# Automatic

# Hand dryer

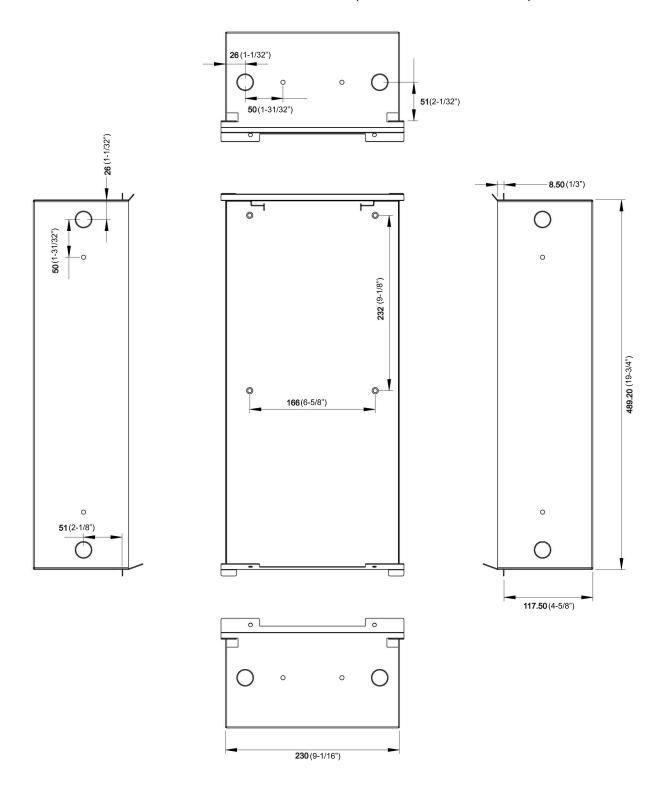


Mounting Instruction
High Speed Hand Dryer Semi-Recessed Type

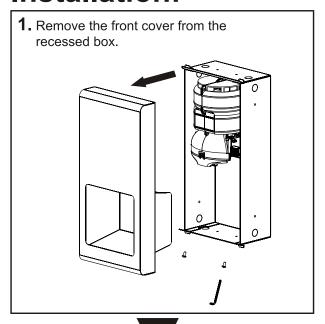
# Diagram: mm

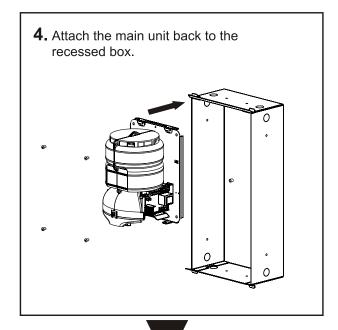
# Rough wall opening: 235 x 495 x 123 mm

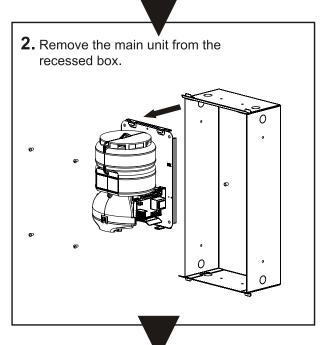
(9-1/4" x 19-1/2" x 4-7/8")

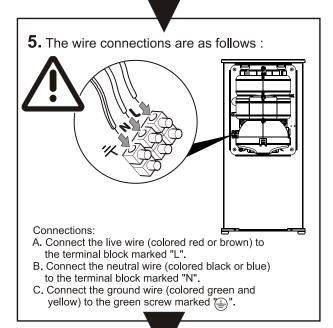


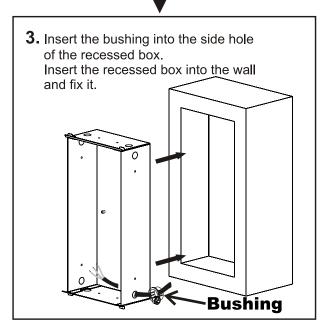
# Installation:

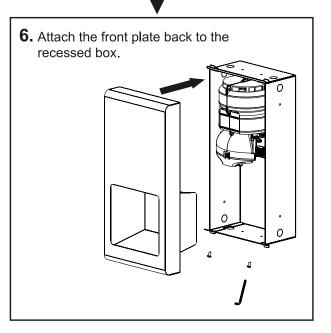












### **General safety information:**

## **A WARNING**

This product is intended for installation by a qualified service person. Use AWG NO. 14 (1.6 mm²) solid conductor for wiring.

## **▲ DANGER**

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

## **A WARNING**

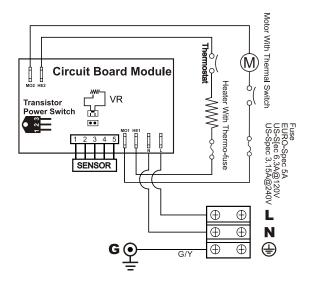
Disconnect power at the service breaker before installing or servicing.

## **A 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 --

## Circuit Diagram



#### TECHNICAL SPECIFICATIONS

#### **ITEM CATEGORY**

#### PERFORMANCE DATA

Operating Voltage 110-120Vac, 50/60 Hz, 1.34-1.6 kW -

220-240Vac, 50/60 Hz, 1,34-1,6 kW -

Warm Air Speed Output 168-224 mi/hr (75-100 m/s), adjustable
Air Output Temperature 113°F (45°C) – Ambient Temp. 68°F (20°C)

Dryer Shall Deliver 51-68 CFM (87-116 m³/h)

Motor Type 15/16HP, 350-700W, 12000-18000 R.R.M., Adjustable;

Brush Type, Dual Ball Bearings

Motor Thermal Protection Auto Resetting Thermostat turns unit off,

120V at 275°F (135°C), 240V at 221°F (95°C)

Heater Element 450-900W, adjustable

Heater Thermal Protection Auto Resetting Thermostat turns unit off at, 185°F (85°C)

Drying Time Less than 15 seconds

Circuit Operation Infrared Automatic, self adjusting

Sensor Range 51 mm to 330 mm [2" to 13"], adjustable; standard 18 cm±2 cm[7"]

Timing Protection 60 seeonds auto shut off

Drip proof IPX1 Isolation CLASS 1

Net Weight 20.7 lbs (9.4 kg) Shipping Weight 24.7 lbs (11.2 kg)

Unit Size 230 mm x 489.20 mm x 117.5 mm [90-35/64" W x 192-19/32" H x 46-1/4" D]

# **Diagnostics and Remedies**

#### Symptom

If the dryer will not run

The dryer cycles by itself or runs constantly

The dryer makes a loud noise and does not run for a complete cycle

The dryer runs but air stream is low pressure and/or low velocity

#### Corrective Actions for Initial Installation Failures

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. Adjust the VR to make sure it is not set too low.

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.

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.

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

If the dryer will not run

The IR sensor only "sees" close range objects

The heater gets hot but no air stream is produced

The dryer only blows cold air during a full cycle

The air stream is low pressure and velocity

#### Corrective Actions for In-Service Failures

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. Test the VR for open circuit (see Technical Specifications for value). Replace VR if  $\Omega = \infty$ . Taking suitable precautions to avoid shock hazard, reconnect the power and check for Voltage at the terminal block.

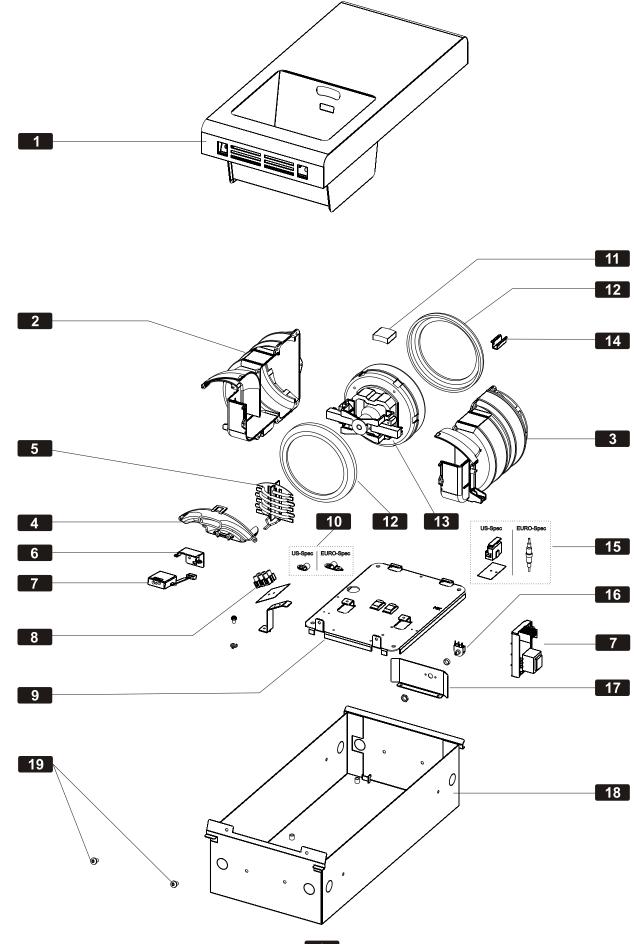
Ensure that there is no obstruction on or in front of the IR sensor. Clean any dirt or debris off the sensor lens. If problem persists, disconnect the power and remove the dryer cover. Taking suitable precautions to avoid shock hazard, reconnect the power and try carefully adjusting the sensitivity control (yellow shaft in blue box on CBM) to increase the sensing range. If problem persists, replace sensor.

Disconnect the power. Remove the dryer cover and disassemble the blower-motor/fan housing. Replace the fan motor.

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.

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 ( $\leq$  25/64" [10 mm] graphite remains) and replace them, if necessary.

# **Assembly Diagram**



# Repair parts list

Key	Part #	Description	Qty
1	C39-0030	Cover	1
2	A19-0006	blower housing (LH)	1
3	A19-0007	blower housing (RH)	1
4	A19-0009	Air outlet	1
5		Heater assembly	1
	T29-0016	900W@120Vac,16Ω	
	T29-0017	900W@240Vac,64Ω	
6	C19-0013	Sensor module bracket	1
7		Circuit Board Module (CBM)	1
	F29-0012	CBM@120Vac	
	F29-0011	CBM@240Vac	
8	F01-005	Terminal block	1
9	C19-0034	Base plate	1
10		Nylon cable clamp	1
	A16-0004	EURO-Spec	
	A01-001	US-Spec	
11	G39-0006	Shock absorbed	1
12	G19-0002	Motor rubber (2 reqd.)	2
13		Motor	1
	E19-0001	700W@120Vac	
	E19-0002	700W@240Vac	
14	C19-0042	Housing fixed plate	1
15		Fuse	1
	E69-0006	5.0A@220-240Vac (EURO-Spec)	
	E69-0001	6.3A@120Vac (us-spec)	
	E69-0002	3.15A@240Vac (us-spec)	
16		Variable resistance (VR)	1
	F59-0002	50KΩ@240Vac	
	F59-0001	100KΩ@240Vac	
17	C19-0018	Variable resistance bracket	1
18	C19-0040	Recessed box	1
19	D19-0005	Security hex screw	2