



## SWIMMING POOL

Dehumidification for swimming pools,  
spas and therapeutic clinics

Humidification, dehumidification  
and evaporative cooling





# Why an air dehumidifier is so important

A high degree of water evaporation in indoor pools and, especially in combination with the high ambient temperatures, leads to enormous humidities and an unpleasant feeling of being oppressively hot. For those using the swimming pool, these climatic conditions not only detract from personal well-being, but also pose a serious risk to the health of visitors and swimming pool staff in the form of circulation problems. The damp air provides germs and bacteria with the perfect breeding ground. Given the bathing guests' light clothing, these can very quickly get into contact with human skin and, in the worst case, cause infections or diseases.

Alongside the potential health hazards, warm humid air also has an impact on the fabric of the building. In so-called "cold spots" in particular, such as glass surfaces, metallic components, or external walls, the evaporated water condenses and can lead to the formation of mold and corrosion over longer periods. The resulting damage leads to shorter maintenance and repair cycles of the building's infrastructure, entailing unplanned production stoppages and therefore, and above all, higher costs. Operators of swimming pools should therefore insist on a contemporary dehumidification system being installed.

## Energy-efficient dehumidification is an expert field

The simplest version is supposed to be intuitive ventilation of the indoor swimming pool using windows and doors or by means of ventilation. However, it is just as expensive as intuitive ventilation of living spaces during a hot spell (e.g. in the form of a permanently open window). The dilemma is that significant energy is expended to bring

the air fed from the outside to the temperature required inside.

Condair's air dehumidification systems, developed especially for use in swimming pools, by comparison, works significantly more efficiently and sustainably. Available in a variety of performance categories and comfort levels, its technology is based on a cooling circuit, in which a compressor compresses the refrigerant within and is released on a throttle. The advantage is that with this technology, dehumidification and tempering operations are carried out up to 60 percent more economically compared with conventional systems working with input and output air.

One central aspect of contemporary air conditioning equipment in indoor swimming pools is the energy recovered from the dehumidification process. All Condair's swimming pool air dehumidifiers have an integrated heat recovery unit based on the principle of the heat pump.

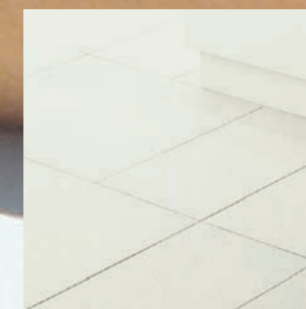
**The principle is** that the humid air going out of the indoor swimming pool firstly flows through the evaporation heat exchanger. It is cooled down during this process and the humidity in the air is condensed out. The dehumidified air then flows through the liquid heat exchanger. The arising heat is then added productively to the inlet air. Swimming pool operators benefit from noticeable savings in energy expenditure thanks to this technology, as the heat is recovered within the heat pump circuit and again fed to the air in the indoor pool through the dry inlet air.



A comfortable ambient atmosphere instead of unpleasant sticky heat



Secure, dry running surfaces



Preventing mold, rust or damage to the building





## CONDAIR DP-W

### Wall-Mounted Dehumidifiers

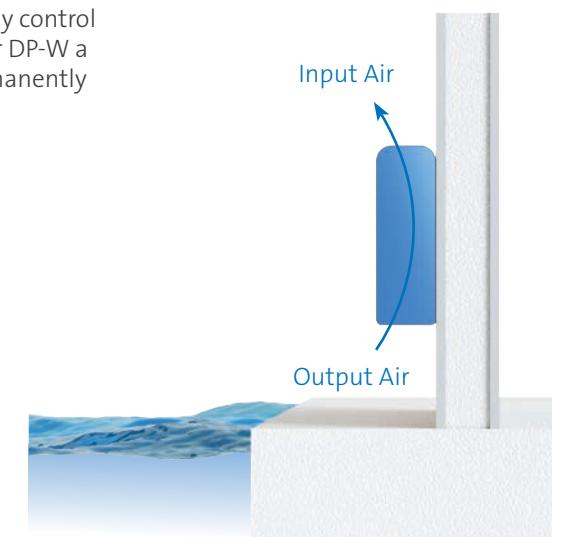
Condair's DP-W swimming pool air dehumidifiers are not just used as a retrofit into existing indoor pools—they are also hugely popular, as they are cheap and easy to install. Given their relatively low construction depth of between 260 and 310 mm, they do not take up much space and are therefore particularly easy to install and retrofit.

For use in smaller private swimming pools, as required, right up to medium-sized indoor pools, the Condair DP-W series is available in five different performance capacities with a maximum dehumidification capacity of 49 to 190 liters per day. The refrigeration equipment within the indoor swimming pool is fitted on the wall and only needs to be connected to the power supply next to a condensation drain to be up and running straight away.

As a stand-alone solution, the Condair DP-W is ready for use in the shortest time. Its pleasantly quiet operation is impressive and fits seamlessly into the existing architecture of the space thanks to its revised design with rounded, soft edges. Use of the refrigerant R410A and the integrated heat recovery means that the DP-W series works particularly efficiently. Extracting exhaust heat from the heat pump circuit, and feeding it back directly to the

ambient air very effectively makes sparing use of resources and saves a great deal on energy costs.

To achieve this, the Condair DP-W can be extended to include a hot water or electric heater coil, electronic or mechanical humidity switches, supporting feet, and further accessories. Depending on the requirement, it can be retrofitted to form a comprehensive air conditioning device that performs a variety of even more humidity control functions. Its tried-and-tested, internal control electronics result in a sustainable and economic operation. All parameters can be operated particularly conveniently. Its user-friendly control interface makes the Condair DP-W a lasting contribution to permanently easing the burden on operating staff.







## CONDAIR DP-R

### Dehumidifiers Installed Behind a Partition

Condair's DP-R model offers highly effective solutions for efficient air dehumidification, especially for concealed applications. Taking into account the structural design of indoor swimming pools, Condair DP-R air dehumidifiers were specially developed as rear wall units. They save space internally as a result, have no adverse effect upon the pool's spatial and conceptual design, while offering a particularly high degree of comfort for its visitors. As the entire technical structure of the air dehumidifier is accommodated on the wall of a neighboring room or in a separate utility room, all operating noises caused by sound-emitting components, such as compressors or fans, are completely eliminated from the guest area.

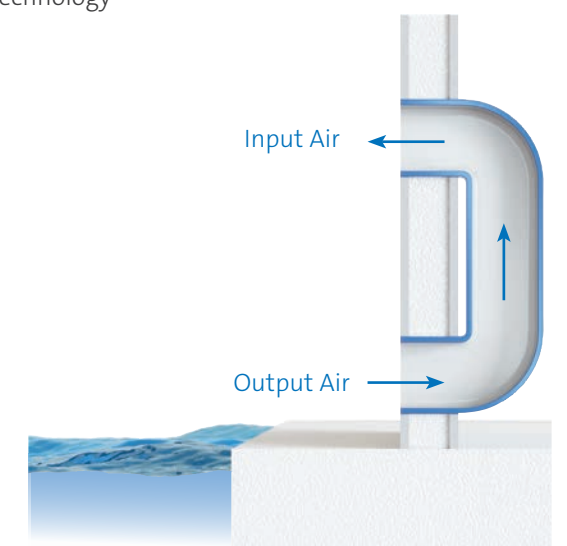
Similar to the range of Condair's chest-type units, Condair DP-R pool dehumidifiers are available in five different sizes and a maximum dehumidifying capacity of 49 to 190 L/day.

The equipment can be installed easily onto the rear wall of the indoor pool and can be connected to the inside of the pool area via two wall openings using Condair's optional ventilation duct.

Less space is therefore required inside the pool area, and with little extra effort. The application of Condair's

DP-R dehumidification systems is only visible in the form of an unobtrusive input and output air grille.

It goes without saying that Condair's tried-and-tested heat recovery system, based on a heat pump circuit, also guarantees the lowest possible heat losses in the DP-R series, meaning sustainable air dehumidification, even in continuous operation. Hot water and electric heater coils, electronic or mechanical humidity switches, supporting feet, and further accessories extend the functional scope of the Condair DP-R swimming pool air dehumidifier—and fully in line with a comprehensive compact solution for the entire air conditioning technology of a swimming pool.





## CONDAIR DP-C

### Ceiling-Mounted Dehumidifiers

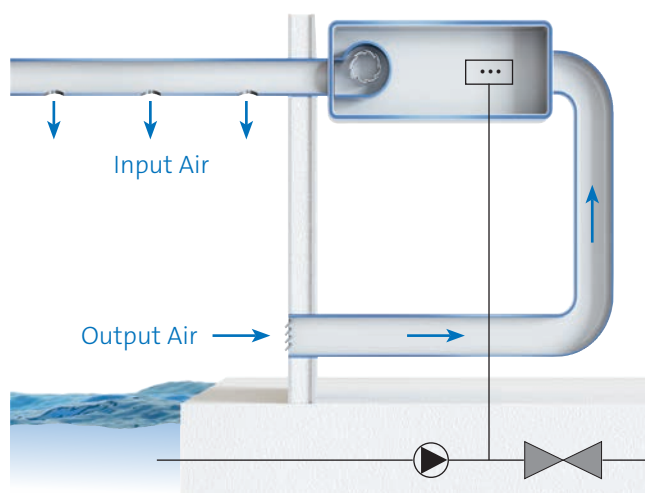
The Condair DP-C is a particularly compact solution for air dehumidification. This model's flat design makes it ideal for mounting below the ceiling or in a suspended ceiling. This type of mounting is particularly suitable if there is no mechanical room or the existing mechanical room is too small to install a floor-mounted unit. Ventilation ducts must be installed for the in-feed of the dehumidified air intake as well as the extraction of the moist exhaust air to/from the pool area. This work must be provided by the customer. All sound-emitting components, such as compressors and fans, are located outside the swimming pool area. This keeps the noise emissions at a minimum and the operation easy.

The Condair DP-C pool dehumidifiers are available in five different sizes and a maximum dehumidifying capacity of 49 to 190 l/day. As an alternative to the optionally available hot water or electric heater coils, electronic or mechanical heater coils, partial heat recovery is available to partially transfer the recovered heat from the air dehumidifier directly into the water of the pool.

#### Features of the air dehumidifier

##### Condair DP-C:

- Effective air dehumidification
- Energy-efficient heat pump principle
- Refrigerant R410A
- Quiet fans
- Very compact, flat housing
- Opt. partial heat recovery unit is available to heat the water of the pool
- Numerous options



## CONDAIR DP

### Dehumidifier for Installation in the Mechanical Room

Particularly in hotels, wellness and therapy areas, in which a mechanical room is available, Condair DP air dehumidifiers are integrated into the utility room. These units are installed in a central utility room, where ventilation ducts feed the air to their specific locations. The recirculated air process ensures a safe and energy-efficient dehumidification, regardless of the pool's operating hours. The broad product mix with a total of ten output ranges and maximum dehumidification capacities of 73 to 940 l/day can cover a wide range of applications.

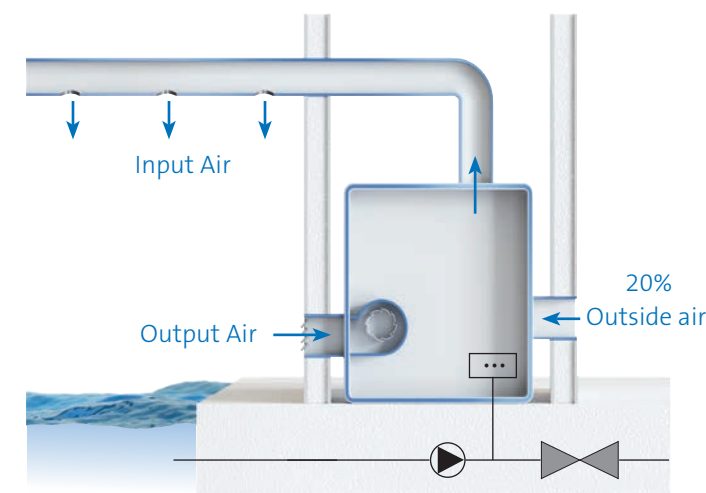
The integrated heat recovery ensures a significant reduction in heating costs, as a large volume of the heat recovered from the heat pump circuit is fed back into the indoor swimming pool and, in some cases, is able to completely replace heating for the space because of the equipment's high performance. Around 20% of the generated heat energy can be used to heat the water in the pool via an optional partial heat recovery. Installing a heat recovery system in order to heat the pool's water temperature is useful, particularly in the therapeutic area where high room temperatures usually prevail, as the system can prevent the room from overheating. As an option, the units can be equipped with a hot water or electric heater coil for quick heating of the indoor air or to support the

existing room heating system. It is also possible on site to mix the volume stream with up to 20% of fresh air.

A wide range of options is available for the Condair DP series of swimming pool dehumidifiers. All can be adapted to meet the specific requirements of the indoor pool.

#### Features of the Condair DP air dehumidifier

- Effective air dehumidification
- Powerful heat pump circuit
- Partial heat recovery to heat pool water
- Hot water or electric heater coil
- Custom-made designs upon request







## CONDAIR DP-HE

### High-Efficiency Dehumidifier

In large swimming pools, indoor aqua parks, saunas, and in hotels, sport and wellness facilities, the highly efficient air dehumidifiers from Condair DP-HE guarantee reliable temperature and air humidity regulation, even under extreme climatic conditions. In addition to Condair's tried-and-tested heat recovery principle via the coolant circuit, an additional plate heat exchanger is fitted into the DP-HE equipment to keep the energy required to maintain the desired internal temperature as low as possible in indoor pools. Condair's DP-HE series is available in seven different models and achieves significant performance values with maximum dehumidification capacities of 133 L/day up to 565 L/day in the pure recirculation mode. Its performance capacity during operation in the external air is even more impressive. Condair's high-efficiency air dehumidifiers dehumidify up to 1054 L/day in continuous operation and therefore ensure sophisticated air humidity regulation in highly frequented indoor pools. Equipped with an automatic external air mixing function, which regulates automatically depending on the operating mode selected, Condair DP-HE is used primarily by operators of larger swimming pools and wellness facilities, who place equal value on maximum ease of operation and highest possible operational reliability.

#### Functional principle

In each fan, the hot and humid swimming pool air is fed via the exhaust air filter and the cross-flow heat exchanger. A part of the enthalpy content is fed to the input air there. Afterwards, 30 percent of the air flow can be fed into the outside air via a separator exhaust air fan. The remaining air volume goes to the direct compressor heat exchanger where it is dehumidified as required. Up to 30 percent of the external air can then be mixed using an EC fan

that is then mixed with the cooled and dehumidified air. The entire air flow is then fed via a second inlet of the cross-flow heat exchanger, where the heat is recovered from the air coming out of the indoor pool. The preheated air flow therefore goes back into the inlet air in the swimming pool via the condenser. At very low external air temperatures or operation with a mixture of fresh air, it can arise that the necessary temperature level is not reached. In this case, a hot water heating coil is retrofitted that heats up the air to the required temperature.

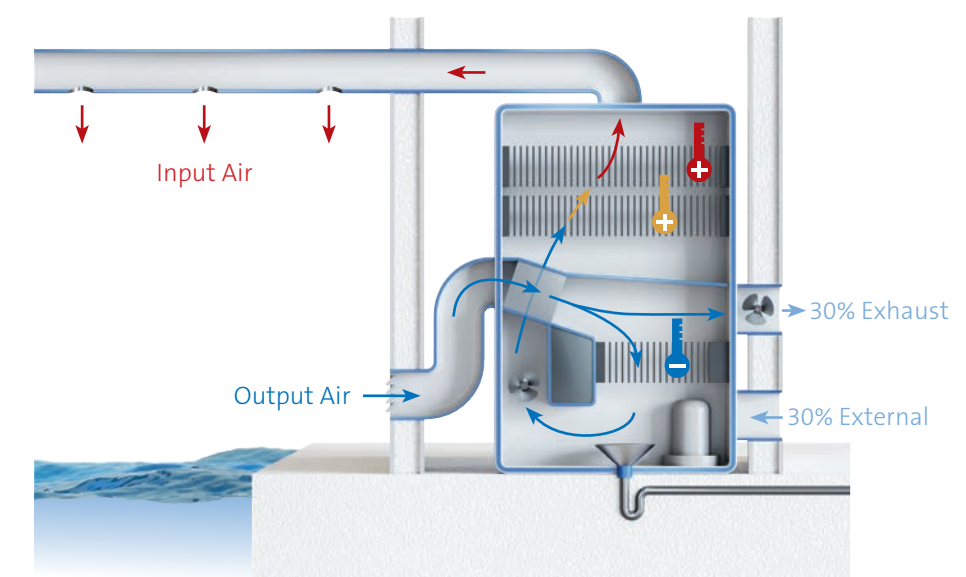
As up to 30% of the proportion of external air can be added, it is possible to significantly improve the air quality. The external air supplied has a positive effect on dehumidification performance, as this generally has a lower humidity level than the air in the indoor pool. Less energy is therefore required for the dehumidification process via the coolant circuit. Compared with the usual air humidifier models on the market, they have up to 30 percent greater dehumidifying performance thanks to the dual-use

cross-flow heat exchanger with lower power consumption.

The energy efficiency can be further optimized by using the separately available energy saving circuit which can be utilized while the pool is not in operation. The flexible options with adjustment mean that the maximum efficiency can be achieved for every utilization rate and every mode of operation.

#### Features of the air dehumidifier Condair DP-HE

- Automatically adding up to 30% fresh air
- Dual-use cross-flow heat exchanger
- Optional partial heat recovery for heating the pool water
- Hot water heaters are part of the standard supply
- Electronic controllers





An underwater photograph showing a person's feet and lower legs as they step into a swimming pool. The water is a vibrant blue, and there is a large, energetic splash of white bubbles and water droplets surrounding the feet. The lighting is bright, creating a high-contrast scene between the white foam and the deep blue water.

## Energy-Efficient Technology from Condair

One traditional method of dehumidification that is still commonplace today is a simple ventilation and circulation system, whereby the damp air is sucked in via a ventilator and drier air streams in from outside.

This external air must then be reheated, which takes a huge amount of energy. This method is therefore incredibly wasteful.

Considerably more energy-efficient is the humidity control offered by air dehumidification systems specially for use in swimming pools.

These are based on a closed coolant circuit, which makes the operation up to 60 percent more economic than conventional systems that work with input and output air.

To recover energy, all Condair's air dehumidifiers work using the heat pump principle. This results in significant savings in operating costs, as the heat recovered in the heat pump circuit is fed back into the room's heating.



WALL-MOUNTED

Condair **DP-W**



| Technical Data                                      |                     | DP 50-W             | DP 75-W          | DP 100-W    | DP 150-W         | DP 200-W |
|-----------------------------------------------------|---------------------|---------------------|------------------|-------------|------------------|----------|
| Dehumidification capacity at 30°C – 80%             | l/24h               | 49                  | 73               | 95          | 155              | 190      |
| Dehumidification capacity at 30°C – 60%             | l/24h               | 39                  | 56.7             | 77.4        | 118.3            | 146.7    |
| Dehumidification capacity at 28°C – 60%             | l/24h               | 35.9                | 51.6             | 1.1         | 101.6            | 132.3    |
| Dehumidification capacity at 26°C – 60%             | l/24h               | 33.4                | 47.3             | 65.8        | 93.4             | 121.3    |
| Air circulation                                     | m³/h                | 500                 | 800              | 1000        | 1400             | 1650     |
| Compression available (higher compression optional) | Pa                  | 40                  |                  |             |                  |          |
| Nominal power consumption <sup>(1)(6)</sup>         | kW                  | 0.9                 | 1.2              | 1.6         | 1.9              | 2.5      |
| Maximum power consumption <sup>(2)(6)</sup>         | kW                  | 1.2                 | 1.5              | 2           | 2.3              | 3.1      |
| Power output of electrical heater (optional)        | kW                  | 3                   |                  |             | 6                |          |
| Maximum current consumption                         | A                   | 3.9                 | 5.6              | 8.4         | 10.5             | 13.2     |
| PWW heater <sup>(4)</sup>                           | kW                  | 3.5                 | 7                | 7           | 11.5             | 11.8     |
| Humidity/temp. operating range                      | % RH                | 50–99% RH / 20–36°C |                  |             |                  |          |
| Voltage supply                                      | V/Ph/Hz             | 230/1/50            |                  |             |                  |          |
| Sound pressure level <sup>(3)</sup>                 | dB(A)               | 47                  | 50               | 50          | 52               | 54       |
| Refrigerant/volume                                  | Type / g            | R410A / 470         | R410A / 600      | R410A / 700 | R410A / 1200     |          |
| Total of CO <sub>2</sub> equivalent <sup>(10)</sup> | t-CO <sub>2</sub> e | 0.98                | 1.25             | 1.46        | 2.51             |          |
| Dimensions (H x W x D)                              | mm                  | 750 x 835 x 260     | 750 x 1135 x 260 |             | 840 x 1384 x 310 |          |
| Weight                                              | kg                  | 50                  | 64               | 68          | 99               | 102      |



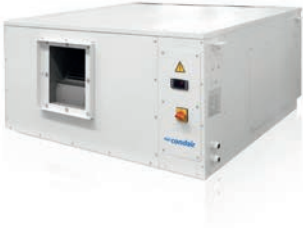
INSTALLATION BEHIND PARTITION

Condair **DP-R**

| Technical Data                                      |                     | DP 50-R             | DP 75-R          | DP 100-R    | DP 150-R         | DP 200-R |
|-----------------------------------------------------|---------------------|---------------------|------------------|-------------|------------------|----------|
| Dehumidification capacity at 30°C – 80%             | l/24h               | 49                  | 73               | 95          | 155              | 190      |
| Dehumidification capacity at 30°C – 60%             | l/24h               | 39                  | 56.7             | 77.4        | 118.3            | 146.7    |
| Dehumidification capacity at 28°C – 60%             | l/24h               | 35.9                | 51.6             | 1.1         | 101.6            | 132.3    |
| Dehumidification capacity at 26°C – 60%             | l/24h               | 33.4                | 47.3             | 65.8        | 93.4             | 121.3    |
| Air circulation                                     | m³/h                | 500                 | 800              | 1000        | 1400             | 1650     |
| Compression available (higher compression optional) | Pa                  | 40                  |                  |             |                  |          |
| Nominal power consumption <sup>(1)(6)</sup>         | kW                  | 0.9                 | 1.2              | 1.6         | 1.9              | 2.5      |
| Maximum power consumption <sup>(2)(6)</sup>         | kW                  | 1.2                 | 1.5              | 2           | 2.3              | 3.1      |
| Power output of electrical heater (optional)        | kW                  | 3                   |                  |             | 6                |          |
| Maximum current consumption                         | A                   | 3.9                 | 5.6              | 8.4         | 10.5             | 13.2     |
| PWW heater <sup>(4)</sup>                           | kW                  | 3.5                 | 7                | 7           | 11.5             | 11.8     |
| Humidity/temp. operating range                      | % RH                | 50–99% RH / 20–36°C |                  |             |                  |          |
| Voltage supply                                      | V/Ph/Hz             | 230/1/50            |                  |             |                  |          |
| Sound pressure level <sup>(3)</sup>                 | dB(A)               | 47                  | 50               | 50          | 52               | 54       |
| Refrigerant/volume                                  | Type / g            | R410A / 470         | R410A / 600      | R410A / 700 | R410A / 1200     |          |
| Total of CO <sub>2</sub> equivalent <sup>(10)</sup> | t-CO <sub>2</sub> e | 0.98                | 1.25             | 1.46        | 2.51             |          |
| Dimensions (H x W x D)                              | mm                  | 680 x 706 x 250     | 680 x 1006 x 250 |             | 770 x 1255 x 300 |          |
| Weight                                              | kg                  | 41                  | 57               | 61          | 82               | 87       |

CEILING-MOUNTED

Condair **DP-C**



| Technical Data                                      |                     | DP 50-C             | DP 75-C         | DP 100-C | DP 150-C          | DP 200-C     |
|-----------------------------------------------------|---------------------|---------------------|-----------------|----------|-------------------|--------------|
| Dehumidification capacity at 30°C – 80%             | l/24h               | 49                  | 73              | 95       | 155               | 190          |
| Dehumidification capacity at 30°C – 60%             | l/24h               | 39                  | 56.7            | 77.4     | 118.3             | 146.7        |
| Dehumidification capacity at 28°C – 60%             | l/24h               | 36                  | 51.6            | 71.1     | 101.6             | 132.3        |
| Dehumidification capacity at 26°C – 60%             | l/24h               | 33.5                | 47.3            | 65.8     | 93.4              | 121.3        |
| Air circulation                                     | m³/h                | 500                 | 800             | 1000     | 1400              | 1650         |
| Compression available (higher compression optional) | Pa                  | 50–150              |                 |          |                   |              |
| Nominal power consumption <sup>(1)(6)</sup>         | kW                  | 0.97                | 1.29            | 1.76     | 2.07              | 2.74         |
| Maximum power consumption <sup>(2)(6)</sup>         | kW                  | 1.2                 | 1.5             | 2        | 2.3               | 3.1          |
| Power output of electrical heater (optional)        | kW                  | 3                   |                 |          | 6                 |              |
| Maximum current consumption                         | A                   | 3.9                 | 5.6             | 8.4      | 10.5              | 13.2         |
| PWW heater <sup>(4)</sup>                           | kW                  | 3.5                 | 7.5             | 8.5      | 13                | 14           |
| Partial heat recovery unit <sup>(5)</sup>           | kW                  | --                  | 1.1             | 1.7      | 2.3               | 3            |
| Humidity/temp. operating range                      | % RH                | 50–99% RH / 20–36°C |                 |          |                   |              |
| Voltage supply                                      | V/Ph/Hz             | 230/1/50            |                 |          |                   |              |
| Sound pressure level <sup>(3)</sup>                 | dB(A)               | 50                  | 52              | 54       | 59.5              | 61.5         |
| Refrigerant/volume                                  | Type / g            | R410A / 470         | R410A / 600     |          | R410A / 900       | R410A / 1200 |
| Total of CO <sub>2</sub> equivalent <sup>(10)</sup> | t-CO <sub>2</sub> e | 0.75                | 1.25            |          | 1.88              | 2.51         |
| Dimensions (H x W x D)                              | mm                  | 360 x 710 x 700     | 460 x 900 x 980 |          | 560 x 1050 x 1160 |              |
| Weight                                              | kg                  | 63                  | 95              | 122      | 131               | 140          |

(1) at t<sub>a</sub> = 30°C; relative humidity = 80% r.H.  
(2) at t<sub>a</sub> = 35°C; relative humidity = 75% r.H.  
(3) Laboratory values in 1 m in the open air in accordance with ISO 9614.

actual values may vary  
(4) at t<sub>a</sub> = 30°C; water temperature 80/70°C, compressor in standby  
(5) at t<sub>a</sub> = 30°C; relative humidity = 80%; water temperature 27/32°C  
(6) without electrical heater coil

(7) sound power level compliant with ISO 9614  
(8) without outside air attachment  
(9) incl. 30% outside air attachment (-5°C, 80% r.H.)  
(10) R410A global warming potential (GWP) = 2088 CO<sub>2</sub>e



MAIN UNIT

Condair **DP**



| Technical Data                                      |                     | DP 75               | DP 100 | DP 150            | DP 200 |
|-----------------------------------------------------|---------------------|---------------------|--------|-------------------|--------|
| Dehumidification capacity at 30°C – 80%             | l/24h               | 73                  | 95.2   | 157.1             | 194.3  |
| Dehumidification capacity at 30°C – 60%             | l/24h               | 56.6                | 76.5   | 111               | 145.3  |
| Dehumidification capacity at 28°C – 60%             | l/24h               | 51.6                | 71.1   | 103               | 133.5  |
| Dehumidification capacity at 26°C – 60%             | l/24h               | 47.3                | 65.8   | 92.6              | 123.3  |
| Air circulation                                     | m³/h                | 800                 | 1000   | 1500              | 1800   |
| Compression available (higher compression optional) | Pa                  | 50–150              |        |                   |        |
| Nominal power consumption <sup>(1)(6)</sup>         | kW                  | 1.4                 | 1.82   | 2.27              | 2.9    |
| Maximum power consumption <sup>(2)(6)</sup>         | kW                  | 1.59                | 2.05   | 2.68              | 3.44   |
| Power output of electrical heater (optional)        | kW                  | 3                   |        | 6                 |        |
| Maximum current consumption                         | A                   | 7.8                 | 9.1    | 12.4              | 15.7   |
| PWW heater <sup>(4)</sup>                           | kW                  | 7.5                 | 8.5    | 13.9              | 15.2   |
| Partial heat recovery unit <sup>(5)</sup>           | kW                  | 1.1                 | 1.7    | 2.3               | 3      |
| Humidity/temp. operating range                      | % RH                | 50–99% RH / 20–36°C |        |                   |        |
| Voltage supply                                      | V/Ph/Hz             | 230/1/50            |        |                   |        |
| Sound pressure level <sup>(3)</sup>                 | dB(A)               | 52                  | 54     | 60                | 62     |
| Refrigerant/volume                                  | Type / g            | R410A / 550         |        | R410A / 1100      |        |
| Total of CO <sub>2</sub> equivalent <sup>(10)</sup> | t-CO <sub>2</sub> e | 1.15                |        | 2.3               |        |
| Dimensions (H x W x D)                              | mm                  | 800 x 800 x 400     |        | 1000 x 1060 x 550 |        |
| Weight                                              | kg                  | 85                  | 90     | 130               | 135    |

| Technical Data                                      |                     | DP 270              | DP 350       | DP 450 | DP 550            | DP 750       | DP 950 |
|-----------------------------------------------------|---------------------|---------------------|--------------|--------|-------------------|--------------|--------|
| Dehumidification capacity at 30°C – 80%             | l/24h               | 263.1               | 340.2        | 418.8  | 566.8             | 751.1        | 939.3  |
| Dehumidification capacity at 30°C – 60%             | l/24h               | 185.1               | 262.3        | 336.3  | 425               | 596.4        | 759.7  |
| Dehumidification capacity at 28°C – 60%             | l/24h               | 168.9               | 242.9        | 313.5  | 392.6             | 554.7        | 706.7  |
| Dehumidification capacity at 26°C – 60%             | l/24h               | 153.4               | 223.9        | 290.8  | 359.6             | 513.5        | 654.6  |
| Air circulation                                     | m³/h                | 3500                | 4200         |        | 5500              | 7000         | 8500   |
| Compression available (higher compression optional) | Pa                  | 50–150              |              |        |                   |              |        |
| Nominal power consumption <sup>(1)(6)</sup>         | kW                  | 5.18                | 6.49         | 9.42   | 10.1              | 12.88        | 19.6   |
| Maximum power consumption <sup>(2)(6)</sup>         | kW                  | 6.6                 | 7.99         | 9.85   | 13                | 16           | 21     |
| Power output of electrical heater (optional)        | kW                  | 9                   |              |        | 9/18              |              |        |
| Maximum current consumption                         | A                   | 12                  | 14.2         | 17.9   | 22                | 27           | 39     |
| PWW heater <sup>(4)</sup>                           | kW                  | 22.8                | 24           | 24     | 42                | 49           | 56     |
| Partial heat recovery unit <sup>(5)</sup>           | kW                  | 1.8                 | 2.2          | 2.7    | 3.5               | -            | -      |
| Humidity/temp. operating range                      | % RH                | 50–99% RH / 20–36°C |              |        |                   |              |        |
| Voltage supply                                      | V/Ph/ Hz            | 400/3/50            |              |        |                   |              |        |
| Sound pressure level <sup>(3)</sup>                 | dB(A)               | 63                  | 64           |        | 66                |              |        |
| Refrigerant/volume                                  | Type / g            | R410A / 3000        | R410A / 2500 |        | R410A / 9000      | R410A / 8000 |        |
| Total of CO <sub>2</sub> equivalent <sup>(10)</sup> | t-CO <sub>2</sub> e | 6.26                | 5.22         |        | 18.79             | 16.7         |        |
| Dimensions (H x W x D)                              | mm                  | 1378 x 1154 x 704   |              |        | 1750 x 1504 x 854 |              |        |
| Weight                                              | kg                  | 207                 | 211          | 215    | 415               | 423          | 430    |

(1) at t<sub>e</sub> = 30°C; relative humidity = 80% r.H.

(2) at t<sub>e</sub> = 35°C; relative humidity = 75% r.H.

(3) Laboratory values in 1 m in the open air in accordance with ISO 9614,

actual values may vary

(4) at t<sub>e</sub> = 30°C; water temperature 80/70°C, compressor in standby

(5) at t<sub>e</sub> = 30°C; relative humidity = 80%; water temperature 27/32°C

(6) without electrical heater coil

(7) sound power level compliant with ISO 9614

(8) without outside air attachment

(9) incl. 30% outside air attachment (-5°C, 80% r.H.)

(10) R410A global warming potential (GWP) = 2088 CO<sub>2</sub>e

HIGH-EFFICIENCY DEHUMIDIFIER

Condair **DP-HE**



| Technical Data                                       |                     | DP 1500-HE        | DP 2000-HE | DP 2800-HE        | DP 3500-HE   |
|------------------------------------------------------|---------------------|-------------------|------------|-------------------|--------------|
| Dehumidification capacity at 30°C–60% <sup>(8)</sup> | l/24h               | 132.7             | 162.3      | 248.9             | 310.7        |
| Dehumidification capacity at 30°C–60% <sup>(9)</sup> | l/24h               | 223               | 290.9      | 444.8             | 552.2        |
| Dehumidification capacity at 28°C–60% <sup>(8)</sup> | l/24h               | 123.4             | 152        | 232.2             | 290          |
| Dehumidification capacity at 28°C–60% <sup>(9)</sup> | l/24h               | 236.3             | 309.8      | 472.9             | 575.7        |
| Dehumidification capacity at 26°C–60% <sup>(8)</sup> | l/24h               | 114.4             | 140.8      | 218.3             | 270.2        |
| Dehumidification capacity at 26°C–60% <sup>(9)</sup> | l/24h               | 212.1             | 276.9      | 423.2             | 525.4        |
| Air circulation                                      | m³/h                | 1500              | 2000       | 2800              | 3500         |
| Compression available                                | Pa                  | 200               |            |                   |              |
| Fresh air available max.                             | m³/h                | 450               | 600        | 845               | 1050         |
| Nominal power consumption <sup>(1)</sup>             | kW                  | 1.97              | 2.54       | 3.44              | 5.27         |
| Maximum current consumption                          | A                   | 6.8               | 9.4        | 12.7              | 17.7         |
| PWW heater <sup>(4)</sup>                            | kW                  | 18                | 23         | 28                | 33           |
| Voltage supply                                       | V/Ph/Hz             | 400/3/50          |            |                   |              |
| Sound pressure level <sup>(3)</sup>                  | dB(A)               | 63                | 63         | 66                | 66           |
| Refrigerant/volume                                   | Type / g            | R410A / 1600      |            | R410A / 2500      | R410A / 3000 |
| Total of CO <sub>2</sub> equivalent <sup>(10)</sup>  | t-CO <sub>2</sub> e | 3.34              | 3.34       | 5.22              | 6.26         |
| Dimensions (H x W x D)                               | mm                  | 1770 x 1000 x 640 |            | 1850 x 1500 x 750 |              |
| Weight                                               | kg                  | 290               | 305        | 400               | 420          |

| Technical Data                                       |                     | DP 4200-HE         | DP 5200-HE | DP 6000-HE |
|------------------------------------------------------|---------------------|--------------------|------------|------------|
| Dehumidification capacity at 30°C–60% <sup>(8)</sup> | l/24h               | 376                | 464.4      | 565.2      |
| Dehumidification capacity at 30°C–60% <sup>(9)</sup> | l/24h               | 587.5              | 746.4      | 907.5      |
| Dehumidification capacity at 28°C–60% <sup>(8)</sup> | l/24h               | 350.4              | 434.1      | 527.2      |
| Dehumidification capacity at 28°C–60% <sup>(9)</sup> | l/24h               | 618.9              | 766.5      | 930.2      |
| Dehumidification capacity at 26°C–60% <sup>(8)</sup> | l/24h               | 325.8              | 407.8      | 492.4      |
| Dehumidification capacity at 26°C–60% <sup>(9)</sup> | l/24h               | 545.8              | 681        | 822.2      |
| Air circulation                                      | m³/h                | 4200               | 5200       | 6000       |
| Compression available                                | Pa                  | 200                |            |            |
| Fresh air available max.                             | m³/h                | 1260               | 1560       | 1800       |
| Nominal power consumption <sup>(1)</sup>             | kW                  | 5.86               | 7.74       | 9.94       |
| Maximum current consumption                          | A                   | 18.5               | 20.9       | 25.8       |
| PWW heater <sup>(4)</sup>                            | kW                  | 53                 | 64         | 70         |
| Voltage supply                                       | V/Ph/Hz             | 400/3/50           |            |            |
| Sound pressure level <sup>(3)</sup>                  | dB(A)               | 68                 | 69         |            |
| Refrigerant/volume                                   | Type / g            | R410A / 5000       |            |            |
| Total of CO <sub>2</sub> equivalent <sup>(10)</sup>  | t-CO <sub>2</sub> e | 10.44              |            |            |
| Dimensions (H x W x D)                               | mm                  | 1950 x 1950 x 1250 |            |            |
| Weight                                               | kg                  | 570                | 590        | 620        |

(1) at t<sub>e</sub> = 30°C; relative humidity = 80% r.H.

(2) at t<sub>e</sub> = 35°C; relative humidity = 75% r.H.

(3) Laboratory values in 1 m in the open air in accordance with ISO 9614,

actual values may vary

(4) at t<sub>e</sub> = 30°C; water temperature 80/70°C, compressor in standby

(5) at t<sub>e</sub> = 30°C; relative humidity = 80%; water temperature 27/32°C

(6) without electrical heater coil

(7) sound power level compliant with ISO 9614

(8) without outside air attachment

(9) incl. 30% outside air attachment (-5°C, 80% r.H.)

(10) R410A global warming potential (GWP) = 2088 CO<sub>2</sub>e



# Best support already during the planning phase

We offer a wide and comprehensive range of dehumidification options. For this reason, we recommend that when it comes to selecting your system, you consult a specialist who can offer objective, expert advice for planners, installers, and operators.

The experts at Condair GmbH are happy to help you plan, design, and select the best dehumidification system to meet your needs.



# Best Service and Spare Part Reliability

When there is a fault, fast assistance is required—especially in the swimming pool and industrial sector. Condair GmbH offers a nationwide customer service program which you can also use to source maintenance and commissioning services for your dehumidifier as needed.

Our central warehouse stocks a sufficient number of spare parts for all Condair models.

These are supplied within 48 hours as standard; express deliveries are possible in urgent cases.

Our service technicians not only have comprehensive specialist technical knowledge, they also have product-specific experience in the optimal execution of installation and maintenance tasks.





