

SmoothAir RDHx

Rear Door Heat Exchanger

> > Foundation of Digital Future



Customized Efficiency

Why Work with Attom

We are experts with data center thermal management system



Quality

Products designed with heart featuring reliable quality and balanced cost to improve your business margin and performance.



Speed

A professional team always standby with service spirit and quick response to support your business agility.



Flexibility

Fully customizable as per your requirements to build your own product solution and boost your own business.

Certifications

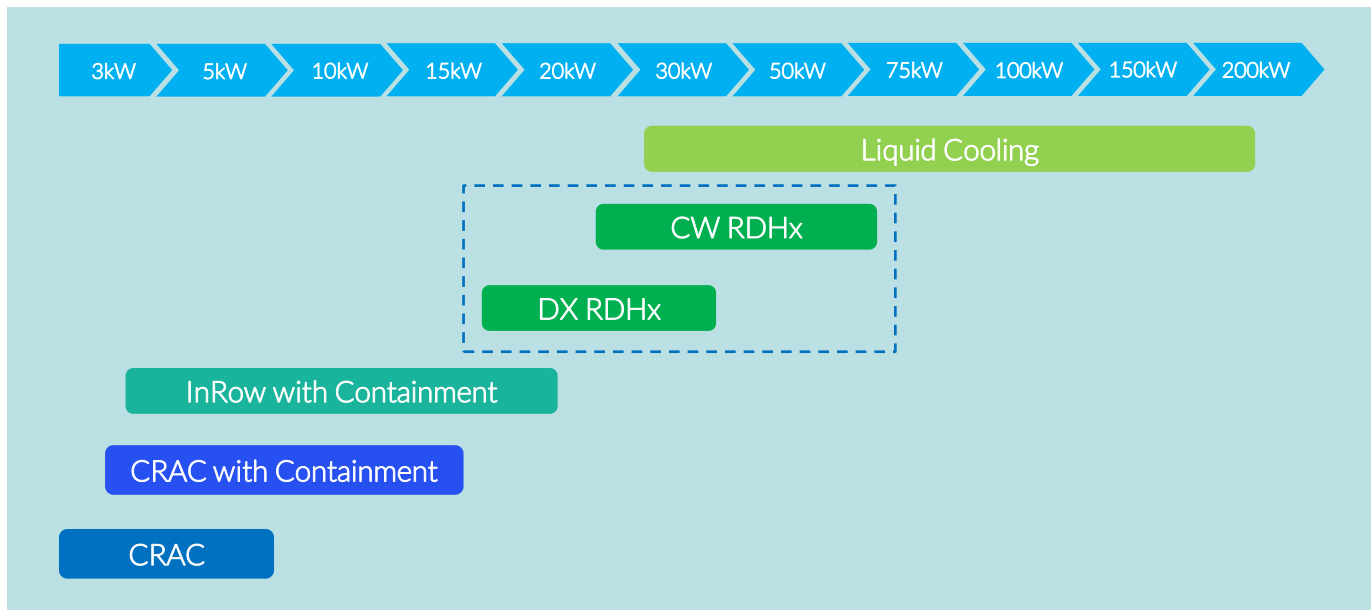


Customized Efficiency

ATTOM

SmoothAir | RDHx

As high performance computing, machine learning, and artificial intelligence starts making its way into data center environment, traditional cooling solutions struggle with rising heat density. Rear door heat exchanger provide direct server contact without equipment modification or access limitations. It's very efficient and can easily handle the typical 20 – 65kW high power density of HPC racks.



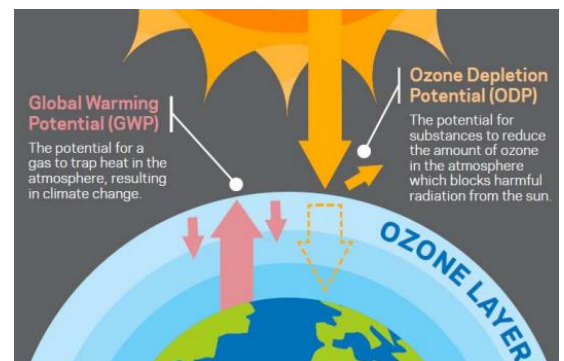
Optimized Rear Door Design

Rear door mounting brings heat removal closer to the heat source, preventing hot air from entering the room. Maximum energy efficiency thanks to high return air temperatures directly from the rack.



R513A/R134A Refrigerant

Green refrigerant R513A/R134A with lower working pressure, zero ODP(ozone depletion potential) effect, and lower GWP(global warming potential) value of 1430. Support continuous working in -40C-55C environment.



Customized Efficiency



SmoothAir | RDHx

With direct expansion system, high density cooling capacity, and smart controller system. It can be working seamlessly with HPC rack to handle AI, ML, and GPT applications.



Features and Benefits

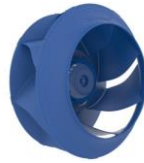
- Up to 30kW(DX)/120kW(CW) cooling capacity and optimized cooling air distribution, to ensure even cooling effects within the high density rack.
- DX based design, no need complex water loops and manifolds.
- No water leaking concern with ECO type R513A/R134A refrigerant.
- Mature smart control system can control, monitor, and access the key working status locally and remotely.
- Flexible piping design allows normal door open and normal access to server equipment from rear of rack easily.
- Seamless integration with IT rack system. Easy transportation and installation.
- Modular design supports easy expansion for future business developments.
- Top level components ensures high reliability and long working life.

Customized Efficiency



SmoothAir | RDHx DX Type

The units designed with top brands components to realize leading level reliability and efficiency.



EC Fan

EC Fan modulates airflow precisely matching heat load while saving energy by adjusting fan speed.



Smart Controller

Intelligent controller automatically monitoring and adjusting the components outputs in the optimized balance.



Electronic Expansion Valve

EEV (electronic expansion valve) precisely maintain the refrigerant flow in the efficient way reducing the compressor/pump power consumption.



Reliable Compressor

Inverter compressor adjusting capacity of whole system per heat load requirement, saving energy during part load application. Working up to 55C ambient with R134a refrigerant option.

Customized Efficiency



SmoothAir | RDHx DX Type

Technical Data



Indoor Unit	S-025DA	S-030DA
Cooling Type	DX	DX
Total Cooling-kW	25.1	31.2
SHR-%	100	100
Air Volume-m3/h	5000	6000
Mount Type	Rear Door	Rear Door
Height-mm	2000	2000
Depth-mm	380	380
Width-mm	600	800
Weight-kg	115	150
Power Input ¹⁾	208-240V/50-60Hz/1-2Ph	208-240V/50-60Hz/1-2Ph
FLA-A ¹⁾	9	9
Outdoor Unit		
Unit Model	KSF38AC	KSF42AC
Unit Qty	1	1
Power Input ¹⁾	380-415V/50-60Hz/3Ph	380-415V/50-60Hz/3Ph
FLA-A ¹⁾	21.2	26.7
Power Input ²⁾	200-230V/50-60Hz/3Ph	200-230V/50-60Hz/3Ph
FLA-A ²⁾	36.4	48.2
Power Input ³⁾	460V/60Hz/3Ph	460V/60Hz/3Ph
FLA-A ³⁾	17.5	24.1

Notes:

1. Air flow is based upon standard fan speed setting. Fan modulates per real loads.
2. Cooling Capacity based on 40°C/20%RH return air and 45°C condensing temperature.

Customized Efficiency



SmoothAir | RDHx CW Type

The units designed with top brands components to realize leading level reliability and efficiency.



EC Fan

EC Fan modulates airflow precisely matching heat load while saving energy by adjusting fan speed.



Smart Controller

Intelligent controller automatically monitoring and adjusting the components outputs in the optimized balance.



Water Valve

ball valve is easily installed with just one bolt. The actuator features a manual button for manual operation and has full-stroke automatic overload protection, eliminating the need for limit switches.

Customized Efficiency



SmoothAir | RDHx CW Type

Technical Data



Indoor Unit	S-030DC	S-045DC	S-065DC	
Cooling Type	CW	CW	CW	CW
Water Temperature inlet/outlet °C	15/20	15/20	15/20	15/20
Return Air Temp. & Humi.	40°C/20%	40°C/20%	40°C/20%	65°C/5%
Total Cooling ¹⁾ –kW	31.2	46	65.8	120
SHR-%	100	100	100	100
Air Volume-m3/h	6000	9000	11400	11400
Mount Type	Rear Door	Rear Door	Rear Door	Rear Door
Height-mm	2000	2000	2000	2000
Depth-mm	310	310	310	310
Width-mm	600	600	600	600
Weight-kg	120	150	180	180
Reheat-kW	-	-	-	-
Hum.(optional)-kg/h	-	-	-	-
Power Input ¹⁾	208-240V/50-60Hz/1-2Ph	208-240V/50-60Hz/1-2Ph	208-240V/50-60Hz/1-2Ph	208-240V/50-60Hz/1-2Ph
FLA-A	11.8	13.9	19.5	19.5

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One-stop Provider of Precision Cooling

Air Cool Platform



Rack Cool

- 3.9- 12kW Split type
- 3.5-5.5kW Package Type



Ceiling Cool

- 12- 36kW Split Type



Wall Cool

- 1.5- 30kW Package Type



Row Cool

- 5.6- 90kW Split Type
- 5.6 – 10.8kW Package Type



Room Cool

- 5.5- 120kW Split DX Type
- 24 – 260 kW CW Type

Liquid Cool Platform



Direct-to-Chip Liquid Cool

- 100kW CDU Rack Mount Type
- 350 – 1500kW CDU Row Mount Type, dry cooler, and water connection kits.



RDHx

- 25-30kW Split DX Type
- 30 – 120 kW CW Type



Immersion Liquid Cool

- 10kW – 2MW immersion cooling tanks, dry coolers and water connection kits.

Efficiency Prefabricated.



We believe the world is
being totally connected.
The digital connections are
creating smart intelligence
and a better future.

We design and deliver
green efficient data
center infrastructure
products to build
foundation of digital
future.



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