

# Inverter Air Cooled Heat Pump

## EuroScroll 20-30 Air EVO HP



20-36 kW



Air cooled



Scroll



410A



20-34 kW



Plate



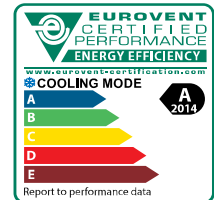
Inverter

### Technical feature

- 2 sizes
- Cooling capacity from 20,0 to 35,9 kW
- Heating capacity from 20,4 to 34,0 kW
- Operating Range: from -10 to 45 °C cooling and from -15 to 20 °C heating
- Inverter driven compressor
- A single inverter driven 3-phase scroll compressor equipped with brushless motor with variable frequency (20-120 Hz)
- One refrigerant circuit
- Bi-flow electronic expansion valve
- Multistage centrifugal pump as standard
- Bluefin coil
- Operating low water content in the plant

### Accessories and options

- Automatic circuit breaker (standard)
- Buffer tank placed under unit
- Coils treatments
- Coil grilles (standard)
- Fan speed control (standard)
- In/Out Valve kit
- Power factor corrector capacitors (standard)
- Remote on/off
- Sequence phases control (standard)
- Softstart (standard)
- Water differential pressure switch (standard)
- Water filter (standard) & Water flow switch



### Operating limit (to be confirmed following selection software issue)

#### Cooling mode

EuroScroll 20-30 Air EVO HP		20		30	
		Min	Max	Min	Max
Leaving water temperature*	°C	-8	18	-8	18
Δ T water	K	3	7	3	7
Air temperature	°C	-10	45	-10	45

#### Heating mode

EuroScroll 20-30 Air EVO HP		20		30	
		Min	Max	Min	Max
Leaving water temperature*	°C	25	55	25	55
Δ T water	K	3	7	3	7
Air temperature	°C	-15	20	-15	20

\* Below 5°C, glycol is required. For operation below 0°C contact sales office.

Chillers suitable for operation without buffer tank for water content greater than 2,5 liters of water per kW of output.

## Technical feature

EuroScroll 20-30 Air EVO HP		20			30		
Heating Capacity (min/nom/max) <sup>1</sup>	kW	9,94	20,4	29,4	11,5	26,1	34,0
Power input <sup>1</sup>	kW	2,98	5,02	8,37	3,01	6,45	9,80
COP <sup>1</sup>	kW/kW	3,34	4,06	3,51	3,82	4,05	3,47
Eurovent class		A			A		
Cooling Capacity (min/nom/max) <sup>2</sup>	kW	9,33	20,0	28,0	13,9	29,0	35,9
Power input <sup>2</sup>	kW	2,38	4,15	6,61	3,51	7,24	13,0
EER <sup>2</sup>	kW/kW	3,92	4,82	4,24	3,96	4,01	2,76
Energy Efficiency Class		A			A		
Heating Capacity (min/nom/max) <sup>3</sup>	kW	8,90	20,4	27,4	10,2	26,1	33,5
Power input <sup>3</sup>	kW	3,34	6,44	9,64	3,97	8,42	11,6
COP <sup>3</sup>	kW/kW	2,66	3,17	2,84	2,57	3,10	2,89
Energy Efficiency Class		B			B		
Cooling Capacity (min/nom/max) <sup>4</sup>	kW	6,60	20,0	25,2	9,43	29,0	31,1
Power input <sup>4</sup>	kW	2,52	6,65	10,3	3,14	10,7	12,4
EER <sup>4</sup>	kW/kW	2,62	3,01	2,45	3,00	2,71	2,51
Energy Efficiency Class		B			C		
EER 75%	kW/kW	3,83			3,65		
EER 50%	kW/kW	4,53			4,48		
EER 25%	kW/kW	3,80			4,79		
ESEER	kW/kW	4,08			4,23		
Part load steps	%	Stepless					
Power supply	V/ph/Hz	400/3+N/50					
Startup type		Soft-start (inverter)					
<b>Refrigerant</b>							
Type		HFC 410A					
Number of refrigerant circuits		1					
<b>Compressor</b>							
Number / Type		1 / Scroll (BLDC Motor)					
Crankcase heater	W	40					
<b>Evaporator</b>							
Qty		1					
Type		Plate exchanger AISI 316					
Water flow rate / pressure drop	l/h / kPa	Refer to hydraulic circuit data					
Antifreeze heater	W	35					
<b>Fan</b>							
Qty		2			2		
Air flow	m <sup>3</sup> /h	10.848			10.425		
Power input	kW	0,54			0,54		
<b>Pump</b>							
Qty		1			1		
Power input	kW	0,56			0,63		
Water flow rate / available static pressure	l/h/kPa	Refer to hydraulic circuit data					
<b>Water Connections</b>							
Type		Male GAS Threaded					
Inlet/Outlet Diameter	inch	1" 1/4					
<b>Weight</b>							
Shipping	kg	266			281		
Operating	kg	260			275		
<b>Dimensions</b>							
Length	mm	1.477			1.477		
Width	mm	539			539		
Height	mm	1.615			1.615		
<b>Acoustical data</b>							
Sound power level <sup>5</sup>	dB(A)	74			75		
Sound pressure level <sup>6</sup>	dB(A)	43			44		

<sup>1</sup> Data refers to 35°C leaving warm water temperature and 7°C ambient coil air temperature with 87% R.H., according EN14511 standard.

<sup>2</sup> Data refers to 18°C leaving chilled water temperature and 35°C condenser air temperature, according EN14511 standard.

<sup>3</sup> Data refers to 45°C leaving warm water temperature and 7°C ambient coil air temperature with 87% R.H., according EN14511 standard.

<sup>4</sup> Data refers to 7°C leaving chilled water temperature and 35°C condenser air temperature, according EN14511 standard.

<sup>5</sup> Sound levels are at fully loaded conditions. Sound power level values refers to ISO 3744 standard.

<sup>6</sup> Sound pressure levels refer to ISO 3744 standard, parallelepiped shape.