Social Housing MEV - Ventilation





Ventilation is key to a home's and occupant's health

It is estimated that we can spend more than 92% of our time indoors¹ and this can lead to indoor air being more polluted than outdoor air. As a result of this, a large amount of moisture is exposed and condensation being formed.

Condensation can be formed in two ways; from water vapour that is cooled to its dew point. Or, when the air becomes so saturated with water vapour that it can't hold any more moisture. If there is no where for this moisture to go, then it stays trapped inside a home.

Condensation built up can lead to mould, which can cause ill health. Mould can release spores that produce allergens, irritants, and mycotoxins² and exposure to mould spores in the home can exacerbate eczema and asthma.³

Condensation is especially common in winter and if not dealt with quickly, can encourage mould growth, with around 1 in 18 households in the UK reported to have experienced some form of mould.⁴

Our everyday activities contribute to moisture within a home. Breathing adds moisture; one sleeping person adds half a pint of water to the air overnight, and at twice that rate when active during the day. To give you some idea of how much moisture can be produced in a day, see example below⁵.



Total amount of moisture produced in your home in 1 day

= 24 pints

With homes becoming more airtight, it's important to allow them to breath, to allow air to flow. Landlords and social housing projects need to 'Ventilate when you insulate' to make sure that tenants have no health issues or building damage is caused further down the line.

os:/road.cc/content/news/217728-brits-spend-92-all-their-time-indoors What causes condensation and how to stop it. Accessed: November 2021. [https://www.axa.co.uk/home

- urance/tips-and-guides/what-causescondensation-
- dical News Today. Is mould in your house a problem? What you need to know. Accessed: November 2021. Ihttps://www.medicalnewstoday.com/arti-
- How to get rid of mould in a rented home. Accessed: November 2021. [https://metro.co.uk/2021/10/30/how-to-get-rid-of-mould-in-a-rented--15513721/]. s/288651#mold-and-health

https://www.solihullcommunityhousing.org.uk/images/stories/fleximedia/condensation-leaflet.pdf









CME MEV Centralised Mechanical Ventilation



For use in dwellings with six wet rooms or fewer

The CME MEV is ideal for landlords and social housing as it allows the continuous removal of stale, damp and polluted air to the outside environment.

Titon's CME MEV comes in four models in two different designs. Designed to fit into tight low profile voids, the CME MEV is able to assist in ventilation and remove condensation and particles from a dwelling.

The units has a very large duty range:

CME2 - 116l/s (418 m³/hr) at 200 Pa. CME2.1 - 103 l/s (371 m³/hr) at 200 Pa.

CME3 - 104l/s (376 m³/hr) at 200 Pa. CME3.1 - 113l/s (405 m³/hr) at 200 Pa



Features & Benefits

- High energy efficiency levels, via Electronically Commutated (EC) motor
- Very low power consumption/specific fan power
- Airflow up to 137 l/s (493 m³/h) at 100 Pa
- Compact unit is small and low in profile, can be fitted in airing cupboards, cupboards or loft spaces
- Easy installation due to innovative sub-assembly and unique packaging design
- Optional two part installation (CME2/2.1)
- Optional adjustable humidity sensor (between 55% RH & 85% RH) triggers boost speed proportionally
- Duct ports on one level, lessening need for unnecessary bends in ducting, saving cost, reducing joints and installation time
- Ideal for central mechanical ventilation in refurbishment of single floor dwellings where there is only space for rectangular ducting
- Low unit noise
- Fully adjustable boost overrun timer 0-30 minutes
- CME2/2.1 can accept either 204mm x 60mm (standard) or 110mm x 54mm ducting (using provided converter)
- CME3/3.1 can accept either Ø125mm and/or Ø100mm
- Unit can be cleaned and serviced without disturbing ducting
- Original enclosure design with 204mm x 60mm spigots on one level, ideal for low profile ceiling mounting
- For use in conjunction with Titon trickle vents
- Available in volt free and switch live inputs
- Hidden fixings
- Quick and easy commissioning
- Demand control ventilation ready
- Wide duty range
- Patent applied
- Can be mounted on any plane

For use with Titon Trickle Ventilators.



CME3/3.1

Description - CME2 Q Plus

Drawing & Dimensions

Titon CME2 Q *Plus* whole-house central mechanical extract ventilation unit.

Product Codes

TP325 CME base only (First fix).

Volt free switch inputs TP302A CME 2 *Q Plus* (Full assembly). TP302HA CME 2 *Q Plus*, humidity sensor (Full assembly). TP303A CME 2 *Q Plus* Fan assembly only (Second fix). TP303HA CME 2 *Q Plus* Fan assembly only, humidity sensor (Second fix).

Switch live inputs

TP304HA CME 2 *Q Plus*, humidity sensor (Full assembly). **TP305HA** CME 2 *Q Plus* Fan assembly only, humidity sensor (Second fix).

Standards

Conforms to requirements of UK statutory Building Regulations and Technical Standards for Ventilation and BRE 398.

SAP Appendix Q tested.

Exceeds requirements of Building Regulations Approved Document L (England & Wales).

EU RoHS Directive compliant.

Conforms to requirements of EC council directives relating to Electromagnetic Compatibility and Electrical Safety:

2006/95/EC (LVD), 2004/108/EC (EMC) EN 60335-1:2002/A2:2006, EN 60335-2- 80:2003, A1:2004. CE Marked.

Other non-UK info available on request.

Specification

Dimensions (excluding ports):

355mm wide x 421mm long x 252mm high

Weight: 5kg

Finish: Light grey / dark grey

Materials:

Housing: Talc Filled Polypropylene

Guarantee period: 3 years (UK only)

Electrical: 230V ~ 50/60Hz, 3A fuse

Installation: Install in accordance with regulatory requirements, such as the Ventilation: Approved Document F and the Residential Ventilation Association recommendations.

Maintenance: See product manual.

Acoustics: Full acoustic data available online www.titon.com/acoustics.

Acoustic Data





Dimensions (excluding ports)

Performance

Dimensions in mm

The figures and compliance levels below relate to current SAP requirements. Revised SAP guidance will have an effect on performance and up-to-date figures can be found on the relevant product page at www.titon.com.

Exhaust terminal configuration*	Fan speed setting	SFP (W/I/s)	SFP (W/I/s)
		2009	2012
Kitchen + 1 additional wet room	100% variable	0.2	0.2
Kitchen + 2 additional wet rooms	100% variable	0.17	0.17
Kitchen + 3 additional wet rooms	100% variable	0.19	0.19
Kitchen + 4 additional wet rooms	100% variable	0.21	0.21
Kitchen + 5 additional wet rooms	100% variable	0.25	0.25
Kitchen + 6 additional wet rooms	100% variable	0.29	0.29

Figures taken from the BRE Test Results apply for both the standard and humidity versions.

*Number of wet rooms is based on SAP Q test criteria and does not correlate directly with regulatory performance requirements. Test results available for use with 110 x 54mm ducting.

Nominal Fan Performance



Product	Airflow	% of Max flow	dB 3m Hen	dB(A) @ 3m Spherical	
	1/5		Induct Inlet	Casing Breakout	Casing Breakout
CME2 Q Plus	36l/s	41%	20	23	20
	57l/s	65%	33	33	30
	85l/s	100%	42	41	38

Description - CME2.1 Q Plus

Drawing & Dimensions

Titon CME2.1 O *Plus* whole-house central mechanical extract ventilation unit.

Product Codes

TP325 - CME base only (First fix).

Volt free switch inputs

TP312A - CME 2.1 Q Plus (Full assembly). TP312HA - CME 2.1 Q Plus, humidity sensor (Full assembly). TP313A - CME 2.1 Q Plus (Second fix). TP313HA - CME 2.1 Q Plus, humidity sensor (Second fix).

Switch live inputs

TP312HALS - CME 2.1 Q Plus, humidity sensor, switch live inputs (Full assembly). TP313HALS - CME 2.1 Q Plus, humidity sensor, switch live inputs (Second fix).

Controls Ready (auralite® TP517)

TP312CH - CME 2.1 Q Plus, humidity sensor, controls ready (Full assembly).

TP313CH - CME 2.1 Q Plus, humidity sensor, controls ready (Second fix).

Standards

Conforms to requirements of UK statutory Building Regulations and Technical Standards for Ventilation and BRE 398.

SAP Appendix Q tested.

Exceeds requirements of Building Regulations Approved Document L (England & Wales).

EU RoHS Directive compliant.

Conforms to requirements of EC council directives relating to Electromagnetic Compatibility and Electrical Safety:

2006/95/EC (LVD), 2004/108/EC (EMC) EN 60335-1:2002/A2:2006, EN 60335-2-80:2003, A1:2004. CE Marked.

Other non-UK info available on request.

Specification

Dimensions (excluding ports):

355mm wide x 421mm long x 252mm high

Weight: 5kg

Finish: Light grey / dark grey

Materials:

Housing: Talc Filled Polypropylene

Guarantee period: 3 years (UK only)

Electrical: 230V ~ 50/60Hz, 3A fuse

Installation: Install in accordance with regulatory requirements, such as the Ventilation: Approved Document F and the Residential Ventilation Association recommendations.

Maintenance: See product manual.

Acoustics: Full acoustic data available online www.titon.com/acoustics.

Acoustic Data

Product		Airflow	% of	dB(A) @ 3m Hemispherical		dB(A) @ 3m Spherical
				Induct Inlet	Casing Breakout	Casing Breakout
CME2.1 <i>Q Plus</i>		36l/s	41%	20	23	20
	57l/s	65%	33	33	30	
		85l/s	100%	42	41	38

Dimensions in mm

Dimensions (excluding ports)

Performance

25

The figures and compliance levels below relate to current SAP requirements. Revised SAP guidance will have an effect on performance and up-to-date figures can be found on the relevant product page at www.titon.com.

Exhaust terminal configuration*	Fan speed setting	SFP (W/I/s)	SFP (W/I/s)
		2009	2012
Kitchen + 1 additional wet room	100% variable	0.20	0.20
Kitchen + 2 additional wet rooms	100% variable	0.18	0.18
Kitchen + 3 additional wet rooms	100% variable	0.20	0.20
Kitchen + 4 additional wet rooms	100% variable	0.22	0.22
Kitchen + 5 additional wet rooms	100% variable	0.28	0.28
Kitchen + 6 additional wet rooms	100% variable	0.33	0.33

Figures taken from the BRE Test Results apply for both the standard and humidity versions.

*Number of wet rooms is based on SAP Q test criteria and does not correlate directly with regulatory performance requirements. Test results available for use with 110 x 54mm ducting.

Nominal Fan Performance



Description - CME3 Q Plus

Drawing & Dimensions

Titon CME3 Q *Plus* whole-house central mechanical extract ventilation unit.

Product Codes

Volt free switch inputs

TP332A CME3 *Q Plus* (Full assembly). **TP332HA** CME3 *Q Plus*, humidity sensor (Full assembly).

Switch live inputs

TP334HA CME3 *Q Plus*, humidity sensor, switch live inputs (Full assembly).

Standards

Conforms to requirements of UK statutory Building Regulations and Technical Standards for Ventilation and BRE 398.

SAP Appendix Q tested.

Exceeds requirements of Building Regulations Approved Document L (England & Wales).

EU RoHS Directive compliant.

Conforms to requirements of EC council directives relating to Electromagnetic Compatibility and Electrical Safety:

2006⁷95/EC (LVD), 2004/108/EC (EMC) EN 60335-1:2002/A2:2006, EN 60335-2- 80:2003, A1:2004. CE Marked.

Other non-UK info available on request.

Specification

Dimensions (excluding ports):

310mm wide x 340mm long x 252mm high (excluding spigots)

Weight: 5 kg

Finish: Light grey / dark grey

Materials:

Housing: Talc Filled Polypropylene

Guarantee period: 3 years (UK only)

Electrical: 230V ~ 50/60Hz, 3A fuse

Installation: Install in accordance with regulatory requirements, such as the Ventilation: Approved Document F and the Residential Ventilation Association recommendations.

Maintenance: See product manual.

Acoustics: Full acoustic data available online www.titon.com/acoustics.



Dimensions (excluding ports)



Performance

Dimensions in mm

The figures and compliance levels below relate to current SAP requirements. Revised SAP guidance will have an effect on performance and up-to-date figures can be found on the relevant product page at www.titon.com.

Exhaust terminal configuration*	Fan speed setting	SFP (W/I/s)	SFP (W/I/s)
		2009	2012
Kitchen + 1 additional wet room	100% variable	0.18	0.18
Kitchen + 2 additional wet rooms	100% variable	0.16	0.16
Kitchen + 3 additional wet rooms	100% variable	0.17	0.17
Kitchen + 4 additional wet rooms	100% variable	0.19	0.19
Kitchen + 5 additional wet rooms	100% variable	0.21	0.21
Kitchen + 6 additional wet rooms	100% variable	0.25	0.25

Figures taken from the BRE Test Results apply for both the standard and humidity versions.

*Number of wet rooms is based on SAP Q test criteria and does not correlate directly with regulatory performance requirements. Test results available for use with 110mm ducting.

Nominal Fan Performance



Acoustic Data

Product	Airflow	% of Max flow	dB 3m Hen	dB(A) @ 3m Spherical	
	1/5		Induct Inlet	Casing Breakout	Casing Breakout
CME3 Q Plus	42l/s	41%	19	21	18
	69l/s	65%	35	32	29
	104l/s	100%	44	45	42

Description - CME3 Q Plus

Drawing & Dimensions

Titon CME3.1 Q *Plus* whole-house central mechanical extract ventilation unit.

Product Codes

Volt free switch inputs

TP342A - CME3.1 *Q Plus* (Full assembly) **TP342HA -** CME3.1 *Q Plus*, humidity sensor (Full assembly)

Switch live inputs

TP342HALS - CME3.1 *Q Plus*, humidity sensor, switch live inputs (Full assembly).

Controls Ready

TP342CH - CME 3.1 *Q Plus*, humidity sensor, controls ready (Full assembly).

Standards

Conforms to requirements of UK statutory Building Regulations and Technical Standards for Ventilation and BRE 398.

SAP Appendix Q tested.

Exceeds requirements of Building Regulations Approved Document L (England & Wales).

EU RoHS Directive compliant.

Conforms to requirements of EC council directives relating to Electromagnetic Compatibility and Electrical Safety:

2006, 95/EC (LVD), 2004/108/EC (EMC) EN 60335-1:2002/A2:2006, EN 60335-2-80:2003, A1:2004. CE Marked.

Other non-UK info available on request.

Specification

Dimensions (excluding ports):

310mm wide x 340mm long x 252mm high (excluding spigots)

Weight: 5 kg

Finish: Light grey / dark grey

Materials:

Housing: Talc Filled Polypropylene

Guarantee period: 3 years (UK only)

Electrical: 230V ~ 50/60Hz, 3A fuse

Installation: Install in accordance with regulatory requirements, such as the Ventilation: Approved Document F and the Residential Ventilation Association recommendations.

Maintenance: See product manual.

Acoustics: Full acoustic data available online www.titon.com/acoustics.



Dimensions (excluding ports)



Performance

Dimensions in mm

The figures and compliance levels below relate to current SAP requirements. Revised SAP guidance will have an effect on performance and up-to-date figures can be found on the relevant product page at www.titon.com.

Exhaust terminal configuration*	Fan speed setting	SFP (W/I/s)	SFP (W/l/s)
		2009	2012
Kitchen + 1 additional wet room	100% variable	0.17	0.17
Kitchen + 2 additional wet rooms	100% variable	0.16	0.16
Kitchen + 3 additional wet rooms	100% variable	0.17	0.17
Kitchen + 4 additional wet rooms	100% variable	0.20	0.20
Kitchen + 5 additional wet rooms	100% variable	0.23	0.23
Kitchen + 6 additional wet rooms	100% variable	0.26	0.26

Figures taken from the BRE Test Results apply for both the standard and humidity versions.

*Number of wet rooms is based on SAP Q test criteria and does not correlate directly with regulatory performance requirements. Test results available for use with 110mm ducting.

Nominal Fan Performance



Acoustic Data

Product		Airflow	% of	dB(A) @ 3m Hemispherical		dB(A) @ 3m Spherical
		1/5 1/10/		Induct Inlet	Casing Breakout	Casing Breakout
CME3.1 <i>Q Plus</i>		42l/s	41%	19	21	18
	CME3.1 Q Plus	69l/s	65%	35	32	29
		104l/s	100%	44	45	42