

HYDRONIC UNITS

MICS-N 0072-0182



Modular air-cooled heat pumps with axial fans

17,3 - 47,9 kW

Unit Description

MICS-N is the Climaveneta range of reversible air-cooled heat pumps. They are outdoor units with axial fans, hermetic Scroll compressors and Full Floating technology. The latter is an intelligent electronic unit providing the perfect answer to residential market requirements: compact, easy to install, low-noise and moderately priced.

Versions

MICS-N FF	Outdoor heat pump with full floating technology and built-in hydronic kit
MICS-N FFT	Outdoor heat pump with full floating technology, without hydronic kit

Features

Structure and base in hot-dip galvanised steel with epoxy powder paint finish.

High-efficiency plate exchangers in AISI 316 stainless steel with low pressure loss, fitted with heating element for frost protection.

External access to control with anti-tamper device.

Finned coils made with copper pipes and aluminium fins with large exchange surface area, tested for leaks with dried air at 30 bar.

User interface with display.

Electronic expansion valve

Available water pipe fittings in case of installation under appliance

Differential pressure switch.

Air vent valve.

The hydronic circuit on the FF models includes:

Multistage centrifugal pump

Expansion tank.

Safety valve.

Pressure gauge.

Drain valve

Main accessories

- Remote control kit
- Kit for connecting the KMC keyboard
- KMC keyboard for modular system
- Coil protection grids
- Removable metal mesh water filter kit
- Rubber anti-vibration mounting kit

Commands

Keyboard Master Control

MICS features an innovative design that optimises the possibilities of connecting up several units, reducing the necessary access space to a minimum and thereby the overall size of the units.

Increasingly better capacity control

The possibility of controlling up to six units as a single product means that MICS can increase the number of available control steps, thereby ensuring practically perfect adaptation to the real heat load trend.

Modular design

KMC is the central control of the cascade modules. Its main function is to supervise operation of all the modules, making them operate synergically. As a user interface it has a graphic display and a keypad for navigating in the pull-down menus.

Full Floating technology

The full floating technology with automatic control of the airflow rate, water flow rate and water temperature gains a new function: Flex Energy, used to manage the capacity control steps in linear or alternating sequence in installations with several modules.



FULL
FLOATING



MICS-N FF

Models	0072	0092	0122	0152	0182
HEAT PUMP MODEL					
Nominal Cooling capacity(1)	kW	17,3	21,8	30,3	37,4
Total absorbed power(1)	kW	6,50	9,30	10,7	13,4
EER		2,66	2,34	2,83	2,79
ESEER		3,86	3,75	3,78	3,92
Nominal water flow	m3/h	3	3,80	5,20	6,40
Nominal Heating power(2)	kW	20,2	26,1	33,9	42,6
Total absorbed power(2)	kW	6,50	8,60	11,2	14
COP		3,11	3,02	3,03	3,04
Absorbed current	A	14	17,7	23,9	29,3
Nominal water flow	m3/h	3,50	4,50	5,90	7,40
Hydraulic connections	inches	1 1/4	1 1/4	1 1/4	1 1/4
Operational weight	kg	310	330	410	450
No. fans	Nr/No.	1	1	2	2
Airflow	m3/h	9000	9000	18000	18000
Compressor type		SCROLL	SCROLL	SCROLL	SCROLL
Refrigerant		R410a	R410a	R410a	R410a
Sound pressure level(3)	db(A)	68	68	71	71
Sound power	db(A)	80	80	83	83
Electrical power supply	V-Ph-Hz	400V-3N~50Hz	400V-3N~50Hz	400V-3N~50Hz	400V-3N~50Hz
DIMENSION					
L	(mm)	1040	1040	1630	1630
H	(mm)	1630	1630	1630	1630
P	(mm)	790	790	790	790

The data refer to

1 Evaporator water (in/out) 12/7°C, condenser air (in) 35°C, based on Eurovent standard

2 Condenser water (in/out) 40/45°C, evaporator air (in) 7°C (r.h. 87%), based on Eurovent standard

3 Noise level measured at 1 m in open field conditions

MICS-N FFT

Models	0072	0092	0122	0152	0182
HEAT PUMP MODEL					
Nominal Cooling capacity(1)	kW	17,3	21,8	30,3	37,4
Total absorbed power(1)	kW	6,50	9,30	10,7	13,4
EER		2,66	2,34	2,83	2,79
ESEER		3,86	3,75	3,78	3,92
Nominal water flow	m3/h	3	3,80	5,20	6,40
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Absorbed current	A	14	17,7	23,9	29,3
Nominal water flow	m3/h	3,50	4,50	5,90	7,40
Hydraulic connections	inches	1 1/4	1 1/4	1 1/4	1 1/4
Operational weight	kg	310	330	410	450
No. fans	Nr/No.	1	1	2	2
Airflow	m3/h	9000	9000	18000	18000
Compressor type		SCROLL	SCROLL	SCROLL	SCROLL
Refrigerant		R410a	R410a	R410a	R410a
Sound pressure level(3)	db(A)	68	68	71	71
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