

# Installation & Maintenance Manual

## MORI MEV & MEV HT

### Centralised Mechanical Extract Ventilation Unit



**Read this manual carefully before using the product and keep it in a safe place for reference.**

This product was constructed up to standard and in compliance with regulations relating to electrical equipment and must be installed by technically qualified personnel. The manufacturer assumes no responsibility for damage to persons or property resulting from failure to observe the regulations contained in this booklet.

#### PRECAUTIONS FOR INSTALLATION, USE & MAINTENANCE

- The device should not be used for applications other than those specified in this manual.
- After removing the product from its packaging, verify its condition. In case of doubt, contact a qualified technician. Do not leave packaging within the reach of small children or people with disabilities.
- Do not touch the appliance with wet or damp hands/feet.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
- Do not use the product in the presence of flammable vapours, such as alcohol, insecticides, gasoline, etc.
- If any abnormalities in operation are detected, disconnect the device from the mains supply and contact a qualified technician immediately. Use original spare parts only for repairs.
- The electrical system to which the device is connected must comply with regulations.
- Before connecting the product to the power supply or the power outlet, ensure that:
  - the data plate (voltage and frequency) correspond to those of the electrical mains
  - the electrical power supply/socket is adequate for maximum device power. If not, contact a qualified technician.
- The device should not be used as an activator for water heaters, stoves, etc., nor should it discharge into hot air/fume vent ducts deriving from any type of combustion unit. It must expel air outside via its own special duct.
- Operating temperature: 0°C up to +40°C.
- The device is designed to extract clean air only, i.e. without grease, soot, chemical or corrosive agents, or flammable or explosive mixtures.
- Do not leave the device exposed to atmospheric agents (rain, sun, snow, etc.).
- Do not immerse the device or its parts in water or other liquids.
- Only turn off the power supply to the unit whenever a malfunction is detected or in the case of inspection, cleaning or maintenance. Prolonged and/or repeated power interruption to the unit (any period more than 72 hours) can create a health and safety hazard, damage components and will invalidate any warranty.
- For installation an omnipolar switch should be incorporated in the fixed wiring, in accordance with the wiring regulations, to provide a full disconnection under overvoltage category III conditions (contact opening distance equal to or greater than 3mm).
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- Do not obstruct the fan or exhaust grille to ensure optimum air passage.
- Ensure adequate air return into the room in compliance with existing regulations in order to ensure proper device operation.
- If the environment in which the product is installed also houses a fuel-operating device (water heater, methane stove etc., that is not a "sealed chamber" type), it is essential to ensure adequate air intake, to ensure good combustion and proper equipment operation.
- Install the product so that the impeller is not accessible from the air outlet side as verified by contact with the Test Finger (test probe "B" of the norm EN61032) in compliance with the current safety regulations.

## INTRODUCTION

MORI MEV (Fig. 1) is a whole house mechanical extract fan designed to be connected to self-adjusting valves. Suitable for ceiling, false-ceiling or floor installation, horizontally or vertically. Version with integral humidistat available (MORI MEV HT).

## TECHNICAL SPECIFICATIONS

- Outer fan casing manufactured from powder coated galvanised sheet steel.
- Top cover made from strong ABS plastic.
- Internal self-extinguishing acoustic foam lining.
- EC external rotor motor for energy saving, mounted on ball bearings that guarantee a longer product life cycle and suitable for cold climates.
- Forward curved centrifugal impeller to provide a smooth and silent airflow through the unit.
- Provided with multiple extract points: air exhaust to outside through Ø125mm circular spigot + air extract from inside through 4xØ125mm circular spigots.
- IPX2 protection.
- Power supply 230V~ 50/60Hz.

Model	Airflow m <sup>3</sup> /h max	Static pressure Pa max	Power W max	Sound pressure dB(A) @3m
MORI MEV MORI MEV HT	380	219	36	27

## OPERATION

### Single speed operation

The unit runs at the speed set by turning the integral trimmer "V1" in the terminal box. This is the default factory setting.

Wiring diagram: Fig. 5A - Dip switch configuration: 0000 for MORI MEV HT (Fig. 5F).

Wiring diagram: Fig. 5A - Dip switch configuration: 0001 for MORI MEV (Fig. 5F).

### Two speed operation

The unit runs continuously at the speed set by turning the integral trimmer "V1" in the terminal box and can be boosted at high speed, which is set by turning the integral trimmer "V2" in the terminal box. Boost is activated, when needed, by means of a remote two-position switch (not supplied) or by means of remote sensors.

Wiring diagram: Fig. 5B - Dip switch configuration: 1000 for MORI MEV HT (Fig. 5F).

Wiring diagram: Fig. 5B - Dip switch configuration: 1001 for MORI MEV (Fig. 5F).

### Variable speed operation with 149-SEN-CTRLM remote manual controller (accessory on request)

The unit runs at the speed set by turning the knob of the 149-SEN-CTRLM remote manual control panel (accessory, Fig. 6).

Wiring diagram: Fig. 5C - Dip switch configuration: 0100 for MORI MEV HT (Fig. 5F).

Wiring diagram: Fig. 5C - Dip switch configuration: 0101 for MORI MEV (Fig. 5F).

### Variable speed operation through external domotic (BMS) system or ballast potentiometer

The unit runs at the speed set by turning the knob of an external 1-10V ballast potentiometer or set by an external 1-10V signal from a domotic (BMS) system.

Wiring diagram: Fig. 5D - Dip switch configuration: 0110 for MORI MEV HT (Fig. 5F).

Wiring diagram: Fig. 5D - Dip switch configuration: 0111 for MORI MEV (Fig. 5F).

### Three speed operation with 149-SEN-3V speed selector (accessory on request)

The unit runs at the speed selected by turning the knob of the 149-SEN-3V speed selector (accessory, Fig. 7).

Speed 1 is set by turning the integral trimmer "V1" in the terminal box.

Speed 2 is set by turning the integral trimmer "V2" in the terminal box.

Speed 3 is the maximum speed achievable by the unit.

Wiring diagram: Fig. 5E - Dip switch configuration: 1000 for MORI MEV HT (Fig. 5F).

Wiring diagram: Fig. 5E - Dip switch configuration: 1001 for MORI MEV (Fig. 5F).

### For humidistat version only (MORI MEV HT)

Whatever is the chosen operation and the speed setting, when the humidity threshold is reached, the fan speed is increased by 15%. When the humidity level returns below the threshold, the fan continues to run at increased speed for a pre-set period of time. Humidity threshold is adjustable from 50% to 95% via trimmer HY (Fig. 5G).

To deactivate the humidistat function, turn the trimmer HY completely clockwise (position G).

**NOTE: Dip switch number 4 should always be in "0" position for MORI MEV HT unit to enable humidistat function.**

## MAINTENANCE

Make sure the mains supply of the unit is disconnected before performing any maintenance.

The maintenance must be carried out by a qualified technician and in accordance with local rules and regulations.

The unit should be inspected regularly and cleaning should be carried out as and when required but please note intervals between cleaning should not exceed 12 months. The installer should explain this cleaning regime to the homeowner/occupier and ask the homeowner/occupier to keep a record of the cleaning done on this leaflet as this will be required to be provided by the homeowner/occupier to claim against any product failure under warranty.

Year	Required Maintenance
1	Inspect, clean if required
2	Inspect, clean if required
3	Inspect, clean if required
4	Inspect, clean if required
5	Inspect, clean if required

## STANDARD CONFORMITY

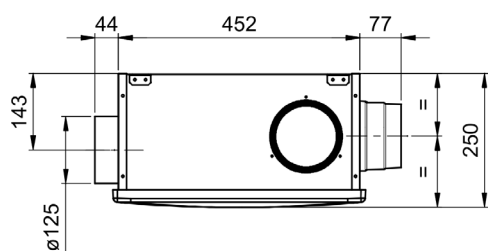
2014/35/EU Low Voltage Directive (LVD)

2014/30/EU Electromagnetic Compatibility (EMC), in conformity with the following standards:

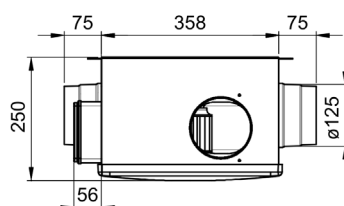
Electrical Safety: EN60335-1(2012)+A11+A13; EN 60335-2-80(2003)+A1+A2

Electromagnetic Compatibility: EN 55014-1(2017); EN 55014-2(2015); EN 61000-3-2(2014); EN 61000-3-3(2013).

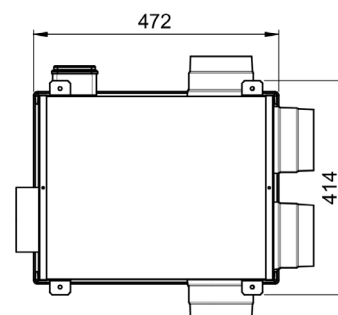
## DIMENSIONS (MM)



Side view



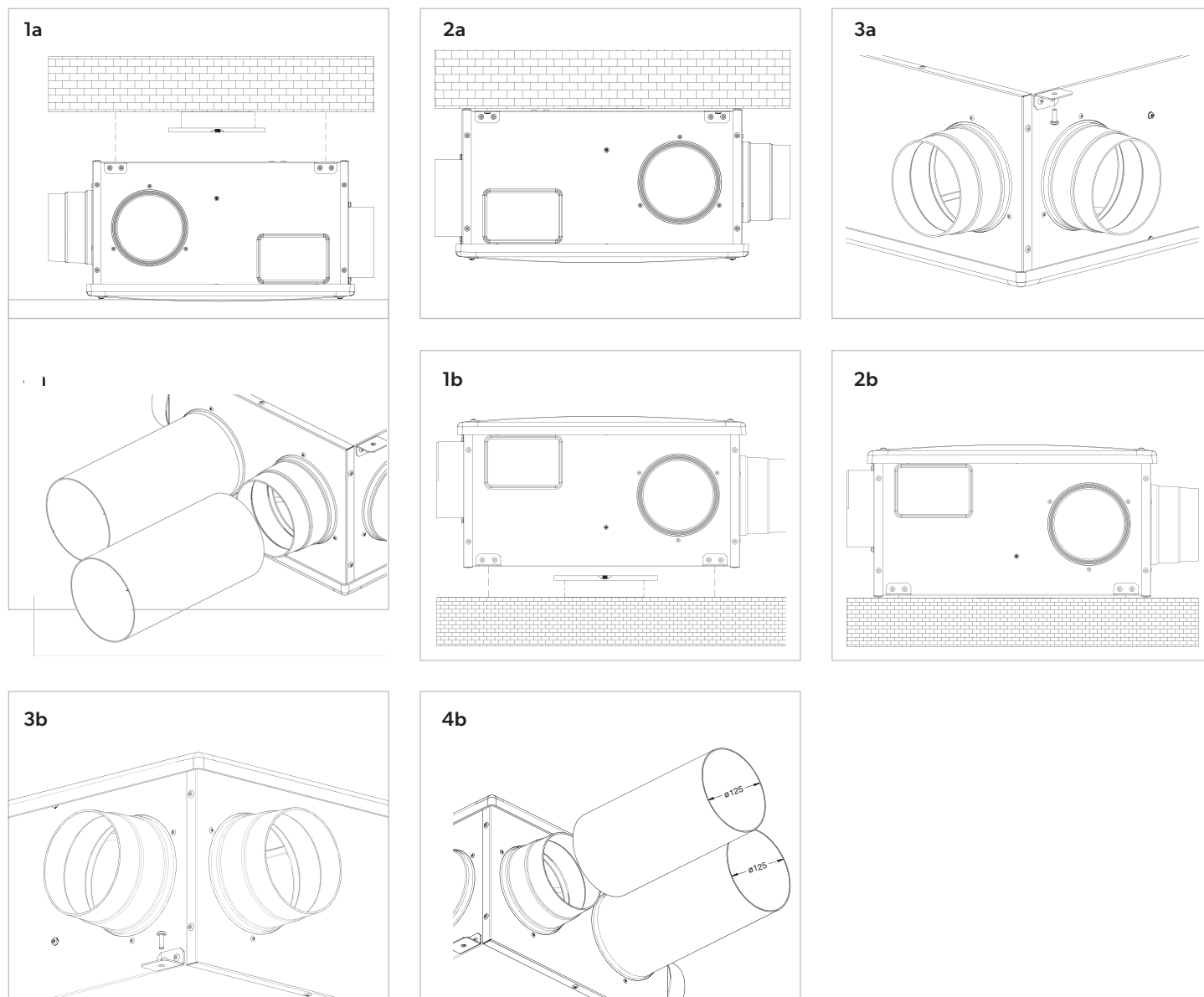
Side view



Top view

4.

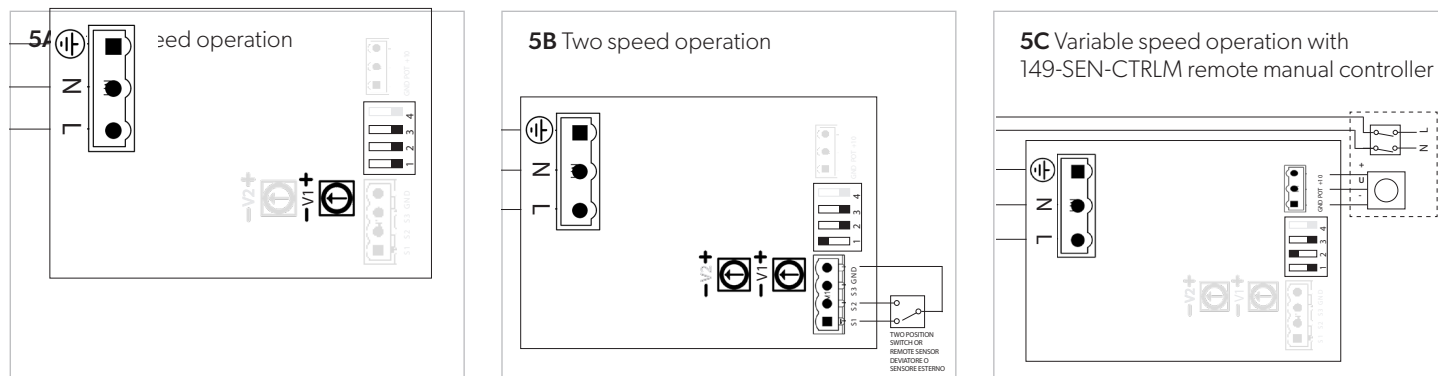
## MOUNTING



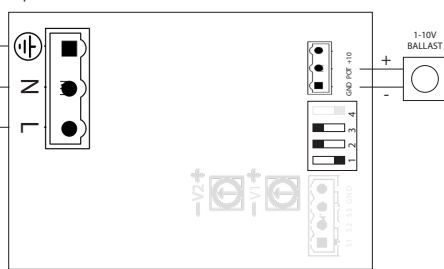
## ELECTRICAL WIRING

The unit must be earthed.

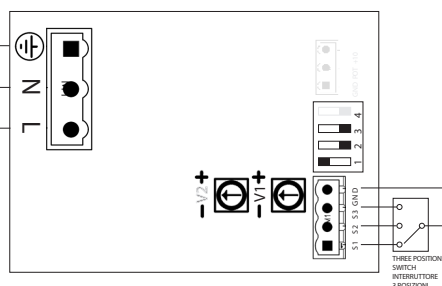
It is not recommended to adjust speed while the fan is powered.



### 5D Variable speed operation through external domotic (BMS) system or ballast potentiometer



### 5E Three speed operation with 149-SEN-3V speed selector



### IMPORTANT NOTE REGARDING DIP SWITCH 4 POSITION (SEE FIG. 5F):

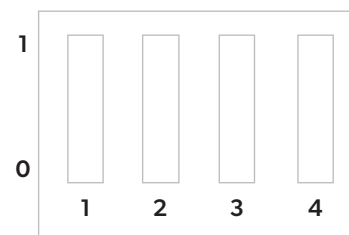
In Fig. 5A, 5B, 5C, 5D and 5E dip switch 4 is shown in position "0" as per Fig. 5F. This is the factory set position for MORI MEV HT units. The factory set position for MORI MEV units is "1" as per Fig. 5F.

5F

### Dip switch

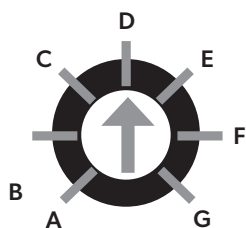
1	2	3	4	Operation
0	0	0		Single speed
1	0	0		Two speed
0	1	0		Variable speed with 149-SEN-CTRLM remote manual controller
0	1	1		Variable speed through external domotic (BMS) system or ballast potentiometer
1	0	0		3 speed with 149-SEN-3V remote control

1	2	3	4	Operation
			0	Humidistat enabled for MORI MEV HT
			1	Humidistat disabled for MORI MEV

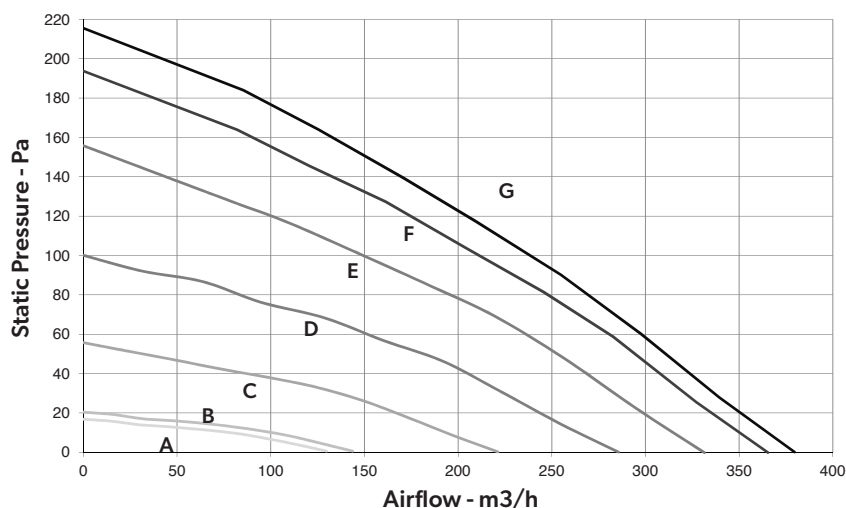


## FAN SPEED SETTING

### Trimmer V1- V2

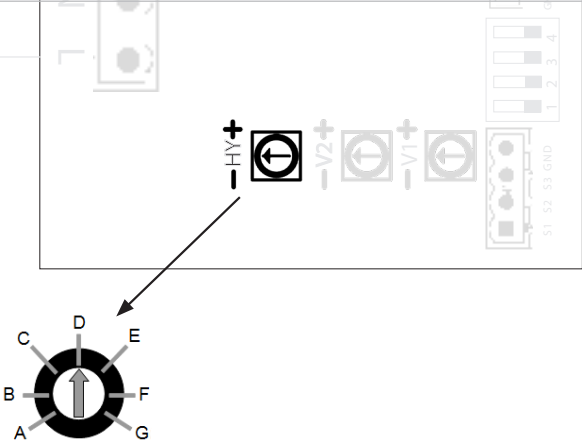


Position	W max	m <sup>3</sup> /h max
A (min)	4	130
B	4	144
C	8	221
D	14	286
E	22	332
F	30	365
G (max)	36	380



HUMIDISTAT SETTING

**5G** Humidistat threshold setting (min 50%, max 95%). This should be set on site as required.



Position	Threshold
A (min)	50%
B	57%
C	66%
D	75%
E	85%
F	95%
G (max)	OFF

HUMIDISTAT SETTING



**Fig.6**  
149-SEN-CTRLM



**Fig.7**  
149-SEN-3V

## ERP DIRECTIVE - REGULATIONS 1253/2014 1254/2014

a)	Mark	-	Homevent	
b)	Model	-	MORI MEV MORI MEV HT	
c)	SEC class	-	B	D
c1)	SEC warm climates	kWh/m2.a	-12.2	-8.9
c2)	SEC average climates	kWh/m2.a	-27.7	-20.9
c3)	SEC cold climates	kWh/m2.a	-54.8	-41.9
	Energy label	-	Yes	
d)	Unit typology	-	Residential - unidirectional	
e)	Type of drive	-	Variable speed drive	
f)	Type of Heat Recovery System	-	absent	
g)	Thermal efficiency of heat recovery	%	N/A	
h)	Maximum flow rate	m3/h	230	
i)	Electric power input at maximum flow rate	W	36	
j)	Sound power level ( $L_{WA}$ )	dBA	42	
k)	Reference flow rate	m3/h	161	
l)	Reference pressure difference	Pa	50	
m)	Specific power input (SPI)	W/m3/h	0.043	
n1)	Control factor	-	0.65	0.85
n2)	Control typology	-	Local demand control	Central demand control
o1)	Maximum internal leakage rate	%	N/A	
o2)	Maximum external leakage rate	%	2	
p1)	Internal mixing rate	%	N/A	
p2)	External mixing rate	%	N/A	
q)	Visual filter warning	-	N/A	
r)	Instructions to install regulated grilles	-	Check the instructions booklet	
s)	Internet address for pre/disassembly instructions	-	www.homevent.co.uk	
t)	Airflow sensitivity to pressure variations	%	N/A	
u)	Indoor/outdoor air tightness	m3/h	N/A	
v1)	AEC - Annual electricity consumption - warm climates	kWh	0.2	0.4
v2)	AEC - Annual electricity consumption - average climates	kWh	0.2	0.4
v3)	AEC - Annual electricity consumption - cold climates	kWh	0.2	0.4
w1)	AHS - Annual heating saved - warm climates	kWh	12.8	9.9
w2)	AHS - Annual heating saved - average climates	kWh	28.3	21.9
w3)	AHS - Annual heating saved - cold climates	kWh	55.4	42.9

## WARRANTY

Our 5 year warranty is provided only to customers who purchased directly from us. If you purchased elsewhere then please contact them directly and they will let you know their warranty procedure. Our warranty covers repair or replacement of defective goods only. It does not cover any labour costs associated with defective product or component removal or installation, nor does it cover the cost of sending goods back to us for inspection. Our warranty is subject to storage, installation, commissioning, inspection and maintenance having been carried out in accordance with our Installation and Maintenance Instructions (supplied with each product) and which are also available to view, save or print from our website.



**Tel:** +44 (0) 1384 275822, **Email:** [sales@homeevent.co.uk](mailto:sales@homeevent.co.uk)

46 Third Avenue, Pensnett Trading Estate, Kingswinford, West Midlands, DY6 7US, UK

**[www.homeevent.co.uk](http://www.homeevent.co.uk)**

A MEMBER OF  **ELTA  
GROUP**

MORI MEV & MEV HT . ISSUE A . 03.21