

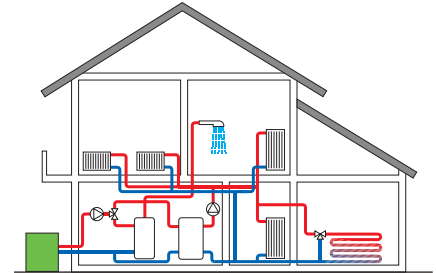
ANR

AIR/WATER heat pumps with axial flow fans
 Heating capacity (UNDERFLOOR HEATING) from 13,54 to 21,49 kW
 Heating capacity (FAN COILS) from 12,83 to 20,34 kW
 Cooling capacity from 11,90 to 18,10 kW

R407C



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



- **OPTIMISED FOR OPERATION IN HEAT PUMP MODE**
- **SINGLE AND THREE-PHASE TANDEM COMPRESSORS**
- **PRODUCTION OF HOT WATER UP TO 55°C WITH AN OUTSIDE TEMPERATURE OF -5°C**
- **FIELD OF APPLICATION FROM -15°C TO 46°C (OUTSIDE AIR TEMPERATURE)**
- **VERSIONS AVAILABLE: WITH BUFFER TANK, CIRCULATION PUMP AND INTEGRATED ELECTRIC HEATER**

Characteristics

- Maximum safety under all working conditions. These heat pumps can produce hot water up to 55°C. They can also operate with outdoor temperatures between -15°C and 42°C, always ensuring continuous operation.
- Available in 3 sizes.
- 4 versions available:
 ANR H: Standard version
 ANR HP: Version with circulation pump
 ANR HA: Version fitted with circulation pump, expansion tank, mechanical water filter (for all versions) and accumulation tank.
- ANR HK: Version fitted with circulation pump, expansion tank, mechanical water filter, accumulation tank, electric heater.
- Scroll compressors with high capacity and low electrical power consumption.
- Differential pressure switch supplied as standard.
- Electronic control card (modu control) with start-up timing and management of defrosting cycles.
- Electric heater for the compressor casing.
- Antifreeze electric heater for plate type exchangers.
- Antifreeze electric heater for the accumulation tank.
- High efficiency heat exchangers.
- Axial flow fans for quiet operation.
- The units are characterised by reduced dimensions and are varnished with polyester powder to protect them against atmospheric agents.
- Softstart, electronic starting current reduction device (standard for single phase versions).

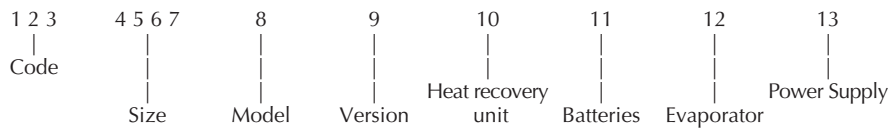
Accessories

- **BDX:** Condensate drip tray for outdoor unit.
- **DRE:** Electronic starting current reduction device for three-phase versions. **Can only be applied in the factory.**
- **DCPX:** Compulsory accessory on heat pumps for the production of hot sanitary water (A.C.S.). Necessary to produce sanitary water in Summer with external temperature up to 42°C. **Assembled as standard on HP versions.**
- **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.

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.

Field configurer:



Code:

ANR

Size:

0502, 0802, 0902

Model:

H - Heat pump

Version:

- ° - Standard
- P - With pump
- A - With accumulation and pump
- K - With accumulation and pump + heater with basic control

Heat recovery unit:

- ° - Standard

Batteries:

- ° - In aluminium
- R - Copper
- S - Tinned copper
- V - In varnished aluminium

Evaporator:

- ° - According to PED standards

Power supply:

- ° - 400V 3N ~50Hz
- M - 230V ~ 50Hz

Warning:

– the standard options are shown by the symbol °;

Example of commercial code: **ANR0502HAR°°**

This is an ANR unit, size 0502 with R407C refrigerant gas, heat pump type, with accumulation and pump, with condensing coils made of copper, with evaporator and with electric panel for compressors with motors 3N~ 400V 50Hz.

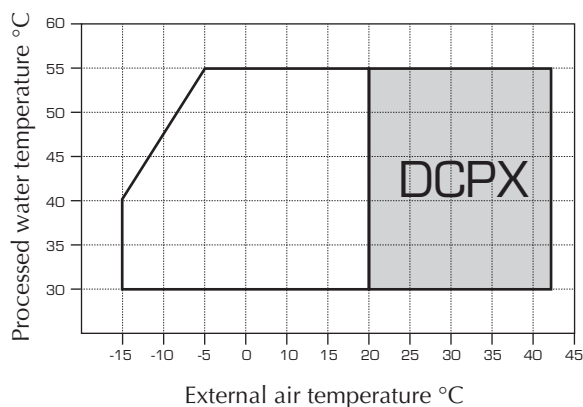
As you can see, each option is represented in a unique way from all the others, so it is not necessary to indicate (within the commercial code) the standard options (identified by °).

Compatibility of accessories					
Standard					
ANR 0502H	✓	✓	VT9	✓	(x 2)
ANR 0802H	✓	✓	VT9	✓	(x 2)
ANR 0902H	✓	✓	VT9	✓	(x 2)
With pump					
ANR 0502HP	di serie	✓	VT9	✓	(x 2)
ANR 0802HP	di serie	✓	VT9	✓	(x 2)
ANR 0902HP	di serie	✓	VT9	✓	(x 2)
With storage tank					
ANR 0502HA	✓	✓	VT9	✓	(x 2)
ANR 0802HA	✓	✓	VT9	✓	(x 2)
ANR 0902HA	✓	✓	VT9	✓	(x 2)
With storage tank + electric heater					
ANR 0502HK	✓	✓	VT9	✓	(x 2)
ANR 0802HK	✓	✓	VT9	✓	(x 2)
ANR 0902HK	✓	✓	VT9	✓	(x 2)

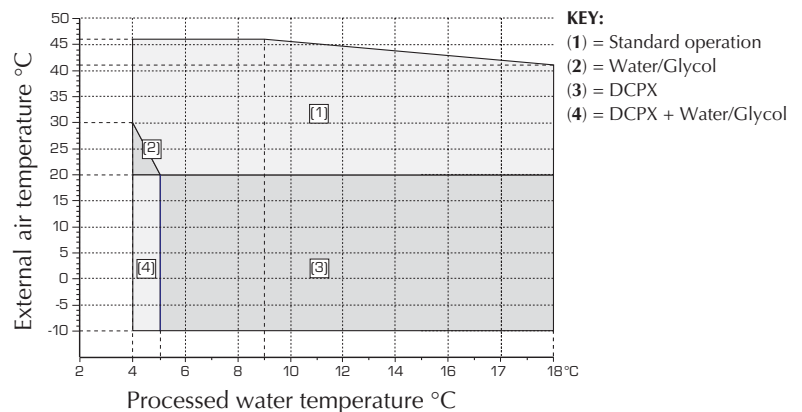
(*) = Only for versions at 400V 3N ~50Hz

Operating limits

Heat operating limits



Cool operating limits



Technical data

Mod. ANR			0502	0802	0902
HEAT MODE 30/35°C air 7°C d.b./6°C w.b. (UNDERFLOOR HEATING) - 230V ~ 50 Hz					
Heating capacity	H	kW	13,96	17,61	21,49
	HP-HA-HK	kW	13,73	17,33	21,17
Total input power	H	kW	3,88	4,98	5,90
	HP-HA-HK	kW	3,96	5,02	5,91
COP	H	kW/kW	3,60	3,54	3,64
	HP-HA-HK	kW/kW	3,47	3,45	3,58
Total input current	H	A	18,7	25,4	29,1
	HP-HA-HK	A	20,6	27,4	31,0
Water flow rate	H	l/h	2400	3030	3700
	HP-HA-HK	l/h	2360	2980	3640
Pressure drop	H	kPa	20	32	37
Useful head available	HP-HA-HK	kPa	84	70	60
HEAT MODE 40/45°C air 7°C d.b./6°C w.b. (FAN COILS) - 230V ~ 50 Hz					
Heating capacity	H	kW	13,24	16,74	20,34
	HP-HA-HK	kW	13,02	16,47	20,02
Total input power	H	kW	4,50	5,68	6,82
	HP-HA-HK	kW	4,59	5,74	6,87
COP	H	kW/kW	2,94	2,95	2,98
	HP-HA-HK	kW/kW	2,84	2,87	2,91
Total input current	H	A	21,2	28,0	32,9
	HP-HA-HK	A	23,2	29,9	34,8
Water flow rate	H	l/h	2280	2880	3500
	HP-HA-HK	l/h	2240	2830	3440
Pressure drop	H	kPa	18	29	34
Useful head available	HP-HA-HK	kPa	82	73	65
HEAT MODE **/55°C air 7°C d.b./6°C w.b. (LOW TEMPERATURE RADIATORS) - 230V ~ 50 Hz					
Heating capacity	H	kW	12,45	15,80	19,18
	HP-HA-HK	kW	12,25	15,55	18,89
Total input power	H	kW	5,25	6,70	7,97
	HP-HA-HK	kW	5,34	6,80	8,02
COP	H	kW/kW	2,37	2,36	2,40
	HP-HA-HK	kW/kW	2,29	2,29	2,36
Total input current	H	A	24,81	33,0	38,45
	HP-HA-HK	A	27,0	35,40	40,62
Water flow rate	H	l/h	2400	3030	3700
	HP-HA-HK	l/h	2360	2980	3640
Pressure drop	H	kPa	20	32	37
Useful head available	HP-HA-HK	kPa	84	70	60
COOL MODE 12/7°C air 35°C - 230V ~ 50 Hz					
Cooling capacity	H	kW	11,90	14,30	17,60
	HP-HA-HK	kW	12,10	14,60	17,90
Total input power	H	kW	4,60	5,60	7,90
	HP-HA-HK	kW	4,70	5,70	8,0
EER	H	kW/kW	2,59	2,55	2,55
	HP-HA-HK	kW/kW	2,57	2,56	2,56
Total input current	H	A	23,5	30,1	36,7
	HP-HA-HK	A	23,4	29,0	34,8
Water flow rate	H	l/h	2050	2460	3030
	HP-HA-HK	l/h	2080	2510	3080
Pressure drop	H	kPa	15	21	26
Useful head available	HP-HA-HK	kPa	90	82	75
♪ Sound pressure	H-HP-HA-HK	db(A) (heat)	39,5	40,0	40,0
	H-HP-HA-HK	db(A) (cool)	41,0	39,0	35,5
♪ Sound power	H-HP-HA-HK	db(A) (heat)	71,5	72,0	72,0
	H-HP-HA-HK	db(A) (cool)	73,0	71,0	67,5
Air flow rate	H-HP-HA-HK	m ³ /h	6550	6450	6450
Hydraulic couplings	H-HP-HA-HK	IN	F - 1"1/4	F - 1"1/4	F - 1"1/4
	H-HP-HA-HK	OUT	F - 1"1/4	F - 1"1/4	F - 1"1/4
Pump speed	HP-HA-HK	n°	3	3	3
Expansion tank capacity	HP-HA-HK	l	5	5	5
Accumulation tank volume	HP-HA-HK	l	75	75	75

Data stated according to EN14511:2004

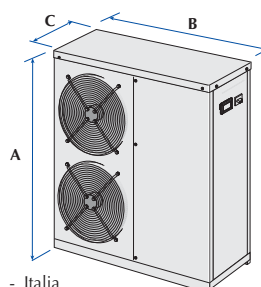
- ♪ Sound pressure measured in a free field with a front distance of 10m and direction factor = 2 In accordance with the ISO 3744 standard
- ♪ Sound power: Taking into account the measurements carried out, Aermec determines the value, in accordance with the ISO 9614 - 2 standard, in compliance with the Eurovent requirements.

Technical data

Mod. ANR			0502	0802	0902
HEAT MODE 30/35°C air 7°C d.b./6°C w.b. (UNDERFLOOR HEATING) - 400V 3N~ 50 Hz					
Heating capacity	H	kW	13,77	17,22	20,96
	HP-HA-HK	kW	13,54	16,95	20,64
Total input power	H	kW	3,72	4,55	5,48
	HP-HA-HK	kW	3,80	4,60	5,51
COP	H	kW/kW	3,70	3,78	3,82
	HP-HA-HK	kW/kW	3,56	3,68	3,75
Total input current	H	A	8,1	10,0	11,7
	HP-HA-HK	A	10,0	12,0	13,7
Water flow rate	H	l/h	2360	2960	3610
	HP-HA-HK	l/h	2330	2920	3550
Pressure drop	H	kPa	20	30	36
Useful head available	HP-HA-HK	kPa	85	71	65
HEAT MODE 40/45°C air 7°C d.b./6°C w.b. (FAN COILS) - 400V 3N~ 50 Hz					
Heating capacity	H	kW	13,05	16,41	20,0
	HP-HA-HK	kW	12,83	16,14	19,69
Total input power	H	kW	4,33	5,28	6,48
	HP-HA-HK	kW	4,43	5,34	6,51
COP	H	kW/kW	3,01	3,10	3,09
	HP-HA-HK	kW/kW	2,90	3,02	3,02
Total input current	H	A	8,8	10,8	12,9
	HP-HA-HK	A	10,7	12,8	14,8
Water flow rate	H	l/h	2240	2820	3440
	HP-HA-HK	l/h	2210	2780	3390
Pressure drop	H	kPa	18	28	33
Useful head available	HP-HA-HK	kPa	86	75	68
HEAT MODE **/55°C air 7°C d.b./6°C w.b. (LOW TEMPERATURE RADIATORS) - 400V 3N~ 50 Hz					
Heating capacity	H	kW	12,36	15,42	18,85
	HP-HA-HK	kW	12,16	15,18	18,57
Total input power	H	kW	5,06	6,28	7,57
	HP-HA-HK	kW	5,16	6,35	7,61
COP	H	kW/kW	2,44	2,46	2,49
	HP-HA-HK	kW/kW	2,36	2,39	2,44
Total input current	H	A	10,30	12,95	15,06
	HP-HA-HK	A	12,42	15,20	17,30
Water flow rate	H	l/h	2360	2960	3610
	HP-HA-HK	l/h	2330	2920	3550
Pressure drop	H	kPa	20	30	36
Useful head available	HP-HA-HK	kPa	85	71	65
COOL MODE 12/7°C air 35°C - 400V 3N~ 50 Hz					
Cooling capacity	H	kW	11,90	14,40	17,80
	HP-HA-HK	kW	12,10	14,70	18,10
Total input power	H	kW	4,40	5,30	6,60
	HP-HA-HK	kW	4,50	5,40	6,70
EER	H	kW/kW	2,70	2,72	2,70
	HP-HA-HK	kW/kW	2,69	2,72	2,70
Total input current	H	A	9,4	11,5	14,0
	HP-HA-HK	A	10,6	12,6	14,6
Water flow rate	H	l/h	2050	2480	3060
	HP-HA-HK	l/h	2080	2530	3110
Pressure drop	H	kPa	15	22	26
Useful head available	HP-HA-HK	kPa	90	81	75
♪ Sound pressure	H-HP-HA-HK	db(A) (heat)	39,5	40,0	40,0
	H-HP-HA-HK	db(A) (cool)	41,0	39,0	35,5
♪ Sound power	H-HP-HA-HK	db(A) (heat)	71,5	72,0	72,0
	H-HP-HA-HK	db(A) (cool)	73,0	71,0	67,5
Air flow rate	H-HP-HA-HK	m ³ /h	6550	6450	6450
Hydraulic couplings	H-HP-HA-HK	IN	F - 1"1/4	F - 1"1/4	F - 1"1/4
		OUT	F - 1"1/4	F - 1"1/4	F - 1"1/4
Pump speed	HP-HA-HK	n°	3	3	3
Expansion tank capacity	HP-HA-HK	l	5	5	5
Accumulation tank volume	HP-HA-HK	l	75	75	75

Dimensions (mm)

ANR		0502	0802	0902
Height	A	1580	1580	1580
Width	B	1277	1277	1277
Depth	C	555	555	555
Weights (H)	kg	223	232	247
Weights (HP)	kg	229	238	253
Weights (HA)	kg	248	257	272
Weights (HAK)	kg	253	262	277



0502 - 0802 - 0902 H

The technical data in this document 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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