ELTA TRADE

CE UK CA

MOXA MEV

Single Flow Extract Ventilation Unit

INSTALLATION, MAINTENANCE & USER GUIDE

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.

01384 275771
info@eltatrade.co.uk
www.eltatrade.co.uk

PRECAUTIONS FOR INSTALLATION, USE & MAINTENANCE

TRANSPORT AND STORAGE

01. Do not leave the device exposed to atmospheric agents (rain, sun, snow, etc.).
02. Duct connections/duct ends must be covered during storage and installation.

INSTALLATION

03. After removing the product from its packaging, verify its conditions. Do not leave packaging within the reach of children or people with disabilities.
04. Beware of sharp edges. Use protective gloves.
05. 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 or tumble dryer.
06. 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.
07. 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.
08. The electrical system to which the device is connected must comply with local regulations.
09. 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.
10. For installation, an omnipolar switch should be incorporated in the fixed wiring, in accordance with the wiring rules, to provide a full disconnection under overvoltage category III conditions (contact opening distance equal to or greater than 3mm).
11. Ensure adequate air return into the room in compliance with existing regulations in order to ensure proper device operation.
12. 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.

USE

13. The device should not be used for applications other than those specified in this manual.
14. 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.
15. Cleaning and user maintenance shall not be made by children without supervision.
16. Do not touch the appliance with wet or damp hands/feet.
17. The device is designed to intake clean air only, i.e. without grease, soot, chemical or corrosive agents, or flammable or explosive mixtures.
18. Do not use the product in the presence of inflammable vapours, such as alcohol, insecticides, gasoline, etc.
19. The system should operate continuously, and only be stopped for maintenance/service.
20. Do not obstruct ducts or grilles to ensure optimum air passage.
21. Do not immerse the device or its parts in water or other liquids.
22. Operating temperature: 0°C up to +40°C.

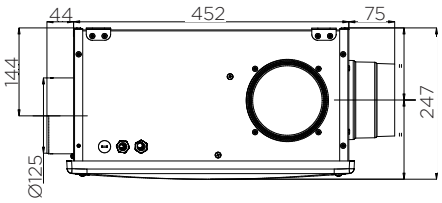
SERVICE

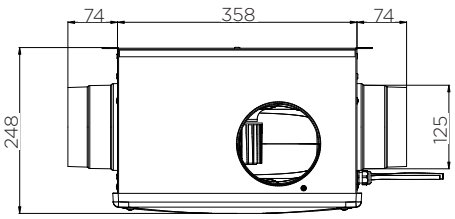
23. Although the mains supply to the unit has been disconnected there is still risk for injury due to rotating parts that have not come to a complete standstill.
24. Beware of sharp edges. Use protective gloves.
25. Use original spare parts only for repairs.

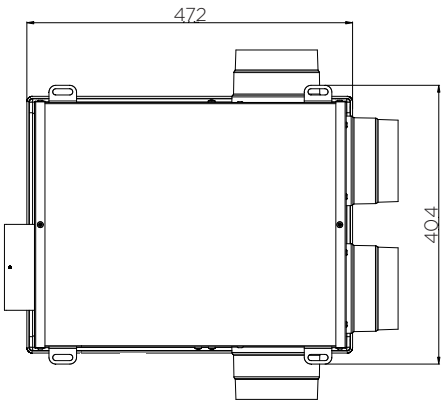
INTRODUCTION

MOXA MEV is a whole-house centralised mechanical extract unit, designed to be connected to adjustable air valves. Suitable for wall, ceiling, false-ceiling and floor installation, for horizontal or vertical mounting. MOXA MEV is supplied with 1xØ125mm outlet to exhaust air to the outside and 4xØ125mm inlets to draw stale air out from inside. It comes as standard with an integral humidity sensor.

DIMENSIONS







Weight: 6.4kg

Dimensions in mm.

TRANSPORT AND STORAGE

The appliance is delivered in one carton box.

The appliance should be stored and transported in such a way that it is protected against physical damage that can harm spigots, casing, display etc.

It should be covered so that dust, rain and snow cannot enter and damage the unit and its components.

MAINTENANCE

The fan 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.

WARNING: Make sure that specific warnings and cautions in the “Precautions for Installation, Use & Maintenance” are carefully read, understood and applied.

01384 275771
info@eltatrade.co.uk
www.eltatrade.co.uk

INSTALLATION

WARNING: Make sure that the mains supply to the unit is disconnected before performing any installation, service, maintenance or electrical work. The installation and service of the unit and complete ventilation system must be performed by an authorised installer and in accordance with local rules and regulations. If any abnormality in operation is detected, disconnect the device from the mains supply and contact a qualified technician immediately.

IMPORTANT: The unit must be installed according to these instructions.

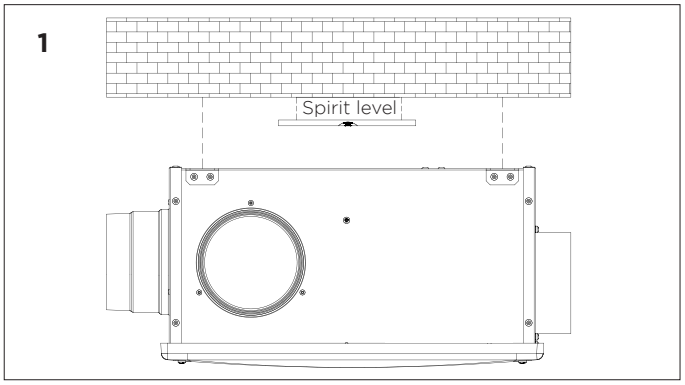
WHERE/HOW TO INSTALL

- All MOXA MEV units are meant for indoor installation in a heated space.
- The unit can be mounted vertically and horizontally.
- Mount the unit on a flat surface.
- When choosing the location it should be kept in mind that the unit requires maintenance regularly and that the inspection door should be easily accessible.
- Leave free space for opening the removable panels and for removal of the main components.
- Prepare the surface on which the unit is to be mounted. Ensure that the surface is flat, levelled and built to support the weight of the unit. Do the installation in accordance with the local rules and regulations in force.
- Use appropriate screws (not supplied) to fix the unit. It is recommended to fit the unit with anti-vibration mounts (not supplied).

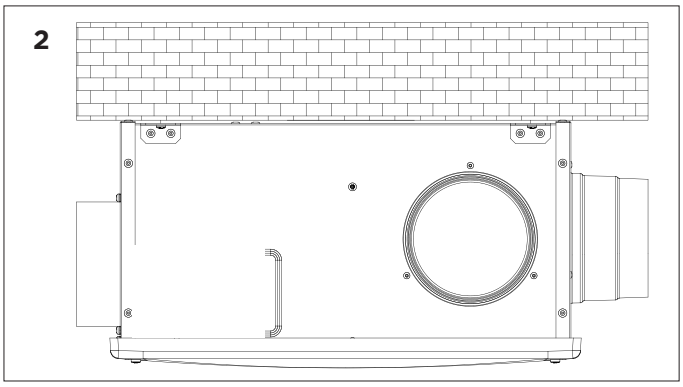
NOTE: Make sure that enough space is left around the unit to allow easy maintenance..

CEILING INSTALLATION

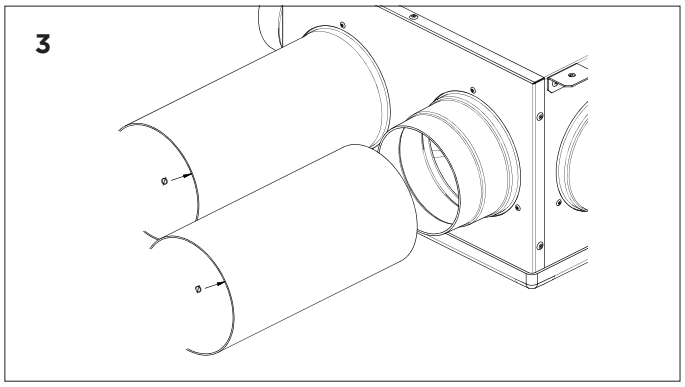
The unit must be installed in the following position.



Prepare the surface where the unit is to be mounted. Make sure that the surface is flat, levelled and that it supports the weight of the unit. Perform the installation in accordance with local rules and regulations.



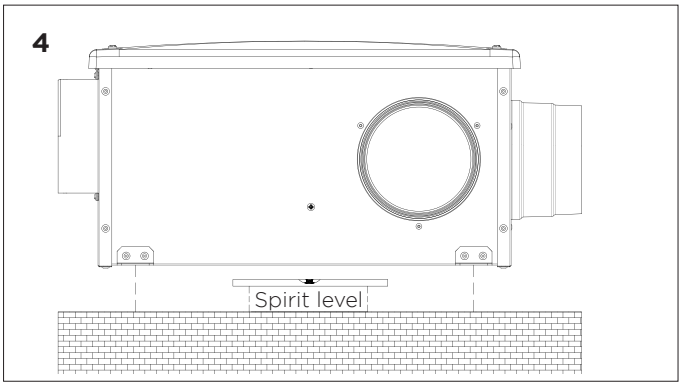
Use appropriate screws (not supplied) to fix the unit to the ceiling. It is recommended to fit the unit with anti-vibration mounts (not supplied).



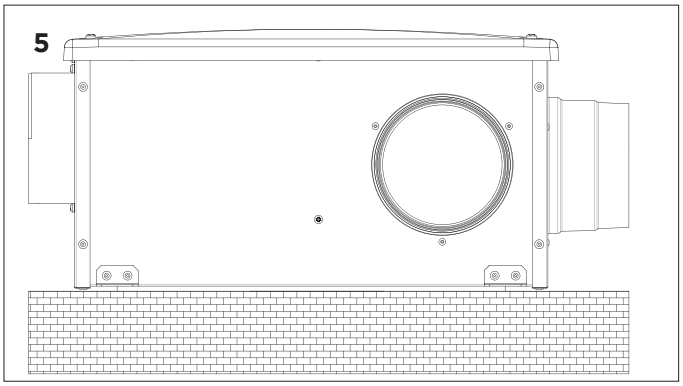
Install the ducting.

FLOOR INSTALLATION

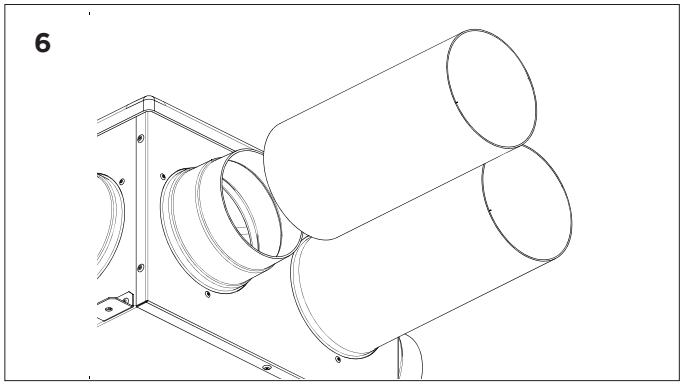
The unit must be installed in the following position.



Prepare the surface where the unit is to be mounted. Make sure that the surface is flat, levelled and that it supports the weight of the unit. Perform the installation in accordance with local rules and regulations.



Use appropriate screws (not supplied) to fix the unit to the ceiling. It is recommended to fit the unit with anti-vibration mounts (not supplied).



Install the ducting.

ELECTRICAL CONNECTIONS, COMMISSIONING & OPERATION

WARNING: Make sure that the mains supply to the unit is disconnected before performing any installation, service, maintenance or electrical work. The installation and service of the unit and complete ventilation system must be performed by an authorised installer and in accordance with local rules and regulations.
WARNING: The unit must be earthed.

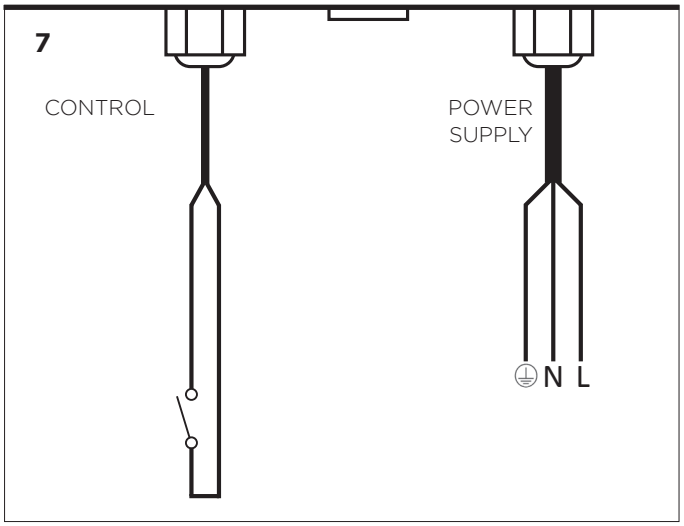
Modes of operation:

- Single speed
- Two speed, external swith or sensoe
- Three speed, external switch
- Variable speed, external controller

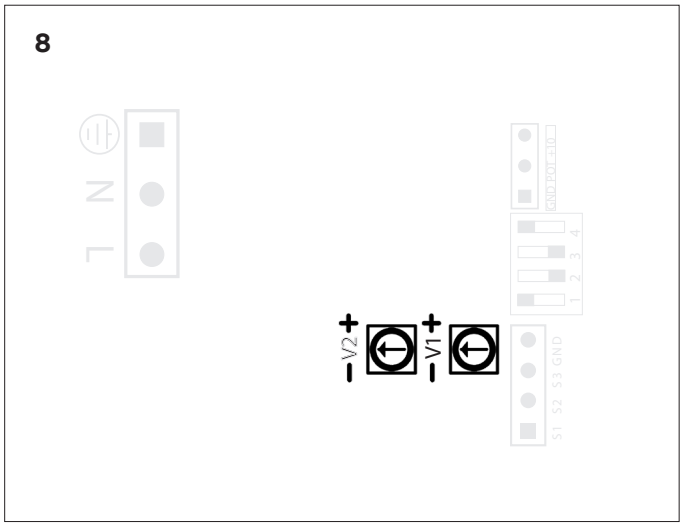
PRE-CABLED ELECTRIC CONNECTIONS

MOXA MEV units are wired internally for two-speed operation via remote switch, not supplied. (Fig. 9).
Unit comes pre-wired with:
- mains supply cable (3-core: brown, blue, yellow/green).
- control cable (2-core: blue, brown).

7



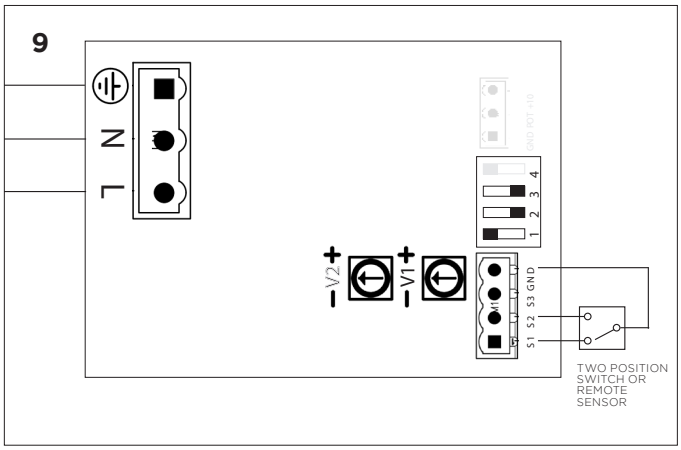
8



Speed adjustment trimmer on the internal electronic board. See 'Fan Speed Setting' section for speed and pressure table and curves.

INTERNAL CONNECTIONS

9



Default setting: Two-speed operation with remote two-position switch/sensor (not supplied)

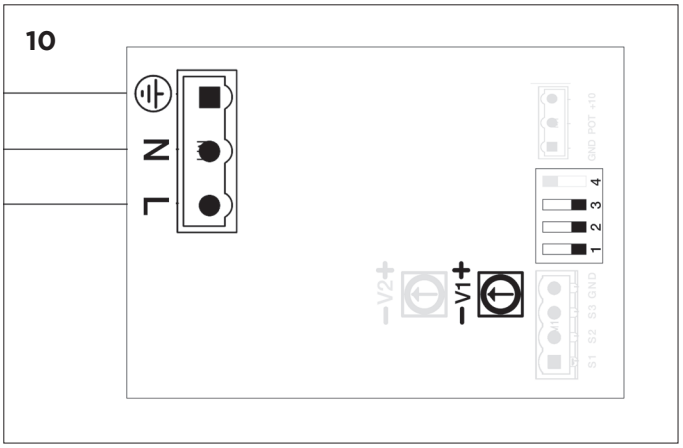
The unit runs continuously at the speed set by turning the integral trimmer "V1" on the circuit board. It can be boosted to a second speed, which is set by turning the integral trimmer "V2" .

Second speed is activated when needed, by means of a remote two-position switch (not supplied) or by means of remote sensors (AERAULIQA HUMIDITY SENSOR, AERAULIQA CO_2 SENSOR or AERAULIQA PIR SENSOR available on request).

Dip switch configuration: 1000

Factory setting:
"V1" (first speed) 135m³/h @0Pa
"V2" (second speed) 383m³/h @0Pa

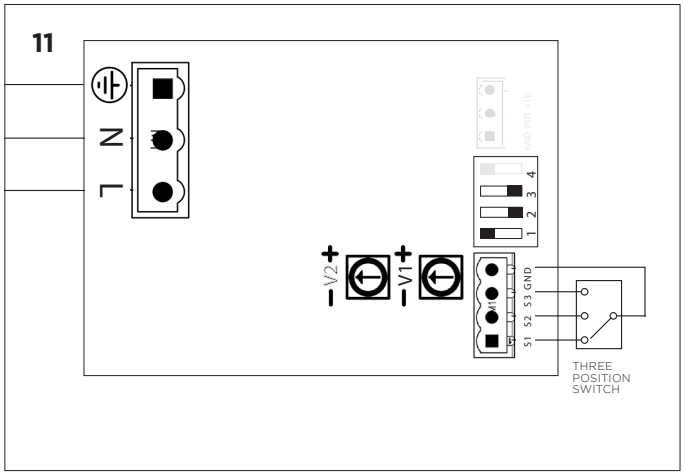
01384 275771
info@eltatrade.co.uk
www.eltatrade.co.uk



Single Speed Operation

The unit runs at the speed set by turning the integral trimmer “V1” on the internal electronic circuit.

Dip switch configuration: 0000

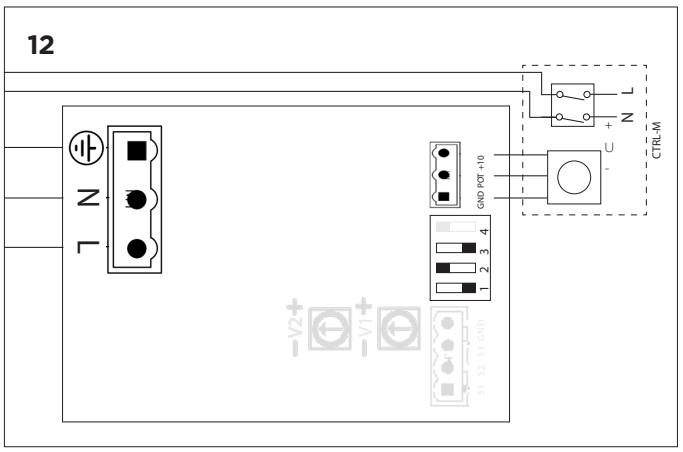


Three-Speed Operation with SEL-3V Speed Selector (accessory on request)

The unit runs at the speed selected by turning the knob of the SEL-3V speed selector.

Speed 1 is set by turning the integral trimmer “V1”.
Speed 2 is set by turning the integral trimmer “V2”.
Speed 3 is the maximum speed achievable by the unit.

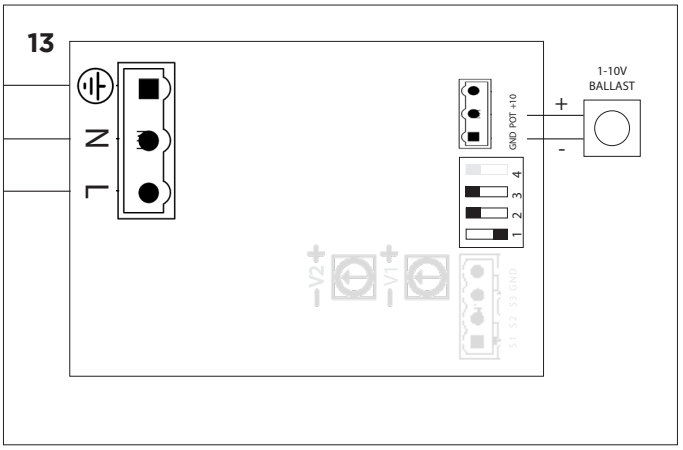
Dip switch configuration: 1000



Variable speed operation with AERAULIQA MEV CONTROL KNOB WITH SWITCH remote manual controller (accessory on request)

The unit runs at the speed set by turning the knob of the AERAULIQA MEV CONTROL KNOB WITH SWITCH remote manual control panel.

Dip switch configuration: 0100



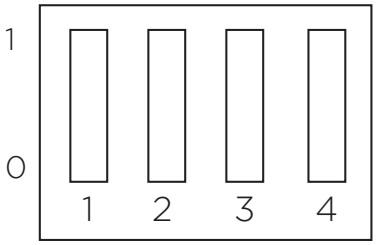
Variable speed operation through external 0-10v controller (not supplied)

The unit runs at the speed set by an external 0-10V signal from a BMS system or 0-10v controller

Dip switch configuration: 0110

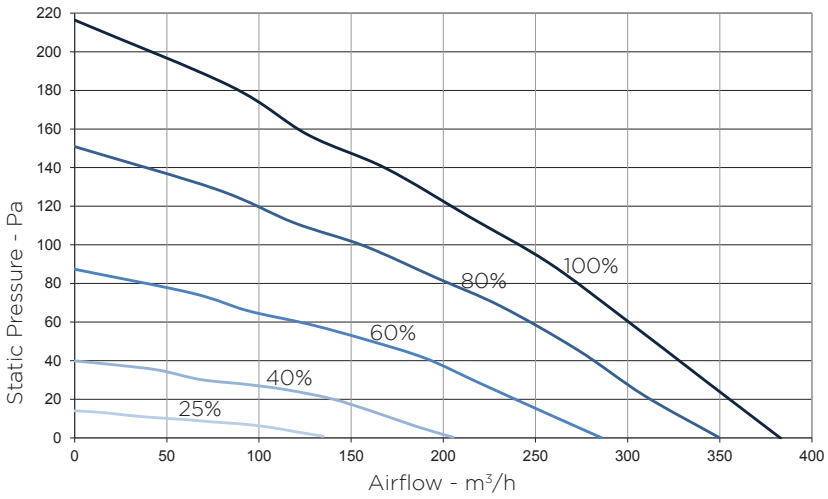
COMMISSIONING AND OPERATION

1	2	3	4	Operation selection via dip switch
0	0	0		Single speed
1	0	0		Two-speed operation with external two-position switch/sensor
0	1	0		Variable speed operation with AERAULIQA MEV CONTROL KNOB WITH SWITCH remote manual controller
0	1	1		Variable speed operation through external 0-10v control
1	0	0		Three-speed operation with AERAULIQA 3 SPEED KNOB speed selector

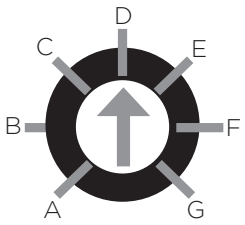


1	2	3	4	Humidity control selection
			0	Humidistat enabled
			1	Humidistat disabled

FAN SPEED SETTING



TRIMMER

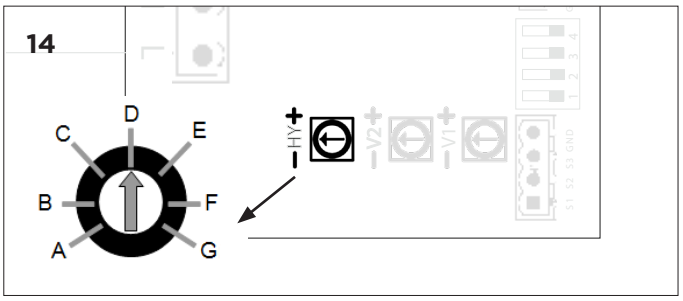


Position	Speed %	W Max	m³/h Max
A (min.)	25	4	135
B	30	4	144
C	40	7	205
D	60	14	286
E	80	24	350
F	90	30	365
G (max.)	100	36	383

HUMIDITY THRESHOLD SETTING

When the humidistat is enabled, it works regardless of 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.
- The Humidity threshold is adjustable from 50% to 95% via trimmer HY (fig. 14).



Humidity threshold setting (min 50%, max 95%).

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

ErP DIRECTIVE - REGULATIONS 1253/2014 - 1254/2014

a)	Mark	-	ELTA TRADE	
b)	Model	-	**MOXA MEV**	
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 B	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 instruction booklet	
s)	Internet address for pre/disassembly instructions	-	www.eltatrade.co.uk	
t)	Airflow sensitivity to pressure	%	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.

Scan the QR code or visit **www.eltatrade.co.uk/warranty** to view further warranty information.

DISPOSAL AND RECYCLING

Information on disposal of units at the end of life.

This product complies with EU Directive 2002/96/EC. The symbol of the crossed-out dustbin indicates that this product must be collected separately from other waste at the end of its life. The user must, therefore, dispose of the product in question at suitable electronic and electro-technical waste disposal collection centres, or else send the product back to the retailer when purchasing a new, equivalent type device.

Separate collection of decommissioned equipment for recycling, treatment and environmentally compatible disposal helps to prevent negative effects on the environment and on health and promotes the recycling of the materials that make up the equipment.

Improper disposal of the product by the user may result in administrative sanctions as provided by law.

ELTA TRADE

Elta Trade is brought to you by Elta Fans Ltd. 46 Third Avenue, Kingswinford, West Midlands, DY6 7US. Manufactured in Italy.

01384 275771
info@eltatrade.co.uk
www.eltatrade.co.uk

ELTA TRADE

MOXA MEV USER GUIDE

NOTE: The installer should go through the user guide with the home occupants and leave this with them for their reference.

WHAT IS A FLUX HR?

MOXA MEV is a whole house centralised mechanical extract unit to exhaust stale air to the outside.

HOW DOES IT WORK?

The fan is designed to work on a continuous basis by extracting stale air in your home from multiple rooms such as kitchens, utility rooms, bathrooms, shower rooms, en-suites, and toilets. How it will work will depend on how the installer has set the fan to operate. Please see "Fan operation" confirmed by Installer.

WHAT ARE THE BENEFITS?

The MOXA MEV can help improve the air quality within your home for the health and wellbeing of occupants as well as the building.

HOW DO I OPERATE THE FAN?

Your MOXA MEV will have been set up by the Installer to operate in one of a number of ways. The Installer should indicate the method of "Fan operation" by ticking the appropriate box on the back of this sheet.

DOES IT NEED SERVICING?

The fan 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.

HOW MUCH DOES IT COST TO RUN?

There are several variables that can determine the annual electrical running costs of MOXA MEV, however, at typical electricity costs as of June 2023, you should expect the fan to cost between £2-3 per year to run under normal conditions.

WHAT IF I THINK THERE IS A PROBLEM WITH THE FAN?

If you are a tenant, please report it to your landlord. If you are not, please contact the company you purchased the fan from.

IMPORTANT NOTE

MOXA MEV fans are designed to run continuously. The power supply to the fan should only be disconnected if a fault is detected or suspected or when the fan is being maintained. Prolonged and/or repeated power interruption can create a health and safety risk and invalidate the fan warranty.

01384 275771
info@eltatrade.co.uk
www.eltatrade.co.uk

MOXA MEV USER GUIDE

FAN OPERATION

Installer to tick as appropriate.

☐ The fan is fully automatic and will continuously remove stale air from multiple rooms such as kitchens, utility rooms, bathrooms, shower rooms, en-suites, and toilets.

☐ The fan is fully automatic and will continuously remove stale air from multiple rooms such as kitchens, utility rooms, bathrooms, shower rooms, en-suites, and toilets. In addition, it is linked to a sensor to provide a “boost” mode which will run the fan at a higher speed.

☐ The fan is fully automatic and will continuously remove stale air from multiple rooms such as kitchens, utility rooms, bathrooms, shower rooms, en-suites, and toilets. In addition, it is linked to a two-position switch to provide a “boost” mode which will run the fan at a higher speed.

☐ The fan is fully automatic and will continuously remove stale air from multiple rooms such as kitchens, utility rooms, bathrooms, shower rooms, en-suites, and toilets. In addition, it is linked to a three-position switch to provide a low, medium and high mode which will run the fan at higher speeds.

☐ The fan is fully automatic and will continuously remove stale air from multiple rooms such as kitchens, utility rooms, bathrooms, shower rooms, en-suites, and toilets. In addition, it is linked to a manual speed controller to vary the fan speed.

☐ Other (Installer to specify here)

_____

_____

Scan the QR code for product and warranty information.

Elta Trade is brought to you by Elta Fans Ltd. 46 Third Avenue, Kingswinford, West Midlands, DY6 7US. Manufactured in Italy.

006148_00_0623.

01384 275771
info@eltatrade.co.uk
www.eltatrade.co.uk