

## ANK

Air cooled heat pump units with axial fans  
 Heating capacity from 8,14 up to 17,85 kW  
 Cooling capacity from 6,82 up to 15,68 kW

## R410A



Aermecc adheres to the EUROVENT Certification Programme. The products concerned appear in the EUROVENT Certified Products Guide.



- **PRODUCTION OF HOT WATER UP TO 60°C**
- **OPTIMISED FOR HEAT PUMP OPERATION**
- **HIGH EFFICIENCY COMPRESSORS**
- **HEATING OPERATION WITH OUTDOOR TEMPERATURES DOWN TO -20°C**
- **PRODUCTION OF HOT DOMESTIC WATER WITH OUTDOOR TEMPERATURES FROM -20°C UP TO 42°C**
- **A VERSION WITH CIRCULATION PUMP IS ALSO AVAILABLE**
- **A VERSION WITH CIRCULATION PUMP AND STORAGE TANK**

### Characteristics

- Available in 6 sizes
- 3 versions are available:  
 ANK H: Standard version  
 ANK HP: Version with circulation pump  
 ANK HA: Version with circulation pump and storage tank
- High-efficiency scroll compressor
- Flow switch fitted as standard
- Electronic control card with start timing and management of defrosting cycles
- Electric heater for the compressor casing
- High efficiency heat exchangers, with electric resistance
- Axial flow fans for quiet operation
- Metallic protective cabinet with rustproofing polyester paint
- Softstart electronic starting current reduction device (standard for single phase versions)

### Accessori

- **DCPX:** Fan speed adjustment device, allowing good cooling operation with outdoor temperatures lower than 19°C (down to -10°C), and heating with outdoor temperatures up to 42°C.
- **DRE:** Electronic starting current reduction device (30%). **Only available for three-phase models. 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 150 m.
- **VT:** Shock absorbers.
- **MODU-485A:** RS-485 interface for supervision systems with MODBUS protocol.
- **KR B1/B2:** Kit electrical resistance base to avoid ice formation.

ANK	Compatibility of accessories					
	020	030	040	045	050	085
DCPX 51	✓	✓	✓	✓	✓	✓
DRE 5 *	✓	✓	✓	✓	✓	✓
PR3	✓	✓	✓	✓	✓	✓
VT9	H-HP	H-HP	H-HP	H-HP	H-HP	H-HP
VT15A	HA	HA	HA	HA	HA	HA
KRB1**	✓					
KRB2**		✓	✓	✓	✓	✓
MODU-485A	✓	✓	✓	✓	✓	✓

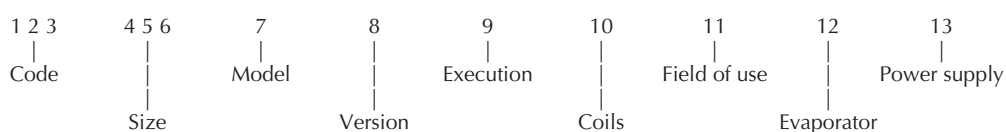
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## Choice of unit

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.

### Configurator fields:



#### Code:

ANK

#### Size:

020, 030, 040, 045, 050, 085

#### Model:

H - Heat pump

#### Version:

- ° - Standard
- P - With pump
- A - With pump and storage tank

#### Execution:

- ° - Standard

#### Coils:

- ° - Aluminium
- R - Copper
- S - Tinned copper
- V - Made of aluminium with epoxy paint

#### Range of use:

- ° - Processed water temperature up to +4°C
- Y - Processed water temperature from 4°C to 0°C
- Z - Processed water temperature from 0°C to -8°C

#### Evaporator:

- ° - Standard

#### Power supply:

- ° - 3N~ 400V 50Hz
- M - 1~ 230V 50Hz

#### Warning:

- the standard options are shown by the symbol °;
- the single phase power supply (field 13: option M) is only available for sizes 020 - 030 - 040

Example of the commercial code: ANK085HPR

This is an ANK unit, size 085, with heat pump, pump, copper condensative coils, evaporator and electrical panel for compressors with motors 3N~400V 50Hz.

As you may have noticed, each option is represented in a unique way from all the others, so it is not necessary to indicate (within the commercial code) the standard options (identified by °).

## Technical data

Mod. ANK			020	030	040
<b>HEATING OPERATION 40/45°C external air 7°C d.b./6°C w.b. (FAN COILS) - 230V ~ 50Hz</b>					
Heating capacity	H	kW	8,14	10,25	11,17
	HP-HA	kW	8,03	10,12	11,03
Total input power	H	kW	2,51	3,08	3,34
	HP-HA	kW	2,57	3,12	3,37
COP	H	kW/kW	3,24	3,33	3,35
	HP - HA	kW/kW	3,13	3,24	3,27
Total input current	H	A	11,8	14,2	16,1
Water flow rate	H	A	1400	1764	1922
	HP-HA	l/h	1381	1740	1897
Pressure drop	H	kPa	22	13	17

### COOLING OPERATION 12/7 °C external air 35°C - 230V ~ 50Hz

Cooling capacity	H	kW	6,82	8,15	9,55
	HP-HA	kW	6,91	8,25	9,67
Total input power	H	kW	2,36	2,82	3,24
	HP-HA	kW	2,43	2,89	3,30
EER	H	kW/kW	2,89	2,89	2,95
	HP-HA	kW/kW	2,84	2,85	2,93
Total input current	H	A	11,1	13,0	15,6
Water flow rate	H	l/h	1173	1402	1643
	HP-HA	l/h	1189	1419	1663
Pressure drop	H	kPa	15	8	12
Starting current (LRA)	H	A	45,0	45,0	45,0
Maximum current (FLA)	H	A	13,9	19,4	22,2
Air flow rate	H- HP-HA	m3/h	3500	8000	8000
♪ Sound pressure	H- HP-HA	db(A)	37,0	39,5	39,5
♪♪ Sound power	H- HP-HA	db(A)	68,0	70,5	70,5
Water connections	H-HP-HA	IN	1"1/4	1"1/4	1"1/4
		OUT	1"1/4	1"1/4	1"1/4
Expansion vessel	HP-HA	l	2	5	5
Storage tank	HA	l	50	100	100
Useful head *	HP-HA	kPa	56	63	58

related to air condition 7 ° / 6 ° C, water 30 ° / 35 ° C

#### Data stated according to EN14511:2004

The technical data is calculated as follows:

Cooling mode

Temperature water inlet	12 °C
Temperature of processed water	7 °C
Ambient air temperature	35 °C
Δt	5 °C

Temperature of processed water 45 °C

Ambient air temperature b.s. 7 °C

Δt b.u. 6 °C

5 °C

Heating mode

♪ Sound pressure: measured in a free field, with a distance of 10m and a direction factor of 2. In accordance with the Standard (ISO 3744)

♪♪ Sound power: Aermec determines the value on the basis of the measurements taken in accordance with Standard ISO 9614 - 2, respecting the Eurovent requisites

## Technical data

Mod. ANK			020	030	040	45	50	85
<b>HEATING OPERATION 40/45°C external air 7°C d.b./6°C w.b. (FAN COILS) - 3N~ 400V ~ 50Hz</b>								
Heating capacity	H	kW	8,14	10,25	12,51	14,36	15,69	17,85
	HP-HA	kW	8,03	10,12	12,35	14,14	15,46	17,60
Total input power	H	kW	2,48	3,08	3,75	4,14	4,39	5,02
	HP-HA	kW	2,53	3,12	3,78	4,23	4,49	5,11
COP	H	kW/kW	3,29	3,33	3,33	3,47	3,57	3,56
	HP - HA	kW/kW	3,17	3,24	3,27	3,34	3,44	3,44
Total input current	H	A	4,6	6,1	7,4	8,0	8,8	10,2
Water flow rate	H	A	1400	1764	2151	2469	2699	3070
	HP-HA	l/h	1381	1740	2124	2431	2659	3027
Pressure drop	H	kPa	22	13	20	17	20	24

<b>COOLING OPERATION 12/7 °C external air 35°C - 3N~ 400V ~ 50Hz</b>								
Cooling capacity	H	kW	6,76	8,15	10,48	11,57	13,04	15,48
	HP-HA	kW	6,84	8,25	10,61	11,74	13,22	15,68
Total input power	H	kW	2,33	2,82	3,55	3,98	4,34	5,22
	HP-HA	kW	2,41	2,89	3,61	4,12	4,49	5,35
EER	H	kW/kW	2,90	2,89	2,95	2,91	3,00	2,97
	HP-HA	kW/kW	2,84	2,85	2,94	2,85	2,94	2,93
Total input current	H	A	4,3	5,6	7,0	7,6	8,7	10,6
Water flow rate	H	l/h	1163	1402	1803	1990	2243	2663
	HP-HA	l/h	1176	1419	1825	2019	2274	2697
Pressure drop	H	kPa	15	8	14	11	15	20
Starting current (LRA)	H	A	39,7	40,3	54,3	61,3	71,3	91,3
Maximum current (FLA)	H	A	6,1	7,7	9,1	10,6	11,8	12,3
Air flow rate	H - HP-HA	m3/h	3500	8000	8000	7500	7500	7500
♪ Sound pressure	H - HP-HA	db(A)	37,0	39,5	39,5	39,5	39,5	39,5
			68,0	70,5	70,5	70,5	70,5	70,5
♪♪ Sound power	H - HP-HA	db(A)	68,0	70,5	70,5	70,5	70,5	70,5
Water connections	H-HP-HA	IN	1" 1/4	1" 1/4	1" 1/4	1" 1/4	1" 1/4	1" 1/4
		OUT	1" 1/4	1" 1/4	1" 1/4	1" 1/4	1" 1/4	1" 1/4
Expansion vessel	HP-HA	l	2	5	5	5	5	5
Storage tank	HA	l	50	100	100	100	100	100
Useful head *	HP-HA	kPa	56	63	51	74	66	57

related to air condition 7 ° / 6 ° C, water 30 ° / 35 ° C

Data stated according to EN14511:2004

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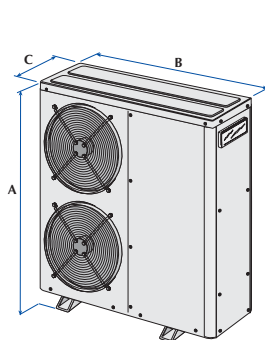
Heating mode

Temperature of processed water	45 °C
Ambient air temperature	b.s. 7 °C
	b.u. 6 °C
Δt	5 °C

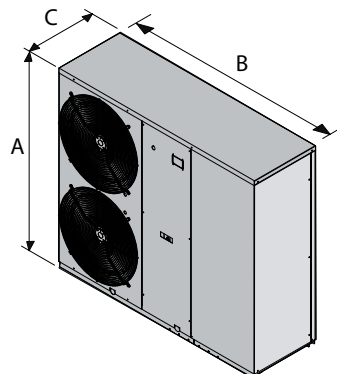
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## Dimensions (mm)



ANK H-HP



ANK HA

ANK H-HP-HA		020	030	040	045	050	085	
Height	A	1028	1281	1281	1281	1281	1281	
Width	H-HP B	1000	1000	1000	1000	1000	1000	
	HA B	1358	1450	1450	1450	1450	1450	
Depth	C	400	450	450	450	450	450	
Weight	kg	H	118	149	152	165	172	174
		HP	123	154	157	175	182	184
		HA	160	211	214	232	238	241

The technical data in this documentation are not binding. Aermec S.p.A. shall have the right to introduce at any time whatever modifications deemed necessary for the improvement of the product.

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