

ANKI 020-045

Reversible air/water heat pump

Cooling capacity 1.6 - 3.2 ton
Heating capacity 20,077 - 40,707 BTU/h



- Production of hot water up to 140.0 °F
- Quick & easy installation



DESCRIPTION

Reversible air/water heat pump for air conditioning systems with chilled water production for cooling rooms and hot water for heating services, suitable for connection with small or medium users. It's optimised for use in heating mode, and can be combined not only with low-temperature emission systems such as floor heating or fan coils, but also conventional radiators. Equipped with rotary inverter compressors, inverter fans, finned coils in copper with aluminium fins, plate heat exchanger on the system side. The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

- ° Standard
- X With inverter pump

FEATURES

Operating field

Working at full load up to -4.0 °F outside air temperature in winter, and up to 114.8 °F in summer. Possibility production technical hot water production up to 140.0 °F (for more information see the technical documentation).

Technical hot water production

The technical water, thanks to an intermediate exchanger (**not supplied**), can guarantee the production of domestic hot water (the use of a storage tank **not supplied** is recommended).

Version with Integrated hydronic kit

If a plug&play solution is required, there's also a version with an integrated hydronic unit containing the main hydraulic components including the water filter (supplied).

■ *The water filter must be installed to validate the warranty.*

CONTROL PCO

Microprocessor adjustment, with keyboard and LCD display, for easy access on the unit is a menu available in several languages.

Adjustment includes complete management of the alarms and their log.

The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.

ACCESSORIES

MOD485K: RS-485 simplified interface for supervision systems with MODBUS protocol.

PGD1: Allows you to control the unit at a distance.

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: Anti-vibration supports.

BDX: Condensate drip.

FACTORY FITTED ACCESSORIES

KR: Anti-freeze electric heater for the plate heat exchanger.

ACCESSORIES COMPATIBILITY

Model	Ver	020	025	040	045
MOD485K	°X	.	.	.	.
PGD1	°X	.	.	.	.
PR3	°X	.	.	.	.

Antivibration

Ver	020	025	040	045
°X	VT9	VT9	VT9	VT9

Condensate drip

Ver	020	025	040	045
°X	BDX30	BDX30	BDX30	BDX30

Antifreeze electric heater

Ver	020	025	040	045
°X	KR2	KR2	KR2	KR2

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3,4	ANKI
5,6,7	Size 020, 025, 040, 045
8	Model
H	Heat pump
9	Version
°	Standard
X	With inverter pump
10	Heat recovery
°	Without heat recovery
11	Coils
°	Copper-aluminium

Field	Description
V	Copper pieps-Coated aluminium fins
12	Fans
J	Inverter
13	Operating field (1)
°	Electronic thermostatic expansion valve
14	Evaporator
°	Standard
15	Power supply
5	230V ~ 60Hz
16	Field for future development

(1) Water produced up to 17.6 °F

PERFORMANCE SPECIFICATIONS

ANKI - (°)

Size		020	025	040	045
Cooling performance 54.0 °F / 44.1 °F (1)					
Cooling capacity	ton	1.6	2.0	2.6	3.2
Input power	kW	1.9	2.6	3.0	4.1
Cooling total input current	A	8.5	11.0	13.0	18.0
EER	BTU/(Wh)	10.20	9.22	10.39	9.30
IPLV	BTU/(Wh)	17.67	17.09	16.51	16.79
Water flow rate system side	gpm	4.0	4.8	6.2	7.7
Pressure drop system side	ftH ₂ O	5.4	7.4	4.3	6.4
Heating performance * °F / 120.0 °F (2)					
Heating capacity	Btu/h	20,077	25,328	30,842	40,707
Input power	kW	2.0	2.6	3.3	4.4
Heating total input current	A	8.9	11.0	14.0	19.0
COP	kW/kW	2.92	2.88	2.77	2.74
Water flow rate system side	gpm	4.0 (3)	4.8 (3)	6.2 (3)	7.7 (3)
Pressure drop system side	ftH ₂ O	5.4	7.4	4.3	6.4

(1) Data: System side water heat exchanger 54.0 °F / 44.1 °F; External air 95 °F

(2) Data: System side water heat exchanger * °F / 120.0 °F; External air 47 °F

(3) Water flow rate as in cooling mode

■ Reference conditions: AHRI std 550/590 I-P

ANKI - (X)

Size		020	025	040	045
Cooling performance 54.0 °F / 44.1 °F (1)					
Cooling capacity	ton	1.6	2.0	2.6	3.2
Input power	kW	2.0	2.7	3.1	4.2
Cooling total input current	A	9.3	12.0	14.0	19.0
EER	BTU/(Wh)	9.72	8.87	10.00	9.03
IPLV	BTU/(Wh)	17.67	17.09	16.51	16.79
Water flow rate system side	gpm	4.0	4.8	6.2	7.7
Useful head system side	ftH ₂ O	29.1	27.1	30.1	27.8
Heating performance * °F / 120.0 °F (2)					
Heating capacity	Btu/h	20,077	25,328	30,842	40,707
Input power	kW	2.1	2.7	3.4	4.5
Heating total input current	A	9.7	12.0	15.0	20.0
COP	kW/kW	2.78	2.77	2.67	2.66
Water flow rate system side	gpm	4.0 (3)	4.8 (3)	6.2 (3)	7.7 (3)
Useful head system side	ftH ₂ O	29.1	27.1	30.1	27.8

(1) Data: System side water heat exchanger 54.0 °F / 44.1 °F; External air 95 °F

(2) Data: System side water heat exchanger * °F / 120.0 °F; External air 47 °F

(3) Water flow rate as in cooling mode

■ **Reference conditions: AHRI std 550/590 I-P****PART LOAD IPLV**

Size		020	025	040	045
Part load IPLV					
100 %	BTU/(Wh)	10.20	9.21	10.41	9.32
75 %	BTU/(Wh)	14.74	13.75	13.89	13.41
50 %	BTU/(Wh)	19.52	19.01	18.08	18.77
25 %	BTU/(Wh)	21.77	22.35	20.51	21.77

ELECTRIC DATA

Size		020	025	040	045	
Electric data						
Peak current (LRA)	°	A	8.0	8.0	10.0	10.0
	X	A	8.8	8.8	10.8	10.8
Minimum circuit amperage (MCA)	°	A	25.0	25.0	35.0	35.0
	X	A	30.0	30.0	35.0	35.0
Maximum overcurrent permitted by the protection device (MOP)	°	A	40.0	40.0	60.0	60.0
	X	A	45.0	45.0	60.0	60.0

GENERAL TECHNICAL DATA

Size		020	025	040	045
Compressor					
Type	°X	type		Rotary	
Compressor regulation	°X	Type		Inverter	
Number	°X	no.	1	1	1
Circuits	°X	no.	1	1	1
Refrigerant	°X	type		R410A	
Refrigerant charge (1)	°X	lbs	3.1	3.1	5.1
System side heat exchanger					
Type	°X	type		Brazed plate	
Number	°X	no.	1	1	1
System side hydraulic connections					
Connections (in/out)	°X	Type		Gas - M (2)	
Sizes (in/out)	°X	Ø		1"	
Fan					
Type	°X	type		Axial	
Fan motor	°X	type		Inverter	
Number	°X	no.	1	1	2
Air flow rate	°X	cfm	2,113	2,113	4,403
Sound data calculated in cooling mode (3)					
Sound power level	°X	dB(A)	64.0	65.4	66.7
Sound pressure level (10 m / 33 ft)	°X	dB(A)	32.7	34.1	35.4
Sound pressure level (1 m / 3.3 ft)	°X	dB(A)	49.4	50.8	51.5
Sound data calculated in heating mode (3)					
Sound power level	°X	dB(A)	65.0	68.6	69.8
Sound pressure level (10 m / 33 ft)	°X	dB(A)	33.7	37.3	38.4
Sound pressure level (1 m / 3.3 ft)	°X	dB(A)	50.4	54.0	54.5

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

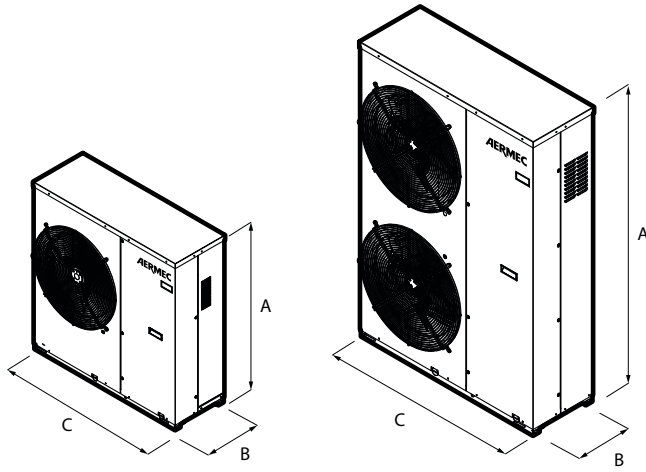
(2) A Gas-NPT adapter is supplied as standard.

(3) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2. Sound pressure (cold functioning) measured in free field, 10 m / 33 ft away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS

ANKI020
ANKI025

ANKI040
ANKI045



Size			020	025	040	045
Dimensions and weights						
A	°X	in	40.5	40.5	58.3	58.3
B	°X	in	13.6	13.6	13.6	13.6
C	°X	in	39.4	39.4	39.4	39.4
Weights						
Empty weight	°	lbs	176	176	249	249
	X	lbs	181	181	254	254

Aermec reserves the right to make any modifications deemed necessary.
All data is subject to change without notice. Aermec does not assume
responsibility or liability for errors or omissions.

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