

AIRTRONICS

Designed and inspired in Sweden

AIRTRONICS CENTRAL AIR-CONDITIONING AIR-COOLED SPLIT AIR CONDITIONER



Air-cooled Inverter Air Conditioning Unit

Product Overview

AIRTRONICS Air-cooled Inverter Air Conditioning Unit comes in various models. The single-unit cooling capacity ranges from 23.4 kW to 88 kW. Equipped with the inverter compressor and fan design, as well as stepless capacity regulation, the unit can meet different requirements for cooling in both transitional seasons and summer. These products are widely used in commercial office buildings, high-end residences, restaurants, hospitals, banks, and shopping malls. They feature mature technology, flexible design, easy installation, easy control, etc.



IDUs

Standard Air-cooled Inverter Air Conditioning Unit



Product features: long air duct, applicable to large spaces
Cooling capacity: 80000Btu/h~300000Btu/h
 23.4kW~88kW

All Fresh Air Air-cooled Inverter Air Conditioning Unit



Product features: 100% fresh air
Cooling capacity: 80000Btu/h~300000Btu/h
 23.4kW~88kW

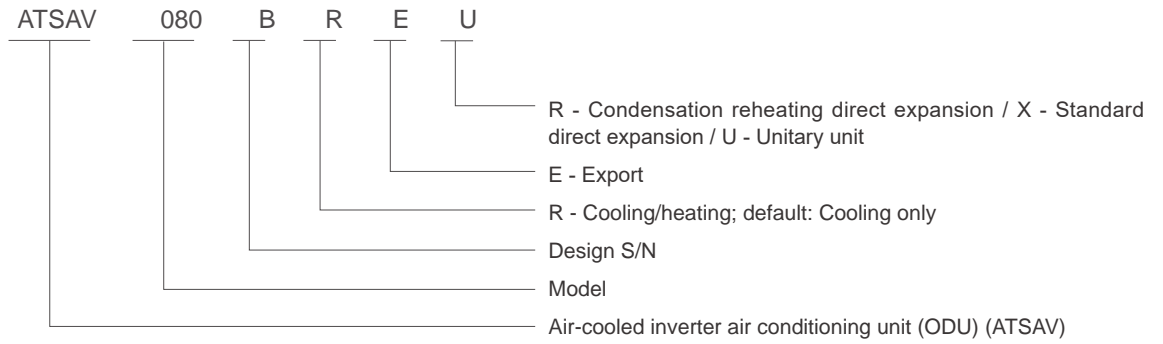
Purification Air-cooled Inverter Air Conditioning Unit



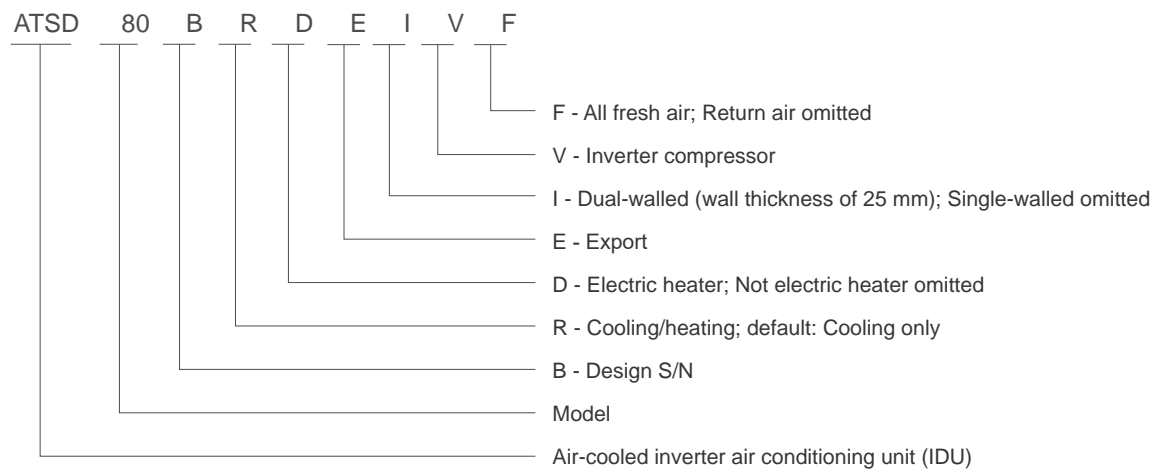
Product features: applicable to places with various shapes, air flow volume deviation: 70%~120%
Cooling capacity: 80000Btu/h~300000Btu/h
 23.4kW~88kW

Nomenclature

Inverter ODU model

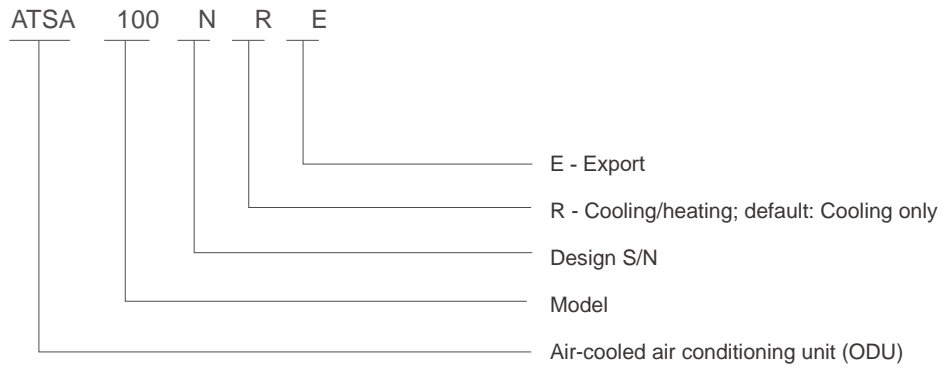


Inverter IDU model

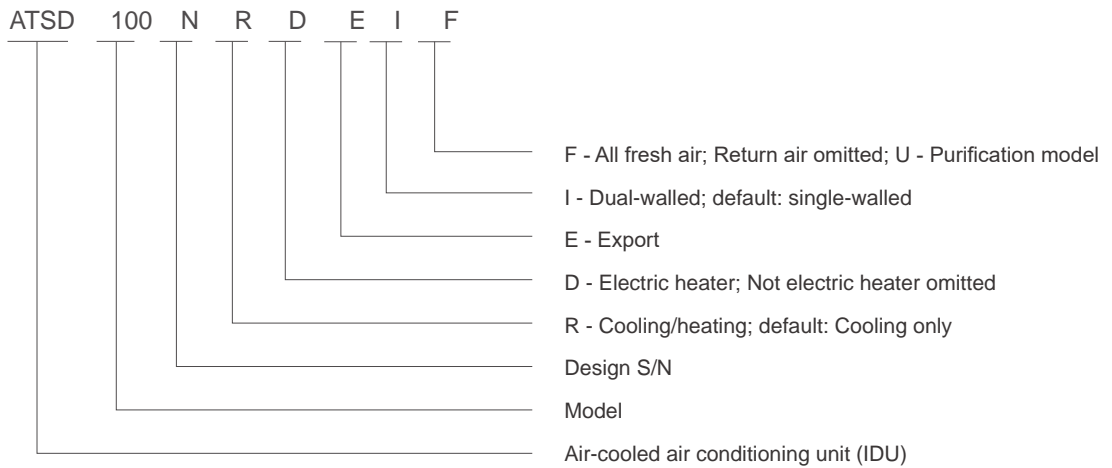


Nomenclature

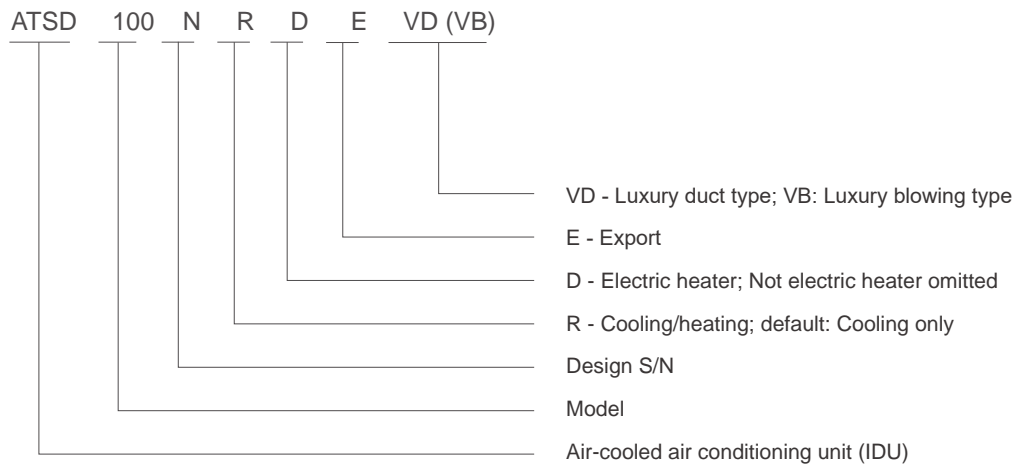
Fixed speed ODU model



IDU model



IDU model



Summary

Model		080	100	120	150	200	250	300
Inverter Air Conditioning Unit IDU	Return Air type	★	★	★	★	★	★	★
	All Fresh Air type	★	★	★	★	★	★	★
	Purification type	★	★	★	★	★	★	★
Air-cooled Inverter Air Conditioning Unit (ODU)		★	★	★	★	★	★	★

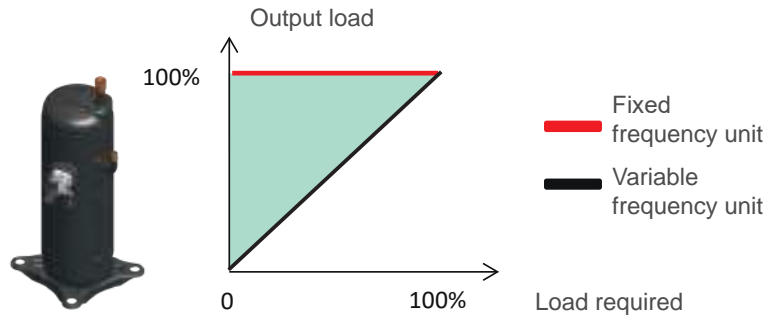
Model		080	100	120	150	200	250	300
Air-cooled Air Conditioning Unit IDU	Return Air type	★	★	★	★	★	★	★
	All Fresh Air type	★	★	★	★	★	★	★
	Floor Standing type		★	★	★	★	★	★
	Purification type	★	★	★	★	★	★	★
Air-cooled Fixed Speed Air Conditioning Unit (ODU)		★	★	★	★	★	★	★

Air-cooled Inverter Air Conditioning Unit

ODU Efficient Configuration

High-efficiency inverter compressor

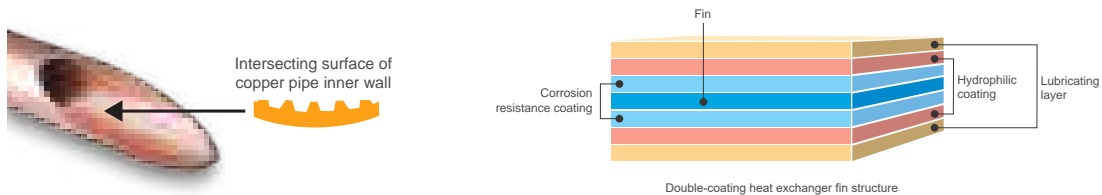
The unit adopts leading-brand inverter compressor for stepless regulation of cooling capacity. It features high energy efficiency in partial load and adapts to scenarios with different cooling requirements and in transitional seasons.



High-efficiency heat exchanger

The efficient copper tube with internal thread design provides a larger contact area with refrigerant, and thus substantially increasing the heat transfer efficiency.

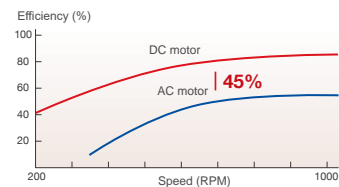
Quality hydrophilic aluminum foil and corrugated fins with openings are adopted. The heat exchanging area is 15% larger than flat sheets, and the heat exchanging performance is higher. The corrosion resistance coating contributes to excellent corrosion resistance, while the hydrophilic coating and lubricating layer facilitate smooth defrosting drainage.



Fan full inverter

The innovative DC inverter fan motor can adjust speed based on the system pressure and status to guarantee stable running and stepless regulation, achieving the most efficient operation all the time.

DC inverter motor is 45% more efficient than AC motor, and boasts lower noise.



Features

Professional Design

Refrigerant cooling technology

1. With the innovative micro-ripple and special section structure, the heat exchanging area is twice that of ordinary refrigerant-cooling schemes. The IPM module surface temperature can be controlled under 60°C to minimize the system pressure loss with efficient heat exchange guaranteed.

2. AIRTRONICS refrigerant-cooling scheme adopts only the two-layer thermal resistance of radiator panel and thermal conductive silicone. In contrast, conventional refrigerant-cooling scheme adopts at least four layers of thermal resistance of copper pipe, gap, thermal conductive silicone and radiator, and the heat dissipating capability is low.



AIRTRONICS new refrigerant cooling technology

VS

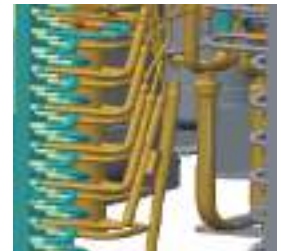
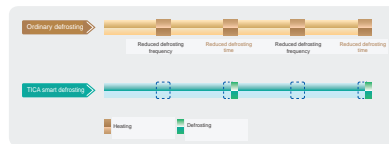


Ordinary liquid-cooled dissipation

Reliable Operation

Smart defrosting

Defrosting self-adapting: The system can precisely determine when to start defrosting based on system running duration, compressor suction and exhaust pressure, ambient temperature, outdoor heat exchanger coil temperature, and last defrosting data. When there is a need for defrosting, the defrosting operation will be started. When there is not such a need, the system will keep the heating operation. This guarantees the optimum heating capacity and ultra-high energy efficiency of the unit.



Anti-frosting at the bottom: In defrosting mode, the one-way valve at the bottom is closed to ensure thorough defrosting at the unit bottom and avoid degraded performance due to frosting at the bottom.

Multi-protection

- | | |
|---|--------------------------------------|
| Compressor over-current protection | Drive fault protection |
| Compressor high/low voltage protection | Communication failure protection |
| High discharge (compressor-top) temperature protection | Four-way valve fault protection |
| High discharge (compressor-top) superheat degree protection | Compressor exception protection |
| Low discharge (compressor-top) superheat degree protection | Pressure sensor fault protection |
| Insufficient pressure difference protection | Temperature sensor fault protection |
| Phase sequence protection | Indoor coil anti-freezing protection |



Intelligent Control

- Cloud technology + black box, dual-protection for worry-free operation
1. Bidirectional cloud technology, remote commissioning, operation and maintenance
 2. Standard "black box" function to ensure operation and maintenance safety
 3. Touchscreen control, smart operations

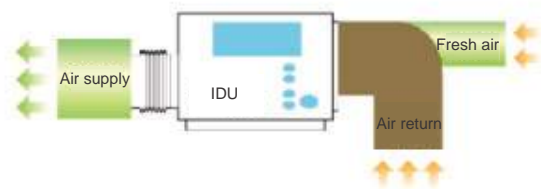


Standard Air-cooled Air Conditioning Unit



Application schematic diagram

The unit features a large capacity and high static pressure. It is possible to connect extra-long air duct to realize long-distance air supply as high as reaching the suspended space, suitable for high reaching spaces such as cinemas and stadiums.



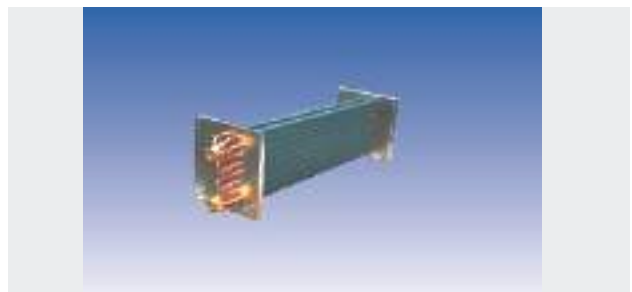
Ultra-low noise

AIRTRONICS units adopt the innovative low-speed fan with advanced large impeller, which has passed strict static and dynamic balance test. When used together with quality low-noise motor, it can reduce vibration and noise during running.



High-efficiency heat exchanger

The heat exchanger adopts quality copper tube through the advanced mechanical expansion tube process and large-spacing hydrophilic aluminum fins with openings. The hydrophilic aluminum foil contributes to good drainage and substantially enhances the heat exchange efficiency.



Performance Data

Specifications of Inverter Return Air Unit

Model		IDU	ATSD	080BRDEIV	080BREIV	100BRDEIV	100BREIV	120BRDEIV	120BREIV	150BRDEIV	150BREIV	200BRDEIV	200BREIV	250BRDEIV	250BREIV	300BRDEIV	300BREIV	
		ODU	ATSAV	080BREU		100BREU		120BREU		150BREU		200BREU		250BREU		150BREU*2		
Rated Cooling Capacity		kW		23.4		29.3		35		44		58.6		70		88		
		Btu/h		80000		100000		120000		150000		200000		240000		300000		
Rated Heating Capacity		kW		30.4		34		46.7		49.5		66.2		77		96.8		
		Btu/h		103700		116000		159300		168900		225900		262700		330300		
ODU		Compressor Type		Fully enclosed DC frequency conversion														
		Dimension (single-unit)	Length	mm	985		985		930		1240		1500		1500		1240	
			Width	mm	466		466		860		860		860		860		860	
			Height	mm	1264		1264		1690		1690		1690		1690		1690	
		Weight (single-unit)	kg	125		125		220		220		320		350		220		
		Noise	dB(A)	63		63		66		65		65		65		65		
		Power Supply		380V 3N- 50Hz														
IDU		Dimensions	Length	mm	1410		1410		1735		1860		1988		2298		2255	
			Width	mm	807		807		867		907		1007		1007		1207	
			Height	mm	590		590		653		800		780		820		997	
		Weight	kg	120	110	120	110	120	110	190	180	240	230	260	250	300	290	
		Fan Motor	Air Flow	m ³ /h	4300		4800		6000		8000		10000		11000		13000	
			ESP	Pa	100		100		120		120		150		150		180	
			Power Supply	380V 3N- 50Hz														
		Optional Auxiliary Electric Heating	kW	6	\	6	\	9	\	12	\	18	\	20.4	\	24	\	
		Condensate Drain Pipe		DN25 (R1)														
		Return Air Inlet Dimension		mm	1140*480		1140*480		1475*543		1590*690		1764*670		2074*710		1980*887	
Supply Air Outlet Dimension		mm	745*295		745*295		1145*295		930*291		864*343		1120*343		1044*409			
Total Power Input	Cooling	kW	9		12.00		15.00		16		23		28		28.2			
	Heating	kW	9.2		11.00		12.00		15		19.8		24		28.7			
Total Rated Current	Cooling	A	15.5		19.70		24.30		27.2		37.8		52		53.5			
	Heating	A	15.8		17.80		20.10		25.41		32.54		45		55			
Refrigerant		Type	R410A															
		Charging	kg	5.6		5.6		8.5		13.5		19		22		13.5*2		
Connection Pipe		Connection Type		Welded Joint														
		Diameter	Liquid	φmm	Φ9.52		Φ9.52		Φ12.7		Φ12.7		Φ15.88		Φ15.88		Φ12.7*2	
Gas	φmm		Φ19.05		Φ19.05		Φ22.23		Φ28.6		Φ28.6		Φ28.6		Φ28.6*2			

★ Notes:

1. The rated cooling capacity of the return air unit is tested when the indoor dry/wet bulb temperature is 27/19°C and the outdoor dry bulb temperature is 35/-°C.
2. The rated heating capacity of the return air unit is tested when the indoor dry bulb temperature is 20°C and the outdoor dry/wet bulb temperature is 7/6°C.
3. Piping condition of unit performance test: IDU-ODU connecting pipe of 7.5 m (horizontal).
4. Ambient temperature range for operation of the circulating air unit: -10~50°C (cooling); -15~24°C (heating).

Performance Data

Specifications of Duct-type Return Air Unit

Model		IDU	ATSD	080N(R)(D)E	100N(R)(D)E	120N(R)(D)E	150N(R)(D)E	200N(R)(D)E	250N(R)(D)E	300N(R)(D)E	
		ODU	ATSA	080N(R)E	100N(R)E	120N(R)E	150N(R)E	200N(R)E	250N(R)E	150N(R)E*2	
Rated Cooling Capacity			kw	23.4	29.3	35	44	58.6	70	88	
			Btu/h	80000	100000	120000	150000	200000	240000	300000	
Rated Heating Capacity			kw	26.91	34.4	40.8	47.3	67.6	81.3	92.5	
			Btu/h	91800	117400	139200	161400	230700	277400	315700	
IDU	Dimension (single-unit)	Length	mm	1411	1411	1805	1859	1988	2298	2241	
		Width	mm	700	700	700	1000	1100	1100	1300	
		Height	mm	540	540	540	690	780	820	1027	
	Weight (single-unit)		kg	93	125	147	200	240	298	340	
	Fan Motor	Air Flow	m ³ /h	4300	4800	6000	7500	9000	11000	13000	
		ESP	Pa	100	100	120	120	150	150	180	
		Power Supply		220V-50Hz				380V 3N-50HZ			
	Optional Auxiliary Electric Heating		kw	6	6	10.2	12	18	20.4	24	
	Condensate Drain Pipe			DN25(R1)							
	Return Air Inlet Dimension		mm	965*425	965*425	1470*447	1635*580	1764*670	2074*710	1981*887	
Supply Air Outlet Dimension		mm	745*295	745*295	1216*295	930*291	864*343	1116*343	1044*409		
Total Power Input	Coding		kw	8	10	11.9	15	20	24.5	30.89	
	Heating		kW	8.5	10.5	12.3	14.5	19.8	23.5	28.6	
Total Rated Current	Coding		A	17.2	21.51	25.59	28.3	37.74	46.23	58.28	
	Heating		A	18.28	22.58	26.45	27.36	37.36	44.34	53.96	
Connecting Pipe	Connection Type			Flared Joint			Welded Joint				
	ODU Type		ATSA	080N(R)E	100N(R)E	120N(R)E	150N(R)E	200N(R)E	250N(R)E	150N(R)E*2	
ODU	Compressor Type			Hermetic Scroll Compressor							
	Dimensions (single-unit)	L	mm	1403	1403	1403	1403	1808	1808	1403	
		w	mm	821	821	821	821	1090	1090	821	
		H	mm	1200	1200	1200	1200	1214	1214	1200	
	Weight (single-unit)		kg	220	245	270	280	415	455	280	
Power Supply			380V 3N-50HZ								
Refrigerant	Type			R410A							
	Charging		kg	3.0*2	3.4*2	3.6*2	4.35*2	6.7*2	7.2*2	4.35*4	
Connection Pipe	Connection Type			Flared Joint			Welded Joint			Flared Joint	
	Diameter	Liquid	φmm	9.52*2	9.52*2	9.52*2	12.7*2	12.7*2	12.7*2	12.7*4	
		Gas	φmm	15.88*2	15.88*2	15.88*2	19.05*2	22.23*2	25.4*2	19.05*4	

★ Notes:

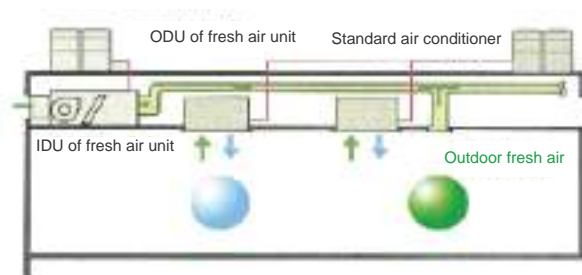
- The rated cooling capacity is tested when the indoor dry/wet bulb temperature is 27°C/19°C and the outdoor dry/wet bulb temperature is 35°C/24°C (indoor operating conditions do not apply to all fresh air units).
- The rated heating capacity is tested when the indoor dry/wet bulb temperature is 20°C/15°C and the outdoor dry/wet bulb temperature is 7°C/6°C (indoor operating conditions do not apply to all fresh air units).
- Piping condition of unit performance test: Equivalent refrigerant length 7.5 m (horizontal).
- ATSD300N ODU is composed of two ATSA150N(R) units.
- When the unit is equipped with an optional electric heater, the power supply of the unit must meet the specification 380V3N-50Hz.
- Ambient temperature: 0°C-45°C (cooling); -15°C-25°C (heating).

All Fresh Air Air-cooled Air Conditioning Unit



High static pressure, ideal for large areas

All fresh air handling unit has the static pressure up to 100 Pa, making it possible to connect extra-long air duct to realize long-distance air supply and bring fresh and clean air to indoor places. It applies to high reaching spaces such as cinemas and stadiums.



All fresh air design, improved air quality

The units adopt 100% fresh air, which can efficiently and precisely make the fresh air close to room temperature through the powerful heating/cooling capacity of IDU, so as to meet various requirements.



Eco-friendly refrigerant

R410A refrigerant and DC inverter technology have no harm to the ozone layer, featuring energy-saving operation.



Performance Data

Specifications of Inverter Fresh Air Unit

Model	IDU	ATSD	080BRDEIVF	080BREIVF	100BRDEIVF	100BREIVF	120BRDEIVF	120BREIVF	150BRDEIVF	150BREIVF	200BRDEIVF	200BREIVF	250BRDEIVF	250BREIVF	300BRDEIVF	300BREIVF	
	ODU	ATSAV	080BREU		100BREU		120BREU		150BREU		200BREU		250BREU		150BREU*2		
Rated Cooling Capacity	kW	23.4		29.3		35		44		58.6		70		88			
	Btu/h	80000		100000		120000		150000		200000		240000		300000			
Rated Heating Capacity	kW	25.5		29.3		36.1		40.9		55.3		71.1		90.8			
	Btu/h	87000		100000		123200		139500		188700		242600		309800			
ODU	Compressor Type		Fully enclosed DC frequency conversion														
	Dimension (single-unit)	Length	mm	985		985		930		1240		1500		1500		1240	
		Width	mm	466		466		860		860		860		860		860	
		Height	mm	1264		1264		1710		1710		1710		1710		1710	
	Weight (single-unit)		kg	125		220		220		220		320		350		220	
	Noise		dB(A)	63		63		66		65		65		66		65	
Power Supply		380V 3N- 50Hz															
IDU	Dimensions	Length	mm	1410	1410	1410	1410	1735	1735	1860	1860	1988	1988	2298	2298	2255	2255
		Width	mm	1107	807	1107	807	1167	867	1157	907	1307	1007	1357	1007	1507	1207
		Height	mm	608	608	608	608	653	653	800	800	780	780	820	820	997	997
	Weight		kg	140	120	160	145	160	145	220	205	240	225	280	260	320	300
	Fan Motor	Air Flow	m³/h	1850		2450		3000		4500		5000		7000		8000	
		ESP	Pa	100		100		200		200		250		250		300	
		Power Supply		380V 3N- 50Hz													
	Optional Auxiliary Electric Heating		kW	8	\	8	\	12	\	12	\	20	\	25	\	30	\
	Condensate Drain Pipe		DN25 (R1)														
	Return Air Inlet Dimension		mm	1140*480		1140*480		1475*543		1590*690		1764*670		2074*710		1980*887	
Supply Air Outlet Dimension		mm	275*295		275*295		747*295		333*291		333*291		745*291		930*291		
Total Power Input	Cooling	kW	8.45		11.00		12.60		18		21.7		30		33		
	Heating	kW	8.5		11.20		11.50		16.5		19		29		29.5		
Total Rated Current	Cooling	A	14.4		17.30		20.10		30.23		35.17		55		63.5		
	Heating	A	14.8		19.50		18.50		26.1		30.77		53		56		
Refrigerant	Type		R410A														
	Charging	kg	5.6		5.6		8.5		13.5		19		22		13.5*2		
Connection Pipe	Connection Type		Welded Joint														
	Diameter	Liquid	φmm	Φ9.52		Φ9.52		Φ12.7		Φ12.7		Φ15.88		Φ15.88		Φ12.7*2	
		Gas	φmm	Φ19.05		Φ19.05		Φ22.23		Φ28.6		Φ28.6		Φ28.6		Φ28.6*2	

★ Notes:

1. The rated cooling capacity of the return air unit is tested when the indoor dry/wet bulb temperature is 27/19°C and the outdoor dry bulb temperature is 35/-°C.
2. The rated heating capacity of the return air unit is tested when the indoor dry bulb temperature is 20°C and the outdoor dry/wet bulb temperature is 7/6°C.
3. Piping condition of unit performance test: IDU-ODU connecting pipe of 7.5 m (horizontal).
4. Ambient temperature range for operation of the circulating air unit: -10~50°C (cooling); -15~24°C (heating).

Performance Data

Specifications of Duct-Type Fresh Air Unit

Model	IDU	ATSD	080N(R)EIF	100N(R)EIF	125N(R)EIF	150N(R)EIF	200N(R)EIF	250N(R)EIF	300N(R)EIF	
	ODU	ATSA	080N(R)E	100N(R)E	120N(R)E	150N(R)E	200N(R)E	250N(R)E	150N(R)E*2	
Rated Cooling Capacity		kW	23.4	29.3	35	44	58.6	70	88	
		Btu/h	80000	100000	120000	150000	200000	240000	300000	
Rated Heating Capacity		kW	26.91	34.4	40.8	47.3	67.6	81.3	92.5	
		Btu/h	91800	117400	139200	161400	230700	277400	315700	
IDU	Dimension (single-unit)	Length	mm	1251	1451	1551	1901	1951	2051	2293
		Width	mm	1204	1204	1204	1504	1604	1604	1604
		Height	mm	608	608	708	708	808	908	1038
	Weight (single-unit)		kg	130	150	188	230	275	325	390
	Fan Motor	Air Flow	m³/h	1850	2450	3000	4000	5000	7000	8000
		ESP	Pa	100	200	200	200	250	250	300
		Power Supply		220V~ 50Hz				380V 3N~ 50Hz		
	Condensate Drain Pipe			DN32						
	Return Air Inlet Dimension		mm	1008*508	1008*508	1308*608	1658*608	1708*708	1808*808	2008*908
Supply Air Outlet Dimension		mm	270*295	270*295	745*295	333*292	651*265	748*292	930*292	
Total Power Input	Cooling	kW	8	10.00	11.9	15	20.8	24.5	30.89	
	Heating	kW	8.5	10.50	12.9	14.5	19.8	23.5	28.6	
Total Rated Current	Cooling	A	17.2	18.87	22.45	28.3	39.25	46.23	58.28	
	Heating	A	18.28	19.81	24.34	27.36	37.36	44.34	53.96	
Connecting Pipe	Connection Type		Welded Joint							
ODU Type		ATSA	080N(R)E	100N(R)E	120N(R)E	150N(R)E	200N(R)E	250N(R)E	150N(R)E*2	
ODU	Compressor Type			Hermetic Scroll Compressor						
	Dimensions (single-unit)	L	mm	1403	1403	1403	1403	1808	1808	1403
		w	mm	821	821	821	821	1090	1090	821
		H	mm	1200	1200	1200	1200	1214	1214	1200
Weight (single-unit)		kg	220	245	270	280	415	455	280	
Power Supply			380V 3N~ 50Hz							
Refrigerant	Type			R410A						
	Charging	kg	3.0*2	3.4*2	3.6*2	4.35*2	6.7*2	7.2*2	4.35*4	
Connection Pipe	Connection Type			Flared Joint				Welded Joint		Flared Joint
	Diameter	Liquid	φmm	9.52*2	9.52*2	9.52*2	12.7*2	12.7*2	12.7*2	12.7*4
		Gas	φmm	15.88*2	15.88*2	15.88*2	19.05*2	22.23*2	25.4*2	19.05*4

★ Notes:

- The rated cooling capacity is tested when the indoor dry/wet bulb temperature is 27°C/19°C and the outdoor dry/wet bulb temperature is 35°C/24°C (indoor operating conditions do not apply to all fresh air units).
- The rated heating capacity is tested when the indoor dry/wet bulb temperature is 20°C/15°C and the outdoor dry/wet bulb temperature is 7°C/6°C (indoor operating conditions do not apply to all fresh air units).
- Piping condition of unit performance test: Equivalent refrigerant length 7.5 m (horizontal).
- ATSD300N ODU is composed of two ATSA150N(R) units.
- When the unit is equipped with an optional electric heater, the power supply of the unit must meet the specification 380V3N~50Hz.
- Ambient temperature: 0°C–45°C (cooling); -15°C–25°C (heating).

Purification Air-cooled Air Conditioning Unit



High static pressure, ideal for large areas

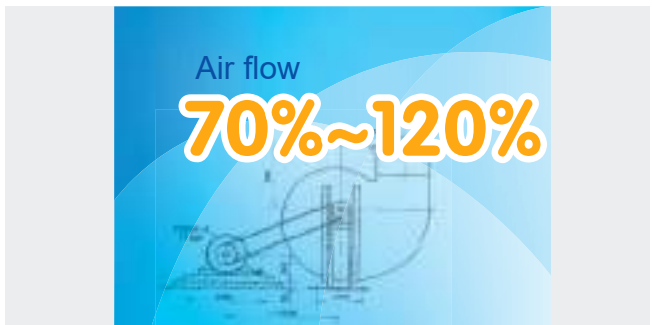
This series is specially designed to meet various requirements for purification in different places.

Flexible air supply type



Professional design, flexible installation

This series of units are specially designed for purification and other applications to ensure stable and reliable operation of the units even in cases of 70%-120% air flow.



Intelligent control

In addition to intelligent control, the unit also supports indoor fan control output. The fan start/stop can be controlled on site with the fan control point of unit.



Performance Data

Specifications of Inverter Purification Unit

Model	IDU	ATSD	080BRDEIV-U	080BREIV-U	100BRDEIV-U	100BREIV-U	120BRDEIV-U	120BREIV-U	150BRDEIV-U	150BREIV-U	200BRDEIV-U	200BREIV-U	250BRDEIV-U	250BREIV-U	300BRDEIV-U	300BREIV-U	
	ODU	ATSAV	080BREU		100BREU		120BREU		150BREU		200BREU		250BREU		150BREU*2		
Rated Cooling Capacity	kW		23.4		29.3		35		44		58.6		70		88		
	Btu/h		80000		100000		120000		150000		200000		240000		300000		
Rated Heating Capacity	kW		30.4		34		46.7		49.5		66.2		77		96.8		
	Btu/h		103700		116000		159300		168900		225900		262700		330375		
ODU	Compressor Type		Fully enclosed DC frequency conversion														
	Dimension (single-unit)	Length	mm	985		985		930		1240		1500		1500		1240	
		Width	mm	466		466		860		860		860		860		860	
		Height	mm	1264		1264		1710		1710		1710		1710		1710	
	Weight (single-unit)	kg	125		125		220		220		320		350		220*2		
	Noise	dB(A)	63		63		66		65		65		66		65		
Power Supply		380V 3N-50Hz															
IDU	Dimensions	Length	mm	1410		1410		1735		1860		1988		2298		2255	
		Width	mm	620		620		620		620		620		620		620	
		Height	mm	590		590		653		800		780		820		997	
	Weight	kg	63	63	63	63	78	83	100	110	110	120	120	130	140	150	
	Fan Motor	Air Flow	m³/h	4000		4000		5000		8000		10000		11000		13000	
		Power Supply	380V 3N-50Hz														
	Optional Auxiliary Electric Heating	kW	6	\	6	\	9	\	12	\	18	\	20.4	\	24	\	
	Condensate Drain Pipe		DN25(R1)														
	Return Air Inlet Dimension	mm	1140*480		1140*480		1475*543		1590*690		1764*670		2074*710		1980*887		
	Supply Air Outlet Dimension	mm	1140*480		1140*480		1475*543		1590*690		1764*670		2074*710		1980*887		
Total Power Input	Cooling	kW	9		12.00		15.00		16		23		28		30		
	Heating	kW	9.2		11.00		12.00		15		19.8		24		29.5		
Total Rated Current	Cooling	A	15.5		19.70		24.30		27.2		37.8		52		58.5		
	Heating	A	15.8		17.80		20.10		25.4		32.54		45		56		
Refrigerant	Type	R410A															
	Charging	kg	5.6		5.6		8.5		13.5		19		22		13.5*2		
Connection Pipe	Connection Type		Welded Joint														
	Diameter	Liquid	φmm	Φ9.52		Φ9.52		Φ12.7		Φ12.7		Φ15.88		Φ15.88		Φ12.7*2	
		Gas	φmm	Φ19.05		Φ19.05		Φ22.23		Φ28.6		Φ28.6		Φ28.6		Φ28.6*2	

★ Notes:

1. The rated cooling capacity of the return air unit is tested when the indoor dry/wet bulb temperature is 27/19°C and the outdoor dry bulb temperature is 35/-°C.
2. The rated heating capacity of the return air unit is tested when the indoor dry bulb temperature is 20°C and the outdoor dry/wet bulb temperature is 7/6°C.
3. Piping condition of unit performance test: IDU-ODU connecting pipe of 7.5 m (horizontal).
4. Ambient temperature range for operation of the circulating air unit: -10–50°C (cooling); -15–24°C (heating).

Performance Data

Specifications of Duct-Type Purification Unit

Model		IDU	ATSD	080N(R)(D)EI-U	100N(R)(D)EI-U	120N(R)(D)EI-U	150N(R)(D)EI-U	200N(R)(D)EI-U	250N(R)(D)EI-U	300N(R)(D)EI-U	
		ODU	ATSA	080N(R)E	100N(R)E	120N(R)E	150N(R)E	200N(R)E	250N(R)E	150N(R)E*2	
Rated Cooling Capacity			kW	23.4	29.3	35	44	58.6	70	88	
			Btu/h	80000	100000	120000	150000	200000	240000	300000	
Rated Heating Capacity			kW	26.91	34.4	40.8	47.3	67.6	81.3	92.5	
			Btu/h	91800	117400	139200	161400	230700	277400	315700	
IDU	Dimension (single-unit)	Length	mm	1380	1586	1884	1859	1988	2298	2218	
		Width	mm	620	620	620	620	620	620	620	
		Height	mm	630	630	630	690	780	820	997	
	Weight (single-unit)		kg	63	78	80	100	110	120	140	
	Rated Air Flow		m³/h	4300	4800	6000	7500	9000	11000	13000	
	Power Supply			220V- 50Hz							
	Optional Auxiliary Electric Heating		kW	6	9	10.2	12	18	20.4	24	
	Condensate Drain Pipe			DN25(R1)							
	Return Air Inlet Dimension		mm	1111*530	1317*530	1615*530	1635*580	1764*670	2074*710	1980*887	
	Supply Air Outlet Dimension		mm	1111*530	1317*530	1615*530	1635*580	1764*670	2074*710	1980*887	
Total Power Input	Cooling		kW	8	10	11.9	15	20.8	24.5	30.89	
	Heating		kW	8.5	10.5	12.9	14.5	19.8	23.5	28.6	
Total Rated Current	Cooling		A	17.2	18.87	22.45	28.3	39.25	46.23	58.28	
	Heating		A	18.28	19.81	24.34	27.36	37.36	44.34	53.96	
Connecting Pipe	Connection Type			Welded Joint							
ODU Type			ATSA	080N(R)E	100N(R)E	120N(R)E	150N(R)E	200N(R)E	250N(R)E	150N(R)E*2	
ODU	Compressor Type			Hermetic Scroll Compressor							
	Dimensions (single-unit)	L	mm	1403	1403	1403	1403	1808	1808	1403	
		w	mm	821	821	821	821	1090	1090	821	
		H	mm	1200	1200	1200	1200	1214	1214	1200	
	Weight (single-unit)		kg	220	245	270	280	415	455	280	
Power Supply			380V 3N- 50Hz								
Refrigerant	Type			R410A							
	Charging		kg	3.0*2	3.4*2	3.6*2	4.35*2	6.7*2	7.2*2	4.35*4	
Connection Pipe	Connection Type			Flared Joint				Welded Joint			Flared Joint
	Diameter	Liquid	φmm	9.52*2	9.52*2	9.52*2	12.7*2	12.7*2	12.7*2	12.7*4	
		Gas	φmm	15.88*2	15.88*2	15.88*2	19.05*2	22.23*2	25.4*2	19.05*4	

★ Notes:

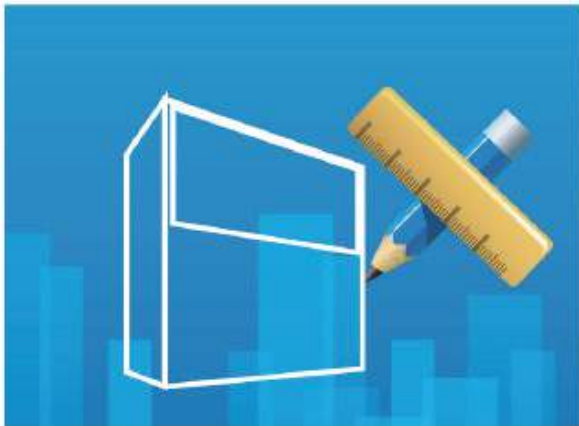
1. The rated cooling capacity is tested when the indoor dry/wet bulb temperature is 27°C/19°C and the outdoor dry/wet bulb temperature is 35°C/24°C (indoor operating conditions do not apply to all fresh air units).
2. The rated heating capacity is tested when the indoor dry/wet bulb temperature is 20°C/15°C and the outdoor dry/wet bulb temperature is 7°C/6°C (indoor operating conditions do not apply to all fresh air units).
3. Piping condition of unit performance test: Equivalent refrigerant length 7.5 m (horizontal).
4. ATSD300N ODU is composed of two ATSA150N(R) units.
5. When the unit is equipped with an optional electric heater, the power supply of the unit must meet the specification 380V3N~50Hz.
6. Ambient temperature: 0°C–45°C (cooling); -15°C–25°C (heating).

Air-cooled Floor Standing Air Conditioning Unit



Luxury and elegant design

User-friendly interface



Performance Data

Specifications of Floor Standing Unit

Model		IDU	ATSD	100N(R)E(D)VD(VB)	120N(R)E(D)VD(VB)	150N(R)E(D)VD(VB)	200N(R)E(D)VD(VB)	250N(R)(D)EVD	300N(R)(D)EVD
		ODU	ATSA	100N(R)E	120N(R)E	150N(R)E	200N(R)E	250N(R)E	150N(R)E*2
Rated Cooling Capacity			kW	29.3	35	44	58.6	70	88
			Btu/h	100000	120000	150000	200000	240000	300000
Rated Heating Capacity			kW	34.4	40.8	47.3	67.6	81.3	92.5
			Btu/h	117400	139200	161400	230700	277400	315700
IDU	Dimension (single-unit)	Length	mm	1470	1470	1810	1810	1873	1873
		Width	mm	500	700	700	700	1240	1240
		Height	mm	1670 (1870)	2010 (2260)	2010 (2260)	2010 (2260)	1764	1764
	Weight (single-unit)		kg	200 (220)	280 (310)	300 (320)	360 (380)	400	410
	Fan Motor	Air Flow	m ³ /h	5000	6800	7500	10000	12000	15000
		ESP	Pa	100 (0)	120 (0)	150 (0)	200 (0)	250	250
		Power Supply		380V 3N-50Hz 220V-50Hz	380V 3N-50Hz				
	Optional Auxiliary Electric Heating		kW	9	10.2	12	18	20.4	24
Condensate Drain Pipe			DN25(R1)						
Total Power Input	Cooling	kW	10.00 (9.10)	11.90 (10.7)	15.00 (14.20)	20.80 (18.50)	24.65	30.89	
	Heating	kW	10.50 (9.70)	12.90 (11.10)	14.50 (13.80)	19.80 (18.30)	24	28.6	
Total Rated Current	Cooling	A	18.87 (17.17)	2.45 (20.19)	28.30 (26.79)	39.25 (34.91)	46.3	58.6	
	Heating	A	19.81 (18.30)	4.34 (20.94)	27.36 (26.04)	37.36 (34.53)	44.4	52.9	
Connecting Pipe	Connection Type			Flared Joint			Welded Joint		
	ODU Type		ATSA	100N(R)E	120N(R)E	150N(R)E	200N(R)E	250N(R)E	150N(R)E*2
ODU	Compressor Type			Hermetic Scroll Compressor					
	Dimensions (single-unit)	L	mm	1403	1403	1403	1808	1808	1403
		w	mm	821	821	821	1090	1090	821
		H	mm	1200	1200	1200	1214	1214	1200
	Weight (single-unit)		kg	245	270	280	415	455	280
Power Supply			380V 3N-50Hz						
Refrigerant	Type			R410A					
	Charging		kg	3.4*2	3.6*2	4.35*2	6.7*2	7.2*2	4.35*4
Connection Pipe	Connection Type			Flared Joint			Welded Joint		Flared Joint
	Diameter	Liquid	φmm	9.52*2	9.52*2	12.7*2	12.7*2	12.7*2	12.7*4
		Gas	φmm	15.88*2	15.88*2	19.05*2	22.23*2	25.4*2	19.05*4

★ Notes:

- The rated cooling capacity is tested when the indoor dry/wet bulb temperature is 27°C/19°C and the outdoor dry/wet bulb temperature is 35°C/24°C (indoor operating conditions do not apply to all fresh air units).
- The rated heating capacity is tested when the indoor dry/wet bulb temperature is 20°C/15°C and the outdoor dry/wet bulb temperature is 7°C/6°C (indoor operating conditions do not apply to all fresh air units).
- Piping condition of unit performance test: Equivalent refrigerant length 7.5 m (horizontal).
- ATSD300N ODU is composed of two ATSA150N(R) units.
- When the unit is equipped with an optional electric heater, the power supply of the unit must meet the specification 380V3N-50Hz.
- Ambient temperature: 0°C-45°C (cooling); -15°C-25°C (heating).