



# PA AIR CONDITIONING UNITS

7 sizes for air volumes  
from 930 to 4350 m<sup>3</sup>/h





## PA AIR CONDITIONING UNITS

The PA series is available in 7 different sizes with flow rates ranging from 930 m<sup>3</sup>/h to 435 m<sup>3</sup>/h. The units are very compact to enable installation in small spaces and false ceilings. The units can be used for heating and cooling purposes. The basic version includes a filter, electric fan and water heat exchange coil.

The basic version is available in two versions:

- Horizontal denoted by the acronym PA/O
- Vertical denoted by the acronym PA/V

### DESIGN FEATURES

- The units are made from sheet steel with Aluzink surface treatment and coated internally with polyethylene and polyester sheets.
- The units are fitted with heat exchange coils made from copper tubes and aluminium fins, and collection devices with GAS threading. The coils are fitted with condensate collection trays made from AISI 304 stainless steel.

- The basic unit is fitted with twin electric fans, three-speed centrifuges with statically and dynamically balanced fan wheels to reduce noise and vibration levels to a minimum.
- The units are fitted with a terminal board complete with fan control relay.

### ACCESSORIES

- GRA Take-up grill
- SPA Suction plenum
- MIX Mixing chamber
- SBC Water post-heating section
- SBE and SB2E Electric post-heating section
- SPM Soundproof supply plenum
- SPF Flexible hose supply plenum
- FL Supply flange for coupling with channels
- BMO Adjustable fin inlet
- C3V Speed control
- PCM Unit control panel
- PCMR Unit control panel + electric heating section

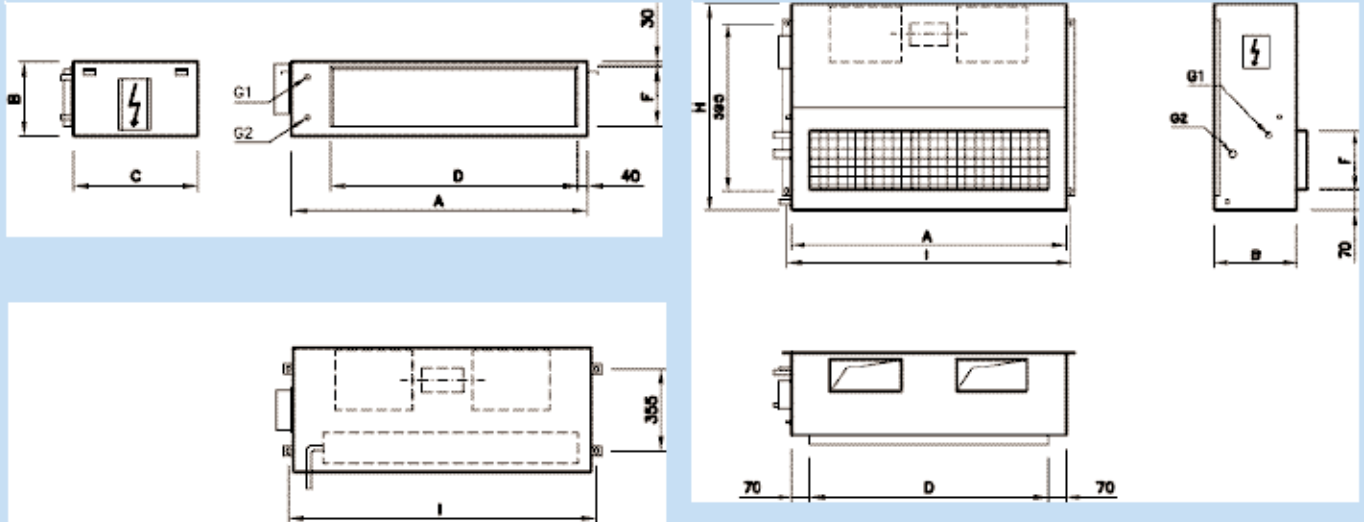
**TABLE OF AIR VOLUMES AND AVAILABLE PRESSURES**

Mod.	Speed	Static pressure (Pa)										Electrical data		
		50		100		150		200		250		W	A	Poles
		m <sup>3</sup> /h*	dB(A)**	m <sup>3</sup> /h*	dB(A)**	m <sup>3</sup> /h*	dB(A)**	m <sup>3</sup> /h*	dB(A)**	m <sup>3</sup> /h*	dB(A)**			
PA 09	min	800	48	750	48	350	48	-	-	-	-	90	1	4
	mean	1150	51	900	50	450	49	-	-	-	-			
	max	1300	52	1100	51	600	49	-	-	-	-			
PA 15	min	1600	47	1300	50	700	50	-	-	-	-	150	1.9	4
	mean	1800	51	1500	49	900	51	-	-	-	-			
	max	2000	52	1700	52	1200	52	-	-	-	-			
PA 17	min	1400	48	1100	49	550	50	-	-	-	-	150	1.9	4
	mean	1700	51	1300	51	700	51	-	-	-	-			
	max	1900	52	1500	52	900	51	-	-	-	-			
PA 21	min	1100	43	900	46	600	49	-	-	-	-	185	2.6	4
	mean	1800	51	1500	51	1300	53	700	55	-	-			
	max	-	-	2400	56	2000	55	1300	57	-	-			
PA 24	min	1100	43	900	45	600	49	-	-	-	-	185	2.6	4
	mean	1800	48	1500	49	1200	52	500	55	-	-			
	max	2600	55	2400	55	2100	55	1300	56	-	-			
PA 36	min	1700	44	1400	51	1200	50	900	53	-	-	420	3.9	4
	mean	2600	51	2400	54	2100	54	1800	56	1200	57			
	max	4200	59	3800	59	3500	58	3200	59	2600	59			
PA 43	min	3200	44	3000	45	2700	45	2500	46	2100	48	600	5.5	4
	mean	4000	51	3800	51	3600	52	3200	52	2800	53			
	max	4800	59	4700	59	4300	59	4000	59	3600	59			

\* flow rate in m<sup>3</sup>/h

\*\* Sound pressure level calculated in free field at 1 metre from the fan mouth.  
Static pressure values refer to a unit complete with filter and heat exchanger.

## TABLE OF WEIGHTS AND DIMENSIONS



Dimensions and Weights

Mod.	A	B	C	D	E	F	G	H	I	L	M	N	P	Weight Kg
PA 09	645	296	450	500	380	210	90	750	675	615	440	550	278	30
PA 15-17	1000	296	450	860	650	210	180	750	1035	975	800	910	278	48
PA 21	1100	325	500	960	725	235	205	835	1135	1075	800	1010	302	54
PA 24	1345	325	535	1200	905	235	265	950	1375	1315	1070	1250	302	63
PA 36-43	1345	375	535	1200	905	260	265	950	1375	1315	1070	1250	328	75

## TABLE OF PERFORMANCES IN COOLING

Mod.	Water temperature infeed/outfeed (°C)	Temperature and relative humidity of infeed air to coil							
		21 °C 50%		24 °C 50%		26 °C 50%		28 °C 50%	
		kW <sup>†</sup>	kPa <sup>††</sup>	kW <sup>†</sup>	kPa <sup>††</sup>	kW <sup>†</sup>	kPa <sup>††</sup>	kW <sup>†</sup>	kPa <sup>††</sup>
PA 09	5/10	3.4	7	4.4	12	5.5	16	6.7	18
	7/12	2.4	6	3.5	10	4.6	12	5.8	16
	9/14	1.9	5	2.4	6	3.6	10	4.9	14
PA 15	5/10	5.8	11	7.5	16	9.2	22	11.1	35
	7/12	4.3	9	6	12	7.5	16	9.7	23
	9/14	3.3	6	4.4	0	6.2	12	8.1	18
PA 17	5/10	6.7	8	8.8	15	10.9	23	13.2	26
	7/12	5.2	7	6.9	12	9.1	16	11.3	24
	9/14	4.3	5	5.3	8	7.1	11	9.4	18
PA 21	5/10	7.7	8	10	10	12.5	18	15.1	28
	7/12	5.5	5	7.9	8	10.5	14	13.1	22
	9/14	4.4	4	5.6	6	8.3	11	10.9	18
PA 24	5/10	9.4	5	12.1	15	15	22	17.9	31
	7/12	7.6	4	10.3	11	13.1	18	16.2	24
	9/14	5.4	3	7.1	4	10.1	12	13.2	18
PA 36	5/10	11.5	9	15.2	15	19	22	23	32
	7/12	9.1	5	11.8	9	15.7	16	19.8	24
	9/14	7.4	4	9.2	5	12.1	10	16.3	18
PA 43	5/10	15.2	12	20	18	25.1	27	30.4	36
	7/12	12.2	8	15.6	12	20.7	20	26.1	28
	9/14	10	6	12.3	8	15.9	12	21.4	20



**TABLE OF PERFORMANCES IN HEATING**

Mod.	Water temperature infeed/outfeed (°C)	Temperature of infeed air to coil									
		10 °C		16 °C		19 °C		20 °C		21 °C	
		kW*	kPa**	kW*	kPa**	kW*	kPa**	kW*	kPa**	kW*	kPa**
PA 09	80/70	14.2	25	12.9	18	12.3	17	12.1	17	19.1	16
	70/60	11.9	18	10.7	16	10	15	9.8	15	9.6	15
	45/40	7	8	5.7	5	5.1	5	4.9	5	4.7	5
PA 15	80/70	22.8	34	20.8	26	19.8	24	19.5	23	19.2	22
	70/60	19	24	16.9	22	15.9	18	15.5	17	15.2	16
	45/40	11.3	10	9.3	8	8.3	6	7.9	5	7.5	4
PA 17	80/70	28.8	27	26.3	30	25	28	24.6	26	24.1	25
	70/60	23.9	18	21.4	20	20.1	19	19.7	18	19.3	17
	45/40	14.3	11	11.7	8	10.4	8	10	7	9.5	7
PA 21	80/70	31.9	32	29.1	28	27.7	24	27.3	23	26.8	22
	70/60	26.7	22	23.8	18	22.4	17	21.6	16	21.4	16
	45/40	15.8	10	12.9	6	11.5	6	11	6	10.5	6
PA 24	80/70	37.1	33	33.8	28	32.2	25	31.7	24	31.1	23
	70/60	31.4	25	28	20	26.4	18	25.9	17	25.3	16
	45/40	18.4	8	15.1	6	13.4	5	12.8	5	12.3	5
PA 36	80/70	52.7	38	48	35	45.7	32	44.9	30	44.1	30
	70/60	43.5	28	38.8	22	36.4	22	35.5	20	34.8	20
	45/40	26.1	12	21.3	9	18.9	8	18.1	7	17.4	7
PA 43	80/70	69.1	40	63	39	59.9	36	58.9	35	57.9	34
	70/60	56.6	35	50.4	28	47.3	25	46.3	24	45.3	24
	45/40	34.3	15	28	10	24.8	8	23.8	8	22.7	7

**TABLE OF PERFORMANCES OF ADDITIONAL HEATING COIL**

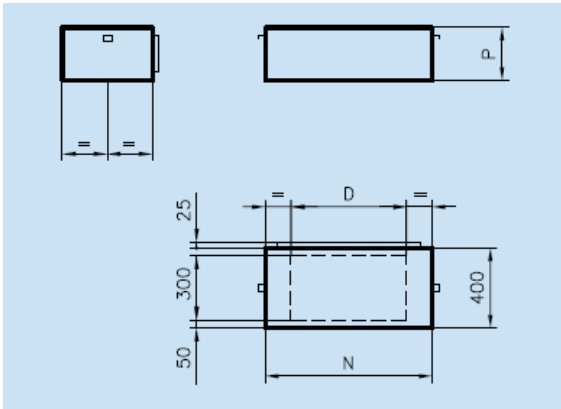
Mod.	Water temperature infeed/outfeed (°C)	Infeed air temperature									
		10 °C		16 °C		19 °C		20 °C		21 °C	
		kW*	kPa**	kW*	kPa**	kW*	kPa**	kW*	kPa**	kW*	kPa**
PA 09	70/60	8.3	12	7.4	11	6.9	9	6.8	9	6.7	8.5
	80/70	9.9	15	9	12	8.6	11	8.4	11	8.3	10.5
PA 15	70/60	13.3	14	11.8	11	11.1	10	10.9	10	10.6	9
	80/70	15.7	25	14.4	21	18.7	18	13.4	18	13.2	16
PA 17	70/60	14	18	12.5	15	11.8	12	11.5	12	11.3	11
	80/70	16.7	28	15.2	25	14.5	19	14.2	18	14	18
PA 21	70/60	16.5	22	14.7	12	13.8	11	13.5	9	13.2	8
	80/70	19.7	40	17.9	28	17	20	16.7	20	16.5	18
PA 24	70/60	19.5	23	17.4	15	16.4	18	16	17	15.7	9
	80/70	23.2	42	21.2	31	20.2	25	19.8	22	19.5	22
PA 36	70/60	24.8	22	22.2	14	20.8	11	20.3	10	19.9	9
	80/70	29.6	40	27	28	25.7	24	25.2	20	24.8	20
PA 43	70/60	27.1	28	24.2	22	22.7	15	22.2	12	21.7	12
	80/70	32.3	45	29.5	40	28	34	27.5	30	27	30

\* Values refer to nominal air volume

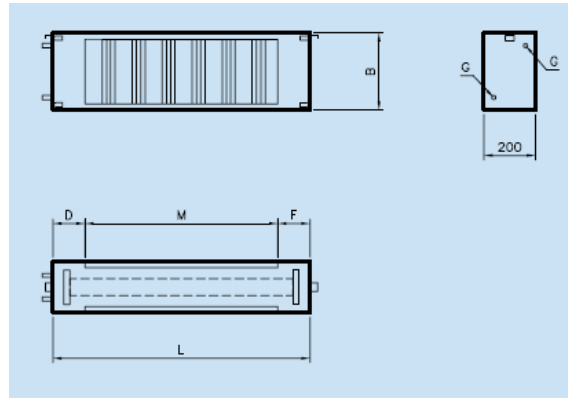
\*\* Water side pressure losses

**AVAILABLE ACCESSORIES**

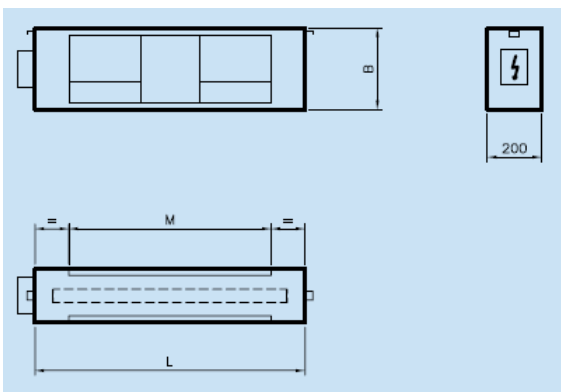
Suction plenum



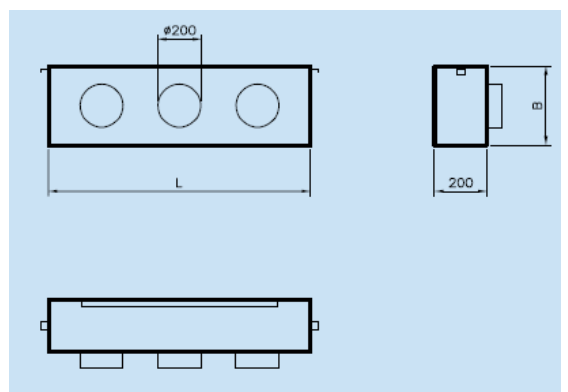
Additional heating coil



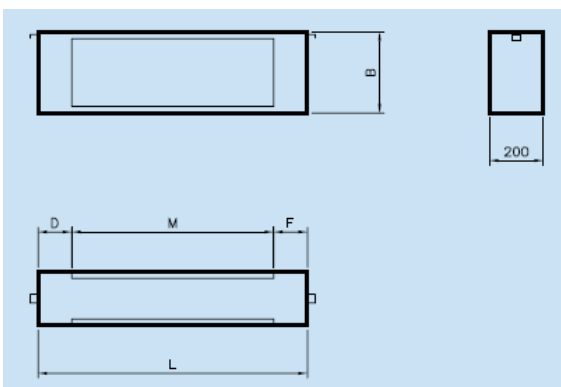
Electric heating battery



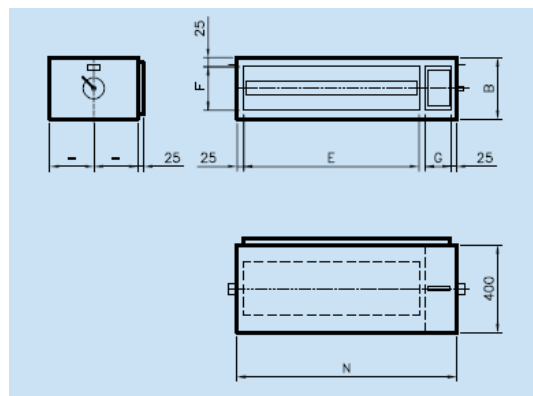
Plenum with circular spigots



Supply plenum



Mixing chamber





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