



## Retro & Retro+ HAND DRYER



PLEASE READ CAREFULLY THROUGH THIS MANUAL BEFORE USING THE PRODUCT, OBSERVING ALL SAFETY INFORMATION, WARNINGS.

## SAFETY WARNINGS

Before installing, be sure to read this installation manual and retain for future reference.

This product must be installed by qualified personnel in accordance with the instructions given in this manual and installation must comply with all applicable regulations, national security standards and laws in force in the country where the product is installed.

Turn off the power at the main switch before installing or servicing the dryer unit

The dryer must not be installed on a flammable surface. Do not damage any parts of the electrical connections.

Pre-arrange an appropriate power outlet and a system of disconnection in accordance with current local regulations. Make sure the product is properly connected to ground. If there is no ground connection, there is a risk of an electrical shock.

Do not install the dryer over a washbasin. If the power cord is damaged, it must be repaired by qualified personnel to avoid any type of risk.

This dryer can be used by children aged 8 years and above. People with reduced physical, sensory or mental abilities or lack of experience and knowledge, if they have been given supervision and appropriate training regarding the use of the dryer in a safe manner, can use it with no restriction. Children should not play with the apparatus. Cleaning and maintenance performed by the owner should not be done without the children having supervision.

During use, temperatures above 158°F [70°C] may develop in the parts near the hot air nozzle. Do not touch or cover the dryer during use or when finished using it.

### General safety information:

**⚠ WARNING** This product is intended for installation by a qualified service person. Use AWG NO. 12 solid conductor for wiring.

**⚠ DANGER** Failure to properly ground unit could result in service electrical shock and/or death.

**⚠ WARNING** Disconnect power at the service breaker before installing or servicing.

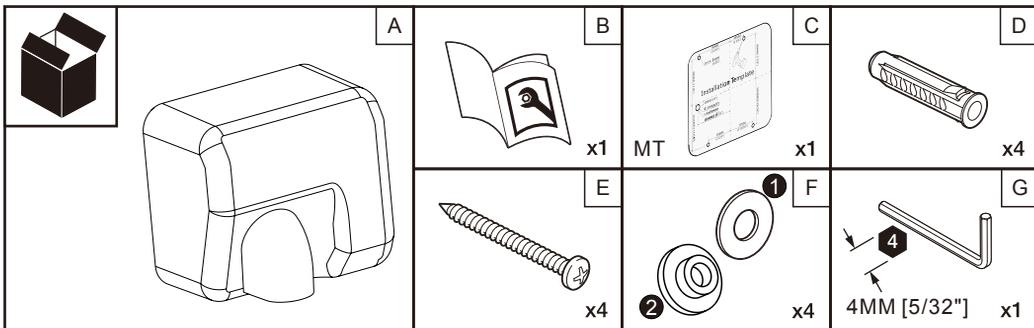
**⚠ WARNING** All units must be supplied with a 3-wire service. The ground wire must be connected to the dryer's backplate.

--**NOTE:** Do not install dryer over washbasin --



# PACKING LIST

ITEM KEY	ITEM DESCRIPTION	ITEM QTY	NOTES
A	Hand Dryer Unit Complete	1	Stainless Steel 304 Cover&Cabinet
B	Owner Manual(OM - this booklet)	1	
C	Mounting Template(MT)	1	
D	Wall Anchors, Expansion	4	Φ8x38MM [ 5/16" Dia.x 1-1/2"], for#10
E	Self-threading Phillips PH Screws	4	M5x36MM [ No.10 AB x 1-3/16"]
F	Flat Washer(F1)+Silent Block(F2)	4+4	F1 For M5[No.10 AB]Phillips PH Screws
G	Hex Key (for cover screws)	1	For 4MM[ 5/32"] hex socket FH Screws



# SPECIFICATION

**Voltage:** 220V-240V 50/60Hz, 10A, 2300W } **⚠ ONLY** be used on same voltage as product rated label marked.  
 110V-120V 60Hz, 19A, 2300W }

**Stand-by Power:** Less than 2.0W

**Air Temperature:** 45°C[113°F](Distance from nozzle=100MM[4"], Room Temp.=25°C[77°F])

**Air Velocity:** 26M/S[85 FT/S] / 93KM/H[58MPH]

**Air Flow:** 270M<sup>3</sup>/H[159CFM]

**Drying Time:** 20-25 Seconds

**Timing Protection:** Hold-On 60S(Sensor Type) or 30S(Manual Type) auto shut-off

**Timing Duration:** Auto Shut-Off ≤3 Seconds after last sensor read (Sensor Type)

**Sensor Range:** 5-15CM[2"~ 5-7/8"], Owner Adjustable (Sensor Type)

**Fuse Protection:** Main PCB, Φ5x20, 250V, 16A[230V] / 25A[120V]

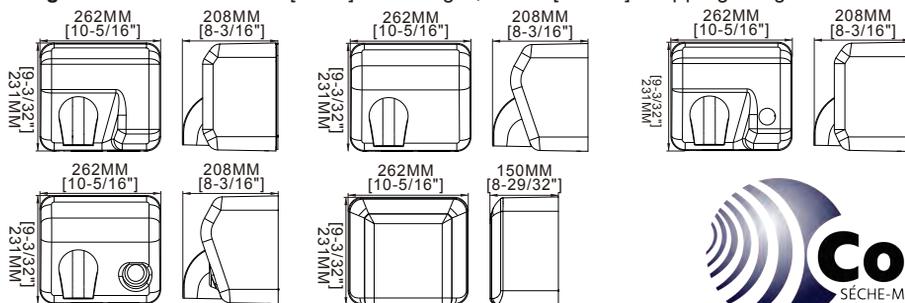
**Protection Level:** IP23

**Electric Isolation:** CLASS I

**Brush Motor:** 6500RPM, 300W[0.4HP]

**Noise(at 1M):** 70dB

**Weight:** 4.2KG[9.3lb]/Net Weight, 4.6KG[10.1lb]/Shipping Weight

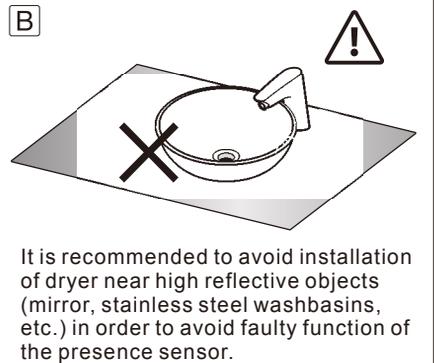
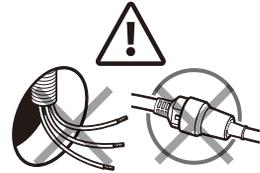
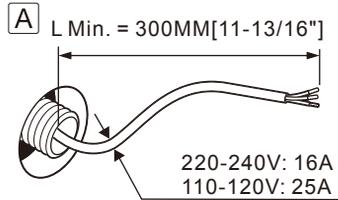
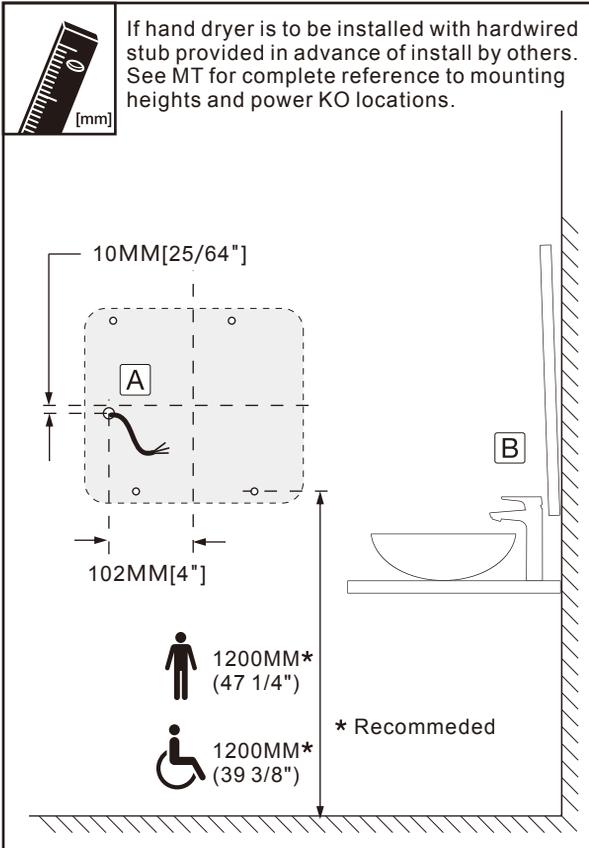


## BEFORE INSTALLATION

Installation must be carried out in accordance with the current edition of the local wiring regulations code having jurisdiction. Installation should be performed only by a qualified electrician.



Please check if hand dryer is supplied with convenient plug in feature.



## INSTALLATION

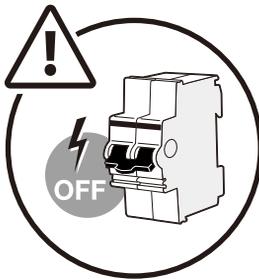
1. Make sure power supply breaker is switched off. Installation must adhere to the regulations of the current edition of the local wiring code having jurisdiction. Installation should be performed only by a qualified electrician.
2. Place template against wall at desired height (see mounting height recommendations on MT) and mark locations of four(4) mounting holes and wire service entry at knockout (KO) location.  
**Note:** For two(2) or more dryers units, units should be no closer than 610MM[24"] on centers.
3. Remove and retain 2 cover screws and cover.
4. a. For in-wall (concealed) power supply-  
Provide supply wire to KO location according to local code and attach securely to chassis at KO with appropriate strain relief connector (not supplied).  
b. For surface Mounted Conduit (exposed) power supply -  
Provide appropriate conduit to entry location accordingly to local code and attach securely to chassis with correct strain relief connector (not supplied).

- Drill four(4) holes at location A,B,C, and D of 5/16" Diameter( $\Phi 8$ ) x 35MM[1-3/8"] deep if using wall anchors supplied with unit. Install supplied anchors flush with wall face, or install other fastening system suitable for wall conditions (not supplied). Attach dryer to wall. For wood wall/studs use Dia. M6[1/4"] screws at length that will ensure 25MM [1"] min. stud penetration. For masonry walls use expansion bolts or anchors for Dia. M6[1/4"] screws to ensure penetration 6MM[1/4"] deeper than anchor. Shim if necessary to ensure base plate is flat against wall.
- Connect supply and ground wires to terminal block where indicated or connect supply wires to terminal block where indicated and connect ground wire to base plate with ground screw.

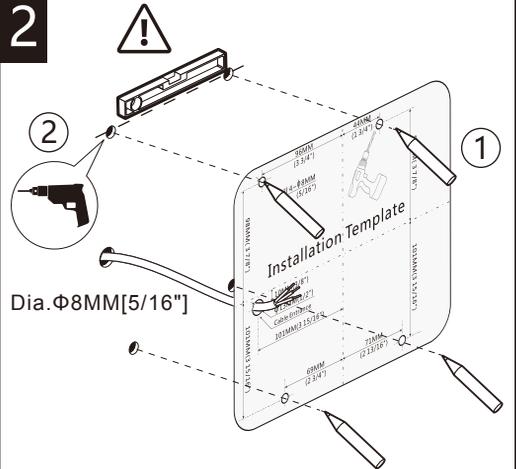
**Connections:**

- Connect the live wire(colored Brown, Red, or Black) to the terminal block marked "L".
  - Connect the neutral wire(colored Black, Blue, White or Grey) or connect the second live wire(colored Red or Orange) to the terminal block marked "N".
  - Connect the ground wire to the terminal block marked "⊕" or to the green screw marked "⊕" Bare grounding (earth) wires should be sleeved with green and yellow or green tubing. Colors of live and neutral wires depends on voltage of supply service and requirements of Building and Electrical Code having jurisdiction.
- Replace cover. Do not over-tighten screws.

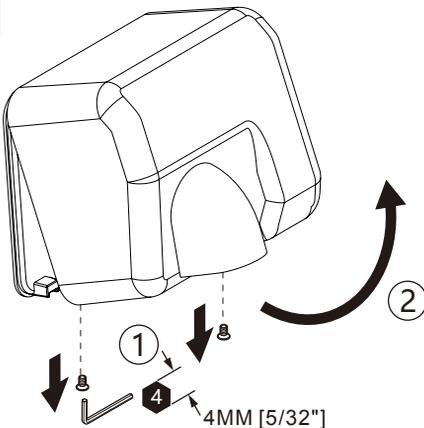
**1** Circuit Breaker (By others)



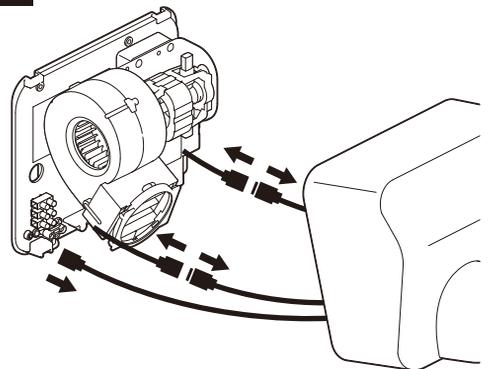
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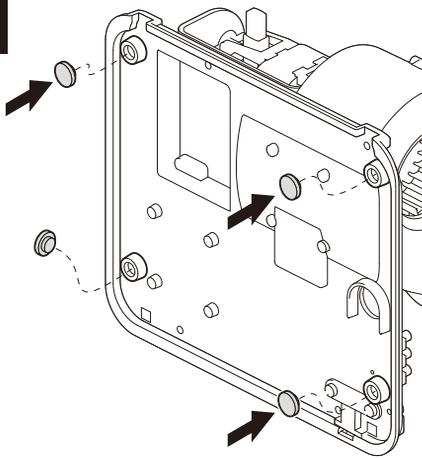
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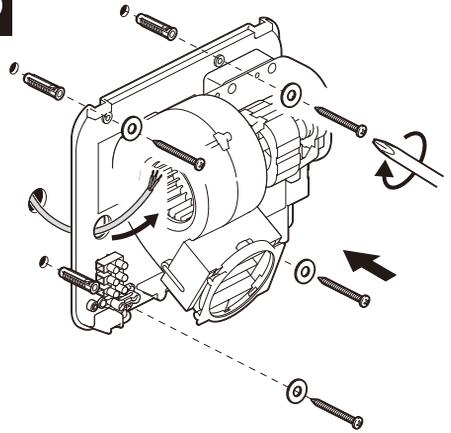
**4**



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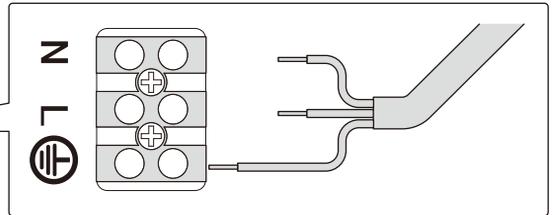
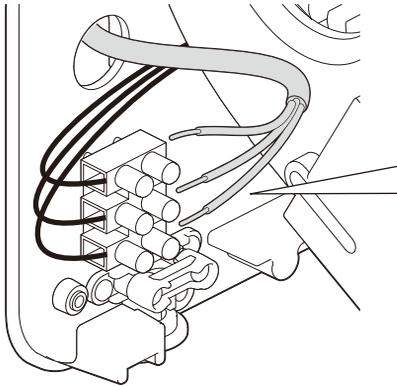


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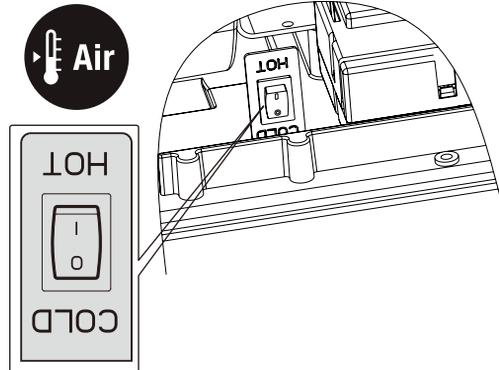
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HARD WIRED ONLY



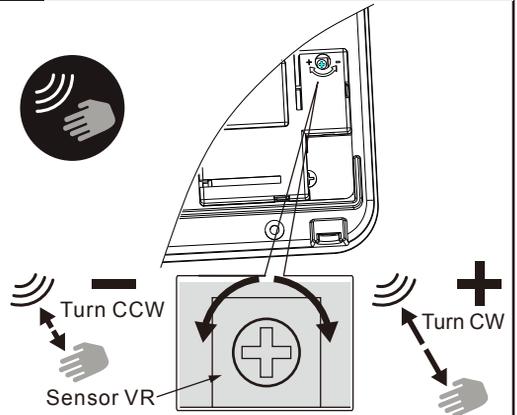
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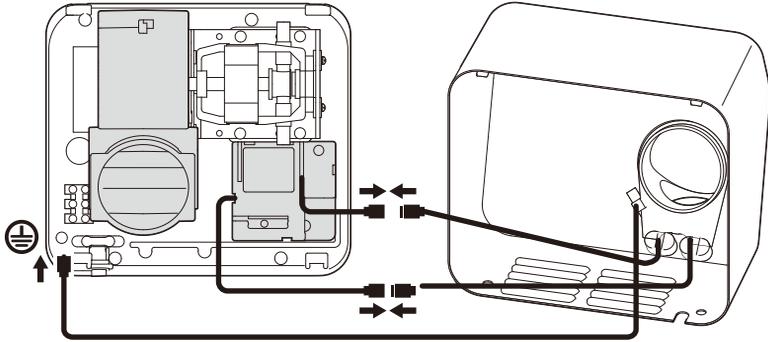
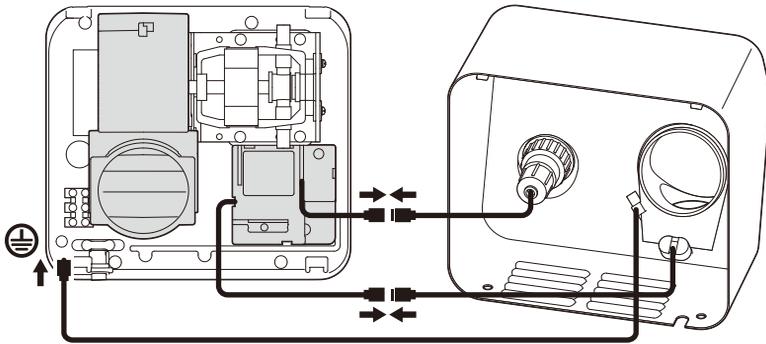
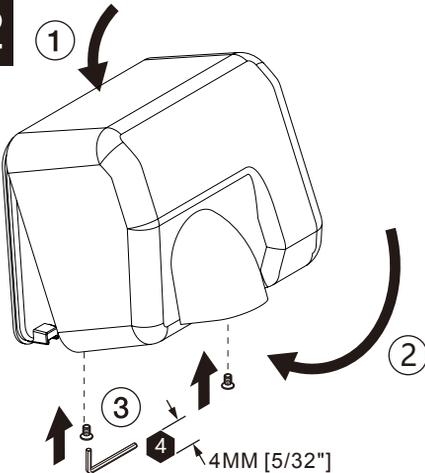
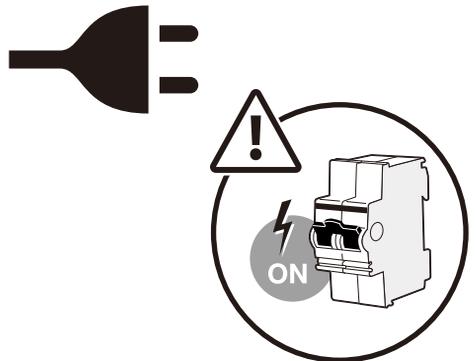
HOT AIR ON/OFF (Selection)



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SENSOR RANGE SETTING



**10****HAND DRYER CONNECTIONS (SENSOR TYPE)****11****HAND DRYER CONNECTIONS (MANUAL TYPE)****12****13****PLUG IN/TURN ON CIRCUIT BREAKER**

## OPERATION

No-touch operation.

There is a blue LED light to guide user to the air flow.

Shake excess water from hands.

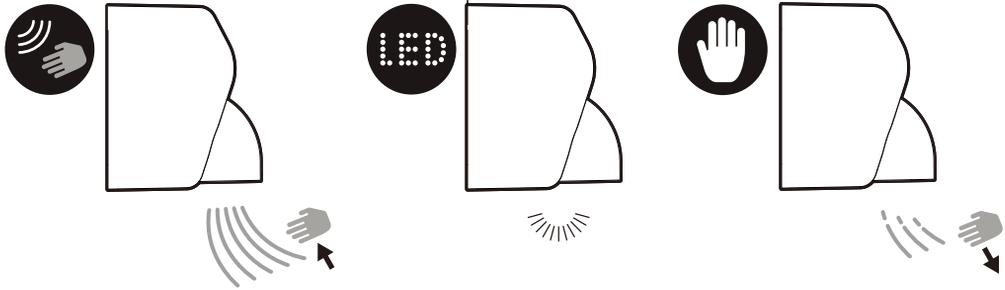
Place hands under the outlet to start operation.

Rub hands lightly and rapidly under the nozzle outlet.

Stops automatically after hands are removed or if maximum time is reached.



### BASIC USE (Sensor Type)

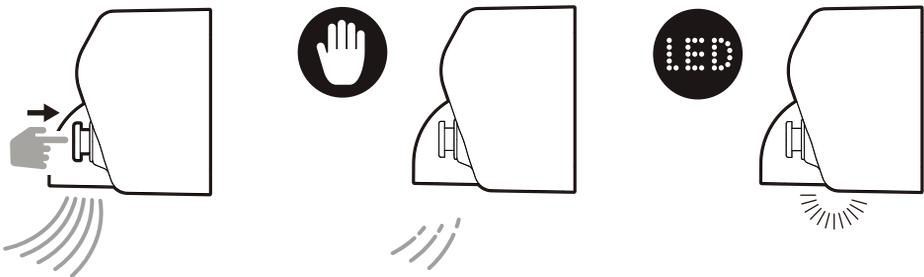


Operation without touching, place your hands under the exit to activate the device.

Externally visible service blue LED light guides hands to air flow.

After 3 seconds without detecting hands, the device stops automatically.

### BASIC USE (Manual Type)

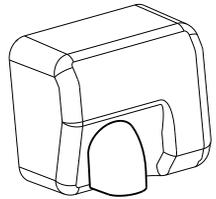
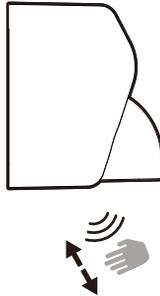
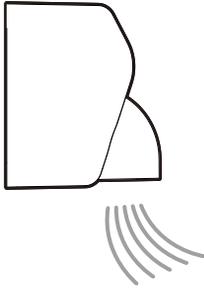


Press button to activate the device.  
Press again to stop.

The device switches off automatically after 30 seconds.

Externally visible service blue LED light guides hands to air flow.

## OWNER ADJUSTMENTS



It is possible to turned on/off hot air with a switch(If it is supplied) located inside the unit (See 7 in "INSTALLATION").

It is possible to adjust the detection distance by means of the potentiometer located inside the unit (See section 8 in "INSTALLATION").

Air nozzle is available to have 360° revolving.  
Turn upward to dry face or hair

## DIAGNOSTICS & REMEDIES

SYMPTOM	CORRECTIVE ACTION
Hand dryer fails to start	Ensure the breaker supplying the dryer is operational. If it is, disconnect the power and remove the hand dryer cover. Check all the wire connection to sure they are well fixed. Turn on power and verify correct power at terminal block. If it does not work then replace circuit board.
Hand dryer turns on/off erratically or not sensitive enough	Ensure that there is no obstruction on or in front of the infrared sensor zone. Clean any dirt off the sensor lens. Try adjusting the sensitivity potentiometer on program board. If it still does not still not work, replace circuit board and sensor board.
Not hot air	Check if the heat element switch is set for power on. Check if the heat element is broken. If yes, replace with a new one.
Hand dryer makes ticking noise	Check the motor brush wear down condition. Replace them if worn out or install a new motor. Disconnect power, remove cover, check to make sure no object is stuck in motor vents.

## WARRANTY

All of our dryers are designed and manufactured to provide years of dependable performance. Component parts are guaranteed to be free of defects in material and workmanship for a period of one (1) year from date of original invoice. This guarantee will be honored provided that the dryer is installed and maintained in accordance with the instructions. Parts damaged during the installation are the purchaser's responsibility. The warranty covers defects exclusively, and only liability for the replacement of defective parts will be accepted. This warranty does not cover wear and tear, or misuse and abuse. Transportation, freight cost and labor are also excluded.

Defective parts must be returned prepaid, accompanied by the serial number, to the point of purchase. This warranty is granted solely to the original purchaser of the unit and is subject to registration.

## MAINTENANCE

Periodic cleaning of the unit is recommended. Remove cover and clean dryer dust lint.

### Cleaning stainless steel

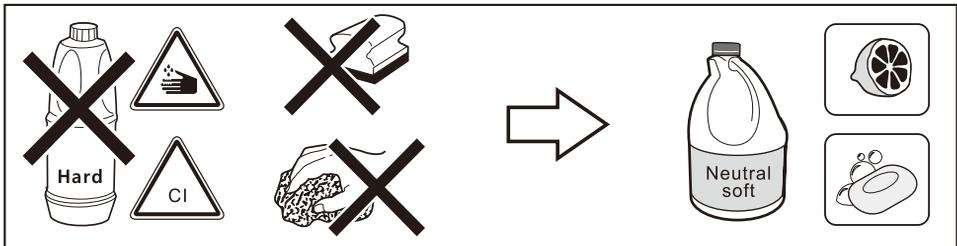
Stainless steel is highly resistant to rust, but there are some very strict cleaning and maintenance rules to be followed to prevent damage to its appearance.

#### General cleaning tips

Apply neutral detergents formulated for these purposes (non-ionic surfactants and citric acid). Apply the detergent with soft cloth. Be careful with abrasive cloths. They may scratch the surface. Rinse with water until all the detergent has gone.

Residue from hygiene products, liquid soap, shampoos, bath gel, etc, can also damage surfaces. Rinse the surface with plenty of water after use.

Limescale stains can be prevented by drying the surface with a soft cloth after use.



#### Specific cleaning tips

Limescale from mains water: Apply a solution of one part vinegar and three parts water directly to the stains and leave to work for a few minutes. Then rub with a soft cloth or damp sponge. Then give it a final wash with plenty of water and neutral soap to ensure it is thoroughly rinsed.

Unacceptable practices (loss of guarantee)

- Do not apply detergents with abrasive products or which contain:
  - Hydrochloric acid
  - Sodium hypochlorite (bleach)
  - Formic acid.
- Do not use abrasive utensils like metal scouring pads or abrasive sponges.
- Do not spray the detergent on the surface, because the liquid can get into the openings or cracks in them and cause damage.
- Do not use anti-limescale and descaling cleaning products. They are not suitable for cleaning satin less steel.
- Do not use silver cleaners, contain chlorides that attach stainless steel.

#### Warning. Important to avoid (loss of guarantee)

Bleach and descalers are often applied to bathroom equipment and left to work for a time. This leads to the release of gases that contain chloride, which together with the water in the surface cause chlorides to run down the surface of the stainless steel. This rusts both internal and external surfaces.

# DIAGRAM BY STANDARD CIRCUIT BOARD

