

Modular reversible unit, air source for outdoor installation 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: compactness, ease of installation and quietness.

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.

VERSIONS

- FF base version, with built-in hydronic kit
- FFT base version 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 drops, 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



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 | 42,5 |
| Total absorbed power | (1) kW | 6,50 | 9,30 | 10,7 | 13,4 | 15,5 |
| EER | | 2,66 | 2,34 | 2,83 | 2,79 | 2,74 |
| ESEER | | 3,86 | 3,75 | 3,78 | 3,92 | 3,96 |
| Nominal water flow | m ³ /h | 3 | 3,80 | 5,20 | 6,40 | 7,30 |
| Nominal Heating power | (2) kW | 20,2 | 26,1 | 33,9 | 42,6 | 47,9 |
| Total absorbed power | (2) kW | 6,50 | 8,60 | 11,2 | 14 | 15,4 |
| COP | | 3,11 | 3,02 | 3,03 | 3,04 | 3,11 |
| Absorbed current | A | 14 | 17,7 | 23,9 | 29,3 | 31,3 |
| Nominal water flow | m ³ /h | 3,50 | 4,50 | 5,90 | 7,40 | 8,30 |
| Hydraulic connections | inches | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 |
| Operational weight | kg | 310 | 330 | 410 | 450 | 480 |
| N° fans | N. | 1 | 1 | 2 | 2 | 2 |
| Airflow | m ³ /h | 9000 | 9000 | 18000 | 18000 | 18000 |
| Compressor type | | SCROLL | SCROLL | SCROLL | SCROLL | SCROLL |
| Refrigerant | | R410A | R410A | R410A | R410A | R410A |
| Sound pressure level | (3) dB(A) | 68 | 68 | 71 | 71 | 71 |
| Sound power | | 80 | 80 | 83 | 83 | 83 |
| Electrical power supply | V-Ph-Hz | 400V-3N-50Hz | 400V-3N-50Hz | 400V-3N-50Hz | 400V-3N-50Hz | 400V-3N-50Hz |
| DIMENSION | | | | | | |
| L | mm | 1040 | 1040 | 1630 | 1630 | 1630 |
| H | mm | 1630 | 1630 | 1630 | 1630 | 1630 |
| P | mm | 790 | 790 | 790 | 790 | 790 |

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 | 42,5 |
| Total absorbed power | (1) kW | 6,50 | 9,30 | 10,7 | 13,4 | 15,5 |
| EER | | 2,66 | 2,34 | 2,83 | 2,79 | 2,74 |
| ESEER | | 3,86 | 3,75 | 3,78 | 3,92 | 3,96 |
| Nominal water flow | m ³ /h | 3 | 3,80 | 5,20 | 6,40 | 7,30 |
| Nominal Heating power | (2) kW | 20,2 | 26,1 | 33,9 | 42,6 | 47,9 |
| Total absorbed power | (2) kW | 6,50 | 8,60 | 11,2 | 14 | 15,4 |
| COP | | 3,11 | 3,02 | 3,03 | 3,04 | 3,11 |
| Absorbed current | A | 14 | 17,7 | 23,9 | 29,3 | 31,3 |
| Nominal water flow | m ³ /h | 3,50 | 4,50 | 5,90 | 7,40 | 8,30 |
| Hydraulic connections | inches | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 | 1"1/4 |
| Operational weight | kg | 310 | 330 | 410 | 450 | 480 |
| N° fans | N. | 1 | 1 | 2 | 2 | 2 |
| Airflow | m ³ /h | 9000 | 9000 | 18000 | 18000 | 18000 |
| Compressor type | | SCROLL | SCROLL | SCROLL | SCROLL | SCROLL |
| Refrigerant | | R410A | R410A | R410A | R410A | R410A |
| Sound pressure level | (3) dB(A) | 68 | 68 | 71 | 71 | 71 |
| Sound power | | 80 | 80 | 83 | 83 | 83 |
| Electrical power supply | V-Ph-Hz | 400V-3N-50Hz | 400V-3N-50Hz | 400V-3N-50Hz | 400V-3N-50Hz | 400V-3N-50Hz |
| DIMENSION | | | | | | |
| L | mm | 1040 | 1040 | 1630 | 1630 | 1630 |
| H | mm | 1630 | 1630 | 1630 | 1630 | 1630 |
| P | mm | 790 | 790 | 790 | 790 | 790 |

Note

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