

EVO-R HPM

EVO-R (X/O) HPM is a compact **supply-and-exhaust air handling unit** with high-efficiency heat recovery and an integrated air-to-air inverter heat pump. Available with a counter-flow (X) or rotary (O) heat exchanger, it ensures **optimal energy performance and indoor comfort**. The system includes a roof-mounted outdoor module and a ceiling-installed indoor module, and can also operate as a stand-alone outdoor unit connected to air ducts. Optional heating functions provide added **flexibility for a wide range of applications**.



1 Mini-pleat supply air filter
F7 / ePM1 class 60%

4 Exhaust filter
class M5 / ePM10 50%

2 Counterflow plate heat
exchanger with full 100%
bypass or rotary regenerator

5 Built-in heat and cooling
recovery module – inverter
heat pump

7 Long-range
swirl diffuser with adjustment
blade angle

3 Complete supply and
exhaust EC fan assemblies

6 Water
or electric heater

8 Air intake with built-in rainwater deflector

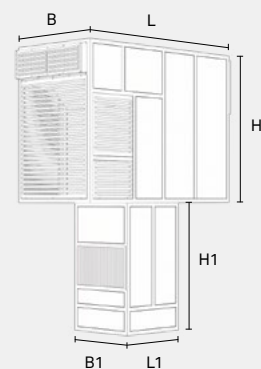
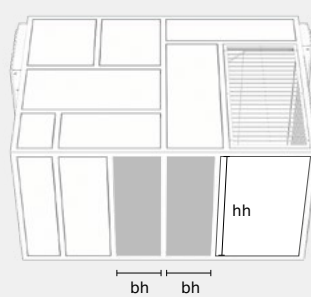
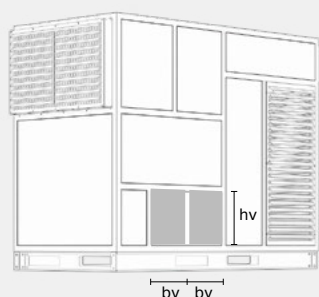
Technical data

		EVO-RX HPM 0500	EVO-RX HPM 0800	EVO-RO HPM 0500	EVO-RO HPM 0800
Nominal Capacity	m³/h	5000	8000	5000	8000
Maximum heat recovery efficiency	%	88	88	83	84
Air Capacit	m³/h	3750÷5750	5000÷9200	3000÷5750	5000÷9200
Externa pressure	Pa	400	400	400	400
Maxmum DX cooling / heating capcity	kW	28 / 31	45 / 50	28 / 31	45 / 50
Maximum water heater heating capcity	kW	40 / 45	65 / 90	40 / 45	65 / 90
Maximum suuply fan output capacity	kW	2,5	2x2,5	2,5	2x2,5
Maximum exhaust fan output capacity	kW	2,5	2x2,5	2,5	2x2,5
Supply voltage	V	3x400	3x400	3x400	3x400
Maximum weight of outdoor unit OU	kg	1004	1421	1013	1332
Maximum weight of indoor unit IU	kg	226	252	226	252

DX: To=6°C; R410C; CW: 6/12°C; HW: 80/60°C



Dimensions



Unit model	Unit size	Outdoor module							Indoor module			
		B	H	L	hv	bv	hh	bh	B1	H1*	L1	ØD
		[mm]							[mm]			
EVO-RX HPM	0500	1300	1950	2560	460	475	900	400	950	1650	950	630
EVO-RX HPM	0800	1650	2360	2970	460	680	950	450	1050	1650	1050	800
EVO-RO HPM	0500	1300	1950	2560	460	475	900	400	950	1650	950	630
EVO-RO HPM	0800	1650	2360	2970	460	680	950	450	1050	1650	1050	800

ØD - diameter of the long-throw diffuser | For a stand-alone outdoor unit, a 120mm high panel frame is used

* Dimensions variable (every 100mm) resulting from the thickness of the roof, the given dimension is a minimum

CONTROL SYSTEM

Bearing in mind the currently high requirements resulting from the needs of users and industry regulations, KLIMOR's offer goes to meet them.

The new automation solution is not only the local control and control of AHU. It is primarily a remote management and prevention system based on cloud technology. Control of the operation of the panels becomes intuitive thanks to the use of touch screen LCDs, suitably

sized to the type and configuration of the device. The standard open communication protocols MODBUS, BACnet, and ETHERNET, implemented on board of the controller, allow to fully integrate all units within the framework of comprehensive BMS systems.

Klimor **control functions:**

LOCAL

LCD HMI



AHU WORKING VISUALISATION

- Air quality control
- Temperature / Humidity control
- Summer / Winter operation mode
- Standby mode
- Callendar mode
- Operation on demand
- Operation failure protection
- Service time
- External stop
- Operation and Service settings
- Trends
- Emergency shut-down in case of fire

REMOTE

ALL LOCAL HMI FUNCTIONS AVAILABE VIA:

**MOD
BUS**

Modbus

BACnet

BACnet

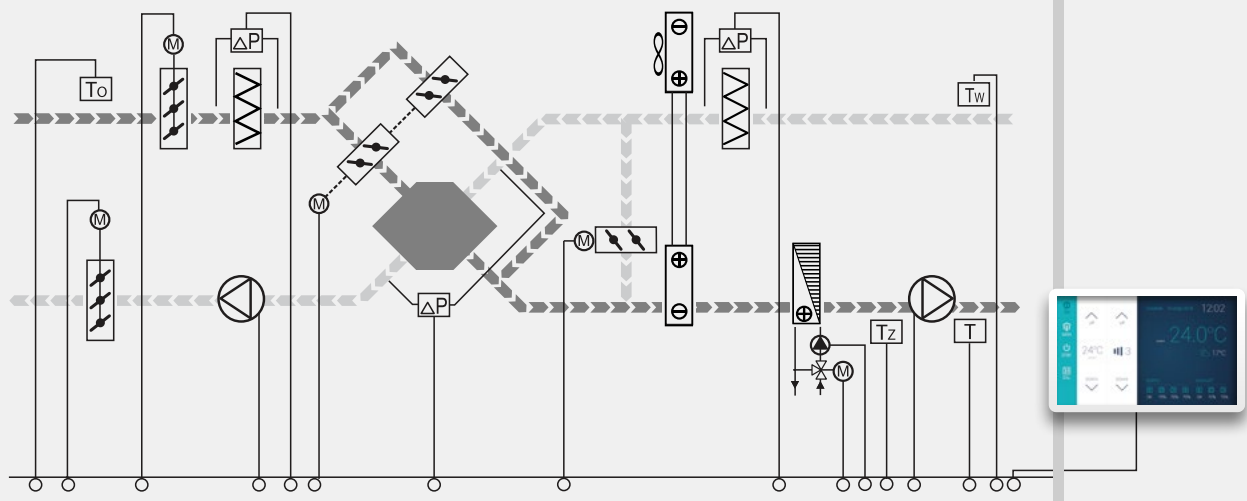


Ethernet



WEB platform
(Cloud)

EVO - R (X) HPM control system diagram

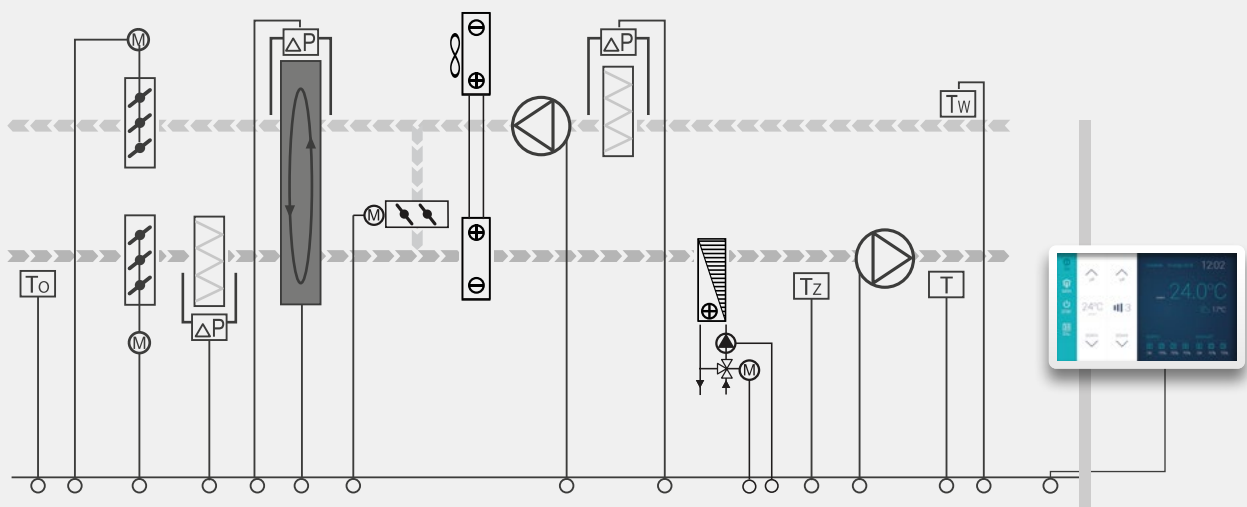


Monitoring of ambient, supply, exhaust and room temperatures / Monitoring of filter contamination / Monitoring of heat pump cooling system / Monitoring of fan unit operation / Air capacity control / Supply air temperature control / Energy recovery control / Frost protection for heat recovery exchanger and water heater / Free-cooling operation / Free cooling operation/ Night recirculation of „fast heating“

ADDITIONAL SYSTEM FEATURES:

Operating mode - manual or automatic setting according to the calendar | Alarm status information | Drive system overload protection | Power supply for an additional water exchanger circulation pump 1x230V 50Hz with a power of up to 500W | Pressure transducers - maintaining constant output | "Recirculation" mode for rapid heating/cooling | Monitoring and management via web server (www) or Klimor Cloud | Connections - RS485 SLAVE / RS485 MASTER, USB, ETHERNET, HMI CON | Communication - Modbus RTU, BACnet MS / TP, Modbus TCP / IP, BACnet IP | External integrated RJ45 communication port

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