

## MOMENTUM DC

**Model: MOMDC100 & MOMDC150**

**(Continuous Run Inline Exhaust Fan)**

### INSTALLATION AND WIRING INSTRUCTIONS



**Class II (double insulated) electrical appliance**

**READ AND SAVE THESE INSTRUCTIONS**

# IMPORTANT SAFETY INSTRUCTIONS

Thank you for purchasing this quality Ventair exhaust fan. To ensure correct operation and safety, please read all instructions prior to using the product and keep all instructions for future reference.

**WARNING: TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:**

**Licensed Electrician Required:** For your safety, all electrical work including the removal of the factory link wire and the connection of the external control switch must be performed by a licensed electrician in accordance with the **Australian/New Zealand Wiring Rules (AS/NZS 3000)** or the latest edition.

**Double Insulated (Class II):** This appliance is **double insulated** and does not require an earth connection. Ensure the integrity of the double insulation is maintained during installation.

**DC Technology Warning:** This unit utilises a high-efficiency DC motor. **DO NOT** connect this fan to any external AC solid-state speed controller or wall dimmer, as these are incompatible with DC electronics and will cause permanent damage to the motor.

**Electronic Sensitivity:** The internal PCB (Printed Circuit Board) is sensitive to voltage fluctuations; ensure the power supply is stable and that the dual pole isolation switch is used for all maintenance to prevent electronic surges.

**Isolation Warning:** A **dual pole isolation switch (RCBO)** must be included in the fixed wiring to provide full isolation for maintenance. Note that the fan may remain active in "trickle" or "run-on" mode even if the wall switch is turned off; always isolate at the dual pole switch before servicing.

**Supervision:** This appliance is not intended for use by persons (including children) with reduced physical, sensory, or mental capabilities, unless supervised by a person responsible for their safety. Cleaning and user maintenance shall not be performed by children without supervision.

**Combustion Air Safety:** Precautions must be taken to avoid the back-flow of gases into the room from the open flue of gas or other fuel-burning appliances. Ensure the air supply is sufficient for both the fan and any combustion appliances in the room.

**Venting Requirements:** This inline fan must be vented to the outdoors. Ensure the exhaust air is not discharged into a wall cavity, ceiling space, or any other enclosed area; it must be discharged into the external atmosphere or a dedicated duct.

**Mounting and Support:** The fan unit must be securely fixed to a structural member (such as a ceiling joist) to prevent vibration and noise. Mount with the lowest moving parts at least 2.3m above the floor level.

**Wet Area Compliance:** If installed in a bathroom, near sinks, or water taps, the unit must be located and installed in accordance with the latest edition of the AS/NZS 3000 wiring rules relating to damp situations (Zones). Never place a switch where it can be reached from a tub or shower.

**Service Access:** Ensure the fan motor and the toggle switch for the Run-on/Trickle modes remain accessible for future adjustment and servicing.

**Supply Cord:** If the supply cord (Plug & Flex) is damaged, it must be replaced by the manufacturer, its service agent, or similarly qualified persons in order to avoid a hazard.

**Usage Restrictions:** For general ventilation use only. **DO NOT** use to exhaust hazardous or explosive materials and vapours.

**WARNING: For your safety, a licensed electrician must perform all electrical work and ensure a dual pole isolation switch (RCBO) is included in the fixed wiring as per the Australian/New Zealand Wiring Rules (AS/NZS 3000).**

# INTRODUCTION

Momentum DC in-line exhaust fans are produced under ISO 9001 quality standards, with each component thoroughly tested post-manufacturing. Before installation, please confirm the correct size and model were received, the rating label matches your electrical supply, and inspect for shipping damage. Contact your supplier immediately if damage is found. **Do not operate the unit if damaged.** This fan is designed for indoor use only, operating with air temperatures between -10°C and +50°C. Suitable for conditioned or unconditioned air.

## MOULD REDUCTION TECHNOLOGY



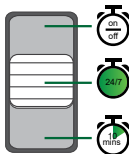
Tired of dampness and worried about mould? This product features Ventair's advanced Mould Reduction Technology to help you maintain a dry and healthy home. Choose the ideal setting for your needs:

**Standard** - Powerful, On Demand Extraction provides immediate and effective removal of moisture. Alternatively, the built-in

**10-minute run-on timer** continues to effectively clear lingering moisture after you've switched it off. For continuous protection, the **24/7 Trickle** mode delivers a gentle, constant airflow when the main switch is off, ensuring a healthier home environment by constantly replacing stale, damp air with fresh air.

## MODE SELECTION

### MODE SWITCH



#### Standard

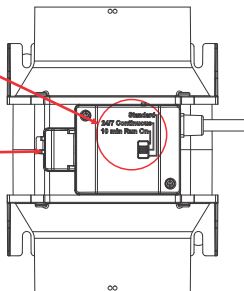
Simply turn on or off as required.

#### 24/7 Continuous Trickle Extraction

Creates a healthier living environment by encouraging constant air change.

#### 10 minute Run On Timer

Continues to operate for 10 minutes after switching off.



### ADDITIONAL FEATURES TERMINAL BLOCK.

Connect active control switch here for activation of '10 min run on' or '24/7' settings.

See wiring diagrams on page 6 and 7.

## TYPICAL APPLICATIONS

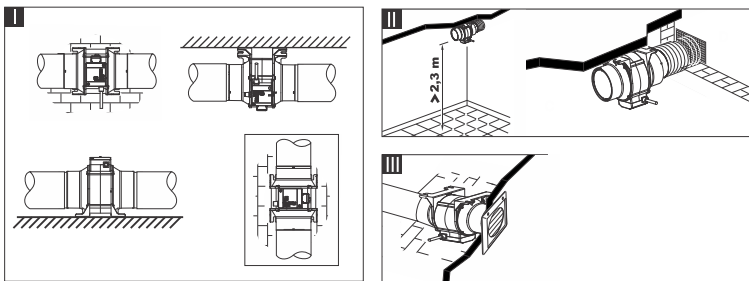
This exhaust fan offers versatile installation, accommodating both horizontal and vertical orientations, and is designed for a wide range of applications.

Typical installations are illustrated in Figure 1.

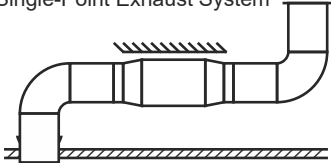
Before installing the product check the following points: **(1)** The fan impeller turns freely and **(2)** there are no obstructions to the airflow.

Each model features a robust mounting bracket, designed for quick and easy installation. To ensure a secure and airtight connection, attach any ductwork using duct tape or duct fastening clamps, both available at your local hardware store.

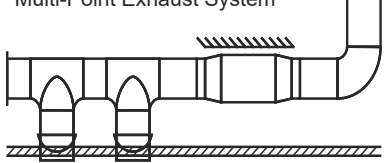
**Figure 1.**



Single-Point Exhaust System



Multi-Point Exhaust System

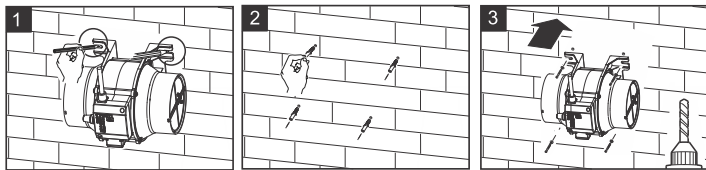


## INSTALLATION AND ASSEMBLY

To start the installation, the motor assembly must first be removed from the mounting bracket. Loosen the two retaining clips around the motor and remove (steps 1-3 below).

Use the motor base as a template to mark the drill points on the wall.

1. Drill holes at the marked positions and insert the wall plugs into the holes.
2. Use screws to firmly attach to the wall.
3. Place fan motor in the bracket & securely fasten retaining clips.



**Avoid the below configurations:** To ensure maximum possible airflow & performance, flexible ducting should be fully expanded with no unnecessary bends or vertical runs.



(1)



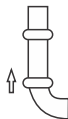
(2)



(3)

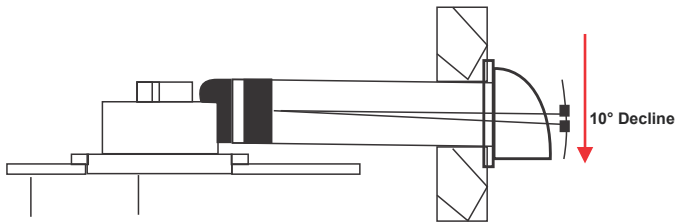


(4)



(5)

**NOTE:** When installing the fan in a bathroom, ensure the duct declines downwards at approximately 10 degrees to aid with condensation removal.

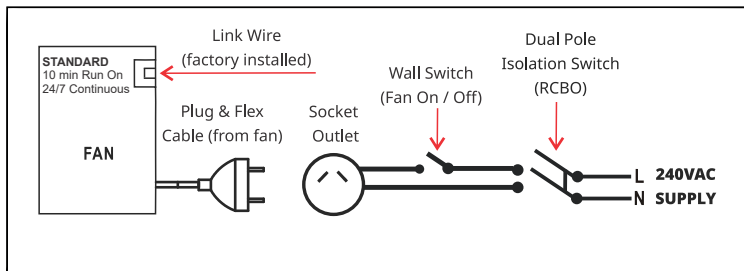


**WARNING:** Ensure the power supply to the exhaust fan is fully isolated via the dual pole isolation switch (RCBO) before carrying out any installation or maintenance.

# ELECTRICAL WIRING

**WARNING:** For your safety, a licensed electrician must perform all electrical work and ensure a dual pole isolation switch (RCBO) is included in the fixed wiring as per the Australian/New Zealand Wiring Rules (AS/NZS 3000).

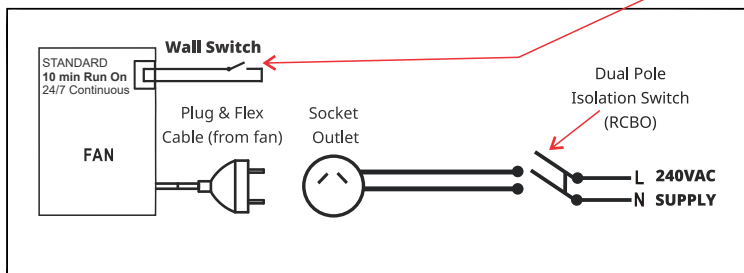
## Wiring for Standard Operation



## Wiring for 10 min Run On or 24/7 Continuous Operation

**FAN CONTROL SWITCH:** In **STANDARD** mode, this switch provides basic ON/OFF control.

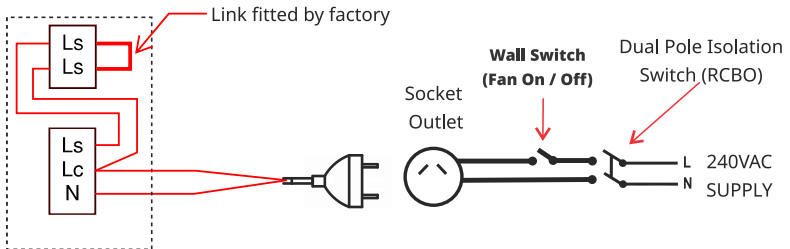
When the unit is configured for **10-minute Run-on** or **24/7 Continuous (trickle)** operation, turning this switch OFF triggers the selected feature rather than stopping the fan immediately. Refer to page 7 for additional wiring information.



**WARNING:** To activate '24/7 continuous (trickle)' or '10-minute run-on' features, a **licensed electrician** must connect an active control switch. Before removing the factory-installed link wire from the terminal block, fully isolate the power by removing the plug from the power outlet or setting the Dual Pole Isolation Switch (RCBO) to the OFF position. **NOTE:** This unit utilises an internal loop; a separate Hard Active supply to the control switch is not required. Ensure the switch is suitable for the product's rated power and refer to the diagrams on pages 5 and 7.

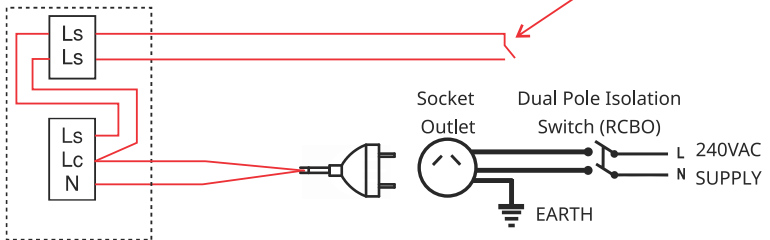
# ELECTRICAL WIRING

## STANDARD OPERATION



## RUN ON TIMER / 24 x 7 CONTINUOUS

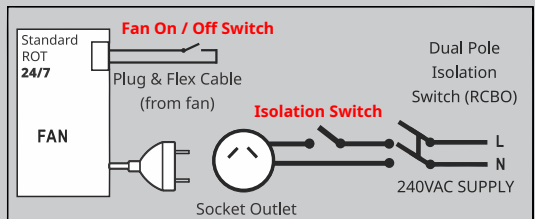
Link wire removed by licensed electrician.  
Electrician to run twin-core cable to wall switch (not supplied) to enable ON/OFF control of the fan.



## Optional System Isolation

**OPTIONAL:** A second switch can be installed to act as an isolator for general servicing or deactivating the 24/7 function during extended absences.

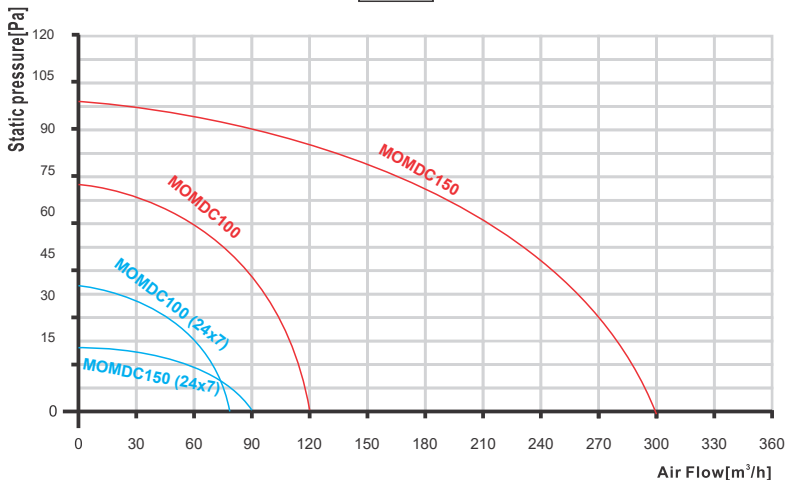
- #1 Isolation Switch
- #2 Fan On / Off



# SPECIFICATIONS

Model No:	MOMDC 100	MOMDC 150
Rated Voltage	220 - 240VAC 50Hz	220 - 240VAC 50Hz
Power Consumption	6 - 7W	10 - 14W
Noise (dB) @3m	30 - 38dB(A)	26 - 44dB(A)
Duct Size	100mm Diameter	150mm Diameter
Air Delivery	80 - 120m <sup>3</sup> /h	90 - 300m <sup>3</sup> /h
Minimum Install Depth	160mm	192mm
Electrical Classification	Class II	Class II
IP Rating	IPX4	IPX4
Indoor / Outdoor Suitability	For Indoor use only	For Indoor use only
Climatic Classification	Tropical	Tropical

## Class II (double insulated) electrical appliance



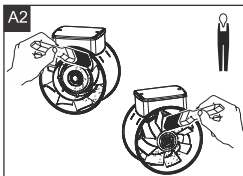
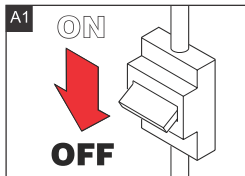
## MAINTENANCE

**WARNING:** ENSURE THE POWER SUPPLY TO THE EXHAUST FAN IS FULLY ISOLATED VIA THE DUAL POLE ISOLATION SWITCH (RCBO) BEFORE CARRYING OUT ANY INSTALLATION OR MAINTENANCE.

This exhaust fan incorporates fully sealed bearings and therefore does not require any lubrication. We recommend inspection of the product at least once every twelve (12) months to avoid the excessive accumulation of dust and dirt on the impeller.

To inspect the unit, fully isolate via the dual pole isolation switch (RCBO) and disconnect from ducting. If any debris is evident on the impeller clean with a damp (not wet) cloth.

DO NOT USE any detergents or abrasive materials for cleaning.



**WARRANTY PERIOD:** 3 year replacement warranty.

**In-home (labour):** N/A

**Lodging a Warranty Claim:** All warranty claims are lodged online by visiting <https://ventair.com.au/warranty/>

Warranty terms and conditions apply. Refer to the enclosed warranty card for additional information.



Do not dispose of electrical products with household waste. Please check with your local council for advice on disposal or recycling. If electrical appliances are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging your health and well-being.



## **MOMENTUM DC**

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