

HR SERIES

HR Mural Up 300^{eco} & 400^{eco}



Ventilation Unit
with counterflow
heat exchanger



Designed for detached houses, multi-dwelling houses and holiday cottages less than 240 m².

Also suitable for renovation projects. The unit's maximum air flow is 300 or 400m³/h with a thermal efficiency for the heat exchanger > 90%.

Mural 300 and 400 is suitable to install in a machine room, storage space, laundry room, or similar areas.

The unit can be controlled directly, from a separate control panel or via WiFi with an App (smartphone or tablet).



Control Technology

- The new TAC 5 control technology ensures that the ventilation is energy efficient and that the indoor air in the home is always healthy for both the home and its inhabitants.
- User interface
Configuring & piloting your ventilation can be made through different user interfaces:
 - A small display on the unit
 - A remote control
 - A touchscreen
 - A smartphone or tablet, using our dedicated App (requires WiFi or Ethernet).
- Connection to a BMS system by a digital and/or analogue signal (if the MODBUS communication cannot be used).
- 4 different operating modes are available:
 - link with signal 0-10V (LS),
 - constant pressure (CPs),
 - constant torque (TQ) and
 - constant airflow rate (CA)
- An exhaustive system of alarms is available, including fire, fan failure, maintenance, filter replacement, pressure variation...



BOOST - A large airflow is used when the ventilation requirement increases, e.g. for cooking, taking a sauna, showering and drying laundry.



HOME - Normal airflow. Guarantees that there is sufficient fresh indoor air in the home, and that the building construction is at its best.



AWAY - Low airflow. Reduces power consumption when the ventilation requirement in the home is small.



TRAVELLING - Very low airflow and lower supply air temperature. Used when no one is present in the home.



TIME TABLE - You can switch as required to an appropriate operating mode or let the pre-programmed weekly clock switch operating mode according to the diurnal rhythm you want.



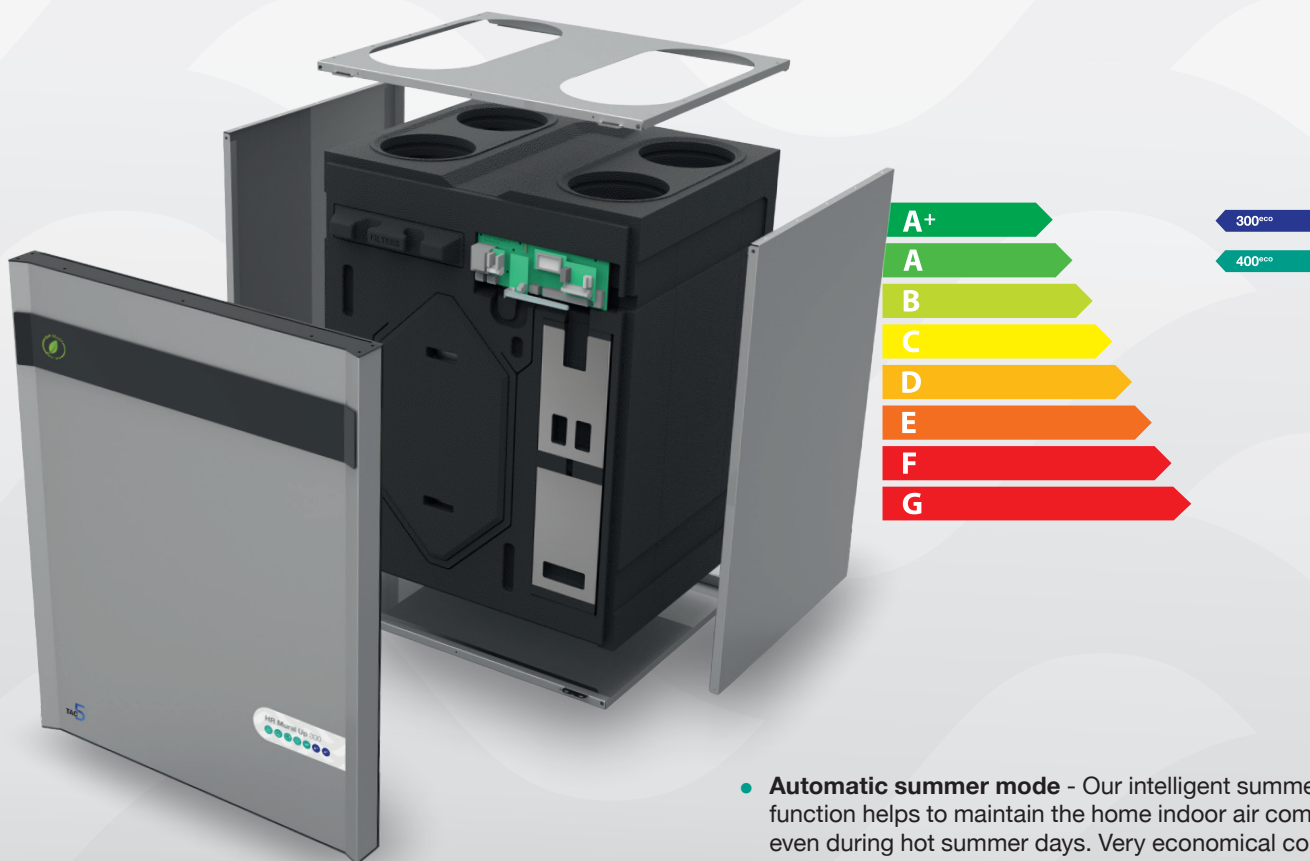
AUTO HUMIDITY CONTROL - Automatically regulates the ventilation according to the indoor air humidity levels (accessories).



AUTO AIR QUALITY CONTROL - The most advanced automation function to achieve the best indoor air quality. Responds to numerous factors that affect air quality.

HR Mural Up 300

- Max airflow of 300m³/h (85 l/s) or 400m³/h (112l/s)
- A+ and A eco-labelling
- Eurovent, DIBT & Passive house certifications pending
- Thermal efficiency > 90%
- Advanced TAC 5 control technology
- Low weight
- Very low consumption
- Maintenance facilitated by easy access to all components.
- High standards of airtightness & thermic tightness
- Low noise level
- Pre & post heating available
- Dedicated App available to configure & pilot the unit



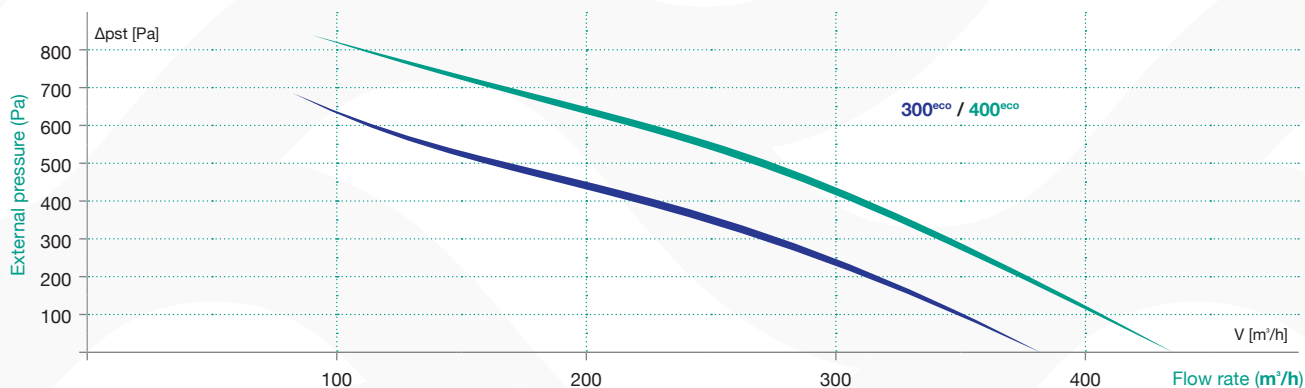
- **Pre & Post Heating** - Usually the extract air heating energy is sufficient to heat up the supply air. In cold conditions, you can use the HR Mural models, which can be equipped with an electric pre or post heating coil, to ensure a comfortable indoor air quality is maintained even during periods of intense cold.
- **Anti-frost protection** - Our reliable defrosting function guarantees continuous and balanced ventilation in the home even during extreme conditions. If there is a freezing risk of the heat exchanger, the speed of the fans decreases and the warm extract air prevents freezing occurring inside the heat exchanger. The supply air fan does not stop completely, ensuring continuous ventilation in the house.

- **Polypropylene casing** (Metal in option) - The original casing is compact and made of polypropylene casing. This allows to have no thermal bridges. In option, the unit can be fitted with a metal casing giving a nicer finishing.
- **Heat Recovery** - The warm indoor air passing through the heat exchanger is cooled down before exhausting the building and transfers its heat to the cold fresh outdoor air supplying the building. Our high efficiency counter flow heat exchanger (up to 94%) is made of seawater resistant aluminum and is foreseen for temperatures between -30°C and +100° C. It is also Eurovent approved according to EN308.
- **Fans** - The fans have low-energy, economical, type EC direct current motors, whose power consumption is substantially lower than traditional fans driven by AC motors. The advantage of the EC fans is their controlled and variable speed and their high efficiency even when it's operated at lower speed. The fans are included in a drawer, which means they can be quickly dismantled from the unit.

- **Automatic summer mode** - Our intelligent summer function helps to maintain the home indoor air comfort even during hot summer days. Very economical comfort coolness can be produced almost free of charge by using the difference indoor and outdoor temperatures and the heat exchanger smart regulation. Thanks to the heat exchanger, is during the hot summer days the incoming outdoor air cooled down by the colder indoor exhaust air. At night the air by pass the heat exchanger and the home is cooled with fresh outdoor air. This is managed by an advanced automatic system that can be set according to the resident's requirements!
- **Installation** - The unit can either be mounted on a wall or just be laid on the ground. Suitable installation locations are laundry rooms, store rooms, cold attics, etc. When installed in cold areas the unit should be insulated. All units are supplied complete with temperature sensors, heat exchangers, wiring, etc. They are delivered plug & play and are individually pre tested in the factory

HR Mural Up 300^{eco} & 400^{eco}

Technical characteristics



General characteristics

	HR Mural Up 300 ^{eco}	HR Mural Up 400 ^{eco}
• AIR FLOW	50 - 300 m³/h	50 - 400 m³/h
• DIMENSIONS (L X W X H)	600 x 550 x 750	600 x 550 x 750
• WEIGHT	25 kg*	25 kg*
• NOMINAL VOLTAGE	1 x 230V - 50Hz	1 x 230V - 50Hz
• MAXIMUM INTENSITY	1,4 A	1,8 A
• RECOMMENDED ELECTRICAL PROTECTION	4 A / D-10000A-AC3	4 A / D-10000A-AC3
• SUPPLY / EXTRACTION AIR FILTER	G4 / G4 (F7 optional)	G4 / G4 (F7 optional)
• AVAILABLE OPTIONS	KWin/KWout	KWin/KWout
• AUTOMATIC FREE COOLING	yes / 100%	yes / 100%
• OPERATING TEMPERATURE RANGE	-20°C à +40°C	-20°C à +40°C
• CASING (BLACK)	Polypropylene (PPE)	Polypropylene (PPE)
• STEEL COLOUR PANELS (OPTION)	RAL 9010	RAL 9010
• INSTALATION	Indoor mounting	Indoor mounting
• CONNECTION	∅ 160mm	∅ 160mm

* The weight may change depending on the options.

Technical data

FLOW RATE	POWER ABSORBED	SFP	EXCHANGER EFFICIENCY	OUTLET T° AFTER EXCHANGER	SOUND LEVEL	Conditions:
m³/h	W	W/m³/h	%	°C	dB(A)	
100	● 19	● 0,19	● 93,4	● 19,9	-	1. values calculated on the basis of an external 100 Pa system curve at maximum flow rate.
200	● 47 / ● 42	● 0,24 / ● 0,21	● 91,1	● 19,2	● 29 / ● 27	2. efficiency calculations for external conditions of -10°C, 90% RH and internal conditions of +22°C, 50% RH.
300	● 133 / ● 114	● 0,44 / ● 0,38	● 89,7	● 18,7	● 34 / ● 33	3. Sound level in the free field at 3m.
400	● 229	● 0,57	● 88,7	● 18,4	● 38	

P. LEMMENS COMPANY

Address

Parc Industriel de Sauvenière
102, chaussée de Tirlemont
B 5030 Gembloux
Belgium

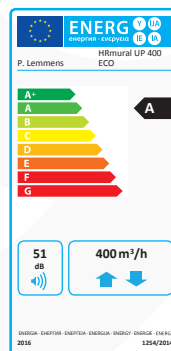
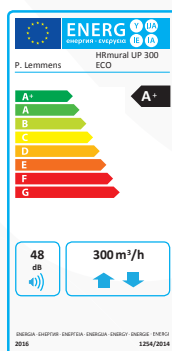
Phone

+32 (0)81 62 52 52

Web

www.lemmens.com

29062016



TAC 5



DIBt



Pending Certifications