



emitters

The total comfort solution for housing

Residenciat

Advantages for installers

- Easy installation
- Air conditioning and dehumidification
- Can be used with all types of reversible heat pump

Advantages for home-owners

- Energy savings
- Extremely quiet operation
- Completely invisible in attic spaces or suspended ceilings
- Room-by-room control



SPECIFICATIONS (see technical manual N 08.515 A)

RESIDENCIAT 2T reversible		295/01R	295/03	295/04
Heating capacity (1)	W	4430	6300	7400
Cooling capacity (1)	W	4460	6710	8050
Air flow rate	HS	580	830	1020
	MS	480	555	850
	LS	375	280	480
Diameter of hydraulic connections		1/2" G		3/4" G
Recommended pipe diameter		3/4"		1"
Condensate drain	mm	Dia. 32 mm		
Water capacity	L	1.10	1.75	2.33
Average noise level at selected speed (2)	dB(A)	23		28
Electrical power supply (3)	230 V - single-phase - 50 Hz			
		176 W	199 W	294 W
Electrical wiring (not supplied)	mm ²	3 G 0.75		
BUS cable	Two 1 mm ² shielded twisted pairs			
Maximum number of outlets		4	6	
Damper kit	Dia. 160 / 200 mm available on all sizes			
Available pressure	Pi	40	50	60
Hydraulic and electric connections	Left side, opposite discharge (modifiable on site)			

(1) Selection conditions: Summer: chilled water [7/12°C], return water [27°C/50%]; Winter: hot water [45/40°C], return water [19°C].

Enquire for details of two-pipe/two-wire and four-pipe applications.

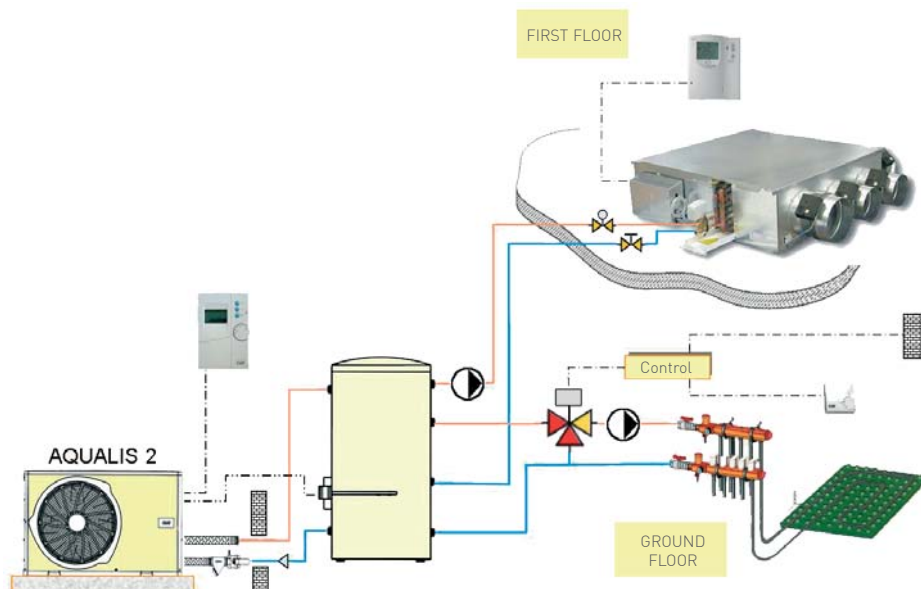
(2) Sound pressure levels measured 2 metres away from the diffuser with 5 linear metres of flexible sound-absorbing ducting and one elbow piece.

(3) Enquire for details of the electrical power supply for two-pipe/two-wire units

PRICES EXC. VAT

Designation	Code	€
Y Suspended ceiling		
295/01R Y	7141528	1 462
295/03 Y	7141529	1 697
295/04 Y	7141531	1 830
H Suspended ceiling		
295/01R H	7141534	1 509
295/03 H	7141536	1 744
295/04 H	7141537	1 907
H Attic		
295/01R H	7141552	1 509
295/03 H	7141554	1 744
295/04 H	7141555	1 907
Kit per room		
One dia. 200 mm motorised damper	7143872	127
Two dia. 200 mm connectors (except non-ducted return)		
Two dia. 200/160 mm reducers		
Wiring bundle		
Hardware + labels		
Zone terminals		
One zone terminal	7038792	112
Diffusion accessories (wall diffusers only)		
Bedroom diffusion kit (blown air/return air) 600 x 150 mm	7090882	215
Living room diffusion kit (blown air/return air) 800 x 200 mm	7090884	309
Flexible sound-absorbing ducting kit (10 m, dia. 160 mm)	7057224	188
Flexible sound-absorbing ducting kit (10 m, dia. 200 mm)	7090513	200
Spare filter		
295/01R Y or H	5201241	51
295/03 Y or H	5201243	47
295/04 Y or H	5201244	52
Extended warranty including commissioning	E002012	234

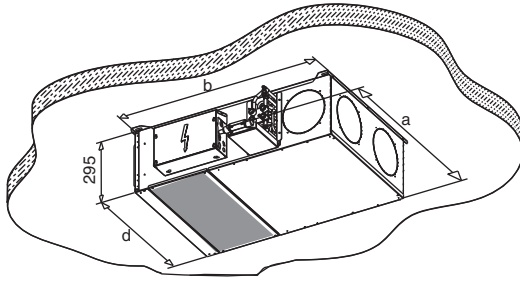
SCHEMATIC INSTALLATION DIAGRAM



DIMENSIONS

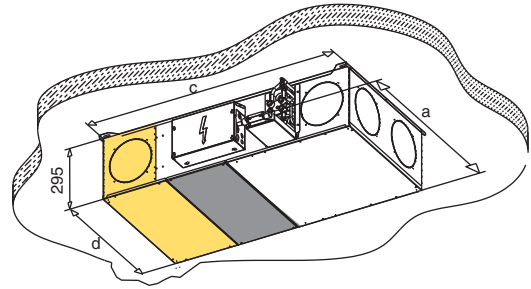
Y Suspended ceiling

Non-ducted return
Suspended unit; maintenance from underneath



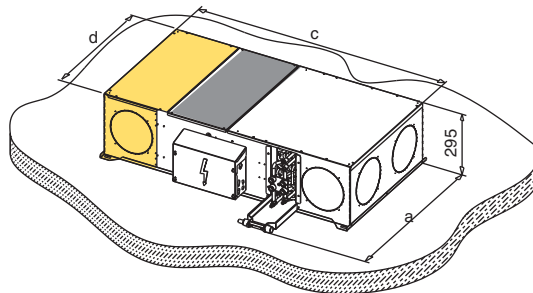
H Suspended ceiling

Ducted return
Suspended unit; maintenance from underneath



H Attic

Ducted return
Unit placed on floor; maintenance from above



Size	a mm	b mm	c mm	d mm	Maximum number of outlets				Weight (kg)	
					left	front	right	total	Y model	H model
295/01R	865	1220	1455	662	1	2	1	4	42	45
295/03	1135			932		4			52	56
295/04	1435			1232		6			57	62

Collar dimensions to be added to the above dimensions

Connections	Intake (collar)	Discharge (damper)
Dia. 200 mm	 H = 50 mm	 H = 160 mm
Dia. 160 mm	 H = 130 mm	 H = 240 mm

Recommended quantities and sizes of diffusion kits (for information):

The sizes and number of kits may vary depending on room geometry.

Room floor area	Number of diffusion kits and size
Up to 20 m ²	1 bedroom kit, dia. 160 mm
15 to 40 m ²	1 living room kit, dia. 200 mm
35 to 60 m ²	2 living room kits, dia. 200 mm

DESCRIPTION OF SYSTEM

Residenciat is a heating and cooling system specifically designed for homes. Its control algorithms are perfectly adapted to the specific requirements of home systems.

The system is designed for two-pipe or two-pipe/two-wire applications (with a reversible heat pump) or four-pipe applications (boiler + chiller) and runs on recirculated air only. It is made up of the following components:

- A Residenciat ducted terminal unit with a multi-zone PI controller, a four-way valve with a three-position actuator (fitted and wired) and a changeover sensor (for two-pipe reversible systems). Residenciat uses its central control system to adjust the temperature in up to six rooms independently, keeping temperatures and noise levels just right for optimum comfort.



- Wall terminal units with displays to be connected to the central control system via a free-topology bus line:

- main unit in zone 1 for controlling zone 1 and viewing and modifying the settings in all the other zones.
- and up to 6 zone terminal units.



- Supply air/return air diffusion kits for wall diffusion only (600 x 150 mm bedroom model with 160 mm collar or 800 x 200 mm living room model with 200 mm collar).



- Pre-wired motorised damper kits (1 damper per zone to be handled) to be connected to the ductable unit after removing the knockouts. A damper is unnecessary if the unit only handles one zone.



Why choose a Residenciat system for a two-storey house?

The system is cheaper than a underfloor heating system upstairs, and takes up less space than radiators.

The responsiveness of the Residenciat system provides another advantage, taking just 15 minutes to bring the temperatures back up from economy to comfort level, compared with one hour for a radiator and 3 to 4 hours for an underfloor heating system. This allows you to leave the system in economy mode for longer whilst retaining maximum comfort.

QUICK SELECTION

Selection based on a new single-family home (RT2005 insulation) with a heat pump (two-pipe system) on air (glycol/water mix) or water (pure water) and one unit with ducting on supply air only (Y model):

Floor area covered	Climate zone	Pure water or MPG	Heating capacity (return air at 19 °C)			Total cooling capacity (return air at 27°C / 50% RH)			Residenciat	
			In	W/m ²	Total W	In	W/m ²	Total W	Size	Coil + valve pressure drop kPa
40 m ²	H1	Pure water	45°C	57	2280	7 °C	40	1600	295/01R	11
		40%		57	2280		40	1600	295/01R	13
	H2	Pure water		50	2000		60	2400	295/01R	21
		30%		50	2000		60	2400	295/01R	21
	H3	Pure water		45	1800		80	3200	295/01R	11
		20%		45	1800		80	3200	295/01R	26
60 m ²	H1	Pure water		57	3420		40	2400	295/01R	20
		40%		57	3420		40	2400	295/03	14
	H2	Pure water		50	3000		60	3600	295/01R	27
		30%		50	3000		60	3600	295/03	24
	H3	Pure water		45	2700		80	4800	295/03	33
		20%		45	2700		80	4800	295/03	35
80 m ²	H1	Pure water	57	4560	40	3200	295/03	17		
		40%	57	4560	40	3200	295/03	30		
	H2	Pure water	50	4000	60	4800	295/03	41		
		30%	50	4000	60	4800	295/04	30		
	H3	Pure water	45	3600	80	6400	295/04	35		
		20%	45	3600	80	6400	295/04	40		
100 m ²	H1	Pure water	57	5700	40	4000	295/04	15		
		40%	57	5700	40	4000	295/04	20		
	H2	Pure water	50	5000	60	6000	295/04	20		
		30%	50	5000	60	6000	2 units depending on configuration *			
	H3	Pure water	45	4500	80	8000	295/04	50		
		20%	45	4500	80	8000	2 units depending on configuration *			

For information regarding flat or office applications, please contact us.

* Coil and valve pressure drops too high for just one unit. Please contact us.