

# BC 2012

# Dolphin Automatic Velocity Hand Dryer

# User Manual

Please read carefully before use





## Safety & Guidance notes

### Important:- Read all these instructions before commencing the installation.

- All wiring of this hand dryer should be in accordance with the current IEE regulations, or the appropriate standards in your country.
- This hand dryer MUST be installed by a suitably qualified person.
- Ensure that the mains supply (voltage, frequency, and phase) complies with the hand dryers rating label.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance.
- Do not allow hand dryer to get excessively wet.
- Do not modify and disassemble the unit unnecessarily.
- The hand dryer should be provided with a fused spur, isolator switch capable of disconnecting all poles, having a contact separation of at least 3mm.
- Ensure the hand dryer is properly earthed
- Always use the hand dryer with the drain tank & air filter provided.
- We recommend installing a RCD (residual current device) use a single phase 220-240V 50Hz cable with a 20A rated current, 15mA-type rated operating current.
- Do not let children hang from the hand dryer
- Wear gloves when inspecting and cleaning the unit.
- If the supply cord is damaged, it must be replaced by a suitably qualified service engineer in order to avoid a hazard.
- For additional protection, the installation of a residual current device (RCD) having a rated residual operating current not exceeding 30mA is advisable in the electrical circuit supplying the dryer.
- Do not use the hand dryer in the following places:-  
Where the ambient temperature is below -10°C or above 40°C  
Where the hand dryer may come into direct contact with water  
Where the unit is under direct or strong sunlight  
Where condensation may form within the unit.  
Locations where corrosive, neutral, or reductive gases are present.

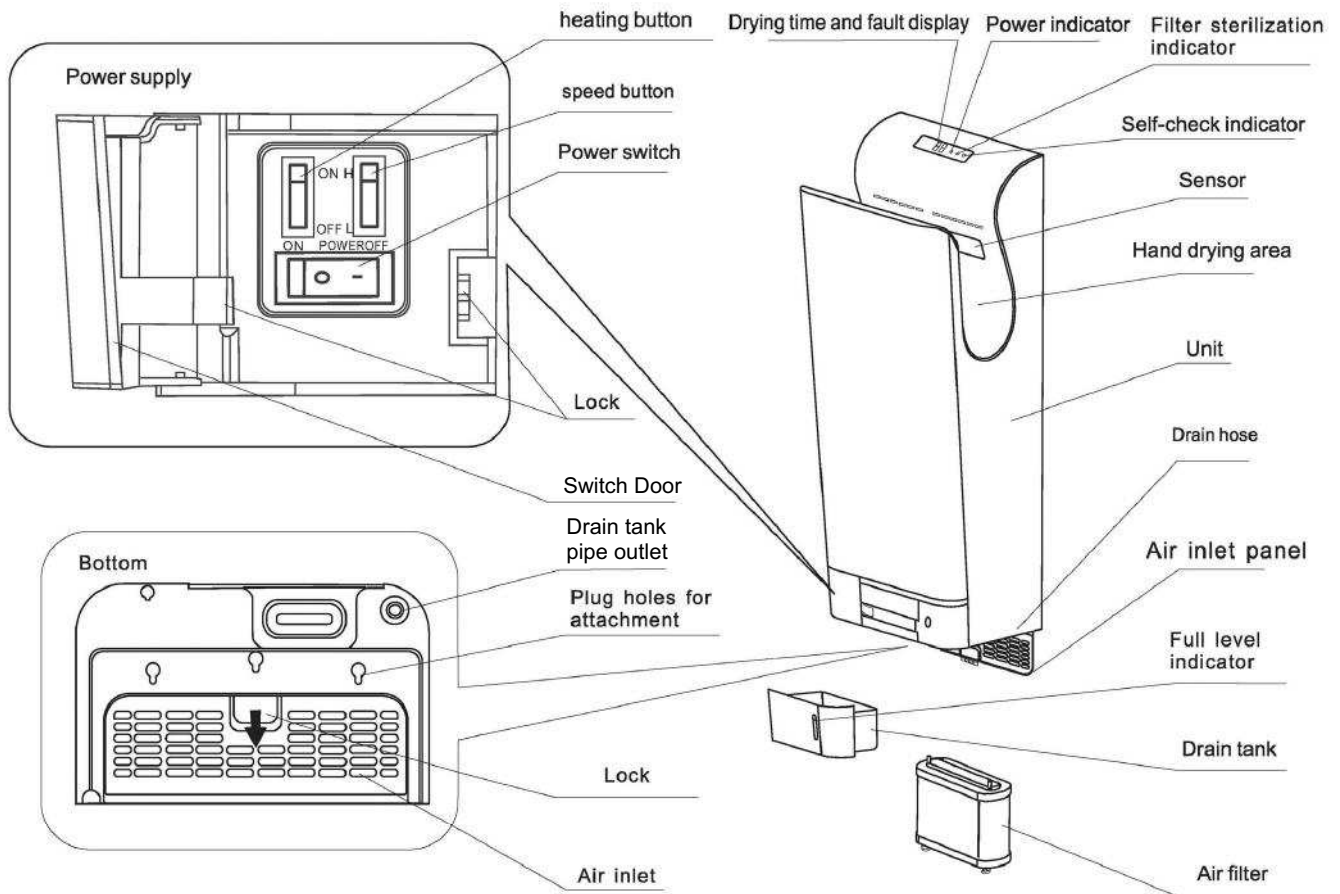
## Features

- “No touch” hand drying ensures complete hygiene.
- Economical high speed drying only “10 seconds”
- Built in tamper-proof timer function
- Fitted with HEPA air filter to remove dust and bacteria.
- 2 speed & 2 heat settings
- Anti-bacterial coating
- Built in UV sterilization function

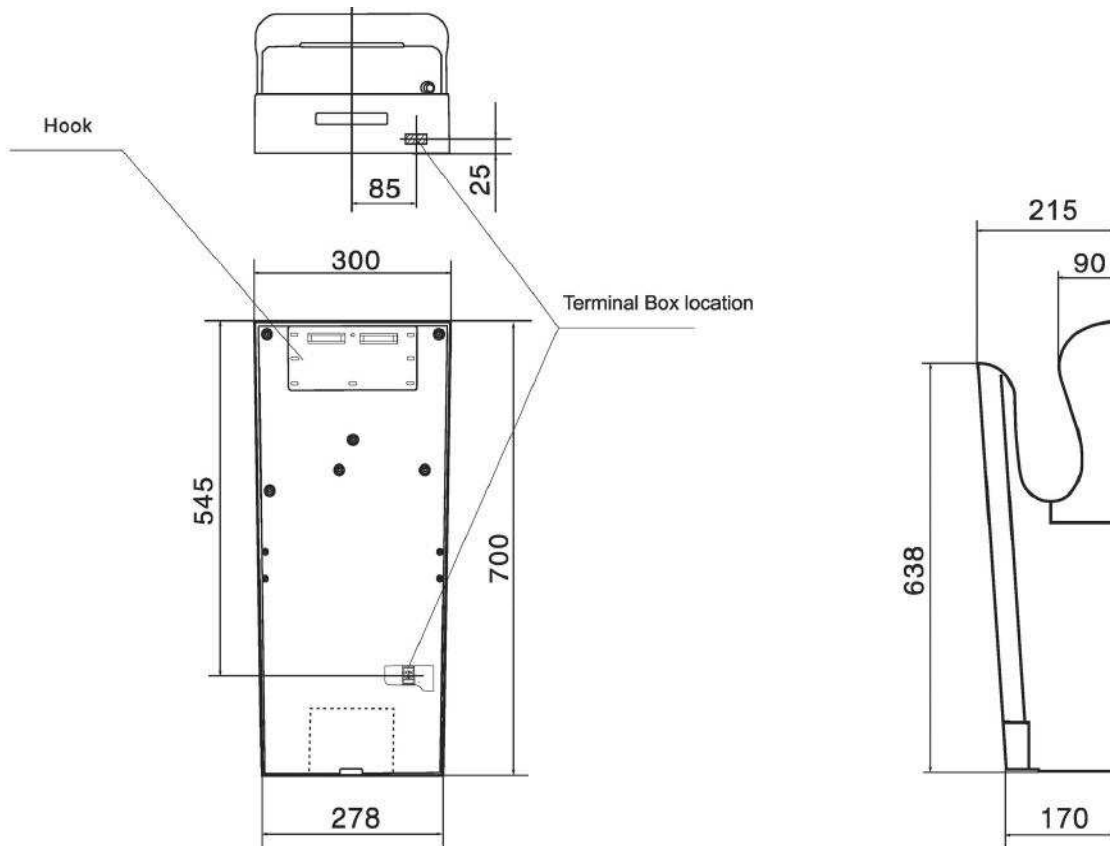
## Specifications

<b>Rated voltage</b>	220-240V ~	<b>Motor</b>	Brushless Dc motor
<b>Input power</b>	1650 – 2050W	<b>Induction method</b>	IR blocking
<b>Air velocity</b>	95 m/S	<b>Protection class</b>	IPX4
<b>Heating power</b>	1000 – 1200W	<b>Dimensions</b>	300x215x700
		<b>Net weight</b>	9.5kg

# Hand dryer Features & functions



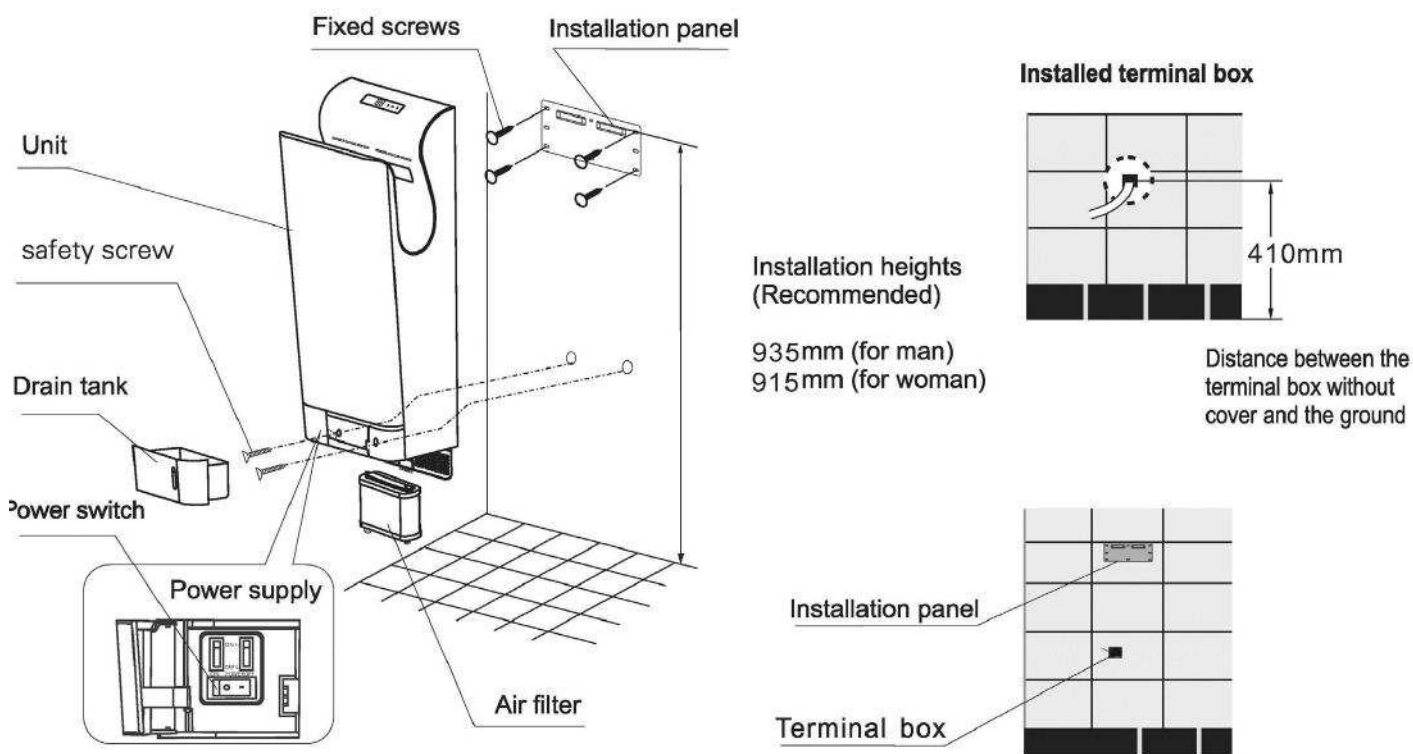
# Hand dryer dimensions



# Before installing the hand dryer

## Installation location

- Install the hand dryer in a location where it will be easy to use, and ensure that there is adequate space around the dryer for cleaning and maintenance.
- If the unit is installed too low, water may splash onto the dryer when the floor is being cleaned. (The bottom of the hand dryer must be mounted at least 150mm above the floor). This is also required to gain access to the HEPA filter for cleaning and/or replacement.
- The left hand side of the hand dryer must be at least 100mm away from any walls, to allow access to the power switch, speed & heat setting switches.
- We recommend that the right hand side of the dryer should be at least 100mm from any wall/objects.
- Avoid installing the hand dryer in locations where people or doors might bump into the dryer.
- Choose a completely flat surface on the wall to install the dryer.



## Installation procedure

Use 220-240V 50Hz ~ supply (Do not use if power supply is exceeding rated voltage +/-10%).

Use a power cord that is between 2mm<sup>2</sup> and 2.5mm<sup>2</sup> (A drop in voltage is possible if the power cord run exceeds 11m in length, so we recommend using 2.5mm<sup>2</sup> cord). Do not install above a fixed socket outlet.

### Wire the unit

Fit a suitable recessed back box

And run the cable through as shown.

Note:- The unit is supplied with a length of flexible Cord for connecting to a suitably rated fused spur if required).

Attach the installation panel to the wall

Using 4 of the screws provided.

If the wall is concrete, use

Commercially available metal screw plugs.

(Make sure that the wall the hand

Dryer is being fixed to is strong enough to

Take the weight of the dryer 9.5kg)

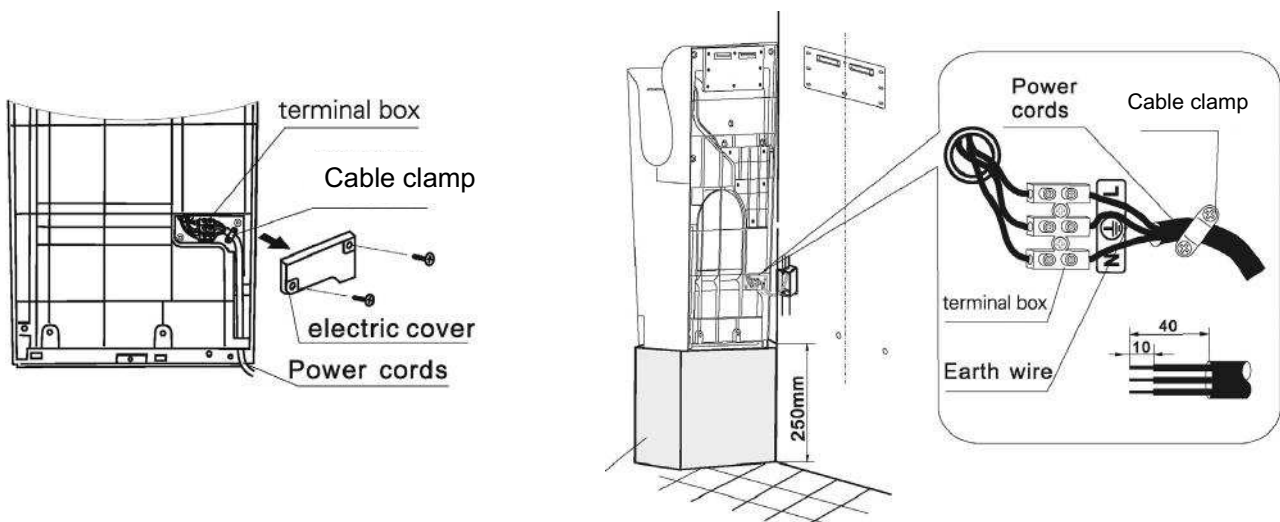
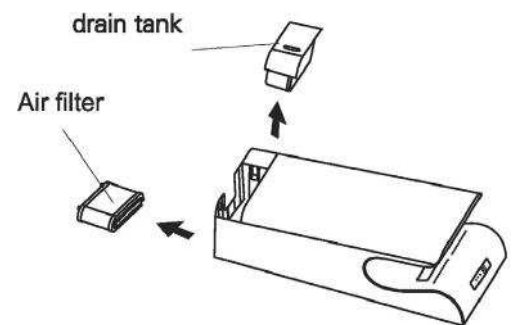
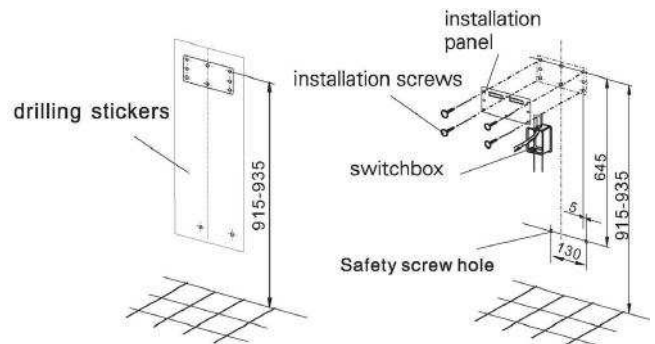
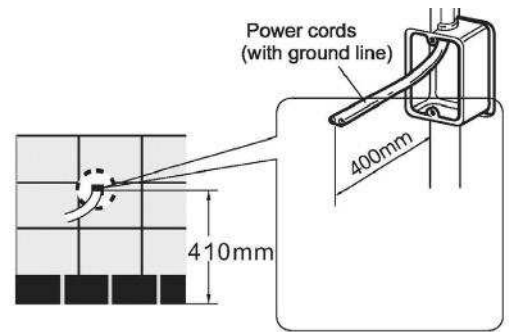
Remove the drain tank and air filter.

To gain access to the wiring terminals (If you do not wish to use the fitted cord provided). Please proceed as follows. Unscrew the 2 screws holding on the terminal box cover located on the rear of the hand dryer. Loosen the 2 cable clamp screws, then disconnect the 3 terminal block wires.

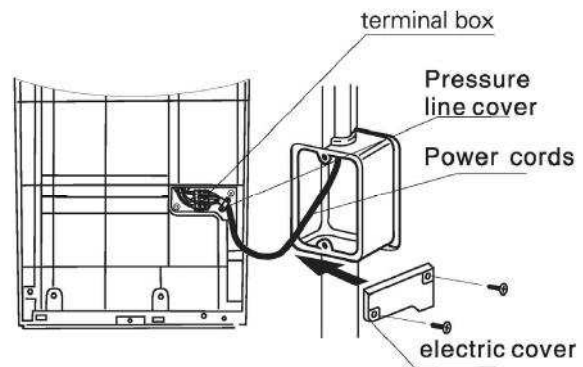
You can now carefully pull out the fitted cord.

To connect your own cord direct to the hand dryer please proceed as follows.

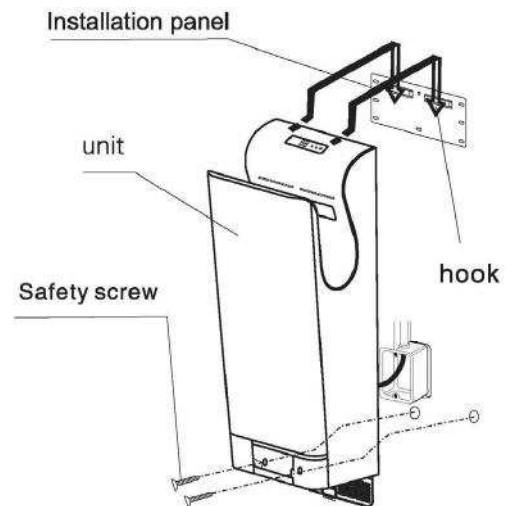
1. Raise the unit by approx 250mm from the floor (as shown).
2. Strip off the outer and inner insulation as shown below.
3. Connect the power cord to the terminal block as shown below.
4. Ensure the cable clamp is fitted and tight.



Fit terminal block cover to rear of dryer  
 Using the 2 screws provided.  
 Ensure that the cable clamp has been fitted and  
 that the cover is flat against the rear of the  
 dryer.

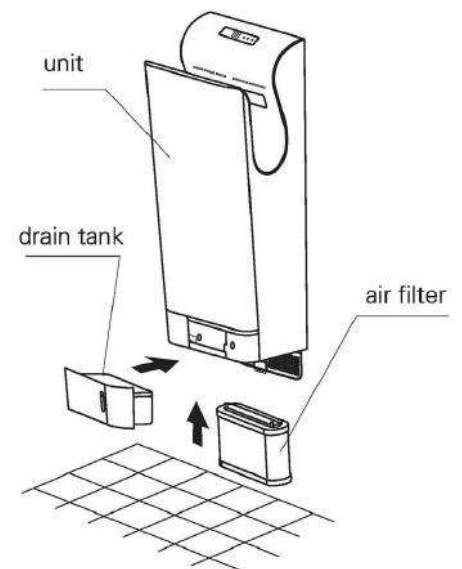


Fixing the unit to the wall.  
 Hang the unit on the wall using the mounting  
 bracket provided. The 2 hooks on the rear of the  
 unit should locate inside the 2 slots on the wall  
 mounted bracket.



Install the 2 safety screws through the bottom of  
 the unit .  
 These screws **MUST** be fitted to stop the dryer  
 being taken/knocked off the wall.

Re-fit the air filter.  
 Line up the air filter so the 2 pins are at the top  
 as shown.  
 Once in close the air inlet door to retain the filter.



Re-fit the drain tank.  
 Making sure the lid is on. Push the drain tank  
 into the dryer as shown.

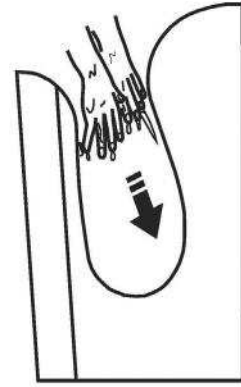
### Hand Dryer test run.

1. Check the voltage of the power supply.  
Please use the stated rated voltage.
2. Turn on the RCD/power supply.
3. Remove drain tank (to gain access to power switch).
4. Turn on the power switch. The lamp should light up.
5. Select heat and speed setting required.
6. Close power switch cover, and replace drain tank.
7. Dry hands. (See page 7)
8. Check the unit. Is the unit firmly fitted to the wall? Is there any vibration or strange noises?

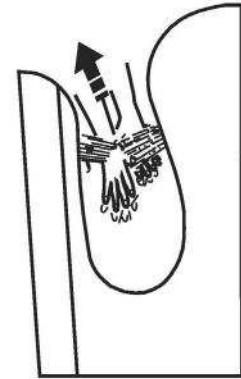
\*Do not turn the power switch on with your hands inside.

## Using the hand dryer

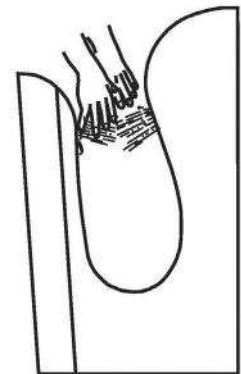
- Shake off excess water at the sink  
And insert both hands into the dryer  
The unit starts to run automatically.



- Pull your hands out slowly, letting the air blow the water off.



- Pull your hands out completely, repeat process until dry.



Note:- This hand dryer is fitted with an Anti-damage timer. The dryer will stop working after 25 seconds, once activated. Remove hands and then re-insert your hands to continue using the dryer.

## Self-check indicator

When a malfunction or error occurs, the self-check indicator located on the top of the dryer “check” will either light up or flash.

Turn off the power switch, wait about 40 seconds until all the indicators go off, and then turn the dryer back on.

If the indicator still lights up or flashes, turn off the unit, Isolate the dryer from the mains supply and contact a service engineer.

## Routine Cleaning & Maintenance of the hand dryer



### Warning:-

**The Hand dryer must be isolated from the power supply before any cleaning and maintenance takes place.**

### Cleaning the body of the hand dryer

- Clean the unit with a soft cloth.
- If the unit gets very dirty, clean with a soft damp cloth with a neutral cleaning agent, then clean with a dry soft cloth.
- Remove any dirt from the sensor area.
- Only use a neutral cleaning agent.
- Do not use thinners, acidic or alkaline toilet cleaners, or any type of brushes. (use of these may damage the surface of the hand dryer.
- If chemical cloths are to be used, please read their instructions first.



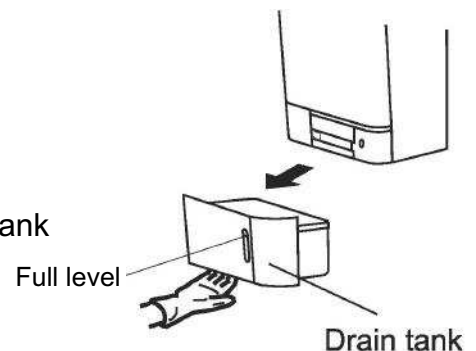
**Caution always wear suitable gloves when cleaning**

### Draining and cleaning the drain tank

Before the tank fills up (at least once a week)

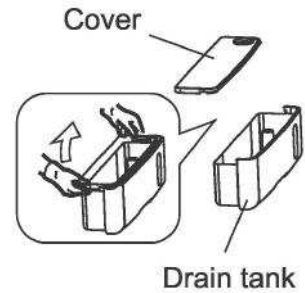
- The water blown off your hands when drying is called “drain water”
- Empty the drain water at any time, in order to prevent accumulated water from exceeding the full level.
- The water in the tank may start smelling if it remains in the tank for too long.

Pull the drain tank out in a horizontal direction as indicated. This ensures the drain water does not spill out.



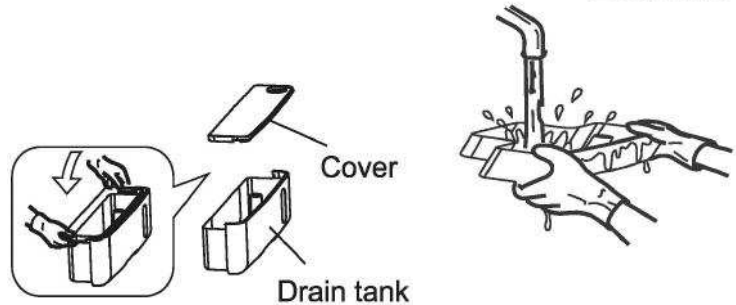


Open the drain tank cover and empty out the water.

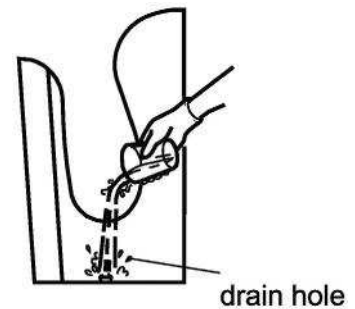


Wash out the interior of the drain tank.

Replace the drain tank cover and re-attach it to the dryer  
Ensure that the drain tank is correctly inserted.

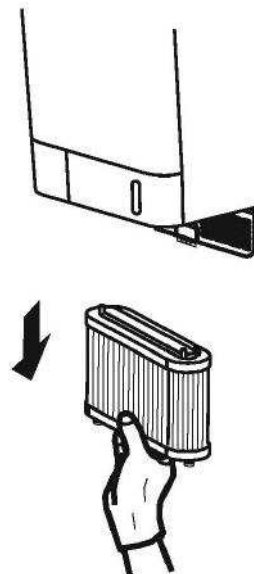


At regular intervals (at least once a week) carefully pour 200cc (around a cup) of water through the drain hole. (to prevent it from getting clogged up).



### **Cleaning the air filter** (At least once a week)

Open the air inlet cover  
Then Remove the air filter as shown



## Cleaning the air filter

Use a vacuum cleaner to remove any dirt from the filter.

If the filter is very dirty, wash it carefully in cold or warm water. Allow the filter to dry and replace.

Make sure that the air filter is all the way in. (If it is not located correctly dirt or dust will enter the dryer and shorten its service life).



## Hand dryer troubleshooting

If the following problems occur, please perform checks as follows.

Problem	Check	Action
No air blows even if hands are inserted	Do any of the display indicators light up?	Turn the circuit breaker/RCD on.
	Is the power switch on?	Turn the power switch on.
	Are you putting your hands in all the way?	Put hands in all the way.
The unit does not stop blowing once hands are removed display shows E2	Is the sensor being blocked by dust or dirt?	Turn the power switch off, and then, after all the lamps in the display have gone off, clean the sensor.
Airflow is too low	Is the speed button set to the low level?	Put speed button on the high level.

If the above actions do not work, turn off the power supply, isolate the dryer, then call a service engineer.

## Display screen indicator lights and functions

### Power indicator light

When power input is normal, this light will light and stay on.

If the light is out, power supply is not on. Or the fuse on the main circuit board has blown. (Check power supply or call service engineer),

### State indicator light

When the light is on the unit is working. When the light is out the unit will not work.

If this light is flashing it could be.

1. A motor fault (Check motor connecting wires or motor impeller for foreign material).
2. Working time of the dryer is longer than 25 seconds. (check/clear hand drying area for foreign materials). Restart dryer.

### **Sterilization indicator light**

When this light is on the UV lamps within the dryer come on for one hour.

(on first power up the lamps will come on for 1 hour, then once every day for an hour).

When the light goes out the sterilization work has ended.

If the lamp does not come on. The UV emission PCB will need to be checked. Switch off power supply and contact a service engineer.

### **LED display**

When the dryer is operating this display will count down to "00" once at "00" the display will flash to indicate that the drying time has finished.

The display may also show the following error messages.

**E1** = Motor fault, The dryer can not start normally. (Check motor connecting wires or motor impeller for foreign material).

**E2** = The working time of the dryer is longer then 25 seconds. (Check/clear hand drying area of foregin materials). Restart dryer.

**E3** = The voltage to the dryer exceeds 15% (Check power supply circuit)

**E4** = The voltage to the dryer is lower than 15% (Check power supply circuit)

**E5** = Machine temperature is higher than 80°C (Clear any foreign material from the air inlet/outlet).

**E6** = Master board temperature is higher than 80°C (Clear any foreign material from the air inlet/outlet).

**E8** = Fan fault (Check wheather the fan sensor connection is loose).

If in doubt consult a quailified service engineer.



### **Disposal**

This product should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority for recycling advice.

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