ELTA TRADE

DEXA dMEV

100mm Decentralised Mechanical 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.

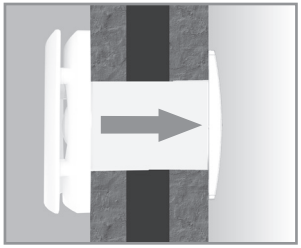
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info@eltatrade.co.uk
www.eltatrade.co.uk

PRECAUTIONS FOR INSTALLATION, USE & MAINTENANCE

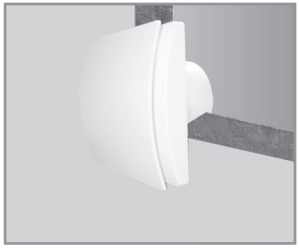
01. The device should not be used for applications other than those specified in this manual.
02. After removing the product from its packaging, verify its condition. In case of doubt, contact a qualified technician. Do not leave packaging within the reach of small children or people with disabilities.
03. Do not touch the appliance with wet or damp hands/feet.
04. 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.
05. Do not use the product in the presence of flammable vapours, such as alcohol, insecticides, gasoline, etc.
06. 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.
07. The electrical system to which the device is connected must comply with regulations.
08. 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.
09. 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 duct.
10. Operating temperature: 0°C up to +40°C.
11. The device is designed to extract clean air only, i.e. without grease, soot, chemical or corrosive agents, or flammable or explosive mixtures.
12. Do not leave the device exposed to atmospheric agents (rain, sun, snow, etc.).
13. Do not immerse the device or its parts in water or other liquids.
14. Turn off the main switch whenever a malfunction is detected or when cleaning.
15. For installation, an omnipolar switch should be incorporated in the fixed wiring, in accordance with the wiring regulations, to provide a full disconnection under over-voltage category III conditions (contact opening distance equal to or greater than 3mm).
16. 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.
17. Do not obstruct the fan or exhaust grille to ensure optimum air passage.
18. Ensure adequate air return into the room in compliance with existing regulations in order to ensure proper device operation.
19. 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.

INTRODUCTION

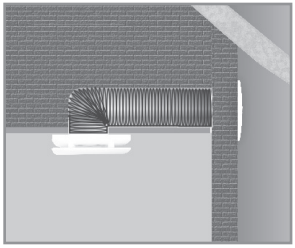
The Elta Trade DEXA Decentralised Mechanical Extract Ventilation (dMEV) unit is an axial fan designed to ensure air extraction in small/medium sized rooms. Suitable for wall, ceiling or window installation and for air discharge in the presence of long ducted system.



Direct Exhaust Through Wall



Wall



Ducted

TECHNICAL SPECIFICATION

- Constructed from high quality, impact and UV-resistant ABS in white (RAL 9010).
- Removable contemporary front cover for cleaning without the use of tools.
- High efficiency aerodynamic fan with “winglet” blades to optimise quietness and efficiency.
- Single phase EC Brushless motor for energy saving, with integral thermal overload protection.
- The motor is mounted on high quality ball bearings.
- Selectable minimum speed for continuous running and intermediate speed.
- Option to boost from minimum speed through LS connection.
- Suitable for through-wall installation: unit is typically mounted on an external wall or window and discharge direct to the outside.
- Suitable for in-room installation: unit is typically mounted on the ceiling or internal wall which are ducted to the outside.
- Features a smart humidistat and intelligent run-on timer.
- Selection of constant volume mode.
- Suitable for continuous running.
- IPX4 wall installation; IPX2 ceiling installation.
- Power supply 220-240V~ 50/60Hz.

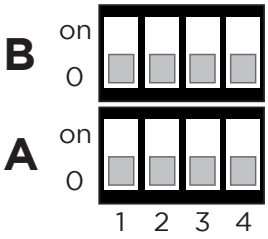
OPERATION

The unit has many modes of operation which can be set via the dip switches A and B on the electronic circuit (when disconnected from the main supply unit).

Default operation:

- Upon power-up, the unit runs at the minimum continuous speed.
- If the humidistat or timer is activated, the unit runs at the intermediate speed.
- If the external switch is activated, the unit runs at the maximum speed.
- After the external switch is turned off, the unit continues to run at the intermediate speed for a period of time, then it returns to the selected minimum speed (or to the intermediate speed in case humidistat or run-on timer operation is on).

The functionalities can be set/enabled through the Dip Switches A and B on the electronic circuit (when disconnected from the main supply unit).



MINIMUM CONTINUOUS SPEED

Upon power-up, the unit runs at the minimum continuous speed settable from 0 to 58m³/h (0 to 16l/s) by means of the switches as per table Dip Switch A (pg. 5).

INTERMEDIATE SPEED

The unit runs automatically at the intermediate speed settable from 29 to 72m³/h (8 to 20l/s) by means of the switches as per table Dip Switch A (pg. 5).

The intermediate speed can be activated when either humidistat or run-on timer has been activated.

MAXIMUM SPEED

The maximum speed fixed, at 90m³/h (25l/s) in through-wall or 72m³/h (20l/s) in in-room installation, can be activated through external switch, remote ambient sensor or light switch.

INSTALLATION TYPE

Based on the selected installation type, the unit scales its speed (minimum, intermediate and maximum) to obtain the selected airflow rates.

NOTE: The unit runs at a higher speed when in-room installation is selected to account for longer duct lengths.

The installation type can be selected by means of the switches as per table Dip Switch A (below).

DIP SWITCH A

1	2	3	4		Installation	Min Speed		Intermediate Speed		Max Speed	
						m^3/h	l/s	m^3/h	l/s	m^3/h	l/s
0	0	0	0	*	Through-Wall	18	5	47	13	90	25
0	0	on	0		Through-Wall	18	5	29	8	90	25
0	on	0	0		Through-Wall	29	8	47	13	90	25
0	on	on	0		Through-Wall	29	8	40	11	90	25
on	0	0	0		Through-Wall	40	11	47	13	90	25
on	0	on	0		Through-Wall	47	13	58	16	90	25
on	on	0	0		Through-Wall	58	16	72	20	90	25
on	on	on	0		Through-Wall	0	0	47	13	90	25
0	0	0	on		In-Room	18	5	47	13	72	20
0	0	on	on		In-Room	18	5	29	8	72	20
0	on	0	on		In-Room	29	8	47	13	72	20
0	on	on	on		In-Room	29	8	40	11	72	20
on	0	0	on		In-Room	40	11	47	13	72	20
on	0	on	on		In-Room	47	13	58	16	72	20
on	on	0	on		In-Room	58	16	72	20	72	20
on	on	on	on		In-Room	0	0	47	13	72	20

*Default Setting.

CONSTANT FLOW OPERATION

When the constant flow operation is enabled, the unit speeds up or slows down depending on the variations of the resistances caused by long length ducting or external windy conditions.

The constant flow operation can be enabled/disabled by means of switch 1 of Dip Switch B.

DIP SWITCH B

1	Constant Flow
on	Enabled
0	Disabled*

*Default Setting.

HUMIDISTAT

The unit is equipped with a humidity sensor that operates in AUTO mode, i.e. the humidistat, which records the humidity levels, triggers if there is a steep variation of the humidity and if humidity level is over 65%. If the humidistat is activated, the unit runs at the intermediate speed and continues to run for a fixed time of 5 minutes after the humidity level stabilises.

The humidistat can be enabled/disabled by means of switch 2 of Dip Switch B.

DIP SWITCH B

2	Humidistat
on	Disabled
0	AUTO*

*Default Setting.

RUN-ON TIMER

The unit is equipped with a run-on timer. When the external switch is turned off, the unit continues to run at the intermediate speed for a period of time defined as follows:

- if the external switch is activated for less than 3 minutes, the unit does not run-on;

- if the external switch is activated for between 3 and 10 minutes, the unit runs on for 5 minutes;

- if the external switch is activated for between 10 and 20 minutes, the unit runs on for 10 minutes;

- if the external switch is activated for over 20 minutes, the unit runs on for 15 minutes.

When the time is expired, the unit returns to the minimum continuous speed.

The run-on Timer can be enabled/disabled by means of switch 3 of Dip Switch B.

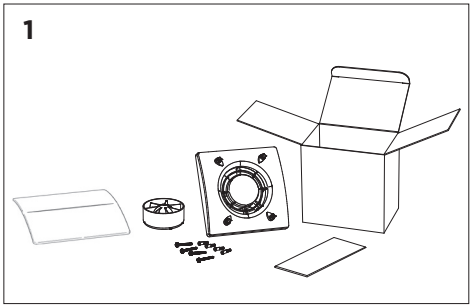
DIP SWITCH B

3	Timer
on	Disabled
0	AUTO*

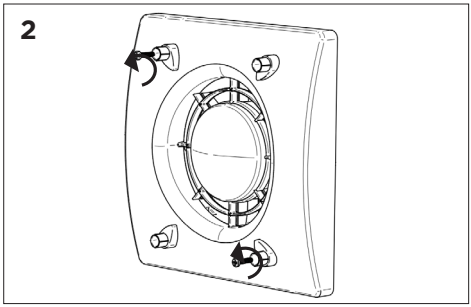
*Default Setting.

INSTALLATION

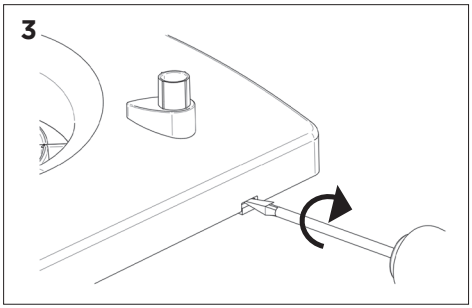
MOUNTING & WIRING



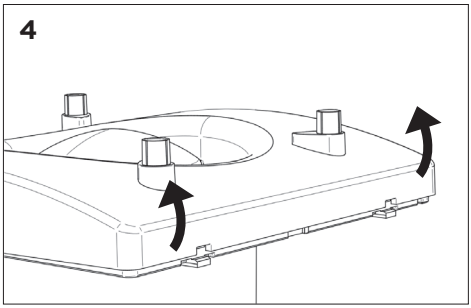
Check the contents of the box to make sure all items are present.



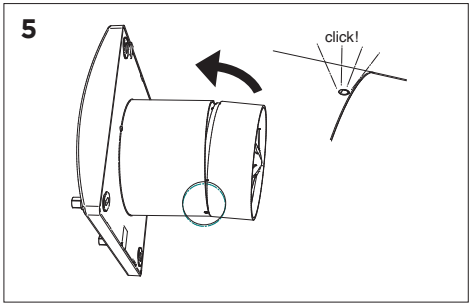
Remove the 2 screws to unsecure the front cover.



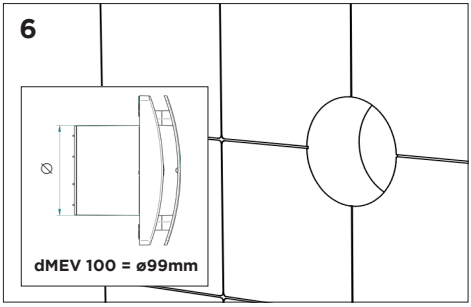
Use a flat bladed screwdriver to release the side tabs.



Lift the cover from the base.

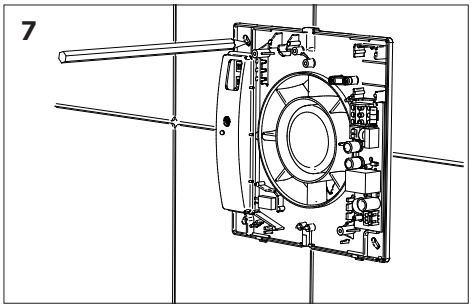


Connect the stator to the fan by locating the 2 holes and listening for the click!

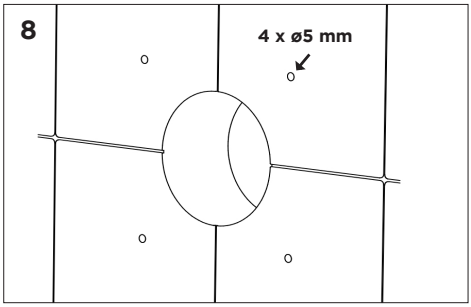


Ensure the hole or duct is the correct size for the fan.

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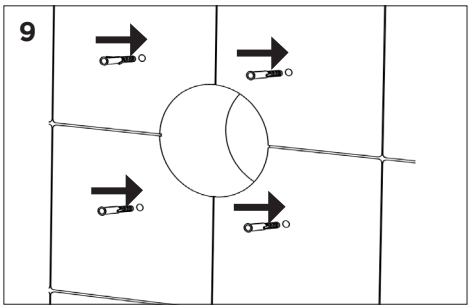


Ensure the fan is level and then mark the 4 mounting holes.

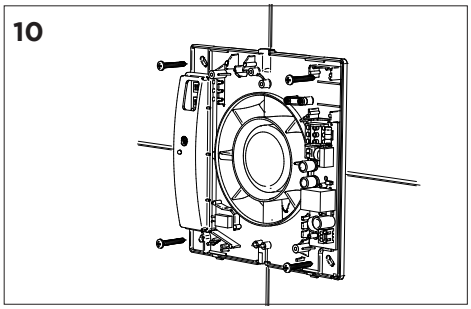


Drill 4 x 5mm mounting holes.

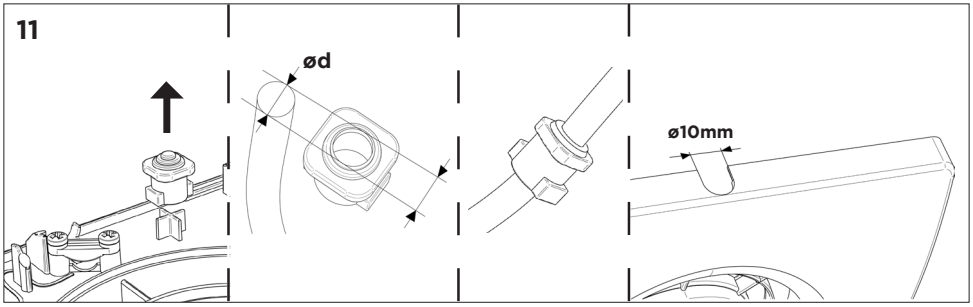
For Surface Cable Installation



Insert the 4 supplied wall plugs. If you are mounting to other surfaces, other fixings (not supplied) may be required.

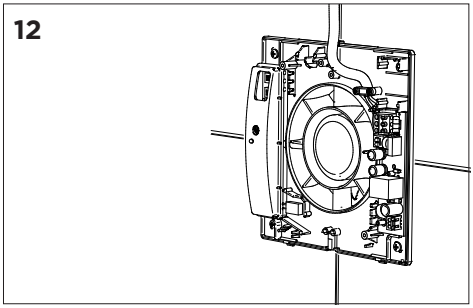


Affix the fan to the wall with the 4 screws supplied.



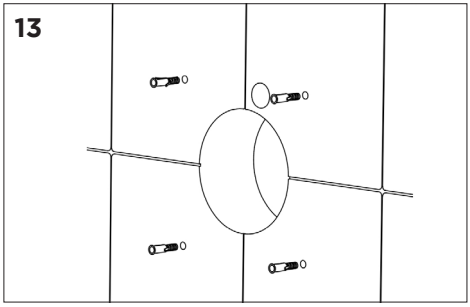
Put the cable grommet over the cable and slot into the fan. Notch the fan cover as required.

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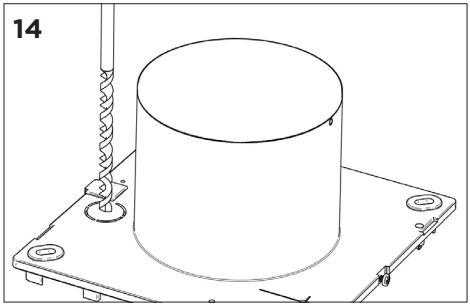


Route the cable and secure within the fan.

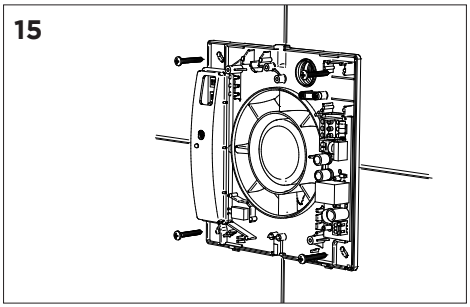
Recessed Cable Entry



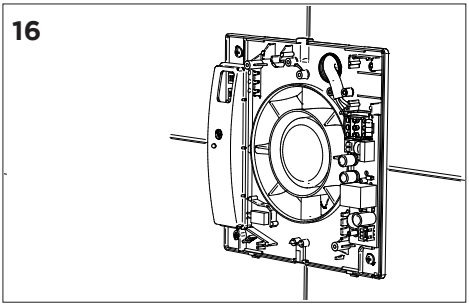
Insert the 4 supplied wall plugs. If you are mounting to other surfaces, other fixings (not supplied) may be required.



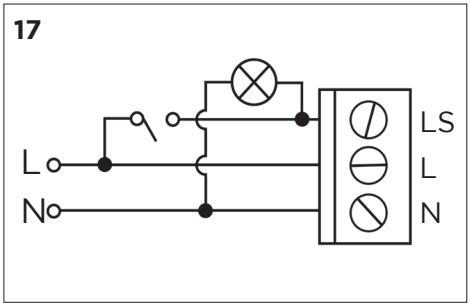
Drill/remove the rear cable knockout.



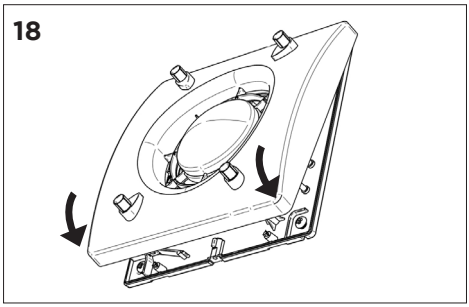
Affix the fan to the wall with the 4 screws supplied.



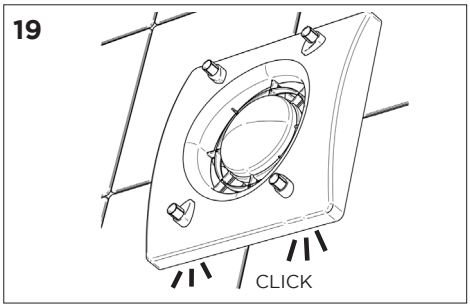
Route the cable and secure within the fan.



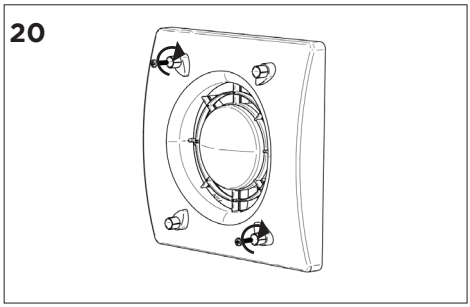
WARNING: When wiring to the PCB terminals, do not over-tighten the screws: maximum torque 0.15Nm.



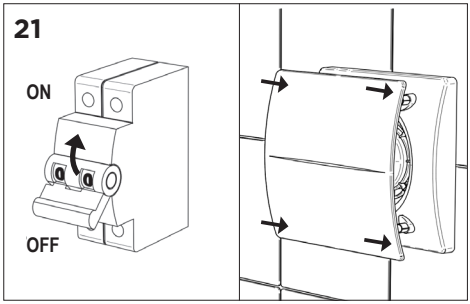
To reattach the cover, locate the 2 tabs and hinge the cover into place.



Ensure the cover clicks into place and is seated squarely all around.



Replace the two screws removed in step 2.

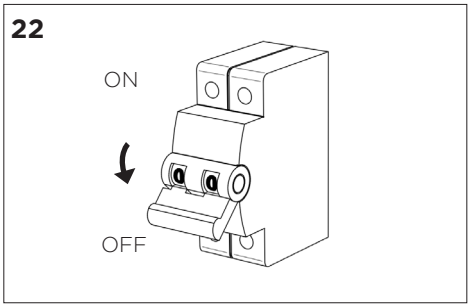


Energise the fan and check operation is correct. Then push on the front cover.

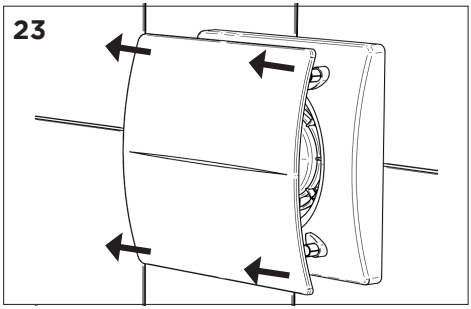
NOTE: Following installation, the installer should go through the user guide (found at the end of this booklet) with the home occupants and leave this with them for their reference.

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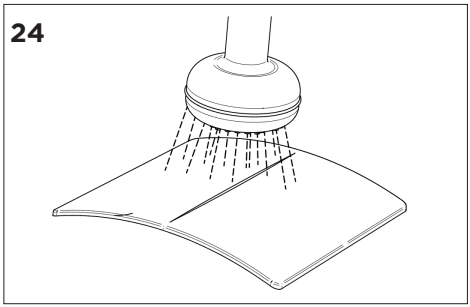
MAINTENANCE / CLEANING



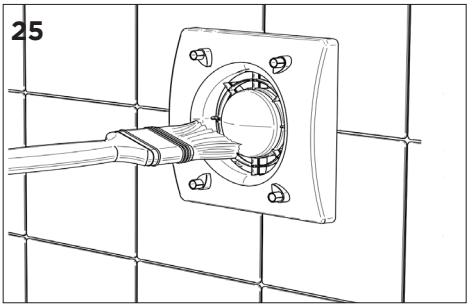
Isolate the fan.



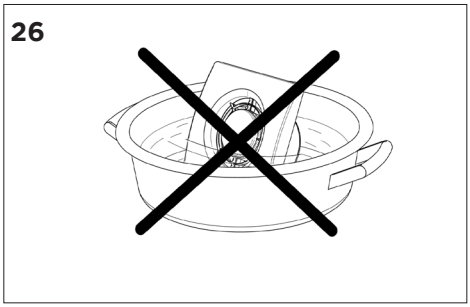
Remove the front cover.



Wash the front cover.



Remove any dirt from the unit with a soft bristled brush.



Do not submerge the unit or get it wet.

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ErP DIRECTIVE REGULATIONS 1253/2014 - 1254/2014

a)	Mark	-	ELTA TRADE
b)	Model	-	**DEXA dMEV 100**
c)	SEC class	-	C
c1)	SEC warm climates	kWh/m².a	-11,1
c2)	SEC average climates	kWh/m².a	-25,5
c3)	SEC cold climates	kWh/m².a	-50,6
	Energy label	-	No
d)	Unit typology	-	Residential - Unidirectional
e)	Type of drive	-	Multi-speed drive
f)	Type of Heat Recovery System	-	absent
g)	Thermal efficiency of heat recovery	%	N/A
h)	Maximum flow rate	m³/h	97
i)	Electric power input at maximum flow rate	W	6
j)	Sound power level (L_{WA})	dBA	50
k)	Reference flow rate	m³/h	68
l)	Reference pressure difference	Pa	20
m)	Specific power input (SPI)	W/m³/h	0,040
n1)	Control factor	-	0,65
n2)	Control typology	-	Local demand control
o1)	Maximum internal leakage rate	%	N/A
o2)	Maximum external leakage rate	%	N/A
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 variations	%	N/A
u)	Indoor/outdoor air tightness	m³/h	52
v1)	Annual electricity consumption - warm climates	kWh	0,3
v2)	Annual electricity consumption - average climates	kWh	0,3
v3)	Annual electricity consumption - cold climates	kWh	0,3
w1)	Annual heating saved - warm climates	kWh	11,9
w2)	Annual heating saved - average climates	kWh	26,2
w3)	Annual heating saved - cold climates	kWh	51,3

ELTA TRADE

NEED A HAND SELECTING THE RIGHT FAN?

At eltatrade.co.uk, we have a selection tool to help you or your customer choose the correct ventilation solution.

You can also find your local stockist and see our full product range & accessories.

FIND US ON SOCIAL MEDIA FOR PRODUCT RELEASES, COMPETITIONS & MORE!

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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.

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DEXA dMEV 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 DEXA dMEV?

A DEXA dMEV is a Decentralised Continuous Mechanical Extract Ventilation fan which is normally installed in “wet rooms” in your home such as kitchens, bathrooms and WCs.

HOW DOES IT WORK?

The fan is designed to work on a continuous basis by extracting stale, humid air in your home from and via the wet room it is installed in. Most of the time the fan will run at a low background speed but may occasionally increase in speed depending on how the installer has set it up to operate. Please see “Fan operation” confirmed by Installer.

WHAT ARE THE BENEFITS?

The DEXA dMEV can help improve the air quality within your home and reduce the risk of condensation and mould problems.

HOW DO I OPERATE THE FAN?

Your DEXA dMEV 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 will need cleaning in line with the instructions in the Installation & Maintenance manual which is available to download from our website.

HOW MUCH DOES IT COST TO RUN?

There are several variables that can determine the annual electrical running costs of the DEXA dMEV, 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

DEXA dMEV 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.

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DEXA dMEV USER GUIDE

FAN OPERATION

Installer to tick as appropriate.

- ☐ The fan is fully automatic and will increase and decrease in speed depending on the humidity level in the room it is installed in.
- ☐ The fan is automatic and will increase and decrease in speed depending on the humidity level in the room it is installed in. In addition, it is linked to the light switch serving the room it is installed in. When you switch on the light switch the fan will increase to maximum speed and air extraction. When you switch off the light switch the fan may run on at maximum speed for a set period of time before reverting back to its automatic humidity control mode.
- ☐ The fan is automatic and will increase and decrease in speed depending on the humidity level in the room it is installed in. In addition, it is linked to an airflow boost switch provided by the Installer. When you switch on the airflow boost switch the fan will increase to maximum speed and air extraction. When you switch off the airflow boost switch the fan may run on at maximum speed for a set period of time before reverting back to its automatic humidity control mode.
- ☐ The intelligent timer has been activated. When the external switch is turned off, the unit continues to run at the intermediate speed for a period of time between 3 and 15 minutes. It will not run-on if the switch has been on for less than 3 minutes.
- ☐ Other (Installer to specify here)

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Scan the QR code for product and warranty information.

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