



Key features:

- Reversible heat pump integrated
- Cooling- or heat recovery by integrated exchangers and adsorption rotary wheel
- Electronic expansion valve
- Supply air with F7 envelope filter, return air with F5 envelope filter
- Sustainable components of European brands for lifetime reliability
- Ventilation capacity 2.000 - 75.000m³/h
- Advanced microprocessor controller
- Plug and play ready operation, no additional equipment is required
- Double sheeted panels, coated galvanised on the outside and Magnesium zinc on the inside for maximum sustainability
- Inverter compressor(s) and inverter plug fans
- Hand held for easy settings of fan speed, set point and weekly program

The new range of Compact **HRW-IHP air to air heat pump** is designed for the highest level of sustainable indoor climate conditioning by integrating all elements into one single unit. Every component is attuned to one another for maximum comfort and low exploitation costs.

HRW-IHP air to air heat pump - Air handling unit with integrated reversible heat pump and heat/cool recovery. Available from 2.000 – 75.000m³/h. The HRW heat recovery air handling units are completely assembled with inverter scroll compressor(s), condenser, evaporator, inverter EC plug fans, heat recovery adsorption wheel and control panel. The complete system is designed to have the absolute maximum heat-, and cooling recovery, free cooling and adjustable air volume when necessary. The controller is able to control the temperature, duct pressure or CO₂ level. The HRW-IHP units are suitable for inside and outside operation.

Unique design philosophy for a sustainable green environment

With 65 years of experience, Horos takes the responsibility to reduce the carbon emissions by developing a unique plug and play air handling system with integrated cooling and heat pump. The HRW-IHP optimizes the preparation time, labour costs and the required space. Connecting and cooling become very simple and economical.

Efficiency

By controlling the inverter compressor and adsorption rotary wheel speed the HRW-IHP is unique in its kind. By dehumidifying the supply air, low condensing pressure (in summertime,) high evaporating temperature (in wintertime) and cool - or heat recovery, the maximum efficiency is guaranteed.

Intelligence

The powerful microprocessors control the performance of the reversible heat pump and is designed to maximise the energy saving and performance with high reliability. Depending on the application, the processor is able to control the temperature, duct pressure or CO₂ level. This is achieved by the modulation of cooling power and the air flow guaranteed by the inverter technology. The unit is designed for easy RS485 connection to supervision systems based on Modbus, BacNet, LONworks protocol or TCP/IP.

Acoustic performance

Some of the best acoustic performances have been achieved by EC plugfans with inverter technology. The compressor compartment is separated from the airstream and the HRW-IHP can be supplied with complete sound attenuators.

HRW-IHP AIR HANDLING UNITS WITH INTEGRATED HEAT PUMP

Model		2-4	3-6	5-10	7-14	9-18	12-24	16-32
Air volume min/max	m³/h	2.000	3.000	5.000	7.000	9.000	12.000	16.000
		4.000	6.000	10.000	14.000	18.000	24.000	32.000
Selection made by	m³/h	3.000	4.500	7.500	10.500	13.500	18.500	24.000
Cooling								
Capacity (1)	kW	15,3	23,4	36,6	52,5	69,5	67,5	81,4
Supply temperature	°C	15,7	15,5	15,9	15,7	15,5	17,5	17,8
EER		3	2,8	3,1	3,6	3,1	3,6	3,9
Heating								
Capacity	kW	13,6	20,3	31,2	43,5	59,2	55,6	65,2
COP*		7,1	6,9	7,2	7,7	7,3	8,1	7,2
Dimensions								
Length	mm	3.665	4.240	4.670	4.850	5.600	5.400	6.530
Wide	mm	880	880	1.400	1.900	1.800	2.200	2.200
Height	mm	1.400	1.760	1.760	1.920	2.350	2.550	2.600
Operational weight	kg	1.133	1.451	2.099	2.661	3.209	3.738	4.577
Maximum absorbed power	kW	9,2	13,7	19,5	28,3	39,1	43,4	58,4
Maximum absorbed current	A	17	25,5	35	45,6	64,4	69,6	97

(1) please note 1kW = 0,284 RT

Summer conditions:

Ambient 28°C / 55% RH Return air 24°C / 50% RH

Winter conditions:

Ambient -10°C / 90% RH Return air 22°C / 30% RH

Options

- Different envelope filters
- Sound attenuators
- Interior lighting and viewing options with internal light
- Aluminium or Stainless steel housing
- Dynamic filter pressure loss measurement
- Anti corrosion coil treatment
- Air dampers on the in- or outlet
- Electronic starter and phase controller
- Additional heater for dehumidification
- Integrated humidification
- BREEAM application
- Modbus, BacNet, LONworks or TCP/IP communication

Your HOROS Supplier:

