



MICROWELL



User's and installation manual

DUCTED SWIMMING POOL DEHUMIDIFIER

Model: DRY 300 DUCT
DRY 400 DUCT
DRY 500 DUCT
DRY 800 DUCT
DRY 1200 DUCT



Version: 2023-06-07





Thank you for purchasing Microwell swimming pool dehumidifier. You have exceptional piece of device and you chose the best and the most energy efficient dehumidifier for your pool. Before you use this device, it is necessary to carefully read the entire User's manual. Please keep the User's manual available in the case of any future reference is required. Please provide this information also to each user of the device. Please mind local regulations in your country regarding installation and usage of this dehumidifier which are valid in addition to this User's manual.

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1. WASTE DISPOSAL INFORMATION

When using this dehumidifier in the European countries, the following information must be followed:

DISPOSAL: Do not dispose this product as unsorted municipal waste. It is prohibited to dispose this dehumidifier in domestic / household waste. It is prohibited to dispose this appliance into forests or natural landscape. This could lead into local soil pollution. Collection of such waste must be treated individually.



DISPOSAL POSSIBILITIES:

1. The municipality has established a collection system where electronic waste can be disposed.
2. When buying a new product, the retailer or the manufacturer may take back the old appliance free of charge.
3. As old appliance may contain valuable resources which could be sold to scrap material dealers.
4. Disposal of packaging materials such as carton box or plastic / bubble foil can be recycled. Please use your local waste separation services.



2. SAFETY MEASURES

This device is primarily designed for use in indoor swimming pool, sauna or spa. Alternative use is in laundries, drying rooms or other humid areas requiring dehumidification.

Model Microwell **DRY 300 DUCT** is designed for halls with swimming pool surface of up to 30m².

Model Microwell **DRY 400 DUCT** is designed for halls with swimming pool surface of up to 40m².

Model Microwell **DRY 500 DUCT** is designed for halls with swimming pool surface of up to 50m². Model Microwell **DRY 800 DUCT** is designed for halls with swimming pool surface of up to 80m².

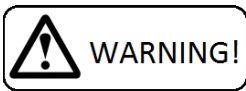
Model Microwell **DRY 1200 DUCT** is designed for halls with swimming pool surface of up to 110m².



For proper and optimal operations of the device it is necessary to maintain the air temperature in the swimming pool room / hall 2-3°C higher than actual water temperature in the pool. It is also necessary to keep the air temperature in the swimming pool room / hall in operational temperature range of the dehumidifier (specified in Technical data section) based on particular choice of Operational Temperature Accessories chosen for your particular device. Lower air temperature than operational temperature range may cause damage to the unit resulting from freezing. Higher temperatures than operational temperature range may cause damage to the unit resulting from overheating of the unit.

It is necessary to follow instructions in this User's manual and local regulations in your country that regulate the installation and usage of this device. Incorrect, improper or operations contradictory to

this User's manual may lead to an injury or property damage and will lead to loss of warranty. To prevent injury or property damage the following instructions must be followed:



2.1 ELECTRICAL SAFETY

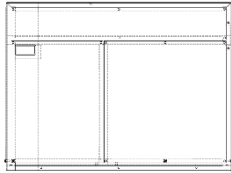
- *The device operates at dangerous electrical current.*
- *Only authorized person with particular electro-technical qualification can manipulate with unit.*
- *Danger of electrical shock.*
- *Do not exceed the required power supply.*
- *Do not turn the device on that shows signs of possible damage such as broken packaging, broken or otherwise damaged unit's chassis or cover, smoke, smell, etc.*
- *It is necessary to use appropriate Residual current circuit breaker (RCD) for connection of the dehumidifier to main power supply.*
- *Do not manipulate with the device with wet hands.*
- *Do not clean the device with water.*
- *Before cleaning the device, switch off the circuit breaker of the unit's power supply.*
- *Installation, service or repair must be performed by qualified technician.*
- *When the device is not intended to be used for a longer time, we recommend switching the circuit breaker of the unit's power supply off.*
- *Unit must be installed in vertical position to avoid condensate water to enter electrical part of the unit.*
- *It is forbidden to install the unit close to devices that may cause electrical or frequency disturbance such as welding machines, motors or rotors, WIFI/WLAN routers or repeaters.*
- *It is forbidden to alter electrical installation of the device. It is also forbidden to alter any other part or functionality of the device.*



2.2 USAGE PRECAUTIONS

- *Air outlet (exhaust) and air inlet (intake) are designed for connection to air ducting system.*
- *Do not cover or block the intake or exhaust openings. It is forbidden to block or cover the intake or exhaust openings with clothes, towels, buckets, canoes, ceiling beams, etc.*
- ***Do not install or place any heating appliances close to intake grilles / louvers. It could continually overheat the dehumidifier and result in its malfunction or damage.***
- *Do not climb up on or sit on the unit.*
- *Do not place any objects on the top of the unit (e.g. boxes, flower vases, etc.).*
- *Do not spray any flammable substances into the equipment; this might lead to fire.*
- *Do not clean the equipment with aggressive cleaning agents, this might lead to damage or deformations.*
- *When cleaning plastic parts do not use any cleaning agents unsuitable for the cover of the dehumidifier (household cleaning agents, solvents, bleaching agents, benzene, diluents, rough cleaning powder, cresol, chemical agents). Instead, sweep the dehumidifier cover with a soft cloth or a sponge.*
- *Never throw or insert any objects into any hose or opening.*
- *The cover is made from powder coated metal. Do not manipulate with lighted cigarette, cigarette ashes, or any other kind of fire in vicinity to this part.*
- *Use this device exclusively for the intended purpose, as described in the attached instruction manual. Do not use parts which are not recommended.*
- *Do not drink or use the condensate water drained from the unit. Do not return the water back to the swimming pool. The water may be contaminated with bacteria.*
- *Children are not allowed to operate, touch or play with the unit.*
- ***Children are not allowed to manipulate with packaging, plastic / bubble foil. Risk of suffocation!***
- ***Prevent the children from injury or harm caused by any manipulation with the unit, its parts or its packaging. Small parts like screws may be swallowed and cause suffocation or harm to health.***
- *Do not leave the children in the swimming pool hall unattended.*

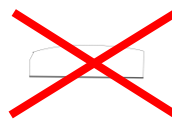
2.3 HANDLING PRECAUTIONS



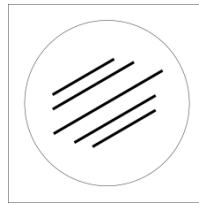
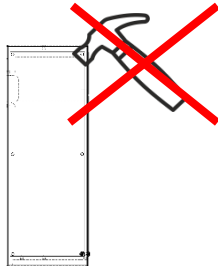
Keep in vertical position for 2 hours



Leave the unit in a vertical upright position for at least 2 hours before mounting. It is necessary to stabilize the refrigerant charge and especially to return the oil to the compressor tray. Oil could get out of the tray during transport and handling, and this could adversely affect the function of the dehumidifier.

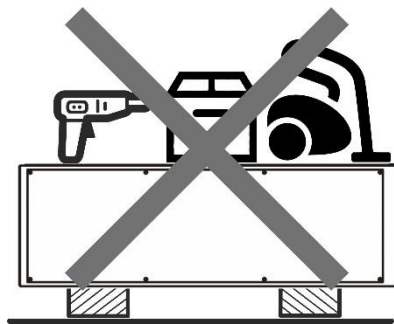


- Transport in a horizontal position or overturning the unit may damage the compressor, which may result in malfunction or damage to the unit and will void the warranty.
- The device must be handled carefully and with special care to avoid mechanical damage.

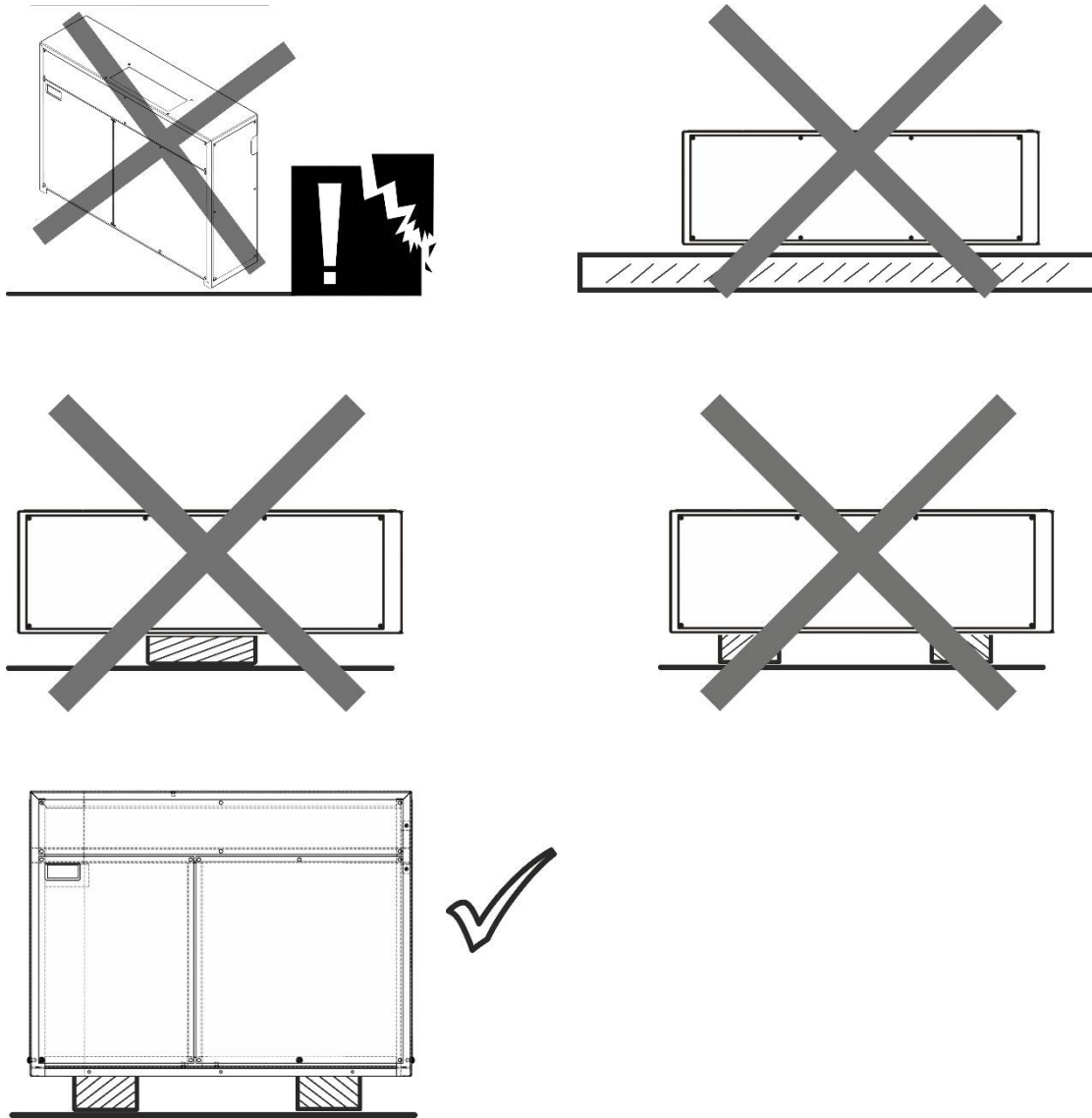


Beware of scratches. Handle the device carefully. Avoid contact with surfaces that may scratch the device.

- It is forbidden to exert any unsuitable mechanical force on the unit, which may cause mechanical damage to the device



- It is forbidden to freely drop the device on the ground or any hard or rough surface that can lead to a hard impact of the device and scratch the cover. As the owner of the area make sure that your installer does not damage the cover or a part of the device during handling and installation.


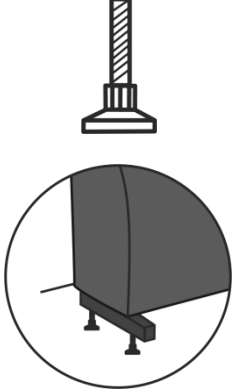

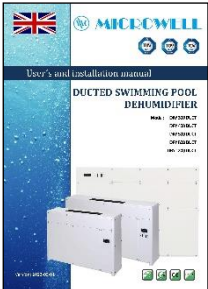


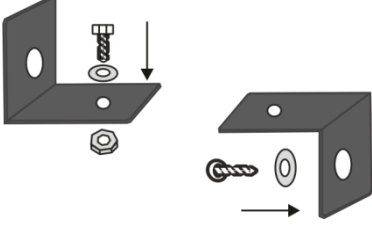

- Please notify your reseller or distributor if the delivered unit had been damaged. The unit may appear to work fine at first, but minor damage may cause the unit to stop working properly in a short time. In this case the unit must be inspected and its further use must be approved by the seller.
- Please notify your reseller or distributor if you notice immediately after installation that the unit is not working properly.
- In case of device failure resulting from improper handling or mechanical damage (impact, hit, fall, etc.), the manufacturer reserves the right to evaluate the continuity of warranty.

3. PRODUCT DESCRIPTION




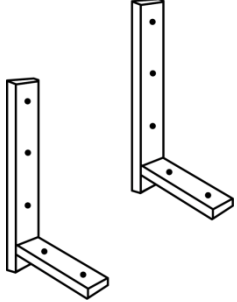


The unit was delivered in carton box on a wooden pallette. Please unpack the unit and check the content. It should include the following:



Package:

Name/ code	Image	Name/ code	Image
1 – Dehumidifier 1x	 <p style="text-align: center;">DRY300/400 DUCT</p> <p style="text-align: center;">DRY500 DUCT</p> <p style="text-align: center;">DRY800/1200 DUCT</p>	2 – Metal feet / adjustable screw with plastic heel / 4x Compatibility: DRY800/1200 DUCT	
3 – Condensate drain hose (illustration photo) 1x		4 - Installation and user manual 1x	

<p>5 – Adjusting "L" piece 2x</p> <p>+ screw M6 – 2x + nut MC – 1x + washer D7 – 2x</p> <p>Compatibility: DRY800/1200 DUCT</p>		<p>6- Built-in digital humidistat and thermostat</p>	
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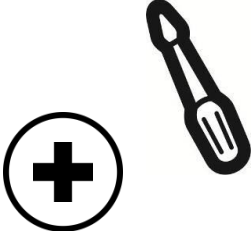




Additional accessories (to order):

Name/code	Image	Name/ code	Image
<p>1 - External wireless humidistat and thermostat DRY EASY 300</p> <p>1x</p> <p>Part of packaging (white box) located on the fan plate on the left</p> <p>In this case the “Built-in digital humidistat and thermostat” is not installed.</p> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-bottom: 5px;">Easy300 / Eberle</div> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-top: 5px;">Solenoid valve</div>		<p>2 - External wired humidistat EBERLE /picture may differ/</p> <p>Separate small box glued to the device (cardboard box) see picture 1</p> <p>In this case the “Built-in digital humidistat and thermostat” is not installed.</p>	
<p>3A – Wall console</p> <p>1x</p> <p>Compatibility: DRY300/400/500 DUCT</p>		<p>3B – Wall console</p> <p>2x</p> <p>Compatibility: DRY800/1200 DUCT</p>	
<p>4 – Fixing screws for a cross screwdriver D6 and dowels D10 (illustration photo)</p> <p>4x</p>		<p>5 - Solenoid valve - valve and coil</p> <p>1x</p> <p>Part of packaging (white box) located under the main cover on the fan plate on the left, see. picture point. 1</p>	

6 – Air filter Installed inside the device		7 – Defrost thermostat	
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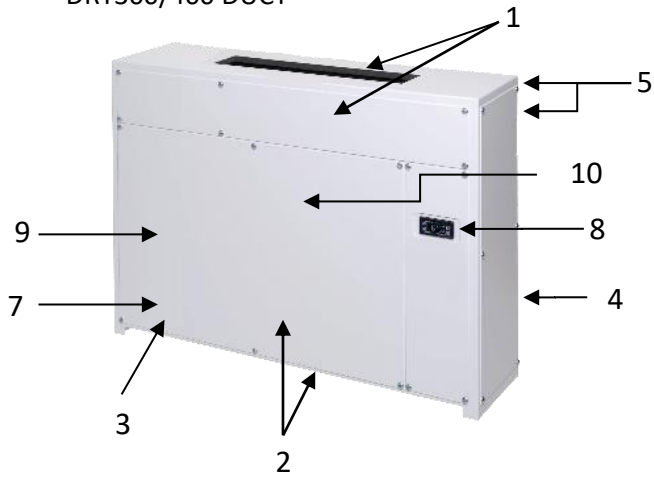
Please note that pictures may differ.

List of necessary tools (is not part of packaging):

Názov/ kód	Obrázok	Názov/ kód	Obrázok
1 - Drill 1x		3 – Drill bit 10mm 1x	
2 - Phillips screwdriver 1x		Vacuum cleaner and ladder	
5 – Small hammer 1x		6 - Meter 1x	
7- Spirit level 1x			

1.1. Description of basic parts

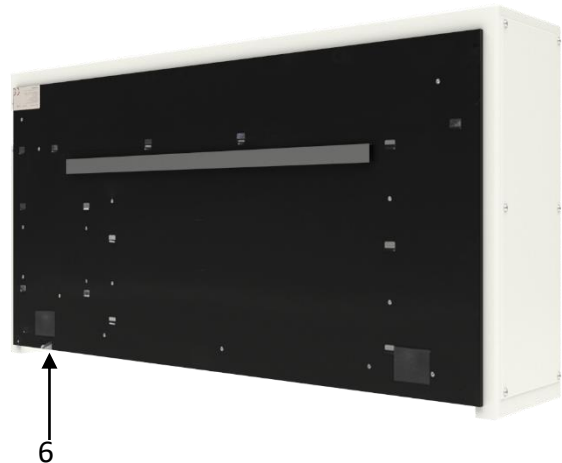
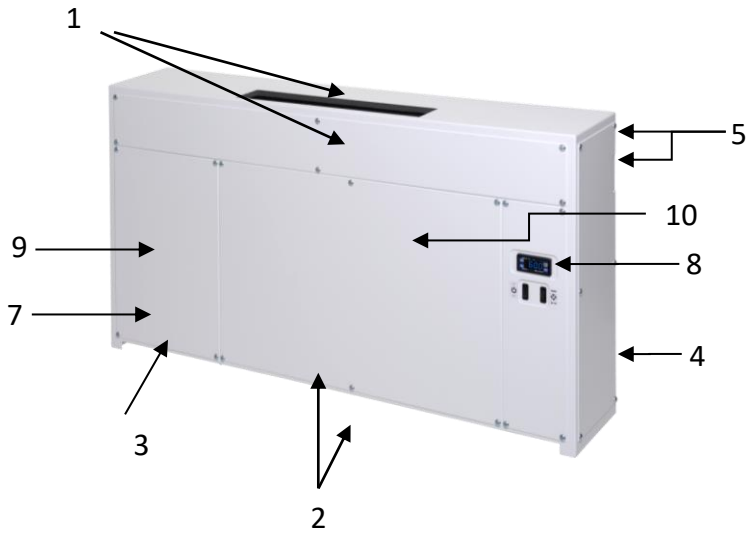
DRY300/400 DUCT



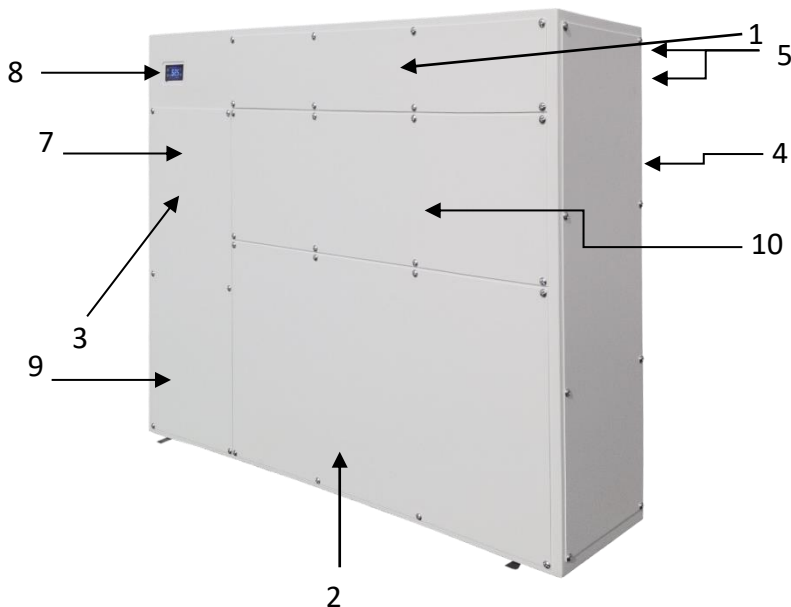
Legend:

- 1 – Air exhaust / AIR OUT/ = supply for pool hall
- 2 – Air suction /AIR IN/ = exhaust from pool hall
- 3 – Mechanical humidistat (on the bottom)
- 4 – Metal cover
- 5 – LPHW connection B-BACK or R-RIGHT
- 6 – Condensate drain Ø 16 mm (from the back)
- 7 – Main power supply connection box 230V (under the main cover)
- 8 – Built in digital controller
- 9 – Compressor (under the cover)
- 10 – Fan(s) / Ventilator (s)

DRY500 DUCT



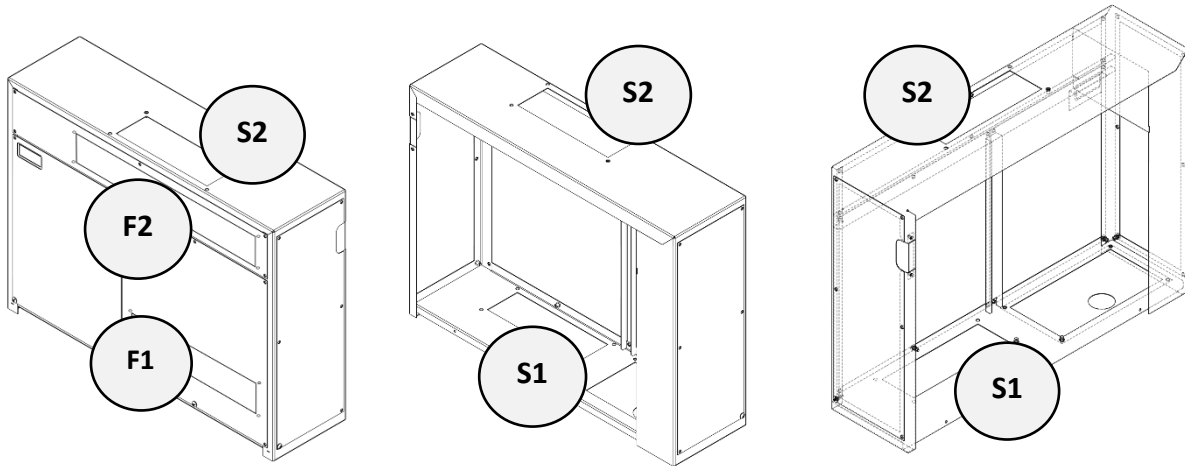
DRY800/1200 DUCT



Please note that your dehumidifier may differ from here pictured units.

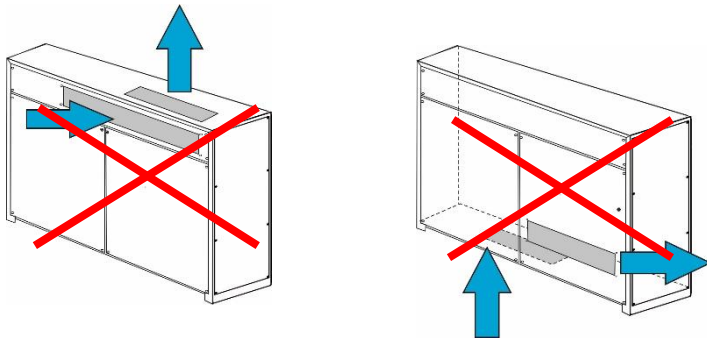
1.2. Air connection options

1.2.1. DRY300/400 DUCT

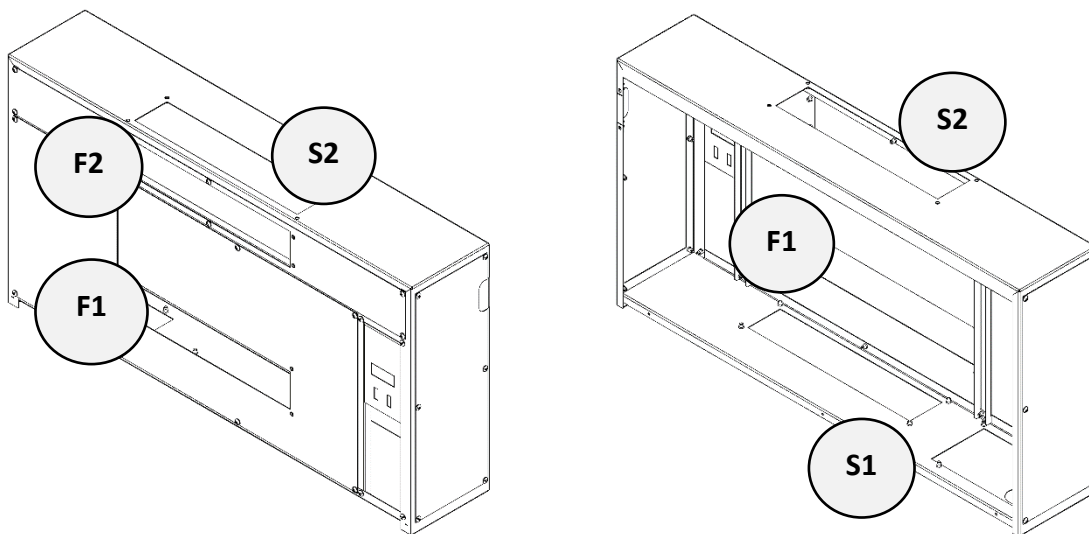


Connection marking	Connection type	Hatch dimensions	Flange connection for air ducting	Thread
S1	Air inlet from bottom	300x100mm	320x120mm	M6
S2	Air outlet from the top	300x100mm	320x120mm	M6
F1	Air inlet from the front	300x100mm	325x125mm	M6
F2	Air outlet from the front	388x87mm	413x112mm	M6

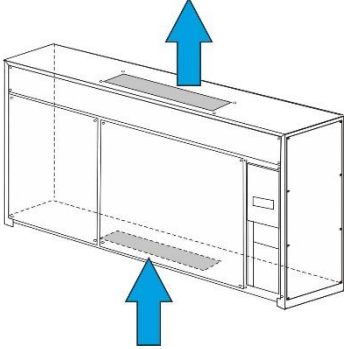
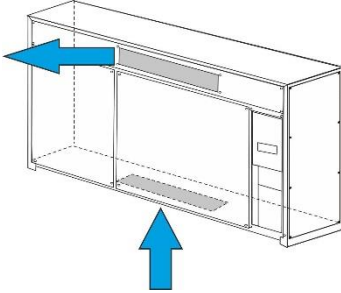
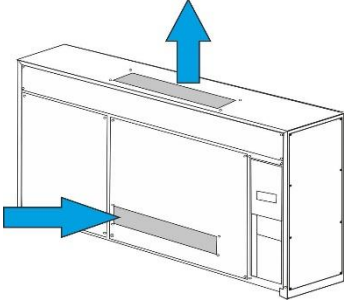
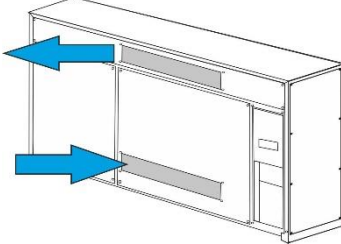
DRY300DUCT, DRY400DUCT		
AIR OUTLET TO THE TOP S2	AIR OUTLET TO THE FRONT F2	
		AIR INLET FROM THE BOTTOM S1
		AIR INLET FROM THE FRONT F1

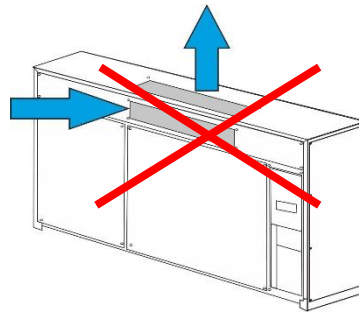
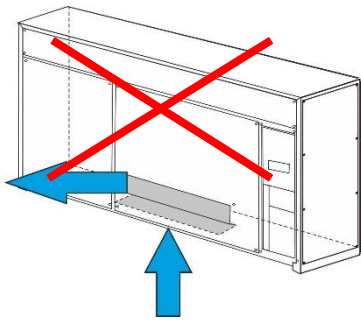


1.2.2. DRY500 DUCT

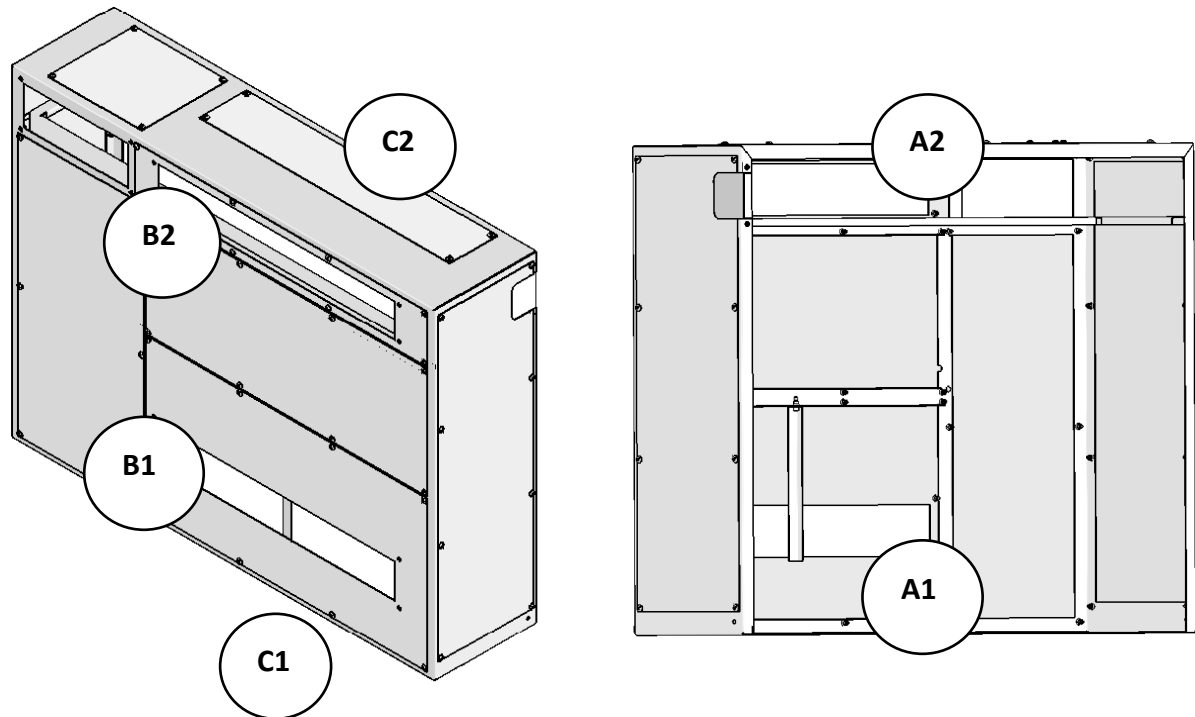


Connection marking	Connection type	Hatch dimensions	Flange connection for air ducting	Thread
S1	Air inlet from bottom	500x100mm	520x120mm	M6
S2	Air outlet from the top	500x100mm	520x120mm	M6
F1	Air inlet from the front	500x100mm	510x120mm	M6
F2	Flange connection for air ducting	500x96mm	520x76mm	M6

DRY500 DUCT		
AIR OUTLET TO THE TOP S2	AIR OUTLET TO THE FRONT F2	
		AIR INLET FROM THE BOTTOM S1
		AIR INLET FROM THE FRONT F1



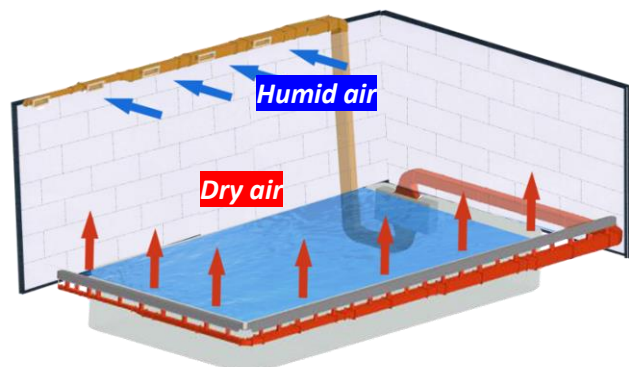
1.2.3. DRY800/1200 DUCT



Connection marking	Connection type	Opening dimensions	Flange connection for air ducting	Thread
A1	Air inlet from the back	700x100mm	720x120mm	M6
A2	Air outlet from the back	700x100mm	720x120mm	M6
B1	Air inlet from the front	700x100mm	725x125mm	M6
B2	Air outlet from the front	700x100mm	725x95mm	M6
C1	Air inlet from the bottom	700x100mm	720x120mm	M6
C2	Air outlet from the top	700x100mm	720x120mm	M6

DRY800 DUCT, DRY1200 DUCT			
AIR OUTLET TO THE BACK A2	AIR OUTLET TO THE TOP C2	AIR OUTLET TO THE FRONT B2	
			AIR INLET FROM THE BACK A1
			AIR INLET FROM THE FRONT B1
			AIR INLET FROM THE BOTTOM C1

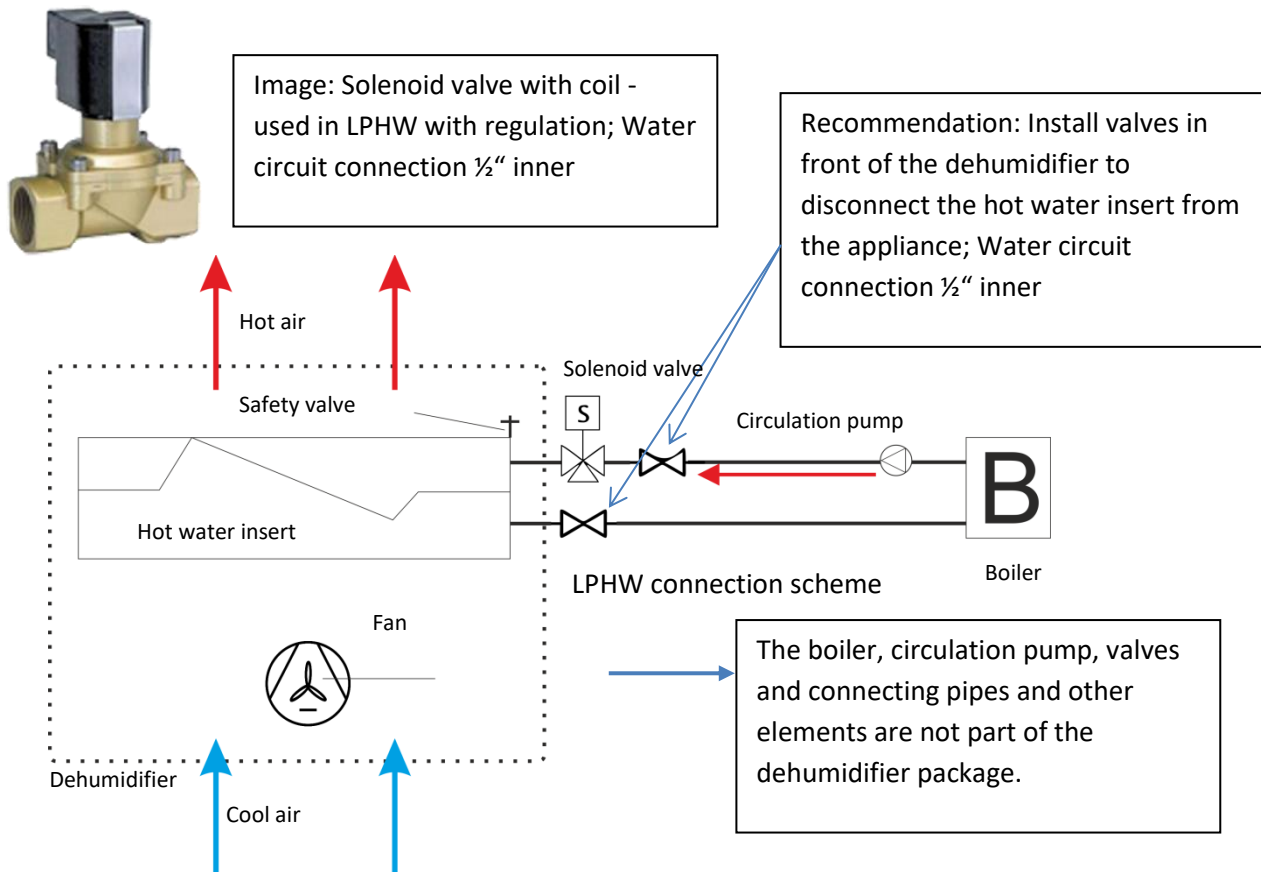
Humid air is brought into the dehumidifier. It leaves the dehumidifier dried and warmer by 5-20° than inlet air depending on air temperature, humidity and LPHW performance.



RECOMMENDATION: Cover your pool when not used. It will reduce the amount of vapor in the air and energy costs needed to operate your dehumidifier.

1.3. LPHW hot water insert for additional heating – on demand

The LPHW heating element is only available on request. The connection of the LPHW hot water insert is made similarly to the connection of the radiator. A control valve is connected at the inlet and a shut-off valve with a screw connection at the return. These are supplied by the heating supplier.



Please note that DRY 300/400/500 are not equipped with a thermostat and a potential-free heating contact by standard.

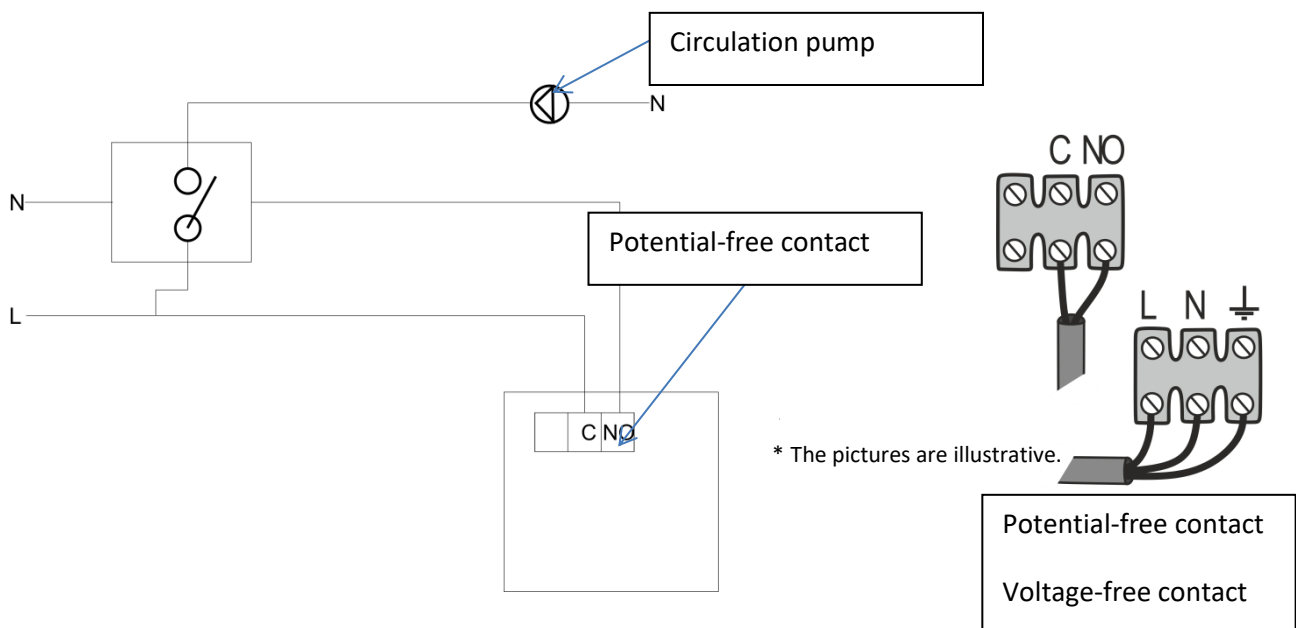
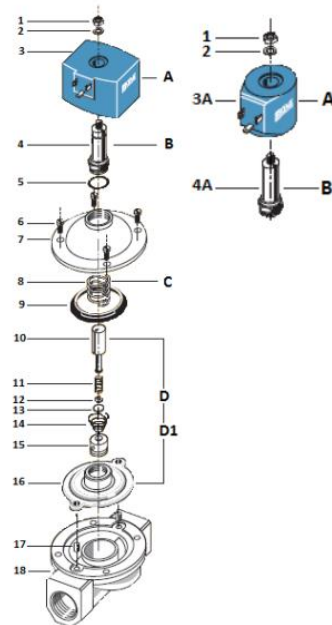
If your dehumidifier is equipped with a hot water element and/or a solenoid valve, you must use built-in digital controller OR MICROWELL DRY EASY300 wireless humidistat and thermostat OR EBERLE HYG7001 thermostat and hygostat to activate the air heating function with a dehumidifier, or you must have an external thermostat connected. The reason is that the built-in mechanical humidistat or cable remote humidistat EBERLE HYG6001 does not have a thermostat function. An external thermostat is not included in the package of this product.

If your dehumidifier is equipped with a hot water element and your dehumidifier is designed without a thermostat, there is a risk of the dehumidifier overheating. Overheating can occur if hot water flows into the LPHW (hot water insert even when the dehumidifier dehumidification is not running - fan off). Under normal circumstances, a thermostat and an original solenoid valve regulate the water supply automatically, effectively preventing the dehumidifier from overheating. It is therefore necessary to use a thermostat to control the heating in the appliance. Neither the manufacturer nor the distributor is liable for damages resulting from non-compliance with the above instructions.

Parameters of the solenoid valve:

- dimension DN 12,
- operating pressure PN 10,
- threaded connection,
- control: coil
- 230V (D-233),
- material: brass,
- controlled directly,
- type: 8253 12D 1 12 2 1 230V AC

No.	Item	Material
1	Safety nut	Galvanized steel
2	Washer	Galvanized steel
3	Coil	PBT + 30% G.F
4	Piping	Stainless steel AISI 430
5	Seal	FPM
6	Screw	Stainless steel
7	Cover	Brass CW 617 N
8	Spring	Steel
9	Ring	Stainless steel
10	Piston	Stainless steel
11	Spring	Steel
12	Support	Stainless steel
13	Insulation	NBR
14	Spring	Steel
15	Cover	Stainless steel
16	Membrane	NBR
17	Cover	Stainless steel
18	Body	Brass CW 617 N



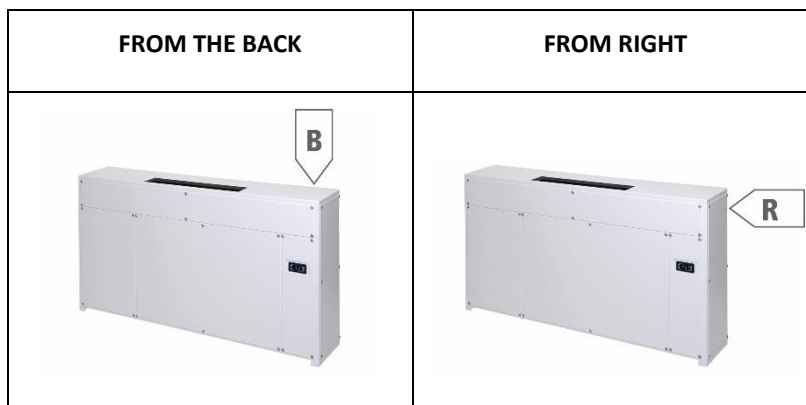


The dehumidifier can be equipped with a solenoid valve on request. When used in combination with a hot water coil, it has a similar function to the fan coil, i. the fan works independently with the compressor (humidistat) and independently with the LPHW hot water coil (thermostat).



It is recommended to insert a shut-off valve between the LPHW hot water insert and the heating source. This will allow it to be quickly disconnected from the heating system in the event of a fault in the heating system and/or maintenance of the system or dehumidifier.

LPHW connection options



1.4. Humidity control by remote controller – on demand

An external wireless humidistat and the DRY EASY 300 thermostat can be ordered for the pool dehumidifier which is equipped with a built-in mechanical humidistat as standard.



When ordering the DRY EASY 300, there will be no digital humidistat and thermostat 1401F on the cover. The hole in the cover will be covered.

Wireless communication takes place in the 868 MHz band, where the emphasis is on the reliability and range of the controller. The dehumidifier is controlled primarily by a remote humidistat, provided that the built-in humidity controller in the dehumidifier is set to a higher desired humidity value than the remote humidistat.

External wireless humidistat and thermostat DRY EASY 300



1. TRANSMITTER



2. RECEIVER

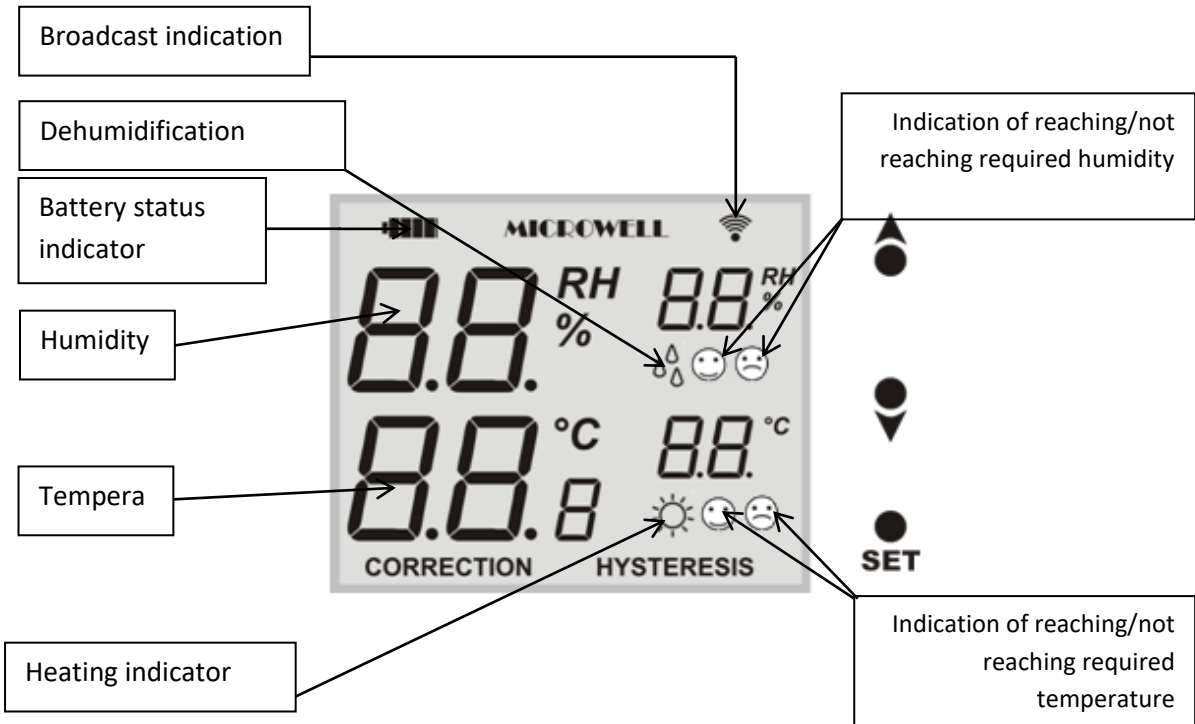


3. ANTENNA



The manufacturer recommends setting the required humidity value on the DRY EASY 300 in the range of 55 to 65% RH.

If the backup humidistat had been set to a lower value than the DRY EASY 300 remote humidistat, the backup humidistat will take over the room humidity control and in this case the dehumidifier will not respond to signals from the DRY EASY 300 remote humidistat.



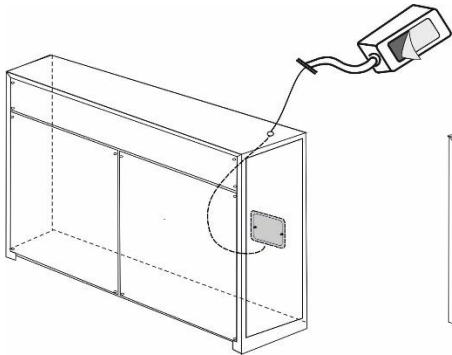
Additional functions and operation of the remote humidistat are described in the separate enclosed instructions.

Location of receiver and antenna

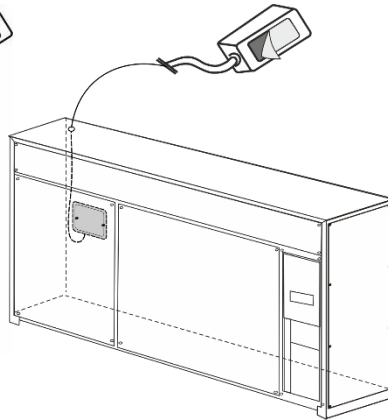
A: The receiver is located inside the electrobox and the antenna is located on the outside of it.

B: For TTW version / through the wall / we recommend pulling the antenna into the pipe in the wall. Follow the picture below.

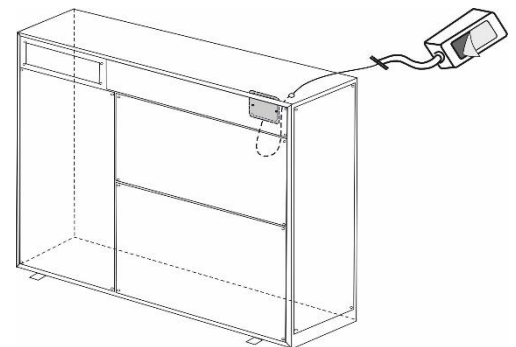
DRY300/400 DUCT



DRY500 DUCT



DRY800/1200 DUCT



1.5. Humidity control by external wired humidistat EBERLE

If your device is equipped with an EBERLE wired remote humidity controller, pay attention to this section of the installation manual.



Wired humidistat EBERLE HYG6001



Wired humidistat and thermostat EBERLE



When ordering EBERLE HYG6001/7001, there will be no digital humidistat and thermostat 1401F on the covers and the hole in the cover will be covered with a cover.

The dehumidifier can be equipped with a remote humidistat on request. In this case, the dehumidifier has two humidity controllers. One of them is a built-in mechanical humidistat inside the pool dehumidifier, the other is an external wired humidistat. The dehumidifier is controlled primarily by the remote humidistat, provided that the built-in humidity controller inside the dehumidifier is set to a higher desired humidity value than the remote humidistat.

If your dehumidifier is equipped with a hot water insert and/or a solenoid valve also, you must use a humidistat with an EBERLE HYG7001 thermostat to activate the dehumidifier's air heating function, or you must have an external thermostat connected.

4. HANDLING INSTRUCTIONS

4.1 Main humidistat

The dehumidifier is switched on and off using a digital humidistat with a display. The built-in humidistat is located in the housing of the device. The humidistat checks the humidity level of the intake air and, depending on the set value, starts dehumidification if necessary. In rooms with an indoor pool, the optimum humidity should be between 55% and 65%. Reducing the humidity level below said interface is not desirable, taking into account the physiological aspects as well as the protection of the building. In addition, electricity consumption increases. The humidistat can be fully controlled by the user.

The illuminated dot indicates that the humidity level is **shown on the display**.

The illuminated dot indicates that the display shows the **air temperature**.



The lit square indicates that the controller **is giving a signal to heat the air** (if a hot water insert and solenoid valve are installed.) An unlit symbol indicates that the desired air temperature is lower than the actual one.

An illuminated square indicates that the controller **is giving signal to dehumidify**, ie. the required humidity is lower than the actual one.



The manufacturer recommends setting the required humidity in the range of 55 to 65% RH. Reducing the humidity level below said interface is not desirable, taking into account the physiological aspects as well as the protection of the building. In addition, electricity consumption increases. Setting above 65% RH can create an environment where the humidity reaches a critical level of 70%, which could lead to an overgrowth of unwanted bacteria and the formation of mold, or damage to home textiles.

Error codes:

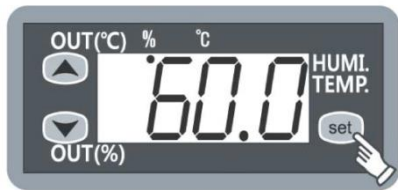
Er1 Memory failure. Switch off and then switch on again the electrical connection.

If the failure reporting continues, please ask us to change the component.

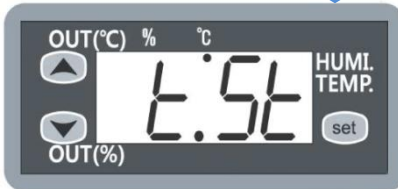
0-E Sensor failure. The electrical connection of the sensor is broken off. Please control the cable.

S-E Sensor failure. The sensor is short-circuited. Please control the cable.

User setting HUMIDITY / TEMPERATURE changing (/ * Manufacturer settings)

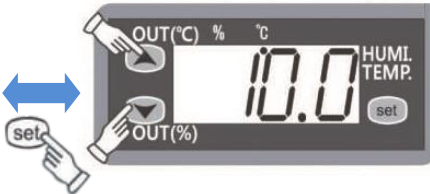


Press SET key for 10secs

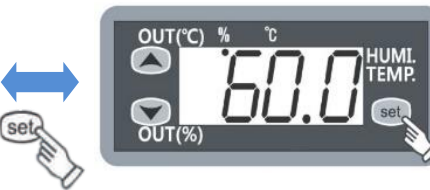
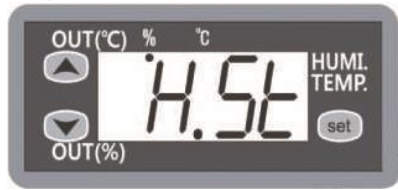


User setting TEMPERATURE changing menu

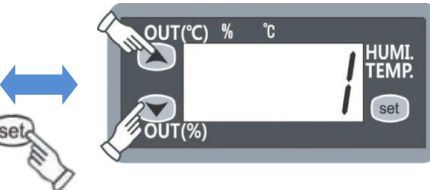
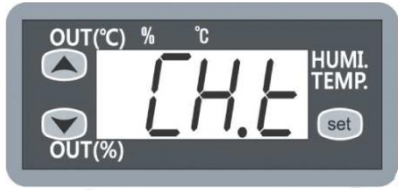
Temperature manufacturer setting
without LPHW /* with LPHW /*



User setting HUMIDITY changing menu /*



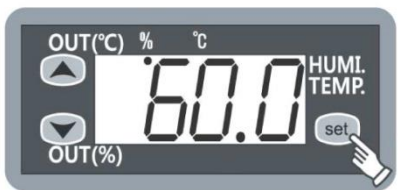
TEMP./HUMI. display changing cycle setting menu



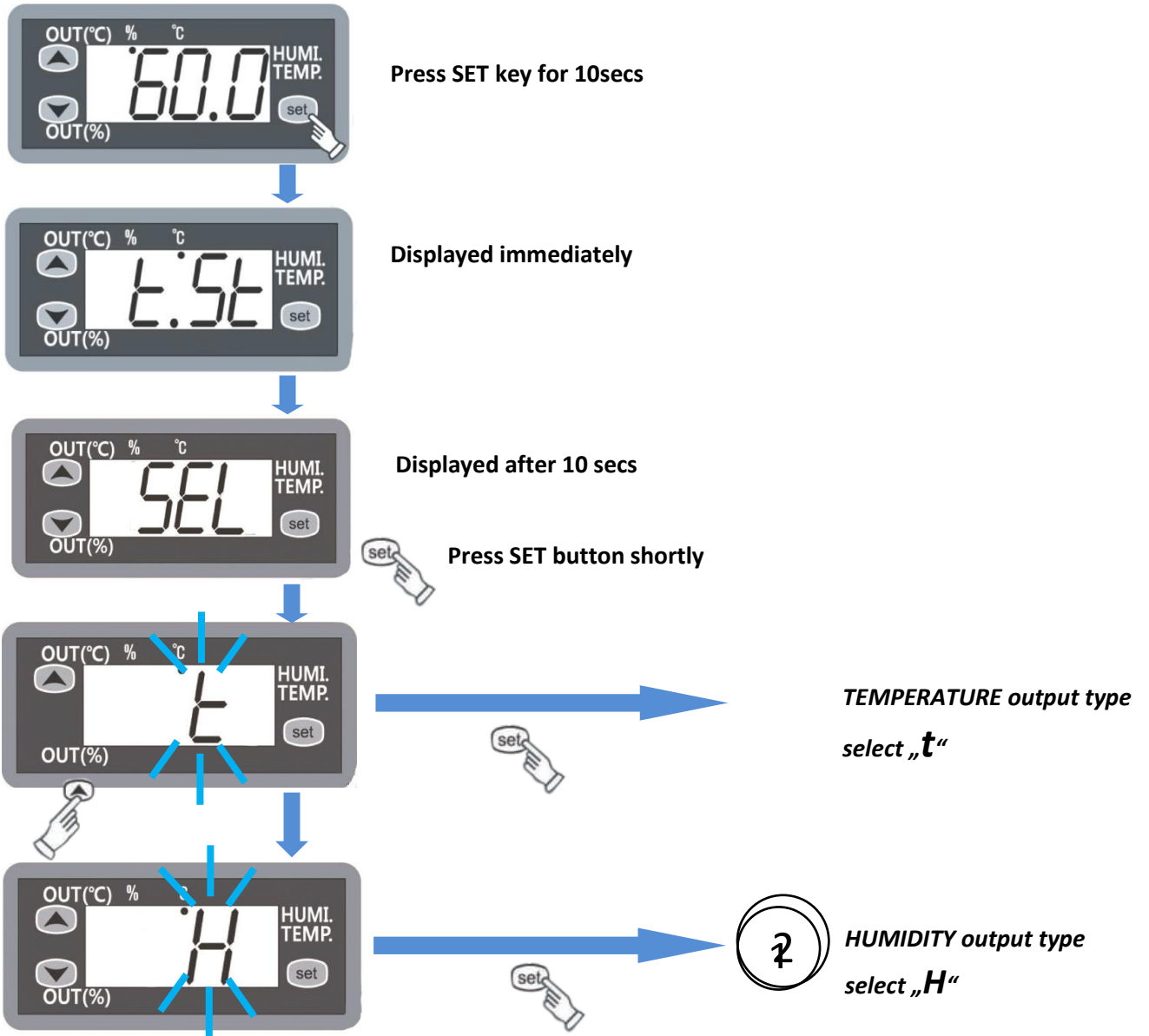
Save in memory



Return to operating mode

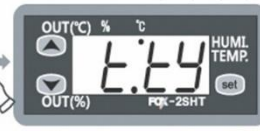
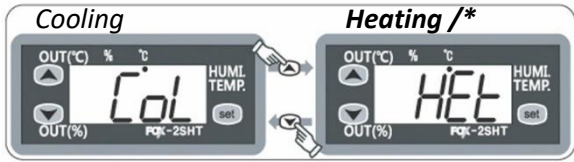
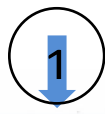


Deviation, correction and other service settings

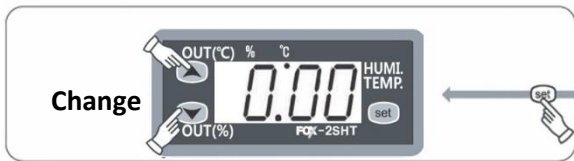


Program setting (/ * Manufacturer settings)

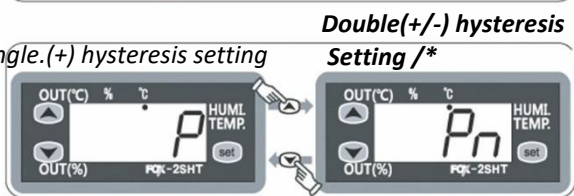
TEMPERATURE output type select



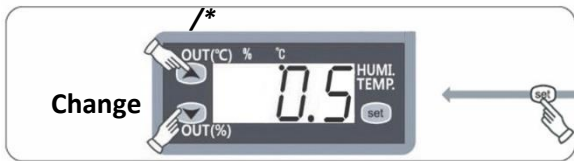
TEMP. output delay time setting



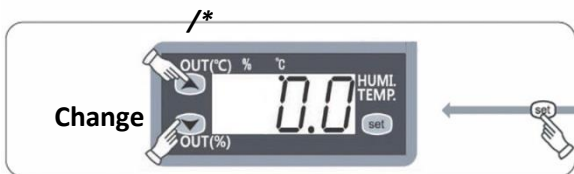
TEMP. output hysteresis type select



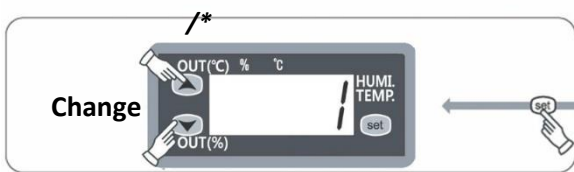
TEMP. output hysteresis setting



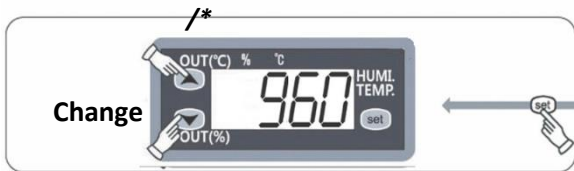
Temperature sensor correction



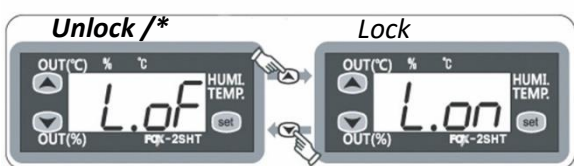
Setting the device address for communication with the superior system via the RS485 interface



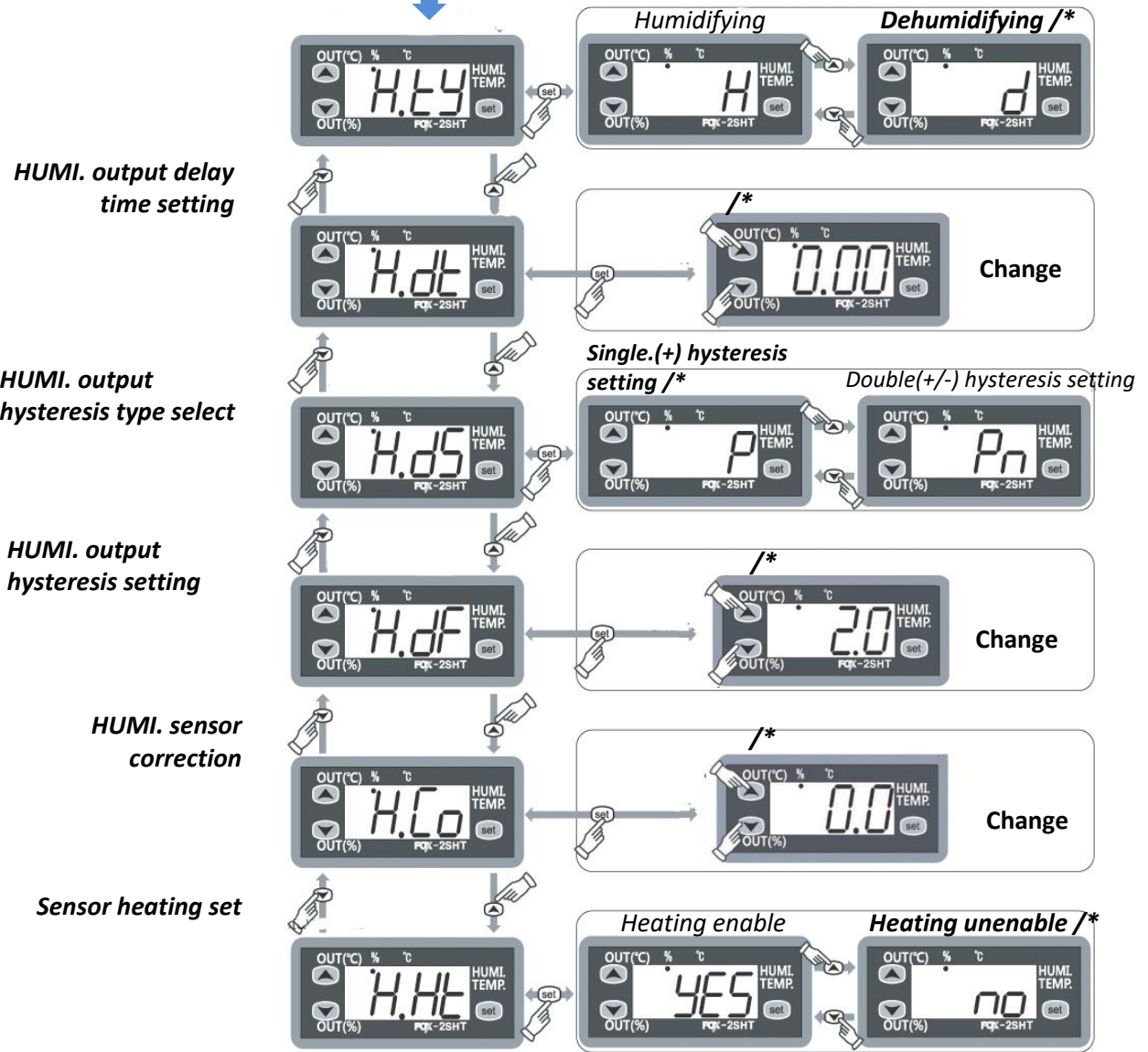
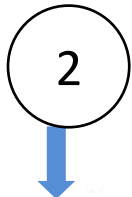
Communication speed setting /RS485/



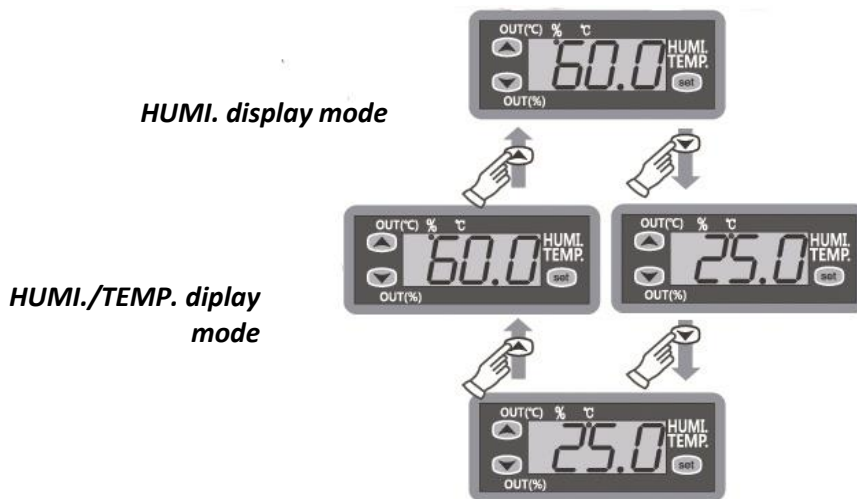
Program lock setting



HUMIDITY output type select



HUMIDITY / TEMP. display mode change



TEMP. display mode

4.2 Control of the fan

A fan is a very important part of a dehumidifier. Microwell has programmed the fan functionality in order to ensure absolute humidity control in your pool with strong focus on energy efficiency. For this reason all ducted dehumidifier models's (DRY300DUCT, DRY400DUCT, DRY500DUCT, DRY800DUCT and DRY1200DUCT) fans work on high speed when dehumidification is activated (compressor on) and are turned off when the dehumidifier does not dehumidify (compressor off). In turn off stage, in order to ensure constant control of the pool environment, the fans are programmed to perform a 2 min humidity reading every 15 minutes. Should measured humidity be below requested level, the fans go to sleep for another 15min. Should the humidity measured be above the requested level, the fans will be turned on to high speed and the unit will initiate dehumidification.

Please check 6. TECHNICAL DATA for fan air flow and external pressure. It is necessary to design the air ducting in compliance with these technical parameters. Proper air circulation is required to achieve proper humidity control in the swimming pool hall. It is advised to contact professional air ducting company to design and install the ducting system.

4.3 Compressor control

Start-up of the compressor is due to its protection delayed by 3 minutes. Depending on the humidity of the environment, it may take even longer for compressor to start operating. Once the compressor stops operating, the operation is renewed automatically at the earliest after three minutes. The user must not alter the preset delay-action relay.



After longer time without operations when compressor attempts to turn itself on, it is normal to take up to 4-6 turning-on attempts to finally turn the compressor on. This depends also on current air temperature. Lower temperature environment (app. 22°C) requires more attempts. Higher temperatures (30°C) less and typically 1 attempt.

4.4 Maintenance

At least once a year it is necessary to have the unit checked and cleaned by a qualified service specialist. This will ensure long and reliable service life of the unit.

1x / month	check air filter
1x / 6 months	exchange air filter
1x / year	Unit fixation – unit holding OK? No released screws?
1x / year	Condensate drain – Visual check - does it drain OK? Clean of dust? No waving? No leakage? No water on the stain on the ceiling or the wall?
1x / year	air ducting connection ok? No released screws?

5. INSTALLATION GUIDE



The unit must be installed in compliance with the local installation and electrical installation regulations!

5.1 Location of the equipment

DRY 300 DUCT, DRY 400 DUCT, DRY 500 DUCT, DRY 800 DUCT and **DRY 1200 DUCT** are designed to be installed in technical rooms. All models are IP44 protected. For maintenance purposes it is essential to have min 200mm of a free space on both sides of the unit and min 750mm from the front side of the unit. In technical chamber or adjacent room it is necessary to have 2.25x1m² of a floor surface.



5.2 Device fixation

DRY 300/400/500 DUCT comes by standard with wall console and it is designed to be installed on the wall.

DRY 800/1200 DUCT comes by standard with floor feet designed to be installed on the floor. Alternatively it is possible to install **DRY 800/1200 DUCT** on the wall using wall console.



Please note that the screws and dowels supplied with this dehumidifier are to be used only with solid concrete or brick wall. Please check your wall material and choose appropriate screw and dowel.



DRY 300/400/500 DUCT - Please use installation layout. It is 1:1 scale drawing of the dehumidifier with markings for wall console screws, side fixation screws, water drainage, electrical power supply and LPHW connection from the back.

Brief installation instructions:

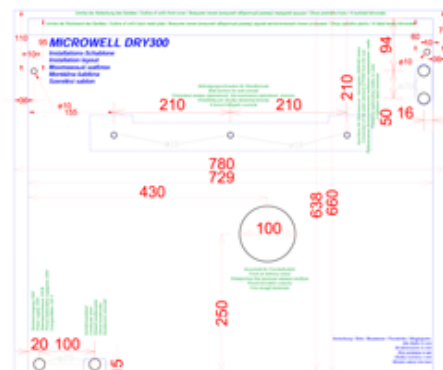
DRY 300/400/500 DUCT

1. Confirm the position of the dehumidifier and the wall console screws using Installation layout.
 2. Drill 3 holes, use appropriate dowels.
 3. Fix the wall console tightly with appropriate screws. **Wall console must be perfectly levelled using spirit level!**
 4. **Remove the transport protection of the compressor! More information below.**
 5. Hang the dehumidifier onto the wall console.
 6. Remove the right part of front cover (3 screws) and connect the electrical power supply.
 7. Put the condensate water hose into drainage (from the back).
 8. Turn the unit on and test it.
 9. If unit works and appears to operate normally, turn it off and continue with installation finalization.
 10. Connect air ducting. And you are good to go!
1. Confirm the position of a dehumidifier on floor feet / wall console.
 2. In the case of wall console fit both consoles with 3 screws and dowels. Both consoles must be levelled by spirit level. Screws are supplied with the dehumidifier.
 3. **Remove the transport protection of the compressor! More information below.**
 4. Level the dehumidifier using flexible feet / fix the dehumidifier on the wall console with screws (all coming in packaging).
 5. Remove the left part of front cover (2 screws) and connect the electrical power supply.
 6. Put the condensate water hose into drainage (from the back).
 7. Turn the unit on and test it.
 8. If unit works and appears to operate normally, turn it off and continue with installation finalization.
 9. Put the right side of the cover back and connect the ducting with 4 screws.
 10. Connect air ducting. And you are good to go!

DRY 800/1200 DUCT

Mounting template

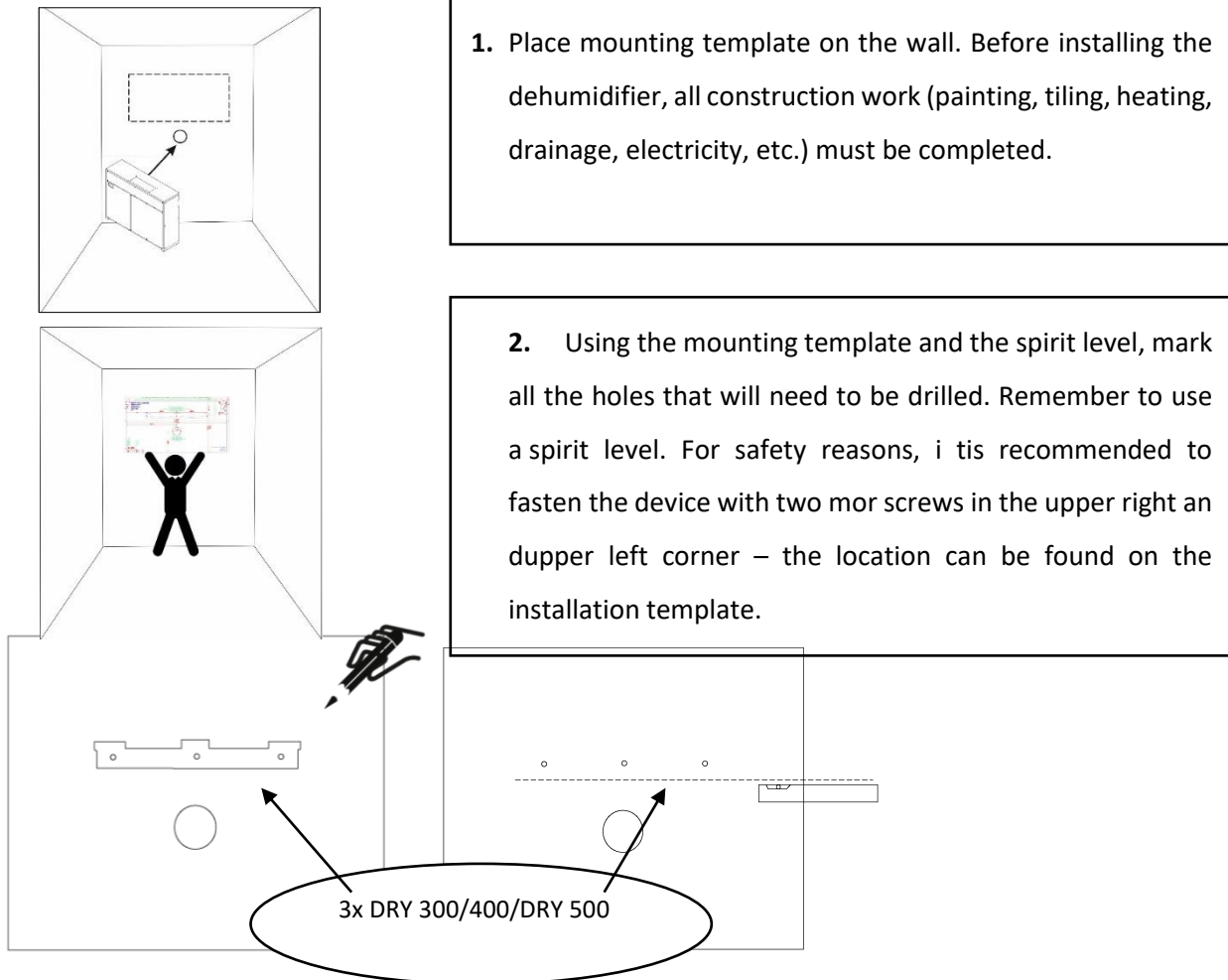
The mounting template is a large sheet of paper that is processed in a scale of 1: 1 ratio of the size of the dehumidifier. Includes marking of dehumidifier drawing, wall bracket with screw holes, fixing screws, water drain, power supply and LPHW connection from behind. Proceed by placing the mounting template on the wall where the dehumidifier will be mounted - make sure that the holes in the wall bracket are balanced with a spirit level. Punch and mark them on the wall in the places indicated for drilling. When positioning the holes,



pay attention to the location of the electricity supply and the condensate drain! Available for DRY300-400-500DUCT.

Brief installation instructions (DRY300/400/500 DUCT)

Determine a location for mounting the dehumidifier. Choose a suitable position respecting all the rules described above.

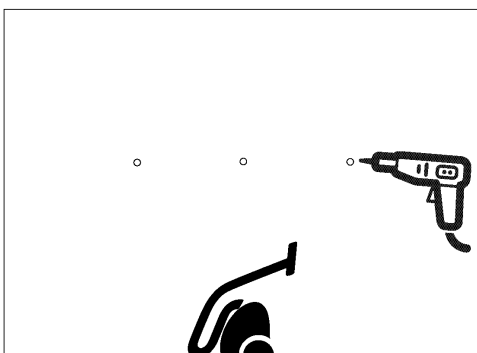


1. Place mounting template on the wall. Before installing the dehumidifier, all construction work (painting, tiling, heating, drainage, electricity, etc.) must be completed.

2. Using the mounting template and the spirit level, mark all the holes that will need to be drilled. Remember to use a spirit level. For safety reasons, it is recommended to fasten the device with two more screws in the upper right and upper left corner – the location can be found on the installation template.

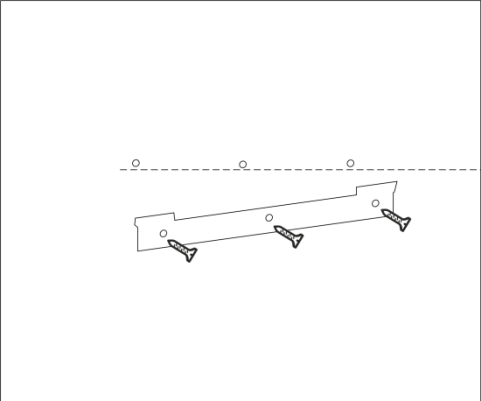
3. You must drill: **3 holes for the DRY300/400/500 wall console**

It is advised to drill also 2x holes DRY300/400/500 for fixing screws, an opening of \varnothing 100mm for DRY300/400/500 fresh air supply (in case your dehumidifier is equipped with this accessories, which is available on request).



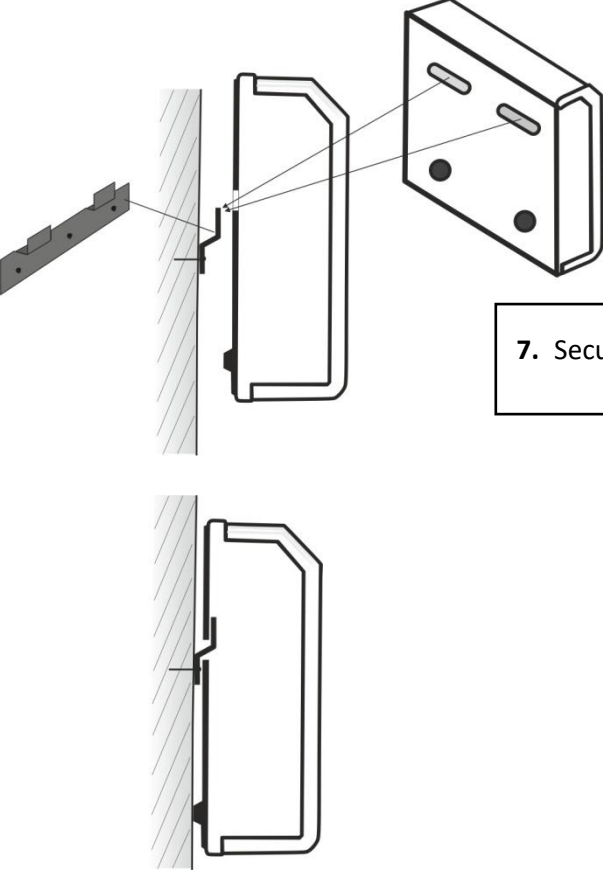
4. Drill the holes. We recommend vacuuming the dust.

5. Insert supplied dowels in the holes.

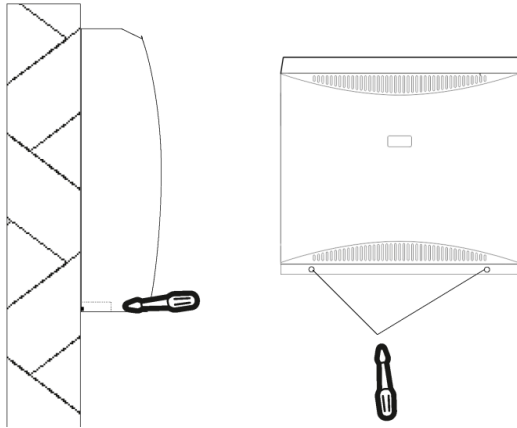


+/- 0.3%

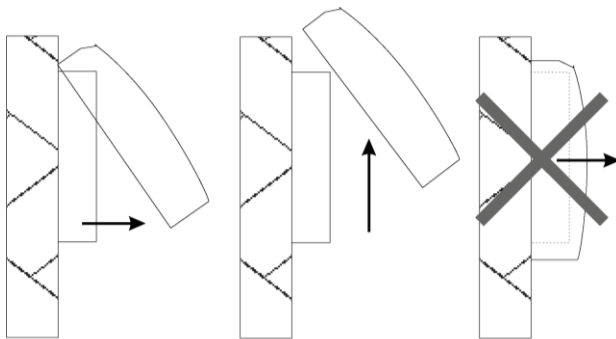
**6. Secure console with the supplied or other suitable screws.
The console must be in a horizontal position with
a maximum deviation of +/- 0.3%!**



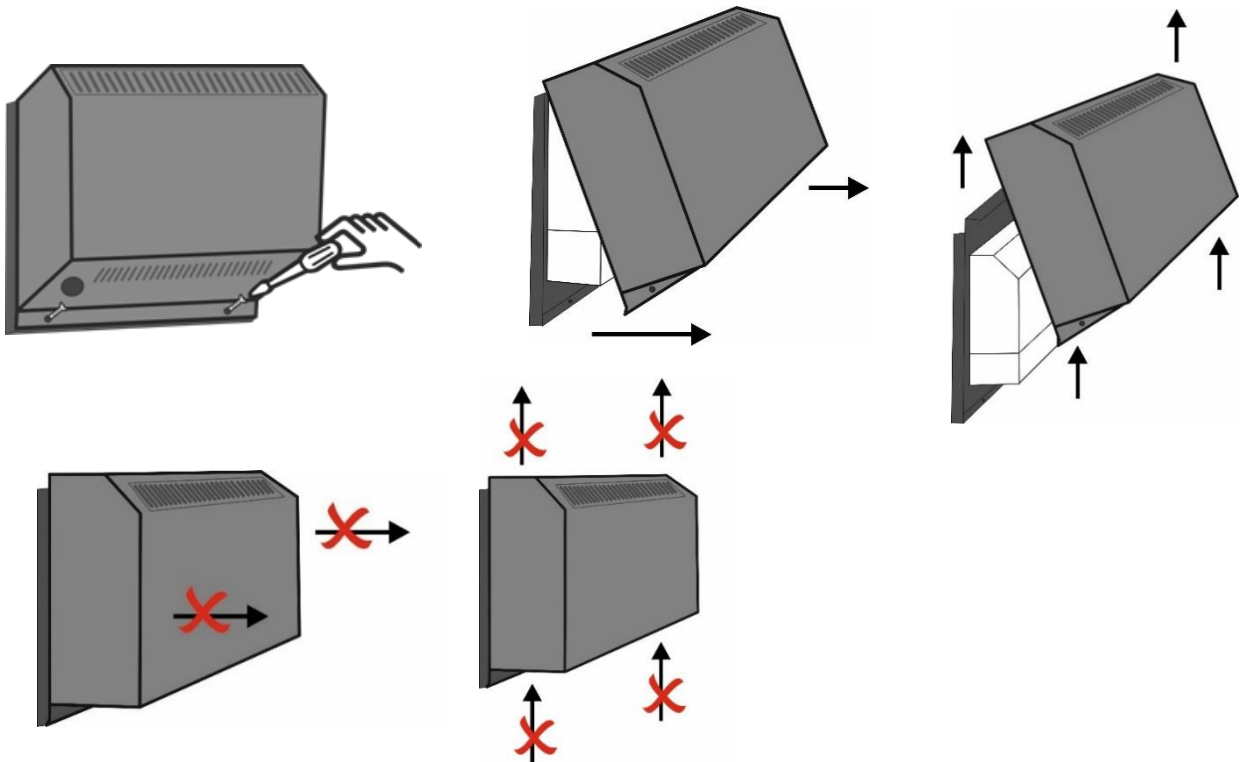
7. Secure dehumidifier onto the console.

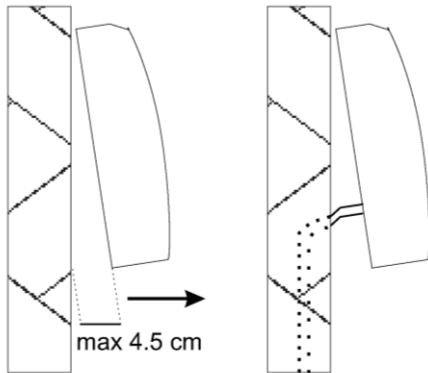


8. You will now need to remove the cover of the dehumidifier, to connect the power supply and condensate drain. The cover can be removed after loosening 2 screws (DRY 300/400) or 3 screws (DRY 500) on the bottom part of the device

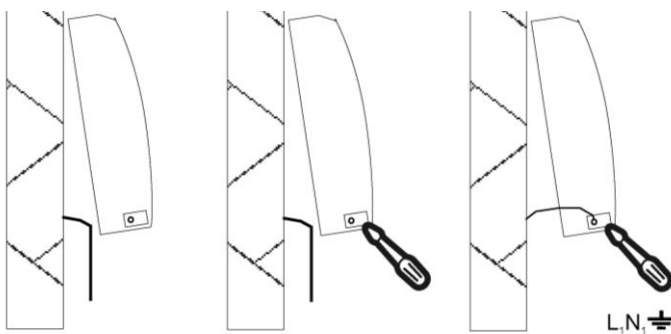



9. Pull the lower part of the cover towards yourself and then lift it down to remove the cover from the back plate. **Do not pull the cover towards yourself without lifting it first!**

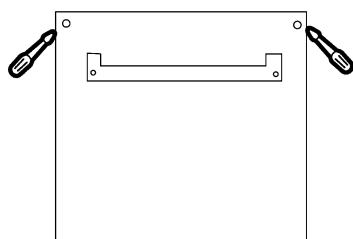




10. In the lower left part, there is a condensate drain hose, which must be inserted into the sewer pipe (rear). **Never drain condensate into the pool, it may contain dangerous bacteria.** The lower part of the dehumidifier can be slightly pulled together and thus have access to the condensate. Follow section Condensation drainage when installing the condensate hose.

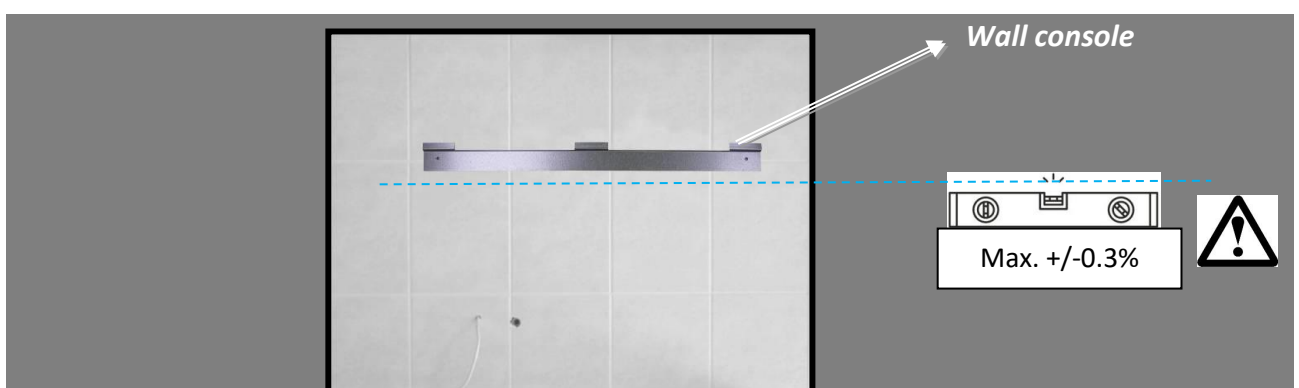


11. Connect the power cord. For this purpose, there's an adaptor formed on the back plate of the device. The device is connected to 230VAC/1φ L,N, grounding . Please follow section Main power supply connection.



12. After successful set-up of the dehumidifier, it is advised to fix it with fixing screws. These are not part of the package and must be selected according to the type of wall or mounting structure.

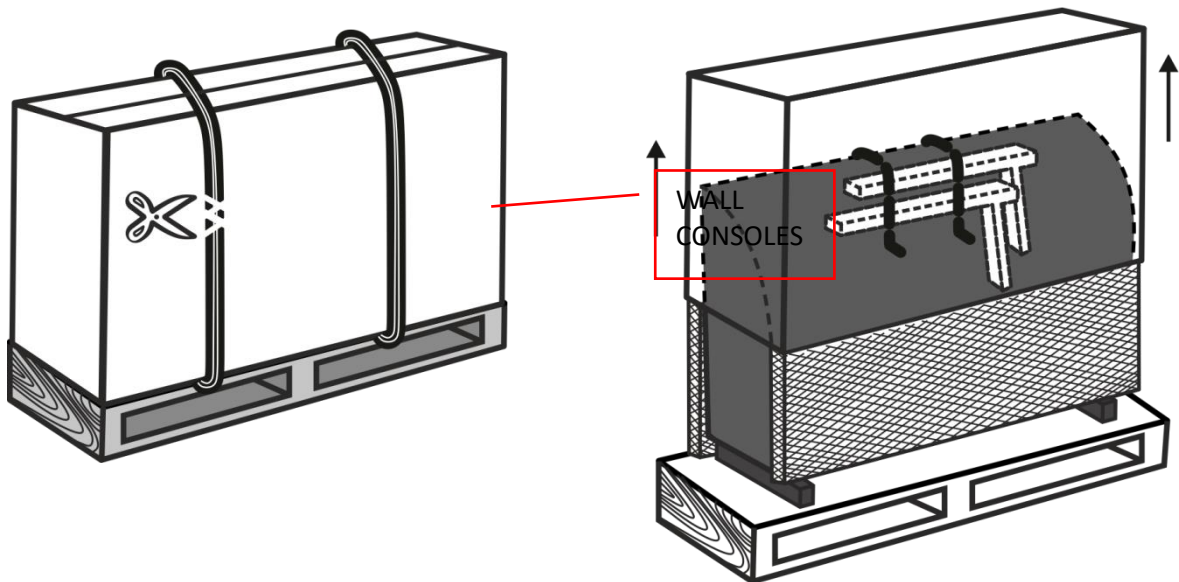
- 14.** Put the cover back on the device. Follow point 9 in reverse order.
- 15.** Switch on the circuit breaker to supply voltage to the dehumidifier's power supply. This turns on the device. If you have set the fan to run continuously, it will turn on immediately. If the set humidity is lower than the actual humidity, the compressor will also start after approx. 3 minutes. You will hear a gentle vibration. Do not run the dehumidifier without the main cover. **This condition can cause back ventilation, virtually instant freezing of the device and possible malfunction or damage.**
- 16.** If the dehumidifier works properly, the installation is complete. If the pool hall has not yet been completed, we recommend switching off the dehumidifier with a circuit breaker and wrapping the air duct openings or the openings for air connection on the dehumidifier with plastic foil. This will prevent dust and construction waste from entering the device. More instructions in section 5.3.
- Condensed water drainage





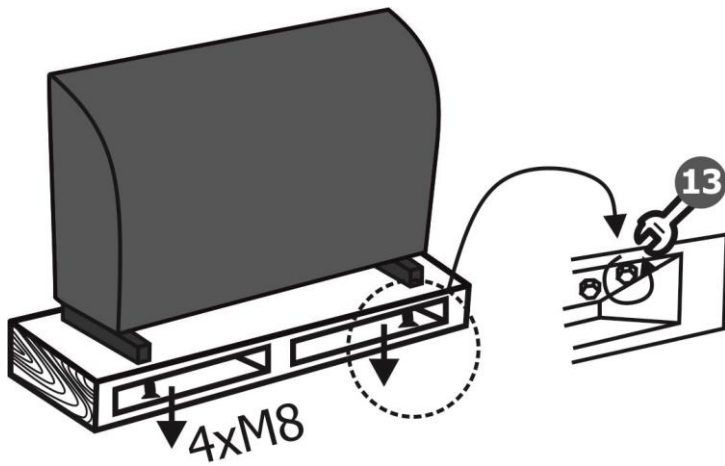
Preparation of electric power supply, condensate drain and console mounting

Brief installation instructions (DRY800/1200 DUCT)



3. Remove the 4 M8 screws that secure the dehumidifier to the pallet.

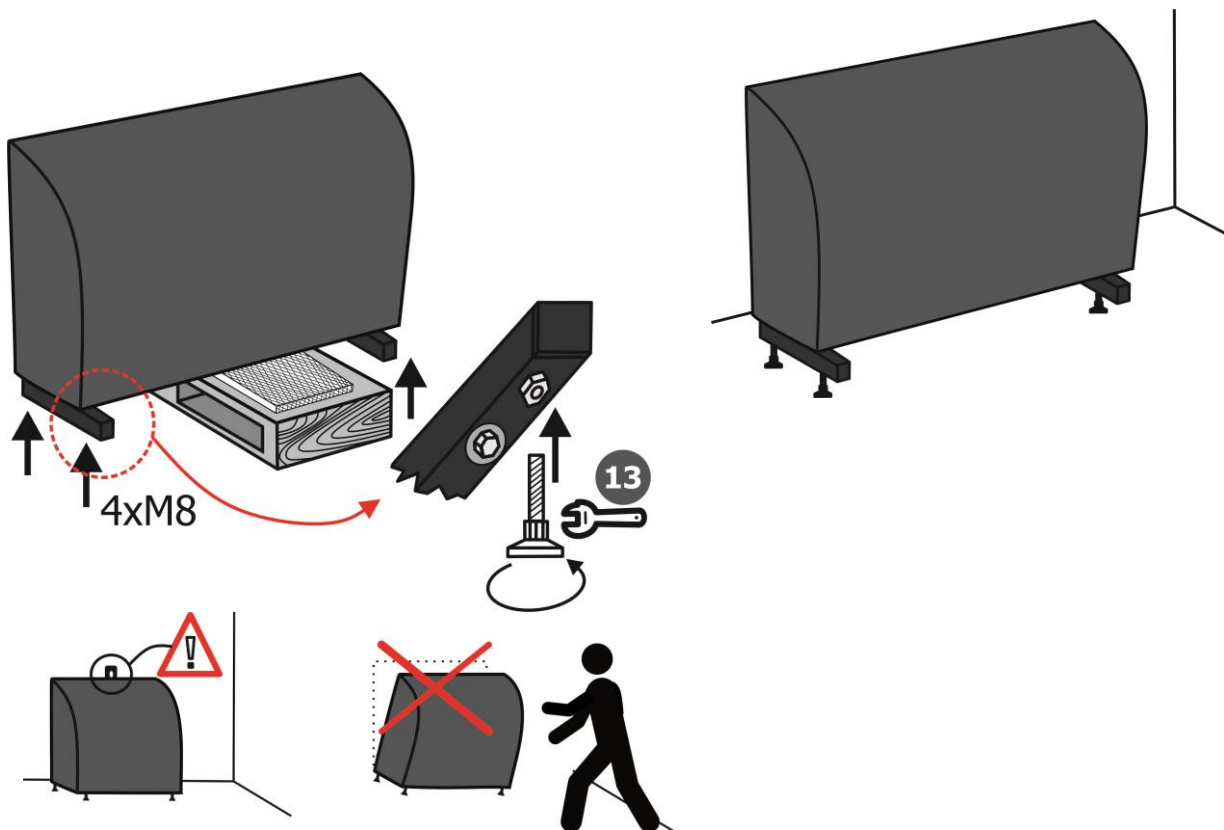
WARNING! Do not unscrew the M6 screws. After removing these screws, there is risk of the device falling.

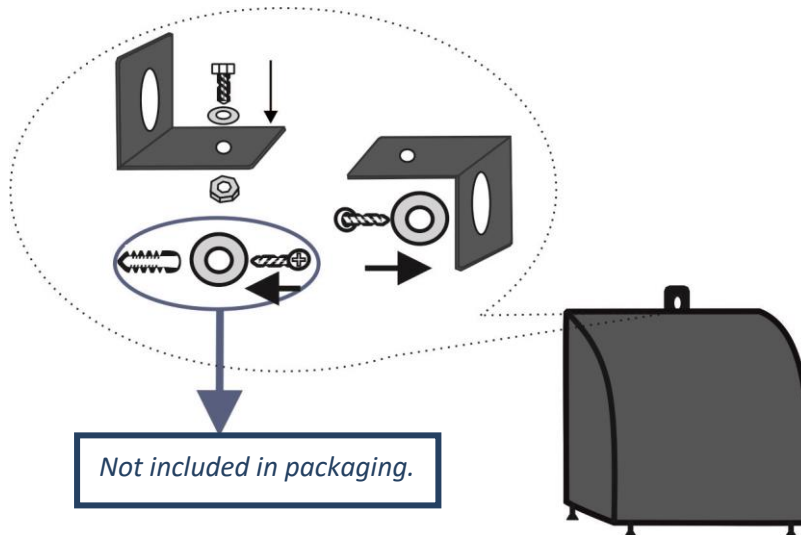


Floor installation

1. After removing 4 M8 screws, insert 4 rubber feet instead.

2. Floor installation is complete. Finally, attach the dehumidifier to the wall as shown below.





Wall installation of DRY80/1200 DUCT – on demand

If the dehumidifier is being installed on a wall, it is necessary to order a set of brackets for wall mounting. This is used instead of the legs that come standard with the device. The set of brackets for wall mounting consists of:

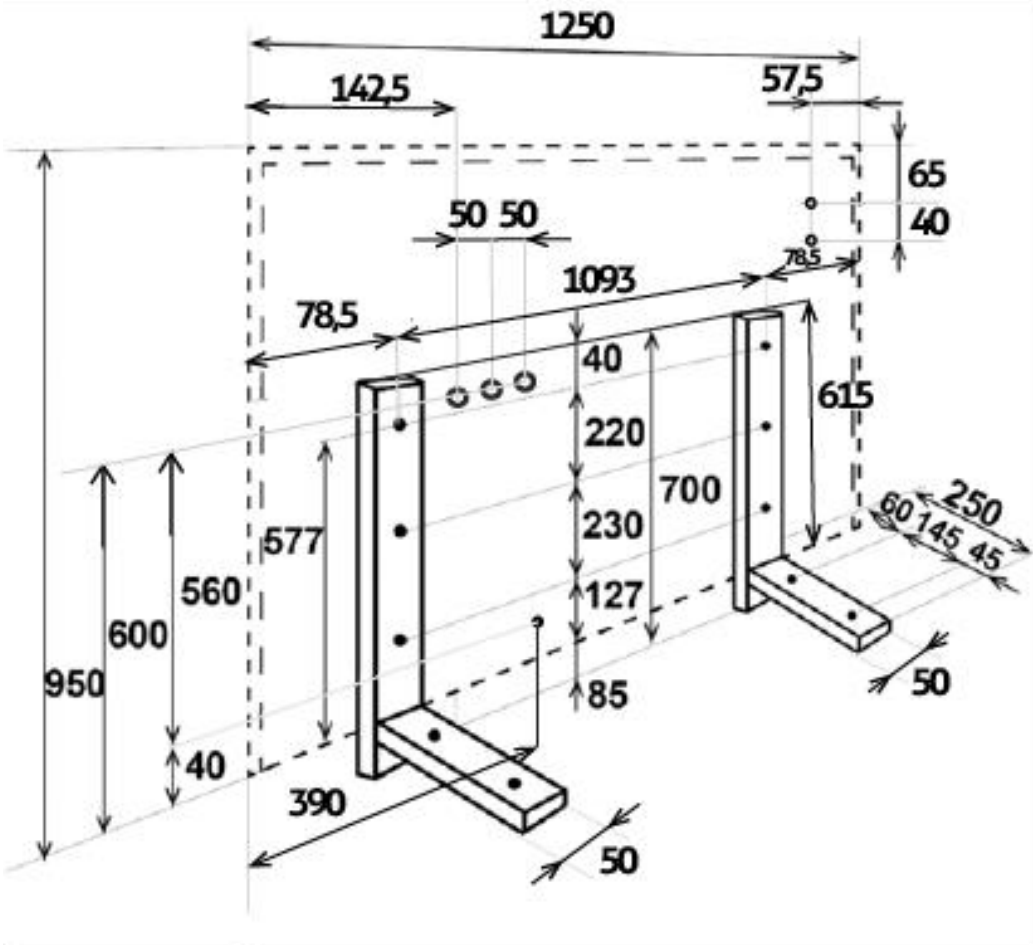
- pcs d 10 mm nylon dowels length 160 mm for anchoring in solid brick and concrete
- pcs M8 dowel screws
- 4 pcs M6 screws for attaching the dehumidifier bottom through the brackets

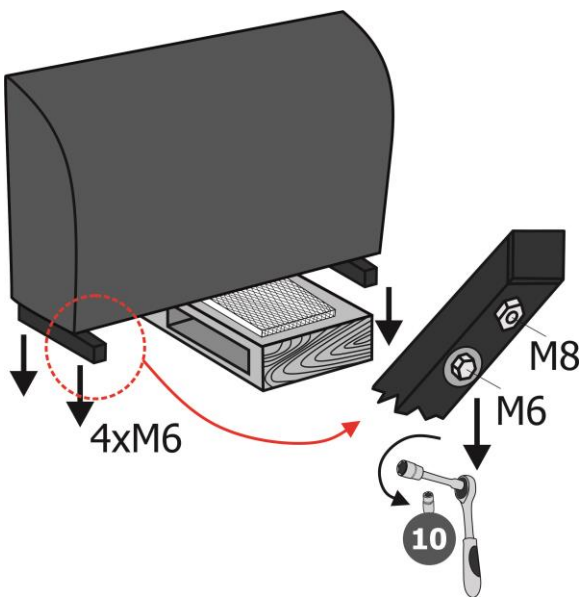
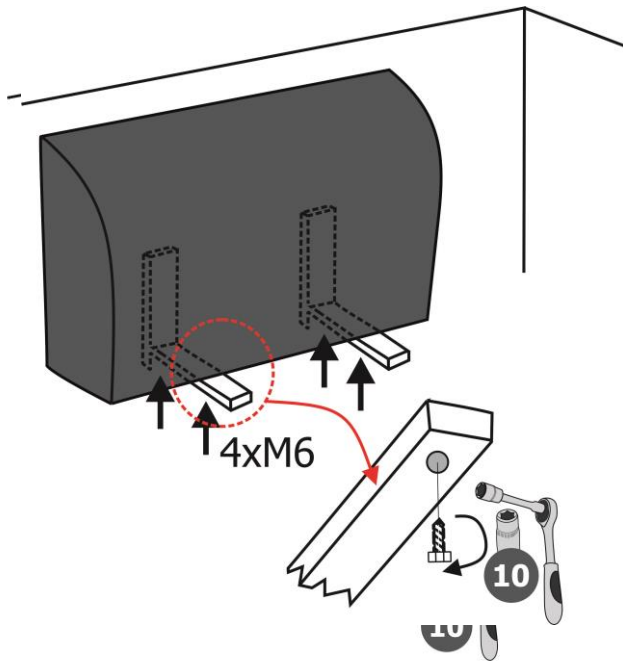
Each bracket is attached to the wall with three screws through the holes in the bracket into the dowels on the wall. The brackets must be mounted at a distance from each other as shown in the figure below. After mounting the device on the brackets, the device at the bottom must be screwed to each bracket with two M6 screws.

Installation procedure:

Remove the supplied feet (which fixed the device to the pallet). You can remove them on the floor, lift the whole unit and place it on the wall. Or you can install the wall brackets first and then lift the unit and then remove the feet.

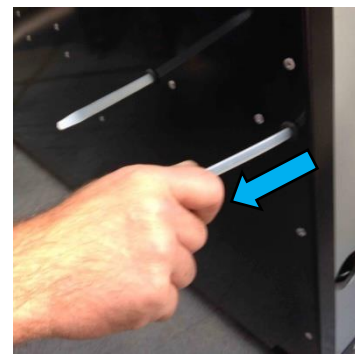
Be careful not to place the cover/unit on the floor without feet. There is a risk of scratching and damaging the cover.





5.3 Compressor transport protection

Your compressor is protected for the transport with plastic zipper strap. Due to compressor size and weight this is necessary in order to have a fully functional unit delivered to you safely. This protection **must** be removed before starting the unit. Please view below pictures on how to proceed. The procedure generally takes few seconds. Please be advised that no removal of plastic zipper strap results in warranty void. Only regards DRY500-800-1200 models.



Picture 1: Plastic zipper strap as delivered from factory.

Picture 2: To cut the strap use pliers or other appropriate tool.

Picture 3: Finally remove the strap from the the dehumidifier.

5.4 Condensed water drainage

When drying your pool hall, your dehumidifier will condense the water that is fed into its internal collection tray. Without active (free) condensate drainage, the dehumidification process will not work. Condensation water is drained from the dehumidifier by gravity (downwards). The condensing tray has the correct slope when the dehumidifier is mounted horizontally (using a spirit level). Condensed water

must be drained through a siphon to the sewer or to the outside environment. Please do not place the drain hose upwards (against gravity), as this may cause the appliance to be unable to drain water condensate. This in turn will cause water to leak from under the unit cover and may lead to unit failure, damage, or failure. It can also cause the floor to get wet, creating the risk of injury and damage to health from unwanted slipperiness. The manufacturer, distributor or dealer is not liable for such damages. We recommend using the **HL 138** concealed siphon designed for air conditioning units in the condensate drain. This must be located min. 20 cm below the condensate outlet from the dehumidifier. The pictures below show more.



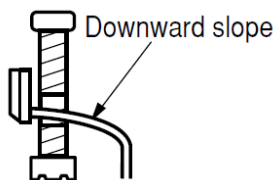
Warning: Condensed water from the dehumidifier must not be collected in the collecting bin and drunk!
Condensed water from the dehumidifier must not be returned to the pool!

HL138 0,15 l/s DN 32

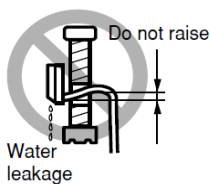
Parts list:
 01097D
 0138.3E
 0138.2E
 0138.1E
 01096D
 138K

Installation steps:
 1. Insert Ø20-32mm pipe into DN32 hole.
 2. Push siphon into hole.
 3. Trim excess with a knife.
 4. Push siphon into wall.
 5a. Connect to drain pipe.
 5b. Ensure min. 20cm height above drain.
 6. Insert cap and tighten.

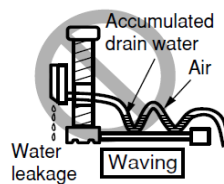
Translations:
 DE KLIMAGERÄTE - EINBAUSIFON
 IT SIFONE AD INCASSO PER CONDENSATI
 GB INWALL CONDENSATE SIFON
 H KLÍMAZFON FALBA SÜLLYESZTVE
 PL SYFON PODTYNKOWY DO SKROPLIN
 SI VGRADNI SIFON ZA KLIMA NAPRAVE
 CZ/SK PODOMÍTKOVÝ SIFON PRO KLIMATIZ JEDNOTKY
 HR UGRADENI SIFON ZA KLIMA -UREDAJE
 RO SIFON DE CONDENSATJE
 TR SPLIT KLİMALAR İÇİN GÖMME SIFON
 PYC СИФОН ДЛЯ КОНДИЦИОНЕРОВ
 BUL КОНДЕНЗАТЕН СИФОН ЗА ВЪРЖДАНЕ



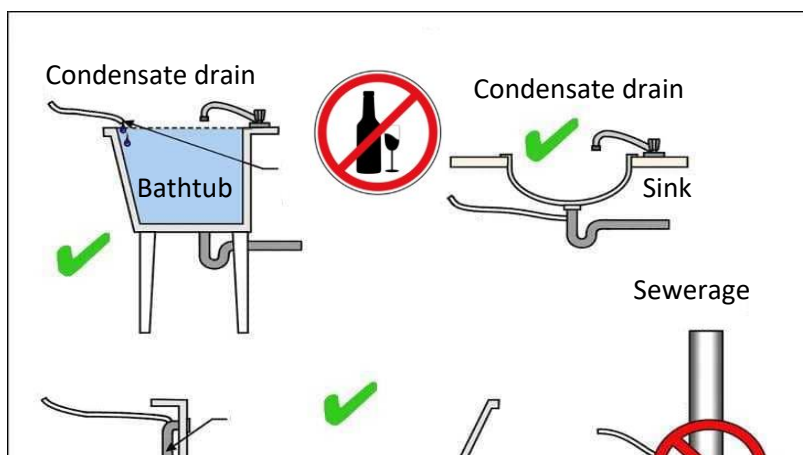
Proper installation of condense hose



Improper installation of condense hose



CONDENSATE DRAIN



Condensate drain
Overflow

Condensate
drain

5.5 Main power supply connection

Main electrical connection for fixed cable in wall

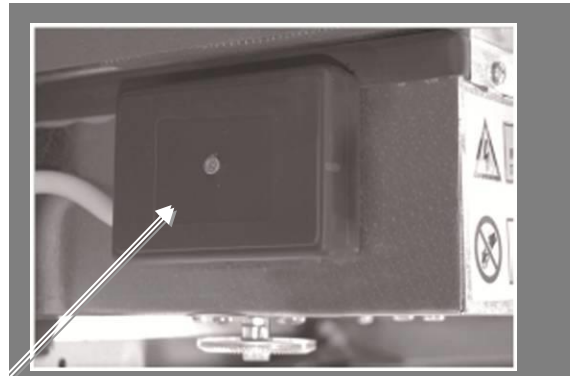
As standard, the dehumidifiers are connected to a fixed cable in the wall. Connecting the device to an electrical network must comply with the relevant security standards. Connection requirements include usage of the circuit breaker and residual current device (RCD) with a rated residual current not exceeding 30 mA. The main switch of the device must be located outside the pool hall. The main switch of the appliance must be bipolar with the switch of the L and N wires. The appliance must be placed on a solid surface to disconnect the appliance from the mains. The distance between the contacts, when switched off, must be at least 3 mm for all poles.



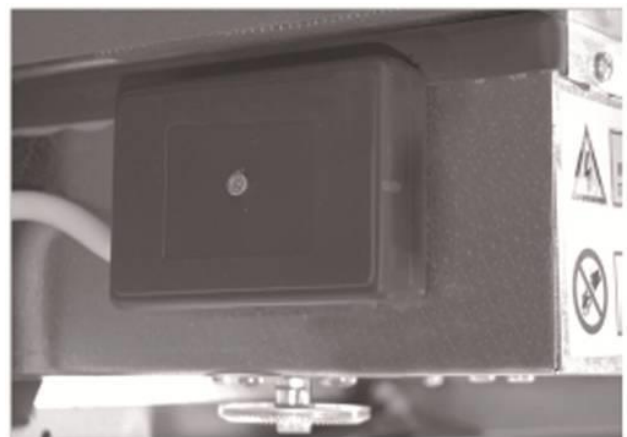
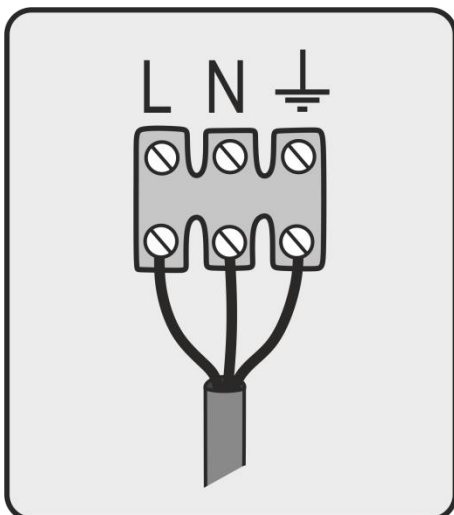
The appliance must be connected to the mains by a certified electrician.



Mind all electrical safety precautions.



The mains terminal block is located in this black box



MAIN ELECTRICAL CONNECTION OF THE DEHUMIDIFIER

230V/50Hz/1f

3x 2.5mm² CYSV

Standard terminal block -
L, N, ground

Main power supply		
Dehumidifier type	El. cable	Circuit breaker
DRY 300	CYSY 3x 1,5 mm ²	10 A typ C
DRY 400	CYSY 3x 1,5 mm ²	10 A typ C
DRY 500	CYSY 3x 2,5 mm ²	16 A typ C
DRY 800	CYSY 3x 2,5 mm ²	16 A typ C
DRY 1200	CYSY 3x 2,5 mm ²	20 A typ C

El. connection of a potential-free contact for a cooperating hot water heating system		
Dehumidifier type	El. cable	Power supply
DRY 300/400/500/800/1200	CYSY 2x 1,5 mm ²	via contactor

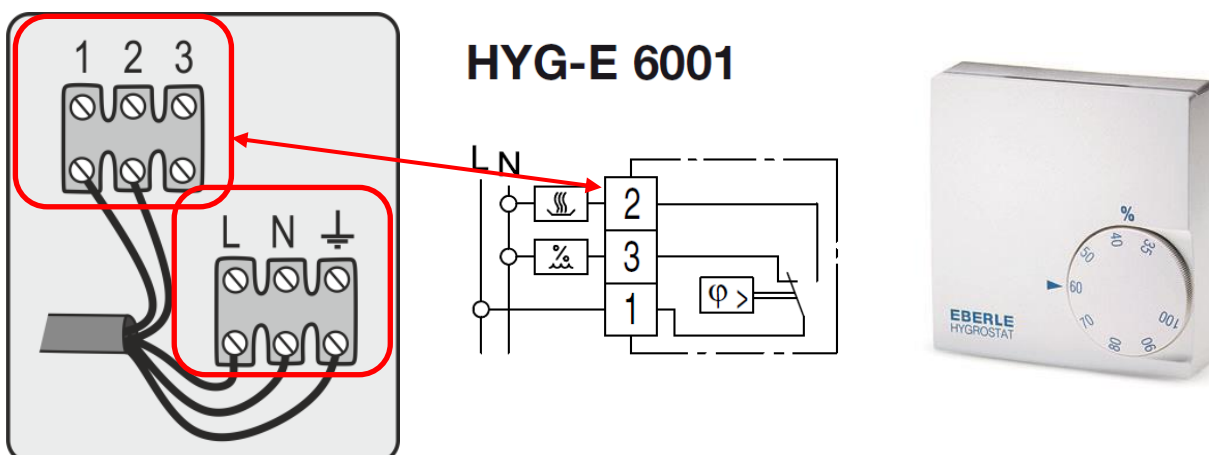
Electric heating element connection		
Dehumidifier type	El. cable	Circuit breaker
DRY 300/400/500/800/1200	CYSY 3x 2,5 mm ²	16A

El. connection of wire humidistat and thermostat	
Model	El. cable
HYG6001	CYSY 4x 1,0 mm ²
HYG7001	CYSY 5x 1,0 mm ²

El. connection of external humidistat and thermostat

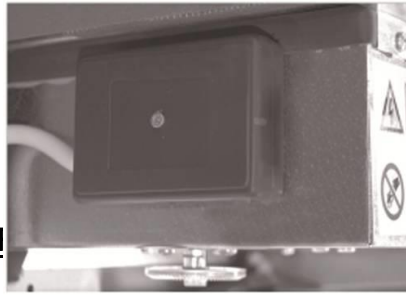
The connection of the EBERLE HYG6001 (HYG7001) cable remote humidistat is made at the installation site. The manufacturer does not supply the connecting cable.

EBERLE HYG6001 connection for DRY 300/400

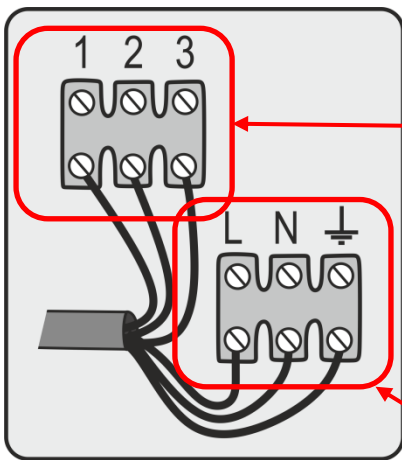


MAIN ELECTRICAL CONNECTION OF THE DEHUMIDIFIER

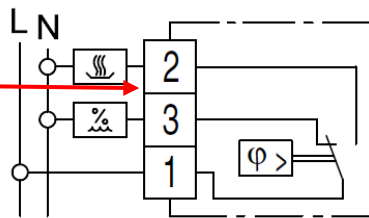
230V/50Hz/1f
 3x 2.5mm² CYSY
 breaker 10A type C
 circuit breaker 30mA



HYG-E 6001

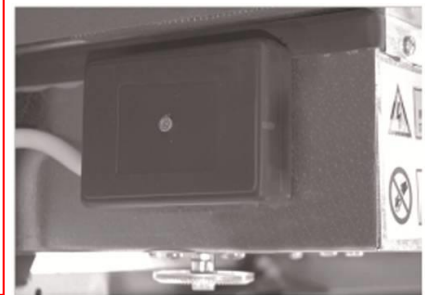


Black box from the SIDE of the electrobox

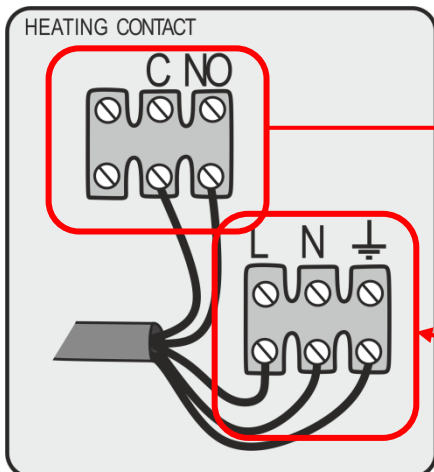


MAIN ELECTRICAL CONNECTION OF THE DEHUMIDIFIER

230V/50Hz/1f
 3x 2.5mm² CYSY
 breaker 16A type C
 circuit breaker 30mA



EBERLE HYG7001 connection for DRY 300/400



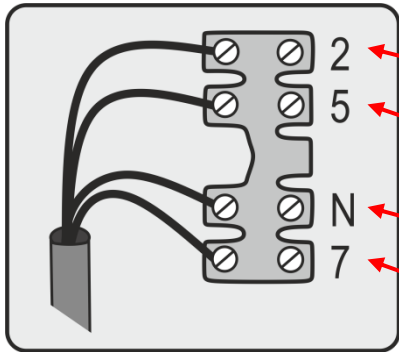
POTENTIAL-FREE CONTACT

- NO / Normal Open /
- If the air is heated, then C / closed /

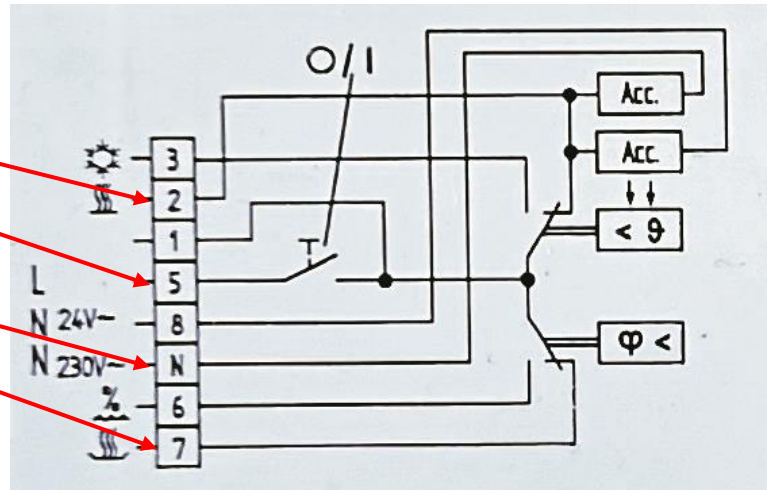
MAIN ELECTRICAL CONNECTION OF THE DEHUMIDIFIER

230V/50Hz/1f
 3x 2.5mm² CYSY
 Breaker 10A type C
 Circuit breaker 30mA

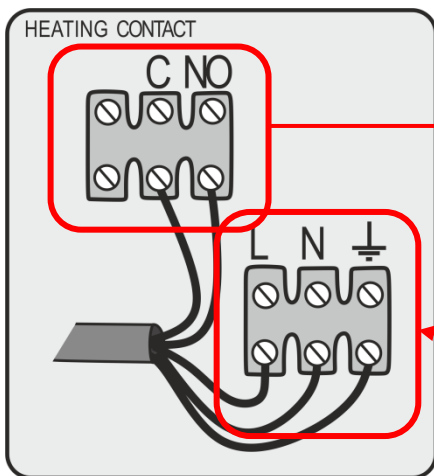
Black box from the *SIDE* of the electrobox



Black box from the *FRONT* of the electrobox



EBERLE HYG7001 connection for DRY 500



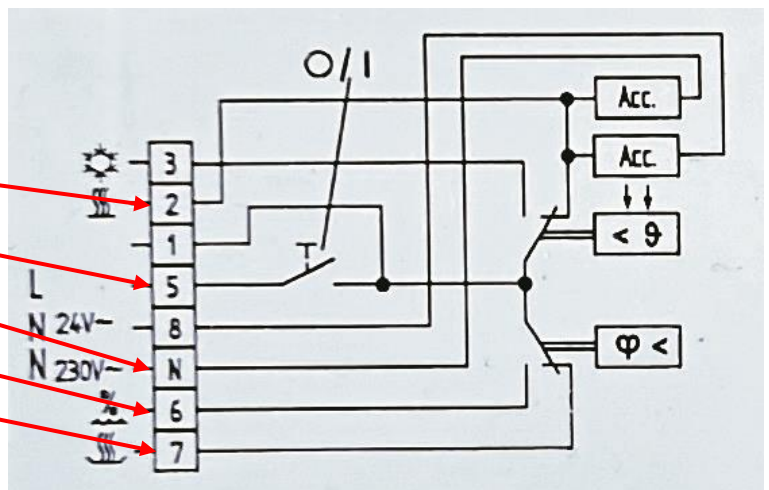
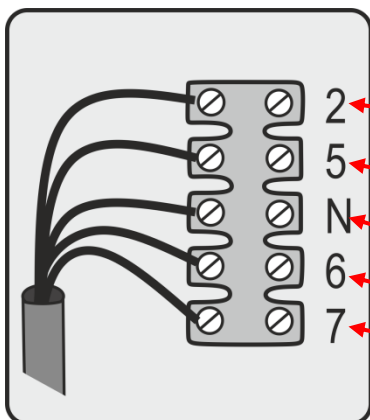
Black box from the *SIDE* of the electrobox

POTENCIAL-FREE CONTACT

- POTENTIAL CONTACT- NO / Normal Open /
- - If the air is heated, then C / closed /

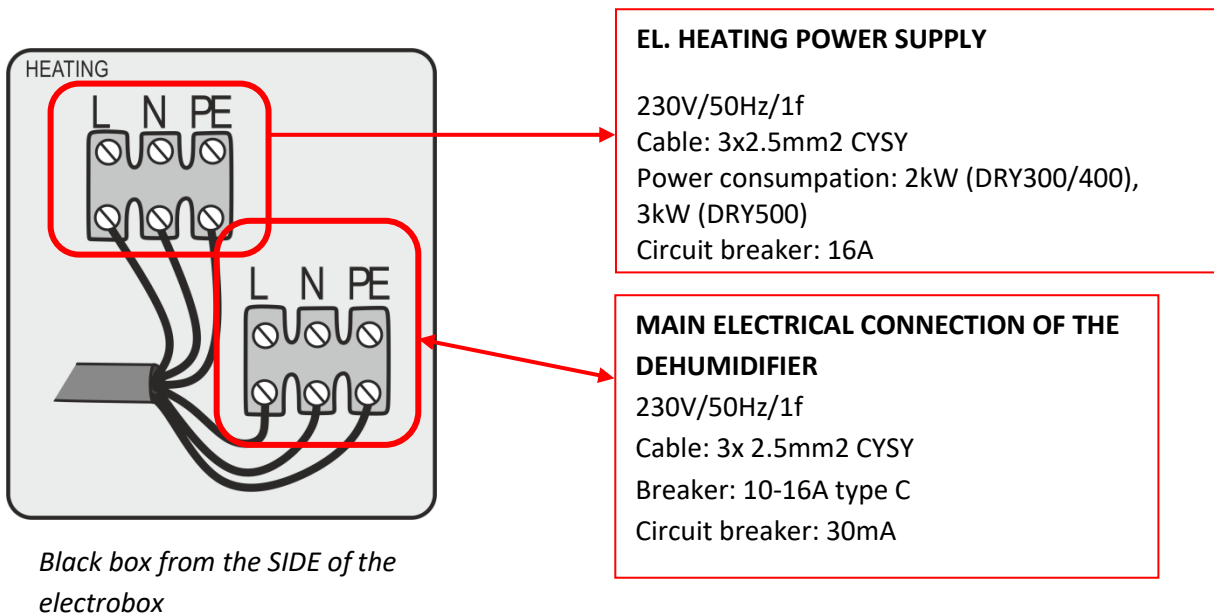
MAIN ELECTRICAL CONNECTION OF THE DEHUMIDIFIER

230V/50Hz/1f
 3x 2.5mm² CYSY
 breaker 16A type C
 circuit breaker 30mA



Black box from the *FRONT* of the electrobox

Electric heating element connection for DRY 300/400/500



The functions and operation of the remote humidistat are described in a separate enclosed manual.

Main electrical connection to the flexible cable to the electrical outlet

Models with a mobile stand on the floor are supplied with a flex cord for connecting a socket up to 220-240 V / 50 Hz / 1f. The socket must be designed for humid environments and separately protected: a 16A circuit breaker (DRY 300/400/500) with a residual current device (RCD) with a rated residual current not exceeding 30 mA.

Connection to air ducting

Air ducting needs to be designed with focus on pressure drop. The pressure drop needs to be lower than the disposable pressure created by the unit (shown in section Technical data). Air ducting is to be connected to the unit's cover which has matrixes type M6 ready to hold the screws. The air inlet/outlet cover cut-outs are in dimensions of 300x100mm (DRY 300/400DUCT), 500x100mm (DRY 500DUCT), 700x100mm (DRY 800/1200DUCT) or alternatives when connected from the front.

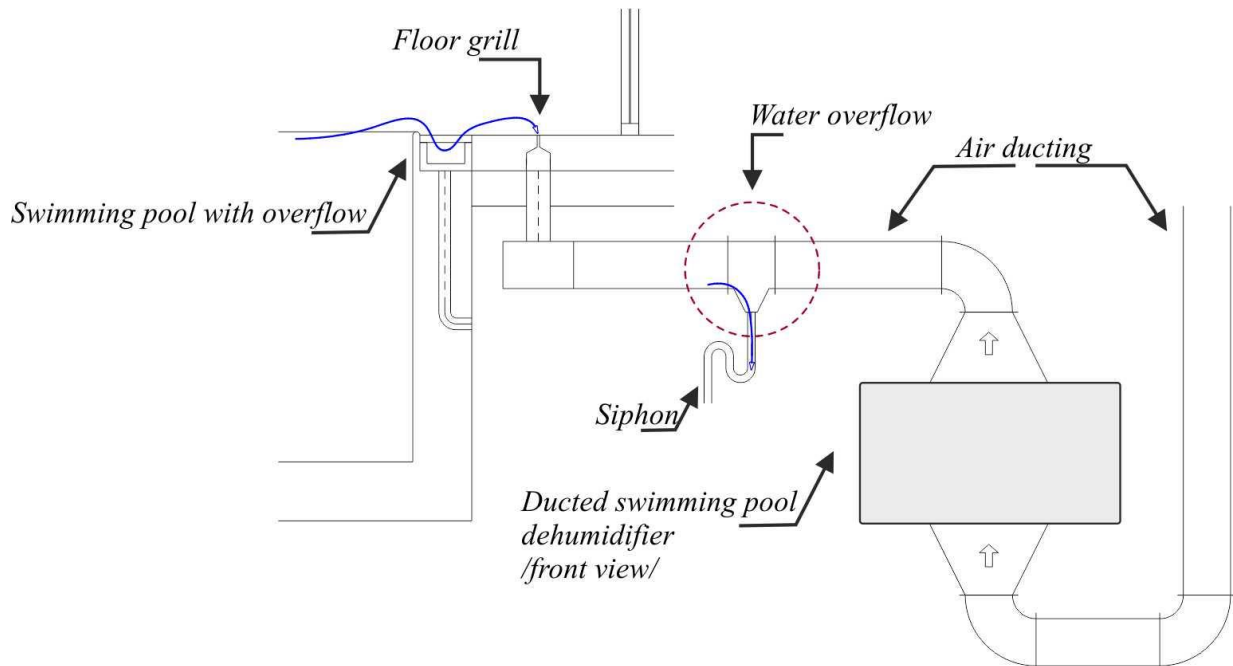
In order to prevent the pool or waste water entering the air ducting on the floor, it is necessary to install a **drainage part in air ducting**. It is necessary to ensure this mainly in the case the air is supplied to the pool hall with the floor grills. We advise to add a siphon to the water drop if the water is drained into the sewage drain, to prevent odour from the sewage piping into the air supply line (see picture below).

It is suggested to drain the water from siphon into an external drain, pool compensation tank etc. If the water will be drained into a sewer system, it is advised to regularly fill the siphon with water to avoid unpleasant odor.

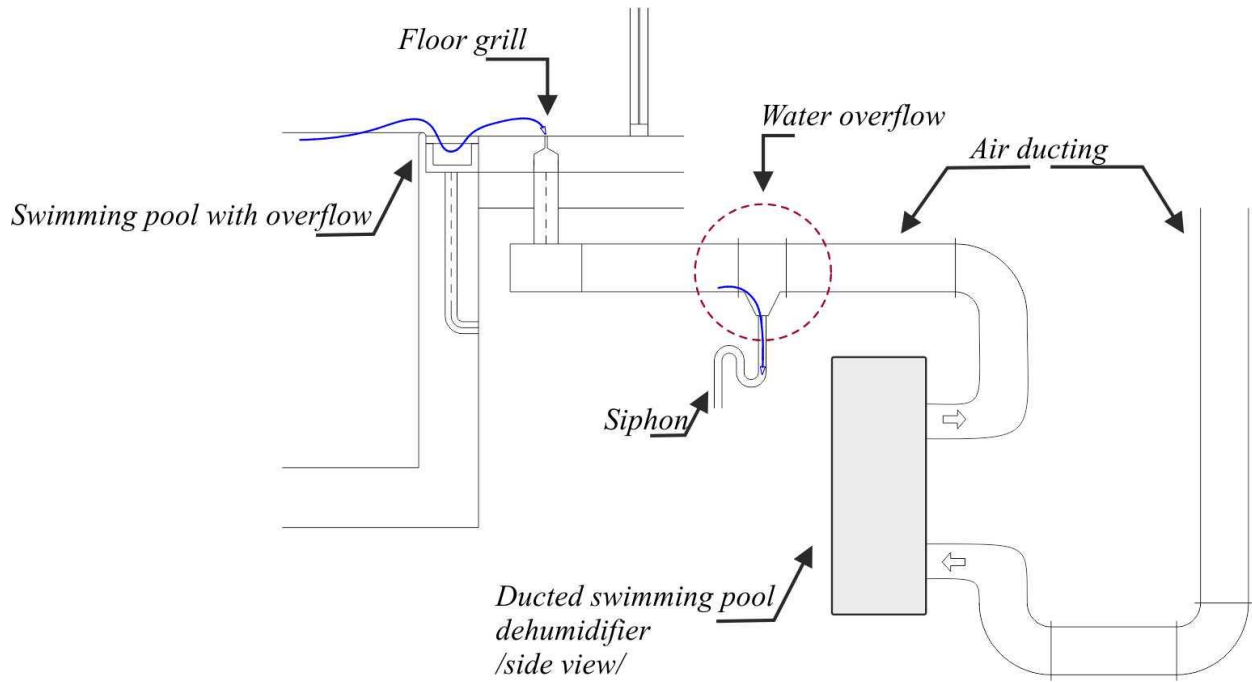


Please note that it is forbidden to pour waste water, e.g. when washing the floor in the swimming pool, into the floor grills. Overflow in the air supply ducting prevents the water from entering the pool dehumidifier where it could cause damage to the equipment.

DRY 300-400-500 DUCT



DRY 800-1200 DUCT



LPHW heating coil for additional heating – on demand

The LPHW heater element is supplied on demand only. Connection of the LPHW onto the LPHW plumbing is carried out similarly to the installation of radiators. On the feeder pipe, it is connected by a control valve and on the return pipe by a closing screw joint. The LPHW is not supplied with a control valve and a screw joint; these are supplied by the supplier of the heating.



The dehumidifier can be equipped with Solenoid valve on demand. In combined use together with LPHW, the dehumidifier has the functionality of individual heating appliance (fan coil), i.e. fan works independently with the compressor (humidistat) and independently with LPHW (thermostat).



If you chose LPHW with your dehumidifier without built-in digital humidistat & thermostat and without remote wireless humidistat & thermostat, there is a risk of dehumidifier overheating. Overheating may occur if hot water flows into LPHW also in the time when the dehumidifier does not dehumidify (fan off). Normally, with built-in or remote humidistat & thermostat and original solenoid valve, the dehumidifier controls the hot water inflow automatically thus effectively avoids overheating damage. Without original thermostat and/or solenoid valve it is necessary to ensure proper and effective regulation of hot water inflow. Manufacturer, distributor or reseller do not bear responsibility for damage resulting from not following above instructions.



LPHW connection options (from the back or from right) are described in section "Unit's dimensions".

DRY 300/400 LPHW nominal heating outputs

	Heating output: /W/
90/70/30 °C	3500
80/60/30 °C	3005
70/50/30 °C	2240
55/45/30 °C	1550
45/35/30 °C	665

DRY 500 LPHW nominal heating outputs

	Heating output: /W/	45/35/30 °C
90/70/30 °C	5000	1005
80/60/30 °C	4200	
70/50/30 °C	3350	
55/45/30 °C	2150	

DRY 800/1200 LPHW nominal heating outputs

	Heating output: /W/
90/70/30 °C	7000
80/60/30 °C	6200
70/50/30 °C	4350
55/45/30 °C	3005
45/35/30 °C	1650

After installing the LPHW plumbing and leading the LPHW into the element under pressure, it is necessary to bleed the heater element. The bleeding valve is located on the feeder pipe of the LPHW heater element.

If Solenoid valve was supplied originally with the unit, please make sure it is properly connected to water circuit. Otherwise the unit may suffer from overheating resulting malfunction or damage.



It is highly advised to insert manual valves into water piping in between the LPHW and water piping leading to a heat source /e.g. gas boiler/. This will allow easy and quick dehumidifier disconnection from heating system.

Hot gas defrost (DRY300/ DRY400/ DRY500DUCT) – on demand

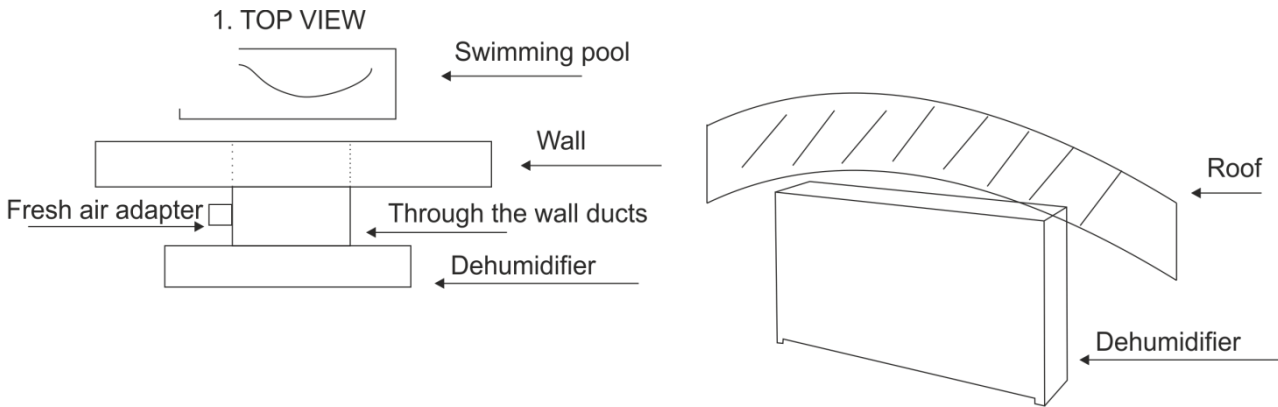
Hot gas defrost allows the dehumidifier to operate effectively at air temperatures down to 5°C. It is designed for heavy duty low air temperature operations. Although the efficiency of the device concerning the extraction rate versus energy consumption by 5°C ambient air temperature conditions is low, the dehumidifier will still operate normally. If your dehumidifier is equipped with hot gas defrost accessory, then the gas circuit is equipped with 4-way valve. When temperature on evaporator drops below zero, system starts to count 30 minutes of a time. After this period, the evaporator temperature is checked again and if the current temperature is still below zero, the compressor and the ventilator are turned off. Dehumidification stops. Gas circuit is reversed and after 3 min the compressor starts. System now defreezes the unit for 3 minutes. After another 3 minutes, if the defrost cycle is completed, the unit goes into usual operations. In extremely low temperatures and in still humid enough air it is normal to take 2 or 3 defreezing cycles to complete the procedure.

External installation

Your Microwell dehumidifier can be installed outdoors if you ordered it with an outdoor kit. In such case the dehumidifier is equipped with additional compressor heater, condensate tray defrost and the whole unit is specially insulated with thicker layer of thermal insulation to avoid condensation on its structure.

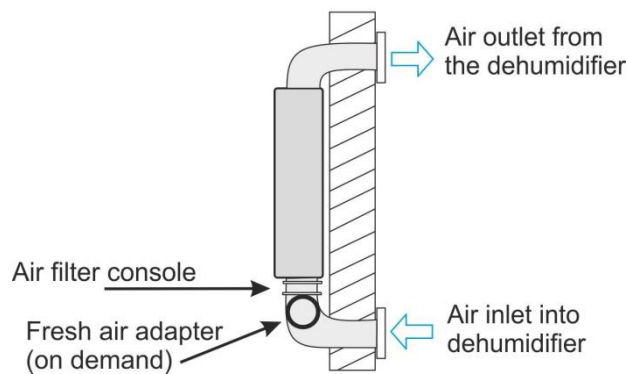
The insulation is to avoid condensation on the chassis of the unit. It is advised to install protection roof above the unit. It is strongly advised to thermally insulate air ducting.

Please proceed as per below when installing the through the wall:



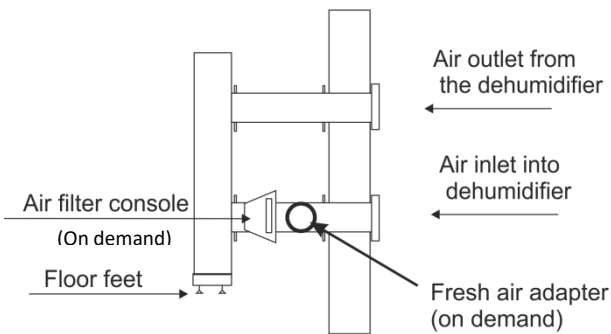
DRY 300-400-500 DUCT

SIDE VIEW

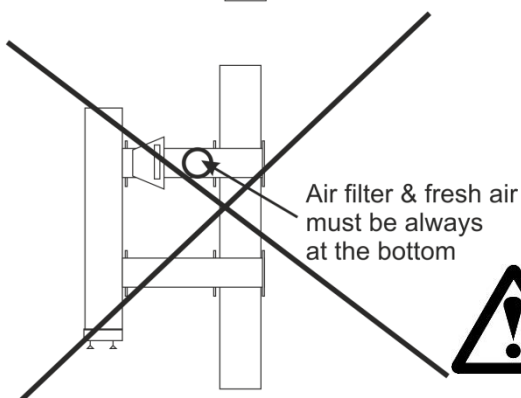
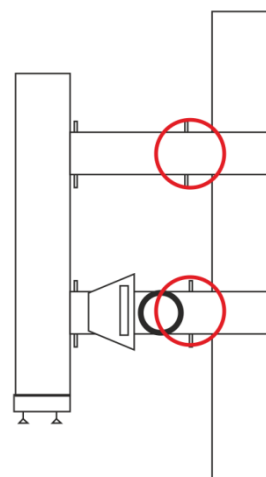


DRY 800-1200 DUCT

SIDE VIEW



INSULATION



Always insulate the exceeding parts of the air ducting in order to avoid condensation on the ducts' structure.

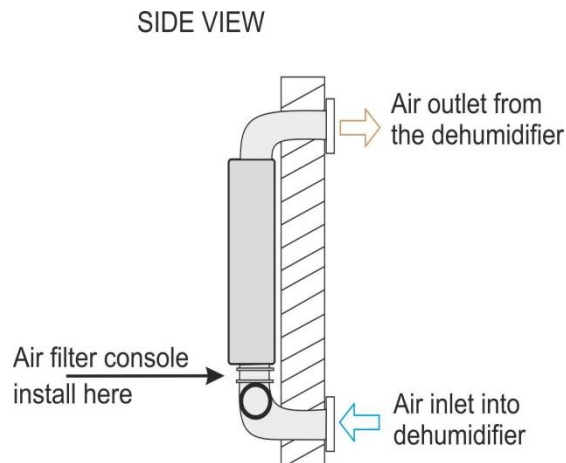


Remark for outdoor installation: Although your dehumidifier unit is equipped with special thermal insulation, antifreeze protectors and its chassis is made from galvanized metal powder coated by enamel at 180°C, it is advised to avoid a direct sunlight, rain or snow to fall onto the unit. We thus advise installing a small roof or install a unit under a staircase.

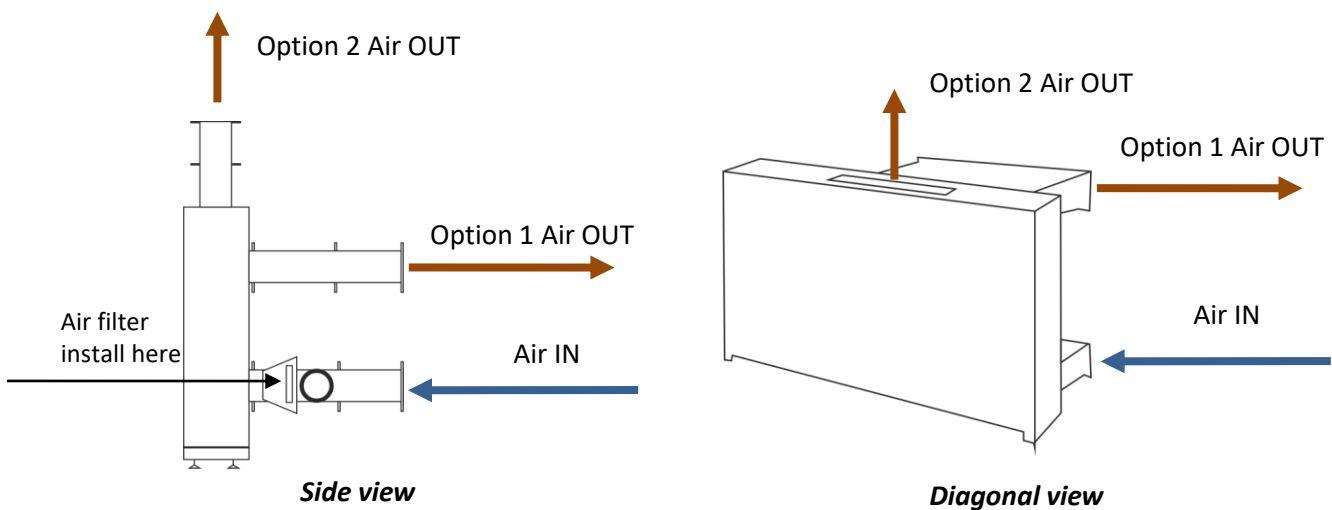
Air filter – on demand

Your dehumidifier could be equipped with air filter if so this is G3 class (10µm). You will receive together with unit a filtration cassette. Always install the filter at AIR IN side.

DRY 300-400-500 DUCT example of air filter installation

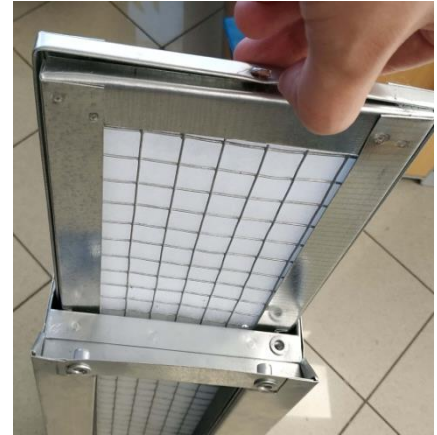


DRY 800-1200 DUCT examples of air filter installation



Air filter replacement

1. Remove the screws.
2. Remove the filter cover.
3. Pull out the filter.
4. Replace the filter.



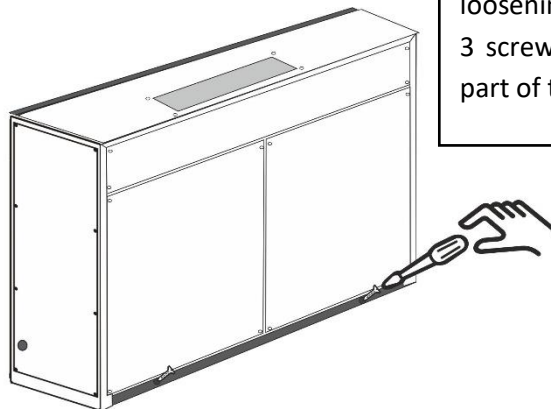
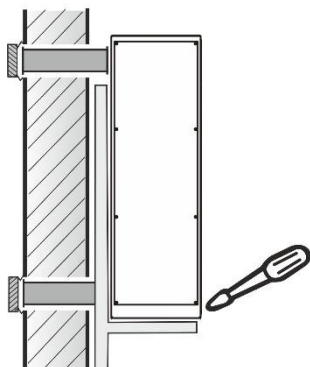
Put a new air filter and follow the same procedure, but in reverse order.



Cover removal

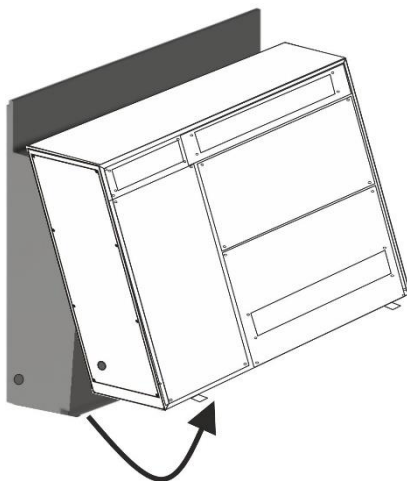
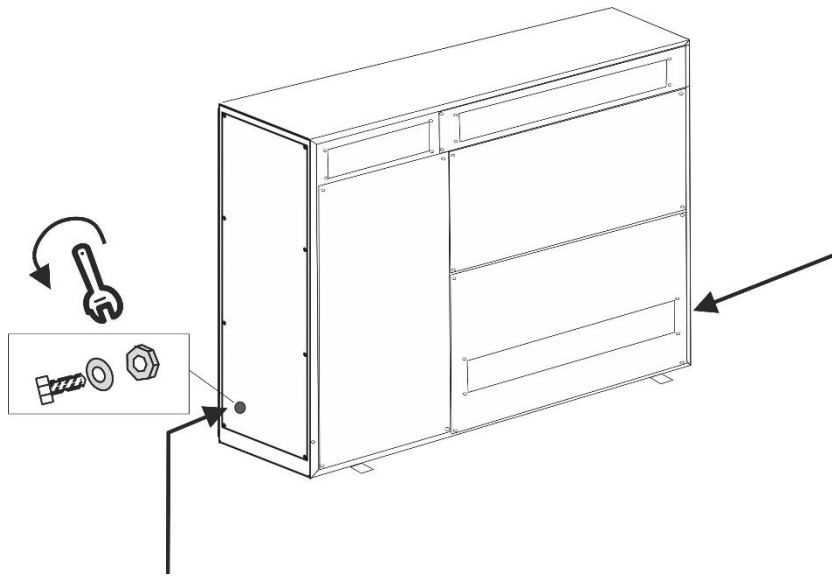
Lower the side cover caps, unscrew and remove the side cover screws.

DRY 300-400-500 DUCT



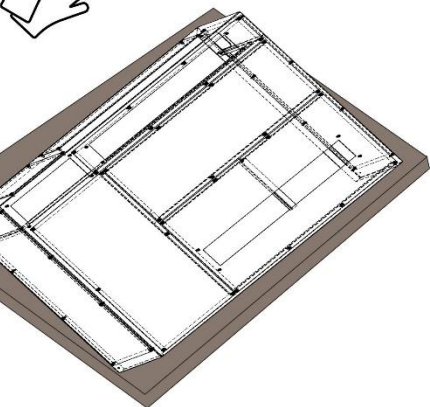
The cover can be removed after loosening 2 screws (DRY 300/400) or 3 screws (DRY 500) on the bottom part of the device.

DRY 800-1200 DUCT



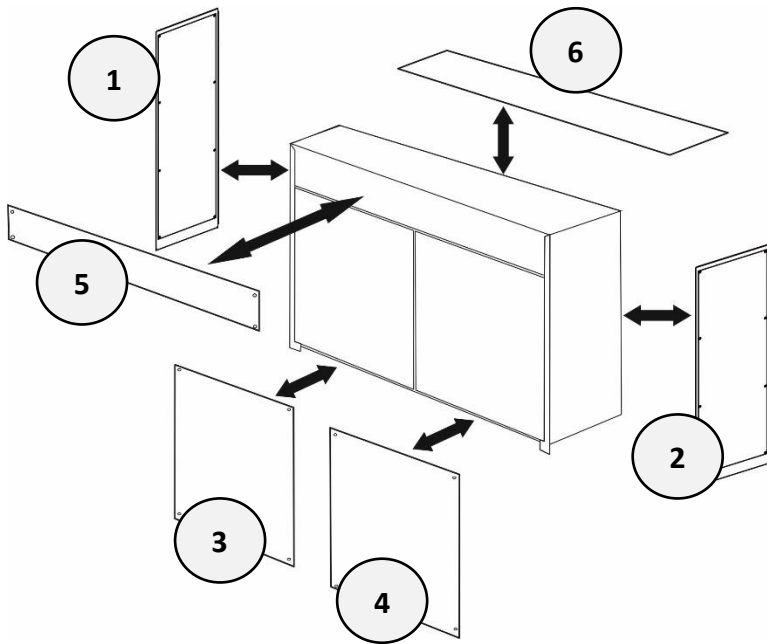
Lift the cover as shown in the illustration. Disconnect the connectors on the display on the left side under the cover.

accessories



Place the cover sideways on a foam pad or cardboard so that you do not scratch the cover on the floor. Use soft gloves when handling the kit.

Possibility to dismount DRY DUCT



Position	Component
1-Left side	Electro set
2-Right side	Expansion, LPHW, Connection, 4-way valve
3-	Compressor + Electro box
4-	Evaporator + Condensate tray, Fan Coil
5-	Condenser, LPHW, El. coil
6-Top	LPHW, El. coil, Condenser

Your Microwell DUCT dehumidifier allows you to access, inspect, maintain or service inner parts of the dehumidifier without necessity to de-install the air ducting and/or unit main chassis cover. This allows the maintenance or service to be easier and faster. Each compartment is affixed with 4 or 6 screws.

6. TECHNICAL DATA

6.1 Technical data table *

DATA	UNIT	DRY 300 DUCT	DRY 400 DUCT	DRY 500 DUCT	DRY 800 DUCT	DRY 1200 DUCT
For swimming pools with max. water surface	m ²	30	40	50	80	110
Extraction rate at 30°C and 60 % RH	l/24hrs	32	43	52	88	112
Extraction rate at 30°C and 70 % RH	l/24hrs	37	49,8	60	115	140
Extraction rate at 30°C and 80 % RH	l/24hrs	43	56,2	68	135	170
Operational temperature - standard	°C	22-35	22-42	22-35	22-35	22-35
Operational temperature - antifreeze stat	°C	15-35	15-42	15-35	15-35	15-35
Operational temperature - Thermostatic expansive valve (TEV)	°C	22-42	standard	22-42	-	-
Operational temperature - antifreeze stat + TEV	°C	15-42	15-42	15-42	-	-
Operational temperature - hot gas defrost	°C	5-35	-	5-35	-	-
Operational humidity range	% RH	20-100	20-100	20-100	20-100	20-100
Air flow	m³/h	500	500	1000	1100	1200
EXTERNAL PRESSURE	Pa	200	200	200	170	145
Noise level (in 1m distance)	dB (A)	54	54	56	58	60
Heat output	W	1900	1900	3500	5100	5250
Energy consumption	W	800	800	1150	1700	2250
Voltage	V/ph/Hz	230-240/1/50	230-240/1/50	230-240/1/50	230-240/1/50	230-240/1/50
Operating / Starting current	A	6.5 / 18	6.5 / 18	6.5 / 30	7.6/50	10/50
Protection	A	16	16	16	16	20
Conductor	mm ²	CYSY 3C x 2.5	CYSY 3C x 2.5	CYSY 3C x 2.5	CYSY 3C x 2.5	CYSY 3C x 2.5
Condensed water pipe	mm	d 16	d 16	d 16	d 16	d 16
Dimensions netto (width x height x depth)	mm	880 x 658 x 240	880 x 658 x 240	1245 x 660 x 255	1247 x 950 x 300	1247 x 950 x 300
Dimensions brutto (width x height x depth)	mm	1315 x 735 x 345	1315 x 735 x 345	1315 x 735 x 345	1300 x 1020 x 370	1300 x 1020 x 370
Weight netto / brutto	kg	56 / 61	56 / 61	78 / 91	102/135	103/136
Amount of refrigerant - R 410 A	kg	0.55 (1.15t CO ₂ ekv.)	0.60 (1.25t CO ₂ ekv.)	0.75 (1.57t CO ₂ ekv.)	1.4 (2.92t CO ₂ ekv.)	1.6 (3.34t CO ₂ ekv.)
Max. pressures in the system HP/LP	bar	28.5/8.5	28.5/8.5	28.5/8.5	35/12	35/12

* Manufacturer reserves the right to change above data without notice.

Gas circuit is filled with refrigerant R410A which is two-content refrigerant (R32/R125). Based on ES No. 842/2006 are these contents considered to be a fluorocarbon greenhouse gases. The unit contains fluorocarbon greenhouse gases included in Kyoto Protocol:

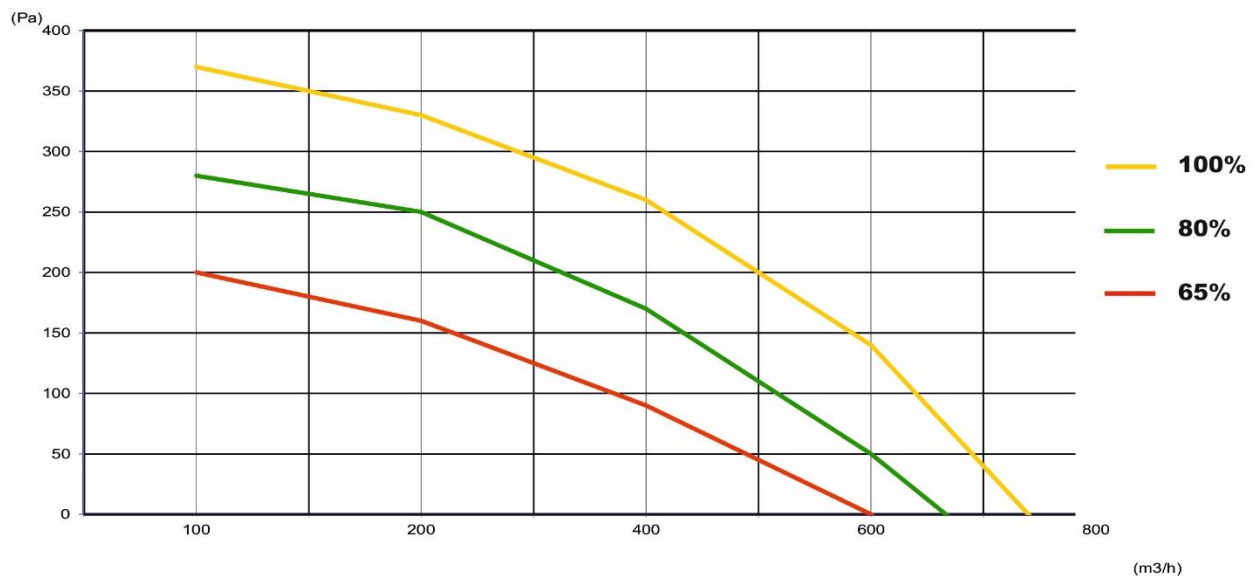
**R410A with global warming potential (GWP) 1720:
(R-32/125 50/50)**

$\text{CH}_2\text{F}_2 + \text{CF}_3\text{CHF}_2$

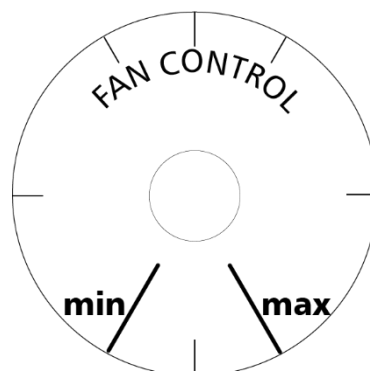
This information is informative, for exact amount of refrigerant in your device, please turn to serial number sticker (located in the upper right corner of the unit from the back).

6.2 Ventilator & Extraction rate diagrams

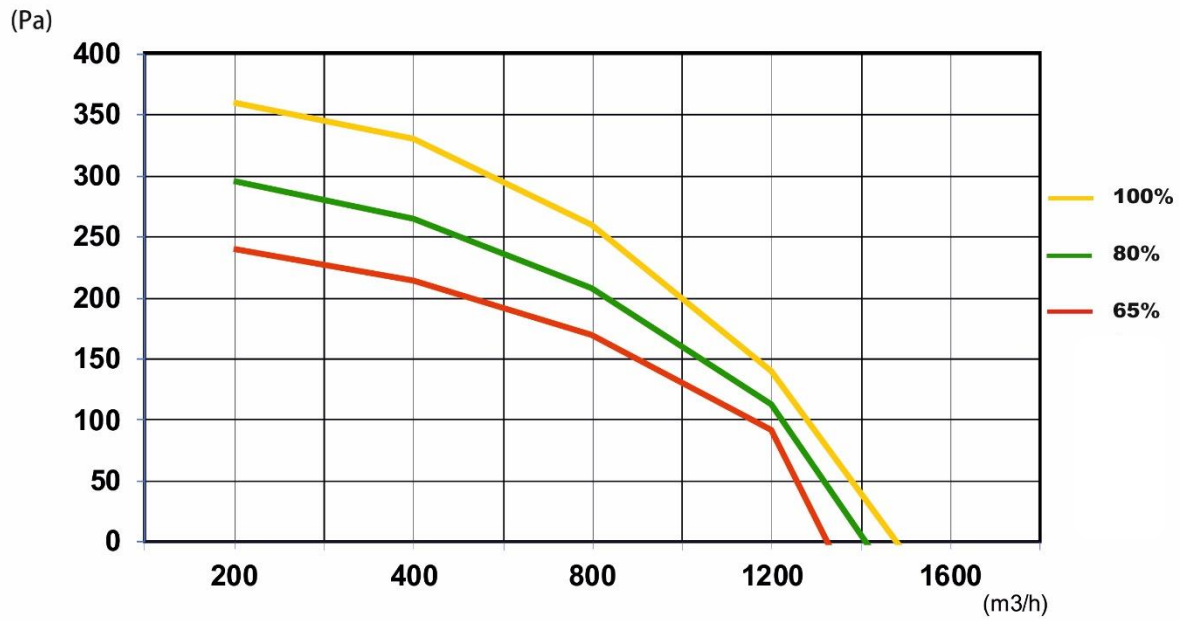
DRY 300/400 DUCT



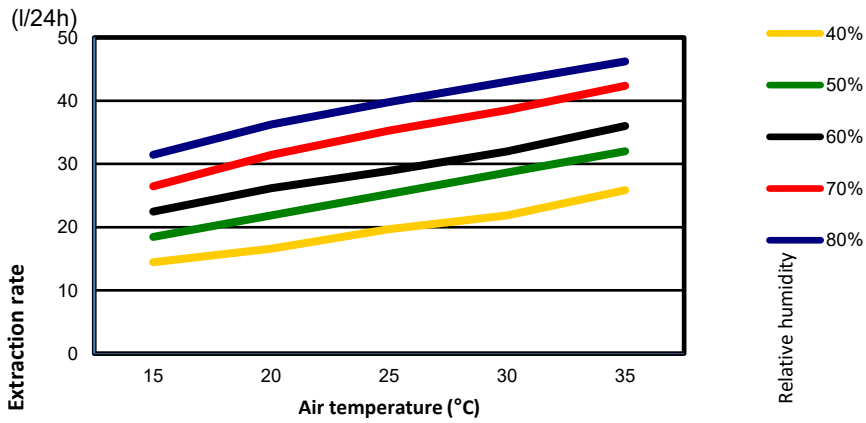
Each Microwell DUCT dehumidifier is supplied with manual fan speed control. This allows manual settings of its speed in range of 65~100%. This is used to optimize performance/noise level ratio by each particular installation. Use at maximum for beginning or testing. Once your installation is fully completed (with all air ducting elements), please adjust the knob left-rightwards to fit into your performance and noise level preferences.



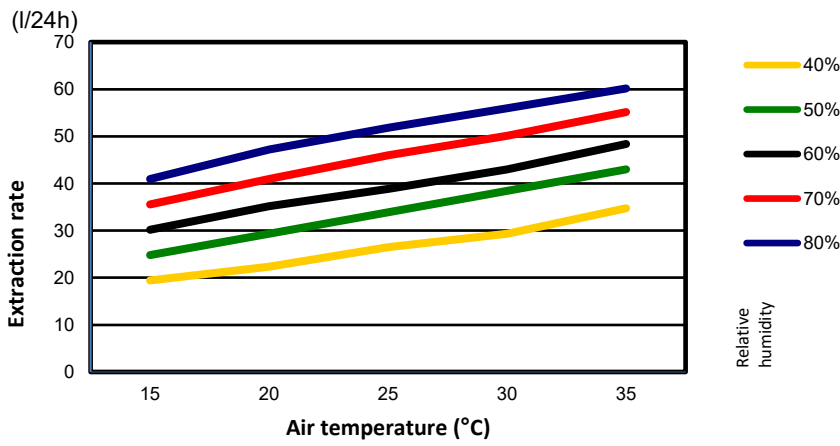
DRY 500/800/1200 DUCT



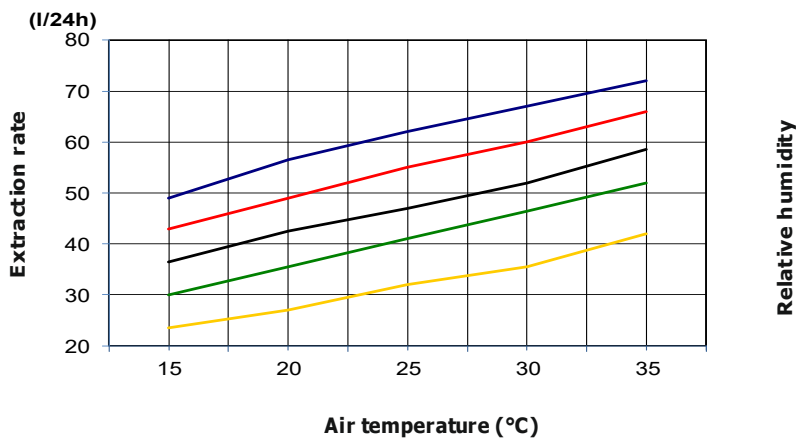
DRY 300 DUCT



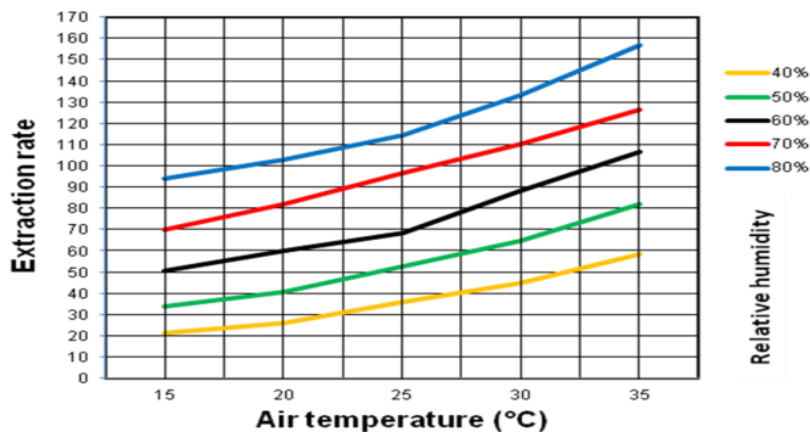
DRY 400 DUCT



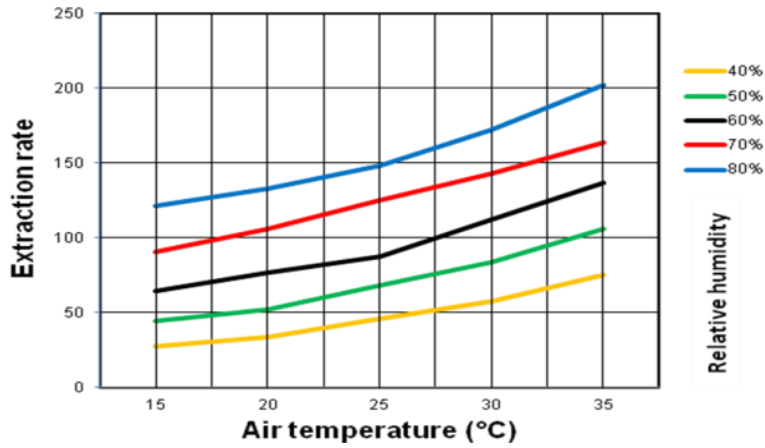
DRY 500 DUCT



DRY 800 DUCT



DRY 1200 DUCT

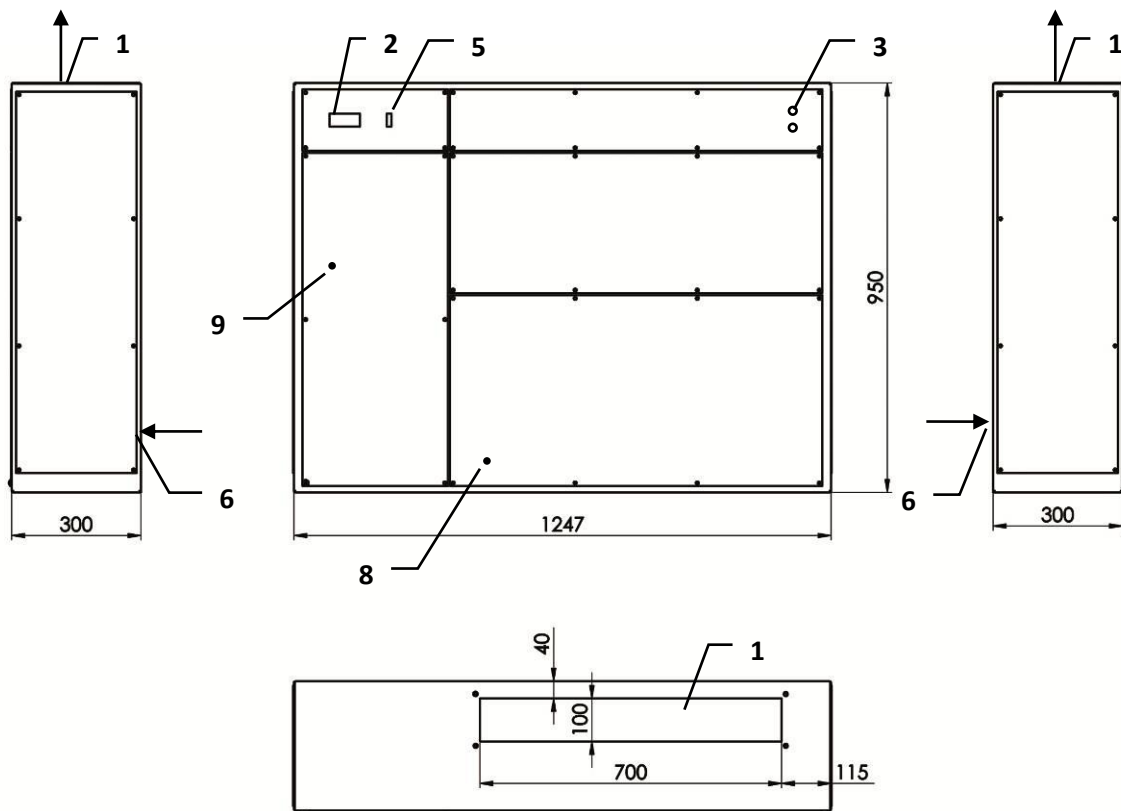


LEGEND:

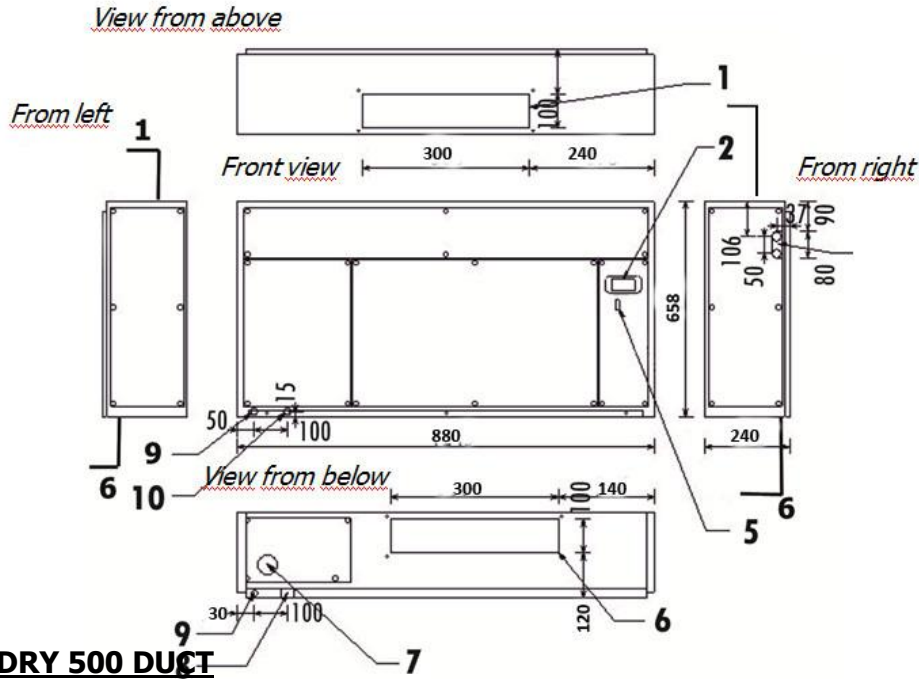
- 1 - DRY AIR OUTLET
- 2 - DIGITAL HUMIDITY REGULATOR
- 3 - LPHW CONNECTOR – ON DEMAND
- 5 - MAIN SWITCH
- 6 - HUMID AIR INLET
- 7 - AUXILIARY MECHANICAL HUMIDISTAT
- 8 - CONDENSATE DRAIN FROM THE BOTTOM
- 9 - ELECTRICITY CONNECTION
- 10 - CONDENSATE DRAIN FROM BEHIND

6.3 Unit's dimensions

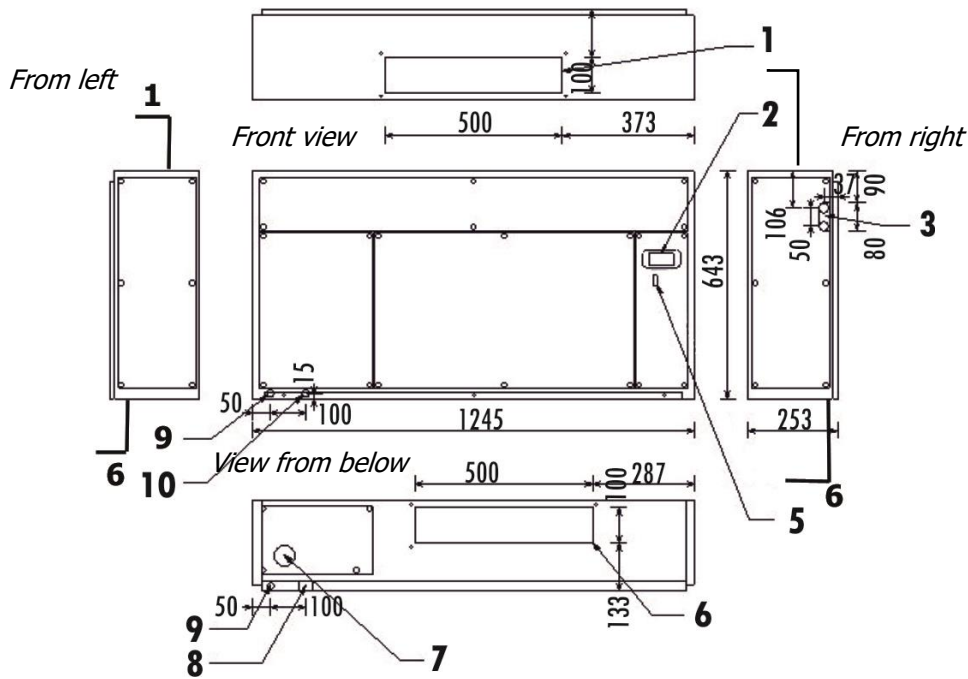
DRY 800/1200 DUCT



DRY 300/400 DUCT



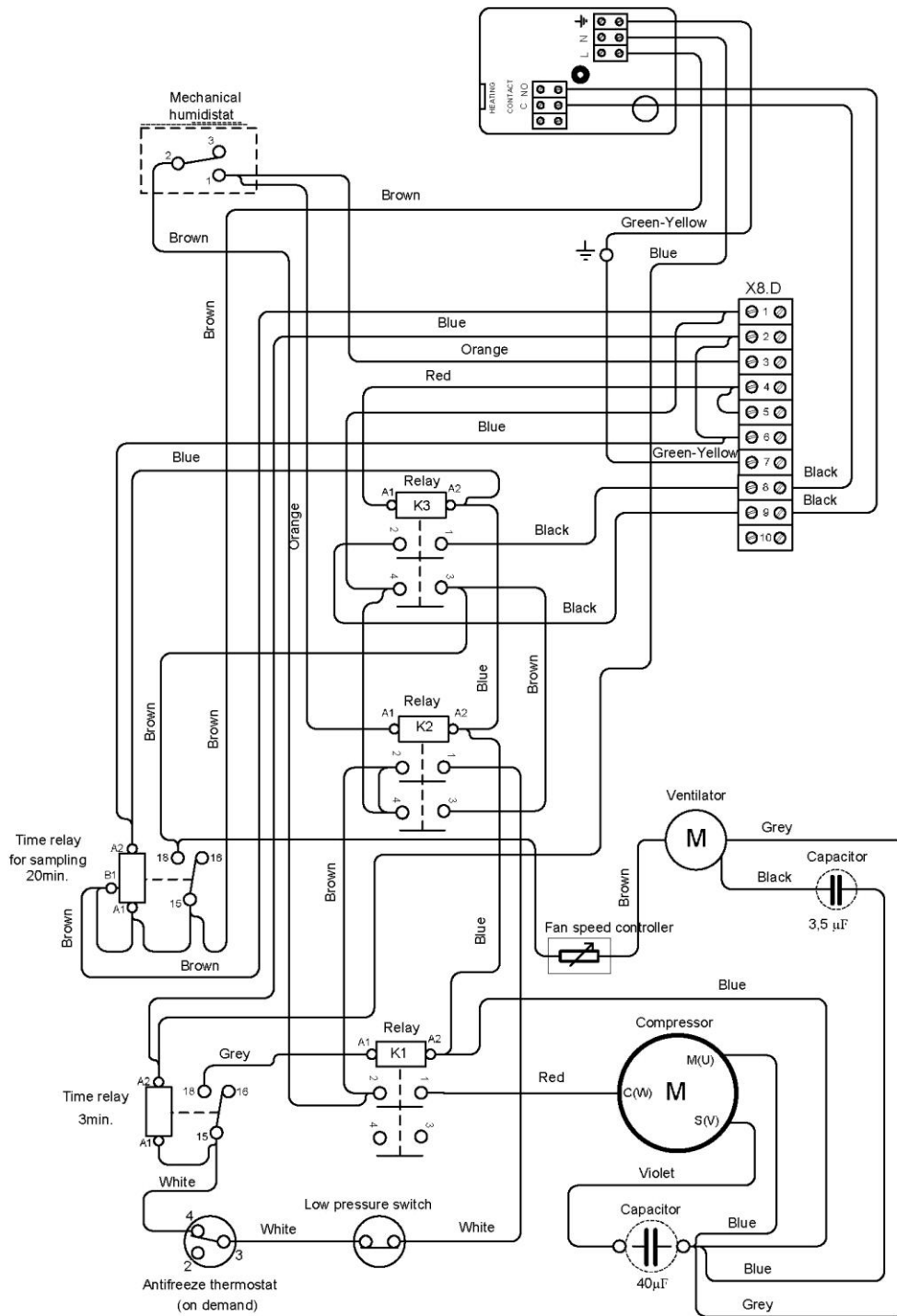
View from above



6.4 Wiring diagrams

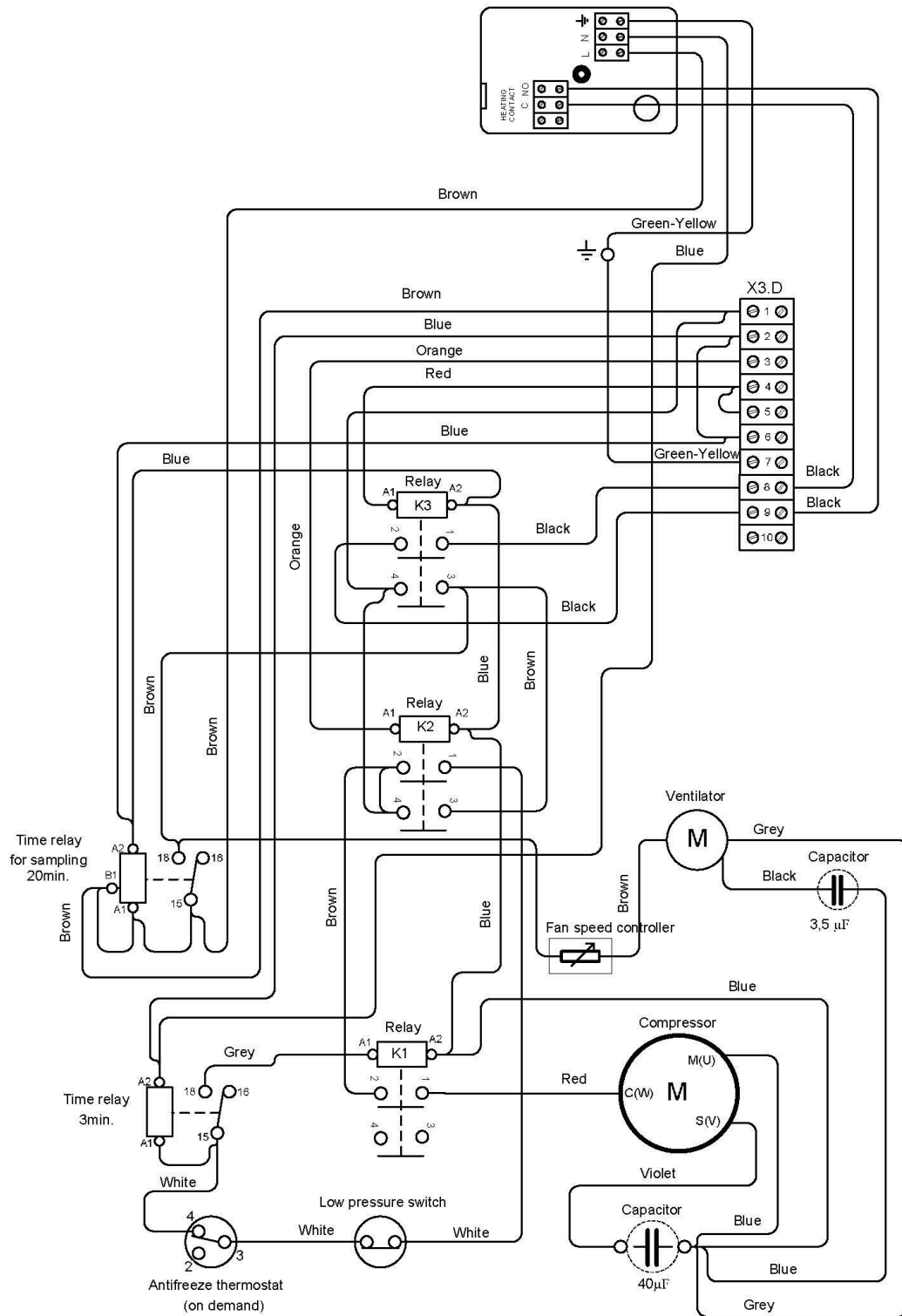
DRY 300 DUCT BK - Fan Speed Controller

16.9.2022



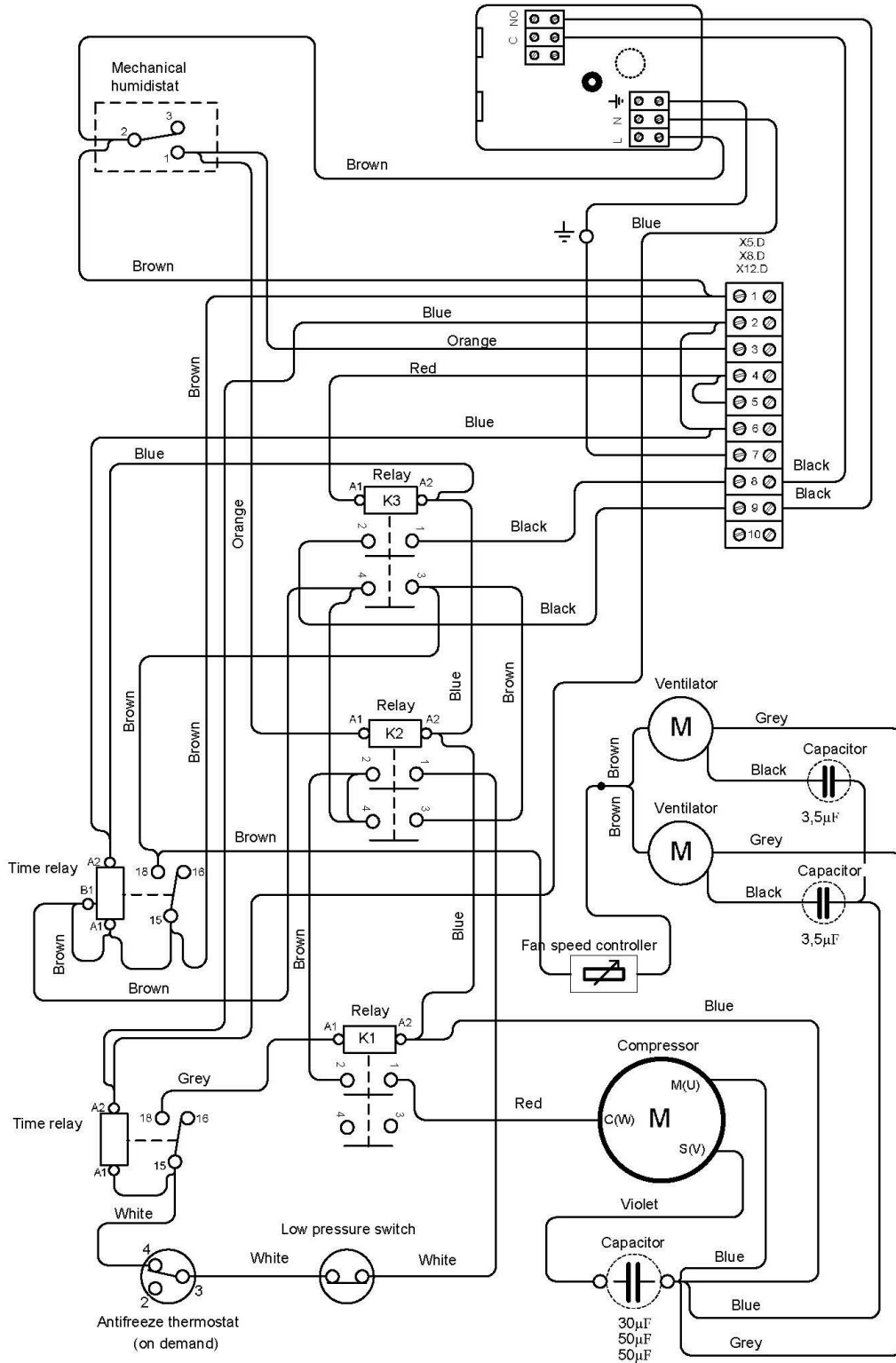
DRY 300 DUCT BK - Fan Speed Controller without Hygrostat

16.9.2022



DRY 500,800, 1200 DUCT /voltage-free contact/

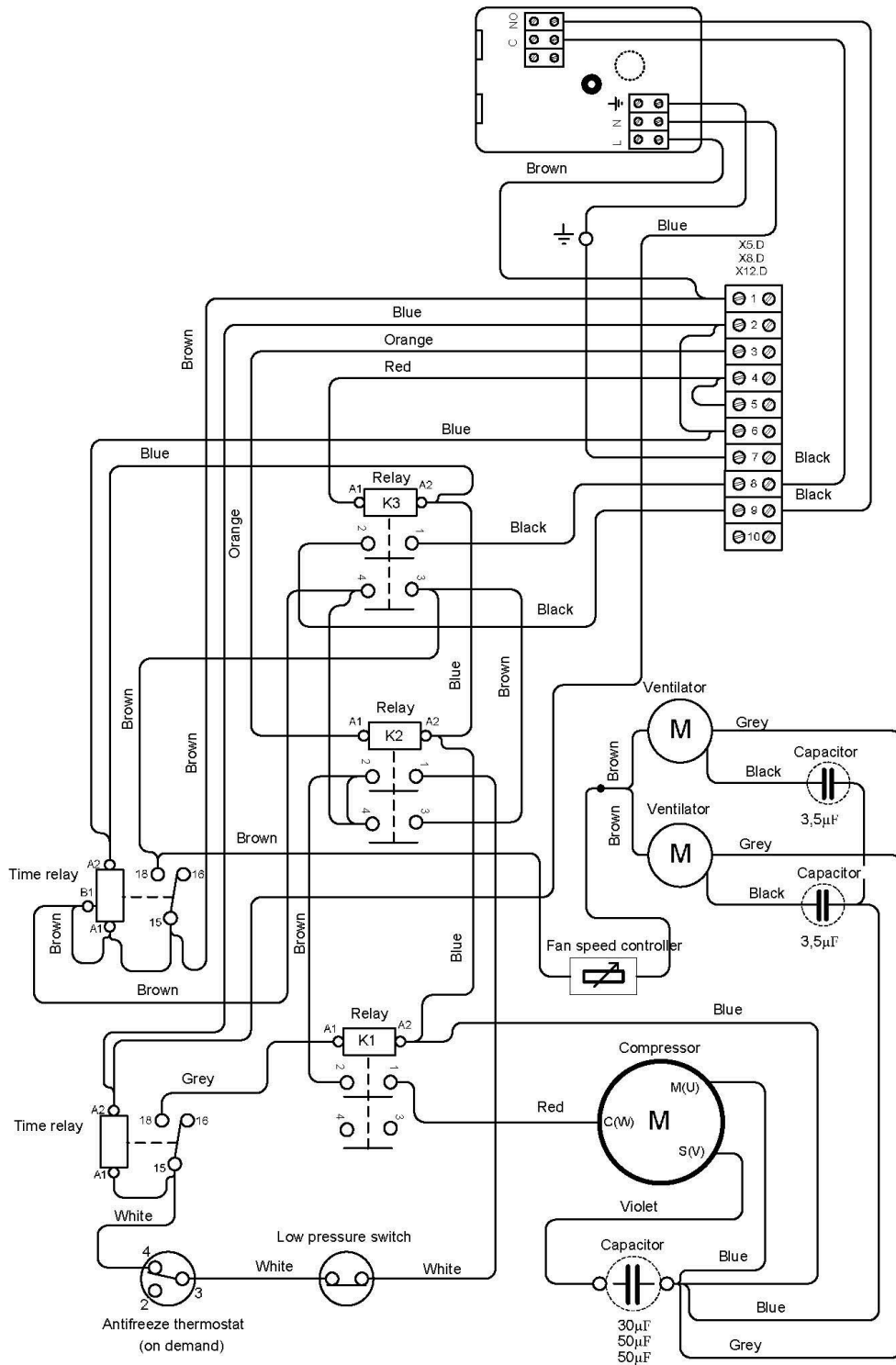
16.9.2022



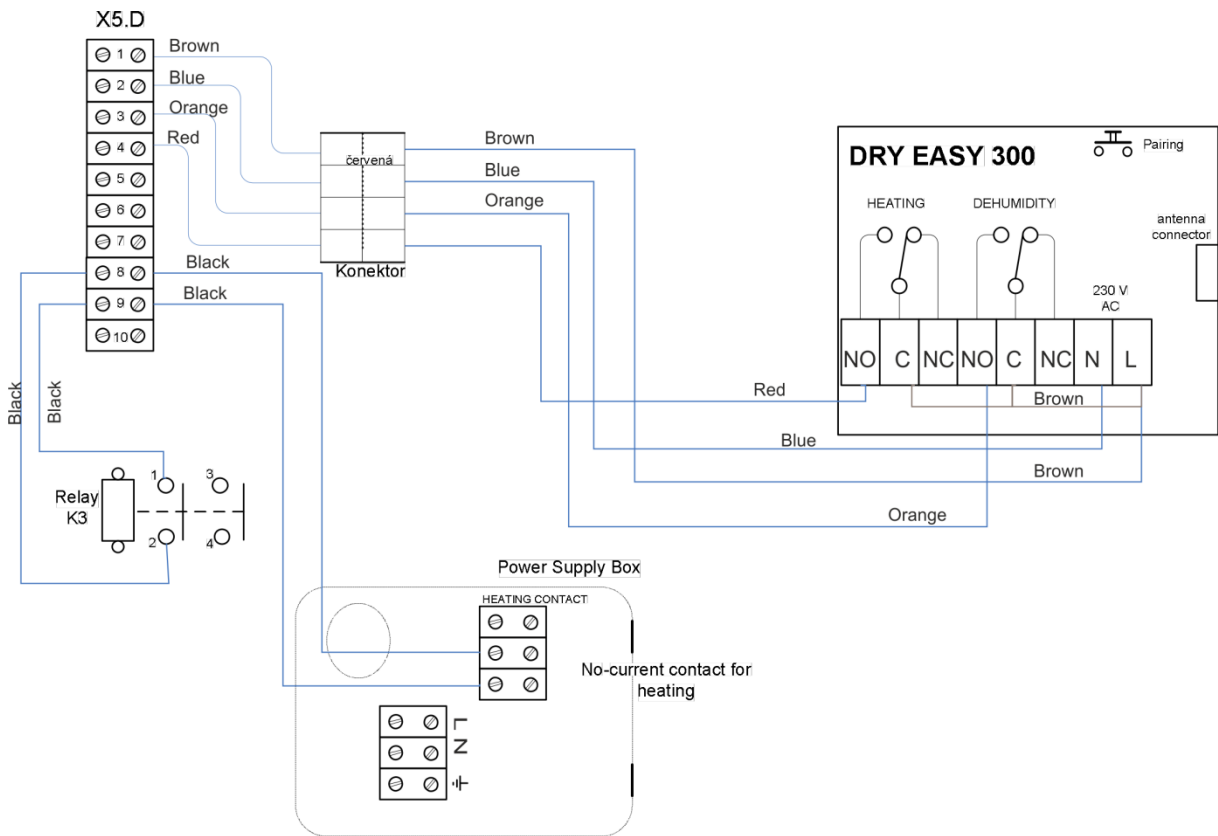
DRY 500,800, 1200 DUCT without Hygostat

16.9.2022

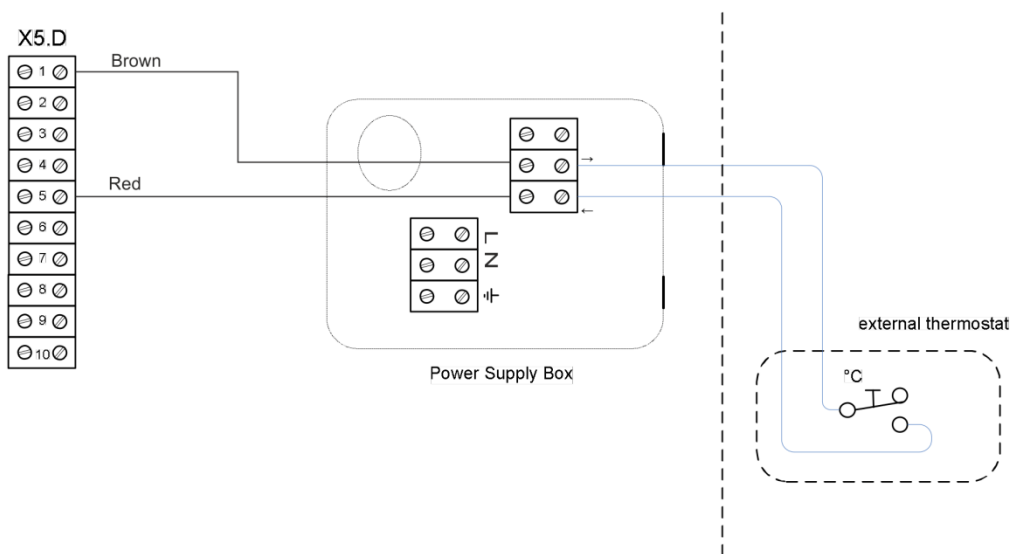
/voltage-free contact/



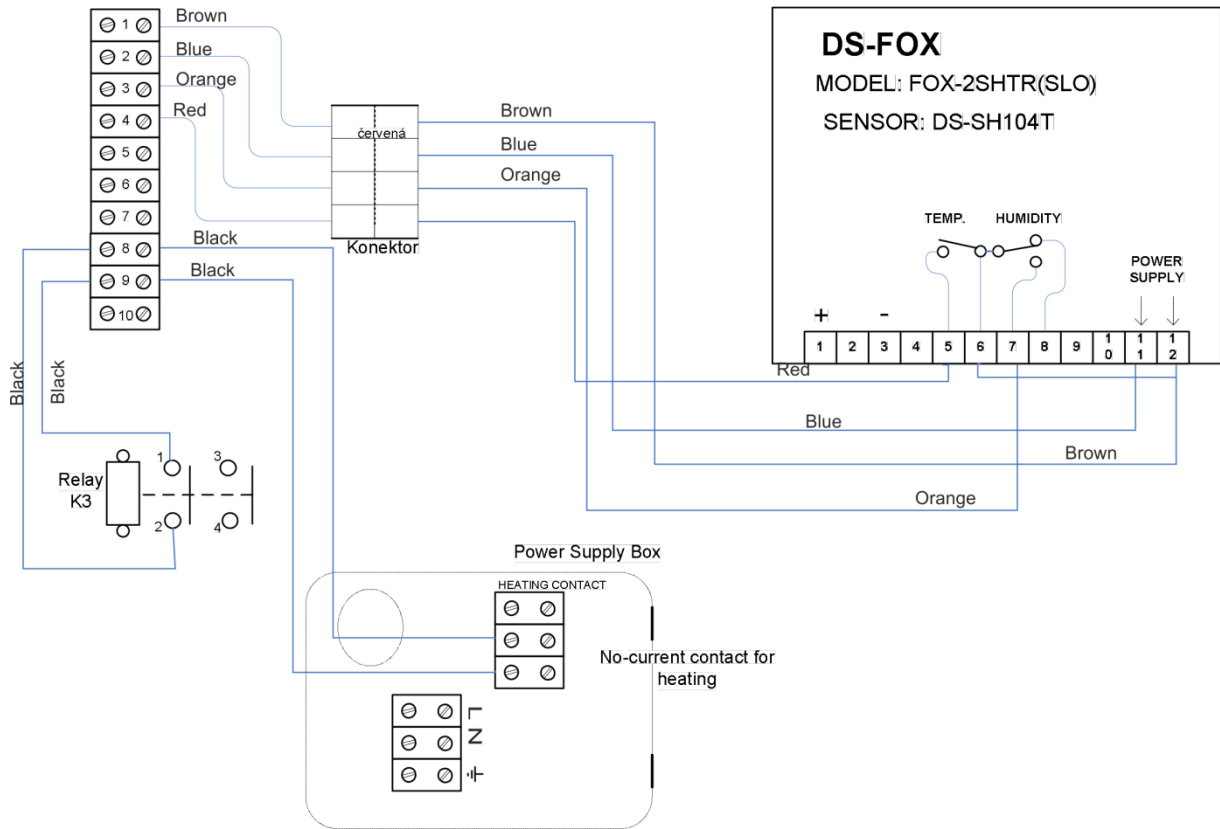
DRY 300/400/500/800/1200 DUCT – X5.D DRY EASY 300 /No-current contact for heating/



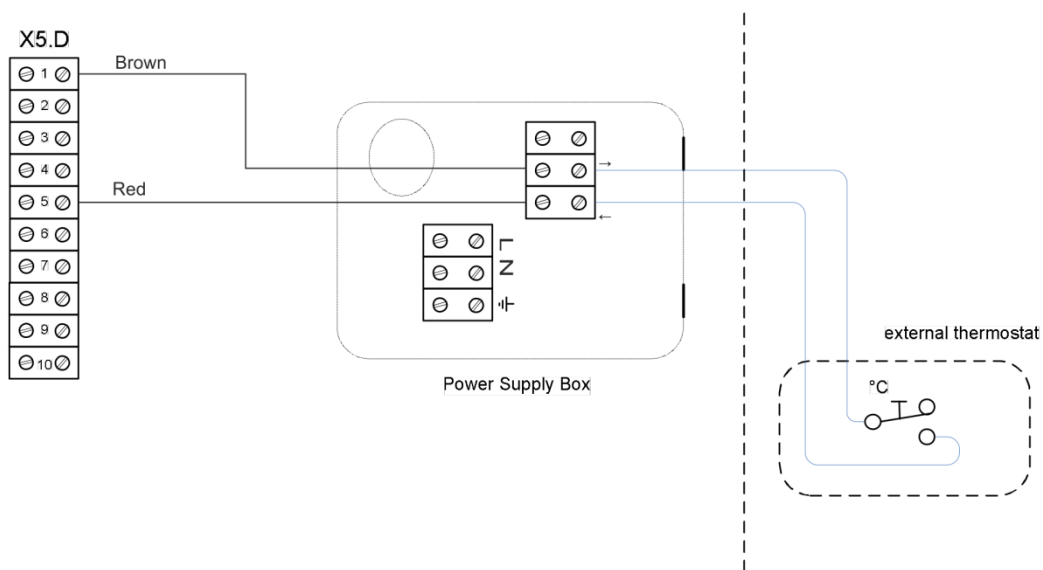
X5.D EXTERNAL THERMOSTAT



DRY 300/400/500/800/1200 DUCT – X5.D DSFOX /No-current contact for heating/



X5.D EXTERNAL THERMOSTAT



7. SUMMER SHUT-DOWN

Some swimming pool users use to shut the dehumidifier for summer down. This is mainly due to favourable weather conditions with dry and warm weather. In such case, good air ventilation / natural air exchange does the job of humidity control for few weeks/months of the year. Although following rapid change in weather (e.g. into rainy days) may result in high humidity in your pool.

In this case please make sure that:

1. Dehumidifier's circuit breaker is off (i.e. dehumidifier does not have any power supply)
2. Dehumidifier is cleaned of duct, fluff or other dirt that may harden / stiffen its structure during the shut down period making it hard to remove afterwards.
3. Make sure air inlets and outlets are covered properly so no chlorine or other chemicals are not input into dehumidifier body, especially ventilator bearings. Failing to do so may result in bearings corrosion and failure of the dehumidifier.
4. **Please be advised that during shut down of the system the dehumidifier does not provide humidity control at all.**

8. WARRANTY

This dehumidifier is subject to a warranty period of 2 years. It may have been prolonged in your country or by your distributor or reseller. Please contact your reseller or distributor in the case a warranty should be claimed for this dehumidifier.

Please note that no claims will be accepted (warranty void) if:

1. The dehumidifier has been used in an incorrect way, not as described in this manual or in contrary to this User's manual or against Safety measures of this User's manual.
2. The dehumidifier is installed in an incorrect way, not as described in this User's manual or in contrary to this User's manual.
3. The dehumidifier was put to operation by an unauthorized person.
4. The air flow through the dehumidifier is out of the defined borders.
5. The unit has been exposed to a mechanical damage / force or any unauthorized action was performed on construction of a unit - welding, brazing or has been mechanically damaged resulting in scratches, blends, compressions, pipe rupture, etc. No mechanical damage is accepted as warranty claim unless a written claim had been made with transporting agent delivering the device.
6. Chemical conditions in the pool or pool hall have not been within the defined borders (*please see below table Allowed chemical conditions*).
7. The dehumidifier suffered frost or overheating damage resulting from ambient air temperatures out of Temperature operational range.
8. The electric tension source is insufficient or improper in any other way.



When applying for warranty, please contact your distributor and indicate dehumidifier model, serial number and date of purchase. Please describe the genesis of the failure.

Acidity / pH level:	pH	7,4 +/- 0,4
Total alkalinity, as CaCO ₃	ppm	80-120
Total hardness, as CaCo ₃	ppm	100-300
Total melted dry mass	ppm	max. 3000
Maximum salt content (standard dehumidifier)	wt/wt	0.3% (3,000 ppm, 3 kg of salt per 1 m ³ of water)
Maximum salt content (dehumidifier with SALT+/SULPHUR+ treatment)	wt/wt	3% (30,000 ppm, 30 kg of salt per 1 m ³ of water)
Free chlorine range	ppm	1,0-3,0
Superchlorination	ppm	max. 30 ppm/max. 24 hours
Bromine	ppm	2-3
Baquacil	ppm	25-50
Ozone	ppm	0,8-1,0
Maximum copper content	ppm	max. 2
Aquamatic single purifier	ppm	max. 2
Tarn clean purifier	ppm	max. 2
Sherwood purifier	ppm	max. 2

Table: Allowed chemical conditions

TRANSPORT INSTRUCTIONS



*The dehumidifier must be transported in the original packaging only and **in a vertical upright position**. Make sure that the dehumidifier cannot turn over or fall down during transport. Never put the dehumidifier aside! It may lead to serious compressor damage!*

No mechanical damage is accepted as warranty claim unless a written claim had been made with transporting agent delivering the device. When receiving the product please check whether the package is not damaged. Please make a proper documentation of any damage immediately after delivery and claim all transport damage in written form with the forwarding agent at the delivery.



TECHNICKÝ SKÚŠOBNÝ ÚSTAV PIEŠŤANY, š.p.
Certifikačný orgán certifikujúci výroby
Product Certification Body
Krajinská cesta 2929/9, 921 01 Piešťany
Slovenská republika/Slovak Republic



CERTIFIKÁT ZHODY CONFORMITY CERTIFICATE

č./No. 231299156

Výrobca/Manufacturer: **MICROWELL, spol. s r.o**
SNP 2018/42
927 00 Šaľa, Slovenská republika / Slovak Republic

Výrobok/Product: **Bazénový odvlhčovač MICROWELL**
Swimming pool dehumidifier MICROWELL

Typ/Type: **DRY 500 WAVE**

Odvođené typy / Derived types: **uvedené na druhej strane / see the next page**

Tento certifikát zhody potvrdzuje, že výrobok spĺňa základné požiadavky na bezpečnosť podľa nasledovných smerníc ES/EÚ nového prístupu v ich platnom znení:
This conformity certificate confirms the conformity of the product with essential safety requirements of the following EC/EU New Approach Directives as amended:

2014/35/EÚ	Smernica o LVD	2014/35/EU	LVD Directive
2014/30/EÚ	Smernica o EMC	2014/30/EU	EMC Directive

Harmonizované normy použité pre posúdenie zhody:
Harmonized standards used for the conformity assessment:

EN 60335-1:2012/AC:2014/A11:2014/A13:2017/A1:2019/A14:2019/A2:2019/A15:2021
EN 60335-2-40:2003/A11:2004/A12:2005/AC:2006/A1:2006/A2:2009/AC:2010/A13:2012/AC:2013
EN 61000-3-3:2013

Iné normy použité pre posúdenie zhody:
Other standards used for conformity assessment:

EN IEC 55014-1:2021
EN IEC 55014-2:2021
EN IEC 61000-3-2:2019/A1:2021
EN 61000-3-3:2013/A1:2019/A2:2021/AC:2022-01

Certifikát je vydaný na základe skúšok vzorky typu výrobku. Výsledky sú uvedené v Správe o posúdení zhody č. 230500076 zo dňa 27.04.2023

The certificate has been issued on the basis of the tests of the product type sample. The results are recorded in the Conformity assessment report No. 230500076 dated 27.04.2023



označenie môže byť použité iba v prípade posúdenia zhody so všetkými príslušnými smernicami ES/EÚ
mark can be used only in the case of conformity assessment according to all relevant EC/EU Directives

Dátum vydania/Issue date: 28.04.2023
Platnosť do/Expiry date: 27.04.2026
Vydanie /Issue: 1



Ing. Dušan HANKO
vedúci certifikačného orgánu
certifikujúceho výroby
Head of Product Certification Body

154801

Odvozené typy / *Derived types:*

DRY 300, DRY 400, DRY 500, DRY 800 a DRY 1200 v prevedení WAVE, METAL, SILVER a DUCT v kódovom označení:

DRY 300, DRY 400, DRY 500, DRY 800 and DRY 1200 in make of WAVE, METAL, SILVER a DUCT in code marking:

DRY300W	DRY300M	DRY300S	DRY300D
DRY400W	DRY400M	DRY400S	DRY400D
DRY500W	DRY500M	DRY500S	DRY500D
DRY800W	DRY800M	DRY300G	DRY800D
DRY1200W	DRY1200M	DRY400G	DRY1200D

Tento certifikát je vydaný za nasledujúcich podmienok:

1. Certifikát sa vzťahuje na typ výrobku a jeho varianty uvedené vo vyššie uvedenej správe o posúdení zhody.
2. Tento certifikát sa nevzťahuje na výrobný proces/vnútro podnikovú kontrolu.
3. Certifikát neznamená, že certifikačný orgán vykonáva dozor alebo kontrolu výroby.
4. Výrobca musí zabezpečiť zhodu následne vyrábaných výrobkov s certifikovaným typom.
5. Zmeny, ktoré majú vplyv na zhodu s certifikačnými požiadavkami môžu podmieniť ďalšiu platnosť certifikátu tým, že sa bude vyžadovať preukázanie zhody s podmienkami, za ktorých bol certifikát udelený, alebo dodatočným hodnotením.
6. Držiteľ tohto certifikátu musí dodržiavať podmienky uvedené vo Všeobecných pravidlách pre certifikáciu výrobkov, ktoré sú voľne dostupné na stránke www.tsu.sk

This certificate is issued under the following conditions:

1. *The certificate applies to the product type and its variations specified in the above mentioned Conformity Assessment report.*
2. *The production process/factory production control is not covered by this certificate.*
3. *The certificate does not imply that the certification body has performed any surveillance or control of the production process.*
4. *The manufacturer shall ensure the conformity of subsequent production items with the certified type.*
5. *Changes that may have an impact on maintaining conformity with the certification requirements may require confirmation of the validity of the certificate by demonstrating compliance with the conditions under which the certificate was issued or by conducting an additional evaluation.*
6. *The holder of this certificate must keep the conditions specified in the General Rules for Product Certification, which are freely available at www.tsu.eu*



Notes:

Notes:

Notes:

Distributor:

Manufacturer:

MICROWELL, spol. s r.o.
SNP 2018/42, 927 01 Šaľa, Slovakia
tel.: +421/31/770 7082
e-mail: microwell@microwell.sk
www.microwell.eu

Made in: EUROPEAN UNION (SLOVAK REPUBLIC)
Country of Origin: EUROPEAN UNION (SLOVAK REPUBLIC)

