luma®

Technical DATA SHEET
High Specification Whole House MVHR System



HIGH THERMAL EFFICIENCY

LOW SPECIFIC FAN POWER

MAX AIRFLOW OF 352M³/H

3 SPEED SETTINGS

INNOVATIVE CONTROLLER

LIGHTWEIGHT UNIT

ON-SITE UNIT HANDING

INTELLITRAC® TRACKING

KEY FEATURES

- High Thermal Efficiency of up to 86%
- SAP PCDB listed with low Specific Fan Power (SFP) down to 0.54W/(l.s)
- High Performance MVHR unit with 335m³/h at 100Pa maximum airflow.
- Designed for use in small to medium size dwellings or to meet specific needs including where there are higher noise or pollution levels, and to assist in meeting requirements for overheating mitigation.
- Three speed adjustable unit as standard.
- Includes a wireless boost switch including indicator with additional switches available for local controls where required.
- USB cloning feature for pre-commissioning identical properties.
- Intelligent, high specification controller with display. Removable up to 10m cable length, wired display with six key menus from installation and commissioning to unit status and airflow settings.
- Lightweight unit of 14.5kg, perfect for a single person installation and designed to fit through a standard doorway.
- On-site unit handing for ultimate flexibility. Choose from Right Hand (RH) as default or Left Hand (LH) configurations depending upon unit spigot connections and condensate drainage.
- Intellitrac® relative humidity tracking automatically adjusts the unit speed in line with humidity levels.
- 5 year warranty

PRODUCT

luma, part of envirovent®'s new product range, is a high specification Mechanical Ventilation with Heat Recovery (MVHR) ventilation unit. luma comes as standard with an innovative, removable wired controller and wireless boost switch as well as multiple filter grades depending upon the application.

APPLICATION SUITABILITY

luma is ideal for use in small to medium dwellings or projects with specific ventilation needs, including where there are requirements for higher noise or pollution levels and overheating mitigation.
The unit has four filtration options, having been designed to provide good indoor quality levels across a variety of applications. luma also features on-site handing for installation flexibility and Ø125mm spigots with ease of connection to different ducting types. The 0-10V sensor port also provides a way to connect external sensors such as the AirSens® range.

PERFORMANCE

Manufactured in the UK, luma incorporates a maximum airflow of 352m³/h in free air and 335m³/h at 100Pa.
The unit is SAP PCDB listed with a Specific Fan Power as low as 0.54W/(l.s) and high thermal efficiency of 86% in line with Approved Document L of Building Regulations.

luma provides a standout, flexible and innovative ventilation solution offering low noise levels as low as 15.4dB(A) breakout at 3m, and Intellitrac® humidity tracking as standard.

luma also includes two mounting brackets and is lightweight at 14.5kg.

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PRODUCT CHARACTERISTICS DATABASE (PCDB)

Exhaust Terminal Configuration – Kitchen + Additional Wet Rooms	Specific Fan Power (W/(l.s)	Heat Recovery Efficiency (%)
Kitchen + 1 Additional Wet Room	0.54	86
Kitchen + 2 Additional Wet Rooms	0.64	84
Kitchen + 3 Additional Wet Rooms	0.79	82
Kitchen + 4 Additional Wet Rooms	1.03	81
Kitchen + 5 Additional Wet Rooms	1.28	80

MOTORS

Low Watt forward curved EC motors benefitting from a reduced sound level.

HEAT EXCHANGER

The heat exchanger is a plastic counterflow heat exchanger with a thermal efficiency of up to 86%.

SUMMER BYPASS

Full mechanical summer bypass to assist with increased temperatures in summer months.

FROST PROTECTION & FIREPLACE MODE

Frost protection as standard via airflow imbalance. If the property contains an open flued combustion appliance, Fireplace Mode must be activated. An external pre-heater accessory could also be used to temper the incoming air to mitigate against frost protection if preferred. If an accessory is incorrectly installed or not fitted, the unit will shut down at low temperatures to prevent spillage of combustion products.

FILTRATION

The unit incorporates 2x ISO Coarse 65% (G4) filters as standard. For enhanced filtration, there are three additional supply filter grades of ISO ePM10 50% (M5), ISO ePM2.5 50% (M6) and ePM1 55% (F7). These can be purchased in packs as accessories alongside a ISO Coarse 65% (G4) extract filter.

SERVICING/MAINTENANCE

luma benefits from ease of maintenance and accessible filters that should be inspected and replaced periodically. These filters are located under the top filter covers on the front of the unit and are marked in terms of grading with 2x ISO Coarse 65% as standard. There are adjustable filter and service countdown periods within the Modbus communication and via several of the menus on the main controller. luma has been designed to support the maintenance and servicing of the unit as well as end of life removal. Further information is available within the Installation Guide.

Download your installation guide here:

SCAN ME

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SOUND DATA

					SOUND POWER LEVELS [Lw dB(A)]									SOUND PRESSURE LEVEL [SPL]
					FREQUENCY (Hz)									
UNIT SETTING	FLOW (m³/h)	FLOW (l/s)	STATIC PRESSURE	MODE	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	TOTAL dB(A)	dB(A) at 3m
100%	191.0	53.1	419.0	Extract	32.6	46.4	52.6	52.3	53.0	50.5	44.4	39.3	57.8	38.2
	204.0	56.7	476.0	Supply	40.2	52.3	57.8	62.7	66.4	67.4	61.9	56.6	71.6	51.1
	191.0	53.1	419.0	Breakout	38.7	45.2	56.1	61.5	60.5	56.7	50.1	42.2	65.5	45.0
	247.0	68.6	373.0	Extract	33.0	46.9	52.1	52.2	51.8	51.2	44.6	39.2	58.2	37.7
	262.0	72.8	419.0	Supply	41.8	52.4	57.9	62.9	66.3	67.2	61.6	56.1	71.5	51.0
	247.0	68.6	373.0	Breakout	37.3	45.0	55.7	60.4	59.9	56.8	50.1	42.6	64.9	44.3
	300.0	83.3	194.0	Extract	32.3	48.8	52.0	51.6	51.7	50.6	44.3	38.4	58.3	37.8
	315.0	87.5	213.0	Supply	40.9	54.0	57.4	62.3	64.2	66.8	60.7	55.4	70.6	50.0
	300.0	83.3	194.0	Breakout	38.7	45.9	54.7	60.2	56.3	55.1	48.1	41.6	63.5	42.9
80%	158.0	43.9	288.0	Extract	30.8	44.5	49.4	48.4	49.0	46.8	39.7	34.9	55.1	34.6
	167.0	46.4	321.0	Supply	39.5	49.7	54.1	58.5	62.0	63.7	56.5	51.7	67.5	46.9
	158.0	43.9	288.0	Breakout	37.0	43.4	51.9	57.8	56.7	53.3	45.3	37.7	61.8	41.2
	208.0	57.8	266.0	Extract	29.6	46.0	51.1	49.6	50.0	49.5	42.3	36.2	56.7	36.2
	224.0	62.2	307.0	Supply	39.3	49.5	53.8	58.4	61.9	63.5	56.3	51.5	67.3	46.8
	208.0	57.8	266.0	Breakout	36.2	43.7	52.3	57.6	56.8	54.0	46.1	38.7	61.9	41.4
	294.0	81.7	186.0	Extract	33.4	49.1	52.2	51.5	51.5	50.5	44.4	38.7	58.3	37.8
	208.0	57.8	205.0	Supply	40.9	53.7	57.1	61.9	64.0	66.7	60.7	55.5	70.4	49.9
	294.0	81.7	186.0	Breakout	38.6	45.6	54.6	60.2	56.1	55.0	47.9	41.1	63.4	42.8
60%	119.0	33.1	162.0	Extract	26.2	39.9	43.0	41.6	43.5	40.0	31.7	27.0	49.0	28.4
	124.0	34.4	176.0	Supply	33.5	44.9	47.5	51.1	56.3	57.2	48.6	43.6	61.0	40.5
	119.0	33.1	162.0	Breakout	32.0	39.8	45.3	50.2	50.5	46.9	37.4	29.6	55.0	34.5
	157.0	43.6	150.0	Extract	25.3	41.8	44.4	42.5	44.8	43.1	34.6	28.1	50.6	30.1
	165.0	45.8	166.0	Supply	33.1	44.4	46.7	50.7	56.1	56.9	48.2	43.1	60.7	40.2
	157.0	43.6	150.0	Breakout	33.4	40.8	45.1	50.2	50.8	47.7	38.4	31.0	55.3	34.8
	221.0	61.4	105.0	Extract	28.6	44.2	46.7	44.8	46.7	45.5	38.7	32.3	52.9	32.4
	236.0	65.6	120.0	Supply	38.7	47.8	50.3	53.3	58.7	60.6	53.0	48.2	64.1	43.5
	221.0	61.4	105.0	Breakout	38.4	41.4	48.9	52.4	51.1	49.5	41.1	34.3	57.0	36.5
40%	79.0	21.9	71.0	Extract	21.6	31.9	34.2	33.7	36.4	28.3	23.6	21.1	40.8	20.3
	82.0	22.8	76.0	Supply	27.1	37.7	38.3	41.7	48.9	44.5	37.3	29.7	51.5	30.9
	79.0	21.9	71.0	Breakout	26.2	31.2	37.2	41.2	43.2	34.9	26.3	21.2	46.5	26.0
	108.0	30.0	64.0	Extract	21.8	34.1	35.1	35.4	38.4	31.2	25.0	21.8	42.6	22.0
	107.0	29.7	70.0	Supply	26.8	37.5	38.0	41.4	48.5	44.0	36.6	28.4	51.1	30.5
	108.0	30.0	64.0	Breakout	26.6	31.8	37.3	41.2	43.9	35.9	27.2	21.7	47.0	26.4
	143.0	39.7	44.0	Extract	23.6	35.7	35.9	35.4	39.9	33.2	27.0	21.8	43.8	23.2
	152.0	42.2	50.0	Supply	28.6	39.1	38.4	42.4	52.3	49.1	41.8	35.4	54.8	34.3
	143.0	39.7	44.0	Breakout	27.4	34.3	38.5	41.7	44.9	38.4	30.0	23.4	48.1	27.5
20%	41.0	11.4	19.0	Extract	18.1	24.0	20.8	23.3	23.2	23.8	23.1	20.1	31.5	10.9
	42.0	11.7	20.0	Supply	19.0	26.2	24.2	30.3	31.3	26.5	22.0	20.1	35.9	15.4
	41.0	11.4	19.0	Breakout	21.3	24.5	27.0	33.2	26.5	23.0	22.1	20.2	35.9	15.4
	51.0	14.2	16.0	Extract	19.1	22.8	21.3	24.3	22.7	20.7	21.3	20.0	30.8	10.3
	53.0	14.7	17.0	Supply	18.9	25.8	24.0	30.1	31.6	27.6	24.3	21.8	36.2	15.7
	51.0	14.2	16.0	Breakout	18.6	22.2	26.2	33.9	27.3	22.5	21.4	20.1	36.1	15.5
	68.0	18.9	10.0	Extract	21.4	23.6	21.4	30.4	29.0	25.1	23.7	20.3	34.8	14.3
	71.0	19.7	10.0	Supply	20.4	26.3	25.4	32.2	36.1	30.2	23.3	20.2	39.0	18.5
	68.0	18.9	10.0	Breakout	18.9	23.4	27.0	34.0	29.2	23.7	22.2	20.9	36.7	16.1

A full Consultant Specification
can be sent on request.

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CONTROLS

luma comes as standard with an intelligent removable controller with display and up to 10m cable length. The unit also includes a wireless three speed switch with indicator. Additional switches are also available where required. The intelligent controller offers six key menus from installation and commissioning to unit status and airflow settings.

Status:
- Showing active functions, current mode, filter inspection countdown, fault notifications, service information, and supply/extract temperatures.

Data:
- Storing datalogging information including filter and service countdowns, total run time, speed, humidity and temperature data.

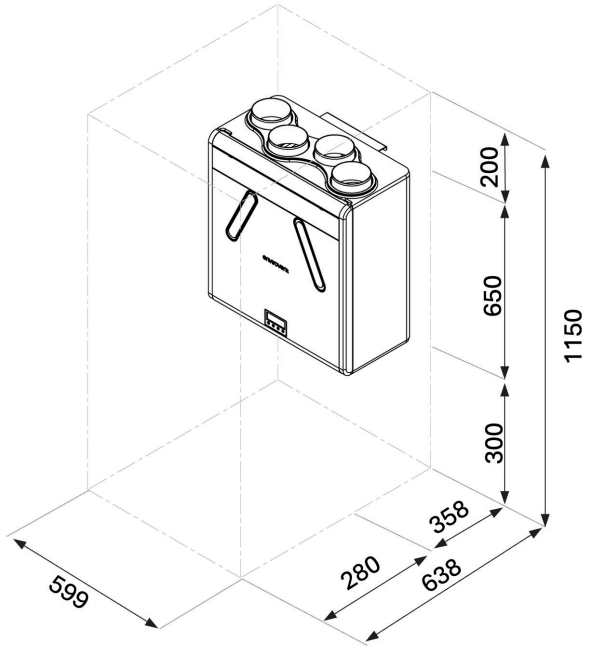
Control:
- To manage bypass controls and override as well as details of the holiday mode.

Reset:
- To enable the filter countdown and reset key details.

My Unit:
- Showing the details of the unit including firmware, installation and warranty information as well as unit handing and fireplace mode.

Install:
- Specifically designed for installers with commissioning, humidity, bypass, timers, data resets and other external equipment details.

DIMENSIONS



WARRANTY

luma is covered by a 5 year warranty.

LITERATURE

A Quick Start Guide is enclosed with luma containing useful information including safety, wiring and maintenance information. The full installation guide is available above via the QR code within the Quick Start Guide and also on envirovent®'s website with printed copies available on request. A User Resident Guide is also available via the website or printed on request for luma containing non-technical information regarding controlling and maintaining the unit.

INSTALLATION

The integral, innovative controller includes a specific menu designed with the installer in mind for commissioning, airflow and humidity settings, unit handing details, USB cloning, temperatures, and resets. The Install Menu includes six sub-menus with further details available within the Installation Guide:

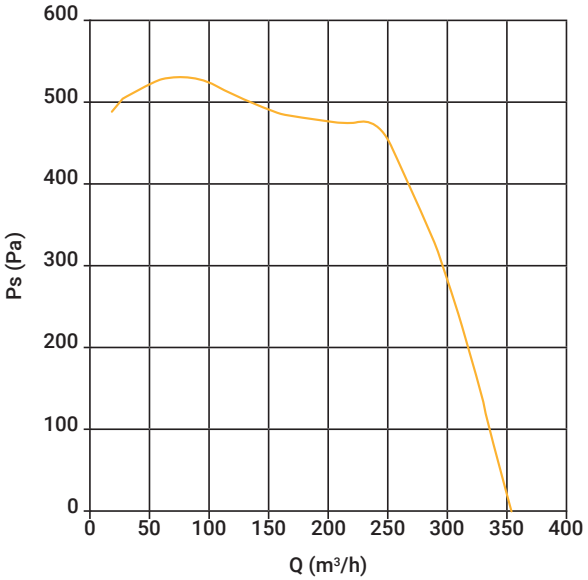
- Airflow
- Humidity
- Bypass
- Timers
- Reset
- Equip

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PERFORMANCE





TECHNICAL DATA

Ventilation Capacity	335m³/h at 100Pa
Spigot Size	Ø125mm Circular
Weight	14.5kg (17kg Boxed)
Thermal Efficiency	Up to 86%
Specific Fan Power	Down to 0.54W/l/s
Heat Exchanger	Counter Flow (Plastic)
Dimensions (mm)	599 x 650 x 358
Supplied Filters	2x ISO Coarse 65% (G4)*
Multiple Speed Settings	Three adjustable speeds with Holiday Mode Option
Controllability	Removable Controller & Wireless Boost Switch
Condensate	Ø21.5mm Connection
Mechanical Summer Bypass	✓
0-10V input	✓
Modbus Connection	✓
Intellitrac® Humidity Tracking	✓
On-Site Handing	✓
ErP SEC Class	A
Electrical Supply	230V 50-60Hz
Max Power Consumption	160W
Warranty	5 Years

*Enhanced filter options available