NESEA

MICRO-CHILLERS & air-to-water HEAT PUMPS



8-24 kW
9-31 kW

Inverter | Scroll | EC

ACS

Made in Spain

R410A | R452B | R134a

NESEA

Adaptation and Versatility

- Versions with hydraulic kit and built-in buffer tank to reduce compressors short cycling
- Condensing pressure control as standard for all year operation
- Adaptability to the facility offering a wide range of models
- Maximum accessibility and easy maintenance via removable panels
- NEW NESEA MAXIMA versions with R-134a refrigerant to deliver water at high temperatures up to +65ºC

Energy efficiency

- High partial and full load efficiency, reducing operating costs
- Compliance with ErP 2018 and ErP 2021
- NEW Full INVERTER technology to improve seasonal energy efficiency
- Electronic fans as standard and electronic expansion valves available for minimal energy consumption
- Equipments with hydraulic kit can include highperformance electronic pumps
- NEW hot gas partial heat reclaim system for sanitary hot water

Low noise level

- Dual acoustic insulation of the compressors with an acoustic jacket in a closed, insulated compartment
- Variable speed electronic fans as standard

Environment

- Optimised design for reduced refrigerant charge R-410A (ODP 0, GWP 2088)
- NEW availability of Mini-Chillers with R-452B refrigerant (ODP 0, GWP 676)

Easy control

- CAREL supervision and electronic control with high performance and easy operation
- Wide variety of communication protocols (Modbus, BACnet and LonWorks)

Applications

Industry | Retail & Shopping centres | Education & Culture | Hospitals

NESEA

8-24 kW

KWF models			3009	3014	3020	4026	4030
Cooling only version (R)							
Cooling	Cooling capacity (1)	kW	7.8	12.1	17.2	22.3	24.3
		TR	2.5	3.5	5	6.5	7
		kBTU/hr	26.6	41.3	58.7	76.1	82.9
	Power input (2)	kW	2.8	4.5	6.4	8.0	9.1
	EER (3)	W/W	2.8	2.7	2.7	2.8	2.7
		BTU/(hrxW)	9.5	9.2	9.2	9.5	9.1
Heat pump version (I)							
Cooling mode	Cooling capacity (1)	kW	7.8	12.1	17.2	22.3	24.3
	Power input (2)	kW	2.8	4.5	6.4	8.0	9.1
	EER (3)	W/W	2.8	2.7	2.7	2.8	2.7
Heating mode	Heating capacity (4)	kW	9.4	15.3	21.5	28.2	31.4
	Power input (2)	kW	2.9	4.7	6.1	8.3	9.4
	COP (3)	W/W	3.2	3.3	3.5	3.4	3.3
Technical characteristics							
Power supply			400 V/III/50 HZ with neutral				
Refrigerant circuit	Refrigerant fluid/GWP	Kg CO_2	R410A/2088				
	Type of compressor		Hermetic scroll, single version				
	No. circuits/compressors		1/1	1/1	1/1	1/1	1/1
	No. power stages		1	1	1	1	1
Hydraulic circuit	Water flow	m^3/h	1.3	2.1	3.0	3.8	4.2
	Type of heat exchanger		Stainless steel brazed plates heat exchanger				
	Hydraulic connections		1"	1"	1"	1 1/4"	1 1/4"
Outdoor fan	Outdoor airflow	m^3/h	3700	3700	7000	7000	7000
	No. x Type of fan		1 x Axial 450 EC		2 x Axial 450 EC		
Equipment sound pressure of Lp10 (5)		dB(A)	32	32	35	35	35
Empty weight		kg	136	144	155	247	250

13-27 kW

KWF INVERTER models			3014	4022	4030
Cooling only version (R)					
Cooling	Cooling capacity (1)	kW	12.8	20.8	26.7
		TR	4.0	6.0	8.0
		kBTU/hr	43.7	71.0	91.2
	Power input (2)	kW	4.7	7.2	8.6
	EER (3)	W/W	2.7	2.9	3.1
		BTU/(hrxW)	9.2	9.9	10.6
Heat pump version (I)					
Cooling mode	Cooling capacity (1)	kW	12.8	20.8	26.7
	Power input (2)	kW	4.7	7.2	8.6
	EER (3)	W/W	2.7	2.9	3.1
Heating mode	Heating capacity (4)	kW	16.2	25.7	32.3
	Power input (2)	kW	4.7	7.1	8.6
	COP (3)	W/W	3.4	3.6	3.8
Technical characteristics					
Power supply			400 V/III/50 HZ with neutral		
Refrigerant circuit	Refrigerant fluid/GWP	Kg CO_2	R410A/2088		
	Type of compressor		Inverter compressor		
	No. circuits/compressors		1/1	1/1	1/1
	Power stage control		Modulating control 25 - 100%		
Hydraulic circuit	Water flow	m^3/h	2.2	3.6	4.6
	Type of heat exchanger		Stainless steel brazed plates heat exchanger		
	Hydraulic connections		1"	1 1/4"	1 1/4"
Outdoor fan	Outdoor airflow	m^3/h	3700	7000	7000
	No. x Type of fan		1 x Axial 450 EC	2 x Axial 450 EC	2 x Axial 450 EC
Equipment sound pressure of Lp10 (5)		dB(A)	32	35	35
Empty weight		kg	134	226	255

(1) Nominal cooling capacity for a water inlet/outlet temp. 12/7°C and outdoor air temp. 35°C.
(2) Nominal power input by compressors and outdoor fans.
(3) EER and COP calculated based on standard EN 14511-2013.
(4) Nominal heating capacity for a water inlet/outlet temp. 40/45°C and outdoor air temp. 7°C DB/6°C WB.
(5) Sound pressure level in dB(A) measured in a free field at 10 m from the source.

Options

- Inverter version with compressor, expansion valve and outdoor electronic fan
- Outdoor EC radial fan
- Anti-corrosion coated outdoor coil
- Hydraulic circuit with variable speed electronic pump (standard with chassis 1, 2 and 3; optional with chassis 4)
- Remote controller
- External communication with MODBUS protocol via RS485 card