BRH 0011÷0121

Water-cooled chillers
5,5 - 35,1 kW

Unit Description

BRH FF is the Climaveneta range of liquid chillers and operating with R410A refrigerant. These are indoor units with 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.

Versions

BRH FF — Indoor liquid chiller with full floating technology and built-in 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.
The safety of the unit is guaranteed by a door lock isolator on the electrical power switchboard and by active protection devices on the main components.
The circuit includes:

- Modulating valve to reduce water consumptions (source side).
- Circulating pump (plant side).
- Air vent valve (plant side).
- Expansion vessel (plant side).
- Safety valve (plant side).
- Differential pressure switch on both plant and source circuits.
- Drain valve on both plant and source circuits.

Main accessories

- Removable metal mesh water filter kit
- HSW10 remote keyboard

Commands

Floating Set

Once ever y 3 minutes an algorithm automatically optimises the water set point in relation to the compressor operating time and the temperatures of the water in the system. he water storage tank is no longer indispensable because it is compensated by the Floating
Set function, with resulting reduction in:
size;
weight;
installation times;
system setting-up times.

Floating Flow

The controller manages the modulation of the active components (pump and electronic flow valve) through pressure transducers and temperature sensors. The performance of the unit may thus be optimised for different operating conditions, such as traditional fan coil system and panel heating system, ensuring:

- broader operating limits;
- easier start-up of installations with both high and low external air system water temperatures;
- fewer defrosts during start-up;
- faster transient after defrosts;
- faster system setup.

BRH FF

Models		0011	0021	0025	0031	0041	0021	0025	0031	0041	0051	0061	0071	0091	0101	0121
HEAT PUMP MODEL																
Nominal Cooling capacity(1)	kW	5,50	5,90	7,60	9,20	11,9	5,90	7,70	9,30	12,4	13,9	16,5	20,8	24	27,3	35,1
Total power input(1)	kW	1,50	1,70	2	2,60	3,20	1,60	1,90	2,40	3,20	3,80	4	5,10	5,80	6,80	8,40
EER		3,67	3,47	3,80	3,54	3,72	3,69	4,05	3,88	3,88	3,66	4,13	4,08	4,14	4,01	4,18
ESEER		4,23	3,92	4,47	4,15	4,10	4	4,61	4,38	4,28	4,22	4,74	4,62	4,84	4,55	4,59
Water flow rate plant side(1)	m3/h	0,90	1	1,20	1,50	1,90	1	1,30	1,50	2	2,30	2,70	3,40	3,90	4,50	5,70
Absorbed current	A	7,50	8	8,90	12,3	15,6	4,60	5	6,10	7,40	8,10	8,80	12,2	13,4	16,1	19,2
Operational weight	kg	148	148	150	152	160	148	150	152	160	170	175	220	230	235	250
Compressor type		SCROLL	SCROLL	SCROLL	SCROLL	SCROLL	SCROLL	SCROLL	SCROLL	SCROLL	SCROLL	SCROLL	SCROLL	SCROLL	SCROLL	SCROLL
Refrigerant		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Hydraulic connections	inches	G 3/4"	G 3/4"	G 3/4"	G 3/4"	G 1"1/4	G 3/4"	G 3/4"	G 3/4"	G 1"1/4	G 1"1/4	G 1"1/4	G 1"1/4	G 1"1/4	G 1"1/4	G 1"1/4
Sound pressure level(2)	db(A)	43	43	48	48	52	43	48	48	52	52	52	52	52	53	53
Sound power	db(A)	54	54	59	59	63	54	59	59	63	63	63	63	63	64	64
Electrical power supply	V-Ph~Hz	230V~50Hz					400V-3N~50Hz									
DIMENSION																
L	(mm)	560	560	560	560	560	560	560	560	560	560	560	680	680	680	680
H	(mm)	980	980	980	980	980	980	980	980	980	980	980	1150	1150	1150	1150
P	(mm)	575	575	575	575	575	575	575	575	575	575	575	780	780	780	780

The data refer to

1 Evaporator water (in/out) 12/7°C, condenser water (in/out) 30/35°C, based on Eurovent Standard
2 Noise level measured at 1 m in open field conditions

Dimension