

OPTIHOME Domestic Heat Recovery Units

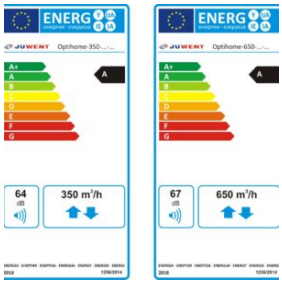
Intended use The OptiHome domestic heat recovery (MVHR) unit is a type of small air handling unit designed for use in supply and exhaust systems in residential buildings. Thanks to the cross-flow heat recovery exchanger, the air handling unit reduces the heat losses resulting from the ventilation of the building.

PRODUCT DESCRIPTION

Main functions of the OptiHome domestic heat recovery unit:

- air exchange inside the building,
- higher comfort of use of the dwelling thanks to the ventilation and supply of fresh air,
- saving energy thanks to a highly efficient heat recovery exchanger, heat recovery efficiency up to 92%,
- compliance with the highest hygienic standards thanks to removal of damp, stale air which is conducive to the growth of fungi and mould,
- cooperation with a ground heat exchanger (GHX), GHX regeneration function to avoid overcooling,
- free-cooling – in the summer period the stale, humid and warm air is removed from the building via a bypass, omitting the heat exchanger, and replaced with fresh, cooler air.

Design **CASING** The OptiHome heat recovery units are provided with self-supporting casing made of galvanised powder-coated steel sheet. The self-supporting structure with mineral wool insulation reduces the risk of thermal bridges. Connectors to ventilation system are made of galvanised steel sheet, and diameter depending on the size is 160 or 200mm. The casing is fitted with adjustable feet for floor mounting or brackets for wall or ceiling mounting. **HEAT RECOVERY** A cross counter-flow heat recovery exchanger used in OptiHome units is made of plastic materials. Heat recovery efficiency up to 92%. The B versions of Optihome unit are additionally fitted with a summer bypass. **FANS** Energy-saving fans integrated within the unit on the supply and exhaust with stepless adjustment of the air flow rate thanks to used EC technology. The stepless adjustment of the air flow rate allows for adaptation of the amount of the supplied air to variable needs and conditions occurring in a handled building. **AIR FILTERS** To ensure high air purity within a dwelling, the unit is fitted with M5 filter. Filter replacement requires no tools, and the OptiHome unit informs on the need to replace filter with an appropriate message on the unit controller. The higher standard of air filtration class F8 is provided by filter boxes available as an ancillary equipment. **ELECTRIC HEATER** Additionally, as standard, units are fitted with electric post-heater enabling the supply air to be heated up to 26°C. **CONTROLS** Full control over the unit operation by a user is provided by a control system comprising controller mounted on the casing and remote panel with touch screen to be mounted in any location within the building. **OPERATING CONDITIONS** The MVHR unit is suitable for operation in insulated rooms, such as basements, lofts, store rooms, where air temperature is maintained within +5 and +45°C. Maximum permissible temperature of the handled air is 50°C. The OptiHome heat recovery units line fully meets requirements for energy efficiency class A in accordance with Directive 2009/125/EC and Commission regulation 1254/2014.



JUWENT
31 Lubelska str., 08-500 Ryki
+48 502 087 841, +48 664 465 243
export@juwent.com.pl