





# Air-Water split heat pump for heating, Cooling and production of DHW Inverter DC Technology Heat output from 8.5kW to 16kW



HBI\_C





AERMEC

partecipates in the EUROVENT programme for: LCP/A/S/R

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HBI\_E







Control panel on board the machine (HBI\_E)

## **Features**

- Five sizes of HBI\_C outdoor unit available
- Five sizes of HBI\_E outdoor unit available (Hydronic module), for wall installation, with small dimensions
- Two sizes of DHW Storage Tank available measuring 200 to 300 litres with coil, electric resistance and any integrative coil
- R410A refrigerant gas
- Outdoor unit with one or two fans with Inverter DC motor with continuous speed variation
- The Inverter DC compressors have been selected to maximise the efficiencies, reduce consumption and minimise absorption at peak
- Microprocessor control
- Functioning mode:
  - -Cooling
  - -Heating
  - -Domestic Hot Water Production
- Possibility of managing functioning mode priority
- Silent functioning

- Anti-legionella Cycle: function can be set via Control Panel on the HBI\_E indoor unit
- Anti-freeze function for Hydronic module and DHW Storage Tank
- Indoor unit supplied (hydraulic side) with:
- -technical water filter
- -plate exchanger
- -expansion vessel (10 litres)
- -2 step electric resistances (3kW+3kW) can be activated/deactivated
- -air vent
- -safety valve (3 bar)
- -flow switch
- -circulation pump
- -manometer
- Length of the cooling lines up to 30m, maximum level difference between outdoor unit and indoor unit 15m
- Outdoor unit supplied with Electric Resistance Kit
  - Base to prevent the formation of ice during heat pump functioning mode
- Indoor unit set-up for the management of:

- 2-way valve
- 3-way valve
- -Environmental thermostat
- Room Temperature Probe (supplied ), can be installed in the wall in a rectangular 3module recess box (type 503)
- Weekly Timer
- Auto-Restart Function
- Operational limits:
- -Cooling
- Outdoor air temperature +10, 48C
- -Heating
- Outdoor air temperature -20, 35C
- -Domestic Hot Water Production
- Outdoor air temperature -20, 45C
- Emergency Functioning:

   in the event of outdoor unit malfunctioning in
   Heating or DHW production mode, the
   electric resistances are activated
- Condensate control device as per standard, for functioning in cooling mode with external temperature to +10°C

## Accessories

- HBI\_WT: 200, 300 litre DHW Storage Tank with main coil and 3kW electric support resistance
  - -Magnesium sacrificial anode
  - -Stainless steel tank and coil
  - -Outdoor covering in painted sheet steel and heat insulation material, thickness 50mm
  - -Indoor installation

- HBI\_WTS: 200, 300 litre DHW Storage Tank with main coil, integrative coil and 3kW electric support resistance
  - -Magnesium sacrificial anode
  - -Stainless steel tank and coil
  - -Outdoor covering in painted sheet steel and heat insulation material, thickness 50mm
  - -Indoor installation

# HBI\_WT/WTS accessory compatibility (DHW storage tank)

	HBI080	HBI100	HBI120	HBI140	HBI160	
HBI200WT/WTS	✓	✓	✓	✓	✓	
HBI300WT/WTS	/	1	/	1	/	

## **Technical data**

			HBI080C	HBI100C	HBI120C	HBI140C	HBI160C
Cooling capacity <sup>1</sup> (nominal)		kW	9.05	10.5	14	15	15.5
Input power <sup>1</sup> (nominal)		kW	2.50	3.14	3.68	4.29	4.63
EER 1			3.62	3.34	3.8	3.5	3.35
Cooling capacity <sup>2</sup> (nominal)		kW	6.5	8.0	10	11	11.5
Input power <sup>2</sup> (nominal)		kW	2.50	3.08	3.45	3.93	4.6
EER 2			2.6	2.6	2.9	2.80	2.5
Heating capacity <sup>1</sup> (nominal)		kW	8.5	10	12	13.5	16
Input power <sup>1</sup> (nominal)		kW	2.10	2.50	2.79	3.21	3.95
COP 1			4.00	4.00	4.3	4.2	4.00
Heating capacity <sup>2</sup> (nominal)		kW	8.0	9.0	11.5	12.5	14
Input power <sup>2</sup> (nominal)		kW	2.54	2.90	3.38	3.73	4.59
COP 2			3.15	3.1	3.4	3.35	3.05
Rated Input (without electric resistances )	Cooling	kW	5	5	6.6	6.6	7
Rated Input (without electric resistances )	Heating	kW	4.6	4.6	5.5	5.5	6
OUTDOOR UNIT							
Electric Power Supply					230V ~ 50Hz		
Air flow rate		m³/h	/	/	6398	6398	6398
n°fans		n°	1	1	2	2	2
R410A Refrigerant Load		kg	2	2	3,3	3,3	3,3
Sound pressure		dB(A)	57	57	57	57	60
Sound pressure		dB(A)	59	59	59	59	62
Liquid		Ø	9,52(3/8")	9,52(3/8")	9,52(3/8")	9,52(3/8")	9,52(3/8")
Cooling connections Gas		Ø	15,9(5/8")	15,9(5/8")	15,9(5/8")	15,9(5/8")	15,9(5/8")
Туре		Ø			flare		

INDOOR UNIT			HBI080E	HBI100E	HBI120E	HBI140E	HBI160E
Input Power Indoor	r Unit*	W	245	245	245	245	245
Dumin	Input Power Max	W	205	205	205	205	205
Pump	Speed	n°	3	3	3	3	3
Electric resistances	power **	kW	3+3	3+3	3+3	3+3	3+3
Hydraulic connecti	ions (In/Out) - (Male)	Ø	G1"	G1"	G1"	G1"	G1"
Expansion Vessel c	apacity				10		
Electric Power Sup	ply				230V ~ 50Hz		
Outlet water temper	erature <sup>1</sup> (range)	°C			18 ÷ 25		
Outlet water temper	erature <sup>2</sup> (range)	°C			7 ÷ 25		
Outlet water temper	erature <sup>1</sup> (range)	°C			25 ~ 45		
Outlet water temperature <sup>2</sup> (range)		°C			25 ~ 55		
<b></b> Sound pressure		dB(A)			31		
	Liquid	Ø	9,52(3/8")	9,52(3/8")	9,52(3/8")	9,52(3/8")	9,52(3/8")
Cooling connection	ns Gas	Ø	15,9(5/8")	15,9(5/8")	15,9(5/8")	15,9(5/8")	15,9(5/8")
	Туре	Ø			flare		

# HBI\_WT/WTS accessory technical data

Domestic Hot Water storage tank	HBI200WT		HBI200WTS H	HBI300WT HBI300	OWTS
Capacity	I	200	200	300	300
DHW outlet temperature	°C		40	) ÷ 80 ***	
Electric Resistances Power	kW	3	3	3	3
Electric resistance Input Power	A	13	13	13	13
Electric Power Supply			23	30V ~ 50Hz	
Utility hydraulic connections (In/Out) - (Female)	Ø	G1/2"	G1/2"	G1/2"	G1/2"
Main coil hydraulic connections (In/Out) - (Female)	Ø	G3/4"	G3/4"	G3/4"	G3/4"
Integrative coil hydraulic connections (In/Out) - (Female)	Ø	-	G3/4"	-	G3/4"
Integrative goil	m	-	10	-	10
Integrative coil O	x s mm	-	22 x 0,8	-	22 x 0,8

DHW outlet temperature

\* Pump - Input Powe Max + Auxiliary

\*\* Electric resistances 2 step ON/OFF control panel

\*\*\* With electric resistances/without electric resistances 40 + 50°C

#### 1 Floor system

Cooling:
- Inlet/outlet water temperature
- External air temperature

23°C / 18°C 35°C D.B. / 24°C W.B.

#### 1 - Floor system

Heating (without electric resistances):

- Inlet/outlet water temperature

30°C / 35°C - External air temperature 7°C D.B. / 6°C W.B.

⇒ measured at 1m in semianechoic chamber

measured at 1,4m in semianechoic chamber

# 2- Fancoil

Cooling:
- Inlet/outlet water temperature
- External air temperature

12°C / 7°C 35°C D.B. / 24°C W.B.

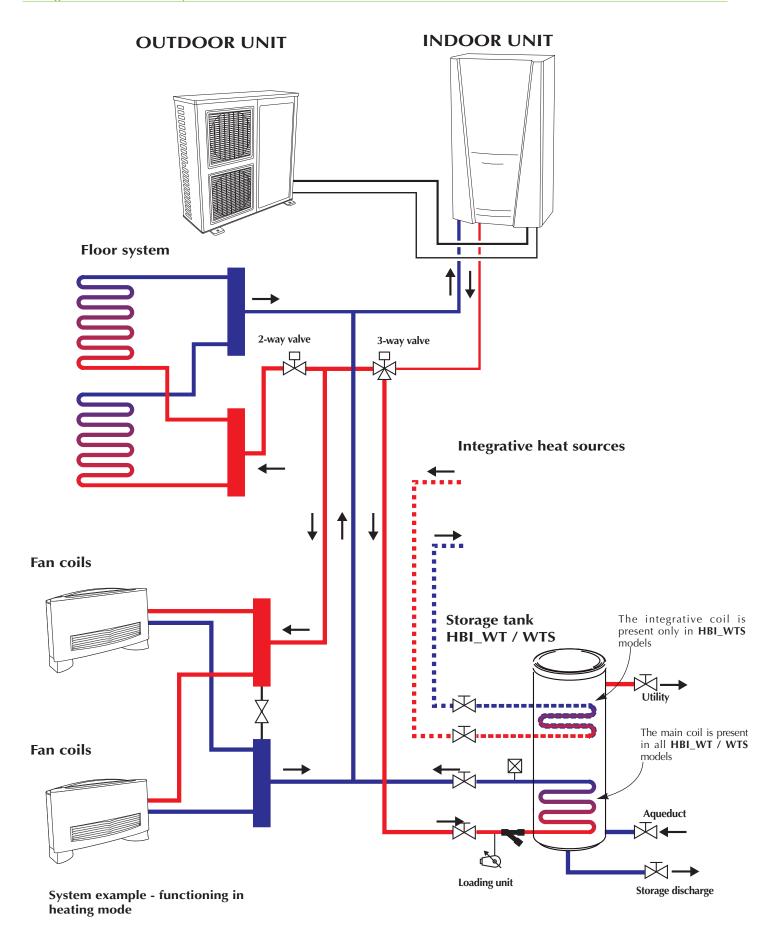
### 2- Fancoil

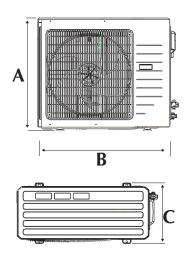
Heating (without electric resistances):

- Inlet/outlet water temperature - External air temperature

40°C / 45°C

7°C D.B. / 6°C W.B.

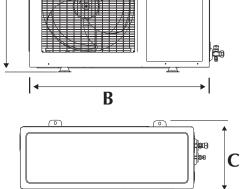




#### Indoor unit

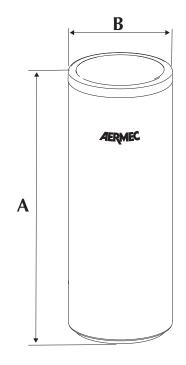
Dimensions		HBI080E	HBI100E	HBI120E	HBI140E	HBI160E
Height (A)	mm	900	900	900	900	900
Width (B)	mm	500	500	500	500	500
Depth (C)	mm	324	324	324	324	324
Net weight	kg	52	52	53	53	53
Gross weight	kσ	62	62	63	63	63

# A



#### Outdoor unit

Outdoor unit				
Dimensions		HBI080C	HBI100C	
Height (A)	mm	791	791	_
Width (B)	mm	921	921	_
Depth (C)	mm	427	427	
Net weight	kg	69	69	
Gross weight	kg	74	74	_



#### Outdoor unit

Dimensions		HBI120C	HBI140C	HBI160C
Height (A)	mm	1253	1253	1253
Width (B)	mm	950	950	950
Depth (C)	mm	412	412	412
Net weight	kg	99	99	99
Gross weight	kg	108	108	108

**Storage Tank** 

Dimensions		HBI200WT / WTS	HBI300WT / WTS
Height (A)	mm	1595	1620
Width (B)	mm	540	620
* Net weight	kg	68 / 71	82 / 87
Gross weight	kg	77 / 80	92 / 97

<sup>\*</sup> Weight when empty

The technical data given on this documentation is not binding. Aermec S.p.A. reserves the right to apply at any time all the modifications deemed necessary for improving the product.

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