

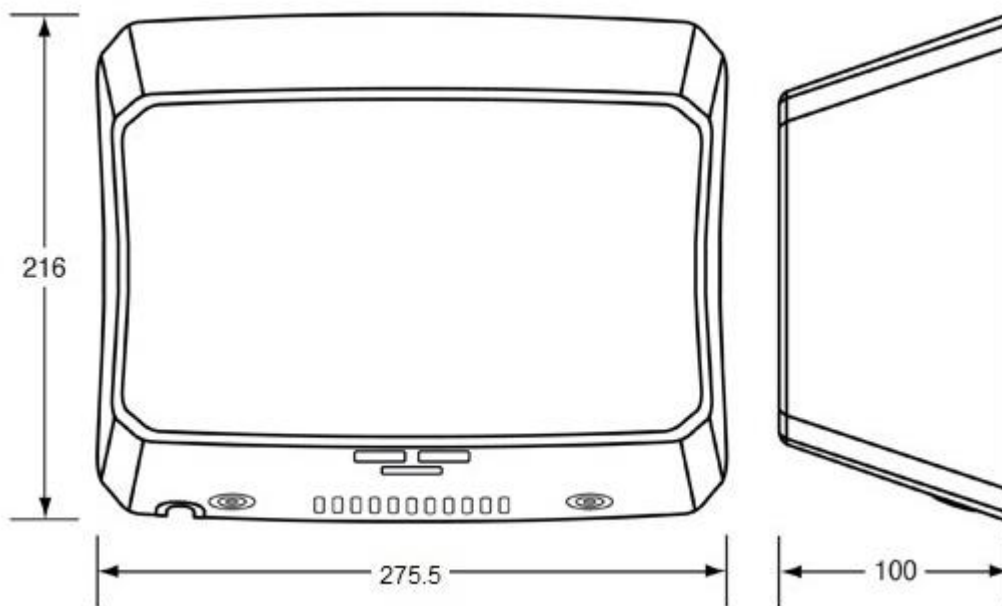
## ECOSLENDER SLIMLINE AUTO OPERATION HAND DRYER OPERATING MANUAL



**ML\_ECOSLENDER05\_SS**



**ML\_ECOSLENDER01\_WHT**



This unit is accessible compliant  
when installed in accordance  
with AS1428.1. guidelines.



The photographs and line drawings of the products presented above are representational only.  
Metlam Australia Pty Ltd reserves the right to, and from time to time, make changes and improvements in design and dimensions.

## Technical Specifications

ITEM CATEGORY	PERFORMANCE DATA
Operating Voltage	240 VAC, 50/60 Hz, 1.0kW
Output Warm Air Volume	42 – 60 CFM {72 – 102 m <sup>3</sup> /h}, Adjustable by Owner
Output Warm Air Temp	131°F {55°C} at ambient T = 77°F {25°C}, MAX, Adjustable by Owner
Output Air Speed	102 mph (150 ft/s) [45.5 m/s {164 km/h}] – 157 mph [70 m/s {252 km/}], Adjustable by Owner
Sound Pressure	68.9 dB-A Min @ 2m, 74.3dB-A Max @ 2m, Adjustable by Owner
Motor Type	0.67 HP, 16-29 krpm, Adjustable, Brush Type, Dual Ball Bearings
Motor Thermal Protection	240 VAC, Auto Resetting Thermostat turns unit off at 203°F {95°C}
Heater Element	ON/OFF Heating Options; Range adjustable by Owner, 325 – 500W
Heather Thermal Protection	Auto Resetting Thermostat turns heater element off at 185°F {85°C}, Resets at 167°F {75°C}, Thermal cut-off at 288oF {142°C}
Drying Time	Less Than 15 Seconds
Standby Power	Less Than 0.5W
Circuit Operation	Infrared Automatic, self adjusting
Sensor Range	4" to 9" [100mm to 230mm], adjustable; standard 7" [170mm± 20mm]
Timing Protection	60 seconds auto shut off
Timing Duration	1 second delayed turn off after last sensor read
Cover Type	18 gauge {.047", 1.2mm} Thick Drawn Steel or #304 Stainless Steel
Cover Finish	White Epoxy on Steel or Satin Stainless Steel
Unit Size	275.5mm x 216mm x 100mm
Net Weight	8.4 lbs {3.8 kg}
Shipping Weight	9.2 lbs {4.2 kg}

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## 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 severe 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.*

## 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.
3. Remove and retain 2 cover screws and cover.
4. a. **For in-wall (concealed) power supply - (See MT & IG 1207101509)**  
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 according to local code and attach securely to chassis with correct strain relief connector (not supplied).
5. Drill four (4) holes at locations A, B, C and D of  $\varnothing 5/16$ " ( $\varnothing 8$ ) Diameter x 1-3/8" (35mm) 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  $\varnothing 1/4$  inch (M6) screws at length that will ensure 1 inch (25 mm) min. stud penetration. For masonry walls use expansion bolts or anchors for  $\varnothing 1/4$  inch (M6) screws to ensure penetration 1/4 inch (6 mm) deeper than anchor. Shim if necessary to ensure base plate is flat against wall.
6. 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:

- A. Connect the live wire (colored Brown, Red or Black) to the terminal block marked "L".
  - B. 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".
  - C. 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 depend on voltage of supply service and requirements of Building and Electrical Code having jurisdiction.
7. Replace cover. Do not over-tighten screws.

## Installation Kit Included (find in carton)

- |                                                                                              |                                                                                 |
|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| 1. Self-Threading screws 1/4" x 1-1/2" (M6 x 38) x 4 pcs                                     | 4. Crimp-on terminal wire tip x 3 pcs                                           |
| 2. Metal Washer 3/8" x 7/8" x 1/16" ( $\varnothing 10$ x $\varnothing 22$ x 1.6 thk) x 4 pcs | 5. Plastic anchor $\varnothing 5/16$ " x 1-3/8" ( $\varnothing 8$ x 35) x 4 pcs |
| 3. Nylon bushing x 4 pcs                                                                     |                                                                                 |

## Service Tool Included (with installation kit)

- Security hex driver 4 mm x 1 pcs (5/32" pin-hex will work if tool is lost)  
➤ Please unpack the unit and check the quantity of the above tool and kit.



## Recommended Mounting Heights

- From bottom edge of dryer above finished floor (AFF)

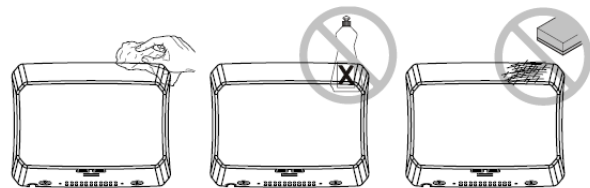
<b>Men:</b>	1200mm
<b>Women:</b>	1200mm
<b>Children 4-7 Years:</b>	850mm
<b>Children 8-10 Years:</b>	950mm
<b>Children 11-13 Years:</b>	1050mm
<b>Children 14-16 Years:</b>	1150mm

**Accessible Compliant:** Where provided, hand dryers shall be installed with the height of their operative component or outlet not less than 900mm and not more than 1100mm above the plane of the finished floor, and no closer than 500mm from an internal corner. (Refer- AS1428.1-2009, Clause 15.4.)

## Cleaning and Maintenance

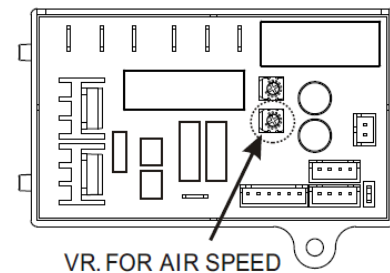
Periodic cleaning of the unit is recommended to ensure optimum performance.

- 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.



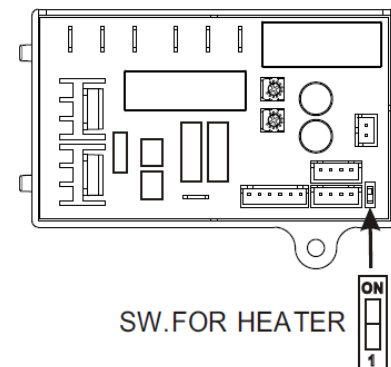
## Warm air speed adjustment

1. Switch off the power, loosen the cover screws and remove the cover.
2. Use small Philips head screwdriver or plastic flat blade probe to turn VR shaft. Clock-wise [CW] to increase power to maximum (+) ↻, turn tool gently [CCW] to reduce power as required (-) ↻.



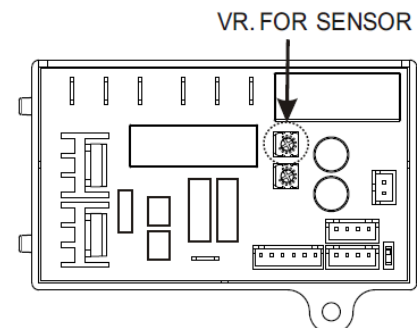
## Heater Element Switch ON/ OFF

1. Switch off the power, loosen the cover screws and remove the cover.
2. Adjust the heater switch on the PCB with a small plastic or wood flat blade probe.
  - 2-1. Slide the switch to "ON" :Enables heater on.
  - 2-2. Slide the switch to "1" :Disables heater.



## Sensor range adjustment

1. The range is 4" to 9" [100 mm to 230 mm], standard setting is 7" [170 mm ± 20 mm ]
2. Clockwise: Increases the sensing range(+) ↻
3. Counterclockwise: Decreases the sensing range(-) ↻
4. **DO NOT OVERTURN!**



## Diagnostics and Remedies

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.
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.
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.

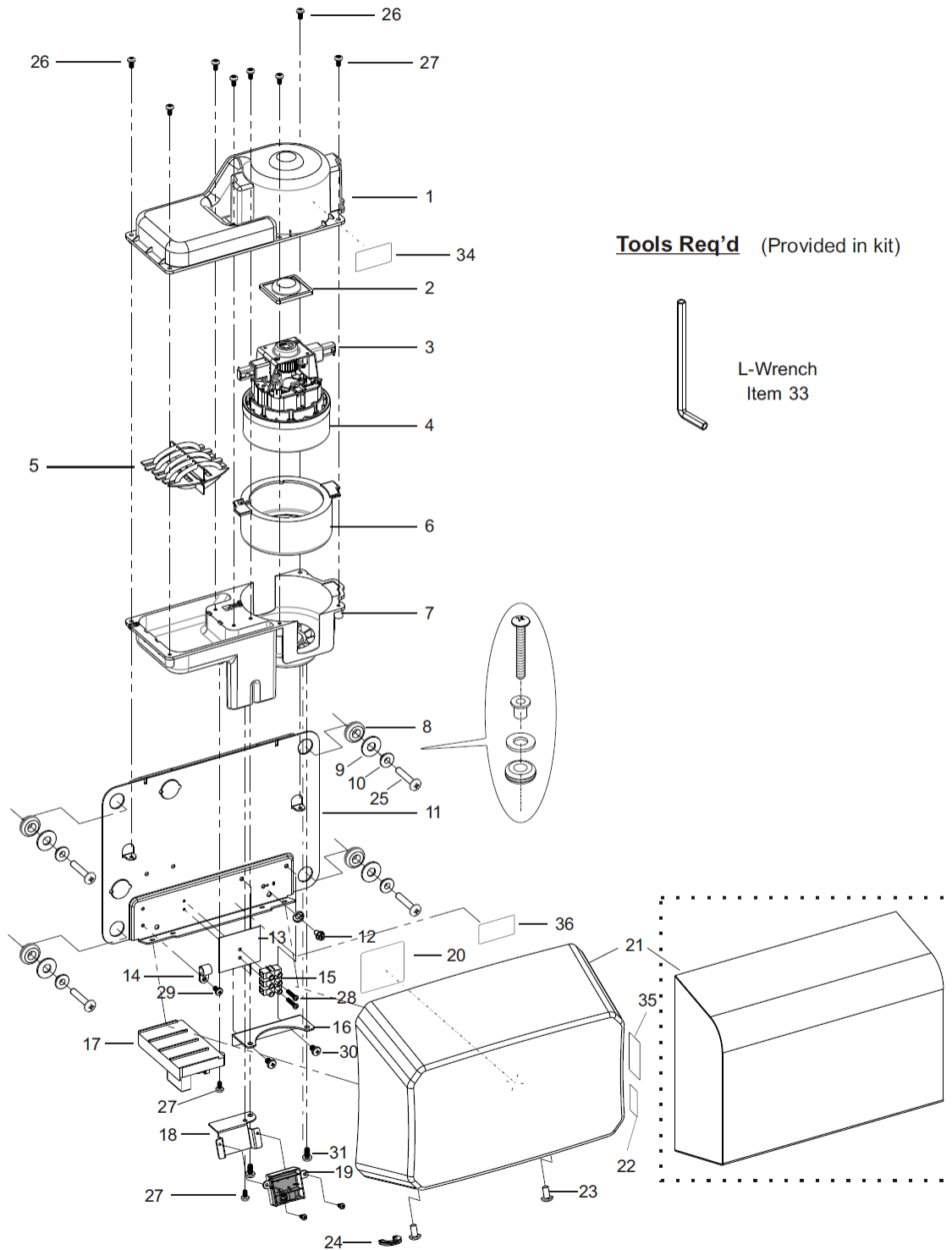
  

Symptom	Corrective Actions for In-Service Failures
If the dryer will not run	First ensure that the breaker supplying the dryer is operational. If it is, disconnect the power and remove the dryer cover. Replace the CBM and IR sensor module. Taking suitable precautions to avoid shock hazard, reconnect the power and check for Voltage at the terminal block.
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. Check VR for sensor range setting. If problem persists, disconnect the power and remove the dryer cover and Replace CBM, IR sensor module.
The heater gets hot but no air stream is produced	Disconnect the power. Remove the dryer cover. Check VR for speed setting. Disassemble the blower- motor/ fan housing. Replace the fan motor. Reassemble.
The dryer only blows cold air during a full cycle	Disconnect the power. Remove the dryer cover and check/ ensure heater SW is ON. 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. Check VR for speed setting. Disassemble the blower-motor/fan housing. Check the motor brushes for worn condition ( $\leq 1\text{-}3/16\text{''}$ [30 mm] graphite remains) and replace them, if necessary.

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## Assembly Diagram



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## Repair parts list

Key	Description	Qty	Key	Description	Qty
1	Blower housing - Upper	1	25	Self threading screw 1/4"x1-1/2",	4
2	Motor rubber - Upper	1		philips pan head	
3	Motor brushes	2	26	Screw M4x10, philips pan head	2
4	Motor	1	27	Self threading screw M4x10,	8
	0.67HP@120Vac			philips pan head	
	0.67HP@240Vac		28	Screw M3x16,philips pan head	2
5	Heater assembly	1	29	Screw M4x10,philips pan head	1
	500W@120Vac,28.8Ω			with external tooth lock washer	
	500W@240Vac,115.2Ω		30	Screw M5x8,philips pan head	2
6	Motor rubber - Lower	1		with external tooth lock washer	
7	Blower housing - Lower	1	31	Screw M5x10,philips pan head	2
8	Rubber grommet -Base	4	32	Wires Harness (Not Shown)	1
9	Metal washer	4	33	L-Wrench	1
10	Nylon bushing	4	34	CBM terminal legend label	1
11	Base plate	1	35	Rating label	1
12	Grounding screw with cup washer	1		Ecoslender 1	
13	Mylar shield with LNG marked	1		Ecoslender(H) 1	
14	Nylon cable clamp	1		Ecoslender(S) 1	
15	Terminal block	1	36	Caution Branch Circuit label	1
16	Blower mounting bracket	1		15A- 120Vac	
17	Circuit Board Module (CBM)	1		7.5A- 240Vac/ 277Vac	
	110-120Vac				
	208-240Vac				
	277Vac				
18	Sensor bracket	1			
19	Sensor module	1			
20	Label, Circuit Diagram	1			
21	Cover EcoSlender 1	1			
	Cover EcoSlender SA				
	Steel - Epoxy enamel				
	Stainless steel - Bright				
	Stainless steel - Satin	1			
22	CAUTION label	2			
23	Security hex cap head 1/4"-20				
	x 5/8" screw with lock washer	1			
24	Cable protector				

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## **Warranty**

The product warranty is 5 years (3 years Parts and Labour plus 2 years parts only) from the date of purchase. For more information, please see Metlam Australia's Warranty Statement: <https://www.metlam.com.au/service-support>.

## **Service**

For service related enquiries email [service@metlam.com.au](mailto:service@metlam.com.au).

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