

ANK

Air cooled heat pump units with axial fans
Heating capacity from 7,98 up to 17,49 kW
Cooling capacity from 6,76 up to 15,68 kW

R410A



- **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.

Compatibility of accessories						
ANK	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	✓	✓	✓	✓	✓	✓

* Only available for three-phase models. Can only be applied in the factory.

** Can only be applied in the factory.

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	045
HEATING OPERATION 40/45°C external air 7°C d.b./6°C w.b. (FAN COILS) - 230V ~ 50Hz						
Heating capacity	H	kW	7,98	10,05	10,88	13,50
	HP-HA	kW	7,87	9,91	10,74	13,29
Total input power	H	kW	2,54	3,11	3,47	3,88
	HP-HA	kW	2,59	3,15	3,51	3,98
COP	H	kW/kW	3,14	3,23	3,14	3,48
	HP - HA	kW/kW	3,04	3,15	3,06	3,34
Total input current	H	A	12,0	14,3	16,8	18,8
Water flow rate	H	l/h	1373	1729	1871	2322
	HP-HA	l/h	1354	1705	1847	2286
Pressure drop	H	kPa	21	13	16	15

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

Cooling capacity	H	kW	6,82	8,15	9,55	11,69
	HP-HA	kW	6,91	8,25	9,67	11,85
Total input power	H	kW	2,36	2,82	3,24	3,73
	HP-HA	kW	2,43	2,89	3,30	3,88
EER	H	kW/kW	2,89	2,89	2,95	3,13
	HP-HA	kW/kW	2,84	2,85	2,93	3,06
Total input current	H	A	11,1	13,0	15,6	18,3
Water flow rate	H	l/h	1173	1402	1643	2010
	HP-HA	l/h	1189	1419	1663	2039
Pressure drop	H	kPa	15	8	12	11
Starting current (LRA)	H	A	45,0	45,0	45,0	45,0
Maximum current (FLA)	H	A	13,9	19,4	22,2	25,0
Air flow rate	H- HP-HA	m3/h	3500	8000	8000	7500
♪ Sound pressure	H- HP-HA	db(A)	37,0	39,5	39,5	39,5
♪♪ Sound power	H- HP-HA	db(A)	68,0	70,5	70,5	70,5
Water connections	H-HP-HA	IN	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
Expansion vessel	HP-HA	l	2	5	5	5
Storage tank	HA	l	50	100	100	100
Useful head *	HP-HA	kPa	56	63	58	78

* 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

Heating mode

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

♪ 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	045	050	085
HEATING OPERATION 40/45°C external air 7°C d.b./6°C w.b. (FAN COILS) - 3N~ 400V ~ 50Hz								
Heating capacity	H	kW	7,98	10,05	12,26	14,07	15,38	17,49
	HP-HA	kW	7,87	9,91	12,10	13,85	15,15	17,25
Total input power	H	kW	2,50	3,11	3,79	4,18	4,44	5,07
	HP-HA	kW	2,55	3,15	3,81	4,27	4,54	5,16
COP	H	kW/kW	3,19	3,23	3,23	3,37	3,46	3,45
	HP - HA	kW/kW	3,09	3,15	3,18	3,24	3,34	3,34
Total input current	H	A	4,6	6,1	7,5	7,9	8,8	10,2
Water flow rate	H	A	1373	1729	2109	2420	2645	3008
	HP-HA	l/h	1354	1705	2081	2382	2606	2967
Pressure drop	H	kPa	21	13	19	17	20	24

COOLING OPERATION 12/7 °C external air 35°C - 3N~ 400V ~ 50Hz

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
♪♪ 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

The technical data is calculated as follows:

Cooling mode

Temperature water inlet	12 °C
Temperature of processed water	7 °C
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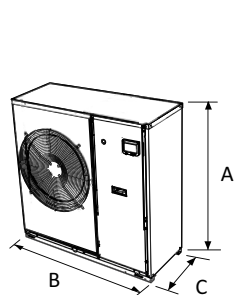
Heating mode

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

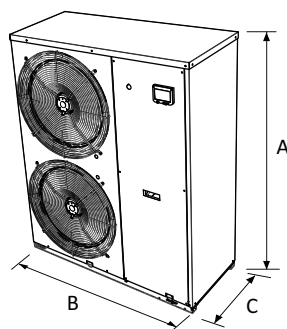
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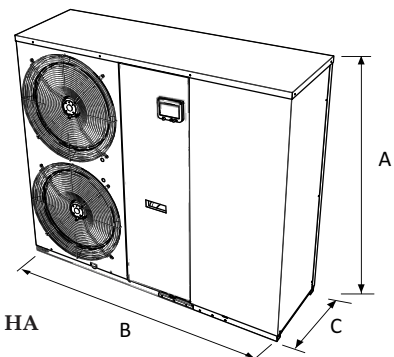
Dimensions (mm)



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
	H	118	149	152	165	172	174
Weight	kg 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.

Aermec S.p.A.
996, via Roma - 37040 Bevilacqua (VR) - Italie
Tél. +39 04 42 63 31 11 - Télécopie +39 044 29 35 66
www.aermec.com