

PAP[®] Temperature Control Type Air cooled

Models

PAP05A1
 PAP05A1-F
 PAP10A1
 PAP10A1-F
 PAP20A
 PAP20A-F

Air processing capacity **3~20m³/min**

Temperature control accuracy **±0.1°C**

Temperature setting range **18~30°C**



<Special order model> For more information on special order models ▶ 21P

- Noise reducing intake duct ■ Circulation intake chamber
- Exhaust chamber ■ Humidity display included

Please contact ORION regarding custom built models of specifications outside the ranges listed herein.



PAP10A1

Specifications

Model		PAP05A1	PAP05A1-F	PAP10A1	PAP10A1-F	PAP20A	PAP20A-F
Performance specifications	Possible temperature setting range ※1			18 ~ 30			
	Temperature and humidity control accuracy ※2			± 0.1			
	Cooling / heating output (50/60Hz)	2.3 / 2.6		4.7 / 5.3		9.4 / 10.5	
	(Maximum cooling output)	(1.6) / (1.8)		(3.2) / (3.6)		(6.5) / (7.2)	
Rated processing airflow	3 ~ 5		7 ~ 10		13 ~ 20		
Maximum external static pressure(50/60Hz)※3	Pa	110	620	250	560	250	690
Environmental conditions	Surrounding (intake air) temperature and humidity range ※1			15 ~ 35, 30 ~ 70			
	Temperature gradient at intake			Within ± 1			
	Humidity gradient at intake			Within ± 5			
Outside dimensions (H x D x W) ※4	mm	1140×700×600	1423×700×600	1305×822×661	1565×822×661	1610×1150×770	2010×1150×770
Mass	kg	(130)	(155)	(185)	(210)	(290)	(365)
Controlled air outlet port	mm	φ 100	φ 100 HEPA filter built in	φ 150	φ 150 HEPA filter built in	φ 200	φ 200 ※5 HEPA filter box included
Power specifications	Power source ※6			Three-phase 200 ± 10% (50/60)			
	Power consumption ※7	1.4		1.8		3.9	
	Electric current ※7	6.2		7.5		14.9	
	Power capacity ※8	2.2		2.6		5.2	
	Noise level (50/60Hz) ※9	dB	66/66	71/71	68/68	73/73	69/69
Operation control method		Heat pump balance control					
Refrigerant		R410A					
Compressor output	kW	0.7		1.7		3.0	

※ 1 The temperature control range noted does not necessarily indicate the actual controllable range possible. The range of temperature control depends on the condition of the air supplied at the intake.
 ※ 2 When the air temperature and humidity is stable at the air intake. Noted accuracy is based on measurement by the internal controller at a single air outlet point. ※ 3 The noted external static pressure is when the controlled air is regulated at the outlet to produce the maximum rated processing air flow. ※ 4 Height includes outlet port. ※ 5 The HEPA filter box is shipped in a separate package from the main unit and must be installed on-site. ※ 6 Source voltage phase unbalance should be less than ± 3%. ※ 7 Maximum value within the range of unit specifications. ※ 8 The figure noted is when the equipment is operating at the highest capacity of its normal operating range. ※ 9 Noise level can be decreased by installing a noise-reducing intake duct.

PAP® Temperature Control Type Water cooled

Models

- PAP05A1-W
- PAP05A1-FW
- PAP10A1-W
- PAP10A1-FW
- PAP20B1-W
- PAP20B1-FW
- PAP40B-W
- PAP40B-FW

- Air processing capacity **3~40m³/min**
- Temperature control accuracy **±0.1°C**
- Temperature setting range **18~30°C**



PAP10A1-W

<Special order model> For more information on special order models ▶ 21P

- Noise reducing intake duct ■ Circulation intake chamber
- Exhaust chamber ■ Humidity display included

Please contact ORION regarding custom built models of specifications outside the ranges listed herein.



Specifications

Model		PAP05A1-W	PAP05A1-FW	PAP10A1-W	PAP10A1-FW	PAP20B1-W	PAP20B1-FW	PAP40B-W	PAP40B-FW
Performance specifications	Possible temperature setting range *1	18 ~ 30							
	Temperature and humidity control accuracy *2	± 0.1							
	Cooling / heating output (50/60Hz)	3.2/3.2		6.5/6.5		13.0/13.0		22.0/22.0	
	(Maximum cooling output)	(2.0)		(4.0)		(8.0)		(16.0)	
	Rated processing airflow	3 ~ 5		7 ~ 10		13 ~ 20		25 ~ 40	
Environmental conditions	Maximum external static pressure(50/60Hz) *3	410/660	300/620	870/870	560/560	650/1000	300/690	300/300	1000/1000
	Surrounding (intake air) temperature and humidity range *1	15 ~ 35 , 30 ~ 70							
	Temperature gradient at intake	Within ± 2							
	Humidity gradient at intake	Within ± 5							
	Cooling water temperature gradient	Within ± 5							
Cooling water specifications	Outside dimensions (H x D x W) *4	1489 x 586 x 538		1703x763x655		1842x973x653		2291x973x653	
	Mass	120	130	215	260	220	290	440	540
	Controlled air outlet port	φ 100	φ 100 HEPA filter built in	φ 150	φ 150 *5 HEPA filter box included	φ 200	φ 200 HEPA filter box included	□ 350	□ 350 *5 HEPA filter box included
	Rate of supply *6	1.0		1.5		2.2		3.0	
	Supply temperature range	15 ~ 32							
Power specifications	Supply pressure	0.69 or less							
	Inlet/outlet pressure difference	0.2 or greater							
	Connection port size	Rc 1/2		Rc3/4		Rc3/4		Rc1	
	Power source *7	Three-phase 200 ± 10% (50/60)							
	Power consumption (50/60Hz) *8	1.2/1.3		1.7		3.0/3.2		6.0	
Electric current *8	4.5/5.2		7.1		12.0/12.5		24.0		
Power capacity *9	1.8		2.5		4.4		8.3		
Noise level(50/60Hz) *10	68 / 71		73/73		73/76		75/75 , 83/83		
Operation control method	Heat pump balance control								
Refrigerant	R410A								
Compressor output	0.7		1.7		3.0		3.0		

*1 The temperature control range noted does not necessarily indicate the actual controllable range possible. The range of temperature control depends on the condition of the air supplied at the intake. *2 Values indicated are for when the intake air temperature and humidity, and supply water temperature and supply water flow rate are stable. Noted accuracy is based on measurement by the internal controller at a single air outlet point. *3 The noted external static pressure is when the controlled air is regulated at the outlet to produce the maximum rated airflow. *4 Height includes outlet port. *5 The HEPA filter box is shipped in a separate package from the main unit and must be installed on-site. *6 When processing at the maximum air flow and at the highest cooling capacity, the difference between the cooling water inlet and outlet ports is 6.5 °C. *7 Source voltage phase unbalance should be less than ± 3%. *8 Maximum value within the range of unit specifications. *9 The figure noted is when the equipment is operating at the highest capacity of its normal operating range. *10 The noise level may be lowered by installing noise-absorbing ducting.