

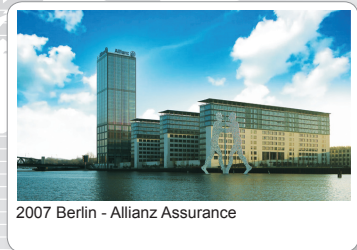
EKCU Precision Air Conditioners for Equipment Rooms



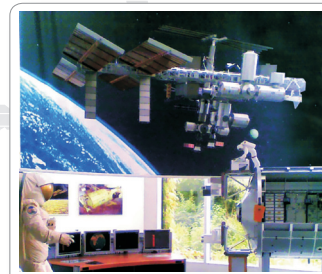
***EUROKLIMAT Air Conditioner,
 Environmental & Energy-saving Technology from Europe.***

EUROKLIMAT (EK) was established in 1963 in Italy. For the past half a century, it has become famous as an energy-saving air-conditioning manufacturer in Italy and globally. Continuous innovation, new product development and top manufacturing quality are the driving force behind this growth.

EUROKLIMAT (EK) pursues the ideals of protecting the environment, providing physical comfort and adopting energy-saving into the whole process of product R&D, manufacturing and service. Our products covering residential, commercial and close control air-conditioner are manufactured according to the global generally accepted standards.



2007 Berlin - Allianz Assurance



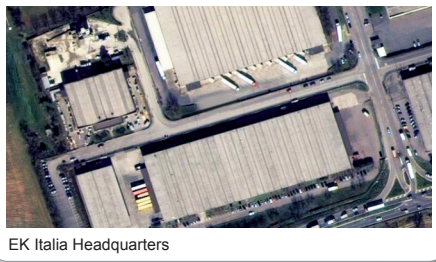
2006-2007 Munich - DLR Aerospace Industry



2006-2007 Helsinki- Nokia R&D Centers Worldwide Headquarters

			
ISO9001: 2008 corporate certification	ISO14001: 2004 Environmental management system certification	Product Manufacturing License (XK06-015-00361)	CNAS L5123 State-certified Lab





EK Italia Headquarters



2011 Yunnan Chihong Zn&Ge Co., Ltd.



2011 Shandong Binzhou Social Insurance Bureau



2011 Far East Cable (Wuxi) Co., Ltd.



Nanjing Autoliv Co., Ltd.



EUROKLIMAT - Trustworthy Expert of Precision Air Conditioners for Equipment Rooms!

As network services increase, the loss of each service interruption gets ever more greater, and more attention and support are required to building infrastructure that can ensure the reliable running of various equipment.

Established in 1963, EUROKLIMAT is the first company that started the R&D and provision of precision air conditioning solutions for equipment rooms in Europe. Based on lead-edge R&D and design platforms and more than 40 years of R&D experience and engineering design concepts, the company provides the most advanced and reliable precision air conditioners for equipment rooms in the industry.

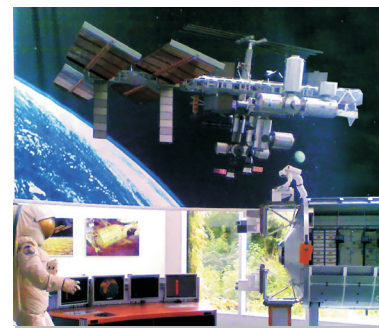
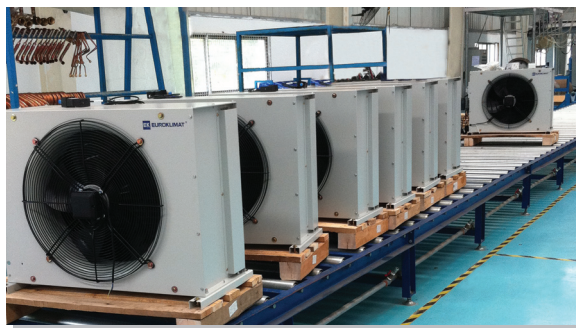
Now, precision air conditioners manufactured by EK has been successfully deployed for international name brands such as Nokia Allianz Insurance, DHL, and European space industry. EK China has introduced the most advanced product design, R&D and manufacturing technologies, and provides quality products and the most suitable air conditioning solutions for crucial environments such as program-controlled mobile switch equipment rooms, charging centers, and data centers.



In 1963, EUROKLIMAT was founded in Italy.
 In 1968, EUROKLIMAT grew into the leading brand of precision air conditioners in Italy.
 In 1975, EUROKLIMAT started manufacturing precision air conditioners for special industries.
 In 2004, EUROKLIMAT deployed air conditioning solutions for the data center of Allianz Insurance.
 In 2006, EKC series precision air conditioners were successfully deployed for the global R&D center of Nokia.
 In 2007, EUROKLIMAT cooperated with the European Space Agency to develop special air conditioning equipment for the space industry, and the products were successfully deployed for German Aerospace Center.
 In 2009, the China R&D center introduced leading-edge precision air conditioning technologies, and started providing a full series of precision air conditioning products.

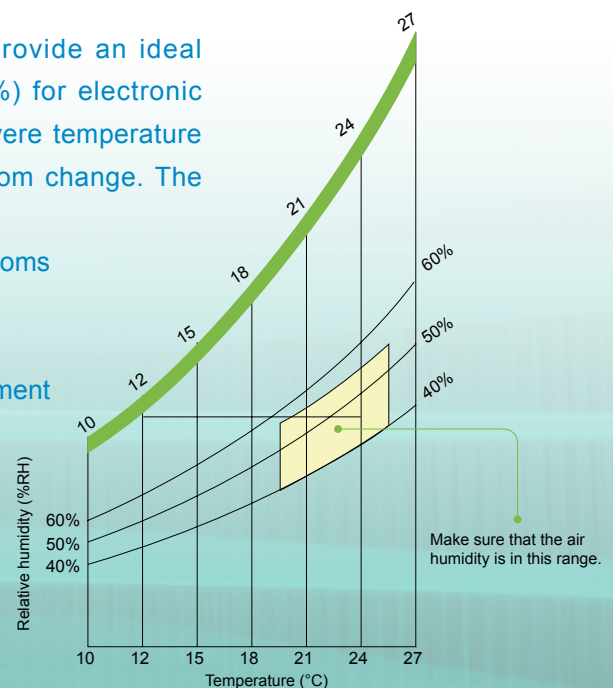


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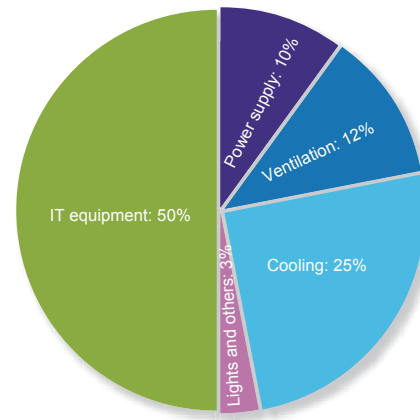
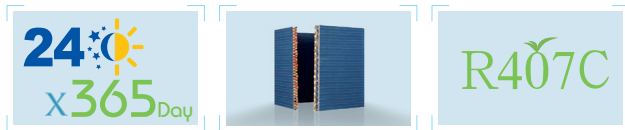
EKC series precision air conditioners are designed to provide an ideal environment temperature (20-25°C) and humidity (40%-55%) for electronic devices that produce a high sensible heat, and can avoid severe temperature fluctuations when the working conditions of an equipment room change. The products are widely used in the following scenarios:

- Integrated data centers (IDC) and communication equipment rooms
- Medium and large sized computer equipment rooms
- UPS and battery rooms
- Industrial manufacturing plants and precision processing equipment
- Precision labs and test rooms

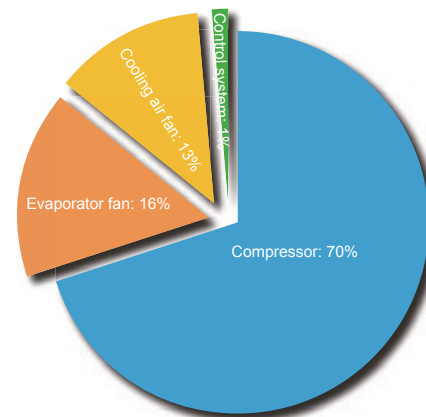


More Energy Saving

- Each component of the EKC series precision air conditioners for equipment rooms is carefully designed, manufactured and tested to ensure the performance of the whole unit.
- The unit features name-brand scroll compressors and centrifugal fans and can work around the clock. Controllers with microprocessors can precisely determine the operation requirements to ensure high efficiency and low energy consumption.
- The adjustable humidifier responds quickly to provide a constant humidity with a low moisture.
- An leading-edge heat-exchanger provides a large heat exchanging area to ensure high heat exchanging efficiency.
- The full series of units features environment-friendly refrigerant and high performances.

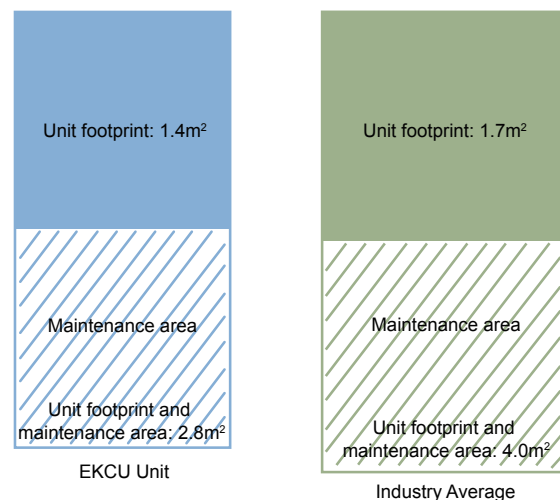


Data centers have large equipment with a high sensible heat. The cooling system consumes about 35%-45% of the total energy consumption of a data center. Therefore, it is crucial for customers to select the right cooling solution for their data centers.



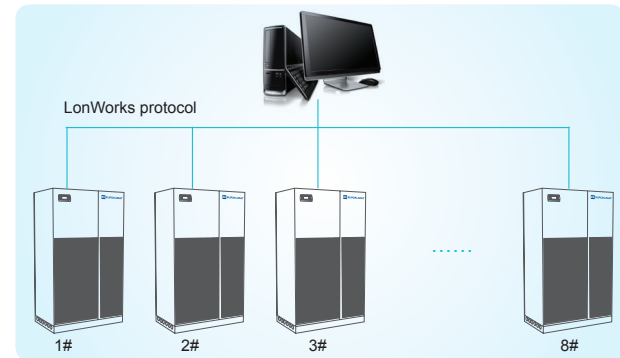
Saving Space

- EKC series air conditioners for equipment rooms feature compact structures and small footprints to save equipment room space and provide the best return for your space investment.
- All components can be serviced at the front, thus saving the maintenance space.
- Air-cooled units feature a split-type air-cooled condenser. The outdoor unit can be installed outdoor to save indoor space usage.



Smart Control

- The units support the general LonWorks protocol to enable multiple units to be remotely controlled in groups.
- A controller with a microprocessor monitors the operation status and time of the system in real time, and turns on/off air conditioning units based on the actual cooling requirement.
- The controller can prevent competing operation modes, such as cooling + heating and dehumidifying + humidifying.
- The unit features smog and fire sensors that can trigger alarms to ensure the security of the system.
- The unit complies with the ICE204-1/EN602041 wiring specifications, provides all-round protections for the compressor and indoor unit, and provides a primary isolation security switch for lock of the conjunction box.
- A maximum of 8 units can be flexibly grouped to back up each other and ensure the high reliability and performance of the air conditioning system.



Reliable and Stable

- EKC series units feature leading-edge reliable designs and quality components to ensure the reliability of the system.
- Parts are strictly certified and have high quality.
- A smart controller automatically balances the wear and tear of components to ensure the longevity of the whole unit.
- A high/low pressure switch, discharge air temperature protector, and external-balanced heat expansion valve are provided to ensure the reliability and precision of the system.
- The unit features automatic expert self diagnosis and fault alarm functions.
- A dedicated drain pan made of stainless steel and shaped using quality cold-rolling stainless steel sheets features an elegant exterior, and prevents corrosion, condensate water and fire.
- A standard configuration provides a grid-protected washable air filter with an aluminum alloy structure that has a high strength and is corrosion proof. A G3 filter or net-shaped electronic air filter is optional.



Flexible Air Supply

- EKC series precision air conditioners for equipment rooms support multiple types of air supply modes and heat/cold sources to meet different customer requirements.

Heat/cold Source

- AX water-cooled
- BX air-cooled
- CW chilled water



Upward air supply
Used for air supply through a wind cowl or air duct



Downward air supply
Used for air supply towards the floor

Nomenclature of Indoor Unit

EKCU 32 A H 0 BX C T - F AA
 1 2 3 4 5 6 7 8 9 10

- 1. E K C U EK precision air conditioners for equipment rooms
- 2. 3 2 Product code: 08,12,14,20...
- 3. A Design serial No.: A: Processing Type
- 4. H Functional type: H: constant temperature and humidity; omitted in cooling-only units
- 5. 0 Refrigerant code: 0: R407C 1: R410A
- 6. B X Unit model: AX: water cooled; BX: air cooled; CW: cold water
- 7. C Dimension code: As, A, Bs, B, C, D, E, F
- 8. T Air supply direction: T: top; U: under
- 9. F Power supply: A: 220V~/50Hz; F: 380V/3N ~ /50Hz
- 10. A A Detailed description on product specification changes

Nomenclature of Outdoor Unit

EKCU 04 A 0 ST CT - A AA
 1 2 3 4 5 6 7 8

- 1. E K C U EK precision air conditioners for equipment rooms
- 2. 0 4 Unit code: 04, 05, 08, 10, 12...
- 3. A Design serial No.: A, B
- 4. 0 Refrigerant code: 0: R407C 1: R410A
- 5. S T Functional type: ST: standard
- 6. C T Unit model: CT: Outdoor unit
- 7. A Power supply: A 220~240V/50Hz
- 8. A A Detailed description on product specification changes

Specifications for Indoor Unit (BX Air Cooled)



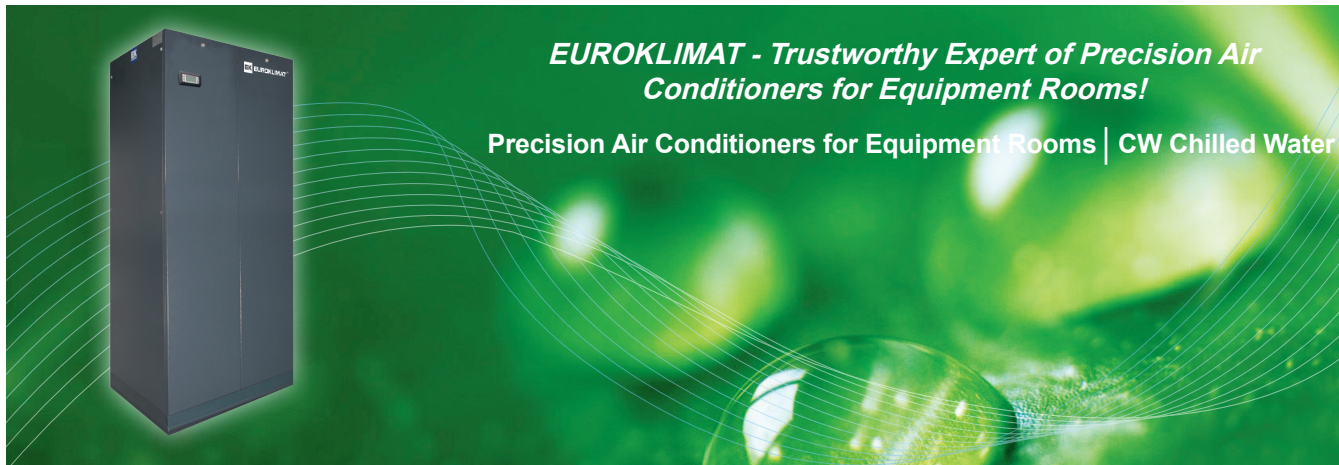
		08 As	12 A	14 A	20 B	24 B	29 C	32 C
BX air-cooled								
Cooling capacity	kW	7.6	11.8	14.1	20.1	24.4	28.5	32.2
Sensible cooling capacity	kW	6.8	10.6	12.7	18.1	22	25.9	29.3
Power supply	-	380V/3N~/50Hz						
Number of compressors/circuits	No.	1/1	1/1	1/1	1/1	1/1	1/1	1/1
Cooling input power	kW	3.04	4.72	5.64	7.18	8.44	9.90	11.18
Cooling operation current	A	5.8	9.1	10.8	13.8	16.2	19.0	21.5
Air flow	m ³ /h	2300	3300	3300	5600	5600	8200	8200
External static pressure	Pa	50	50	80	80	80	100	100
Gas pipe connector size	mm	1xø15.88	1xø15.88	1xø15.88	1xø22.23	1xø22.23	1xø22.23	1xø22.23
Liquid pipe connector size	mm	1xø12.7	1xø12.7	1xø12.7	1xø15.88	1xø15.88	1xø15.88	1xø15.88
Connecting mode of indoor/outdoor units	-	(bell-mouthed) screw connection			(bell-mouthed) screw connection + welding			
Refrigerant	-	R407C						
Dia. of drain pipe for condensate water	mm	Φ22 (steel tube)						
Electric heater	kW	3	6	6	6	6	9	9
Humidifier	kg/h	8	8	8	8	8	8	8
Standard grouping mode condenser CT	-	04 ST	05 ST	05 ST	08 ST	08 ST	12 ST	12 ST
Operating weight	kg	175	200	210	320	340	410	415

		35 D	39 D	43 D	51 E	58 E	61 F
BX air-cooled							
Cooling capacity	kW	35	39.2	43.1	50.6	58.3	60.7
Sensible cooling capacity	kW	31.5	35.3	38.8	45.5	52.5	54.6
Power supply	-	-					
Number of compressors/circuits	No.	2/2	2/2	2/2	2/2	2/2	2/2
Cooling input power	kW	12.15	14.25	15.96	18.07	21.20	22.48
Cooling operation current	A	23.4	27.4	30.7	34.8	40.8	43.2
Air flow	m ³ /h	10500	10500	10500	14000	14000	16000
External static pressure	Pa	100	100	100	150	150	150
Gas pipe connector size	mm	2xø22.23	2xø22.23	2xø22.23	2xø22.23	2xø22.23	2xø22.23
Liquid pipe connector size	mm	2xø15.88	2xø15.88	2xø15.88	2xø15.88	2xø15.88	2xø15.88
Connecting mode of indoor/outdoor units	-	(bell-mouthed) screw connection + welding					
Refrigerant	-	R407C					
Dia. of drain pipe for condensate water	mm	Φ22 (steel tube)					
Electric heater	kW	12	12	12	18	18	18
Humidifier	kg/h	8	8	8	8	8	15
Standard grouping mode condenser CT	-	2x05 ST	2x05 ST	2x08 ST	2x10 ST	2x12 ST	2x12 ST
Operating weight	kg	500	520	530	700	720	950

Note:

1. The preceding cooling capacities are measured in working conditions where the indoor air inlet dry/wet bulb temperatures are 24°C/17°C and inlet air dry bulb temperature for the outdoor unit is 35°C.
2. Specifications of the electric heater and humidifier are customizable. For details, please contact the EK technical service personnel.
3. A condensate water drain hose with an internal diameter of Φ22.5 is provided as a default component.
4. For diameters of the water supply and drainage pipes of the electrode humidifier, see the user manual.

Specifications for Indoor Unit (CW Chilled Water)



CW cold water		08 As	11 A	14 Bs	20 B	27 C	35 D	47 D	53 E	63 E	78 F
Cooling capacity	kW	7.6	10.9	14.3	19.6	27.4	34.9	47	53.1	63.4	78.3
Sensible cooling capacity	kW	6.6	9.5	12.4	17.1	23.8	30.4	40.9	46.2	55.2	68.1
Power supply		220V~/50Hz				380V/3N~/50Hz					
Air flow	m ³ /h	2300	3300	4200	5600	8200	10500	14000	19000	19000	23400
External static pressure	Pa	50	50	80	80	80	100	100	150	150	150
Qty. of Fans	No.	1	1	1	2	2	3	3	4	4	4
Input power of indoor fan	kW	0.8	1.1	1.5	1.5	3.0	3.1	6.0	11.4	11.8	12.2
Working current of indoor fan	A	8.38	11.41	3.0	3.1	6.1	5.9	11.4	21.7	22.4	23.2
Water flow	m ³ /h	1.3	1.9	2.5	3.4	4.7	6.0	8.1	9.1	10.9	13.4
Electric heater	kW	3	6	6	6	9	12	12	18	18	18
Humidifier	kg/h	3*	3*	8	8	8	8	8	8	8	15
Operating weight	kg	150	175	235	275	300	425	440	550	570	750
Water pipe connector size	inch	3/4	3/4	1	1	1 1/4	1 1/2	1 1/2	1 1/2	2	2

Note:

1. The preceding cooling capacities are measured in working conditions where the indoor air inlet dry/wet bulb temperatures are 24°C/17°C and inlet/out cooling water temperatures are 7°C/12°C.
2. Specifications of the electric heater and humidifier are customizable. For details, please contact the EK technical service personnel.
3. A condensate water drain hose with an internal diameter of Φ22.5 is provided as a default component.
4. For diameters of the water supply and drainage pipes of the electrode humidifier, see the user manual.
5. The 3* kg/h humidifier is not washable

Specifications for Indoor Unit (AX Water Cooled)



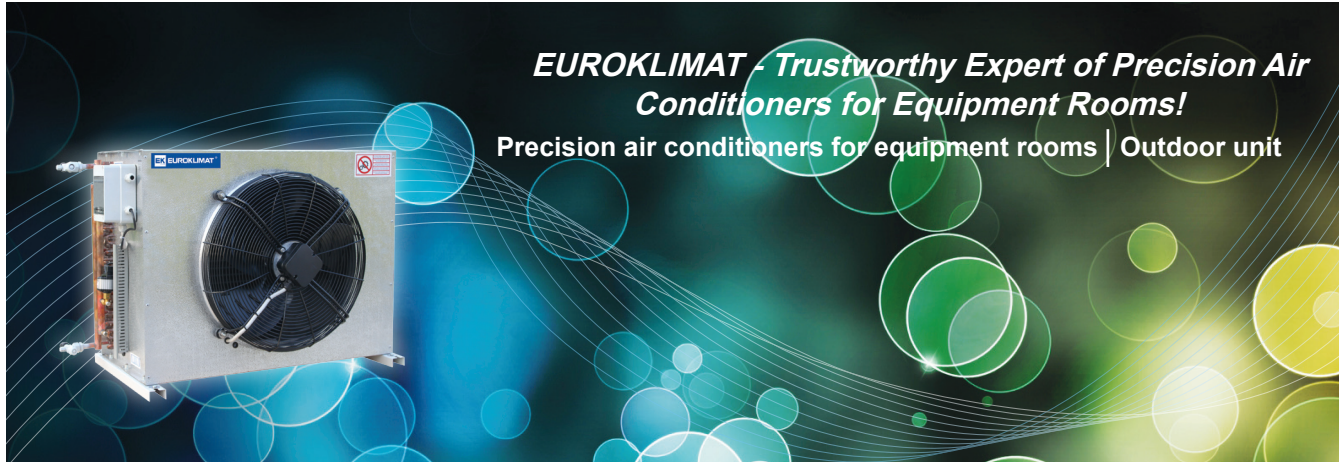
AX water-cooled		07 As	12 A	20 B	26 C	29 C	33 C
Cooling capacity	kW	7.2	12	20.5	26.3	27.9	32.8
Sensible cooling capacity	kW	6.5	10.8	18.5	23.7	25.1	29.5
Power supply		380V/3N~/50Hz					
Number of compressors/circuits	No.	1/1	1/1	1/1	1/1	1/1	1/1
Cooling input power	kW	2.36	3.93	6.71	8.60	8.95	10.33
Cooling operation current	A	4.5	7.6	12.9	16.5	17.2	19.9
Air flow	m ³ /h	2300	3300	5600	8200	8200	8200
External static pressure	Pa	50	50	80	100	100	100
Inlet water pipe connector size	inch	3/4	1	1 1/4	1 1/4	1 1/4	1 1/4
Refrigerant		R407C					
Dia. of drain pipe for condensate water	mm	Φ22 (steel tube)					
Water flow	m ³ /h	1.64	2.73	4.66	5.98	6.32	7.39
Electric heater	kW	3	6	6	9	9	9
Humidifier	kg/h	8	8	8	8	8	8
Operating weight	kg	185	210	320	420	430	440

AX water-cooled		42 D	47 D	48 E	53 E	58 E	69 F
Cooling capacity	kW	41.6	46.9	48.2	53.2	58.1	69.3
Sensible cooling capacity	kW	37.4	42.2	43.4	47.9	52.3	62.4
Power supply	-	380V/3N~/50Hz					
Number of compressors/circuits	No.	2/2	2/2	2/2	2/2	2/2	2/2
Cooling input power	kW	13.10	14.77	15.17	16.14	17.62	21.02
Cooling operation current	A	25.2	28.4	29.2	31.0	33.9	40.4
Air flow	m ³ /h	10500	10500	14000	14000	14000	16000
External static pressure	Pa	100	100	150	150	150	150
Inlet water pipe connector size	inch	2	2	2	2	2	2
Refrigerant		R407C					
Dia. of drain pipe for condensate water	mm	Φ22 (steel tube)					
Water flow	m ³ /h	9.38	10.57	10.86	11.89	12.98	15.48
Electric heater	kW	12	12	18	18	18	18
Humidifier	kg/h	8	8	8	8	8	15
Operating weight	kg	520	540	720	740	760	960

Note:

1. The preceding cooling capacities are measured in working conditions where the indoor air inlet dry/wet bulb temperatures are 24°C/17°C and inlet/out cooling water temperatures are 30°C/35°C.
2. Specifications of the electric heater and humidifier are customizable. For details, please contact the EK technical service personnel.
3. A condensate water drain hose with an internal diameter of Φ22.5 is provided as a default component.
4. For diameters of the water supply and drainage pipes of the electrode humidifier, see the user manual.

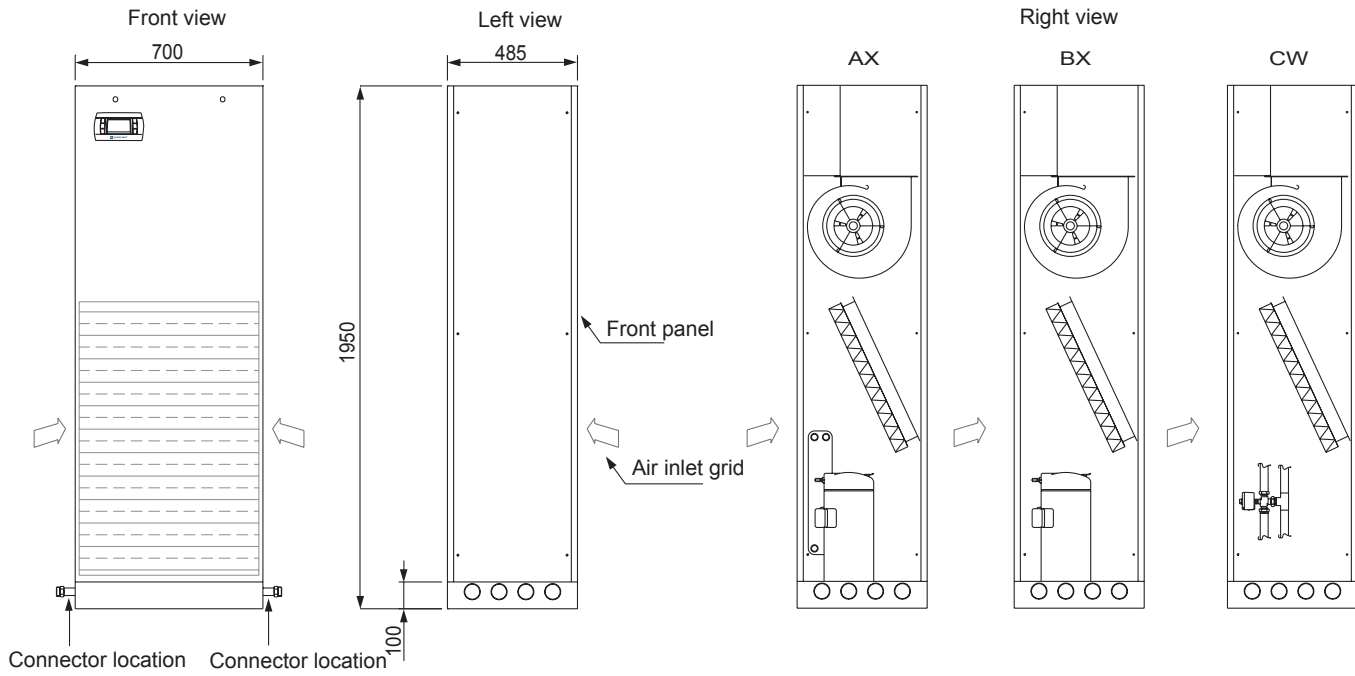
Specifications for Outdoor Unit



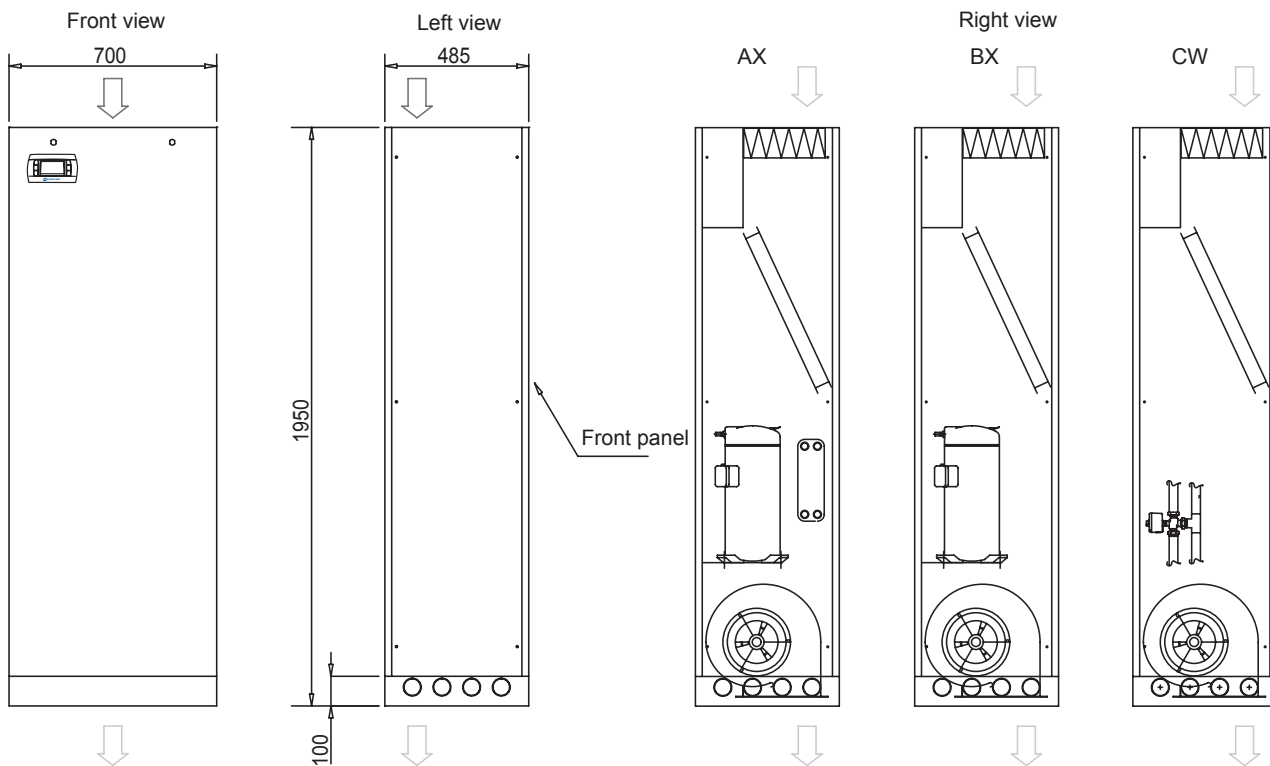
CT Standard		04 ST	05 ST	08 ST	10 ST	12 ST	15 ST
Number of independent circuits	No.	1	1	1	1	1	1
Air flow	m ³ /h	5200	6900	10600	10100	14100	13400
Number of fans/input power	No./kW	1x0.37	1x0.45	1x0.76	1x0.78	2x0.37	2x0.39
Total fan current	A	1.7	2.1	3.5	3.6	3.7	3.8
Power supply		220V~/50Hz					
Shipping weight	kg	65	87	117	123	161	169

Note: the dry bulb temperature for outdoor outlet air is 35°C.

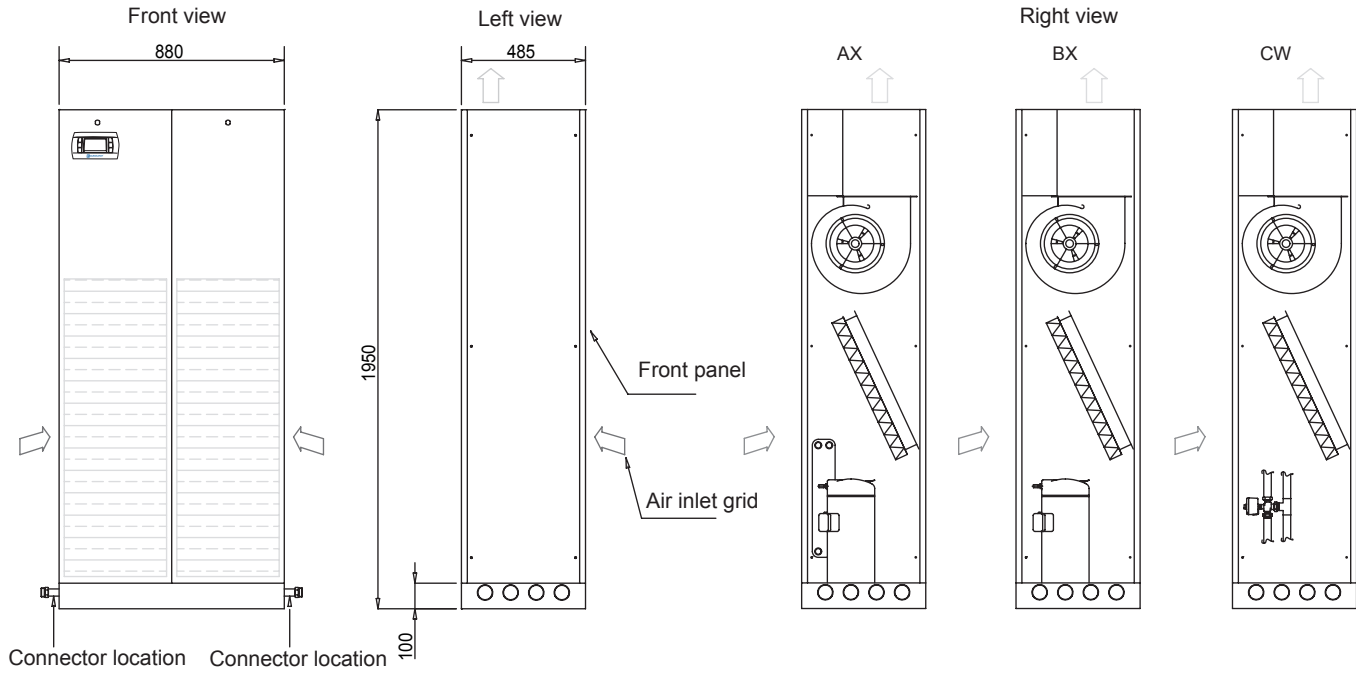
As series top air supply



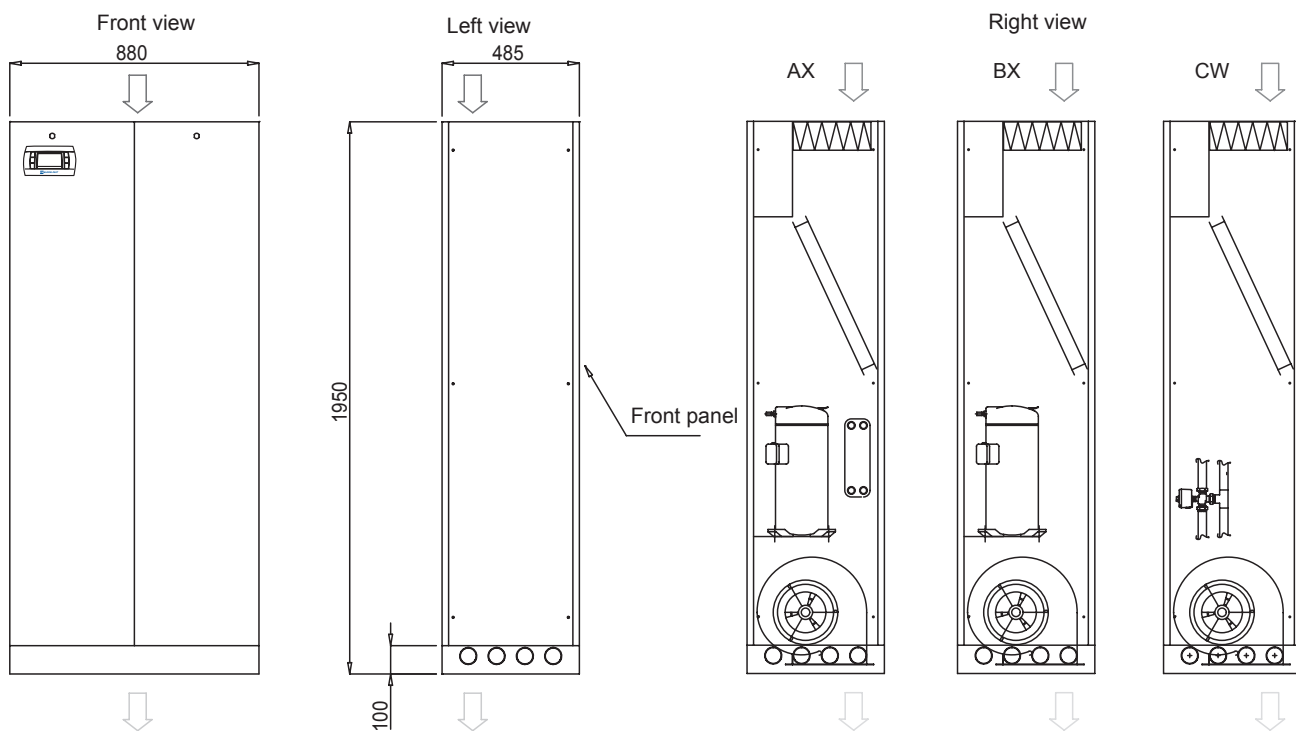
As series with down air supply



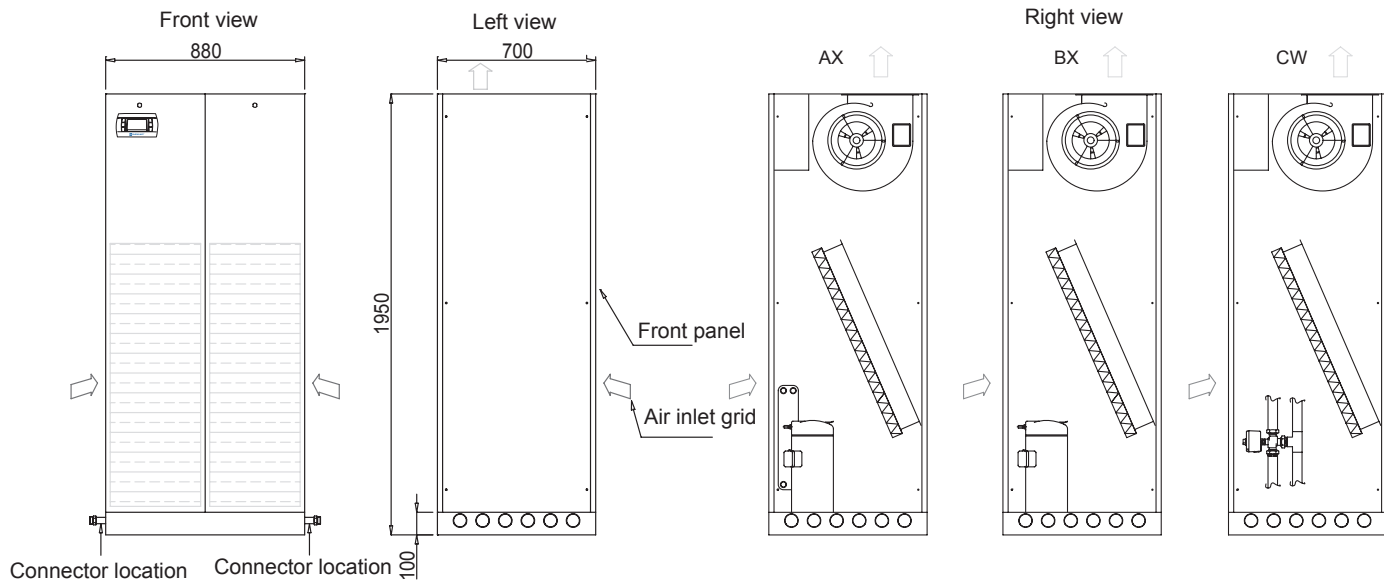
A series with top air supply



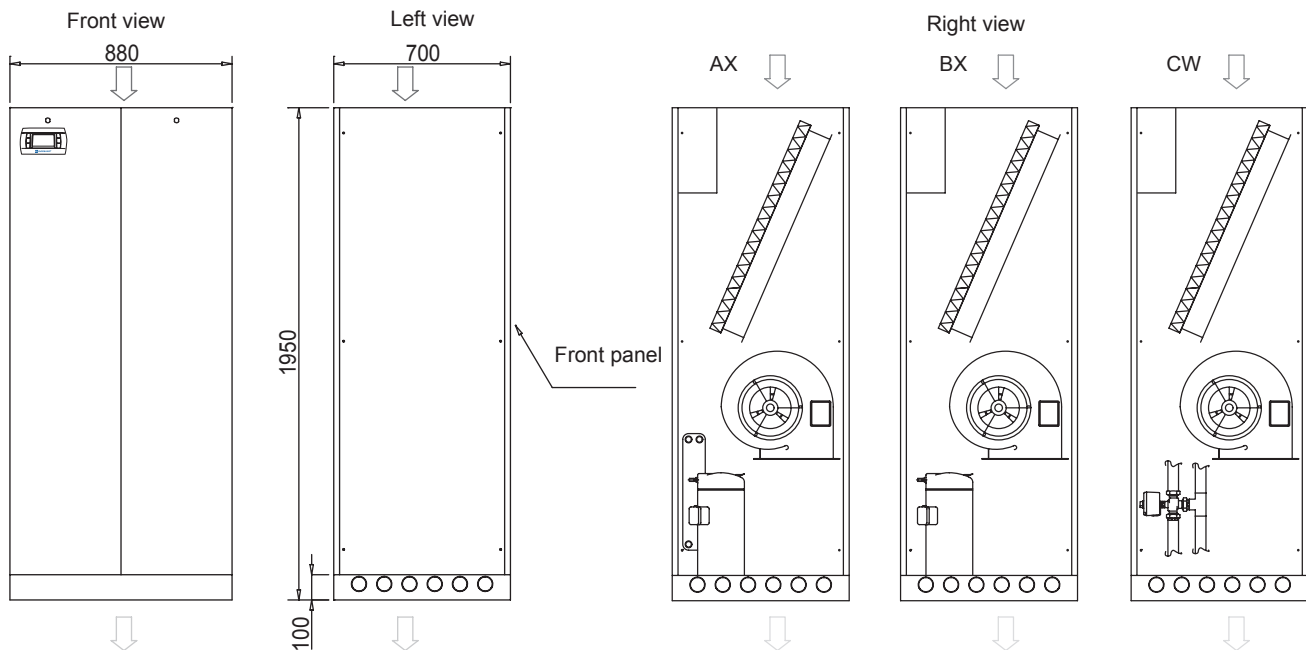
A series with down air supply



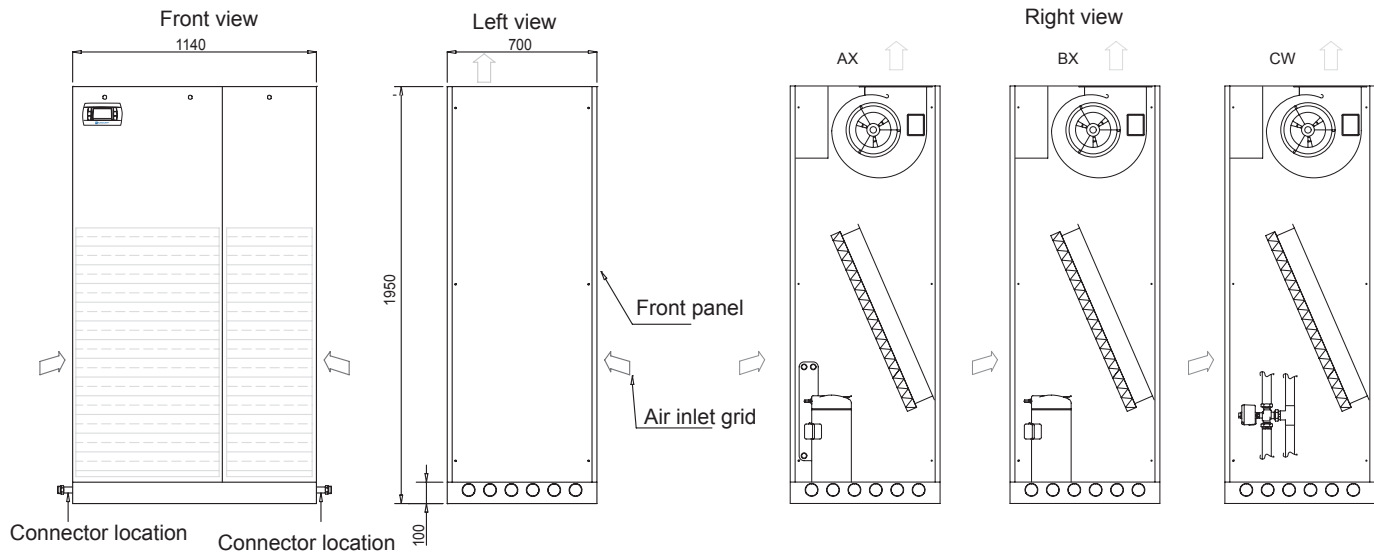
Bs series with top air supply



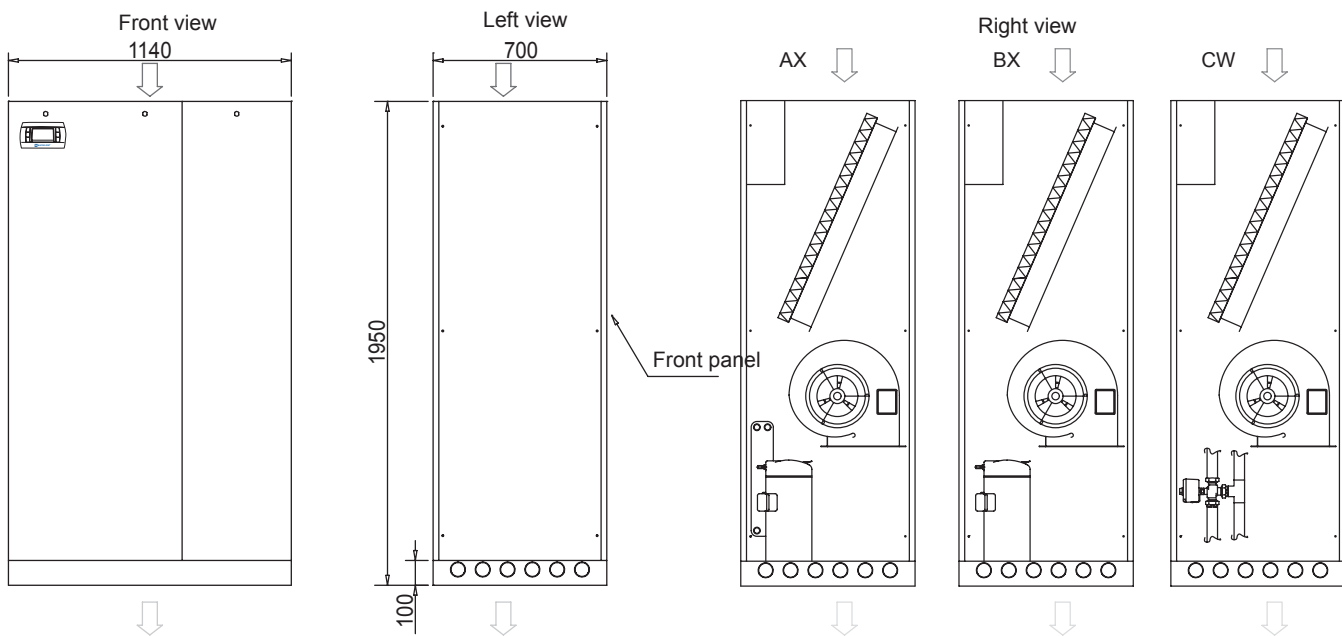
Bs series with down air supply



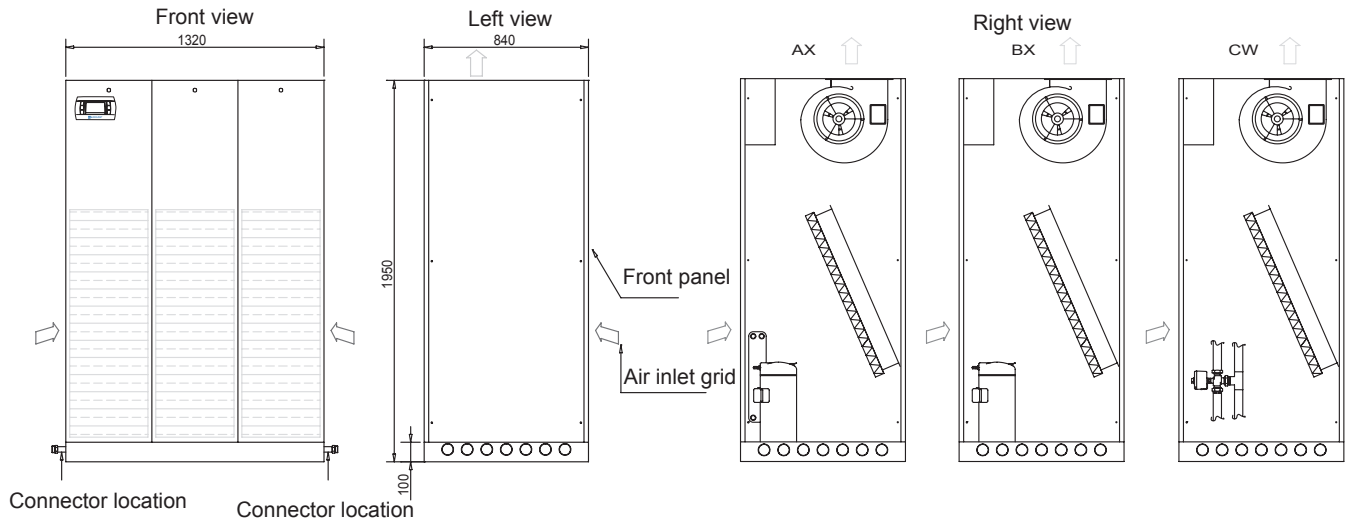
B series with top air supply



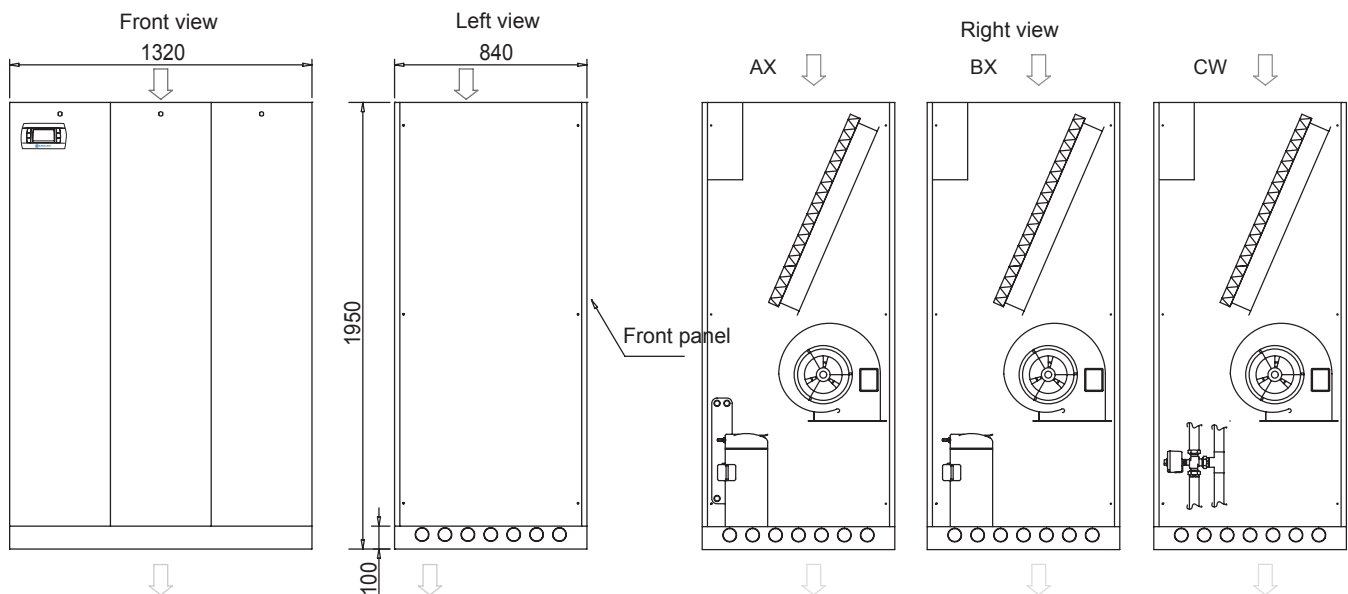
B series with down air supply



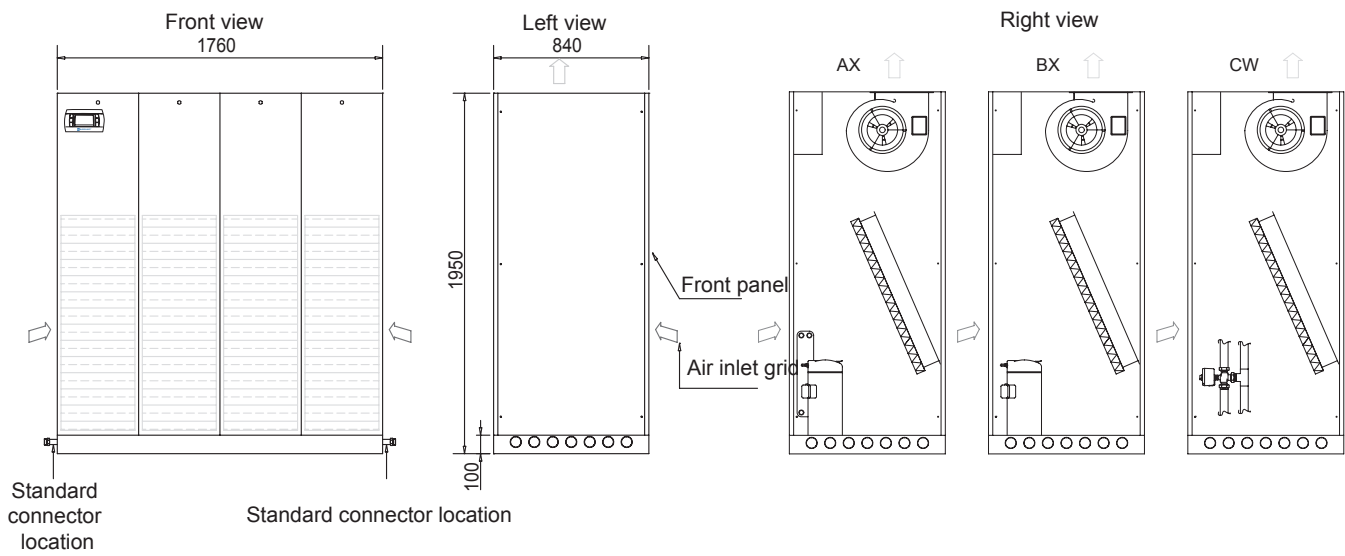
C series with top air supply



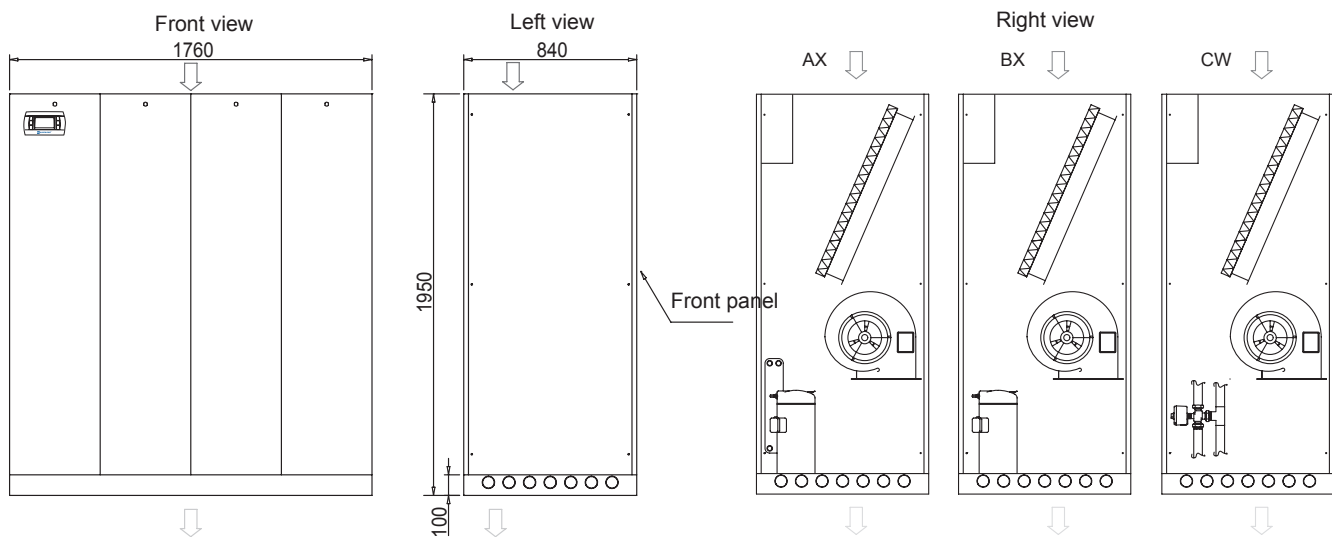
C series with down air supply



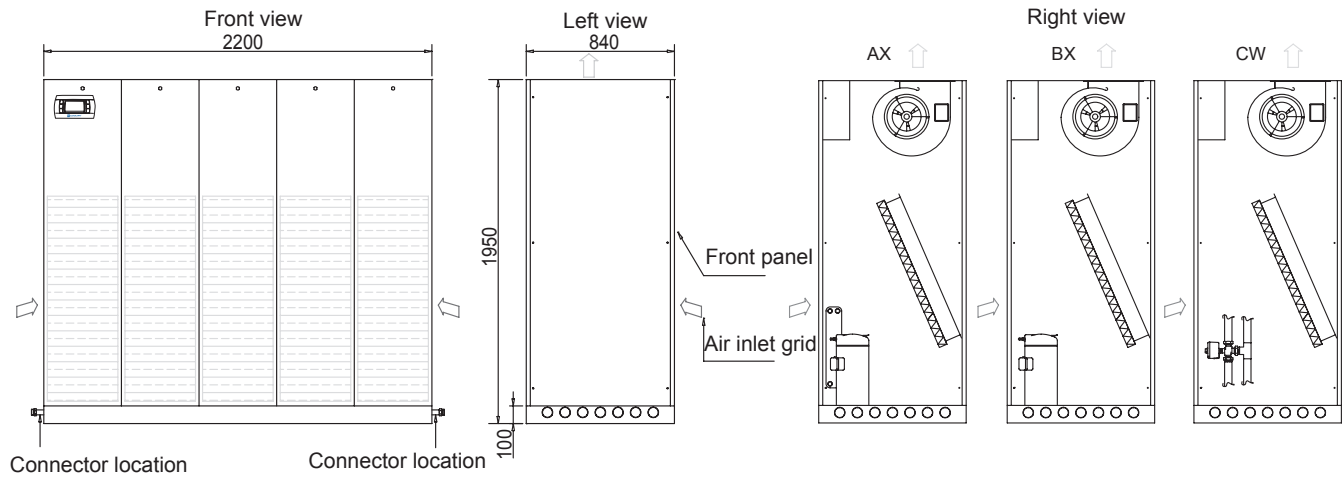
D series with top air supply



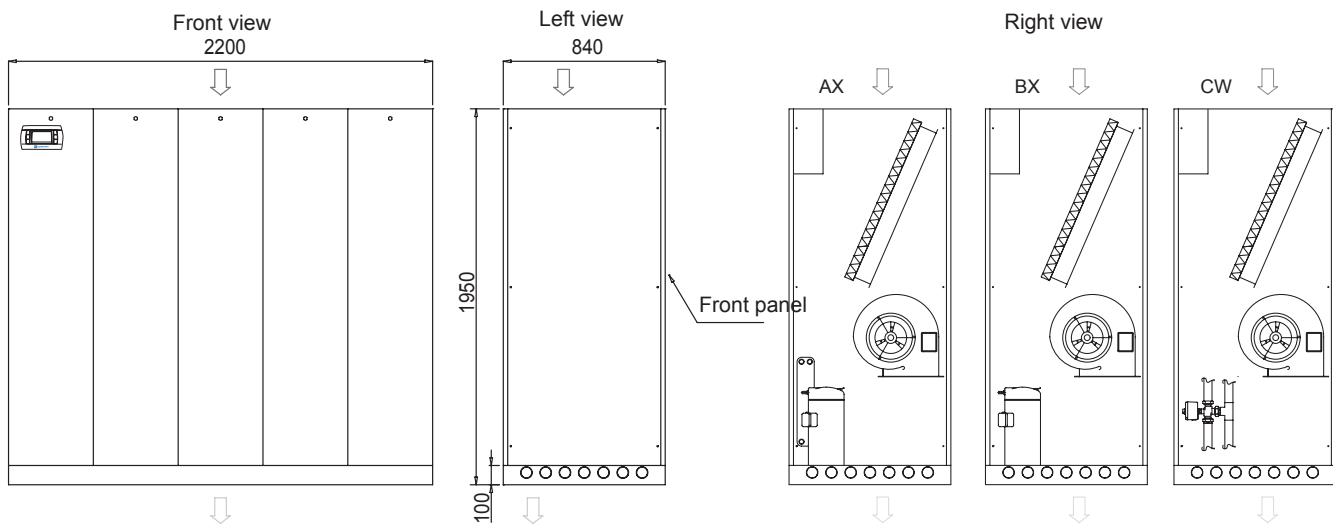
D series with down air supply



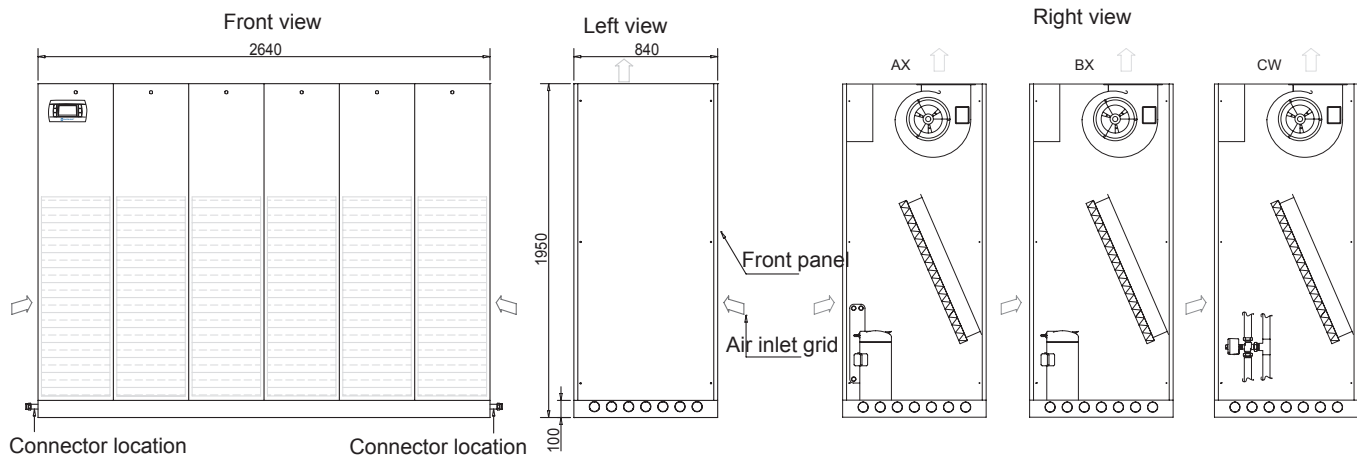
E series with top air supply



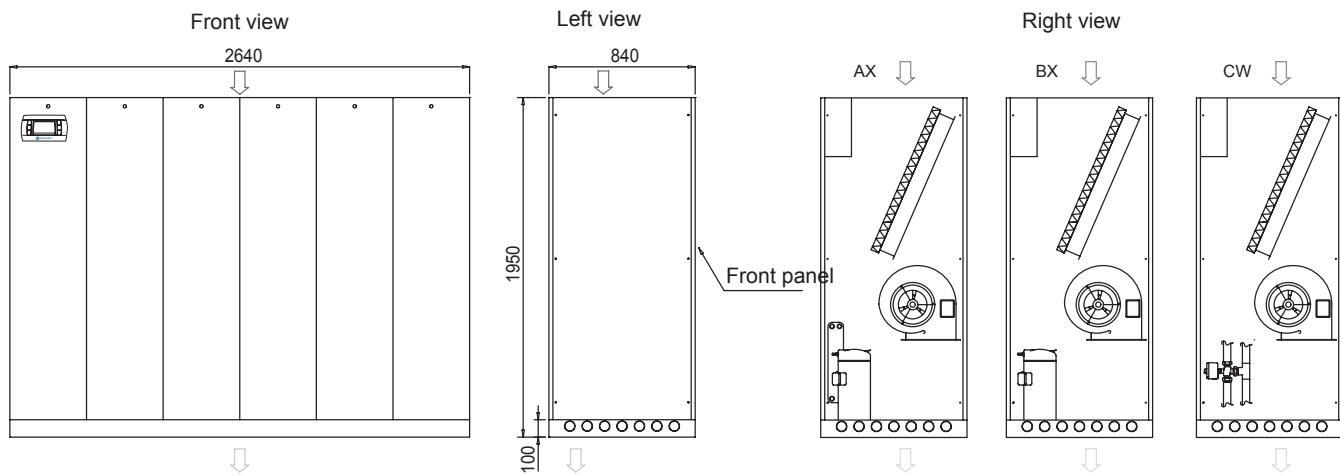
E series with down air supply



F series with top air supply

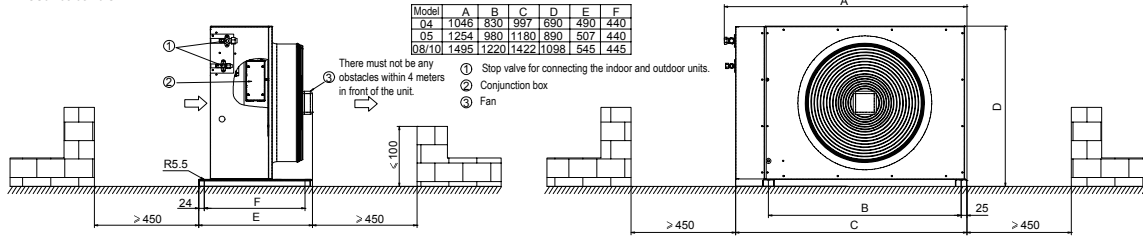


F series with down air supply

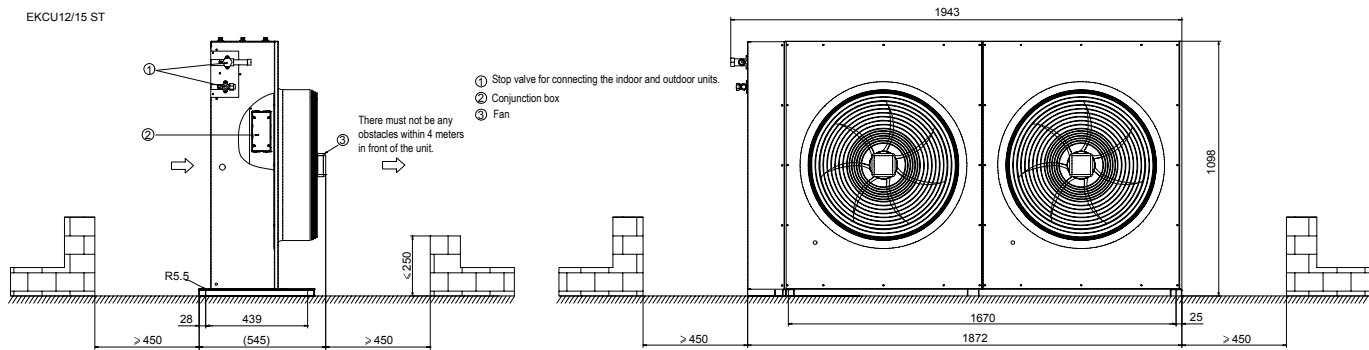


ST CT - horizontal air supply

EKCU04/05/08/10 ST

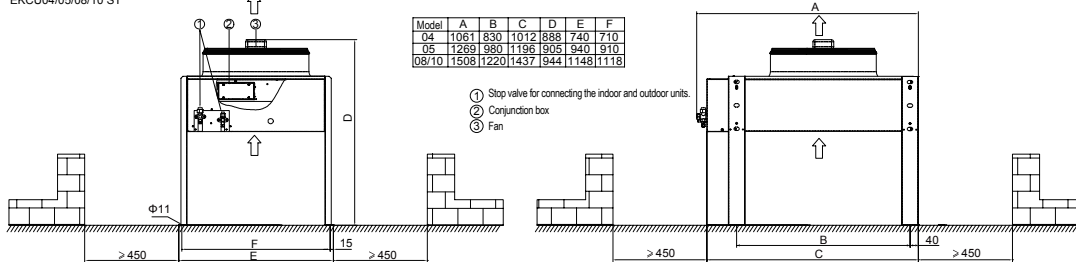


EKCU12/15 ST

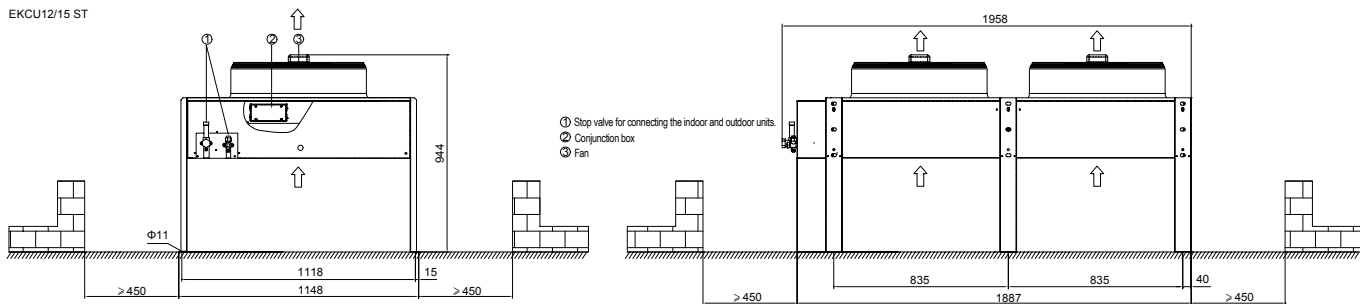


ST CT - top air supply

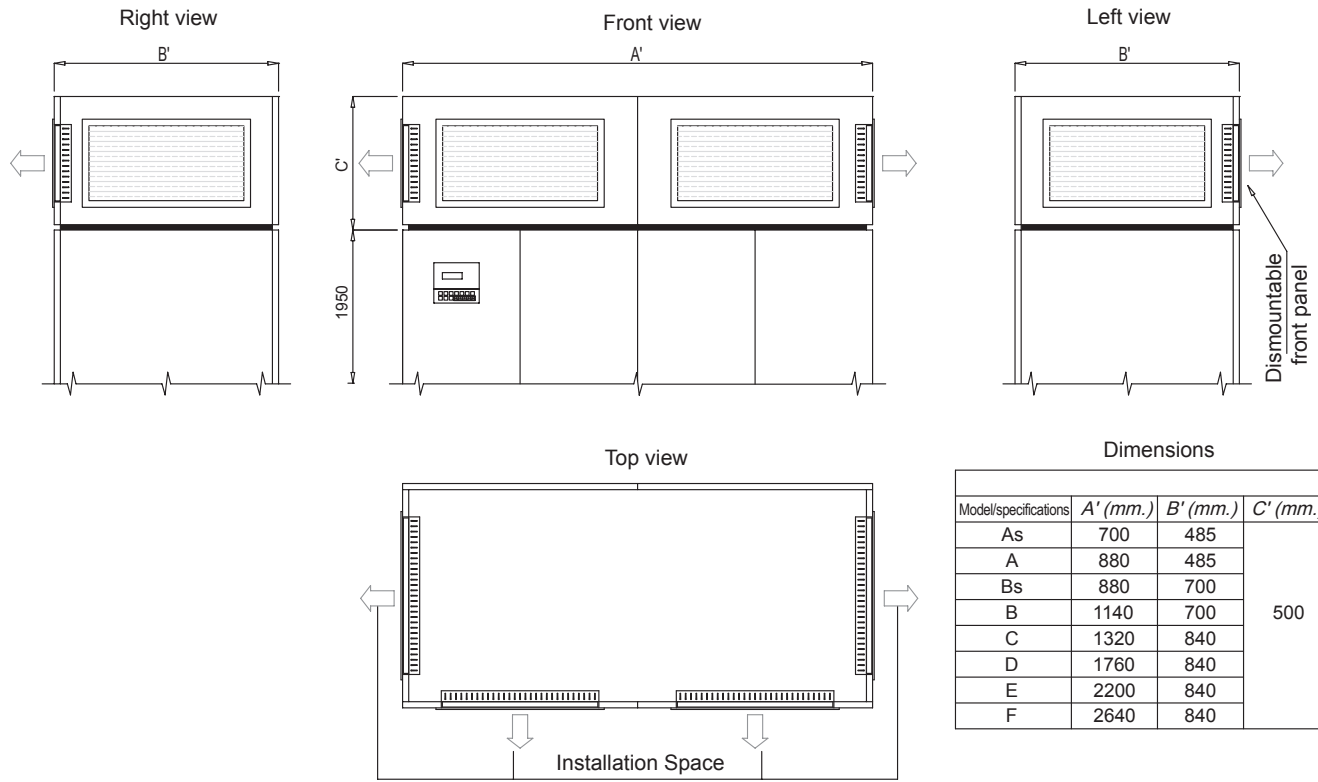
EKCU04/05/08/10 ST



EKCU12/15 ST



Static pressure plenum for outlet air - top air supply



Measurement Conversion Table

Length	m	mm	in	ft	mile
	1	1x10 ³	39.37	3.281	6.214x10 ⁻⁴
	0.3084	304.8	12	1	1.894x10 ⁻⁴
	1x10 ⁻³	1	0.0394	3.281x10 ⁻³	6.214x10 ⁻⁷
	0.0254	25.4	1	0.0833	1.58x10 ⁻⁵
	1.609x10 ³	1.609x10 ⁶	6.336x10 ⁴	5280	1
Area	m ²	hm ²	in ²	ft ²	mil ²
	1	1x10 ⁻⁴	1.55x10 ³	10.764	3.861x10 ⁻⁷
	0.0929	9.29x10 ⁻⁶	144	1	3.587x10 ⁻⁸
	2.59x10 ⁶	258.999	4.0145x10 ⁹	2.7878x10 ⁷	1
Volume	m ³	L	US gal	UK gal	ft ³
	1	1000	264.17	219.97	35.315
	1x10 ⁻³	1	0.2642	0.22	0.0353
	3.785x10 ⁻³	3.7853	1	0.8327	0.1337
	4.546x10 ⁻³	4.546	1.20095	1	0.1605
	2.832x10 ⁻²	28.316	7.481	6.229	1
Weight	g	kg	t	lb	oz
	1	1x10 ⁻³	1x10 ⁻⁶	2.205x10 ⁻³	0.0353
	1x10 ³	1	1x10 ⁻³	2.205	35.274
	1x10 ⁶	1x10 ³	1	2.205x10 ³	3.527x10 ⁴
	453.59	0.4536	4.536x10 ⁻⁴	1	16
	28.35	0.0283	2.83x10 ⁻⁵	0.0625	1
Pressure	Pa	mmH ₂ O	atm	lb/in ²	in.Hg
	1	0.102	9.8692x10 ⁻⁶	1.4504x10 ⁻⁴	2.953x10 ⁻⁴
	9.807	1	9.678x10 ⁻⁵	1.422x10 ⁻³	2.89x10 ⁻³
	101325	10332	1	14.696	29.921
	6894.8	703.06	0.068	1	2.036
	3386.39	345.32	0.0334	0.4911	1
Energy	J	kJ	kW•h	kcal	Btu
	1	1x10 ⁻³	2.778x10 ⁻⁷	2.388x10 ⁻⁴	9.478x10 ⁻⁴
	1x10 ³	1	2.778x10 ⁻⁴	0.2389	0.9478
	3.6x10 ⁶	3600	1	860.1	3411
	4186.8	4.1868	1.163x10 ⁻³	1	3.968
	1055.1	1.0551	2.93x10 ⁻⁴	0.252	1
Power	W	kW	kcal/h	Btu/h	RT(US)
	1	1x10 ⁻³	0.8604	3.412	2.843x10 ⁻⁴
	1x10 ³	1	860.4	3.412	0.2843
	1.163	1.163x10 ⁻⁴	1	3.9657	3.30x10 ⁻⁴
	0.293	2.93x10 ⁻⁴	0.2522	1	8.33x10 ⁻⁵
	3517	3.517	3024	12000	1
Flow	L/s	m ³ /s	m ³ /h	ft ³ /s	UK gal/s
	1	1x10 ⁻³	3.6	0.0353	0.22
	1x10 ³	1	3600	35.3147	219.97
	0.2778	2.778x10 ⁻⁴	1	9.81x10 ⁻³	0.611
	28.317	0.0283	101.941	1	6.2288
	4546	4.546x10 ⁻³	16.416	0.1605	1



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