tube	CDP 40 CDP 50 CDP 70 CDP 40T CDP 50T CDP 70T	094340
	Electric heating coil 2 kW Electric heating coil 3.5 kW Electric heating coil 5 kW	Comprises electric heating coil, relays and electric wires	CDP 40, 40T CDP 50, 50T CDP 70, 70T	094336 094337 094338



## CDP 40-50-70 | CDP 40T-50T-70T

Illustration	Accessory	Description	Products	Code
	Pro 30 Standard Exhaust fan	The exhaust fan can be used in combination with the CDP to either increase dehumidification capacity or establish outdoor air supply <b>Pro 30 Standard:</b> Power supply: 230 V/50Hz Power consumption: 7.5W Air volume: 97m <sup>3</sup> /h Sound level: 25 dB(A) <b>Pro 32 Standard:</b> Power supply: 230 V/50Hz Power consumption: 17W Air volume: 185m <sup>3</sup> /h Sound level: 32 dB(A)	CDP 40 CDP 50 CDP 70 CDP 40T CDP 50T CDP 70T	094339
	Pro 32 Standard Exhaust fan	Pro 30Pro 32ØD99124ØD99124B158182H136158L10791L12627D100125L2500500B2100125C125150	CDP 40 CDP 50 CDP 70 CDP 40T CDP 50T CDP 70T	094341
	Through-wall duct kit with filter, extension kit and alu grill	Comprises inlet and outlet section, grills, inlet filter and extension For walls between 70 and 366mm thickness	CDP 40T CDP 50T CDP 70T	094271 094243 093508
	Duct lead-in adapter	The adapter makes it possible to place CDP 40T-50T-70T on the wall without changing the existing wall openings	CDP 40T CDP 50T CDP 70T	094801 094802 094804



### CDP 40-50-70 | CDP 40T-50T-70T

### Water heating coils – calculations at room temperature = $28^{\circ}$ C; 60% RH

CDP 40 + CDP 40T	$Q = 400 \text{ m}^3/\text{h}$						
Water temperature	°C	82/71	80/60	70/35	90/70	60/40	55/45
Capacity	kW	3.32	2.64	0.68	3.4	1.02	1.36
Water flow rate	l/sec.	0.07	0.03	0.005	0.04	0.01	0.03
Water pressure drop	kPa	11.8	2.8	0.1	4.2	0.6	3.1
Water velocity	m/sec.	1.05	0.46	0.07	0.6	0.18	0.47
Air flow rate	m³/sec.	0.11	0.11	0.11	0.11	0.11	0.11
Inlet temperature	°C	82	80	70	90	60	55
Outlet temperature	°C	71	60	35	70	40	45
Air pressure drop	Pa	8	8	8	8	8	8
Connection tube	Ømm	12	12	12	12	12	12

CDP 50 + CDP 50T	Q = 680 m <sup>3</sup> /h						
Water temperature	°C	82/71	80/60	70/35	90/70	60/40	55/45
Capacity	kW	5.28	4.27	0.99	5.45	1.82	2.2
Water flow rate	l/sec.	0.12	0.05	0.01	0.07	0.02	0.05
Water pressure drop	kPa	32.3	7.6	0.2	11.6	1.8	8.6
Water velocity	m/sec.	1.68	0.74	0.1	0.95	0.32	0.76
Air flow rate	m³/sec.	0.19	0.19	0.19	0.19	0.19	0.19
Inlet temperature	°C	82	80	70	90	60	55
Outlet temperature	°C	71	60	35	70	40	45
Air pressure drop	Pa	10	10	10	10	10	10
Connection tube	Ømm	12	12	12	12	12	12

CDP 70 + CDP 70T	$Q = 900 \text{ m}^{3}/\text{h}$						
Water temperature	°C	82/71	80/60	70/35	90/70	60/40	55/45
Capacity	kW	7.56	6.23	2.37	7.9	2.83	3.23
Water flow rate	l/sec.	0.17	0.08	0.02	0.1	0.03	0.08
Water pressure drop	kPa	83	20.1	1.5	30.1	5.3	22.9
Water velocity	m/sec.	2.4	1.09	0.23	1.38	0.49	1.12
Air flow rate	m³/sec.	0.25	0.25	0.25	0.25	0.25	0.25
Inlet temperature	°C	82	80	70	90	60	55
Outlet temperature	°C	71	60	35	70	40	45
Air pressure drop	Pa	8	8	8	8	8	8
Connection tube	Ømm	12	12	12	12	12	12



### CDP 75-125-165

Illustration	Accessory	Products	Code
	Room hygrostat	CDP 75 CDP 125 CDP 165	516301 516301 516301
	Room thermostat	CDP 75 CDP 125 CDP 165	513321 513321 513321
	Duct hygrostat	CDP 75 CDP 125 CDP 165	516310 516310 516310
	Wall mounting kit	CDP 75 CDP 125	175381 175382
	Shock-absorbing floor mount kit	CDP 75 CDP 125 CDP 165	175367 175368 175369
	Water heating coil	CDP 75 CDP 125 CDP 165	570027 570028 570029
	Defrost sensor	CDP 75 CDP 125 CDP 165	175401 175401 175401
	External failure monitoring kit	CDP 75 CDP 125 CDP 165	019401 019401 019401

### CDF 10-40-50-70

Illustration	Accessory	Description	Products	Code
	Water tank	White or grey	CDF 10	351615 – White tank 351616 – Grey tank
	Remote control, DRC1	<ul> <li>DRC1 is a wireless RH and temperature controller.</li> <li>Frequency: 433 mhz</li> <li>Range: Up to 50m depending on the conditions Protection class: IP20</li> <li>Functionalities: <ul> <li>Reading and setting of RH, temperature, alarms and service information</li> <li>Locking of settings</li> </ul> </li> </ul>	CDF 40 CDF 50 CDF 70	093455
	External RH/t sensor	Remote sensor with 10 meter wire Protection class: IPX7	CDF 40 CDF 50 CDF 70	051710
B	Floor mounting kit, 2 pcs - black	Each bracket to be mounted on each side of the dehumidifier	CDF 40 CDF 50 CDF 70	094332
	Water heating coil 2.6 kW* Water heating coil 4.2 kW* Water heating coil 6.2 kW*	Comprises water heating coil, flexible hose, fittings and gasket *at 80/60° C (See technical specifications for water heating coils on separate page).	CDF 40 CDF 50 CDF 70	094333 094334 094335
	DN 10 control valve and actuator for water heating coils	Comprises valve and actuator 230 V, ON/OFF (180 seconds from closed to fully open), includes union nut for Ø 12 tube	CDF 40 CDF 50 CDF 70	094340
	Electric heating coil 2 kW Electric heating coil 3.5 kW Electric heating coil 5 kW	Comprises electric heating coil, relays and electric wires	CDF 40 CDF 50 CDF 70	094336 094337 094338



### CDF 10-40-50-70

Illustration	Accessory	Description	Products	Code
	Pro 30 Standard Exhaust fan	The exhaust fan can be used in combination with the CDP to either increase dehumidification capacity or establish outdoor air supply. <b>Pro 30 Standard:</b> Power supply: 230 V/50Hz Power consumption: 7.5W Air volume: 97m <sup>3</sup> /h Sound level: 25 dB(A) <b>Pro 32 Standard:</b> Power supply: 230 V/50Hz Power consumption: 17W Air volume: 185m <sup>3</sup> /h Sound level: 32 dB(A)	CDF 40 CDF 50 CDF 70	094339
	Pro 32 Standard Exhaust fan	Pro 30 StandardPro 32 StandardØD99124B158182H136158L10791L12627D100125L2500500B2100125C125150	CDF 40 CDF 50 CDF 70	094341



### CDF 10-40-50-70

### Water heating coils – calculations at room temperature = 20°C; 50% RH

<b>CDF 40</b> Water temperature Capacity Water flow rate Water pressure drop Water velocity Air flow rate Inlet temperature Outlet temperature Air pressure drop Connection tube	<b>Q=400 m<sup>3</sup>/h</b> °C kW I/sec. kPa m/sec. m <sup>3</sup> /sec. °C °C Pa mm	82/71 3.85 0.09 15.5 1.22 0.11 82 71 8 12	80/60 3.19 0.04 3.9 0.56 0.11 80 60 8 12	70/35 1.16 0.01 0.3 0.11 0.11 70 35 8 12	90/70 3.94 0.05 5.5 0.69 0.11 90 70 8 12	60/40 1.64 0.02 1.3 0.28 0.11 60 40 8 12	55/45 1.91 0.05 5.7 0.66 0.11 55 45 8 12
<b>CDF 50</b> Water temperature Capacity Water flow rate Water pressure drop Water velocity Air flow rate Inlet temperature Outlet temperature Air pressure drop Connection tube	<b>Q=680 m<sup>3</sup>/h</b> °C kW I/sec. kPa m/sec. m <sup>3</sup> /sec. °C Pa mm	82/71 6.11 0.14 42.2 1.94 0.19 82 71 10 12	80/60 5.12 0.06 10.6 0.06 0.19 80 60 10 12	70/35 2.42 0.02 1.1 0.24 0.19 70 35 10 12	90/70 6.29 0.08 14.9 1.1 0.19 90 70 10 12	60/40 2.75 0.03 3.8 0.48 0.19 60 40 10 12	55/45 3.08 0.08 15.6 1.07 0.19 55 45 10 12
<b>CDF 70</b> Water temperature Capacity Water flow rate Water pressure drop Water velocity Air flow rate Inlet temperature Outlet temperature Air pressure drop Connection tube	<b>Q=900 m<sup>3</sup>/h</b> °C kW I/sec. kPa m/sec. m <sup>3</sup> /sec. °C °C Pa mm	82/71 8.74 0.19 108.1 2.78 0.25 82 71 8 12	80/60 7.43 0.09 27.7 1.3 0.25 80 60 8 12	70/35 3.86 0.03 3.4 0.38 0.25 70 35 8 12	90/70 9.07 0.11 38.7 1.59 0.25 90 70 8 12	60/40 4.12 0.05 10.3 0.71 0.25 60 40 8 12	55/45 4.47 0.11 40.7 1.55 0.25 55 45 8 12



### DANX

Illustration	Accessory	Description	Products	Code
	DanX touchscreen		DANX 1-2-3, HP, AF, CF	490146

### CD 15

Illustration	Accessory	Description	Products	Code
	Replacement air filter	Replacement	CD 15	490146
	Condensate drainage hose	Size: 12 x 2 mm	CD 15	490100



### DRD

We offer a variety of accessories, including the below.

Illustration	Accessory	Description	Products	Code
	Duct probe	RH% + temp. range 0-100% / -30°/70°C (420mA - 24Vac/dc)	All DRD products	H1D
	Wall probe	RH% + temp. range 0-100% / -30°/70°C (420mA - 24Vac/dc)	All DRD products	H1W
	Wall probe	RH% + temp. range 10-90% / 0°/50°C (420mA - 24Vdc)	All DRD products	H2W
	Electronic humidistat	Electronic humidistat for wall 1 step + 1 alarm + ModBus power supply 230Vac	All DRD products	HW230
	Electronic humidistat	Electronic humidistat for wall 0/10Vdc + 1 alarm + ModBus power supply 24Vdc	All DRD products	HW24
	Probe duct	Probe duct Dew-point range -60°/20°C (420mA - 24Vdc)	All DRD products	HDWP



### GLOSSARY

### Prefix = type of heat pump or product

HPP-i	Heat pump pool-inverter
CDF	Dehumidifier, fixed installation
CDP	Dehumidifier, pool installation
DanX	Swimming pool AHUs

#### Suffix = model type

#### For example

-T CDP through-the-wall version

### DanX 1, DanX 2, DanX 3

XD	Double crossflow heat exchanger only
HP	Double crossflow heat exchanger and heat pump

#### DanX XWPS

Х	Crossflow heat exchanger
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- WP Heat pump
- S Swimming pools

### DanX XWPRS

X Crossflow heat exchange	Х	Crossflow heat exchanger
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- WP Heat pump
- R Reversible
- S Swimming pools

### DanX XKS

- X Crossflow heat exchanger
- K Crossflow heat exchanger only
- S Swimming pools

#### DanX CF

CF Counter flow heat exchanger

### DanX AF/AFs

- AF Heat pump dehumidifier, no crossflow heat exchanger
- s Larger compressor and more airflow, higher dehumidification capacity, contained in the same dimensions as the 'non s' version.

#### Number = size of product

For example	
CDP	40, 50, 70, 75, 125, 165
DanX XD/HP	1, 2, 3
DanX AF	3/6, 5/10, 5/10s, 7/14, etc.
DanX XKS	2/4, 3/6, 5/10, 7/14, etc.

#### DanX numbering system

Numbers indicate air flow, so a 2/4 is from 2000 m<sup>3</sup>/h to 4000 m<sup>3</sup>/h. The actual nominal air flow is stated in the documentation and brochures.

XWPS-XWPRS/XKS 2/4 = 2000/4000 XWPS-XWPRS/XKS 3/6 = 3000/6000 XWPS-XWPRS/XKS 5/10 = 5000/10000 XWPS-XWPRS/XKS 7/14 = 7000/14000 XWPS-XWPRS/XKS 9/18 = 9000/18000 XWPS-XWPRS/XKS 12/24 = 12000/24000 XWPS-XWPRS/XKS 16/32 = 16000/32000

## **NOTE:** On an AF the same numbering system is used, but the air flow cannot be changed. The actual nominal air flow is stated in the documentation and brochures.

AF 3/6 = 3000/6000 AF/AFs 5/10 = 5000/10000 AF/AFs 7/14 = 7000/14000 AF/AFs 12/24 = 12000/24000





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