PAP® D Series Dehumidification

Models

PAP03A-D
PAP03A-WD
PAP06A-D
PAP06A-WD
PAP10A-WD

〈Special order model〉

For more information on special order models ▶ 21P

- Temperature setting range 18~30℃
- Humidity setting range 20~40%
- Temperature control accuracy ±0.2℃

SUPER eco2 ORION

■ Noise reducing intake duct ■ Circulation intake chamber
■ Exhaust chamber ■ Includes humidity display

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

Intelligent monitor | Heat pump balance control | Flow control | HEPA filter (F type) | Air Cooled | Water Cooled | Temperature control | Humidity control

Instant Dehumidification From 27℃ / 70% to 23℃ / 28% With All Fresh Air

Achieves defrost-free performance relying on the refrigeration cycle only, with an industry top-class dew point of 3.5℃.

The PAP-D Series
Precision Air Processing AND Dehumidification Combined

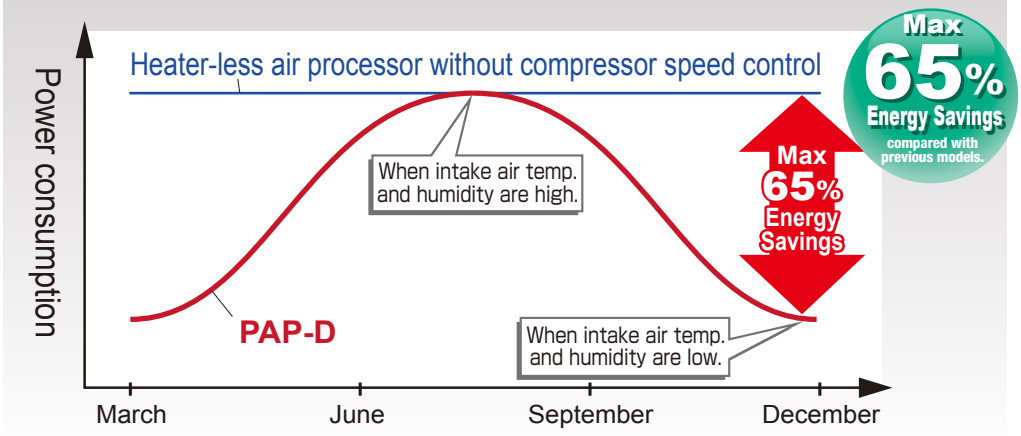
Air cooled	Water cooled
PAP03A-D	PAP03A-WD
PAP06A-D	PAP06A-WD
PAP10A-D	PAP10A-WD

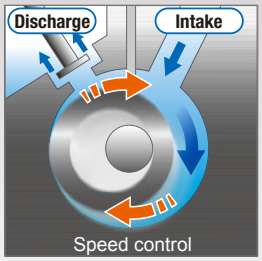
Performance examples
PAP06A-D,WD, air flow : 6m³/min
PAP03A-D,WD, air flow : 3m³/min
PAP10A-D,WD, air flow : 10m³/min

Intake air	Outlet air
30℃ / 55%	25℃ / 25% or lower
28℃ / 65%	23℃ / 28% or lower
27℃ / 70%	21℃ / 32% or lower

Of Course Heater-less! And Compressor Speed Control for **Energy Savings as much as 65%!**

Once the set humidity is attained, compressor speed control takes over for energy savings.





Low rotation speed during low load conditions.

The speed of the compressor is controlled in response to light load conditions in order to reduce unnecessary drying.

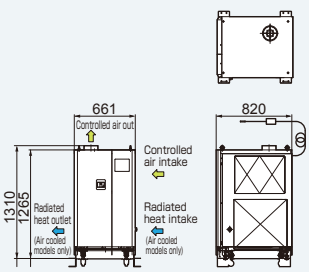
Specifications

	Model		Air cooled			Water cooled		
			PAP03A-D	PAP06A-D	PAP10A-D	PAP03A-WD	PAP06A-WD	PAP10A-WD
Performance specifications	Possible temperature and humidity setting ranges ※1	℃,%	18~30, 20~40					
	Temperature and humidity control accuracy ※2	℃,%	±0.2, ±2(Does not support humidification.)					
	Attainable control air dew point (lower limit) ※3	℃	3.5					
	Maximum cooling output ※4	kW	(3.7)	(6.6)	(10.5)	(4.1)	(6.8)	(11.0)
	Heating capacity ※5	kW	(0.3)	(0.7)	(1.1)	(0.3)	(0.7)	(1.1)
	Rated processing airflow	㎥/min	3~5	6~8	10~12	3~5	6~8	10~12
Environmental conditions	Surrounding temperature and humidity range	℃,%	17~35, 30~70					
	Temperature gradient at intake	℃/h	Within ±1					
	Humidity gradient at intake	%/h	Within ±5					
	Cooling water temperature gradient	℃/h	—			Within ±3		
	Outside dimensions (H×D×W) ※6	mm	(1310×820×661)	(1610×1150×770)	(1860×1200×990)	(1310×820×661)	(1610×1150×660)	(1860×1200×900)
	Mass	kg	(210)	(330)	(450)	(210)	(300)	(450)
	Controlled air outlet port	mm	φ150	φ200	φ200	φ150	φ200	φ200
Cooling water	Rate of supply	㎥/h	—			2.0	2.7	3.0
	Supply temperature range	℃				5~32		
	Supply pressure	MPa				0.69 or higher		
	Inlet/outlet pressure difference	MPa				0.2 or higher		
	Connection port size					Rc3/4		Rc1
Power specifications	Power source ※7	V(Hz)	Three-phase 200V ±10%, 50/60Hz					
	Power consumption ※8	kW	0.8~2.9	1.3~4.1	1.6~5.3	0.7~2.6	1.1~3.9	1.5~4.7
	Electric current ※9	A	11.3	17.2	20.2	10.7	16.6	19.6
	Power capacity ※10	kVA	4.7	6.6	7.2	4.2	6.3	6.9
	Operation control method		Heat Pump Balance Control (incorporates waste heat utilization)					
	Refrigerant		R410A					
	Compressor output		1.7	3.0	3.0	1.7	3.0	3.0

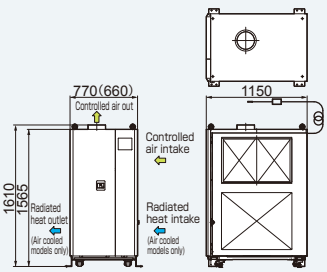
※1 The temperature and humidity control ranges noted do not necessarily indicate the actual controllable range possible. The actual controllable temperature and humidity ranges will depend on the temperature and humidity of the intake air. (This unit does not include a humidification function.) ※2 Values indicated for when intake air temp. and humidity are stable. (For water cooled models: cooling water temperature and rate of supply are stable.) Noted accuracy is based on measurement by the internal controller at a single air outlet point. **Over-dehumidification in some cases depending on operating conditions.**
※3 The attainable dew point depends on the condition of the air supplied at the intake. ※4 The stand-alone capacity of the built in evaporator. ※5 The difference in capacities between the built-in heater and evaporator. ※6 Height includes outlet port. ※7 Source voltage phase unbalance should be less than ±3%. ※8 Minimum and maximum specified values for the specified operating range.
※ 9 Maximum value within the range of unit specifications. ※10 The figure noted is when the equipment is operating at the highest capacity of its normal operating range.

External Dimensions

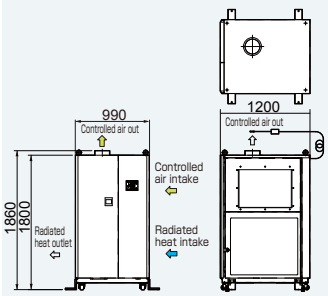
PAP03A-D PAP03A-WD



PAP06A-D PAP06A-WD（ ）寸法



PAP10A-D



PAP10A-WD