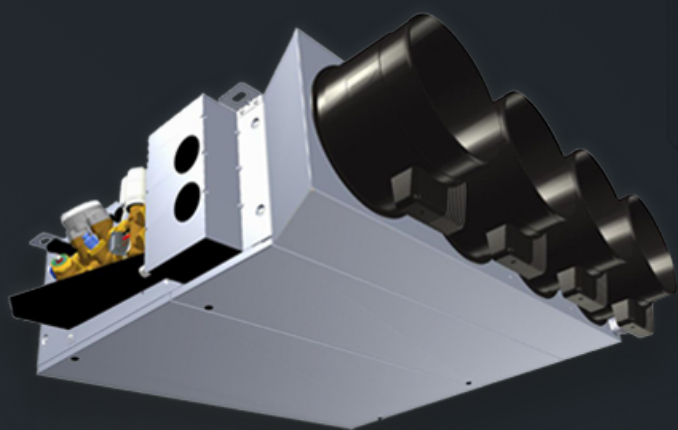


Made
in France



cPIA rSMART 2T

Reversible and connected multi-zone comfort unit

- Integrated multi-task control
- Native multi-zone
- High pressure available
- Compact system, fast installation
- Low noise levels
- Control of indoor air quality

Support with entering RE 2020 compliance data for reversible multi-zone heat pump emitters



EMISSION SYSTEM	
Type of emitter	Heating and cooling
Fans connected to emitters	Automated regulation permitting full fan deactivation

HEATING / COOLING EMITTER		
Gradually regulated water flow coil (for both heating and cooling)		
Fan power consumption (heating and cooling)		
	cPIA 6	cPIA 8
Low-speed power	5 W	8 W
Medium-speed power	12 W	18 W
High-speed power	26 W	40 W
Emitter recirculation flow rate (heating and cooling)		
	cPIA 6	cPIA 8
Recirculation flow at low speed	130 m ³ /h	180 m ³ /h
Recirculation flow at medium speed	220 m ³ /h	290 m ³ /h
Recirculation flow at high speed	380 m ³ /h	580 m ³ /h

EXAMPLE OF A HEATING / COOLING NETWORK		
Type of network	Double pipe	
Network location	Network entirely in heated volume (usually observed)	
Temperature management (EUREVIA heat pump)	Modulation according to outdoor temperature	
	HOT	COLD
Start temperature (not used with EUREVIA heat pump)	40 or 45 °C	7 to 10 °C
Temperature drop	5 °C	5 °C
Power regulation	Variable flow rate control	Minimum flow 0 m ³ /h
Network insulation in heated volume (recommended)	Class 2	
Circulator control mode	No circulator present	

Table of contents

Description	4
Quick selection	7
Heating performance details	7
Cooling performance details	8
Acoustic characteristics	9
Housing	10
Motorised fan	10
Hydraulic coil	10
Electrical connections	10
Air quality	10
Hydraulic system	11
Setting the dynamic balancing valves	12
Return air	13
Supply air	13
Electrical heating kit	14
Anti-vibration mounting accessories	14
Multi-zone / multi-task control	14
Accessories	15
Connected home architecture	15
Open cell insulation	16
Dimensions and weights	17
Maintenance access	18
Mounting points	18
Airflow data	19

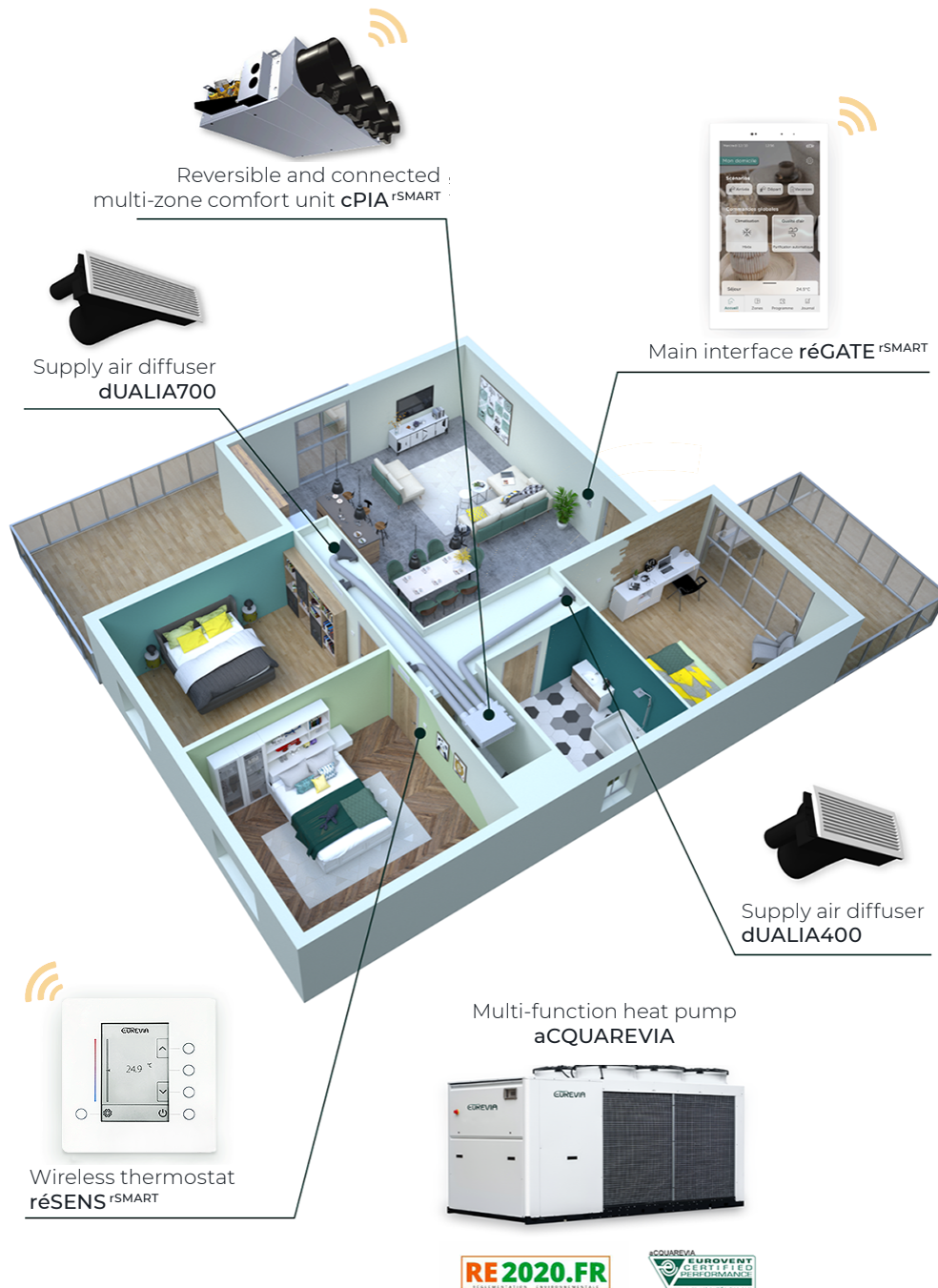
Description

The cPIA^{rSMART} ducted comfort unit is the definitive solution for distributing air-based heating and / or cooling, suitable for residential and hotel buildings.

Native multi-zone and integrated control

The cPIA^{rSMART} comfort unit is the only native multi-zone ducted unit on the market. One supply zone corresponds to one climate zone. The integrated controls allow you to set a different temperature in each room.

Reversible multi-zone heating for collective housing:



Very low energy consumption for our buildings of tomorrow

A pioneer in EC technology, EUREVIA is once again breaking new ground by using electronically-switched motorised fans to:

- Achieve unrivalled levels of performance and efficiency.
- Intelligent operation and adaptability to its environment, thanks to constant-pressure motors and the very high pressure available (240 Pa as standard, up to 400 Pa as an option)
- cPIA^{rSMART} ensures pressure stability by compensating for any drop in pressure (two-storey houses, large houses, etc.), while ensuring sufficient power to control motor speed and preserve thermal and acoustic comfort. moteurs à pression constante et à la très forte pression disponible (240 Pa, jusqu'à 400 Pa en option)

Designed and optimised for high-performance multi-task operation

The cPIA^{rSMART} has been designed for optimised communication with EUREVIA's supervision tools. It is also capable of communicating using a wide range of protocols (Zigbee, Modbus, OPC, etc.) with all the open supervision systems normally used for Building Management Systems.



Low noise levels for optimum comfort

The high-performance acoustic insulation on all sides makes the cPIA ^{rSMART} the quietest ducted unit in its category. The constant-pressure control of the motorised fans, with no perceptible variation in ventilation speed, makes a major contribution to the sense of well-being. The latest tests show that the **cPIA perfectly meets NF Habitat requirements (35 dB in the main room and 25 dB in the bedrooms).**

Plug & Play units

cPIA ^{rSMART} comfort units arrive on site **ready to use** (motorised air connections, hydraulic systems, anti-vibration mounts, etc.). They are also aeraulically and hydraulically **pre-set** according to the selection table. Each machine leaving the EUREVIA factory is labelled with its location (example: building A - 1st floor, apartment no. 102). This considerably reduces commissioning time (each machine has its own dynamic balancing valve – depending on the configuration).

EUREVIA tests **all** of its cPIA ^{rSMART} units before they leave the factory, which means that it achieves zero-defect manufacturing quality.

Multiple configurations to meet your needs as closely as possible

The reversible units are designed to be installed horizontally in false ceilings.

The cPIA ^{rSMART} range is available in reversible 2-pipe c / o, reversible 2-pipe, 2-wire* or 4-pipe* configurations (see 4-pipe cPIA).

The reversible units can be factory-fitted with a fresh air inlet, equipped with a module that automatically adjusts the fresh air flow rate. The high pressure available (max 240 Pa) means that the cPIA ^{rSMART} unit can be adapted to any type of air distribution network and provides high-performance diffusion with all EUREVIA diffusers.

Ease of maintenance for the operator

All components, such as the coil, motorised fans, filter, control system and hydraulic system, can be accessed directly from below, without having to remove the unit from the ceiling.

* Configurations to come

General characteristics			cPIA 6	cPIA 8
Hydraulics	Coil volume	L	1,2	1,6
	Coil connection		1 / 2 " female	3 / 4 " female
Electronics	Power supply	V	230V AC single - 50 Hz	230V AC single - 50 Hz
	Nominal motor power consumption	W	90	180
	Electrical heater power (optional)	W	750 or 1 500	1 250 or 2 500

Quick selection

cPIA 6 2T4R	AIR DISTRIBUTION				HOT POWER		COLD POWER		ACOUSTIC POWER	
	Air flow rate	Static pressure	Power consumption	SFP (*)	Water 45 / 40 °C Pc	Water 55 / 35 °C Pc	Water 7 / 12 °C		Supply Lws	Rep. + Rad. Lwr
	m³/h	Pa	W	W / (m³/s)	W	W	Pt	Ps		
1 OUTLET / MIN	130	15	5	-	1050	1170	1140	680	33	35
1 OUTLET / MEDIUM	220	30	12	196	1700	1720	1900	1140	40	42
2 OUTLETS / MEDIUM	380	30	26	246	2730	2750	2990	1810	45	47
3 OUTLETS / MEDIUM	530	30	48	326	3610	3650	3840	2360	49	51
3 OUTLETS / MAX	680	50	103	-	4410	4450	4590	2860	55	57

cPIA 8 2T4R	AIR DISTRIBUTION				HOT POWER		COLD POWER		ACOUSTIC POWER	
	Air flow rate	Static pressure	Power consumption	SFP (*)	Water 45 / 40 °C Pc	Water 55 / 35 °C Pc	Water 7 / 12 °C		Supply Lws	Rep. + Rad. Lwr
	m³/h	Pa	W	W / (m³/s)	W	W	Pt	Ps		
1 OUTLET / MIN	180	15	8	-	1460	1600	1560	930	33	40
1 OUTLET / MEDIUM	290	30	18	223	2260	2260	2550	1530	40	46
2 OUTLETS / MEDIUM	580	30	40	248	4130	4240	4520	2750	46	51
3 OUTLETS / MEDIUM	800	30	72	324	5390	5520	5760	3550	49	53
4 OUTLETS / MEDIUM	1000	30	110	440	6440	6560	6740	4190	49	54
5 OUTLETS / MEDIUM	1100	30	150	491	6940	7050	7190	4490	51	55
4 / 5 OUTLETS / MAX	1210	50	204	-	7480	7560	7620	4780	54	58

Pc: heating capacity, air inlet 19 °C

Pt: total cooling capacity, air inlet 27 °C - 50% RH

Ps: sensible cooling capacity, air inlet 27 °C - 50% RH

Lws: supply sound power level in accordance with standard ISO 3741 / 88

Lwr: return and radiated sound power level, measured in accordance with ISO 3741 / 88

Lps: sound pressure level, taking account of theoretical attenuation by the building and the distribution system of 18 dB

Lpr: sound pressure level taking account of theoretical attenuation by the ceiling and room of 9 dB

(*) SFP: "Specific Fan Power" given in W / (m³/s) under "nominal" flow conditions and for a static pressure of 30 pa.

For a clean filter and dry elements. Classification of SFP according to EN 13779: SFP1

Unit configuration: 2 pipes, 4 rows, open extract air, supply tap, diameter 200 mm, without fresh air supply

Heating performance details

cPIA 6 2T4R	Air flow rate	Water temperature 55 / 35 °C			Water temperature 45 / 40 °C			Water temperature 40 / 35 °C		
		Pc	Qc	Pdc	Pc	Qc	Pdc	Pc	Qc	Pdc
	m³/h	W	l/h	kPa	W	l/h	kPa	W	l/h	kPa
AIR INLET 19 °C										
1 OUTLET / MIN	130	1170	51	0,1	1050	182	1,3	830	144	0,9
1 OUTLET / MEDIUM	220	1720	75	0,3	1700	295	3,1	1340	233	2,1
2 OUTLETS / MEDIUM	380	2750	119	0,6	2730	474	7,3	2150	373	4,8
3 OUTLETS / MEDIUM	530	3650	158	1,0	3610	627	11,9	2820	490	7,8
3 OUTLETS / MAX	680	4450	193	1,5	4410	766	17,0	3450	599	11,2
AIR INLET 20 °C										
1 OUTLET / MIN	130	1120	49	0,1	1000	174	1,2	780	135	0,8
1 OUTLET / MEDIUM	220	1650	72	0,3	1620	281	2,9	1260	219	1,9
2 OUTLETS / MEDIUM	380	2590	112	0,6	2610	453	6,7	2020	351	4,3
3 OUTLETS / MEDIUM	530	3460	150	0,9	3440	597	11,0	2660	462	7,1
3 OUTLETS/MAX	680	4220	183	1,3	4210	731	15,7	3250	564	10,1

Pc: heating capacity Qc: non-glycol hot water flow rate Pdc: coil pressure drop (without hydraulic option)

Unit configuration: 2 pipes, 4 rows, open extract air, supply tap, diameter 200 mm, without fresh air supply

cPIA 8 2T4R	Air flow rate	Water temperature 55 / 35 °C			Water temperature 45 / 40 °C			Water temperature 40 / 35 °C		
		Pc	Qc	Pdc	Pc	Qc	Pdc	Pc	Qc	Pdc
	m³/h	W	l/h	kPa	W	l/h	kPa	W	l/h	kPa
AIR INLET 19 °C										
1 OUTLET / MIN	180	1600	69	0,1	1460	254	1,3	1150	200	0,9
1 OUTLET / MEDIUM	290	2260	98	0,3	2260	392	2,9	1780	309	2,0
2 OUTLETS / MEDIUM	580	4240	184	0,8	4130	717	8,5	3240	563	5,7
3 OUTLETS / MEDIUM	800	5520	240	1,2	5390	936	13,7	4220	733	9,0
4 OUTLETS / MEDIUM	1000	6560	283	1,6	6440	1110	18,8	5040	869	12,4
5 OUTLETS / MEDIUM	1100	7050	304	1,9	6940	1195	21,5	5430	935	14,1
4 / 5 OUTLETS / MAX	1210	7560	328	2,1	7480	1299	24,5	5840	1014	16,1
AIR INLET 20 °C										
1 OUTLET / MIN	180	1540	67	0,1	1400	243	1,2	1090	189	0,8
1 OUTLET / MEDIUM	290	2170	94	0,2	2160	375	2,7	1680	292	1,8
2 OUTLETS / MEDIUM	580	4020	175	0,7	3950	686	7,9	3060	531	5,1
3 OUTLETS / MEDIUM	800	5240	227	1,1	5150	894	12,6	3980	691	8,2
4 OUTLETS / MEDIUM	1000	6230	269	1,5	6160	1061	17,3	4760	820	11,2
5 OUTLETS / MEDIUM	1100	6700	289	1,7	6630	1142	19,7	5120	882	12,7
4 / 5 OUTLETS / MAX	1210	7190	312	1,9	7140	1240	22,6	5510	957	14,5

Pc: heating capacity

Qc: non-glycol hot water flow rate

Pdc: coil pressure drop (without hydraulic option)

Unit configuration: 2 pipes, 4 rows, open extract air, supply tap, diameter 200 mm, without fresh air supply

Cooling performance details

cPIA 6 2T4R	Air flow rate	Water temperature 7 / 12 °C				Water temperature 8 / 13 °C				Water temperature 9 / 14 °C			
	m³/h	Pt W	Ps W	Qf l/h	Pdc kPa	Pt W	Ps W	Qf l/h	Pdc kPa	Pt W	Ps W	Qf l/h	Pdc kPa
AIR INLET 27°C - 50% RH													
1 OUTLET / MIN	130	1140	680	196	1,8	1040	640	179	1,5	940	590	161	1,3
1 OUTLET / MEDIUM	220	1900	1140	326	4,4	1720	1050	296	3,7	1530	960	263	3,0
2 OUTLETS / MEDIUM	380	2990	1810	514	9,9	2710	1690	466	8,3	2420	1550	416	6,8
3 OUTLETS / MEDIUM	530	3840	2360	660	15,6	3480	2200	598	13,0	3110	2020	534	10,6
3 OUTLET / MAX	680	4590	2860	789	21,3	4160	2650	715	17,8	3710	2440	637	14,5
AIR INLET 26°C - 50% RH													
1 OUTLET / MIN	130	1030	640	177	1,5	930	590	160	1,3	830	550	143	1,0
1 OUTLET / MEDIUM	220	1690	1050	290	3,6	1500	960	258	2,9	1280	860	220	2,2
2 OUTLETS / MEDIUM	380	2670	1690	459	8,1	2380	1550	409	6,6	2080	1410	357	5,2
3 OUTLETS / MEDIUM	530	3430	2200	589	12,7	3070	2030	527	10,4	2680	1840	460	8,1
3 OUTLET / MAX	680	4100	2660	704	17,5	3660	2450	629	14,2	3200	2230	550	11,1

Pt: total cooling capacity

Ps: sensible cooling capacity

Qf: non-glycol cold water flow rate

Pdc: coil pressure drop (without hydraulic option)

Unit configuration: 2 pipes, 4 rows, open extract air, supply tap, diameter 200 mm, without fresh air supply

cPIA 8 2T4R	Air flow rate	Water temperature 7 / 12 °C				Water temperature 8 / 13 °C				Water temperature 9 / 14 °C			
	m ³ / h	Pt W	Ps W	Qf l / h	Pdc kPa	Pt W	Ps W	Qf l / h	Pdc kPa	Pt W	Ps W	Qf l / h	Pdc kPa
AIR INLET 27°C - 50% RH													
1 OUTLET / MIN	180	1560	930	268	1,8	1410	860	242	1,5	1270	800	218	1,2
1 OUTLET / MEDIUM	290	2550	1530	438	4,2	2320	1420	399	3,6	2070	1300	356	2,9
2 OUTLETS / MEDIUM	580	4520	2750	777	11,7	4120	2560	708	9,8	3680	2360	632	8,0
3 OUTLETS / MEDIUM	800	5760	3550	990	18,0	5220	3290	897	15,0	4670	3040	802	12,2
4 OUTLETS / MEDIUM	1000	6740	4190	1161	23,7	6110	3900	1052	19,8	5450	3590	939	16,1
5 OUTLETS / MEDIUM	1100	7190	4490	1238	26,6	6520	4180	1123	22,2	5810	3850	1000	18,1
4 / 5 OUTLETS / MAX	1210	7620	4780	1309	29,5	6900	4450	1185	24,7	6160	4090	1058	20,0
AIR INLET 26°C - 50% RH													
1 OUTLET / MIN	180	1400	870	241	1,5	1270	810	218	1,2	1130	740	194	1,0
1 OUTLET / MEDIUM	290	2280	1420	392	3,5	2030	1300	349	2,8	1750	1160	301	2,2
2 OUTLETS / MEDIUM	580	4050	2570	696	9,6	3630	2370	624	7,9	3180	2150	546	6,2
3 OUTLETS / MEDIUM	800	5150	3310	885	14,7	4260	3050	732	12,0	4040	2780	694	9,5
4 OUTLETS / MEDIUM	1000	6030	3910	1039	19,4	5390	3610	928	15,9	4720	3280	813	12,5
5 OUTLETS / MEDIUM	1100	6430	4200	1108	21,8	5750	3870	990	17,8	5030	3520	866	13,9
4 / 5 OUTLETS / MAX	1210	6850	4500	1177	24,5	6120	4140	1051	20,0	5360	3770	921	15,6

Pt: total cooling capacity
Ps: sensible cooling capacity

Qf: non-glycol cold water flow rate
Pdc: coil pressure drop (without hydraulic option)

Unit configuration: 2 pipes, 4 rows, open extract air, supply tap, diameter 200 mm, without fresh air supply

Acoustic characteristics

cPIA 6	NOISE LEVELS							
	Air flow rate	Static pressure	Lw: sound power level				Lp: sound pressure level	
			Supply	Return	Radiated	Return + Radiated	Supply	Return + Radiated
	m ³ / h	Pa	dB (A)	dB (A)	dB (A)	dB (A)	dB (A)	dB (A)
1 OUTLET / MIN	130	15	33	34	29	35	15	26
1 OUTLET / MEDIUM	220	30	40	41	35	42	22	33
2 OUTLETS / MEDIUM	380	30	45	46	39	47	27	38
3 OUTLETS / MEDIUM	530	30	49	50	43	51	31	42
3 OUTLETS / MAX	680	50	55	56	48	57	37	48

cPIA 8	NOISE LEVELS							
	Air flow rate	Static pressure	Lw: sound power level				Lp: sound pressure level	
			Supply	Return	Radiated	Return + Radiated	Supply	Return + Radiated
	m ³ / h	Pa	dB (A)	dB (A)	dB (A)	dB (A)	dB (A)	dB (A)
1 OUTLET / MIN	180	15	33	39	33	40	15	31
1 OUTLET / MEDIUM	290	30	40	45	39	46	22	37
2 OUTLETS / MEDIUM	580	30	46	50	43	51	28	42
3 OUTLETS / MEDIUM	800	30	49	53	45	53	31	44
4 OUTLETS / MEDIUM	900	30	49	53	45	54	31	45
5 OUTLETS / MEDIUM	1100	30	51	54	46	55	33	46
4 / 5 OUTLETS / MAX	1210	50	54	57	49	58	36	49

Lw: sound power level measured in accordance with standard ISO 3741 / 88

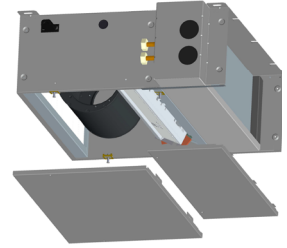
Lp supply: sound pressure level, taking account of theoretical attenuation by the building and the distribution system of 18 dB

Lp return + radiated: sound pressure level taking account of theoretical attenuation by the ceiling and room of 9 dB.

We can send you the results of the test carried out in your home, on request.

Housing

The 10 gauge galvanised sheet steel housing is covered with 13-mm thick M1 open-cell acoustic insulation. The hydraulics are connected at the rear of the machine, which makes it easy to install in false ceilings where space is tight. The underside of the unit can be removed to provide access to all components during maintenance tasks. The reversible version has a main condensate drip tray covered with 3-mm-thick M1 closed-cell insulation.



Motorised fan

The synchronous motorised fan consists of a dual-blade aluminium turbine and a galvanised steel volute. It regulates its speed according to requirements using EC (Electronic Commutation) technology. The motorised fan is equipped with integrated electronics controlled by a constant-pressure logic, enabling it to constantly adapt itself to the areas in demand. As a result, it offers high efficiency while guaranteeing unrivalled acoustic comfort.

Batterie hydraulique

Given the many different production sources (collective or individual heat pumps, urban circuits, heat networks, seawater circuits, etc.), as designers of our coils, we are able to adapt "made-to-measure" exchangers according to the source of production. This ensures that the power of the comfort units is maintained despite low water flow rates. The hydraulic coil is made up of aluminium fins crimped onto copper pipes for optimum thermal efficiency.

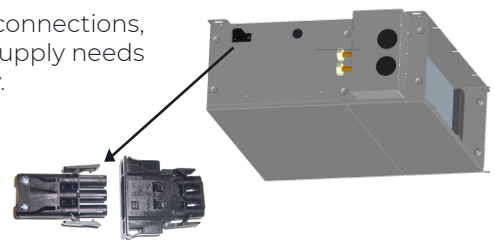
As standard, the hydraulic coil is made up of 4 rows to minimise water pressure drop and deliver maximum power, and is equipped with a water drainage system and drain valve. It is slide-mounted for quick and easy removal during maintenance operations.

On request:

- Additional heating coil for 4-pipe systems.
- Tailor-made coil for intermediate speeds...

Electrical connections

All the components that make up the unit (controller, motorised air connections, valve, etc.) are assembled and wired in the factory. Only the power supply needs to be connected on site by means of a quick-fit connector assembly.



Air quality

As air quality is a major public health issue, EUREVIA equips its cPIA^{rSMART} comfort units with high-performance filtering systems.

Thanks to the very high pressure available, cPIA^{rSMART} units can include, as an option, original 60% ePM1 filters (e.g. F7) without requiring any hardware modifications. What's more, the integrated control system can be used to run air purification cycles (locally or remotely) to clean the air. For the record, ePM1 filters are used in hospital environments.

The 60% ePM1 filter system proposed by EUREVIA now meets the requirements of the new ISO 16890 standard, guaranteeing efficiency based on the size fraction of the airborne particles: ISO ePM10 > 85%, ISO ePM2.5 > 65 - 80% and ISO ePM1 > = 50 - 65%.

Comparison of classes EN 779 and ISO 16890

CLASS	ISO EPM1	ISO EPM2.5	ISO EPM10	ISO COARSE
G3	-	-	-	> 80 %
G4	-	-	-	> 90 %
M5	-	-	> 50 %	-
M6	-	50 - 65 %	> 60 %	-
F7	50 - 65 %	65 - 80 %	> 85 %	-
F8	65 - 80 %	> 80 %	> 90 %	-
F9	> 80 %	> 95 %	> 95 %	-

All figures are given as examples.



Classification of groups according to ISO 16890 based on particle size

ISO ePM1	ePM1, min ≥ 50 % (viruses, nanoparticles, exhaust gases)
ISO ePM2.5	ePM2.5, min ≥ 50 % (bacteria, fungi and mould spores, pollen, toner dust)
ISO ePM10	ePM10, min ≥ 50 % (pollen, desert dust)
ISO coarse	ePM10, min ≥ 50 % (sand, hair)

Hydraulic system

EUREVIA offers different hydraulic systems, factory-fitted to the cPIA^{rSMART} ducted central units. In addition to a condensate drip tray, they can be fitted with:

4-way valve with by-pass	Controlled by a 230 V chrono-proportional thermal servo-motor
2-way valve	Controlled by a 230 V chrono-proportional thermal servo-motor
Change-over probe	Placed at the inlet of the 4-way valve, the probe informs the controller of the temperature of the water circulating in the hydraulic installation.
FlowCon motorised dynamic balancing valve	The valve ensures the water flow rate set at the factory or on site.
Ultrasonic energy meter	MID-approved for load sharing and approved billing
PVC sleeve	Comes with an immersion sleeve for accommodating an energy meter in the future
Condensate pump	Automatic shutdown by default (on request)

cPIA 6 2T4R	Air flow rate	HEAT PUMP OPERATION							CONDENSATION BOILER OPERATION						
		Water temperature 7 / 12 °C							Water temperature 55 / 35 °C						
	m ³ / h	Pt W	Qf l / h	Pdc kPa	Pdc1 kPa	Pdc2 kPa	Pdc3 kPa	Pdc4 kPa	Pc W	Qc l / h	Pdc kPa	Pdc1 kPa	Pdc2 kPa	Pdc3 kPa	Pdc4 kPa
1 OUTLET / MEDIUM	220	1690	290	3,6	6,9	19,6	22,9	23,6	1650	71	0,3	0,5	11,3	11,5	11,5
2 OUTLETS / MEDIUM	380	2670	459	8,1	16,4	28,1	36,4	37,9	2590	111	0,6	1,0	12,6	13,0	13,0
3 OUTLETS / MEDIUM	530	3430	589	12,7	26,3	36,2	49,8	53,1	3460	149	0,9	1,8	13,4	14,3	14,4

cPIA 8 2T4R	Air flow rate	HEAT PUMP OPERATION							CONDENSATION BOILER OPERATION						
		Water temperature 7 / 12 °C							Water temperature 55 / 35 °C						
	m ³ /h	Pt W	Qf l/h	Pdc kPa	Pdc1 kPa	Pdc2 kPa	Pdc3 kPa	Pdc4 kPa	Pc W	Qc l/h	Pdc kPa	Pdc1 kPa	Pdc2 kPa	Pdc3 kPa	Pdc4 kPa
1 OUTLET / MEDIUM	290	2280	392	3,5	5,9	36,0	38,4	39,4	2170	93	0,2	0,4	30,2	30,4	30,4
2 OUTLETS / MEDIUM	580	4050	696	9,6	17,4	47,1	54,9	59,0	4020	173	0,7	1,2	31,2	31,7	33,7
3 OUTLETS / MEDIUM	800	5150	885	14,7	27,2	56,7	69,2	75,3	5240	225	1,1	1,9	32,1	32,9	33,3
4 OUTLETS / MEDIUM	900	5600	962	19,5	36,7	66,5	83,7	91,7	6230	268	1,5	2,7	32,5	33,7	34,2

Pt: total cooling capacity, air inlet 26 °C - 50% RH

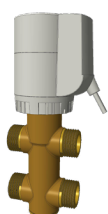
Qf: non-glycol cold water flow rate

Pc: heating capacity, air inlet 20 °C

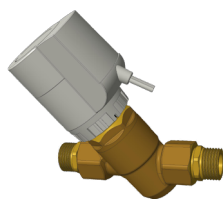
Qc: non-glycol hot water flow rate

Pdc: coil pressure drop only

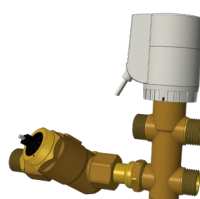
Unit configuration: 2 pipes, 4 rows, open extract air, supply tap, diameter 200 mm, without fresh air supply



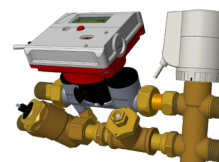
Pdc 1



Pdc 2



Pdc 3



Pdc 4

Pdc 1: coil assembly pressure drop, 4-way motorised valve assembly

Pdc 2: coil assembly pressure drop, motorised dynamic balancing valve

Pdc 3: coil assembly pressure drop, motorised 4-way valve, dynamic balancing valve

Pdc 4: coil assembly pressure drop, motorised 4-way valve, dynamic balancing valve, energy meter

Option:

- Isolation valves and insulated or non-insulated hydraulic hose assemblies are available as accessories and supplied on request.



Setting the dynamic balancing valves

cPIA 6																					
Setting	1,0	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2,0	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8	2,9	3,0
Water flow rate (l / h)	20	36	57	80	105	129	153	176	198	218	237	255	273	290	308	327	347	368	390	414	439

cPIA 6																				
Setting	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4,0	4,1	4,2	4,3	4,4	4,5	4,6	4,7	4,8	4,9	5,0
Water flow rate (l/h)	465	491	518	546	572	597	620	642	660	675	686	695	699	701	702	703	705	711	725	751

cPIA 8																					
Setting	1,0	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2,0	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8	2,9	3,0
Water flow rate (l / h)	64	142	209	168	319	366	408	446	482	516	549	580	611	641	671	700	728	756	783	810	835

cPIA 8																				
Setting	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4,0	4,1	4,2	4,3	4,4	4,5	4,6	4,7	4,8	4,9	5,0
Water flow rate (l/h)	860	883	906	927	946	965	982	998	1010	1020	1040	1050	1060	1070	1080	1080	1090	1100	1100	1110

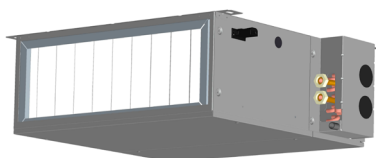
Return air

The cPIA^{rSMART} unit is used to draw in return air and can be fitted with an optional ducted extract air connection box.

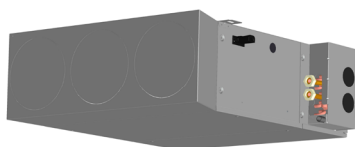
The ducted extract air connection box is clad in 10 gauge galvanised sheet steel and lined with 13-mm thick M1 open cell-acoustic insulation. It features one pre-cut (Ø 100 and 125 mm) for the fresh air inlet and is available in several versions:

- Ducted extract air connection box for cPIA^{rSMART} 6 with 3 pre-cuts (Ø 200 mm).
- Ducted extract air connection box for cPIA^{rSMART} 8 with 4 pre-cuts (Ø 200 mm).

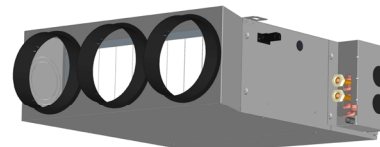
On request: customisable extract air connection boxes (90° side outlet, etc.).



Model cPIA 6
open extract air



cPIA 6 model with pre-cut extract
air connection box



cPIA 6 model with extract air connection
box fitted with 3 taps, Ø 200 mm

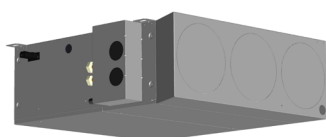
Supply air

The cPIA^{rSMART} unit features a supply air connection box clad in 10 gauge galvanised sheet steel, lined with 13-mm thick M1 open-cell acoustic insulation.

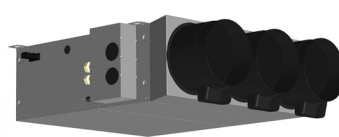
- The cPIA^{rSMART} 6 can be fitted with 1 to 4 taps (Ø 200 mm) or 2 to 4 motorised air connections (Ø 200 mm)
- The cPIA^{rSMART} 8 can be fitted with 1 to 5 taps (Ø 200 mm) or 2 to 5 motorised air connections (Ø 200 mm)
- Reducers (Ø 200 / 160 and Ø 200 / 125 mm), placed on the air connections, are available as an option.

On request:

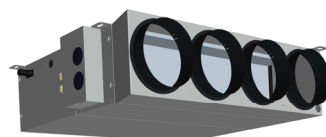
- Customisable supply air connection boxes (90° side inlet, 5 motorised air connections (Ø 200 mm) on the cPIA^{rSMART} 8, etc.).



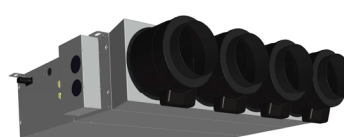
cPIA 6 model with pre-cut supply air
connection box



cPIA 6 model with supply air connection
box equipped with 3 air connections



cPIA 8 model with supply air connection
box equipped with 4 taps, Ø 200 mm



cPIA 8 model with supply air connection
box equipped with 4 air connections
and 4 reducers, Ø 160

Electrical heating kit

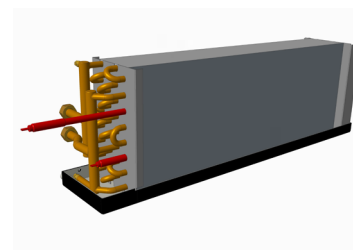
As an option, the cPIA ^{rSMART} unit can be equipped with 1 or 2 single-pipe electrical heaters made of 304 stainless steel, onto which silicone cables are moulded to ensure optimal sealing. The pipes are inserted into the set of fins of the hydraulic coil, without contacting the water circuit, for perfect power distribution. In the event of overheating, the system is protected by a first safety stage with automatic reset, followed by a second stage with manual reset.

cPIA 6 electrical heating kit		
Reference	Power	Minimum flow
1 étage	750 W	100 m ³ /h

cPIA 8 electrical heating kit		
Reference	Power	Minimum flow
1 étage	1250 W	200 m ³ /h

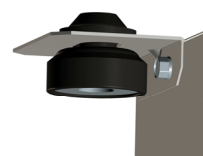
Note:

- It takes 30 seconds, post-ventilation, to cool the electrical heaters (controlled by the control system);
- The minimum airflow to be guaranteed depends on the power of the heaters selected (see table above).



Anti-vibration mounting accessories

The unit can be supplied with 4 anti-vibration mounts, which include a large washer designed to accommodate an M8 fastener.



Multi-zone / multi-task control

The cPIA ^{rSMART} comfort unit features controllers to regulate the temperature independently in several separate zones.

The cPIA ^{rSMART} unit features a control system which, in addition to managing the machine's hydraulics and airflow, can also control equipment such as connected lighting and motorised blinds. The system can be controlled locally via the réGATE gateway controller and the réSENS multi-function thermostat, or remotely via the EUREVIA smartphone application (available on Android or IOS).

This control system will include a "worksite" mode for local configuration and operation without an Internet connection (WiFi or wired). In addition, "over the air" updates will be available as soon as additional functionality is added to the rSMART system.

rSMART	INSTALLATION
✓	2-pipe c / o on heat-only or reversible production
Future	2 pipes, 2-wires on heat-only or reversible production with electrical heater in the off-season and / or as a back-up in the winter

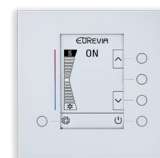
rSMART	ENVIRONMENT
✓	Window contacts
✓	IP communication (Modbus and OPC)
✓	Lighting management
✓	Blind control
✓	Controllable via smartphone
Future	Communication with voice assistants

rCONNECT	APPLICATION
✓	Connected homes
✓	Residences (retirement homes, tourism)
✓	Hotels, managed housing, etc.

Accessories

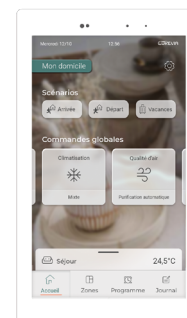
réSENS

Digital Modbus RTU / Zigbee multi-function thermostat, programmable, multi-task control, air purification cycle... (see dedicated documentation)

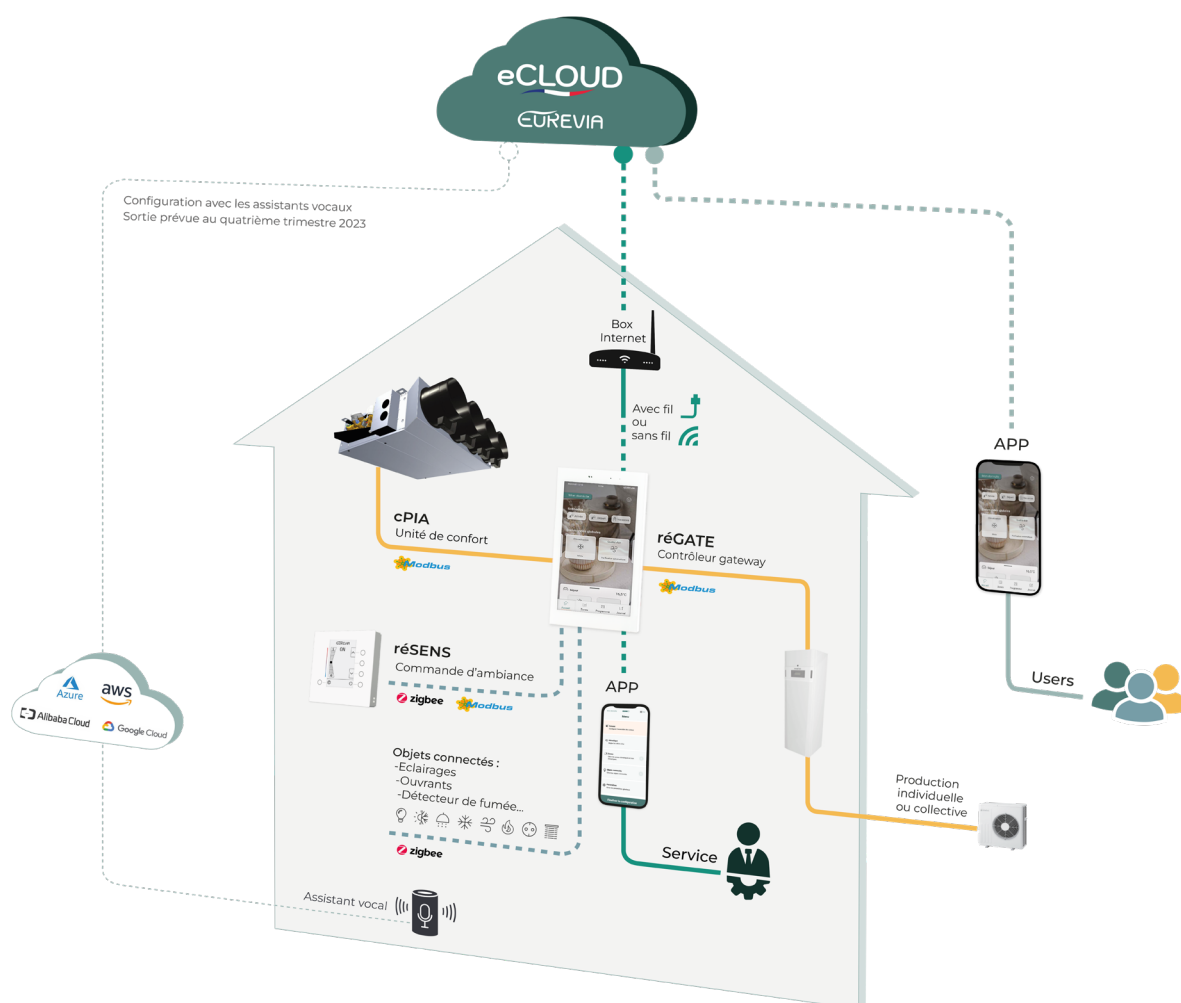


réGATE

Main interface, gateway controller, 7" capacitive thermostat touch screen, programmable, OPC communication, Modbus TCP / IP, multi-task control, air purification cycle, centralised home control. (See dedicated documentation)



Connected home architecture



rSMART

A range of IoT controls designed to be integrated at the heart of a Cloud-connected installation:

- Ultra-secure Cloud architecture with servers installed in French data centres.
- The integrated open protocols make the rSMART concept interoperable with many other standard components on the market.
- Compatibility with voice assistants makes for an even more intuitive experience*.

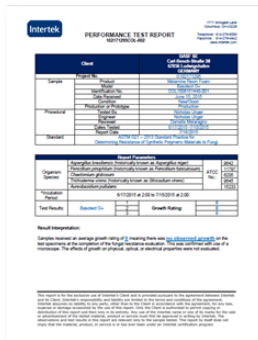
* Coming soon

NB: All trademarks are the property of their respective owners.

High-performance open-cell insulation

Always concerned about air quality for its users, EUREVIA has sought to incorporate a “hygienic” quality mineral thermo-acoustic insulation material into its ducted units, to ensure that bacteria does not proliferate in accordance with standard N F EN ISO 846.

All the tests and certificates listed below are available on request:



ASTM G21 – 2013 Standard practice for determining resistance of synthetic polymeric materials to Fungi

Organism species :

- Aspergillus brasiliensis (historically known as Aspergillus niger)
- Penicillium pinophilum (historically known as Penicillium funiculosum)
- Chaetomium globosum
- Trichoderma virens (historically known as Gliocadium virens)
- Aureobasidium pullulans

Test result after 30 days :

- Growth rating = 0

Result interpretation :

- Samples received an average growth rating of 0 meaning there was no observed growth on the test specimens at the completion of the fungal resistance evaluation. This was confirmed with use of a microscope. The effects of growth on physical, optical, or electrical properties were not evaluated.



ASTM G22 – 1996 : Standard practice for determining resistance of plastics to bacteria (procedure A)

Organism species :

- Pseudomonas aeruginosa

Test result after 28 days :

- Growth rating = No growth



Test report 7022 - 12 testing of material according to DIN EN ISO 846, procedures A, B, B' and C

Procedure A Basic resistance against fungal growth in absence of organic contamination	Growth intensity 0	Evaluation of the material The material contains no nutrients for the growth of fungi; it is "inert" or fungistatic.
Procedures B and B' Fungistatic efficacy	Growth intensity 0	Evaluation of the material Strong fungistatic effect
Procedure C Resistance against bacteria	Result No growth	Evaluation of the material The material contains no nutrients for the growth of bacteria



Certificate hygiene conformity test

Test criteria :

Within the scope of the hygiene conformity test, the hygiene relevant requirements of the regulatory frameworks marked below were tested :

- VDI 6022, Blatt 1 (07 / 2011)
- SWKI VA104 - 01 (04 / 2006)
- VDI 3803 (02 / 2010)
- ONORM H 6021 (09 / 2003)
- DIN EN 13779 (09 / 2007)
- DIN 1946 - 4 (12 / 2008)
- SWKI 99 - 3 (03 / 2004)
- ONORM H 6020 (02 / 2007)

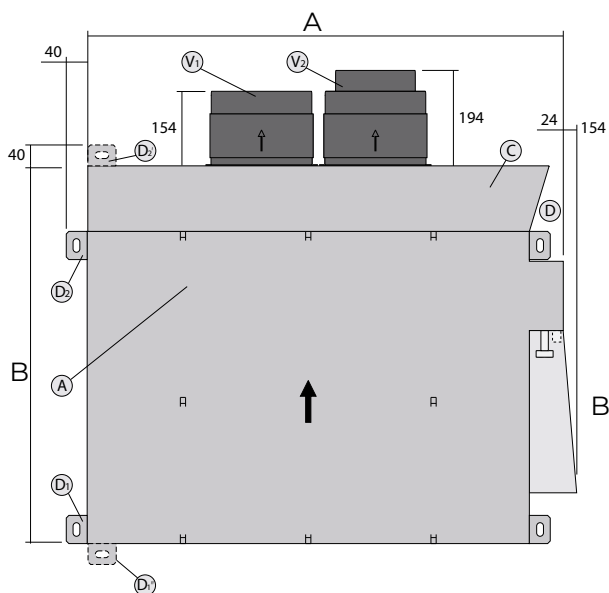
Test result :

The conformity of the tested model with the requirements relevant for hygiene of the aforementioned regulatory frameworks is confirmed

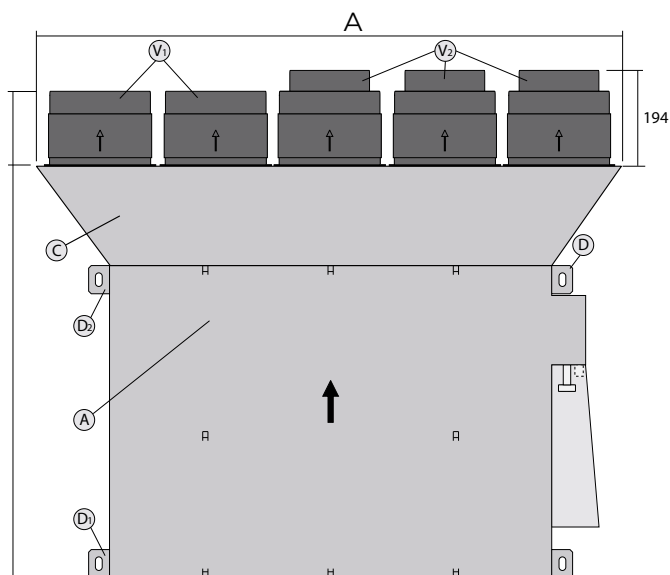
Dimensions and weights

Model	cPIA 6 - 3 outlets	cPIA 6 - 4 outlets	cPIA 8 - 4 outlets	cPIA 8 - 5 outlets
A (mm)	666	904	911	1124
B (mm)	723	792	723	792

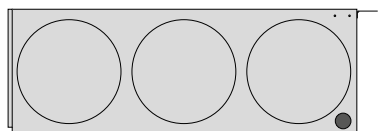
TOP VIEW cPIA 6 - 3 outlets & cPIA 8 - 4 outlets



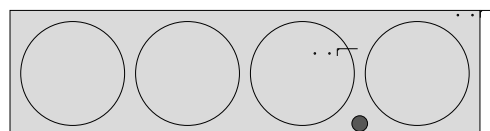
TOP VIEW cPIA 8 - 4 outlets & cPIA 8 - 5 outlets



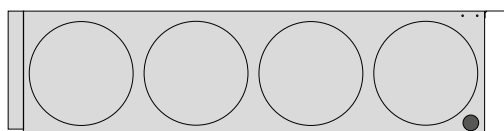
FRONT VIEW cPIA 6 - 3 outlets



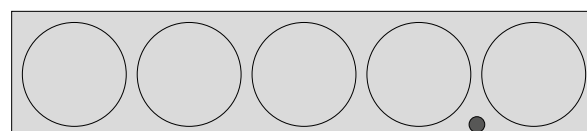
FRONT VIEW cPIA 6 - 4 outlets



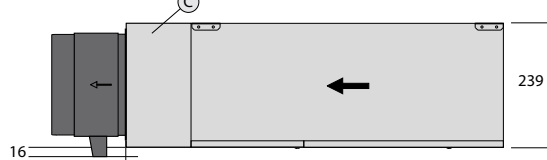
FRONT VIEW cPIA 8 - 4 outlets



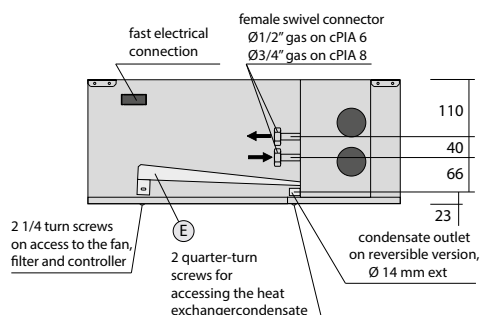
FRONT VIEW cPIA 8 - 5 outlets



VIEW OF OPPOSITE SERVICE ACCESS SIDE



SERVICE ACCESS VIEW



(A) cPIA unit

(C) Large supply air connection box

(D) Mounting bracket

(D1) Mounting bracket, can be moved to position D₁' or D₁"⁽¹⁾

(D2) Mounting bracket, can be moved to position D₂"⁽¹⁾

(E) Removable auxiliary tray (supplied with reversible cPIA system)

(V1) Motorised air connection, diameter 200 mm (depending on supply configuration)

(V2) Air connection with 160 or 125 mm reducer fitting (depending on supply configuration)

(1) if installed against a wall, brackets D₁ and D₂ can be moved.

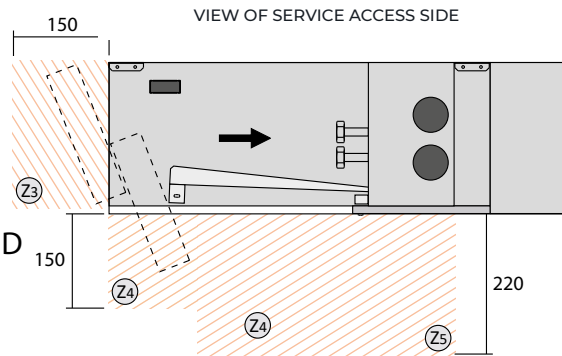
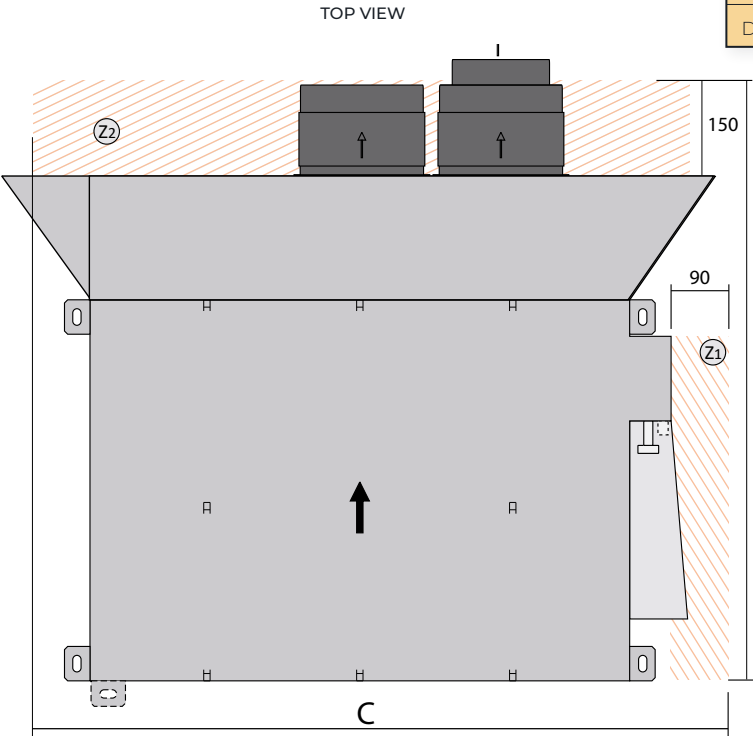
Weight		cPIA 6 3 outlets	cPIA 6 4 outlets	cPIA 8 4 outlets	cPIA 8 5 outlets
Unit with large supply air connection box and open extract air	kg	24	25	33	34
Unit with all accessories	kg	34	36	44	45

Maintenance access

Recommended hatch dimensions for a ceiling that cannot be removed*.

Model	cPIA 6 3 outlets	cPIA 6 4 outlets	cPIA 8 4 outlets	cPIA 8 5 outlets
C (mm)	800	/	1000	1200
D (mm)	1000	/	1000	1000

* for a standard unit without an extract air connection box or any other connection box



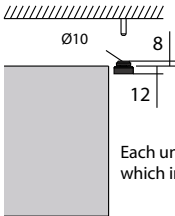
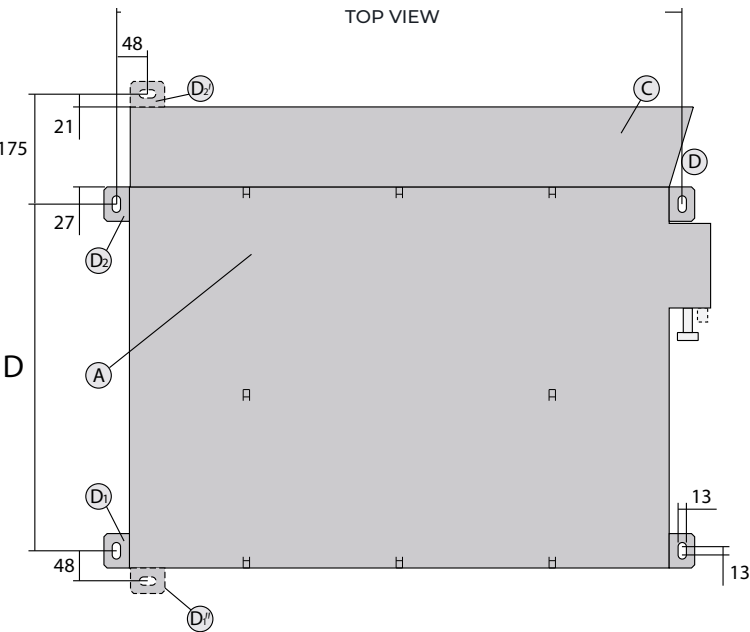
- Ⓐ Hydraulic access zone
- Ⓑ Air connection access zone
- Ⓒ Filter access zone at the rear in the case of open extract air
- Ⓓ Filter access zone from below
- Ⓔ Fan and hydraulic coil access zone

Mounting points

Model	cPIA 6	cPIA 8
C (mm)	645	889
D (mm)	542	542

- Ⓐ CPIA unit
- Ⓑ Large supply air connection box
- Ⓒ Mounting bracket
- Ⓓ Mounting bracket, can be moved to position D₁' or D₁"⁽¹⁾
- Ⓔ Mounting bracket, can be moved to position D₂"⁽¹⁾

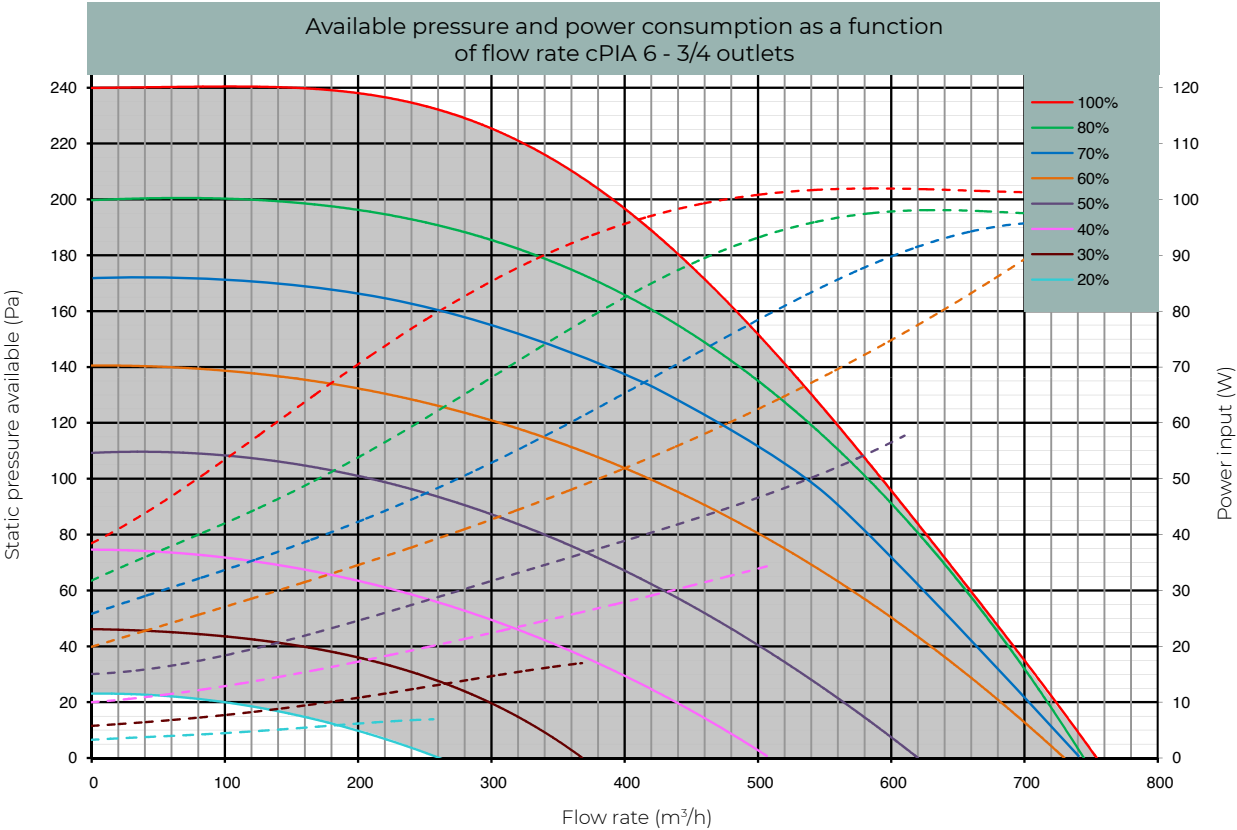
⁽¹⁾ if installed against a wall, brackets D₁ and D₂ can be moved



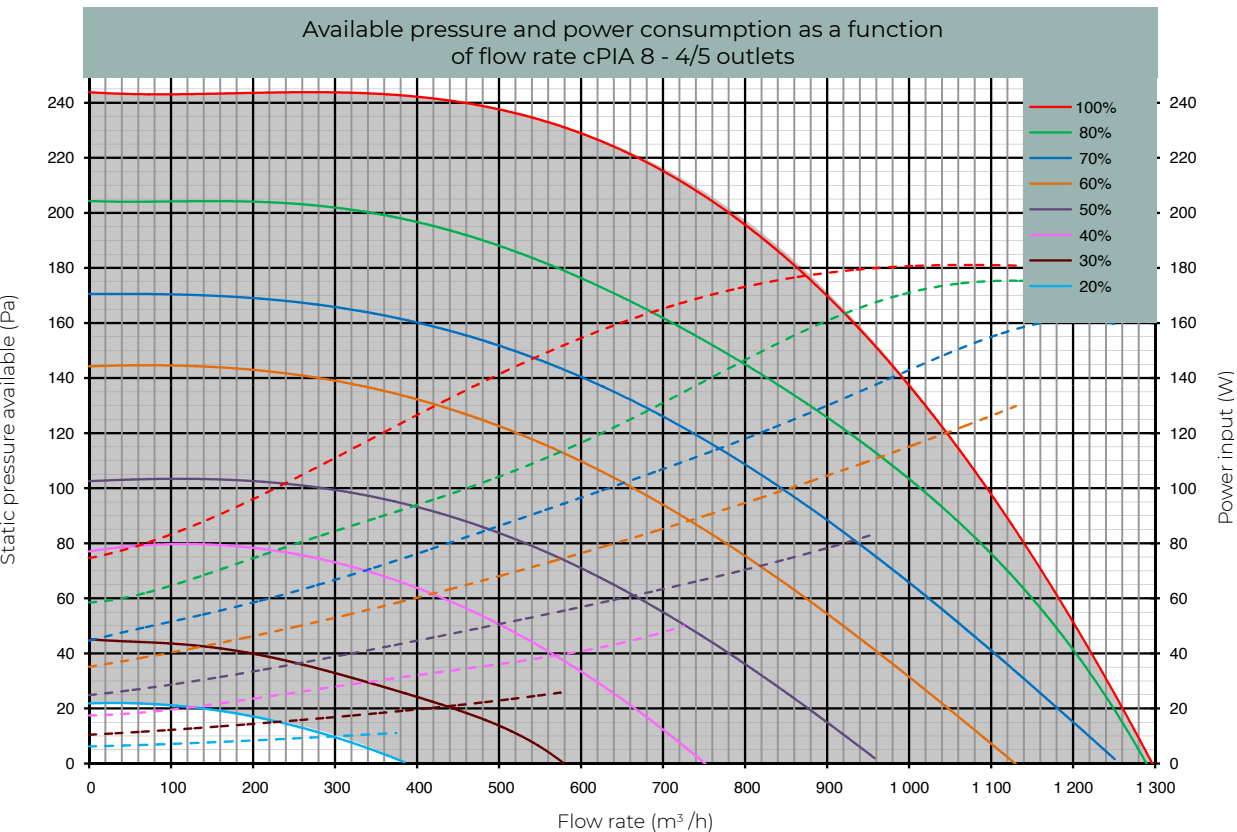
Each unit is supplied with 4 anti-vibration mounts which include a washer for an M8 fastener.

Airflow data

cPIA 6



cPIA 8



Operating range

Static pressure (solid line)

Power consumption (dotted line)

Reversible and connected multi-zone comfort unit cPIA^{rSMART}

Area of application:

Home environment
Connected homes
Tourist residences
Retirement homes
Managed housing

oZONE

cZONE

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