



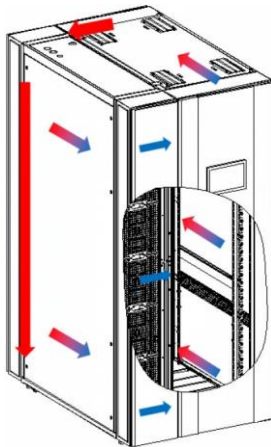
# Row Based Precision Cooling

The professional cooling solutions for you to build highly Reliable,  
Efficient and Green Data Center.



**EDGEWORKS**

# Row Cooling DX



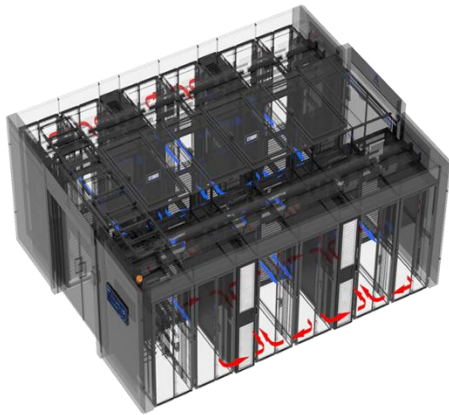
Air cooled, row mount, split type, ideal for micro data centre, integrated modular data center solutions.

**5.6kW -90.1 kW**  
**300/600/900mm Width**

- 1** Dynamically modulated cooling capacity with inverter compressor maintains temperature within envelop and prevent compressor from cycling during low heat load period.
- 2** Air flow modulates with EC fans to match IT equipment requirements. Each fan module is easy to change with quick couple connections.
- 3** Precision cooling controller monitors and protects unit constantly. Easy to be integrated into BMS to display, control and manage the system.
- 4** R410A green refrigerant is highly efficient and no ODP.
- 5** Copper piping adopts quick connections and supports bottom and top connections.
- 6** Easy to change G4 air filter and sealed doors help to build a clean and quiet MDC.
- 7** Slide drawer style electric box makes service easier.
- 8** Optional with condensate pump, leaking kit and long piping kit for diverse applications.



# Row Cooling DX



## Sustainable Energy Efficiency

- Top components from leading brands and unique design assure high reliability of products
- Available in multi size and seamlessly fitting into the IT rack system, you can make the most of your valuable real estate while ensuring efficient cooling
- Inverter compressor and EC fan with intelligent control system ensure precise temperature control
- Indirect Free Cooling with Refrigerant Pump Technology for minimizing the energy consumption of the Inrow cooling system

## Green Efficiency Free Cool

- Indirect free cooling with refrigerant pump technology, PUE low to 1.2
- No water consumption during free cooling mode
- No water loop introduced into server room, no flooding concern
- Indirect type No dust, moisture concern
- Automatic mode switching, and no complex maintenance and service



## Intelligent Control System

- Industry leading smart control system, with insightful sensor data and intelligent control logics
- All digital control to major components, maintaining optimum working status, and flexible adjustment per onsite working conditions
- 1000+ alarm records, and 7days history pressure curve records, 7days history temperature curve records
- Smart monitoring protocols: Web/SNMP/Modbus/Bac-net/Email/Dry contact/IPV6
- Teamwork function including Master/Slave Working mode, Master Control mode and Force Working mode
- Built in web server support visit with web-browser from computers and mobile devices, can view ,control unit through web



# Row Cooling DX



Technical Data												
Indoor Unit	S-005RAY	S-007RAY	S-012RAY	S-017RAY	S-020RAY	S-025RAY	S-030RAY	S-040RAY	S-050RAY	S-065RAY	S-075RAY	S-090RAY
Total Cooling-kW	5.6	7.6	12.8	17.6	21.2	25.1	31.1	40.9	51.2	65.7	76.8	90.1
SHR-%	100	100	100	100	100	100	100	100	100	100	100	100
Air Volume-m <sup>3</sup> /h	2000	2250	2400	4500	4920	5000	5800	8000	10000	12000	13500	16000
Mount Type	Row	Row	Row	Row	Row	Row	Row	Row	Row	Row	Row	Row
Cooling Type	DX	DX	DX	DX	DX	DX	DX	DX	DX	DX	DX	DX
Height-mm	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Depth-mm	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
Width-mm	300	300	300	300	300	300	300	600	600	600	900	900
Weight-kg	210	213	233	253	258	260	320	360	420	460	540	620
Reheat-kW	3.0	3.0	3.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Hum. (optional)-kg/h	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Power Input 1)	208-240V /50-60Hz/ 1Ph-2Ph	208-240V /50-60Hz/ 1Ph-2Ph	208-240V /50-60Hz/ 1Ph-2Ph	380-415V /50-60Hz/ 3Ph	380-415V /50-60Hz/ 3Ph	380-415V /50-60Hz/ 3Ph	380-415V /50-60Hz/ 3Ph	380-415V /50-60Hz/ 3Ph	380-415V /50-60Hz/ 3Ph	380-415V /50-60Hz/ 3Ph	380-415V /50-60Hz/ 3Ph	380-415V /50-60Hz/ 3Ph
FLA-A 1) with heating	28.2	37.3	48.7	27.0	26.7	27.9	34.6	37.7	48.1	60.6	70.8	84.6
FLA-A 1) with hum.	33.3	42.4	53.8	32.1	31.8	33.0	39.7	47.9	58.3	70.8	81.0	94.8
Power Input 2)	-	-	-	208V /50-60Hz/ 3Ph	208V /50-60Hz/ 3Ph	208V /50-60Hz/ 3Ph	208V /50-60Hz/ 3Ph	208V /50-60Hz/ 3Ph	-	-	-	-
FLA-A 2) with heating.	-	-	-	49.4	48.8	51.1	63.2	68.9	-	-	-	-
FLA-A 2) with hum.	-	-	-	52.5	52.0	54.2	66.4	75.1	-	-	-	-
Power Input 3)	-	-	-	460V/ 60Hz /3Ph	460V/ 60Hz /3Ph	460V/ 60Hz /3Ph	460V/ 60Hz /3Ph	460V/ 60Hz /3Ph	460V/ 60Hz /3Ph	460V/ 60Hz /3Ph	460V/ 60Hz /3Ph	460V/ 60Hz /3Ph
FLA-A 3) with heating	-	-	-	22.3	22.1	23.1	28.6	31.1	39.7	50.1	58.5	69.9
FLA-A 3) with hum.	-	-	-	26.5	26.3	27.3	32.8	39.6	48.3	58.6	66.9	78.4
Standard Outdoor												
Unit Model	KSF08AN	KSF12AN	KSF18AN	KSF24AN	KSF32AN	KSF38AN	KSF42AN	KSF52AN	KSF62AN	KSF85AN	KSF52AN	KSF62AN
UnitQty	1	1	1	1	1	1	1	1	1	1	1	1

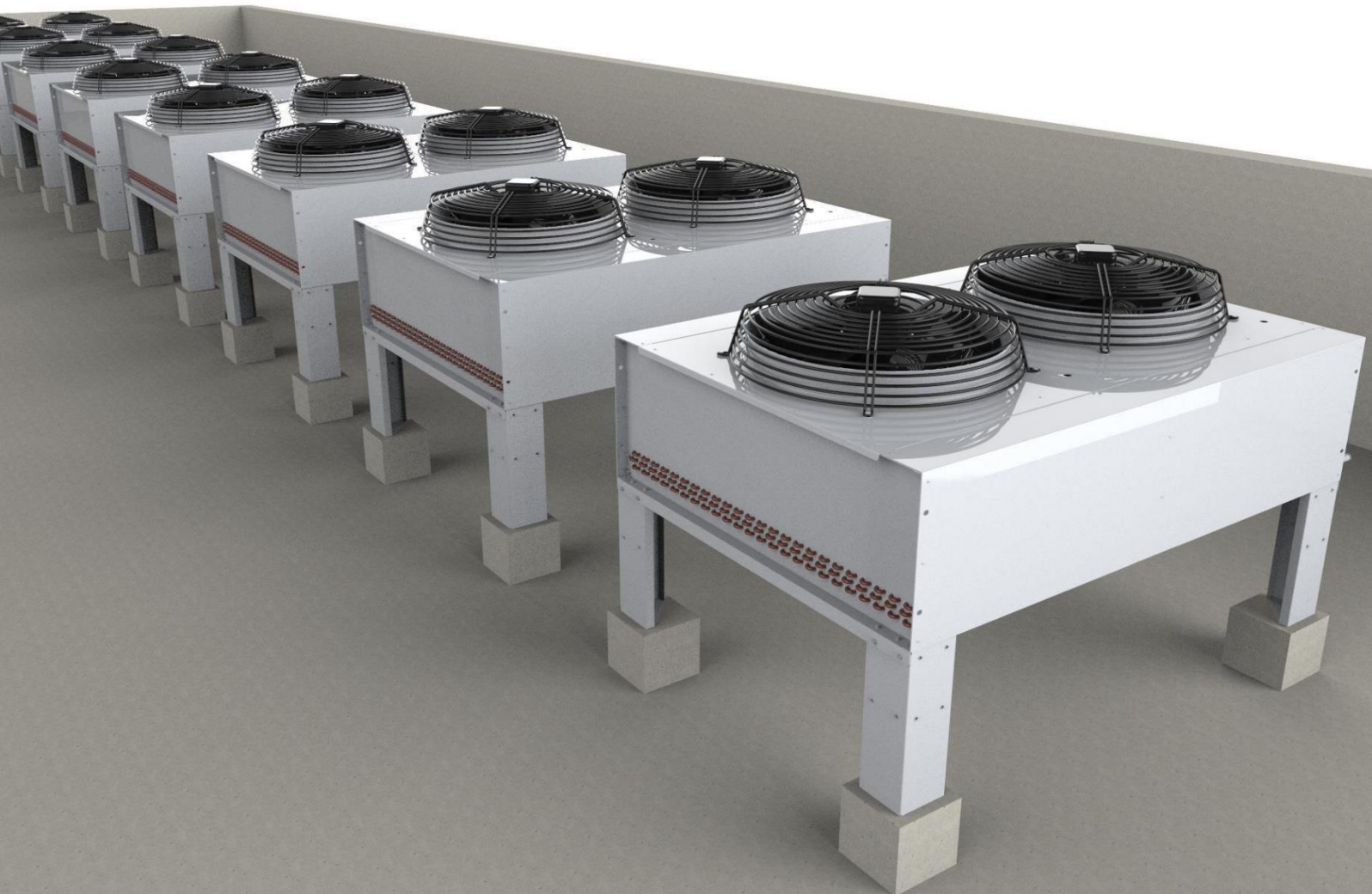
## Notes:

1. Air flow is based upon standard fan speed setting. Fan modulates per real loads.
2. Cooling Capacity based on 37°C/24%RH return air and 45°C condensing temperature.
3. FLA of indoor unit includes FLA of outdoor unit, and outdoor unit power connected from indoor unit.
4. SNMP monitoring port, dual power input, and leaking detection are optional.
5. Standard unit works -15°C above outdoor temperature, select low temperature kit to run for -35°C outdoor ambient temperature.



# Air Cooled Condenser

---

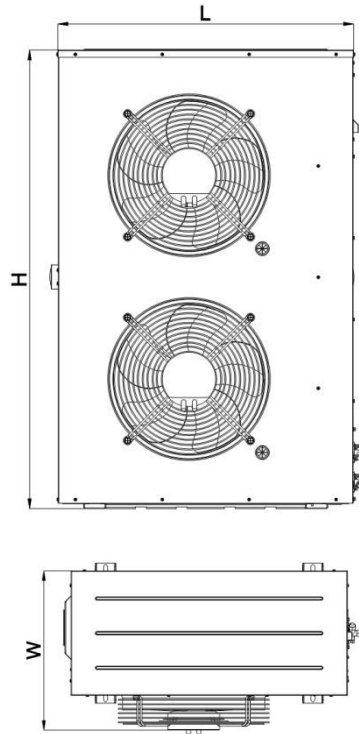


## Key Configurations

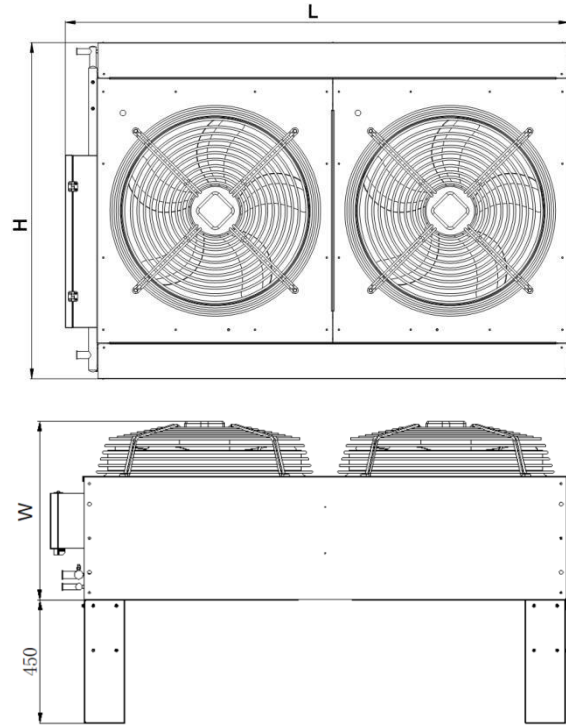
- EC Fan Stepless Speed Adjusting
- Standard Quick Connector
- Efficient Finned with Heat Transfer Enhancement
- Inverter Driven Fan Stepless Speed Adjusting
- High-quality Anti-corrosion Coating
- Protective Structure for Piping Headers
- IP55 Waterproof
- Internally Threaded Piping



# Air Cooled Condenser



KSF08 - KSF18



KSF24 - KDF85

## Technical Data

Model	KSF08 AN	KSF12 AN	KSF18 AN	KSF24 AN	KSF32 AN	KSF38 AN	KSF42 AN	KSF52 AN	KSF62 AN	KSF70 AN	KSF76 AN	KSF85 AN	KSF62 AN	KSF70 AN	KSF76 AN	KSF85 AN
Single/ Dual System	Single	Single	Single	Single	Single	Single	Single	Single	Single	Single	Single	Single	Dual	Dual	Dual	Dual;
Weight -kg	28	40	67	105	110	120	130	140	150	150	220	230	160	160	220	220
Depth - mm	420	420	420	990	990	1273	1273	1273	1273	1273	1273	1273	1273	1273	1273	1273
Width - mm	800	800	800	1407	1407	1407	1607	1607	1907	1907	2407	2407	2407	2407	2407	2407
Height - mm	790	790	1240	689	689	695	695	695	689	689	695	695	689	689	695	695
Leg Height	-	-	-	450	450	450	450	450	450	450	450	450	450	450	450	450
Power Input <sup>1)</sup>	208- 240V /50- 60Hz/ 1P 2P	208- 240V /50- 60Hz/ 1P 2P	208- 240V /50- 60Hz/ 1P 2P	380- 415V /50- 60Hz/ 3Ph	380- 415V /50- 60Hz/ 3Ph	380- 415V /50- 60Hz/ 3Ph	380- 415V /50- 60Hz/ 3Ph	380- 415V /50- 60Hz/ 3Ph	380- 415V /50- 60Hz/ 3Ph	380- 415V /50- 60Hz/ 3Ph	380- 415V /50- 60Hz/ 3Ph	380- 415V /50- 60Hz/ 3Ph	380- 415V /50- 60Hz/ 3Ph	380- 415V /50- 60Hz/ 3Ph	380- 415V /50- 60Hz/ 3Ph	380- 415V /50- 60Hz/ 3Ph
FLA-A <sup>1)</sup>	1.5	1.5	3.0	2.0	2.0	2.8	2.8	2.8	4.0	4.0	5.6	5.6	4.0	4.0	5.6	5.6
Power Input <sup>2)</sup>	-	-	-	460V /50- 60Hz/ 3Ph	460V /50- 60Hz/ 3Ph	460V /50- 60Hz/ 3Ph	460V /50- 60Hz/ 3Ph	460V /50- 60Hz/ 3Ph	460V /50- 60Hz/ 3Ph	460V /50- 60Hz/ 3Ph	460V /50- 60Hz/ 3Ph	460V /50- 60Hz/ 3Ph	460V /50- 60Hz/ 3Ph	460V /50- 60Hz/ 3Ph	460V /50- 60Hz/ 3Ph	460V /50- 60Hz/ 3Ph
FLA-A <sup>2)</sup>	-	-	-	1.7	1.7	2.4	2.4	2.4	3.3	3.3	4.8	4.8	3.3	3.3	4.8	4.8
Piping Conne- ction	10/12	10/12	12/16	16/22	16/22	16/22	16/22	22/28	22/28	22/28	22/28	22/28	22/28	22/28	22/28	22/28

### Notes:

1. KSF08-KSF18 is vertical installation;
2. KSF24 and above is horizontal/vertical adaptive

