Micra 100 E

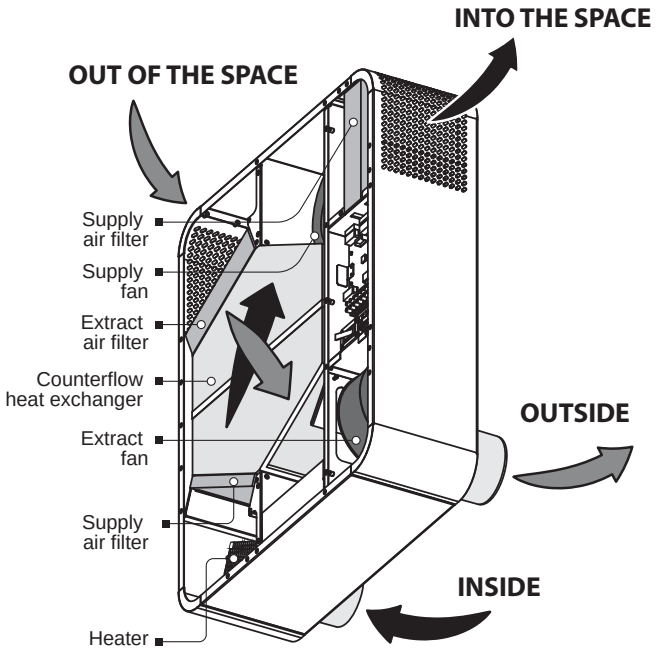
APPLICATION

The air-handling unit is designed as a component of an energy-efficient home to recover and recycle the air heat energy.

The unit is intended for ensuring continuous mechanical air exchange in houses, offices, hotels, cafes, conference halls and other utility and public spaces as well as to recover the heat energy contained in the air extracted from the premises to warm up the filtered stream of supply air.

The unit is designed for extended periods of continuous operation without disconnection from the power mains.

The handled air must not contain flammable or explosive mixtures, chemically active vapours, coarse dust, soot, fats or environments favourable for the formation of hazardous substances (toxic substances, dust, pathogenic germs), sticky substances and fibrous materials.



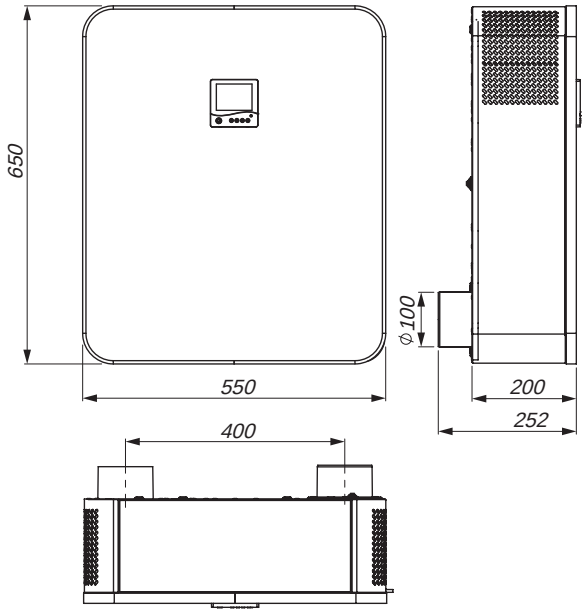
OPERATING PRINCIPLE

The warm stale air from indoors is supplied into the unit filter. Once filtered the air is directed into the heat exchanger and then extracted outside by the exhaust fan. Cold clean air from outdoors is fed into the supply filter by the supply fan via an air duct. The filtered air then passes through the heat exchanger and then enters the serviced space.

While passing through the heat exchanger the supply air is transferred the heat energy extracted from the warm stale air thus raising its temperature. The air streams do not mix in the process. Such design reduces heat energy losses and helps to minimize heating expenses in the cold season.

The unit is equipped with a 600 W posistor heater with overheating protection to warm up the supply air.

TECHNICAL SPECIFICATIONS



Parameter	Micra 100 E		
Supply voltage, [V] / 50 Hz	1 ~ 240		
Maximum fan power, [W]	12	21	45
Electric heater power, [W]	600		
Electric heater current, [A]	2.73		
Total current consumption, [A]	3.08		
Maximum air capacity, [m³/h]	30	60	100
Sound pressure at 3 m, [dB(A)]	13	27	39
Transported air temperature, [°C]	from -25 up to +50		
Casing material	Painted steel		
Insulation	10 mm Foam rubber		
Heat exchange efficiency, [%]	96	92	87
Core type	Counterflow		
Core Material	Polystyrene		
Supply air filter	G4, H13		
Extract air filter	G4		
Connected air duct diameter, [mm]	Ø 100		
Weight, [kg]	28		
Energy efficiency class	A		

The unit is intended for indoor use at ambient air temperatures from +1 ˚C to + 40 ˚C and relative humidity up to 80 %.
Hazardous parts access and water ingress protection:

electric motors – IP 44;
complete unit connected to the air ducts – IP 22.

WARRANTY

Manufacturer hereby guarantees normal performance of the Micra 100E unit for two years from the date of retail sale provided compliance with transport, storage, mounting and operation regulations. In case of no confirmation of the sales date the warranty period is calculated from the manufacturing date.