CHILLERS

HE 0011 - 0121

Condenserless unit
4,70-32,4 kW

HH FF is the Climaveneta range of cooling units. These are indoor units that may be combined with remote outdoor condensers to guarantee maximum flexibility and compliance with any architectural restriction. These units have 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.

Version

FF	Basic version, with built-in hydronic kit

Features

Structure and base in hot-dip galvanised steel with epoxy powder paint finish.
High efficiency, low pressure drop AISI 316 stainless steel plate heat exchangers, fitted with heating element to provide frost protection.
Control with foolproof device accessible from the outside.
Differential pressure switch.
The remote condenser may be installed up to a distance of 50 metres from the cooling unit.
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.

Accessory

- Buffer tank plus pump
- Hydronic kit plus pump
- Removable metal mesh water filter kit
- Modulating pump kit
- Control board for the modulating pump kit

Controls

Full Floating features
Once every 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. The 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.

HE / FF			0011	0021	0025	0031	0021	0025	0031
Power supply		V/ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50	400/3/50	400/3/50	400/3/50
PERFORMANCE									
COOLING									
Cooling capacity	(1)	kW	4,70	6,10	7,00	8,20	6,10	7,00	8,20
Total power input	(1)	kW	1,60	2,10	2,50	2,90	2,10	2,40	2,90
EER	(1)	kW/kW	2,84	2,89	2,80	2,79	2,94	2,86	2,86
EXCHANGERS									
HEAT EXCHANGER USER SIDE IN REFRIGERATION									
Water flow	(1)	l/s	0,25	0,31	0,36	0,42	0,31	0,36	0,42
Available unit's head	(1)	kPa	22,0	24,0	26,0	27,0	24,0	26,0	27,0
REFRIGERANT CIRCUIT									
Compressors nr.		N°	1	1	1	1	1	1	1
No. Circuits		N°	1	1	1	1	1	1	1
Refrigerant charge		kg							
NOISE LEVEL									
Sound Pressure	(2)	dB(A)	43	43	48	48	43	48	48
Sound power level in cooling	(3)(4)	dB(A)	Non un numero	Non un numero	Non un numero	Non un numero	Non un numero	Non un numero	Non un numero
SIZE AND WEIGHT									
A	(5)	mm	450	450	450	450	450	450	450
B	(5)	mm	400	400	400	400	400	400	400
H	(5)	mm	960	960	960	960	960	960	960
Operating weight	(5)	kg	68	70	71	74	70	71	74

HE / FF			0041	0051	0061	0071	0091	0101	0121
Power supply		V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
PERFORMANCE									
COOLING									
Cooling capacity	(1)	kW	10,5	12,5	15,0	19,1	22,2	26,8	32,4
Total power input	(1)	kW	3,40	4,20	4,90	6,30	7,80	8,90	10,9
EER	(1)	kW/kW	3,06	2,97	3,07	3,03	2,86	3,00	2,96
EXCHANGERS									
HEAT EXCHANGER USER SIDE IN REFRIGERATION									
Water flow	(1)	l/s	0,53	0,64	0,78	0,94	1,14	1,33	1,64
Available unit's head	(1)	kPa	19,0	20,0	20,0	23,0	22,0	23,0	23,0
REFRIGERANT CIRCUIT									
Compressors nr.		N°	1	1	1	1	1	1	1
No. Circuits		N°	1	1	1	1	1	1	1
Refrigerant charge		kg							
NOISE LEVEL									
Sound Pressure	(2)	dB(A)	52	52	52	52	52	53	53
Sound power level in cooling	(3)(4)	dB(A)	Non un numero	Non un numero	Non un numero	Non un numero	Non un numero	Non un numero	Non un numero
SIZE AND WEIGHT									
A	(5)	mm	450	450	450	600	600	600	600
B	(5)	mm	400	400	400	600	600	600	600
H	(5)	mm	960	960	960	960	960	960	960
Operating weight	(5)	kg	85	87	90	177	180	187	190

Notes:
1 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Condensation temperature 47°C.
2 Average sound pressure level at 1m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
3 Sound power on the basis of measurements made in compliance with ISO 9614.
4 Sound power level in cooling, indoors.
5 Unit in standard configuration/execution, without optional accessories.
The units highlighted in this publication contain HFC R407C [GWP_{100} 1774] fluorinated greenhouse gases.