DEHUMIDIFIERS

ZODIAC®

408 Entry

409 Dehumidification systems

413 SIROCCO$_2$

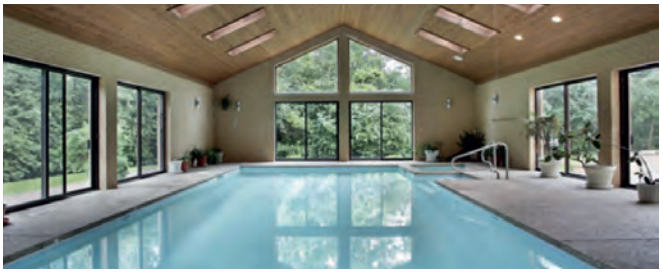
DEHUMIDIFIERS

> THE RIGHT DEHUMIDIFIER FOR EVERY POOL

The room or veranda where the pool is located is a place with high relative humidity. Water vapor trapped inside condenses on the cold walls, forming water droplets and condensation, while the air gradually becomes saturated with moisture. These events have many consequences: mold growth, peeling, rusting, etc. To ensure the enjoyment of swimming and the longevity of the indoor pool, installing a dehumidifier is essential.

> SWIMMING POOLS IN THE GARDENS

Given the large areas of glass surfaces in a garden, it is strongly recommended to install a dehumidification system with a channel system placed around the room.



> INDOOR SWIMMING POOLS

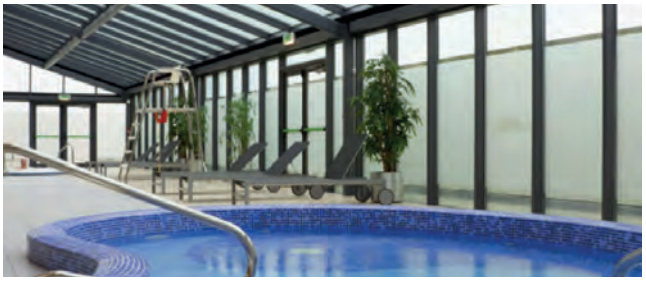
"For use between March and November: A simple floor-standing or wall-mounted dehumidifier, when combined with a lid, can create a comfortable atmosphere."

The ambient air can be heated as needed, but it is usually the sun's rays that increase the air temperature.

"For year-round use: A dehumidifier unit with a hot water coil, mounted in a nearby room, can ensure year-round comfort for bathers."

> SPAS

In a room with a private pool, there is usually a spa, either integrated with the pool or independent. In this case, the amount of water evaporated by the spa must be added to the amount of water evaporated by the pool, and appropriate equipment must be used.



> PROFESSIONAL SWIMMING POOLS

Increased use of these types of pools and higher water temperatures lead to a much higher evaporation rate. Calculating evaporation here requires a thorough understanding of the parameters and equipment needed for thermal monitoring.

Important: It is essential to ensure a minimum fresh air exchange rate of 22 m3/hour per person.

3 CRITERIA THAT MUST BE MET FOR OPTIMUM COMFORT:

1. Water temperature: Between 26°C and 30°C; higher for medical or professional use.

2. Air temperature: Between 26°C and 30°C, usually set to the same value as the water temperature.

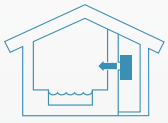
3. Relative humidity: Between 60% and 70%. Below 60%, you'll feel very cool when you get out of the water. Above 70%, the air becomes very humid and condensation occurs in the room.

> 3 TYPES OF DEHUMIDIFICATION SYSTEMS

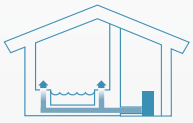
Zodiac® offers a wide range of solutions divided into three categories: free discharge, wall-mounted and ducted units.

All these systems operate on the heat pump principle: they draw in hot, humid air and expel hotter, drier air.

Free discharge systems



Systems that pass through the wall



Channel1 systems

> FREE DISCHARGE SYSTEM

These monoblock DT or Sirocco2 systems are designed for small spaces and do not require ductwork. The units can be placed in the room where the pool is located, no more than 2 meters away from the pool.
This free-discharge solution is the simplest and most economical way to maintain the relative humidity in the room at a comfortable 65% level. However, it is not effective in dealing with condensation on windows.

DT 850 E

SIROCCO2FREE DISCHARGE

Through-the-wall DF2

> SYSTEMS THAT PASS THROUGH THE WALL

These Sirocco2 or DF2 monoblock systems are mounted to an adjacent facility room via walls. Only one inlet grille and one outlet grille are visible in the pool room.

This simple solution allows the dehumidifier to be installed outside the pool hall (in the facility room adjacent to the pool), but it does not effectively deal with condensation on the windows.

> DUCTED SYSTEMS

The only solution to effectively deal with condensation on the windows is a channel system (DF2 or unit), as it is possible to install grilles along the glazed walls. Only these grilles will be visible in the pool room, while the equipment itself can be mounted in a nearby facility room.

Channel 1 CAE

Channel 1 OMEGA

To help you complete your installation, we offer a range of complementary accessories: "ventilation accessories"
"Inlet and outlet grids"
channels and diffusers

DEHUMIDIFIERS

SILENT INSTALLATION

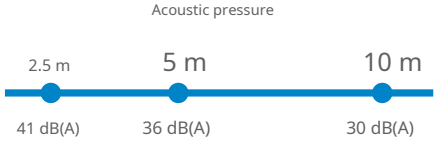
> PRESENTING THE NOISE LEVEL IN A PRECISE MANNER.

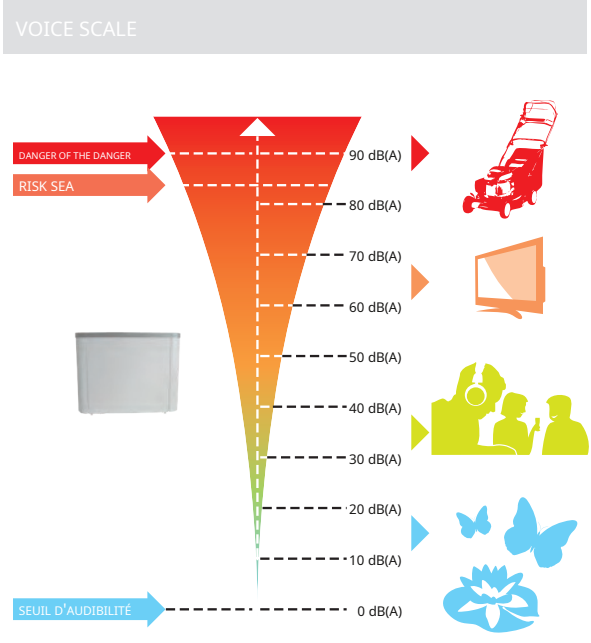
The sound level is as shown in a_a 1.

Acoustic power in dB(A): This is the unaltered noise level of the emitting source. Or acoustic pressure in dB(A): This is the sound level perceived by the human ear. It depends on the installation environment and the distance at which the measurement is taken.

Therefore, it must always include a measurement distance.

The sound level decreases as the distance from the emitted source increases: when the distance doubles, the sound level decreases by 6 dB(A).





To compare the noise levels of several machines, check what type of value you have, whether it's power or pressure, and if pressure, from what distance it was measured!

> REDUCE NOISE TRANSMISSION THROUGH CHANNELS

Special attention will be paid to air networks:

"Direction the channels to suit the airflow, limit turbulent sections, and ensure straight lines between each turbulent section."

"Reduce vibration transmission through the channels:"

- Install mannequins where they pass through the walls.

- Use anti-vibration collars to support channels1,

- Use flexible couplings between the equipment and channel A1.

"Size the inlet and outlet grilles to match the airflow velocities passing through them."

Wall-mounted dehumidification system

Place expansion chambers between the grate and the channel.

"If necessary, install a sound trap on the output ducts, especially to prevent the spread of noise."

Support Framework

> RECOMMENDATIONS FOR DEHUMIDIFIER INSTALLATION

A dehumidification system contains 'moving' parts (compressor, fan, etc.) where vibrations can spread and accumulate. A ducted unit installed in a plant room will provide the best possible noise resolution. However, several installation rules must be followed to prevent or reduce disturbances:

Anti-vibration block

"Install the dehumidifier on suitable anti-vibration blocks. Replace them as needed, as they lose their effectiveness over time."

"Install the system on a mounting base or a very sturdy support frame that is independent of the building and weighs twice as much as the dehumidifier."

HYGIENE CONTROL

BASIC DEHUMIDIFICATION

Hygro Control is a hygro-thermostat specifically designed by Zodiac® for easy and intuitive control of dehumidification equipment (CAE and OMEGA).

HYGRO CONTROL

REFERENCE POINT

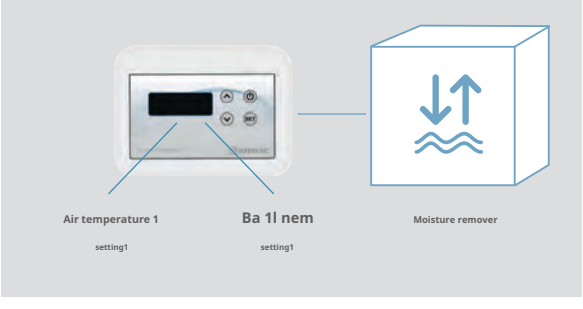
ZODIAC® DEHUMIDIFIERS EQUIPPED WITH HYGRO CONTROL FUNCTION CAN BE FOUND IN THE CATALOGUE BY LOCKING FOR THIS PICTOGRAPH.

> HOW DOES IT WORK?

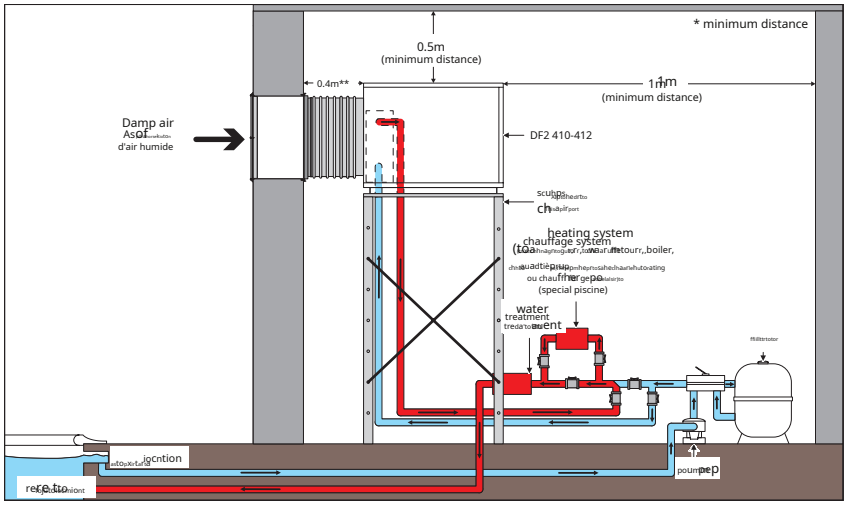
Higro Control is a precise and easy-to-use digital control unit for setting the desired relative humidity. Relative humidity refers to the amount of water present in the air as a gas, especially in a room or garden where a pool is located.

If the dehumidifier is equipped with the 'heating' option, Higro Control can also adjust the room temperature.

The device comes with CAE and OMEGA dehumidifiers. It is wall-mounted and connected to the dehumidifier.



STANDARD INSTALLATION



DF2 DEHUMIDIFIER INSTALLATION EXAMPLE 1

"Hygro Control, CAE and OMEGA must be mounted at least 50 cm away from the outlet."

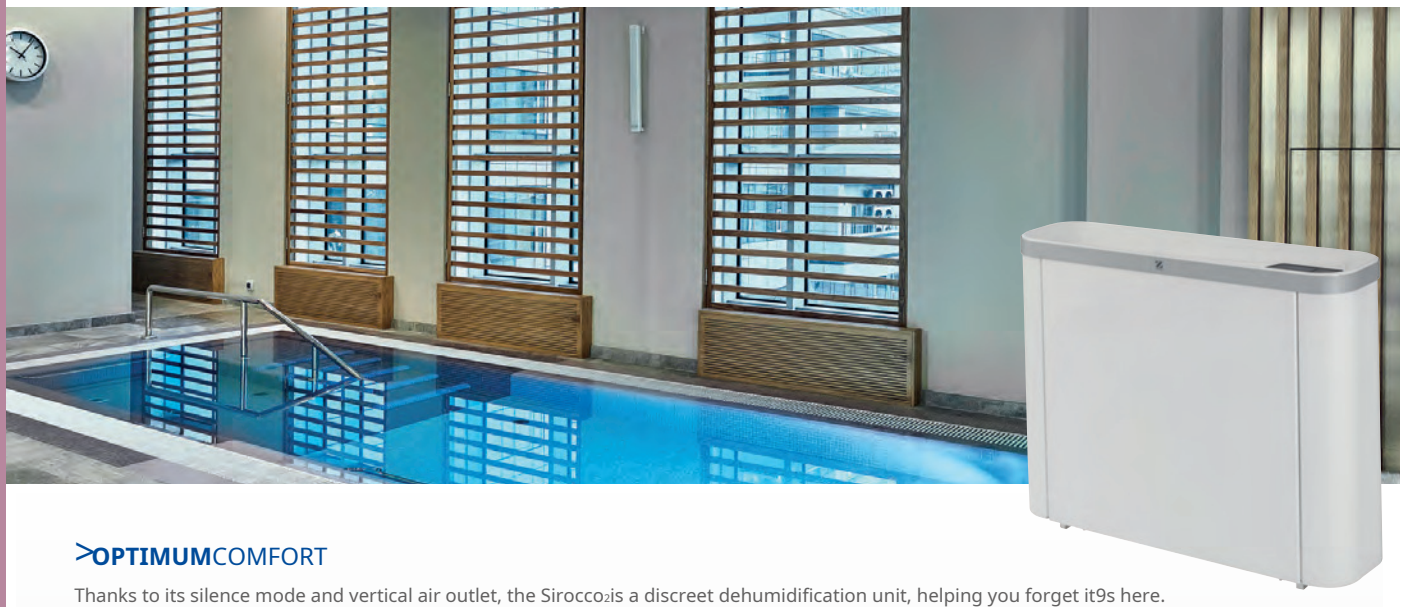
"It should not be placed on the C1k1_ 1zgris1s1n (CAE, DF2 and Omega)."

"It must be at least 1.5 m away from the ground."

Equipping the pool with a good roof and installing an appropriate ventilation system in the room will increase the efficiency of the dehumidification system.

SIROCCO2

Comfort and design



>OPTIMUMCOMFORT

Thanks to its silence mode and vertical air outlet, the Sirocco2is a discreet dehumidification unit, helping you forget it9s here.

> INTELLIGENCE

Sirocco2, thanks to its self-diagnosing humidity sensor, ensures the correct relative humidity level under all conditions to maintain the sustainability of the facility. It also reduces energy consumption by lowering the air heating temperature when there are no swimmers in the pool (closed cover).

> HARMONIOUS DESIGN

With its 1k lines and no visible grid, Sirocco2 blends elegantly and unobtrusively into all indoor pool settings.

HUMIDITY SENSOR

It is located inside the air duct, easily accessible from the side panel.

access is provided.

"TEST" MODE

Correct configuration of the dehumidifier

during initial installation or diagnosis.

Check your options.

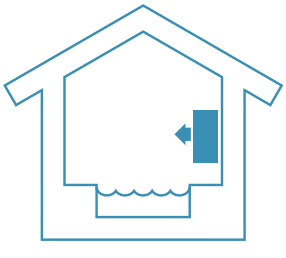
SELF-DIAGNOSIS

Discrepancies in humidity measurements are automatically detected.

It is detected. The dehumidification function is always on.

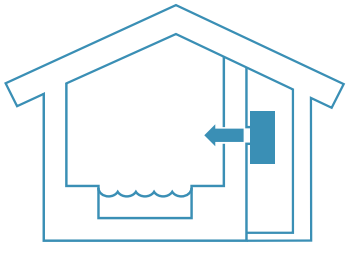
It is provided by default.

2 possibilities in 2 configurations



FREE RELEASE:

wall-mounted or freestanding



FROM INSIDE THE WALL

DEHUMIDIFIERS

Sirocco²

+ Optimum Comfort
+ Built-in Intelligence
+ Harmonious Design1

MADE IN SPAIN

EASY INSTALLATION

ALL TYPES OF SPAS

EXPLANATION

"Vertical Blowing"
"Free-standing or wall-mounted (with accessories)"
Galvanized, epoxy-painted body.
"Internal humidity sensor"
"Optional remote control" 2-speed
centrifugal fan with silent mode
"Energy saving mode (with pool cover_1 contact_1)"
"Air heating options with electric resistance or hot water coil that can be integrated into the main body of the dehumidifier (no extra space required)."
Application Control: No User
Interface: LCD Screen

Manufacturer's original warranty: 2 years

INTERNAL ACCESSORIES

- **Wall Mount Pro li**
- **Air Intake Filter**

PRODUCT CODE

PRODUCT CODE	Sirocco²2M	Sirocco²3M	Sirocco²5M	Sirocco²5T
MODEL	WD002088	WD002089	WD002090	WD002091
Unit Price EURO	5,800.00	7,200.00	7,600.00	8,100.00

TECHNICAL SPECIFICATIONS

Capacity (L/h)*	2.5	3.8	5.5	5.7
Absorbed Power (W)***	1210	2120	2580	2810
Nominal absorbed moisture (A)* **	5.3	9.5	11.8	4.8
Maximum absorbed moisture (A)* **	6.9	12.5	16.7	5.7
Air Flow (m³/h)	600	800	1000	
Acoustic Power (max-min) (dBA)**	61.5 - 58.5	65-62	63.5 - 60	64.5 - 61
Acoustic pressure at 1 m (max.-min.) (dBA)**	47 - 44	51 - 48	49 - 45	50 - 46
Coolant	R410A			
Coolant quantity (kg)	0.93	1.15	1.65	
Condensation discharge type	Flexible pipe Ø12/18			
Electric power supply	220-240 V / 1 / 50 Hz			

DIMENSIONS AND WEIGHT

Product Dimensions (Length x Height x Depth) (mm)	1060 x 835 x 307mm	1060 x 835 x 307mm	1410 x 835 x 307mm	1410 x 835 x 307mm
Product Weight (kg) Product Weight (kg)	70kg	80kg	95kg	

OPS DIRECTIONAL ACCESSORIES

Sirocco² 2M	Sirocco² 3M	Sirocco² 5M	Sirocco² 5T
Recessed 2M / 3M: R0829500 2M Electric Resistor 1: R0829800 2M Hot Water Tap 1: R0830100 Light Grey 2M / 3M Support Leg 1: R0893700 Dark Grey 2M / 3M Support Leg 1: R0893900 Remote Control Unit: R0829700	Recessed 2M / 3M: R0829500 3M Electric Resistor1: R0829900 3M Hot Water Tap1: R0830200 Light Grey 2M / 3M Support Leg 1: R0893700 Dark Grey 2M / 3M Support Leg 1: R0893900 Remote Control Unit: R0829700 Backward compatibility with wall kit between Sirocco 80M and Sirocco2 3M: R0958900	Recessed 5M/5T: R0829600 5M Electric Resistor 1: R0830000 5M/5T Hot Water Tap 1: R0830300 Light Grey 5M/5T Support Leg 1: R0893800 Dark Grey 5M/5T Support Leg 1: R0894000 Remote Control Unit: R0829700	Recessed 5M / 5T: R0829600 5T Electrical Resistance: R0894100 5M / 5T Hot Water Tap 1: R0830300 Light Grey 5M / 5T Support Base 1: R0893800 Dark Grey 5M / 5T Support Base 1: R0894000 Remote Control Unit: R0829700

* Standard unit, under nominal conditions in a_a_1: air 30°C, humidity 70%, Standard mode
* * According to EN60704-1:2010+A11:2012 standard. Values have been measured and approved by CCTM (Centre de Transfert de Technologie du Mans) in standard units (excluding options).
* * * Power consumption of electric heating options is excluded.

ELECTRICAL RESISTANCE PROPERTIES

MODEL	Sirocco²2M	Sirocco²3M	Sirocco²5M	Sirocco²5T
Includes electrical resistance power option (kW)	2	3	4.5	
Electrical resistance Maximum Absorbed Density (A)	8.7	13.1	19.6	

HOT WATER COIL SPECIFICATIONS

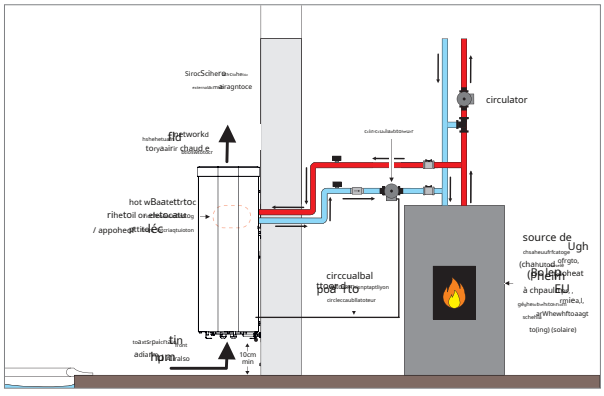
MODEL	Sirocco²2M	Sirocco²3M	Sirocco²5M	Sirocco²5T
Internal hot water coil power option 40-50°C (kW)	2.2	3.2	3.7	
Internal hot water coil power option 90-70°C (kW)	7.1	8.1	11.1	
Primary water flow rate (m³/h) at 50-40 °C / 90-70 °C	0.18 / 0.3	0.27 / 0.35	0.31 / 0.47	
Primary circuit loss (mCE) at 90°C-70°C	1.6 / 2.8	2.3 / 3.9	1.7 / 3.5	
Connection 1 (mm)	15 / 21**male tongue**			

SETUP

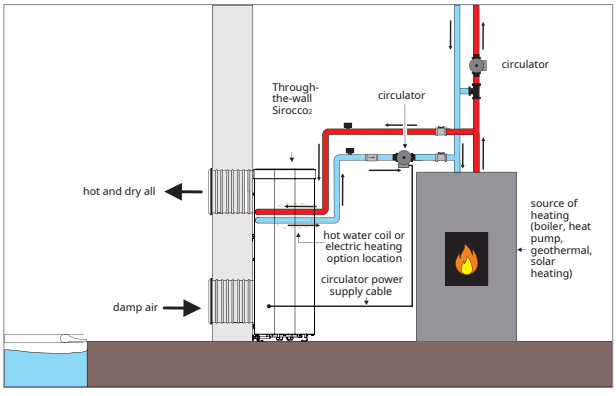
"Operating conditions (ambient air temperature range): +10°C to +40°C for dehumidification function; +5°C to +40°C for air heating function only"
"Air heating options can be added to the unit: electric resistance or hot water connection."

"If the wall unit cannot support the load, it is necessary to mount an optional support bracket as an additional support."
"Even if the unit is equipped with a support leg, it must always be secured to the wall to prevent any tipping." Read the installation and operating manual for more information.

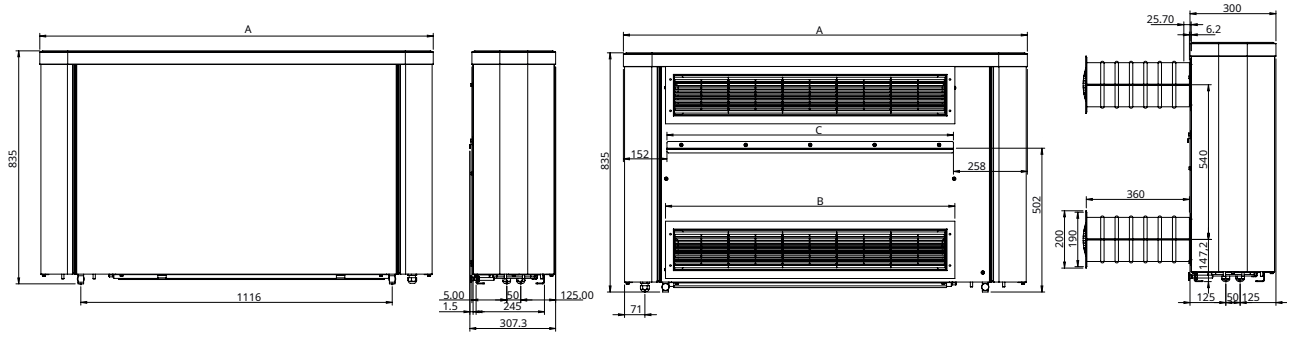
Installation of a hot water coil or an electric heating option device.



FREE RELEASE



FROM INSIDE THE WALL

WEIGHT AND DIMENSIONS

MODEL	Sirocco²2M	Sirocco²3M	Sirocco²5M	Sirocco²5T
A	1060		1410	
B	630		1010	
C:Connection points	700		1000	
Tolerance +2/-0 mm	580 x 145		998 x 165	
Grill number 1s1	2 x 3		2 x 5	
Weight (kg) (basic model)	70kg	80kg	95kg