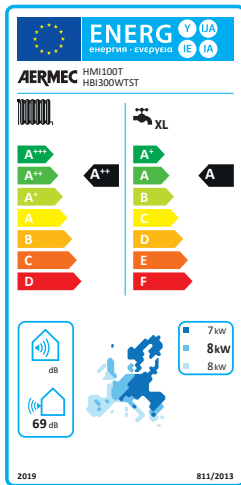
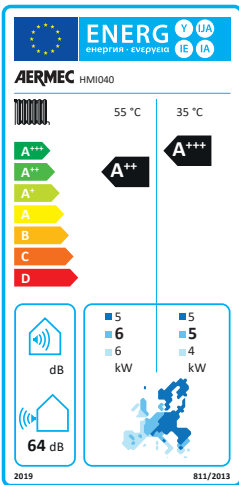


# HMI

- New R32 environmentally friendly refrigerant gas
- Production of hot water up to 60°C
- Production of domestic hot water with outside temperatures from -25°C to 48°C
- WI-FI module fitted as standard



## Air/water reversible heat pump

Cooling capacity from 3.0 to 14.5 kW  
Heating capacity from 4.0 to 15.5 kW



### FEATURES

Reversible outdoor heat pump for air-conditioning systems where, in addition to cooling rooms, high-temperature hot water is required for heating or for the production of domestic hot water (if combined with the specific HBI\_WT accessories) in every season and in an efficient, sustainable manner. HSI is designed to meet the needs of both the new constructions market and the renovation market, **replacing or working alongside conventional boilers**. It can be combined with low-temperature emission systems such as floor heating or fan coils, and also with more traditional radiators, **and comes supplied with the main hydraulic components needed, thereby facilitating the final installation.**

### OPERATING LIMITS

- Works at full load down to -25°C (outside air temperature in winter), and up to 48°C in summer. The maximum processed water temperature in heating mode is 60°C.
- Cooling circuit with economiser.
  - DC brushless axial flow fans designed for aerodynamic optimisation, reducing the noise level whilst at the same time increasing the efficiency and air flow rate.
  - **Heat exchanger coils with Golden Fin anti-corrosion protection.** The aluminium-manganese (Al-Mn) coil fins are coated with a special layer of epoxy resin, which gives them a characteristic golden colour, and then a hydrophilic layer.
  - Equipped with an electric heater in the base to avoid the formation of ice in heating mode.
  - Electronic expansion valve

### MAIN HYDRAULIC COMPONENTS

- Inverter pump
- Plate heat exchanger
- Expansion tank
- Safety valve
- Flow switch
- Water filter supplied (**installation obligatory**)

### REGULATION

- Via the touchscreen control panel, in three languages (Italian, English and Spanish):
- Management of a 3-way diverting valve (not supplied) for the production of domestic hot water

- Management of a 2-way valve
- (not supplied) for shutting off part of the system
- Weekly programming, in time bands
- Auto-Restart
- Emergency operation (a supplementary heat source may be activated)
- Quick domestic hot water heating function (Quick Hot Water)
- Weather-dependent mode (climatic adjustment)
- Quiet function for reduced noise operation (programmable with a timer)
- Condensation control
- When the anti-legionella cycle is activated (it's easily set via the control panel), the whole tank is heated once a week to a temperature (max. 70°C) that weakens the bacteria responsible for the infection.

### MULTI-LANGUAGE CONTROL PANEL TOUCHSCREEN SUPPLIED

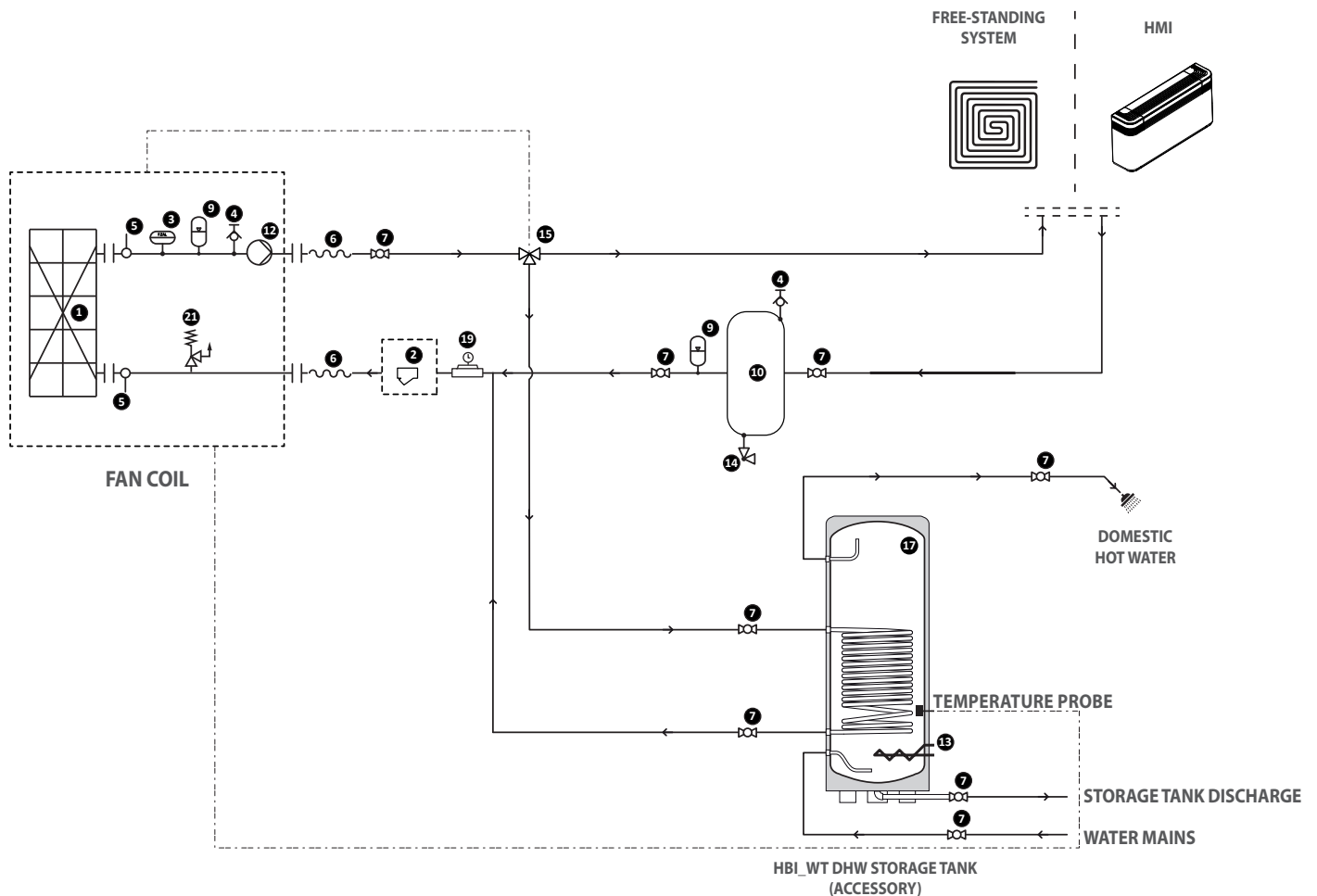


## ACCESSORIES

IF THE SYSTEM IS USED TO PRODUCE DOMESTIC HOT WATER, IT MUST NECESSARILY BE COMPLETED WITH ONE OF THE FOLLOWING STORAGE TANKS:

- **HBI\_WT (220-240V ~ 50Hz)**
- **HBI\_WTT (380-415V ~3 50Hz)**  
Domestic hot water storage tank of 200, 300 litres with main coil and 3kW back-up electric heater:
  - Magnesium sacrificial anode
  - Stainless steel tank and coil
  - Outer casing in painted sheet metal and insulation material, 50mm thick
  - Internal installation
- **HMICB15**  
Connection cable for the control panel  
Cable length 15m
- **HBI\_WTS (220-240V~50Hz)**
- **HBI\_WTST (380-415V ~3 50Hz)**  
Domestic hot water storage tank of 200, 300 litres with main coil, supplementary coil and 3kW back-up electric heater:
  - Magnesium sacrificial anode
  - Stainless steel tank and coil
  - Outer casing in painted sheet metal and insulation material, 50mm thick
  - Internal installation

## CONFIGURATION EXAMPLE: FREE-STANDING SYSTEM / FANCOIL + DHW



### COMPONENTS SUPPLIED AS STANDARD

1. Plate heat exchanger
2. Water filter (supplied)
3. Flow switch
4. Air drain valve
5. Water temperature probes (IN/OUT)
9. Expansion tank
12. Pump
21. Safety valve

### WARNING:

in the case of a free-standing system, the bypass valve must be installed to ensure the circulation of a minimum amount of water to the system.

### RECOMMENDED HYDRAULIC COMPONENTS EXTERNAL TO THE UNIT (THE RESPONSIBILITY OF THE INSTALLER)

4. Air drain valve
6. Anti-vibration joints
7. Interception taps
9. Expansion tank
10. System storage tank (installation recommended if the system water content is lower than the value indicated in the technical manual).
13. Electric heater
14. Discharge tap
15. 3-way valve
17. HBI\_WT accessory
19. Charging unit

TECHNICAL DATA EUROVENT - 14511:2013

HMI		040	060	080	100	120	140	160	100T	120T	140T	160T
<b>Performance in cooling mode 12°C / 7°C<sup>(1)</sup></b>												
Cooling capacity	kW	3,00	4,00	5,00	7,80	9,50	12,00	13,00	7,80	9,50	12,00	13,00
Input power	kW	0,94	1,29	1,61	2,48	3,20	4,14	4,96	2,64	3,11	4,38	4,91
Absorbed current	TO	4,30	5,90	7,37	11,35	14,65	18,95	22,70	4,01	4,73	6,65	7,46
EER	W/W	3,19	3,10	3,11	3,15	2,97	2,90	2,62	2,95	3,05	2,74	2,65
Water flow rate (services)	l/h	516	672	860	1320	1650	2080	2270	1270	1665	2065	2231
Useful head	kPa	75	74	74	71	65	51	45	71	64	51	46
<b>Performance in heating mode 40°C / 45°C<sup>(2)</sup></b>												
Heating capacity	kW	4,00	6,00	7,50	10,00	12,00	14,00	15,50	10,00	12,00	14,00	15,50
Input power	kW	1,00	1,58	2,00	2,70	3,48	4,18	4,70	2,70	3,48	4,18	4,70
Absorbed current	TO	4,58	7,23	9,15	12,36	15,93	19,13	21,51	4,10	5,29	6,35	7,14
COP	W/W	4,00	3,80	3,75	3,70	3,45	3,35	3,30	3,70	3,45	3,35	3,30
Water flow rate (services)	l/h	690	977	1240	1700	2050	2500	2700	1710	2040	2474	2734
Useful head	kPa	74	73	72	63	52	37	30	63	52	38	29

HMI		040	060	080	100	120	140	160	100T	120T	140T	160T
<b>Performance in cooling mode 23°C / 18°C<sup>(3)</sup></b>												
Cooling capacity	kW	3,80	5,80	6,80	8,80	11,00	12,50	14,50	8,80	11,00	12,50	14,50
Input power	kW	0,82	1,32	1,55	1,96	2,56	3,05	3,82	1,96	2,56	3,05	3,82
Absorbed current	TO	3,75	6,04	7,09	8,97	11,72	13,96	17,48	2,98	3,89	4,63	5,80
EER	W/W	4,63	4,39	4,39	4,49	4,30	4,10	3,80	4,49	4,30	4,10	3,80
Water flow rate (services)	l/h	660	981	1220	1510	1926	2238	2640	1500	1900	2200	2570
Useful head	kPa	74	73	72	69	56	46	32	69	57	47	34
<b>Performance in heating mode 30°C / 35°C<sup>(4)</sup></b>												
Heating capacity	kW	4,00	6,00	7,50	10,00	12,00	14,00	15,50	10,00	12,00	14,00	15,50
Input power	kW	0,79	1,20	1,63	2,17	2,64	3,22	3,60	2,17	2,64	3,22	3,60
Absorbed current	TO	3,62	5,49	7,46	9,93	12,08	14,74	16,48	3,30	4,01	4,89	5,47
COP	W/W	5,10	5,00	4,60	4,61	4,55	4,35	4,31	4,61	4,55	4,35	4,31
Water flow rate (services)	l/h	690	1030	1247	1736	2137	2524	2703	1720	2100	2400	2626
Useful head	kPa	74	73	72	62	49	36	30	62	50	40	32

HMI		040	060	080	100	120	140	160	100T	120T	140T	160T
<b>Performance in average ambient conditions (Average 35°C) - UE no.811/2013 Pdesignh ≤ 70kW</b>												
Pdesignh		5	5	6	9	11	11	13	9	11	11	13
ηs	%	185	185	183	176	175	168	164	176	175	168	164
Energy efficiency class		A+++	A+++	A+++	A+++	A+++	A++	A++	A+++	A+++	A++	A++
<b>Performance in average ambient conditions (Average 55°C) - UE no.811/2013 Pdesignh ≤ 70kW</b>												
Pdesignh		6	6	7	8	10	11	13	8	10	11	13
ηs	%	126	126	127	128	126	125	125	128	126	125	125
Energy efficiency class		A++	A++	A++	A++	A++	A++	A++	A++	A++	A++	A++

TECHNICAL DATA - 14511:2018

HMI		040	060	080	100	120	140	160	100T	120T	140T	160T
<b>Performance in cooling mode 12°C / 7°C<sup>(5)</sup></b>												
Cooling capacity	kW	2,98	3,97	4,96	7,75	9,45	11,94	12,95	7,75	9,45	11,94	12,95
Input power	kW	0,94	1,29	1,61	2,48	3,20	4,14	4,96	2,64	3,11	4,38	4,91
Absorbed current	TO	4,70	6,40	7,90	12,00	15,00	20,00	23,00	4,60	5,30	7,30	8,10
EER	W/W	3,17	3,08	3,08	3,12	2,95	2,88	2,61	2,94	3,04	2,73	2,64
Water flow rate (services)	l/h	504	673	842	1318	1609	2038	2210	1318	1609	2038	2210
Useful head	kPa	74	74	74	69	64	52	47	69	64	52	47
<b>Performance in heating mode 40°C / 45°C<sup>(6)</sup></b>												
Heating capacity	kW	4,03	6,04	7,55	10,06	12,06	14,05	15,54	10,06	12,06	14,05	15,54
Input power	kW	1,00	1,58	2,00	2,70	3,48	4,18	4,70	2,70	3,48	4,18	4,70
Absorbed current	TO	5,00	7,80	9,70	13,00	17,00	20,00	22,00	4,70	5,90	6,90	7,70
COP	W/W	4,03	3,83	3,78	3,72	3,46	3,36	3,31	3,72	3,46	3,36	3,31
Water flow rate (services)	l/h	710	1062	1326	1762	2110	2456	2714	1762	2110	2456	2714
Useful head	kPa	74	73	71	60	50	39	29	60	50	39	29

- 1 Data 14511:2013; Heat exchanger water (services side) 12°C / 7°C; Outside air 35°C.
- 2 Data 14511:2013; Heat exchanger water (services side) 40°C / 45°C; Outside air 7°C D.B. / 6°C W.B.
- 3 Data 14511:2013; Heat exchanger water (services side) 23°C / 18°C; Outside air 35°C.
- 4 Data 14511:2013; Heat exchanger water (services side) 30°C / 35°C; Outside air 7°C D.B. / 6°C W.B.
- 5 Data 14511:2018; Heat exchanger water (services side) 12°C / 7°C; Outside air 35°C.
- 6 Data 14511:2018; Heat exchanger water (services side) 40°C / 45°C; Outside air 7°C D.B. / 6°C W.B.

## GENERAL DATA

HMI		040	060	080	100	120	140	160	100T	120T	140T	160T
<b>Electric data</b>												
Power supply		220-240V ~ 50Hz							380-415V 3N ~ 50Hz			
Nominal input current <sup>(7)</sup>	TO	10,4	10,4	10,4	23,0	25,0	29,0	29,0	12,0	12,0	12,0	12,0
<b>Compressors</b>												
Driver		Inverter										
Type		Twin-stage DC rotary inverter										
No. compressors	no.	1	1	1	1	1	1	1	1	1	1	1
No. circuits	no.	1	1	1	1	1	1	1	1	1	1	1
<b>Refrigerant:</b>												
Type		R32/ 675 kgCO <sub>2</sub> eq										
Refrigerant load	kg	0,9	0,9	0,9	2,2	2,2	2,2	2,2	2,2	2,2	2,2	2,2
<b>Oil</b>												
Oil type		FW68DA										
Oil charge	l	0,5	0,5	0,5	1,1	1,1	1,1	1,1	1,1	1,1	1,1	1,1
<b>Heat exchanger, service side</b>												
Type		Plates										
Quantity	no.	1										
Connection type		Female gas										
Connections (in/out)	ø	G1										
<b>Fans</b>												
Type		DC brushless axial flow fan										
Quantity	no.	1	1	1	1	1	1	1	1	1	1	1
Air flow rate	m <sup>3</sup> /h	2600	2600	2600	4500	4500	4500	4500	4500	4500	4500	4500
Useful static pressure	Pa											
<b>Sound data (in cooling mode)</b>												
Sound pressure 1m <sup>(8)</sup>	dB(A)	51	52	53	56	56	57	59	56	56	57	59
<b>Sound data (in heating mode)</b>												
Sound power <sup>(8)</sup>	dB(A)	64	64	65	69	69	70	72	69	69	70	72
Sound pressure 1m <sup>(9)</sup>	dB(A)	50	50	51	54	54	55	57	54	54	55	57

7 The nominal input power (nominal input current) is the maximum electrical input power (maximum input current) to the system, in accordance with standards EN-60335-1 and EN-60335-2-40.

8 Sound power: Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN ISO 9614-2, in compliance with Eurovent certification.

9 Sound pressure measured in a semi-anechoic chamber at a distance of 1.5m from the external surface of the unit.

## SIZES AND WEIGHTS

HMI		040	060	080	100	120	140	160	100T	120T	140T	160T
<b>Dimensions</b>												
A	mm	1150	1150	1150	1200	1200	1200	1200	1200	1200	1200	1200
B	mm	345	345	345	460	460	460	460	460	460	460	460
C	mm	758	758	758	878	878	878	878	878	878	878	878
<b>Dimensions with packaging</b>												
D	mm	1260	1260	1260	1295	1295	1295	1295	1295	1295	1295	1295
E	mm	490	490	490	595	595	595	595	595	595	595	595
F	mm	900	900	900	1020	1020	1020	1020	1020	1020	1020	1020
<b>Weights</b>												
Net weight	kg	96	96	96	151	151	151	151	151	151	151	151
Gross weight	kg	109	109	109	166	166	166	166	166	166	166	166

