

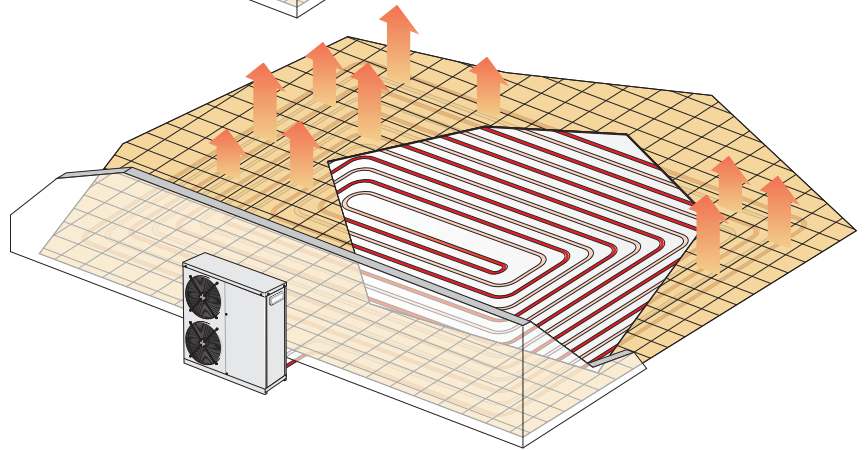
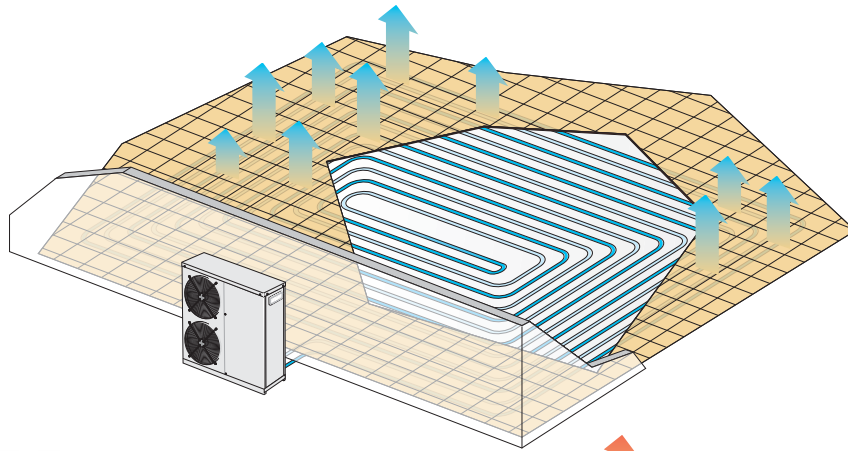
## HE

**Air cooled heat pump chillers for under floor systems application.**  
 Cooling capacity 6,7 up to 47,5 kW  
 Heating capacity 6,3 up to 38,7 kW

## R407C



**Aermec** adheres to the EUROVENT Certification Programme: LCP/A/P/R. The products concerned appear in the EUROVENT site [www.eurovent-certification.com](http://www.eurovent-certification.com).



- **LIVING WATER TEMPERATURE UP TO 20 °C**
- **FUNCTIONING WITH AMBIENT TEMPERATURE DOWN TO -15 °C IN HEATING AND TO 46 °C IN COOLING**
- **COMPLETE WITH PUMP AND STAINLESS STEEL STORAGE TANK**
- **AVAILABLE IN SINGLE OR DOUBLE HYDRAULIC RING**

### Characteristics

- Available in 10 different sizes
- Heat pump models with high-efficiency special compressor and functioning with ambient temperature down to -15 °C
- Two versions are available:
  - HE U:** Version with single ring equipped with circulation pump, expansion tank, mechanical water filter, stainless steel storage tank
  - HE B:** Double ring version (with circuit breaker version) fitted with primary circulation pump, expansion tank, mechanical water filter, stainless steel storage tank; in this case the user circuit (radiating panel) must have a dedicated pump (not supplied)
- Scroll compressor
- Differential pressure switch or flow switch, standard
- Electronic control card and with start timing and management of defrost cycles
- High efficiency heat exchangers
- Axial flow fans for quiet operation
- Metallic protective cabinet with rustproofing polyester paint
- Electrical power supply single phase to 14 kW in cooling and 10.6 kW in heating

**Note: using the HE unit for under floor cooling we suggest to provide an air dehumidification system (dehumidifier, split system, ...)**

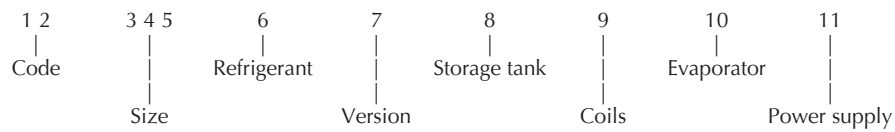
### Accessories

- **BDX:** Condensate drip tray for outdoor unit.
- **DCPX:** Low temperature device for operation of outdoor units at ambient temperatures less than 19 °C down to -10 °C.
- **DRE:** Current soft starter device (about 30% reduction for single-circuit-units). **Only available for 400V/3N/50Hz power supply. It must be factory set.**
- **KR:** Electric antifreeze heater for plate-type heat exchangers. **Can only be applied in the factory.**
- **PR3:** Simplified remote panel. This makes it possible to carry out the unit's basic controls with the signalling of alarms. Can be made remote with shielded cable up to 30 m.
- **PRD1:** Smart remote panel. Repeats at a distance the functions of the panel on the machine. Can be made remote with shielded cable up to 150 m.
- **RA:** Antifreeze electric heater for the accumulation tank. Can only be applied in the factory.
- **SDP:** Card for making the PR1 accessory remote up to 150 m.
- **VT:** anti-vibration mounting.

## Choice of Unit

By suitably combining the numerous options available, it is possible to configure each model in such a way as to meet the most particular of system requirements.

### Sheet configurer:



#### Initials:

HE

#### Size:

020\*, 025, 030, 040, 050, 080, 090, 100, 150, 200

#### Refrigerant :

° - R407C

#### Version:

° - Standard  
H - Heat pump

#### Storage tank:

U - Single ring with accumulation and pump  
B - Double ring with accumulation and primary pump

#### Batteries:

° - aluminium  
R - copper  
S - tinned copper  
V - made of aluminium with epoxy paint

#### Evaporator:

° - Standard

#### Power supply:

° - 400V/3N/50Hz  
M - 230V/1/50Hz (\*\*)

#### Caution:

\* The size HE 020 it's not available:

##### 1. In the cooling version

##### 2. With 400/3N/50 Hz power supply

– the standard options are shown by the symbol °;  
– the single phase power supply (field 11: option M) is only available for sizes 025 - 030 - 040 - 050 cooling only, and for sizes 020 H - 025 H - 030 H - 040 H, for the heat pumps \*\*.

Example of the commercial code: **HE100HUR**

This is an HE unit, with size 100 with R407C refrigerant gas, heat pump type single ring with storage tank and pump, with condensing coils made of copper, with evaporator and with electrical panel for compressors with motors 3~ 400V 50Hz.

As you might have noted, as every operation is represented unequivocally by all the others, it is not necessary to indicate the standard options (represented by °) inside the commercial code.

## Technical data cooling only

Mod. HE	Version	025	030	040	050	080	090	100	150	200
Cooling capacity	kW	8.4	10.1	11.9	14.5	18.0	23.8	27.2	35.8	47.5
Total input power	kW	2.5	3.0	3.5	4.2	5.1	6.7	8.0	10.5	13.7
Total input current 230V-1	A	11.8	15.2	17.6	21.8	---	---	---	---	---
Total input current 400V-3N	A	5.6	8.0	8.9	10.7	12.6	15.4	16.7	21.8	27.0
E.E.R.	W/W	3.36	3.37	3.40	3.45	3.53	3.55	3.40	3.41	3.47
Water flow rate	l/h	1440	1740	2050	2490	3100	1090	4680	6160	8170
Static pressure available kPa		57	54	56	50	58	57	54	58	52
Starting current 230V-1	A	63	80	104	118	---	---	---	---	---
Starting current 400V-3N	A	34	44	50	54	70	105	102	135	141
Sound pressure	db(A)	36	33	33	37	37	36	44	45	46
Plumbing connections IN	Gas	1"	1"	1"	1"	1"1/4	1"1/4	1"1/2	1"1/2	1"1/2
Plumbing connections OUT	Gas	1"	1"	1"	1"	1"1/4	1"1/4	1"1/4	1"1/4	1"1/4
Water flow rate to the condenser	m3/h	3450	5300	5300	6500	6700	6450	13450	12400	12000
Accumulation tank capacity	l	35	35	35	35	75	75	145	145	145

The performance refers to the following conditions:

- ♪ Sound pressure in free field conditions at a distance of 10 mt.s a directional factor of 2.  
In accordance with ISO 3744 regulations

The electrical data and the heads refer to models with a single ring

### COOLING:

- Water inlet temperature 23°C
- Water outlet temperature 18°C
- outside air temp. 35 °C
- Δt = 5 °C.

## Heat pump technical data

Mod. HE	Version	020	025	030	040	050	080	090	100	150	200
Cooling capacity	kW	6.9	8.6	9.7	12.0	14.1	17.0	20.1	25.5	37.0	44.2
Total input power	kW	2.3	2.9	3.0	3.7	4.2	5.2	6.2	8.3	11.2	13.6
Total input current 230V-1	A	11.7	14.4	16.0	20.6	---	---	---	---	---	---
Total input current 400V-3N	A	5.5	6.2	8.1	9.4	10.4	11.8	13.6	17.9	22.2	26.3
E.E.R.	W/W	3.00	2.97	3.23	3.24	3.36	3.27	3.24	3.07	3.30	3.25
Water flow rate	l/h	1190	1480	1670	2060	2430	2920	3460	4390	6360	7600
Static pressure available	kPa	59	56	56	56	51	68	73	57	56	56
Heating capacity	kW	6.3	7.8	8.5	10.6	12.1	15.0	17.6	22.4	31.6	38.7
Total input power	kW	1.8	2.2	2.4	3.0	3.3	4.5	5.0	6.8	9.3	11.3
Total input current 230V-1	A	9.3	11.7	13.0	17.0	---	---	---	---	---	---
Total input current 400V-3N	A	4.7	5.3	7.4	8.3	9.3	11.0	11.9	16.4	19.9	23.3
C.O.P.	W/W	3.50	3.55	3.54	3.53	3.67	3.33	3.52	3.29	3.40	3.42
Water flow rate	l/h	1080	1340	1460	1820	2080	2580	3030	3850	5440	6660
Starting current 230V-1	A	60	76	78	101	---	---	---	---	---	---
Starting current 400V-3N	A	28	34	42	50	57	68	78	103	132	173
Sound pressure	db(A)	36	36	33	33	37	37	36	44	45	46
Plumbing connections IN	Gas	1"	1"	1"	1"	1"	1"1/4	1"1/4	1"1/2	1"1/2	1"1/2
Plumbing connections OUT	Gas	1"	1"	1"	1"	1"	1"1/4	1"1/4	1"1/4	1"1/4	1"1/4
Water flow rate to the condenser	m3/h	3300	3450	5300	5300	6500	6700	6450	13450	12400	12000
Accumulation tank capacity	l	25	35	35	35	35	75	75	145	145	145

The performance refers to the following conditions:

- ♪ Sound pressure in free field conditions at a distance of 10 mt.s a directional factor of 2.  
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The electrical data and the heads refer to models with a single ring

### Cooling:

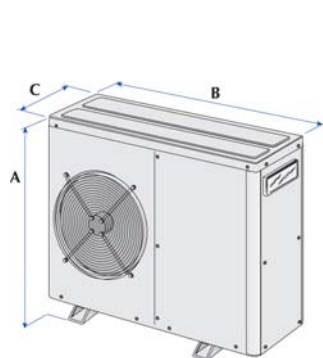
- Water inlet temperature 23°C
- Water outlet temperature 18°C
- outside air temp. 35 °C
- Δt = 5 °C.

### Heating:

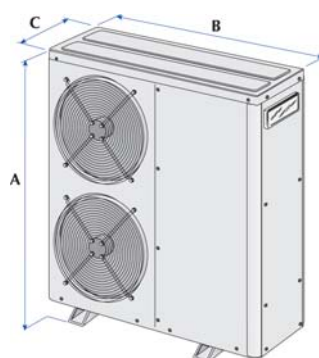
- Water inlet temperature 30°C
- Water outlet temperature 35°C
- outside air temp 7 °C b.s., 6 °C b.u.;
- Δt = 5 °C.C.

All the versions	Accessories available									
	020	025	030	040	050	080	090	100	150	200
DCPX 39	✓	✓	✓	✓	✓	✓	✓			
DCPX 40								✓	✓	✓
DRE 5					✓	✓		✓		
DRE 10									✓	
DRE 15										✓
BDX 5	✓	✓	✓	✓	✓					
BDX 6						✓	✓			
KR 3						✓	✓	✓	✓	✓
PR3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PRD1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
RA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SDP	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
VT 7	✓	✓	✓							
VT 8				✓	✓	✓	✓			
VT 9								✓	✓	✓

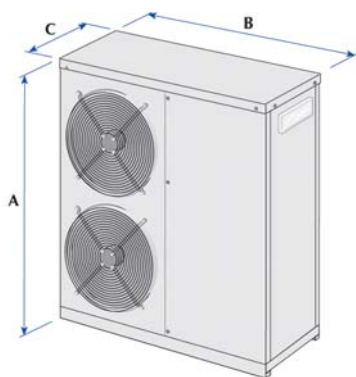
## Dimensions (mm)



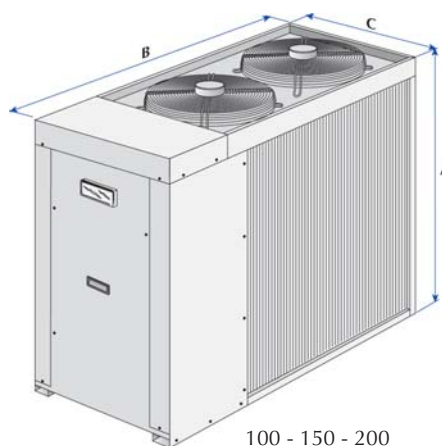
020 - 025



030 - 040 - 050



080 - 090



100 - 150 - 200

		020	025	030	040	050	080	090	100	150	200
Height	A	864	1014	1250	1250	1250	1280	1280/1580*	1345	1345	1345
Width	B	1120	1120	1120	1120	1120	1167	1167	1750	1750	1750
Depth	C	435	435	435	435	435	555	555	750	750	750
Weight	kg	108	113	135	139	152	186	196	355	377	427
Weight (versions H)	kg	112	117	141	146	158	192	223	373	417	460

\*The height is referred to HE series as heat pump (HEH)