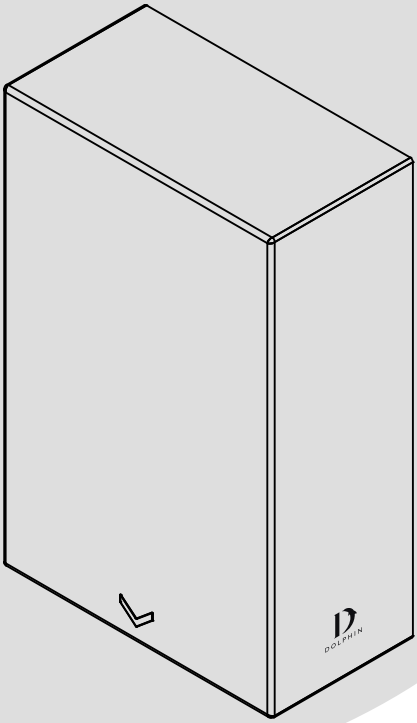
DOLPHIN

High-Speed
Hand Dryer

BC2009



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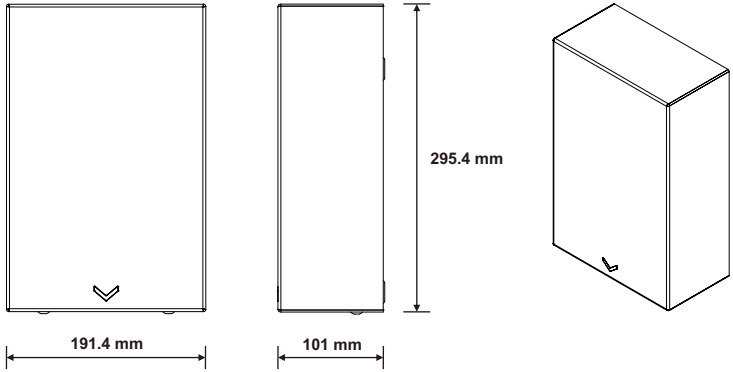
Operating Instructions and Parts Manual

Surface Mount



TECHNICAL SPECIFICATIONS

ITEM CATEGORY	PERFORMANCE DATA
Operating Voltage	220-240 Vac, 50/60 Hz, 0.84-1.0 kW
Output Warm Air Temp	55 °C [131 °F] at ambient T = 25 °C [77 °F], MAX, Adjustable by Owner
Warm Air Speed Output	95-115 m/s, adjustable
Motor Type	325-500 W, 22000-29000 r.p.m., Adjustable; Brush Type, Dual Ball Bearings
Motor Thermal Protection	Auto Resetting Thermostat turns unit off at 95 °C [203 °F]
Heater Element	Range Adjustable by Owner, 325-500 W
Heater Thermal Protection	Auto Resetting Thermostat turns unit off at 85 °C [185 °F] Thermal fuse cuts unit off at 142 °C [288 °F]
Drying Time	Less than 15 seconds
Stand-by Power	Less than 0.5 W
Circuit Operation	Infrared Automatic, self adjusting
Sensor Range	Standard [170 ± 20 mm], Adjustable, The range is [100-230 mm]
Timing Protection	60 seconds auto shut off
Sound Level	MIN 69 dB to 76.6 dB MAX @ 1m
Drip proof	IP24
Isolation	CLASS 1
Net Weight	4.0 kg
Shipping Weight	4.5 kg
Unit Size	191.4 mm (W) x 295.4 mm (H) x 101 mm (D)

COVER TYPE/ COVER FINISH

BC2009 - Stainless steel (#304), Satin finish (t:1.2 mm)

General safety information

⚠ WARNING This product is intended for installation by a qualified service person. Use 1.2 mm² solid conductor for wiring.

⚠ WARNING Disconnect power at the service breaker before installing or servicing. Full pole disconnection device must be incorporated in the fixed wiring in accordance with the wiring rules.

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

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

NOTE: We do not recommend installing this dryer above a basin. If you are installing this dryer above a basin, please make sure that reflection won't occur.

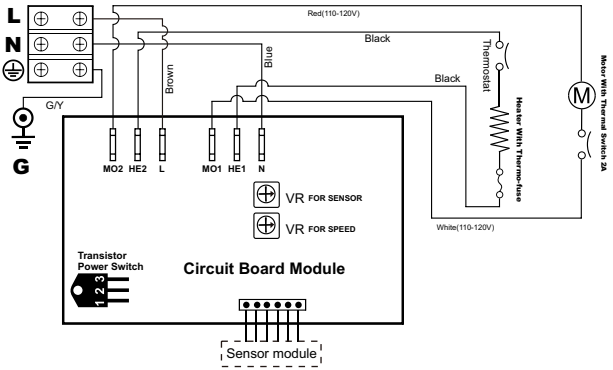
【Type Y attachment】

If the power supply cord is damaged, it must be replaced by the manufacturer or its service agent or a qualified person in order to avoid a hazard. Disconnect the fixed wiring only in accordance with the wiring rules.

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.

Circuit Diagram

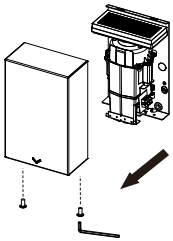


Installation

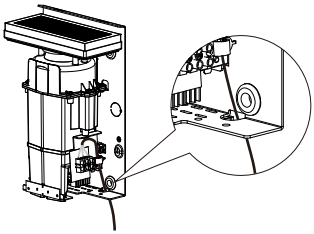
1. Make sure power supply breaker is switched off. Installation must be carried out in accordance with the current edition of the local wiring regulations code having jurisdiction. Installation should be performed only by a qualified electrician.
2. Place template against wall at desired height (see mounting height recommendations) and mark locations of 4 mounting holes and wire service entry at knockout (KO) location.

Note: For two or more dryers, dryers should be no closer than 24 inches (610 mm) on center.

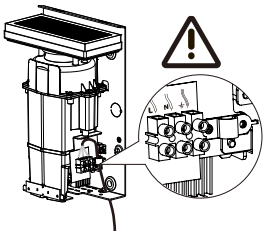
1 Remove and retain 2 cover screws and cover.



2 Insert the power cord into the opening.

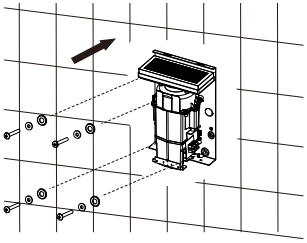


3 Connect the wire into terminal as below:

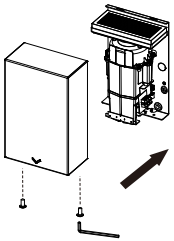


Connections:
A. Connect the live wire (colored black, brown or dark) to the terminal block marked "L".
B. Connect the neutral wire (colored white, blue or light) to the terminal block marked "N".
C. Connect the ground wire (colored green or green and yellow) to the green screw marked "⏚".

4 Fix the base plate to the wall with 4 screws of 1/4" x 1-1/2" dimension.



5 Put the front cover back and screw it with L key.



Recommended mounting heights - from bottom edge of dryer above finished floor (AFF)

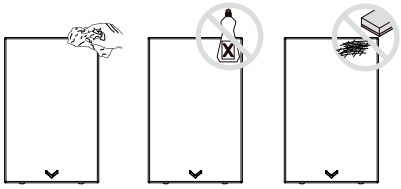
Men	1270 mm
Women	1194 mm
Children 4-7 years	889 mm
Children 8-10 years	991 mm
Children 11-13 years	1092 mm
Children 14-16 years	1194 mm
Wheelchair	1016 mm

'Unit should be mounted to give no less than 300 mm clearance from the bottom of the unit to the nearest surface below'

Cleaning and Maintenance (Every six months is recommended)

Periodic cleaning of the unit is recommended to ensure optimum performance.

- Disconnect the electrical supply.
- Remove the two cover-mounting screws.
- Remove the cover.
- Clean all dust lint from the interior of the dryer.
- Wipe the cover with a damp cloth and mild cleaning solution. Do not Soak. Never use abrasives to clean the cover.
- Replace the cover. Do not over tighten the screws.



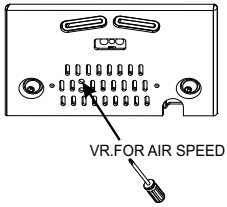
Operation

- **N**o-touch operation.
- **S**hake excess water from hands.
- **P**lace hands under the outlet to start operation.
- **R**ub hands lightly and rapidly.
- **S**tops automatically after hands are removed.

Setting Adjustment

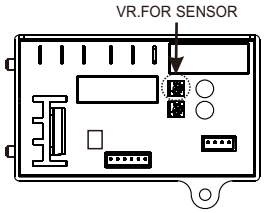
A. Warm air speed adjustment

1.Use phillips screw to adjust air speed.
2.Clockwise: Increases the air speed(+) ↻.
3.Counterclockwise: Decreases the air speed(-) ↺.



B. Sensor range adjustment

1.The recommended unit sensor range is 170 mm.
This can be adjusted from 100 mm to 230 mm.
2.Clockwise: Increases the sensing range(+) ↻.
3.Counterclockwise: Decreases the sensing range(-) ↺.
4.DO NOT OVERTURN!



Troubleshooting

Symptom	Corrective Actions for Initial Installation Failures
If the dryer will not run	First ensure that the breaker supplying the dryer is operational. If it is, disconnect the power and remove the dryer cover. Taking suitable precautions to avoid shock hazard, reconnect the power and check for Voltage at the terminal block. Verify that connections are made correctly.
The dryer cycles by itself or runs constantly	Ensure that there is no obstruction on or in front of the IR sensor. Clean any dirt or debris off the sensor lens. If problem persists, replace sensor and CBM.
The dryer makes a loud noise and does not run for a complete cycle	Ensure that the supply Voltage is correct. Dryer will make a loud humming noise if the input Voltage is too high. Verify Voltage requirement on unit rating label and correct supply as required. If CBM has been damaged, replace CBM, IR sensor module and VR component and cable.
The dryer runs but air stream is low pressure and/or low velocity	Ensure that the supply Voltage is correct. Dryer will run weakly if the input Voltage is too low. Verify Voltage requirement on unit rating label and correct supply as required.

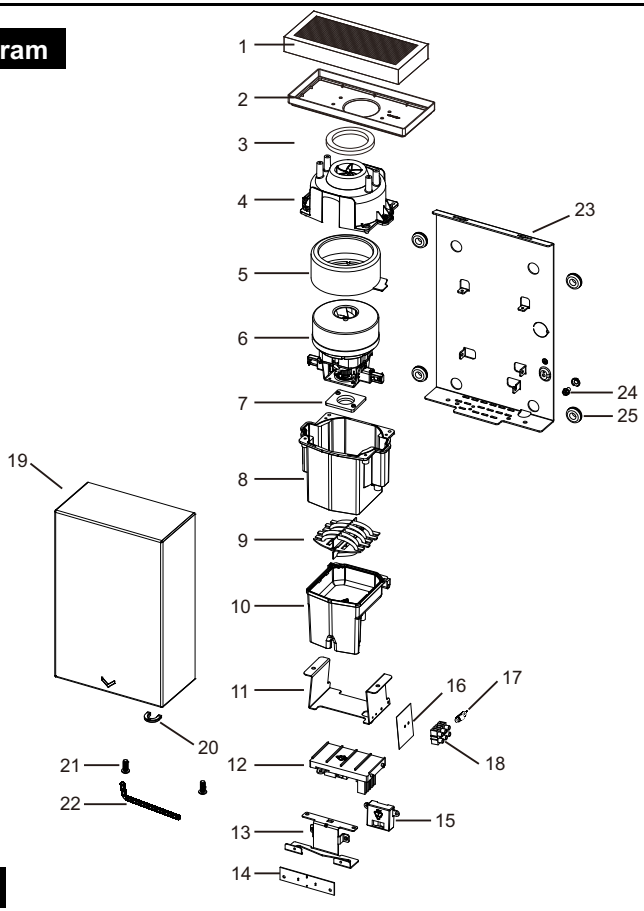
Symptom	Corrective Actions for In-Service Failures
If the dryer will not run	First ensure that the breaker supplying the dryer is operational. If it is, disconnect the power and remove the dryer cover. Replace the CBM and IR sensor module. Taking suitable precautions to avoid shock hazard, reconnect the power and check for Voltage at the terminal block. Use a multimeter to test the current on the heating element. If there was no current, please change the heating element. If current was detected, change the motor or check the motor brushes and replace them if the remaining graphite is ≤ 25/64" [10mm].
The IR sensor only "sees" close range objects	Ensure that there is no obstruction on or in front of the IR sensor. Clean any dirt or debris off the sensor lens. If problem persists, replace sensor and CBM.
The heater gets hot but no air stream is produced	Disconnect the power. Remove the dryer cover and disassemble the blower-motor/fan housing. Replace the fan motor.
The dryer only blows cold air during a full cycle	Disconnect the power. Remove the dryer cover and disassemble the blower-motor/fan housing. Test the thermostat for open circuit. Check the heater element for signs of burning or breakage. Damaged element must be replaced.
The air stream is low pressure and velocity	Check the output nozzle for obstructions. If none are present, disconnect the power. Remove the dryer cover. Remove any dust/lint buildup from intake vent slots. Disassemble the blower-motor/fan housing. Check the motor brushes for worn condition (≤ 25/64" [10 mm] graphite remains) and replace them, if necessary.

Warranty

Limited 3 year warranty

Please see our website or contact us on 01424 202224 for more details.

Parts Diagram



Parts list

Key	Description	Key	Description
1	HEPA Filter	14	LED assembly
2	HEPA Filter box	15	Sensor module
3	HEPA Filter box - gasket	16	Insulation Mylar shield with LNG marked
4	Blower housing - Upper	17	Cable clamp
5	Motor rubber - Large	18	Terminal block
6	Motor	19	Cover
7	Motor rubber - Small	20	Cable protector
8	Blower housing - Below	21	Security hex screw (2 reqd.)
9	Heater assembly	22	L-Wrench
10	Air outlet	23	Base plate
11	Air outlet bracket	24	Grounding screw
12	Circuit Board Module	25	Rubber grommet - Base (4 reqd.)
13	Sensor bracket		