

Product Portfolio 2017



EUROPEAN MANUFACTURER OF SWIMMING POOL DEHUMIDIFIERS AND HEAT PUMPS

"We conceive new possibilities, shape new technologies, and make our products forerunners."

Ing. Tibor Kovacs, CEO



Microwell, spol. s r.o. is a European designer, developer and manufacturer of dehumidification and heating system solutions. Founded in 1992 in Slovakia, Microwell is ISO certified and specialised in advanced products with proven top performance results. Recognised by customers, appreciated by partners and rewarded by industry's professionals and experts, Microwell takes pride in being technology leader with extensive industry experience setting the trends that are yet to come.

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HOW WE WORK

INNOVATIVE SOLUTIONS & TECHNOLOGICAL ADVANTAGE

Microwell develops and manufactures well-rounded product assortment with two key specialisation areas - dehumidification and heating systems. Through continuous improvement and permanent focus on our customer, our products achieve results that push them in the lead. Ingrained in every step of the development process from research to assembly and final installation, Microwell products display innovation, sophisticated engineering, outstanding quality and craftsmanship. Distinguished as trendsetters, Microwell products are built on our core commitment. We are committed to efficiency.

EFFICIENCY THAT MATTERS

We constantly focus on energy efficiency in each part of our products. Our goal is to be the most energy efficient on the market being able to save money on energy bill for our customers. Our products are equipped with features unique to Microwell machines.

micro CONTROL

microCONTROL+ represents a technology of the most precise and most economy humidity control. It is applied for ducted types of dehumidifiers. microCONTROL+ shortens the problem-solving time and overall contributes to healthier environment sooner and more effective than any other dehumidifier.

micro COMPRESSOR +

Devices marked with microCOMPRESSOR+ have special compressors integrated with a maximally fine-tuned working point for the dehumidifiers and for the heat pumps achieving the highest performance at lowest energy consumption.

micro ECONOMY

microECONOMY+ is a technology of circulation pump control. Microwell swimming pool heat pump with microECONOMY+ ensures heating of your pool sooner and cheaper than any other swimming pool heat pump.

micro ENERGY

Dehumidifiers marked with microENERGY+ are equipped solely with the most energy saving DC fans. These bring the necessary performance, quiet operations and save costs on energy bill every day.











LEADING TECHNOLOGY

Based on a review done in 2016 and ISO17025 lab testing of products by various manufacturers across all models, Microwell devices came on top, outperforming the others by up to 30%. Our machines are better, more powerful and of higher quality.*

SMARTER FUNCTIONALITY

Inspired by the pace of progress, all Microwell products are continuously evolving to reach the full potential of ultimate usability, intuitive operation, feature sophistication and compliance to all the most challenging demands and expectations.

APPEALING DESIGN

Microwell product design is recognized in more than 30 countries globally. Over the years products have been awarded with several prizes. Thanks to wide make & finish options our products can blend in, stand out or pefectly fit in any environment.

GREATER PRODUCT RANGE

Based on close relationship with customers, Microwell provides functionality and benefits that consumers desire throughout matchless selection of products, their make, design and accessory options. There is no pool or customer that could not be served by a Microwell product.

HIGHER MONEY SAVING

Thanks to outstanding design, leading technology and up to-date concepts, Microwell products achieve up to 36% lower* energy consumption than the others. Our product saves you money every day and helps to keep your bill under control.





We develop intelligent products with inspiring efficiency performance for superior experiences.

DRY SIREN - CEILING SWIMMING POOL DEHUMIDIFIER

Innovative swimming pool dehumidifier with modern features, low energy consumption and internet control. Designed to control humidity in swimming pools.

SWIMMING POOL DEHUMIDIFIERS

Operating on the condensation principle, DRY swimming pool dehumidifiers are advanced and visually attractive solution for an effective humidity control.

SWIMMING POOL HEAT PUMPS

Designed on the principle of renewable energy source, Microwell heat pumps are designed for highly efficient pool water conditioning.

HIGH CAPACITY POOL DEHUMIDIFIERS

Capable of performing the greatest humidity extraction high-capacity pool dehumidifiers are the most efficient solutions for large swimming pool areas.

INDUSTRIAL DEHUMIDIFIERS

Suitable for use in various environments, industrial dehumidifiers series T40 to TE120 are robust and durable, yet very easy to handle and move around.

MUSEUM DEHUMIDIFIERS

Compactly designed DRY GALLERY museum dehumidifiers deliver reduced vibration and noise operation especially for closed exhibition environment.

MICROCLIMATE PROTECTION

Intelligent pool protection technology microLIGHT+ detects and monitors the level of relative humidity present in the air by using multi-LED light system.

QMAX TESTER

Completely portable Qmax Tester is a unique device for measurement and optimisation of heat pump's performance, ready to assist pool specialists on site.

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MICROWELL DRY SIREN is the ultimate superstar, the first ceiling swimming pool dehumidifier in the world. Combining all what Microwell technology has to offer, DRY Siren is an intelligent and visually captivating solution of paramount performance, setting a new tide in the industry. Breathtaking dehumidifier with extra features.

ULTIMATE PERFORMANCE MEETS SUPERIOR DESIGN

MICROWELL DRY Siren is built on inverter compressor designed as split system. The unit also uses DC high energy efficient fan. Operations are microprocessor controlled and the control provides with 24/7 surveillance from around the globe.

4 PRODUCTS IN 1

Pushing the boundaries of what is possible, DRY Siren combines functionality that surpasses current standards. As highly effective dehumidifier, DRY Siren is equipped with a loudspeaker and LED lamp. Also, it serves as microclimate protection, detecting and displaying the level of humidity in real time.

STANDING AMONG THE STARS

Placed on the ceiling, MICROWELL DRY Siren tackles the humidity directly at the evaporation source, preventing the humidity to accumulate and condensate.



DRY SIREN - CEILING SWIMMING POOL DEHUMIDIFIER

cool light range



low humidity



ideal humidity

warm light range





DEHUMIDIFIER

Microwell DRY Siren is cutting edge dehumidifier, designed to meet the highest standards and user experience. As the first round ceiling dehumidifier DRY Siren is constructed as dual split unit, capable of all round and thorough humidity extraction.

MICROCLIMATE PROTECTION

Overseeing DRY Siren at work and monitoring the levels of humidity in real time is Microwell microLIGHT+technology that transmits the humidity reading into a multi-LED light system to deliver complete microclimate protection.

LOUDSPEAKER

Most convenient extension of DRY Siren functionality is a bluetooth speaker with output of 80W. Easily paired with any bluetooth device, built-in bluetooth speaker streams music, radio or podcast, enabling full and rich multimedia experience.

LED LAMP

Built-in LED lighting system is using 50W LED LAMP. With user-friendly options for adjusting light brightness and colour temperature the LAMP can be easily adjusted to meet any customer's

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GLOBAL REACH | 24/7 REACH

DRY SIREN is connected to live internet via WIFI. This allows a user to reach hers or his DRY SIREN 24/7 from any place on Earth with internet connection. This global coverage is ensured by 99,9% availability of DRY SIREN server where application and system are operated. Being out of your home or out of your property, you can still see the actual humidity and air temperature in your pool. Also you will see if your DRY SIREN is working, currently drying or in stand-by.

microSAFETY+

microSAFETY+ is a supervision system included by standard in DRY SIREN swimming pool dehumidifier models. The system monitors each DRY SIREN on constant basis. In the case of a sign of technical problem or possible malfunction, the system creates a comprehensive report with technical data and sends it to Microwell automatically. Microwell has then the ability to advise the distributor, reseller or installer upper hand to take necessary measures to rectify the problem and avoid further damages. microSAFETY+ effectively protects your property 24/7. The data transfer is securely ciphered.

NO NOISE OR VIBRATION

Designed as split solution, DRY Siren guarantees completely inaudible operation with not operational noise disturbing, enabling complete serenity of pool experience.



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Google Play

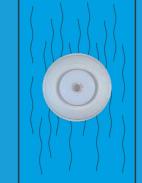
FULL CONTROL

DRY SIREN mobile application allows you to actively take control of dehumidification process, LED lamp, Bluetooth speaker, microLIGHT+ and unit's self-diagnosis. From anywhere in the world, anytime, you are able to observe your unit's current status and air relative humidity and air temperature.



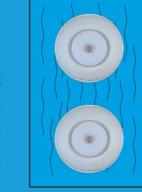
DRY SIREN MONO

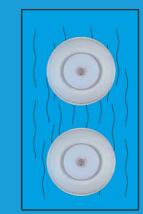
DRY Siren mono consists of one ceiling unit designed to cover pools up to 60 m². Compressor unit is designed to directly above the pool. The whole set is connected with refrigerant piping.



DRY SIREN DUE

DRY Siren due is designed to control humidity in pool halls up to 120 m² in size. It includes two ceiling piping. Compressor unit's installation in technical room ensures complete noiseless operations in pool hall.





| | Pool surface | Extraction rate 30°C / 60%RH | Extraction rate 30°C / 80%RH | Air flow | Noise evel (at 1 m dist.) | Power consumption | Compressor | Heat output | Refrigerant | Dimensions netto (W × H × D) | Weight netto / brutto |
|-------------------|-----------------|------------------------------------|------------------------------------|-------------|---------------------------------|----------------------|------------|----------------|-------------|--|--------------------------|
| SERIES | m² | l/24hrs | l/24hrs | m³/h / Pa | dB (A) | W | | W | | mm | kg |
| DRY Siren Mono | 60 | 67 | 104 | 1000 | 35 | 1200 | ON/OF | 4500 | R410A | Ceiling unit 1205 x 278 Compressor unit 251 x 467 x 404 | 40 / 46 |
| DRY Siren Due | 120 | 134 | 208 | 2000 | 35 | 2300 | INVERTER | 8750 | R 410 A | Ceiling unit 1205 x 278 Compressor unit 251 x 467 x 404 | 50 / 56 |

Microwell reserves the right to change the technical data without notice.

INSTALLATION

DRY SIREN is a split dehumidifier with ceiling unit and compressor

unit. Ceiling unit is equipped with evaporator, condenser, fan, Bluetooth speaker, LED light and microLIGHT+. Ceiling units are connected to compressor unit with refrigerant copper tubes.

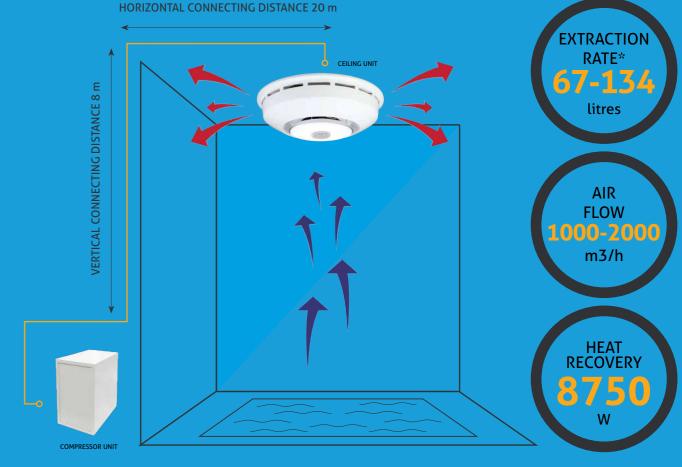
CEILING UNIT PLACEMENT

Ceiling unit is designed to be fixed directly on concrete or wooden ceiling structure or into lower ceiling using adjustable



CONDENSATE DRAIN

DRY SIREN ceiling unit is equipped with condensation drain pump with 40 cm vertical discharge. The pump is of energy A+ class.





SWIMMING POOL DEHUMIDIFIERS

DRY 300

Series DRY 300 provides full Series DRY 400 provides full Series DRY 500 provides full Series DRY 800 provides full swimming pool environment swimming pool environment swimming pool environment swimming pool environment control by monitoring and control by monitoring and control by monitoring and control by monitoring and reregulating humidity and air temperature. Units are suitable for small pools, wellnesses or for smaller pools, wellnesses hot tubs.

up to **30 m**²

DRY 400

temperature. Units are suitable or hot tubs.

up to **45 m**²

DRY 500

temperature. Units are suitable for meduim pools, wellnesses or hot tubs.

up to 60 m²

DRY 800

regulating humidity and air regulating humidity and air gulating humidity and air temperature. Units are suitable for bigger pools, wellnesses or hot

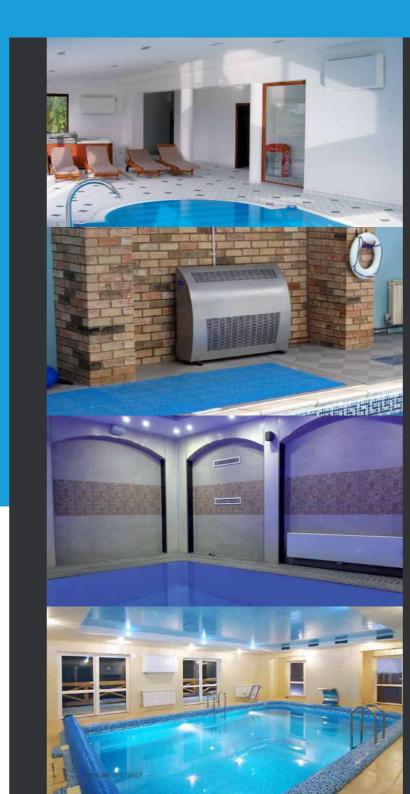
up to 90 m²

DRY 1200

Series DRY 1200 provides full swimming pool environment control by monitoring and regulating humidity and air temperature. Units are suitable for big pools, wellnesses or hot

up to 120 m²





MICROWELL DRY swimming pool dehumidifiers are

an innovative and visually attractive solution for indoor pools. Working on the principle of condensation, they are removing humid air from swimming pool hall, replacing it with dry and warm air. Their effective performance is proven to be the best in class. They solve humidity problems and maintain healthy environment by removing condensation and providing free heating through heat recovery up to 3,5 times!

5 PRODUCT LINES FOR EVERY POOL

MICROWELL DRY range of swimming pool dehumidifiers are designed to fit every pool, from hut tub through residential bath to leisure centre pool and effectively extract humidity. Consisting of 5 product lines, the DRY range is designed to meet the functionality indoor swimming pool owners require.

BEST EFFICIENCY IN CLASS

Conceived and designed to deliver more, MICROWELL DRY swimming pool dehumidifiers are a highly innovative solution for indoor pools. Operating on the condensation principle, they provide constant, reliable and effective heat recovery with the highest efficiency.

ATRACTIVENESS TAILORED

Technologically advanced DRY swimming pool dehumidifiers with their trendy appearance are made to satisfy high expectations of pool owners. Offering an extensive selection of cover materials and colours, they fit any environment, application and use.

PLENTY OF OPTIONS

Microwell DRY swimming pool dehumidifiers are designed with customer in mind. Built with best materials, modern equipment and carefully executed processes on every step of product development, they offer advanced functionality and the widest selection of accessories for customer's satisfaction.

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DRY RANGE FOR INDOOR DRYNESS

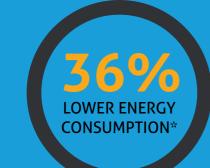
DRY is a product line of swimming pool dehumidifiers by Microwell designed to cover full requirements of domestic pool or spa sizes. As innovative and visually attractive solution for highly effective humidity extraction, they are well known for their best-in-class efficiency that ultimately results in a reduction of unnecessary and preventable costs.

IDEAL HUMIDITY

Humidity is not an enemy when controlled but can cause serious troubles otherwise. Ideal humidity for pool or spa users is when they feel comfortable. This feeling is achieved by a relative humidity from 55% to 65%. Humidity above 70% is detected by condensation on windows and walls and continuously deteriorates the pool or spa environment. It is also a perfect environment for mould and bacteria to grow. Humidity lower than 45% actually causes a reversed problem to bathers in the form of dry feeling and possible harm to mucous tissue. The innovative series of Microwell dehumidifiers keep the humidity at ideal 55%-65%.

The widest selection of models. finishes and accessories.





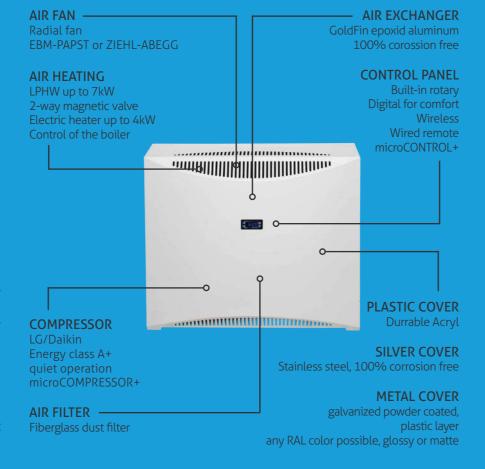
The lowest kWh per litre on the market.

FRESH AIR SUPPLY

Each Microwell dehumidifier has fresh air supply possibility. The air inlet is located under the condenser, that way the incoming fresh air is effectively heated at no cost thanks to heat recovery.

HEAT RECOVERY

Every dehumidifier is built on heat recovery principle providing up to 3.5 times more energy than it consumes.



*Based on 2016 review and ISO17025 lab testing of respective products by various manufacturers.

| | | Pool surface | Extraction rate 30°C / 60%RH | Extraction rate 30°C / 80%RH | Air flow | Noise level (at 1 m dist.) | Power consumption | Heat output | Refrigerant | Dimensions netto (W x H x D) | Weight netto / brutto |
|----------|---------|-----------------|------------------------------------|------------------------------------|-------------|----------------------------------|----------------------|----------------|-------------|------------------------------------|--------------------------|
| SERIES | Model | m² | l/24hrs | l/24hrs | m³/h / Pa | dB (A) | W | W | | mm | kg |
| DRY 300 | PLASTIK | | | | | | | | | 780 x 660 x 255 | 40 / 46 |
| | SILVER | 30 | 36 | 48 | 550 | 42 | 700 | 1900 | R410A | 780 x 642 x 300 | 50 / 56 |
| | METAL | 30 | 30 | | | | | | | | 30730 |
| | TTW | | | | | | | | | 780 x 660 x 255 | 40 / 46 |
| DRY 400 | PLASTIK | | | | | | | | | 780 x 660 x 255 | 40 / 46 |
| | SILVER | 4.5 | 48 | 58 | 600 | 42 | 700 | 1900 | R410A | 780 x 642 x 300 | 50 / 56 |
| | METAL | 45 | 40 | 30 | | | | | | | 30 / 30 |
| | TTW | | | | | | | | | 780 x 660 x 255 | 40 / 46 |
| DRY 500 | PLASTIK | 60 | 66 | 101 | 800 | 44 | 1000 | 3500 | | 1245 x 660 x 255 | 60 / 73 |
| | SILVER | | | | | | | | | 1245 x 660 x 300 | 77 / 90 |
| | METAL | | 00 | 101 | 800 | | | | R410A | | 77790 |
| | TTW | | | | | | | | | 1245 x 660 x 255 | 60 / 73 |
| | DUCT | 50 | 52 | 68 | 1000 / 200 | 56 | 1150 | 3500 | | 1245 x 660 x 253 | 75 / 88 |
| DRY 800 | METAL | 90 | 90 | 136 | 1100 | 46 | 1600 | 5100 | | 1250 x 950 x 310 | 100 / 133 |
| | TTW | 90 | 90 | | | | | | R410A | 1247 x 950 x 300 | 100 / 133 |
| | DUCT | 80 | 88 | 135 | 1100 / 170 | 58 | 1700 | 5100 | | 1247 X 930 X 300 | 102 / 135 |
| DRY 1200 | METAL | 120 | 120 | 181 | 1200 | 46 | 2150 | | | 1250 x 950 x 310 | 104 / 136 |
| | TTW | 120 | 120 | 101 | 101 1200 | 40 | 2130 | 5250 | R410A | 12/7::050::700 | 107/176 |
| | DUCT | 110 | 112 | 170 | 1200 / 145 | 60 | 2250 | | | 1247 x 950 x 300 | 103 / 136 |
| | | | | | | | | | | | 4.1 |

Microwell reserves the right to change the technical data without notice.

HIGHER EXTRACTION RATE*

STANDARD EOUIPMENT:

- Wall console
- Fixation screws
- Installation layout
- microCOMPRESSOR+

- On the wall

- On the floor
- Mobile

INSTALATION OPTIONS:

- Through the wall

- microLIGHT+ - Air filter

ACCESSORIES:

- Built-in mechanical humidistat

- Remote wired humidistat

- LPHW without regulation

- Electric heater up to 4kW

- Control of the boiler

- Remote wireless humidistat-thermostat

- LPHW up to 7kW + 2 way magnetic valve

- LPHW connection (back, right, left)

COLOR OPTIONS:

- Metal in any RAL color, glossy or matte finish

The widest selection of models.

AIR TEMPERATURE RANGE:

- Standard range from 22°C to 35°C
- Thermostatic expansion valve from 22°C to 42°C
- Antifreeze thermostat with thermostatic expansion valve from 15°C to 42°C
- 4-valve hot gas defrost from 5°C to 35°C













DRY ACCESSORIES

DRY ACCESSORIES

PLASTIC COVER

Microwell PLASTIC swimming pool dehumidifier line are entry level economy models providing with necessary humidity control at the most strict energy efficiency. They can be equipped with all other accessory options and are suitable for every installation.

METAL COVER

METAL swimming pool dehumidifiers come in exclusive metal cover with built-in digital dehumidifier control. Metal has 3 protection layers to ensure 100% corrosion free and reliable material. METAL design is available in any RAL colour.

SILVER COVER

Microwell offers the most fashionable line of swimming pool dehumidifiers coming in stainless steel cover. The material, AISI 316L stainless steel, is designed to withstand chemical environment of a swimming pool. Built-in digital dehumidifier control is standard.

DUCT SOLUTION

Microwell offers line of ducted swimming pool dehumidifiers for capacities 4.2 to 7.1 litres an hour at up to 1.200m3/h by 200Pa. Their advantage is that they are small and powerful. They are designed to be installed in technical room and provide with comfort humidity control along with air heating via floor or ceiling grills.



COMPATIBILITY All DRY range

REMOTE WIRELESS **HUMIDISTAT & THERMOSTAT**

EASY 300 is a remote wireless device for monitoring and controlling humidity and air temperature. It communicates wirelessly through 866MHz interface with the dehumidifier and is able to set the requested humidity and air temperature in real time. Unit consists of the transmitter with highly intuitive digital display, receiver and antenna. Signal transmission works up to 30m in buildings or up to 100m in free spaces.



100m outside - **30m** in buildings

COMPATIBILITY All DRY range

REMOTE WIRED HUMIDISTAT

HYG 6001 is a remote wired device for monitoring and controlling of humidity. The unit is mounted on any surface and at any distance from a dehumidifier, communicating through a signal wire, which is directly connected to electro control box of a dehumidifier. It enables very easy management and regulation of required humidity level in real time with rotary humidistat, working within the range 30 to 100% Rh.



range 30% to 100% RH

microLIGHT+

Microwell microLIGHT+ is a unique LED technology, designed for accurate measurement and intuitive reading of humidity level present in indoor environment. Working on the principle of relative humidity reading, microLIGHT+ uses LED light to project colour instead of a measured figure. The colour moves in continuous gradient with blue indicating low humidity, green ideal humidity and red high humidity.



range **5%** to **100% RH**

BUILT-IN DIGITAL

HUMIDISTAT & THERMOSTAT

Built-in digital humidistat & thermostat

is a convenient, accurate solution for

temperature and humidity control. It

is supplied by standard to all Metal,

Silver and Duct swimming pool

dehumidifier models. It helps to

minimise the energy consumption

and maintains normal humidity levels

in any environment. The unit is also

designed to be intuitive and self-

COMPATIBILITY All DRY range

explanatory.



COMPATIBILITY All DRY model

COMPATIBILITY DRY 300, DRY 400, DRY 500



COMPATIBILITY All DRY range

COMPATIBILITY DRY 300, DRY 400, DRY 500

COMPATIBILITY DRY 500. DRY 800. DRY 1200

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DRY ACCESSORIES

DRY ACCESSORIES

EXPANSION VALVE

Thermostatic expansion valve (TEV) controls the amount of refrigerant flow into the evaporator. By preventing the overheating, it allows dehumidifier to work effectively in ambient air temperature up to 42°C. This is effective mainly in spa and sauna areas. Thermostatic expansion valve (TEV) can be combined with Antifreeze thermostat to create the widest operational temperature range in the market from 15°C to 42°C.

operational temperature to + 42°C

COMPATIBILITY All DRY 300 and DRY 500 models

ANTIFREEZE THERMOSTAT

Antifreeze thermostat is a coil temperature sensor designed to prevent the dehumidifier's coils from freezing. It allows dehumidifier to work effectively in ambient temperatures down to 15°C. Antifreeze thermostat can be used together with a thermostatic expansion valve (TEV) to create the widest operational temperature range of dehumidifier from 15°C to 42°C.

operational temperature from + 15°C

COMPATIBILITY

All DRY range

HOT GAS DEFROST

Microwell dehumidifiers can be equipped with hot gas defrost function to provide with an effective and continuous humidity control by ambient air temperatures from +5°C. Hot gas defrost uses four-way valve to reverse the refrigerant cycle and can effectively defreeze the dehumidifier with hot gas. Hot gas defrost is used in low temperature applications.

AIR HEATING

Each Microwell dehumidifier can be equipped with additional air heating on the top of heat recovery, either as Low Pressure Hot Water or Electrical heater. LPHW is designed as high temperature heating for heated water up to 90°C providing capacities 3.5kW, 5kW and 7kW. Electrical heating is an aluminium resistance 230V AC coil with capacities 2kW and 4kW. LPHW can be combined with Solenoid valve to result in completely automated heating system.



operational temperature from + 5°C

COMPATIBILITY All DRY 300 and DRY 500 models



COMPATIBILITY All DRY range

El. heater up to 4kW - LPHW up to 7kW

SOLENOID VALVE

Solenoid valve is a 2-way electromagnetic valve designed to control the heated water flow to and from the LPHW coil. Each Microwell dehumidifier can be also equipped with a no-current contact for heat source, e.g. boiler or gas stove. Thus the system with solenoid valve together with thermostat (built-in digital or DRY EASY 300) enables completely autonomous and fully automated heating system.



1/2" thread **230 V**

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COMPATIBILITY All DRY models with I PHW coils

THROUGH-THE-WALL SET

Through-the-wall adapters are elegant ductwork solution for behind the wall installation of a dehumidifier. They are designed to supply and exhaust air through the ducts most effectively, especially in smaller pool rooms. Adapters can be fitted to any wall with thickness up to 400 mm. Anodized aluminum grills have flashy design. Through-the-wall air ducts with inlet/ outlet grilles are perfect guarantee for air quality, and comfort.



wall thickness up to 400mm

COMPATIBILITY All DRY Plastik. DRY 800/1200TTW

MOBILE STAND

Microwell mobile stands are highly practical and lightweight mobile mounting solution for dehumidifiers. Designed to provide more flexibility, even distribution of weight and safe transport, mobile stands are made from metal frame mounted on four rotation casters. The frame is covered with anti-corrosive powder coating and can be additionally coloured in any RAL colour on demand.



available in 2 SIZES

COMPATIBILITY All DRY 300, DRY 400, DRY 500

FLOOR GRILLS

Floor grills are elegant slotted inlet solution for pool hall air supply. Placed next to the windows, they enable air flow in swimming pool hall, creating an air curtain, which prevents vapour condensation. They are made of highly durable and corrosion free aluminium and come in symmetrical, asymmetrical and removable design with a variety of equipment, such as mounting rail, substructure channel, diffusers, corners, end parts, etc..



variety of equippment

COMPATIBILITY All DRY DUCT models

HP 900

Series HP 900 are most efficient units. With 9kW capacity they are optimized for bigger pools.

up to **40 m**³

HP 1200

Series HP 1200 are most efficient units. With 12kW capacity they are optimized for mid-size pools.

up to **60 m**³

HP 1700

Series HP 1700 are most efficient units. With 17kW capacity they are optimized for bigger pools.

up to **70 m**³

HP 2000

Series HP 2000 are most efficient units. With 20kW capacity they are optimized for larger pools.

up to **80 m**³

HP 2600

Series HP 2600 are most efficient units. With 26kW capacity they are optimized for large pools.

up to **120 m**³

SWIMMING POOL HEAT PUMPS

MICROWELL HP range of swimming pool heat pumps is a full capacity range operating on the principle of renewable energy, designed for continuous and stable production of water heating or cooling in any pool environment. Their exceptional efficiency, low environment impact and low costs are the result of superior technology, putting them at the industry's forefront.

TWO CONCEPT DESIGNS – THE SAME RESULT

HP COMPACT and HP SPLIT heat pumps are two different heat pump design concepts by Microwell. The COMPACT heat pump is one device in one box, that generates water temperature and is installed in any outdoor environment. With the same functionality, the SPLIT heat pump is a two set unit, an outdoor unit being the heat source, while indoor unit provides the required output, ensuring the efficient distribution and temperature control.

MARKET'S MOST EFFICIENT HEATING SOLUTION

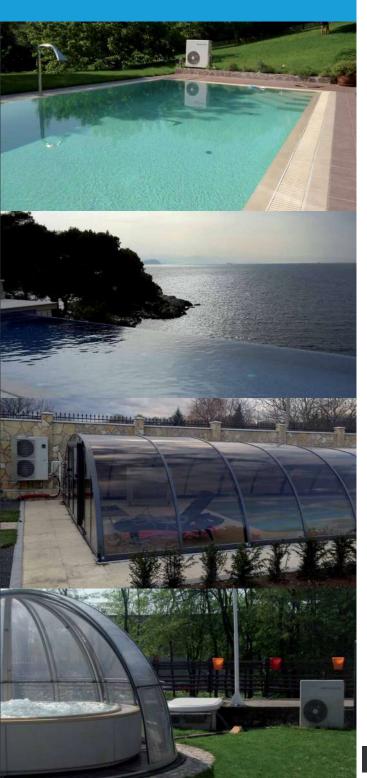
Operating on the thermodynamic principle, which is considered to be one of the most energy efficient systems for water heating or water cooling, Microwell HP COMPACT and HP SPLIT are capable of extracting ambient air from any environment ensuring maximum performance with efficiency that remains unsurpassed on the market.

6 TIME THE ENERGY

Extracting heat from the environment and converting it into warm or cold output source, Microwell heat pumps are able to generate the energy with the highest yield, producing six time more the energy they consume.

COMPLETE CAPACITY RANGE

HP COMPACT and HP SPLIT heat pumps come in five capacities, suitable for every swimming pool and various applications.



| | Pool capacity (cover / no cover) | Heating capacity (A25/W10/35%RH) | Cooling capacity (A30/W35) | Heating output (A26/W26/63%RH) | Power consumption (A26/W26/63%RH) | COP (A26/W26/63%RH) | Operating temperature | | ater ow | Power supply | Heat exchanger | Titanium surface | Acoustic pressure level | Water circuit connection | Dimensions | | | | |
|----------------------------|--|--|----------------------------------|--------------------------------------|---|------------------------|--------------------------|------|------------|-----------------|-------------------------|---------------------|----------------------------|-----------------------------|---------------------------|--------------|------------------|-------------|--------------|
| MODEL | m³ | kW | kW | kW | kW | СОР | °C | m³/h | kPa | V AC/ph | type | m² | dB (A) | mm / inch / thread | width / hight / lenght | | | | |
| HP 900 Compact OMEGA | | | ć F | 10.7 | 1.00 | | | | F 45 | | | 0.47 | | | 870×870×320 | | | | |
| HP 900 Split OMEGA | /0/70 | 9.1 | 6.5 | 10.7 | 1.88 | 5.7 | | 4-6 | 5 - 15 | | | 0.43 | | | 870×655×320 | | | | |
| HP 900 Compact PREMIUM | 40 / 30 | 40 | 7.2 | 44.7 | | | | , , | 4.5 | | | 0.54 | 54/48/42/36 | | 870×870×320 | | | | |
| HP 900 Split PREMIUM | | | 10 | 7.2 | 11.3 | 1.74 | 6.5 | | 4-6 | 1-5 | | | 0.56 | | | 870×655×320 | | | |
| HP 1200 Compact OMEGA | 60 / 40 — | | | 42.4 | 2.5 | | | | | , , | 5 45 | 270 / 4 | | 0.48 | | | 870×870×320 | | |
| HP 1200 Split OMEGA | | 12.1 | 9.5 | 14.1 | 2.47 | 5.7 | | 4-6 | 5 - 15 | 230/1 | Titar | 0.46 | 55/49/43/37 | | 870×655×320 | | | | |
| HP 1200 Compact PREMIUM | | 60 / 40 | 60 / 40 | 00740 | 47 | 40.7 | 14.9 | 2.20 | | -15 t | , , | 4.5 | | nium Gr | 0.70 | 55/49/45/5/ | 50 / 6,4 | 870×870×320 | |
| HP 1200 Split PREMIUM | | 13 | 10.3 | 14.9 | 2.29 | 6.15 | -15 to +40 | 4-6 | 1-5 | | Titanium Gr 2 ASTM B338 | 0.70 | | 50 / 6,4 / internal | 870×655×320 | | | | |
| HP 1700 Compact | 70 / 50 | 70 / 50 | 70 / 50 | 14.7 | 42.24 | 47.04 | 7.77 | | | 6 - 8 | 5 - 15 | | B338 | 0.05 | 54504777 | | 1125×707×453 | | |
| HP 1700 Split | | | 14./ | 12.21 | 17.01 | 3.47 | 4.9 | | 6-8 | 5-15 | | | 0.95 | 56/50/43/39 | | 1125×707×453 | | | |
| HP 2000 Compact | 80 / 60 | 80 / 60 | 80 / 60 | 20 | 17.5 | | 3.59 | 6.14 | | | | | | | | | 942 x 1550 x 360 | | |
| HP 2000 Split | | | | | | 23 | | | | 8-10 | 5 - 15 | | | 1.13 | | | 942×1250×360 | | |
| HP 2600 Compact | - 120/80 | 120/80 | | | | | | | | | | | | 400 / 3 | | | 56/50/44/38 | | 942×1550×360 |
| HP 2600 Split | | | 26 | 23 | 28.4 | 4.44 | 6.15 | | 8-12 | 5 - 15 | | | 1.40 | | | 942×1250×360 | | | |

Microwell reserves the right to change the technical data without notice.

STANDARD EQUIPMENT:

- MICROWELL HP heat pump
- microCOMPRESSOR+
- microECONOMY+

22

ACCESSORIES:

- Winter module
- Heat exchanger frost protectionCondestate tray defrost
- Protection cover

ACCESSORIES:

- Control panel placement
- Split model connection length







INCREDIBLE EFFICIENCY OF HP RANGE

Efficiency of Microwell heat pumps is proven to be the best. Designed to reach the top results, they are able to extract heat or cold present in ambient environment and leverage it into the pool water. While heating, higher the ambient air temperature is, the more free energy can the heat pump extract operating with high efficiency. At favourable conditions users of Microwell heat pumps pay less than 15% of heat meaning 85% of the heat is free.

COMPLETE CAPACITY RANGE

Microwell heat pump range has been carefully conceived and designed to offer a comprehensive line of heating solutions that can serve any pool size; from small residential pool to hotel or spa and large leisure centre pools with volume exceeding 400m³. Microwell heat pumps also include comfort SPLIT range designed for full year heating of internal and external pools. Microwell has also designed special winter accessories allowing heat pumps to work effectively by -15°C.

MICROWELL

HP 900 - 1200 OMEGA





HP 900 - 1200 PREMIUM





HP 1700











HP 2600

Microwell heat pumps are designed by carefully planned operational rhythm of a circulation pump. the most economy circulation pump swimming pool heat pump.

The result of technologically advanced design and carefully set operational rhythm of all HP products is the lowest energy consumption on the market.

HP range is achieved by quality air fan and compressor.



WATER EXCHANGER -

with surface up to 1,4 m²

pressure drop max 15kPa

WATER FLOW

AIR FAN -

COVER —

From 4 to 12 m³/h

LG axcial air fan

Metal galvanized

powder coated

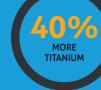
COMPRESSOR -

quiet & energy class A+

microCOMPRESSOR+

protection fan grates

Titanium of class Gr² ASTM B338





FULL YEAR HEATING

- WATER CONNECTION

DN50 internal 6/4" thread

CONTROL PANEL

microECONOMY+

- ACTIVE DEFROST

— AIR EXCHANGER/

— REFILLING VALVE

Valve for refrigerant

AUTO mode

4-way valve

EVAPORATOR

Gold fin epoxid

anti-corrosion salt water resistant

microECONOMY+

to produce the highest energy yield microECONOMY+ is a technology of control. Microwell swimming pool heat pump with microECONOMY+ ensures heating of your pool sooner and cheaper than any other

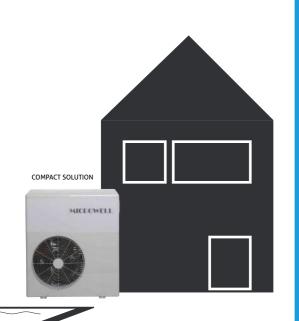
EFFECTIVELY REDUCED **ENERGY CONSUMPTION**

LOW NOISE EMISSION

Unobtrusive operation of Microwell

HP COMPACT

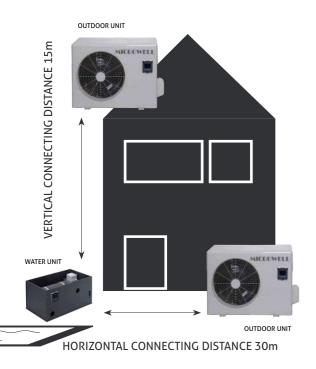
Compact heat pump is one device, one box, that provides desired water temperature in your pool. Requiring only water connection, power supply and convenient place to be installed, it's simple and affordable system for every outdoor pool.



HP COMPACT & HP SPLIT

HP SPLIT

Split heat pump consists of 2 blocks. Outdoor unit is the source of heat. It contains a compressor, ventilator and air heat exchanger. Indoor unit contains water heat exchanger and control sensors. Split heat pump provides remarkably more comfort than compact heat pump.



MICROWELL DESIGN

Microwell Split heat pump system was designed to combine all positives of a swimming pool heat pump and to eliminate all negatives. By delivering renewable energy and low energy pool water conditioning, Microwell Split heat pumps are heating warm water all year long at low cost and without any acoustic or visual disturbance. They are ideal solution for outdoor as well as indoor pools.

COMFORT FULL YEAR HEATING

While most of pools close for winter or are heated with other systems, Microwell heat pumps continue to heat pools regardless of weather steadily all year long.

NO WINTERIZING

Split heat pump does not require winterizing as its water heat exchanger is placed in non-freezing location such as pool's technical room, house basement or soil.

NO NOISE, NO VIBRATION AND NO VISUAL DISTURBANCE

Heat pump's sources of noise are compressor and a fan. These are installed in split heat pump's outdoor unit which is placed away from a pool as far as 30 meters horizontally and 15 meters vertically. The result is warm water without seeing or hearing the heat pump working, effectively providing pleasant warmth.

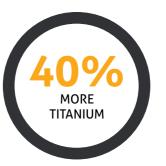
HP OMEGA & HP PREMIUM

SUPERIOR HEAT PUMP DESIGN

OMEGA line of Microwell swimming pool heat pumps provide with a superior COP and heating outputs setting OMEGA line heat pumps above others on the market.



LESS THAN 15% HEAT PAID





TITANIUM

Microwell uses specially selected Grade 2 ASTM B338 annealed titanium material for swimming pool heat pump heat exchangers. This material provides with lifetime reliability, resistance to chlorine and salt.

AMOUNT OF TITANIUM

Microwell uses 40% more titanium inside swimming pool heat pump exchangers than others. This means 40% more heat exchange area, effectively 40% bigger heat exchanger. This results in unprecedented performances and COPs reaching easily above 6.

EXTRAORDINARY PREMIUM LINE

PREMIUM line of Microwell swimming pool heat pumps contains the highest amount of titanium inside the heat exchanger and applies unique tangential principle to control the water flow. Microwell PREMIUM swimming pool heat pumps provide warm pool:

- At lowest cost possible

- At lowest cost p
- In shortest possible time
- With lowest noise possible



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HP ACCESSORIES



WINTER MODULE

Designed to enhance heat pump operation in subzero conditions, winter module consists of several elements that help to extend operational air temperature range down to -15°C.



HEAT EXCHANGER FROST PROTECTION

Effectively protects the water heat exchanger against frost down to -15°C. Widens effective operational air temperature range of a heat pump and prevents any damage to occur.



CONDENSATE TRAY DEFROST

Suggested to all subzero operated heat pumps this fully automatic addition helps to prevent the damage of a heat pump by keeping the condensate tray clean of



IDEAL WATER TEMPERATURE

Microwell has developed a set of accessories enabling the heat pump to

operate down to -15°C. Operating at very

low air temperatures heat pump is still an

effective and comfortable source of heat

although its efficiency is lower compared

The common problem of heat pumps

in subzero temperature is freezing. Thanks to an intelligent solution from

Microwell, heat pump is protected and

fully operational and stable heat source

Heat pump is designed to withstand harsh

outdoor conditions such as heavy snow

or extreme cold. Several security and

protection systems are set to constant reading mode to avoid any reliability or

ALL YEAR ROUND

to that in summer months.

FRFF7ING PROTECTION

throughout the year.

ICE AND SNOW

performance issues.

PROTECTION AGAINST

PROTECTION COVER FOR CHASSIS

Applied in a nonoperation period. protection cover ensures protection to heat pump construction during all seasons.

RECUPERATIVE DESIGN

Recuperative models (WRC and WRG) use exclusively exterior air to control the humidity. Their efficiency tops 75%. Low Pressure Hot Water or electrical heater is used to balance the heat losses.

HEAT PUMP DESIGN

WRPC series combines recuperative design with a compressor and condensing heat. By applying appropriate ratio between recirculation and fresh air, these units maintain 100% of heat.

CROSS VS. COUNTER FLOW

Two types of recuperative heat exchangers are used. A cross flow heat exchanger can achieve up to 75% heat recovery, while counter flow exchanger reaches as high as 95%. Models WRC and WRPC are equipped with a cross flow heat exchanger while WRG series uses counter flow.

MATCHLESS ACCESSORY OPTIONS

All three WRC, WRG and WRPC series are equipped with the widest range of accessories to complete their flexibility and response to onsite demands.







from 700 to 4500 m³/h

Using cross flow heat exchanger, WRC series achieves as high as 75% heat recovery. Available in strong 7 sizes from 700m³/h to massive 9.500m³/h, units are suitable of effective and economy

Heat recovery up to magnificent 95% focus on economy.

from 700 to 9500 m³/h

HIGH-CAPACITY POOL DEHUMIDIFIERS

WRC SERIES

humidity control in commercial projects.



WRPC SERIES

Combining 2 the most efficient ways of humidity control, the WRPC models achieve 100% heat recovery throughout using recuperative and heat pump principle. Built in 4 sizes from 3.000m3/h to 9.500m3/h, the units are applied in large scale commercial projects where performance is the key.

from 3000 to 9500 m³/h

from 17 to 60 kg/h - up to 200 m²

WRG SERIES

throughout counter flow recuperative heat exchanger places WRG series on the top of recuperative dehumidifiers. Available in 5 sizes from 700m3/h to practical 4.500m3/h, the models can serve smaller commercial projects with

from 4 to 60 kg/h - up to 160 m²

from 4 to 60 kg/h - up to 200 m²

ROBUST AND DURABLE **HUMIDITY EXTRACTION**

Designed for drying up buildings, new construction sites, warehouses, as well as non-heated and flooded buildings with high level of humidity. Microwell industrial dehumidifiers ensure powerful and highly efficient humidity extraction. Due to their sturdy metal body and fully mobile design, they are able to deliver required results even in the toughest construction sites, preventing costly damages. Working on condensation principle they are capable of performing in extreme conditions and they guarantee continuous operation with maximum extraction rate.

FIT FOR HARSH **TEMPERATURES**

Equipped with a built-in electrical heating element, which ensures defrosting of the exchanger, Microwell industrial dehumidifiers are capable of operating at temperatures from 0 to 35°C in any indoor area.

APPLICATION OPTIONS

New construction sites, humid, drying up buildings, non-heated rooms, cellars, warehouses, switch rooms, museums, filling stations, sports halls, garages, buildings flooded by water after firefighting to avoid corrosion, etc.









INDUSTRIAL DEHUMIDIFIERS

MUSEUM DEHUMIDIFIERS

AIR FAN -

3 SIZES FOR COMPLETE HUMIDITY EXTRACTION

Microwell industrial dehumidifiers are high-performance mobile appliances designed for high volume moisture extraction. With capacities of 40, 90 and 120 liters per day they are well suited for any application. Often multiple units can be combined in a single application to provide massive yet very mobile drying. Additional electrical heater can be included with a dehumidifier to help speed up the drying process. As the applications are often harsh, all machines are extremely durable.

T40 / TE40

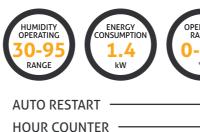


EOUIPPED AND FULL MOBILE PERFORMERS

With swivel casters, handle and a 2m cable with detachable connector. Microwell industrial dehumidifiers are fully mobile and very easy to work with. Each machine is equipped with easily removed and washable dust filter. On built-in display operating status, working conditions and possible failures are shown. They use automatic defrosting technology, external humidistat on demand and an electric heater (TE models).

T90 / TE90





DUST FILTER — ELECTRICAL HEATER 2kW resistant heater

METAL COVER

T120 / TE120



FVAPORATOR AND CONDENSER

DRY GALLERY 300 is an elegant and mobile solution for small exhibition spaces. With standard glossy white cabinet-like housing on wheels, it can be easily and non-intrusively placed in any environment. Specially adapted to work in exhibition spaces, the unit is especially quiet and has low vibration levels. Each unit is equipped with 20-liter condensation tank and digital humidistat and thermostat, capable of extracting 36 litres per day.

APPLICATION VARIFTY

Museum properties, dehumidification of galleries also offices, storage rooms, archives, warehouses, etc.



Radial fan EBM-PAPST GoldFin epoxid aluminum 100% corossion free AIR HEATING CONTROLLER LPHW up to 7kW 2 way magnetic valve Built-in rotary Electric heater up to 4kW Digital humidistat Control of the boiler & thermostat COMPRESSOR LG/Daikin Energy class A+ quiet operation microCOMPRESSOR+ AIR FILTER Fiberglass dust filter HOT GAS DEFROST 4-way valve hot gas defrost CONDENSATION TANK 20 l condensation tank

AIR EXCHANGER

up to 36 Vdav

DISCREET DESIGN FOR **ENCLOSED EXHIBITION ENVIRONMENT**

Maintaining optimal microclimate in museums, galleries, libraries, cultural institutions and other exhibition facilities, containing invaluable exhibition or archived items is quite challenging. Dehumidification in these spaces is essential for the preservation of rare objects, paintings, records, books or documents. Affected by external climate conditions, age and type of construction, as well as a number of visitors and employees exhibition environment must ensure long-term safety and preservation of the collections taking into account specific and often changeable preservation requirements.

PRESERVATION OUALITY WITH DRY GALLERY

Microwell DRY GALLERY 300 is a comprehensive solution for managing museum environment. It continuously measures the ambient temperature and humidity level present in the room. Since different collections might have different humidity requirements, DRY GALLERY offers fully adjustable control to meet a variety of relative humidity requirements.













up to 120 Vday

INTUITIVE TECHNOLOGY microl IGHT+

Microwell microLIGHT+ is a unique LED technology designed to quickly and accurately measure the level of humidity in any indoor environment. Working on the principle of relative humidity reading, microLIGHT+uses multi-LED light system to transmit gathered information. Gathered values are automatically reflected in colour gradient, are notifying the level of relative microclimate humidity in real time.

HUMIDITY PRESENTS A PROBLEM

has a damaging effect on personal health, and it also affects living conditions at home. Moisture in the form of vapour condensation and general dampness is the main cause for the growth of mould, bacteria and bad odour. Prolonged exposure has a bad effect on personal heath and general quality of living conditions.



people in it. Microwell microLIGHT+ is a simple, most effective and comfortable way to monitor Excessive humidity in living areas and prevent excessive humidity exposure. microl IGHT+



HUMIDITY DETECTION

Not knowing the level of humidity

present in the room it is difficult

to protect your environment and



LOW HUMIDITY

COMPATIBILITY All DRY range

MICROCLIMATE PROTECTION







40-60



REAL TIME MEASUREMENT IN LED COLOUR SCALE

Microwell microLIGHT+ measures and automatically reflects current relative humidity, changing the colour gradient between blue, green and red colour. Blue LED light indicates a low level of relative humidity, green LED light marks an ideal range of relative humidity, while shiny red LED light indicates a high level of relative humidity present in the room.

microLIGHT+ APPLICATION

Microwell microLIGHT+ technology was designed to be applicable and used in a variety of environments and ways without any restrictions when it comes to application. Primarily manufactured and installed as an accessory to DRY dehumidifiers. microLIGHT+ is also being designed as a freestanding table lamp that can be placed anywhere in the room. While working as a regular light unit, microLIGHT+ lamp provides the most accurate and safe humidity reading, beneficial for every home environment.

microLIGHT+ LAMP



OPERATION MEASUREMENT

OMAX TESTER

After Omax Tester is connected to swimming pool waterway between heat pump and outlet and water flows through the device, it begins measuring heat pump's performance. In only a few minutes it delivers detailed measurement, and reads off six different measurements:

Coefficient of performance (COP), Energy efficiency ratio (EER), true heating or cooling output (kW), heat pump power consumption, water temperature and water flow in m3/h.

PERFORMANCE OPTIMIZATION

adjust and optimize the water flow for a particular heat pump in real time. Omax Tester can be applied to brand-new or existing installations, increasing the actual performance of a heat pump by up to 30% without the change in power consumption.



ENERGY EFFICIENCY RATIO

EER

WATER FLOW

m3/h

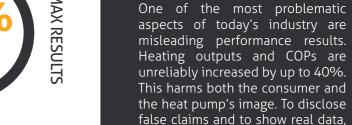
DIGITAL DISPLAY

Qmax Tester is equipped with 4" digital display, on which 6 different measurements and 8 different values are shown in









TRUE RESULTS

Tester.

Omax is connected to water way between the heat pump and the pool. As the water flows through the device, Omax performs detailed testing, displaying all technical data and performs full optimisation of the heat pump. In no more than 15 minutes!

Microwell has designed Qmax

MOBILE POOL SPECIALIST

Omax Tester is a unique device for on-site testing and heat

pump optimisation. Capable of

performing various performance

measurements, Omax Tester is

primarily designed to optimise

particular heat pump's installation.

The cost savings can reach 30%

through increased heat pump's

heating output and COP with not

changed power consumption.

NO MORE FALSE DATA





With Qmax Tester it is possible to









Omax TESTER. Setting the quality of pool performance.

DRY REFERENCES HP REFERENCES



VARIETY OF MODELS TO FIT EVERY POOL

WIDEST RANGE OF DESIGN AND ACCESSORY OPTIONS

EXCELLENT WORKMANSHIP

COMPETITIVE PRICES

PRODUCTS MANUFACTURED IN EUROPE

UP TO 5 YEARS WARRANTY

SELLING TO 30+ COUNTRIES WORLDWIDE

25 YEARS OF BUSINESS EXPERIENCE

ACCREDITED BY ISO 9001, ISO 14001, ISO 18001

WHY MICROWELL?



y in ▶ f

Microwell is European designer and manufacturer of dehumidification solutions and heating systems from Slovakia. From its foundation Microwell is firmly present on the global market, where it is recognized as a leading expert for swimming pool dehumidification and heating solutions.

With distributors and partners in 30+ countries across Europe, Russia, Middle East and North Africa, Microwell capitalises the flexibility and strategic position only to explore new opportunities leading to new intelligent products.

By fostering innovation, Microwell remain true to its core company value and commitment.

Committed to efficiency.

www.microwell.eu



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COMMITTED TO EFFICIENCY.