# HYDRONIC TERMINALS 0706 - 2209 i-CHD

Cassette type Terminal with continuous variation of air flow and cooling power 4.56-9.42 kW



### Version

U - 2T 2 Pipes version U4T

Version for 4 pipe installations, can be realized with the cassette i- CHD 2-pipe, via the valve mounting 4FOR2.

#### **Features**

High efficiency EC motor.

Modulating speed centrifugal fan and air flow regulation.

Energy consumption reduced by more than 50%

Unit coils guarantee high efficiency thermal exchange with low pressure drop. Finned unit coils are made of copper tubes and high exchange surface area aluminium fins. Coils are always tested for leaks with dried air at 14 bar;

Frame in galvanised steel insulated with self-extinguishing closed-cell polyethylene blanket of suitable thickness, to limit heat loss and noise to a minimum. Airflow grille in ABS built in the cassette, supplied in 1 cartonbox

Electrical power and control switchboard, complete with electronic air flow regulator and terminal board for connection to network and available remote controls;

Availability to have fresh air intake, distribute the air flow in different room place thanks to air diffuser present on the unit;

Condensate auxiliary tray standard supplied;

# Accessory

- Main coil 2-way/3-way valve unit
- Kit valves 4For2
- Fresh Air renewal connection
- **Duct Connection Flange**
- i-HB Power box
- Kit RS485 interface for Building Management System

i-CHD is the new cassette of Climaveneta, with high efficency EC motor and Centrifugal fans that operates through a continuous air flow modulation, with low energy consumtion and perfect comfort. i-CHD is supplyed on 2 pipes version. For the 4 Pipes installations we reccomend the 2 Pipes i-CHD cassette with 4For2 kit valves.

## Controls

MTW wall mounted

Fan speed slider, mode slider (OFF/summer/winter). Thermostat with set point regulation. ON/OFF valve unit control (summer/winter for 2 pipes installation), ON/OFF second valve unit control (winter for 4 pipes installation). Room temperature probe. Remote water temperature probe.

Mode button (OFF/summer/winter/AUTO), fan speed button (Max/Med/Min/AUTO). Thermostat with set point regulation. ON/OFF valve unit control (summer/winter for 2 and 4 pipes installation). Control of traditional or PWM modulating valve units. Room temperature probe and water temperature probe. Digital input configurable as: window contact, economy, heating or cooling remote changeover, periodic ventilation. Configuration dip switch. TTL serial port with Modbus protocol for installation in BMS

EK plug-in control /EKW wall mounted control

User interface for selection of functioning mode (OFF/summer/winter/AUTO), fan speed (Max/Med/Min/AUTO), temperature set. Control of main and additional coil valve unit (summer/winter - 2 and 4 pipes installation) . Management of traditional ON/OFF valve unit or modulating valve unit 0-10V or 3 points . Air and water temperature probe. Multifunction digital input configurable by user. Configuration dip switch.

Modbus protocol for installation in BMS (e.g. Idrorelax system by Climaveneta). Installation and management of Master-Slave system up to 8 LIFE fan coil units. Easy control installation thanks to 2 wires connection.

iK control with LCD screen

Interface with LCD screen with user-friendly icons. Control kit for universal installation: wall-mounted as well as plug-in. Selection of functioning mode (OFF/summer/winter/AUTO), fan speed (Max/Med/Min/AUTO), temperature set. Control iK could function manually or with weekly timer regulation configurable by the customer.

Control of main coil valve unit (summer/winter - 2 pipes) and additional coil (winter - 4 pipes). Management of traditional ON/OFF valve unit or modulating valve unit 0-10V or 3 points (supply 230 VAC or 24V)

Parameters configurable directly by user. Modbus protocol for installation in Building Management System (e.g. Idrorelax system by Climaveneta). Installation and management of Master-Slave system up to 8 LIFE2 fan coil units.

Easy control installation thanks to 2 wires connection through HB power board

In combination with (i)HB powerboard on board of the units, it's possible to have Set-point regulation, selection of functioning mode (cool, heat, dehumidify, fan), and fan speed (Max, Med, Min, AUTO). User-sfriendly compact remote control with fine aethetics.



i-CHD			0706	1108	2209
ELECTRICAL DATA			0.00	1100	
Power supply		V/ph/Hz	230/1/50	230/1/50	230/1/50
2 PIPES SYSTEM CONFIGURATION		p		200. 1700	
ENERGY EFFICIENCY					
COOLING (EN14511 VALUE)					
FCEER	(1)(6)	kW/kW	134	135	130
FCEER Class			В	В	В
HEATING ONLY (EN14511 VALUE)					
FCCOP	(2)(6)	kW/kW	162	161	150
FCCOP Class			В	В	С
PERFORMANCE					
MIN SPEED					
Fan Power Input	(1)	W	13,0	16,0	25,0
Air flow rate	(1)	m³/h	200	360	820
Total capacity in cooling mode	(1)	kW	1,47	2,43	5,21
Total Net Cooling Capacity	(1)(6)(7)	kW	1,46	2,42	5,19
Sensible capacity in cooling mode  Net sensible cooling capacity	(1)	kW kW	1,01 1,00	1,73 1,71	4,30 4,28
Net latent power in cooling	(1)(6)(7)	kW	0,46	0,70	4,28 0,91
Max water flow	(1)(0)(7)	I/s	0,46	0,70	0,91
Pressure Drop in cooling mode	(1)	kPa	5	6	9
Total capacity (heating mode)	(2)	kW	1,41	2.39	5.07
Total Net Heating Capacity	(2)(6)	kW	1,42	2,41	5,09
Water flow in heating mode	(2)	l/s	0,07	0,12	0,24
Pressure drop in heating mode	(2)	kPa	5	6	9
Sound Pressure	(3)	dB(A)	31	32	37
Sound Power	(4)(7)	dB(A)	40	41	46
MED SPEED					
Fan Power Input	(1)	W	18,0	37,0	70,0
Air flow rate	(1)	m³/h	520	820	1380
Total capacity in cooling mode	(1)	kW	3,10	4,81	7,66
Total Net Cooling Capacity	(1)(6)(7)	kW	3,08	4,78	7,59
Sensible capacity in cooling mode	(1)	kW	2,20	3,47	6,44
Net letent newer in cooling	(1)(6)(7)	kW	2,18	3,43	6,37
Net latent power in cooling Max water flow	(1)(6)(7)	kW I/s	0,90 0,15	1,34 0,23	1,22 0,37
Pressure Drop in cooling mode	(1)	kPa	19	20	19
Total capacity (heating mode)	(2)	kW	3,18	4,83	7,79
Total Net Heating Capacity	(2)(6)	kW	3,20	4,87	7,86
Water flow in heating mode	(2)	I/s	0,15	0,23	0,38
Pressure drop in heating mode	(2)	kPa	20	20	20
Sound Pressure	(3)	dB(A)	40	45	50
Sound Power	(4)(7)	dB(A)	49	54	59
MAX SPEED					
Fan Power Input	(1)	W	38,0	72,0	205
Air flow rate	(1)	m³/h	810	1300	2100
Total capacity in cooling mode	(1)	kW	4,56	6,97	9,42
Total Net Cooling Capacity	(1)(6)(7)	kW	4,52	6,90	9,22
Sensible capacity in cooling mode	(1)	kW	3,20	5,08	8,08
Net sensible cooling capacity  Net latent power in cooling	(1)(6)(7) (1)(6)(7)	kW kW	3,16 1,36	5,01	7,87 1,35
Max water flow	(1)(6)(7)	I/s	0,22	1,89 0,33	0,45
Pressure Drop in cooling mode	(1)	kPa	39	39	29
Total capacity (heating mode)	(2)	kW	4,69	7,06	9,43
Total Net Heating Capacity	(2)(6)	kW	4,73	7,13	9,63
Water flow in heating mode	(2)	I/s	0,23	0,34	0,46
Pressure drop in heating mode	(2)	kPa	42	40	29
Sound Pressure	(3)	dB(A)	50	55	55
Sound Power	(4)(7)	dB(A)	59	65	67
SIZE AND WEIGHT					
A	(5)	mm	580	730	830
В	(5)	mm	580	730	830
H	(5)	mm	290	262	290
Operating weight	(5)	kg	30	36	50
Notes:					

- Notes:

  1 Room temperature 27°C d.b./18,9°C w.b., Chilled water (in/out) 7°C/12°C.

  2 Room temperature 20°C d.b., hot water (in/out) 45°C/40°C.

  3 Sound pressure level in free field on a reflective surface, 1 m from fan front and 1 m from the ground. Non -binding value obtained fron sound power level.

  4 Sound power on the basis of measurements made in compliance with ISO 3741 and Eurovent 8/2.

  5 Unit in standard configuration/execution, without optional accessories.

  6 Values in compliance with EN14511-3:2013.

  7 Values in compliance with [REGULATION (EU) N. 2016/2281]

  Certified data in EUROVENT





