

# SmoothAir RDx

## Rear Door Heat Exchanger

>> Foundation of Digital Future



**ATOM**

Customized Efficiency

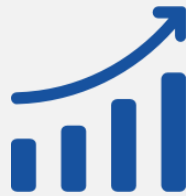
# Why Work with Attom

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

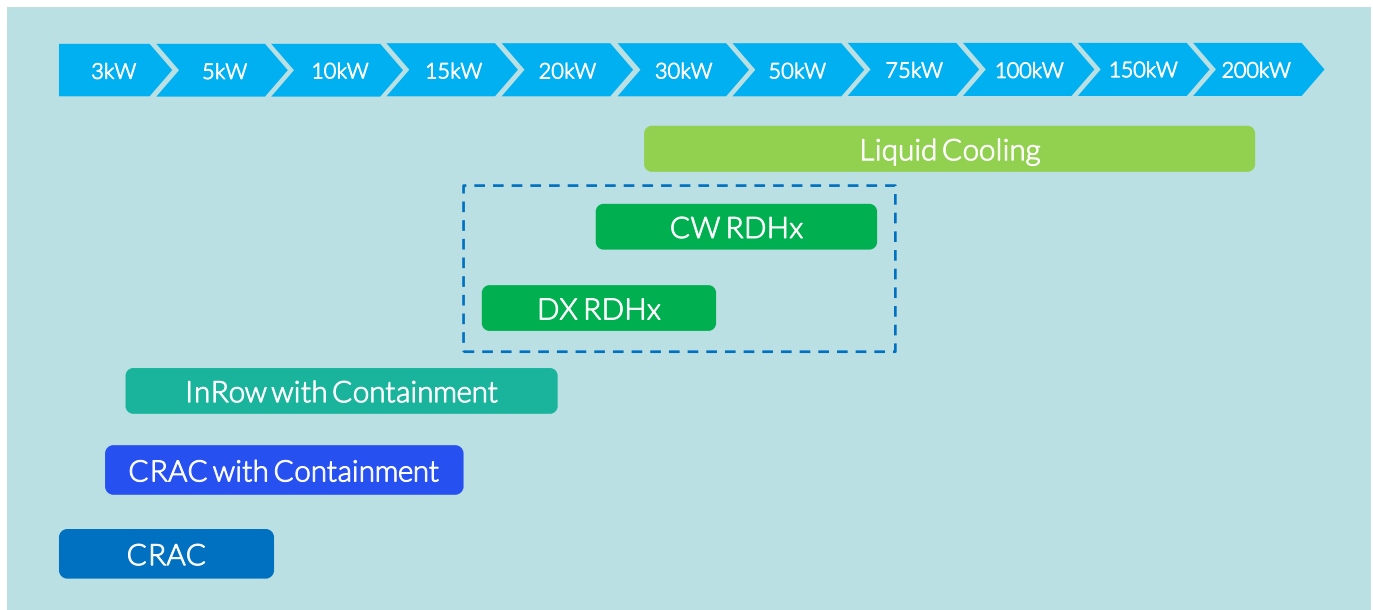


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# SmoothAir | Rear Door HEX

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.



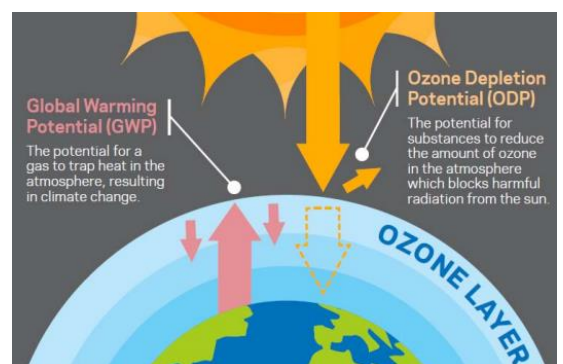
## Optimized Rear Door Design

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.



## R134A Refrigerant

Green refrigerant 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.



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# SmoothAir | Rear Door HEX

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

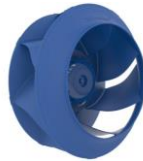
- Up to 30kW(DX)/65kW(CW) cooling capacity and optimized cooling air distribution, to ensure even cooling effects within the high density rack.
- DX based design, no need complex water loops and manifolds.
- No water leaking concern with ECO type R134a refrigerant.
- Mature smart control system can control, 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.

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# SmoothAir | Rear Door HEX

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.

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# SmoothAir | Rear Door HEX DX Type

## Technical Data



Indoor Unit	S-020DA	S-030DA
Cooling Type	<b>DX</b>	<b>DX</b>
Total Cooling-kW	21.2	31.1
SHR-%	100	100
Air Volume-m3/h	4920	5800
Mount Type	Rear Door	Rear Door
Height-mm	2000	2000
Depth-mm	380	380
Width-mm	600	600
Weight-kg	115	140
Reheat-kW	6.0	6.0
Hum.(optional)-kg/h	1.5	3.0
Power Input <sup>1)</sup>	380-415V/50-60Hz/3Ph	380-415V/50-60Hz/3Ph
FLA-A <sup>1)</sup> with heating	26.7	34.6
FLA-A <sup>1)</sup> with hum.	31.8	39.7
Power Input <sup>2)</sup>	200-230V/50-60Hz/3Ph	200-230V/50-60Hz/3Ph
FLA-A <sup>2)</sup> with heating	48.8	63.2
FLA-A <sup>2)</sup> with hum.	52.0	66.4
Power Input <sup>3)</sup>	460V/60Hz/3Ph	460V/60Hz/3Ph
FLA-A <sup>3)</sup> with heating	22.1	28.6
FLA-A <sup>3)</sup> with hum.	26.3	32.8
Standard Outdoor		
Unit Model	KSF32AC	KSF42AC
Unit Qty	1	1

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# SmoothAir | Rear Door HEX CW Type

## Technical Data



Indoor Unit	S-025DC	S-045DC	S-065DC
Cooling Type	<b>CW</b>	<b>CW</b>	<b>CW</b>
Water Temperature inlet/outlet °C	13/18	13/18	13/18
Total Cooling-kW (37°C/24% Return Air)	28.9	46	65.8
SHR-%	100	100	100
Air Volume-m3/h	4800	9000	11400
Mount Type	Rear Door	Rear Door	Rear Door
Height-mm	2000	2000	2000
Depth-mm	380	380	380
Width-mm	600	600	600
Weight-kg	120	230	240
Reheat-kW	6.0	6.0	6.0
Hum.(optional)-kg/h	1.5	1.5	3.0
Power Input <sup>1)</sup>	208-240V/50-60Hz/1-2Ph	380-415V/50-60Hz/3Ph	380-415V/50-60Hz/3Ph
FLA-A <sup>1)</sup> with heating	22.7	13.7	16
FLA-A <sup>1)</sup> with hum.	27.8	18.8	26.1
Power Input <sup>2)</sup>	-	200-230V/50-60Hz/3Ph	200-230V/50-60Hz/3Ph
FLA-A <sup>2)</sup> with heating	-	25.1	29.2
FLA-A <sup>2)</sup> with hum.	-	28.1	35.5
Power Input <sup>3)</sup>	-	460V/60Hz/3Ph	460V/60Hz/3Ph
FLA-A <sup>3)</sup> with heating	-	11.3	13.2
FLA-A <sup>3)</sup> with hum.	-	15.5	21.5

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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 – 10.6kW Package Type

### Room Cool

- 5.5- 120kW Split DX Type
- 26 – 280 kW CW Type

## Liquid Cool Platform



### RDx

- 20- 30kW Split DX Type
- 25 – 65 kW CW Type

### Immersion Liquid Cool

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

### Cold-plate Liquid Cool

- 50kW – 350kW CDU, dry cooler, and water connection kits.

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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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