

ANKI

Reversible inverter heat pump Air/Water outdoor installation
Inverter compressor, plate exchanger and axial fan
Cooling capacity 5,8 - 18,6 kW
Heating capacity 6,08 - 20,2 kW

HFC
Refrigerant

R410A



Aermec participates in the EUROVENT programme: LCP
The products involved can be found at the website
www.eurovent-certification.com

Variable Multi Flow

VMF



- **PRODUCTION OF HOT WATER UP TO 60 °C**
- **PRODUCTION OF HOT DOMESTIC WATER WITH EXTERNAL TEMPERATURES FROM -20 °C UP TO 42 °C**

Features

Reversible outdoor inverter heating pump for air-conditioning systems where, in addition to cooling rooms, high temperature hot water is required for heating or for the production of hot domestic water.

All the units are equipped with inverter compressors, axial fans, external coil with aluminium fins, and a plate heat exchanger on the side. The base, the structure and the panels are made of steel treated with polyester anti-corrosion paints. They are also available with an integrated hydronic unit, thereby simplifying also the final installation

because it just need to be connected electrically and hydraulically to be able to start it.

Versions

ANKI H: Standard

ANKI HX: With inverter pump

Range of operations

Working at full load up to -20°C outside air temperature in winter, and up to 46°C in summer. Hot water production up to 60°C (for more information see the technical documentation)

- Flow switch, high and low pressure transducers fitted as standard.
- Water filter supplied
- Option of an integrated hydronic unit, which contains the main hydraulic components.
- Micro-processor adjustment Electronic board

Accessories

- **MOD485K:** RS-485 interface for supervising systems with MODBUS protocol.

- **MULTICONTROL:** Allows the simultaneous control of several chillers or heat pumps (up to 4) fitted with our MODUCONTROL controller and installed in the same hydraulic system.

For complete control the following accessories are available:

SPLW: System water temperature sensor. In most cases the loose supplied sensors for each chiller/heat pump are sufficient. In cases of a common flow/return header this sensor can be used to control the common system supply water temperature for the chillers connected to the header, or it can be used for temperature monitoring.

SDHW: Domestic hot water temperature sensor. Used with the storage tank to control the temperature of water produced. **VMF-CRP to predict access-**

ory for the management of the probes SPLW /

SDHW if provided with the MULTICONTROL

- **PR3:** Simplified remote panel. Permits control of the basic unit functions (on/off and change of operating mode, diagnostics and alarm reset). Maximum distance permitted is 30 m with screened cable, otherwise up to 10 m.
- **PGD1:** Simplified remote panel. Allows control of basic unit functions and alarm notification.
- **BSKW:** Electric heater kit with IP44 panel for remote mounting in a sheltered area.
- **DCPX:** Low temperature device for correct cooling mode operation with ambient temperatures
- **BDX:** Condensate drip tray.
- **VT:** Anti-vibration mounts.
- **SAF:** Thermal Buffer tank for the instantaneous production of domestic hot water.

Refer to the dedicated "SAF" card for more information necessary for the correct operation of the system, as well as details on the required or rec-

ommended accessories. Please consult the VMF system for the production of DHW with Thermal Accumulator not supplied by Aermec.

Accessories factory fitted only

- **KR:** Electric anti-freeze resistance for plate heat exchanger.
- **KRB:** Electric anti-freeze resistance kit for base; prevents the formation of ice on the base.

COMPATIBILITY with the VMF SYSTEM

For further information about the system see the specific documentation.

Accessory compatibility

ANKI	vers	020	025	040	045	070	075	080
MOD485K		*	*	*	*	*	*	*
MULTICONTROL		*	*	*	*	*	*	*
SPLW	(1)	*	*	*	*	*	*	*
SDHW	(1)	*	*	*	*	*	*	*
PR3		*	*	*	*	*	*	*
PGD1		*	*	*	*	*	*	*
BS4KW230M		*	*	*	*	-	-	-
BS6KW230M		*	*	*	*	-	-	-
BS6KW400T		-	-	-	-	*	*	*
BS9KW400T		-	-	-	-	*	*	*
DCPX	(2)	71	71	71	71	71	71	71
BDX		30	30	30	30	5	5	5
VT	H/HX	9	9	9	9	9	9	9
SAF	(3)	*	*	*	*	*	*	*
Accessories factory fitted only								
KR2		*	*	*	*	*	*	*
KRB1		*	*	*	*	-	-	-
KRB2		-	-	-	-	*	*	*

(1) Probes required with MULTICONTROL to manage the following additional functions: SPLW for secondary plant management, SDHW for DHW management

(2) **Not use the accessory DCPX for units with fans "J or F"**

(3) For more information, see the commercial documentation available on the website www.aermec.com

Unit Configurator

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	Code
1,2,3,4	ANKI
5,6,7	Size 020-025-040-045-070-075-080
8	Model
	H Heat pump
9	Versions
	° Standard
	X With inverter pump
10	Heat recovery
	° Without heat recovery
11	Coil fin
	° Aluminium
	V In painted aluminium-copper (epoxy paint)
12	Fans
	° Standard
	J Inverter
	F Standard phase cut
13	Field of use
	° Standard (leaving water temperature down to -8°C)
14	Evaporator
	° Standatd
15	Power supply
	M 230V/1/50Hz (020-025-040-045)
	T 400V/3N/50Hz (070-075-080)
16	Filed not used
	°

Technical Data

ANKI - H			020	025	040	045	070	075	080
V/ph/Hz			230V~50Hz				400V /3/50HZ		
12°C / 7°C	Cooling capacity	(1) kW	5,85	7,31	9,39	11,78	13,7	16,4	18,6
	Total input power	(1) kW	1,96	2,61	3,15	4,22	4,80	6,15	7,62
	EER	(1)	2,98	2,80	2,98	2,79	2,86	2,67	2,44
	ESEER	(1)	4,15	4,10	4,06	4,10	4,20	4,17	4,12
	Water flow rate	(1) l/h	1026	1258	1622	2017	2375	2845	3222
	Pressure drop	(1) kPa	16	22	13	19	17	25	31
40°C / 45°C	Heating capacity	(2) kW	6,23	7,80	9,35	12,33	15,4	17,8	20,3
	Total input power	(2) kW	1,93	2,46	3,06	4,12	4,85	6,06	7,27
	COP	(2)	3,22	3,17	3,05	3,00	3,17	2,93	2,80
	Water flow rate	(2) l/h	1062	1351	1646	2124	2633	3041	3471
	Pressure drop	(2) kPa	14	21	10	17	17	23	30
	Performance under average climatic conditions (Average) UE n°811/2013 Pdesignh ≤ 70kW								
Pdesignh	(3)	6	7	9	12	14	17	18	
SCOP	(3)	3,58	3,55	3,40	3,20	3,50	3,33	3,30	
ηs	(3)	140	139	133	125	137	130	129	
Efficiency Energy Class			A+	A+	A+	A+	A+	A+	A+
Cooling mode for low temperature									
ηsc		137,1	138,4	147,3	147,7	136,7	135,6	134,4	
SEER		3,50	3,54	3,76	3,77	3,49	3,47	3,44	

ANKI - HX			020	025	040	045	070	075	080
V/ph/Hz			230V~50Hz				400V /3/50HZ		
12°C / 7°C	Cooling capacity	(1) kW	6,00	7,49	9,59	12,00	14,0	16,7	18,9
	Total input power	(1) kW	1,89	2,52	3,04	4,09	4,65	5,99	7,47
	EER	(1)	3,18	2,97	3,16	2,93	3,01	2,79	2,53
	ESEER	(1)	4,89	5,01	4,78	4,79	4,65	4,65	4,59
	Water flow rate	(1) l/h	1026	1258	1622	2017	2375	2845	3222
	High static pressure	(1) kPa	74	68	76	61	81	61	41
40°C / 45°C	Heating capacity	(2) kW	6,08	7,61	9,16	12,11	15,10	17,50	20,05
	Total input power	(2) kW	1,86	2,36	2,95	3,98	4,70	5,92	7,14
	COP	(2)	3,28	3,23	3,10	3,04	3,21	2,96	2,81
	Water flow rate	(2) l/h	1062	1351	1646	2124	2633	3041	3471
	High static pressure	(2) kPa	76	69	77	60	70	50	27
Performance under average climatic conditions (Average) UE n°811/2013 Pdesignh ≤ 70kW									
Pdesignh		(3)	6	7	9	12	14	16	19
SCOP		(3)	3,83	3,83	3,60	3,35	3,60	3,43	3,40
ηs		(3)	150	150	141	131	141	134	133
Efficiency Energy Class			A+	A+	A+	A+	A+	A+	A+
Cooling mode for low temperature									
ηsc			161,7	167,0	172,3	171,9	148,0	149,4	147,8
SEER			4,12	4,25	4,38	4,37	3,78	3,81	3,77

Date (14511:2013)

- (1) Water evaporator 12°C/7°C, External air 35°C
- (2) Water condenser 40°C/45°C, External air 7°C b.s./6°C b.u.
- (3) Efficiencies for low temperature Applications (35°C)

Technical Data

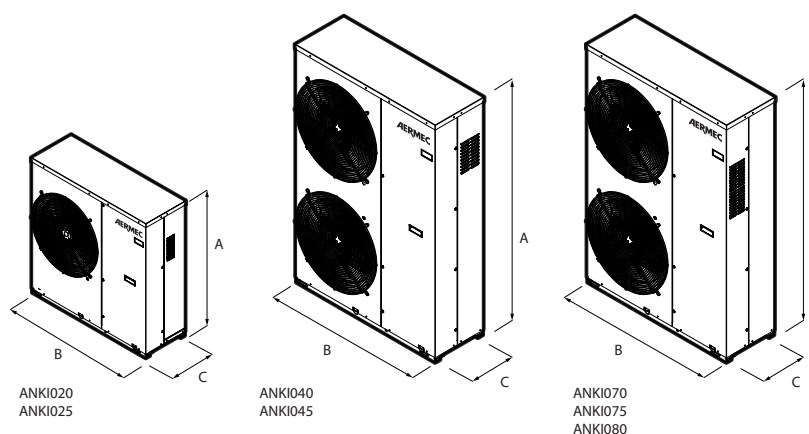
Electrical data			020	025	040	045	070	075	080
Power supply									
				230V/1/50Hz			400V/3N/50Hz		
Total input current (cooling)	°	A	8,3	11,1	13,5	18,1	7,3	9,4	11,4
Total input current (heating)		A	10,5	13,2	17,6	0,0	7,3	9,1	10,8
Maximum current (FLA)		A	12,1	14,1	20,0	23,6	12,5	13,5	15,0
Starting current (LRA)		A	8,0	8,0	10,0	10,0	15,0	15,0	15,0
Total input current (cooling)	X	A	9,0	11,8	14,3	18,8	8,3	10,4	12,5
Total input current (heating)		A	11,2	13,9	18,4	0,8	8,3	10,2	11,9
Maximum current (FLA)		A	12,9	14,9	20,8	24,4	13,6	14,6	16,1
Starting current (LRA)		A	8,8	8,8	10,8	10,8	16,1	16,1	16,1
Inverter Compressor									
Compressor	n°/Type	1/ twin rotary	1/ twin rotary	1/ twin rotary	1/ twin rotary	1/ Scroll	1/ Scroll	1/ Scroll	
Circuit	n°	1							
Refrigerant	Type	R410A							
Heat exchanger system side - Plate									
Exchanger	n°	1							
hydraulic connections (In/Out)	Ø	1"							
Axial fans									
Fans	n°	1	1	2	2	2	2	2	
Air flow rate (cooling)		3590	3590	7480	7480	7350	7350	7350	
Sound data (cooling mode)									
Sound power level	dB(A)	64,0	65,4	66,7	67,7	67,7	69,0	69,0	
Sound pressure level	dB(A)	32,7	34,1	35,4	36,3	36,3	37,6	37,6	

Sound power Aermec determines sound power values on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification.

Sound pressure Sound pressure in free field, at 10 m distance from the external surface of the unit (in accordance with UNI EN ISO 3744).

Note: For more information, refer to the selection program or the technical documentation available on the website www.aermec.com

Dimensions (mm)



ANKI			020	025	040	045	070	075	080
A	Alls	mm	1028	1028	1481	1481	1481	1481	1481
B	Alls	mm	1000	1000	1000	1000	1000	1000	1000
C	Alls	mm	346	346	346	346	450	450	450
Weight	H	kg	80	80	113	113	174	174	174
	HX	kg	82	82	115	115	178	178	178