




The new degree of comfort.®

INVERTER

HIGH EFFICIENCY DUCTED INVERTER SERIES



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 Rheem Middle East


 Rheem Middle East and Africa

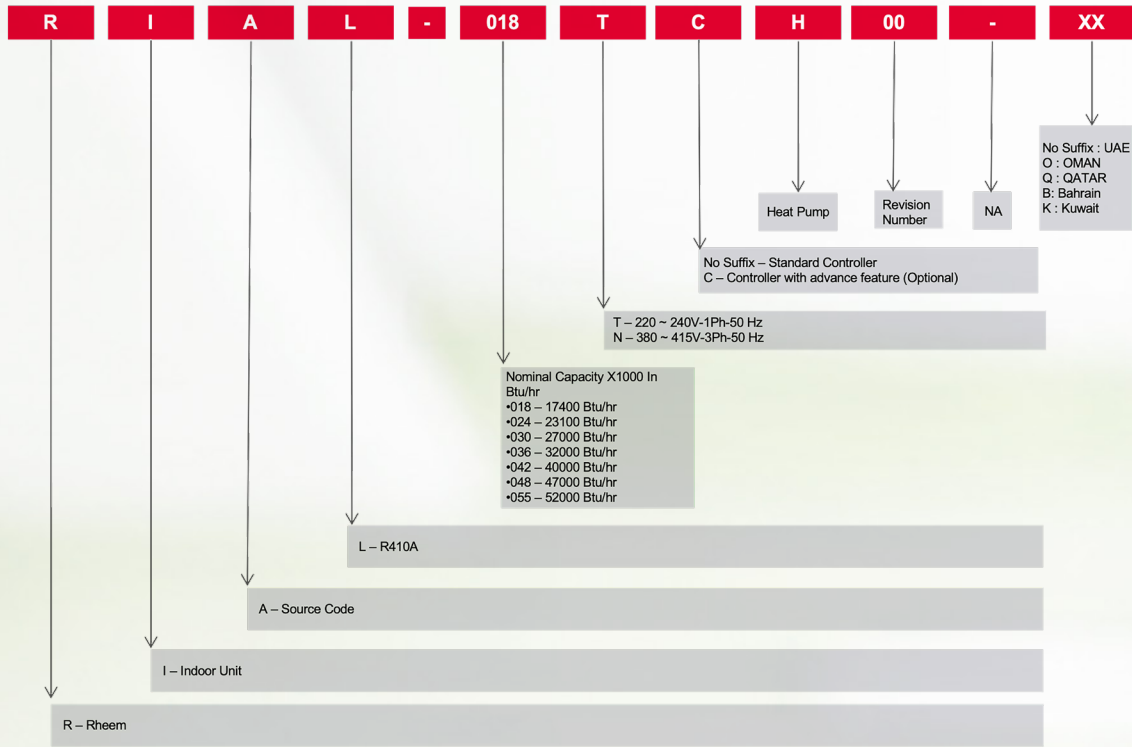


TABLE OF CONTENTS

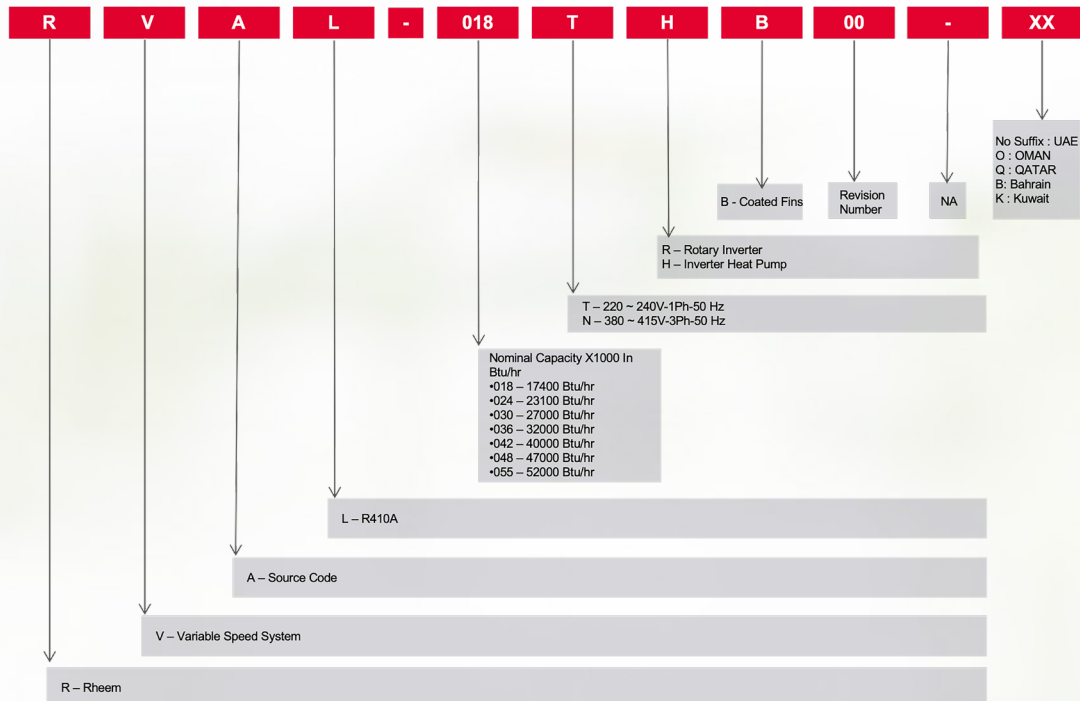
Indoor/Outdoor Unit Nomenclature	03
Inverter Technology	04
System Features	05
Outdoor Unit Features	08
Outdoor Unit Specifications	09
Indoor Unit Features	11
System Specifications	12
System Net Performance Data	13
Indoor/Outdoor Unit Technical Drawings	16
Indoor/Outdoor Unit Wiring Diagrams	22
Indoor Unit Sound Level Data	25
System Static Pressure Curves	25
Remote Controllers	29
Central Controllers	30
Wifi Module	32

NOMENCLATURE-LIGHT COMMERCIAL

Indoor Unit



Outdoor Unit

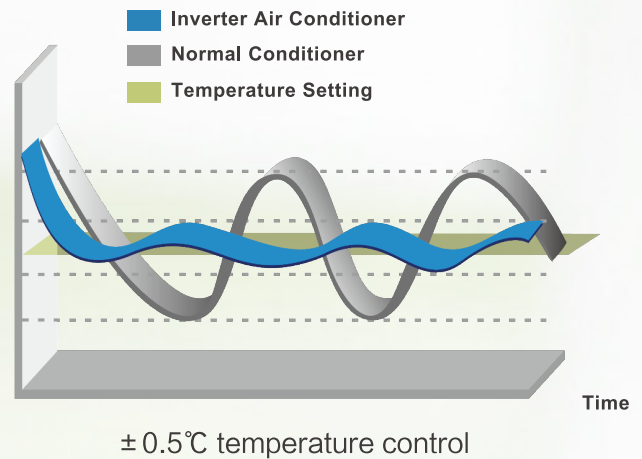


WHAT IS AN INVERTER AIR CONDITIONER AND HOW DOES IT WORK?

A conventional air conditioner or so called ON/OFF or non inverter units operates at a fixed speed. It delivers a fix amount of cooling or heating capacity based on fix speed of the compressor. Irrespective of the temperature difference between set and actual, compressor runs at full speed and delivers fix capacity. Once room set temperature is achieved compressor has to stop completely and again re-start after actual temperature goes above the set. This cycle of ON/OFF continues and room temperature goes up and down in a sinusoidal wave form continuously.

An Inverter air conditioners DC on the other hand uses DC inverter compressor. DC inverter is an advanced technology used in the air conditioning industry to achieve higher degree of user comfort and to save more energy from the air conditioner. DC Inverter compressors can increase or decrease the compressor speed and hence deliver the cooling based on requirement of the space to be air conditioned.

Rheem's Inverter air conditioner's comes with a smart intelligent controls which can identify the cooling requirement in the room automatically and adjust the compressor speed accordingly.

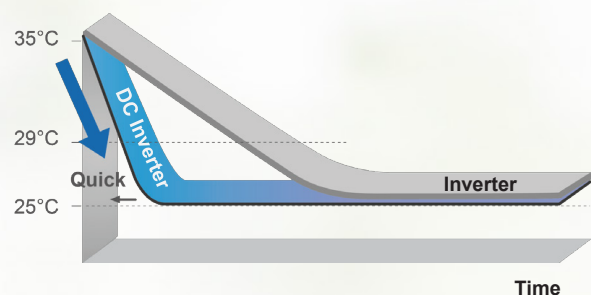


FASTER COOLING

In addition to adjustable DC inverter compressor Rheem also uses smart electronic expansion valve.

Electronic expansion valve is again controlled by the smart controller to maintain the accurate quantity of refrigerant mass flow rate based on the cooling demand. EEV work in 500 different steps, based on the cooling demand intelligent controller will give signal for the accurate opening of the EEV.

This simultaneous control of the DC inverter compressor speed along with electronic expansion valve opening gives faster cooling and precise control over the room temperature. This also saves the energy consumption greatly compared to fix speed air conditioner. Any sudden fluctuation in the room will be sensed by the smart controller and accordingly inverter air conditioner will adjust to achieve the set temperature.



COMFORT



Fast Cooling /Heating

Startup at high frequency increases cooling/heating capacity and reduces time to reach set temperature, thus you can enjoy cooling and heating in seconds.



Independent Dehumidification

With the independent dehumidification function, the unit can efficiently dehumidify the room and give you more comfort.



Silent

Indoor fan will run at super breeze speed and indoor noise level can be extremely low when the unit enters silent mode operation.

RELIABILITY



Low Ambient Cooling

With special designed PCB, outdoor fan speed can be changed automatically according to condensation temperature. The air conditioner can run cooling operation even when the outdoor ambient temperature down to -15°C .



Intelligent Defrosting

Normal defrost function can only be operated in certain time, but Rheem commercial air conditioner's intelligent defrost can start automatically according to the surrounding condition.



Compressor Heating Belt

Auxiliary heating belt can increase compressor oil temperature in winter and prevent defrosting water accumulated, which improves heat transfer efficiency.



No Frosting Chassis

The unique pipeline design makes the temperature on chassis higher than normal units, and it prevents defrosting water accumulated, which improves heat transfer efficiency and solves the drainage problem.



Golden Fin

Effectively prevent bacteria breeding and improve heat transfer efficiency. The unique anti-corrosive golden coating on the condenser can withstand the rain, salty air and other corrosive elements.

CONVENIENCE



24-hour Timer

Users can turn on or turn off the air conditioner at any time in 24 hours with remote controller or wireless controller.



Built-in Drain Pump

The built-in pump can lift the condensing water 1200 mm upmost from the drainage pan.



Dual side Drainage

Both left and right sides of the indoor unit are possible for drainage hose connection, and it's easy for installation with this function.



Digital Tube Display

Easily for the running parameters checking and more convenient for troubleshooting, digital tube displays work status such as indoor temperature, setting temperature, the mode of operation, etc.



Remote Control

Help users to control the air conditioner easily, you can design your most comfortable settings with this controller.



Wired Control

Help users to control the air conditioner easily, the wired controller can be fixed on the wall and avoid mislaying. It's mainly used for commercial zone and makes air conditioner control more convenient.



Central Control

With the control function of weekly timer, zone (or group) setting etc., the centralized controller can control 64 units with RS 485 wire connection and the central control adapter.



Washable Filter

The indoor unit filter can be taken off to wash easily and it keeps cleaning air all the time.



WIFI Control

With the WIFI control, you can easily turn off the air conditioner outside your house via smart device. Furthermore, you can turn it on before you come back. The indoor unit filter can be taken off to wash easily and it keeps cleaning air all the time.



Auto Restart Function

If the air conditioner breaks off unexpectedly due to the power cut, it will restart with the previous setting mode automatically when the power resume.

ENERGY SAVING



180° Sine Wave Control

With considerable advantages, DC Inverter 180° sine wave driving technology has much wider range of frequency and voltage, higher energy efficiency, more smoothly running and lower noise.



Sleep Mode

The function enables the air conditioner to automatically increase cooling or decrease heating 1°C per hour for the first 2 hours, then holds steady for the next 5 hours, after that it will switch off. This function maintains both energy saving and comfort in night.



Full Process By DC Drive

DC control, DC Compressor, DC indoor motor, DC outdoor motor, and DC Electronic expansion valve make low noise and high efficiency.



Hydrophilic aluminum fin

The louvered hydrophilic aluminum foil has improved by more than 10%. There refrigerant inlet and outlet are separated, to ensure the sub-cooling and enhance the cooling capacity.

HEALTH



Fresh Air Intake

Air outside can be led into the room via a connection pipe, which keeps the indoor air fresh and healthy.



Long-term Filter

The latest long-term filter ensures better air quality. Meanwhile, the cleaning frequency has been decreased, and maintenance is also much easier.

TROPICAL SERIES

OUTDOOR UNIT

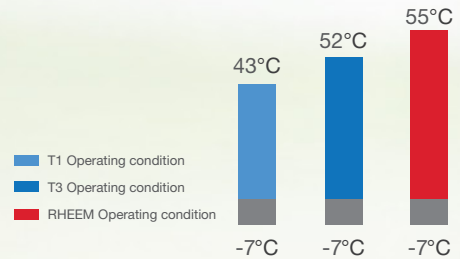


Environment Friendly-R410A



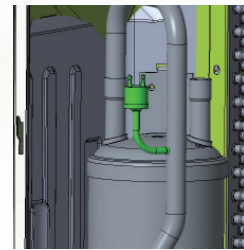
High Running Temperature

Enjoy excellent performance even under ambient temperature up to 55°C , suitable for T3 operating condition.



Multiple Protection

With Multiple Protection contents: High pressure protection, Low pressure protection, Compressor overloading protection, High Ext. temperature protection, Phase protection (Phase-loss, phase-reverse), Over-heating protection, Anti-freezing protection, Sensor failure alarm, Failure code display, etc. The compressor could well run in reasonable operation range.



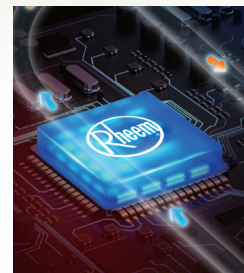
Double Anti-Corrosion Technology

Galvanized metal with world-class powder spraying technology can improve the anti-corrosion ability of the housing of outdoor units three times, especially, in salty, moist surroundings.



Cooled & Insulated PCB Box

Make PCB working temperature below at 30°C , prevent PCB overheating, ensure more stable equipment operation, prolong PCB service life (only DC Inverter 36/42/48/55K)



TROPICAL SERIES

OUTDOOR UNIT



TECHNICAL SPECIFICATION - SINGLE-PHASE

Model	Outdoor		RVAL-018THB00-K	RVAL-024THB00-K	RVAL-030THB00-K	RVAL-036THB00-K
Electric Data	Power Supply	V~,Hz,Ph	220-240,50,1	220-240,50,1	220-240,50,1	220-240,50,1
Performance	Air Flow Volume	m ³ /h	3500	3500	3500	4200
		CFM	2059	2059	2059	2471
	Noise Level	dB(A)	56	58	58	59
Dimension (W×D×H)	Net	mm	900×350×700	900×350×700	900×350×700	970×395×805
	Packing	mm	1020×430×770	1020×430×770	1020×430×770	1105×495×895
Weight	Net/Gross	kg	40/44	42/46	52/56	61/66
	Liquid	mm(inch)	6.35	9.52	9.52	9.52
Piping	Gas	mm (inch)	12.7	15.88	15.88	15.88
	Max. Length/Max. Height	m	30/15	30/15	30/20	50/30
Stuffing Quantity	20/40/40H	unit	87/183/183	87/183/183	87/183/183	44/96/96

TECHNICAL SPECIFICATION - THREE-PHASE

Model	Outdoor		RVAL-042NHB00-K	RVAL-048NHB00-K	RVAL-055NHB00-K
Electric Data	Power Supply	V~,Hz,Ph	380-415,50,3	380-415,50,3	380-415,50,3
Performance	Air Flow Volume	m ³ /h	6800	6800	6800
		CFM	4000	4000	4000
	Noise Level	dB(A)	60	60	60
Dimension (W×D×H)	Net	mm	940×370×1325	940×370×1325	940×401×1366
	Packing	mm	1080×430×1440	1080×430×1440	1080×460×1490
Weight	Net/Gross	kg	96/106	96/106	105/118
	Liquid	mm(inch)	Φ9.52	Φ9.52	Φ9.52
Piping	Gas	mm (inch)	Φ19.05	Φ19.05	Φ19.05
	Max. Length/Max. Height	m	50/30	50/30	50/30
Stuffing Quantity	20/40/40H	unit	27/55/55	27/55/55	27/55/55

Remark:

- 1.The above designs and specifications are subject to change without prior notice. Final specifications please refer to technical specification provided by sales representative.
- 2.Cooling Capacity and Cooling Input Power (T1):Indoor Temperature 26.7°C DB/19.4°C WB;Ambient Temperature 35°C DB/24°C WB.
- 3..Heating Capacity and Heating Input Power :Indoor Temperature 20°C DB;Ambient Temperature 7°C DB/6°C WB.
- 4.The Max.Ambient temperature for units running is 55 °C.

TROPICAL SERIES

T4 CONDITIONS

T4 SUMMARY DATA TABLE

MODEL	Indoor Model		RIAL-018TH00-K	RIAL-024TH00-K	RIAL-030TH00-K	RIAL-036TH00-K	RIAL-042TH00-K	RIAL-048TH00-K	RIAL-055TH00-K
	Outdoor Model		RVAL-018THB00-K	RVAL-024THB00-K	RVAL-030THB00-K	RVAL-036THB00-K	RVAL-042THB00-K	RVAL-048THB00-K	RVAL-055THB00-K
Capacity	Cooling (T4)	Btu/h	12000	17000	21600	27000	33000	40000	45000
Electric Data	Power Input (T4)	W	1400	1984	2520	3151	3851	4667	5251
Performance	EER (T4)	kW/RT	1.4	1.4	1.4	1.4	1.4	1.4	1.4



Tropical Series

Mid ESP Duct

FEATURES

■ optional ■ standard



Wired Control



Auto Restart
Function



Long-term Filter



Hydrophilic
Aluminum Fin



Intelligent
Defrosting



Fast Cooling/
Heating



Low Ambient
Cooling



Remote Control



Central Control



Golden Fin



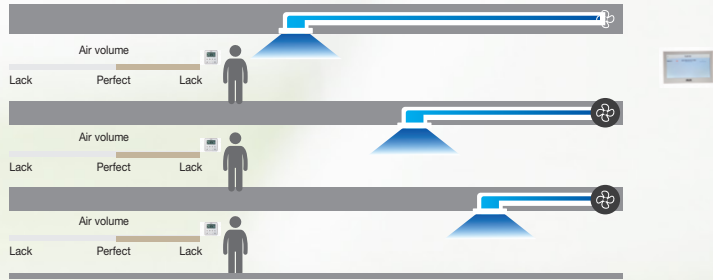
WIFI Control

TROPICAL SERIES MID ESP DUCT



Self-adaption Technology

Automatic ESP Adjustment function will adapt the unit to any ducting with optimized air volume and minimized noise level automatically, making more comfortable in any situation.



Wifi Control

The optional WiFi modular makes it possible to monitor and control your AC while on the road through APP on your mobile phone or pad.



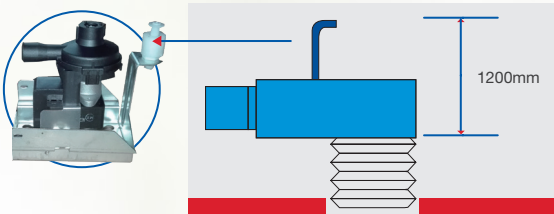
Fresh Air Intake

Fresh air makes a healthy, comfortable life.



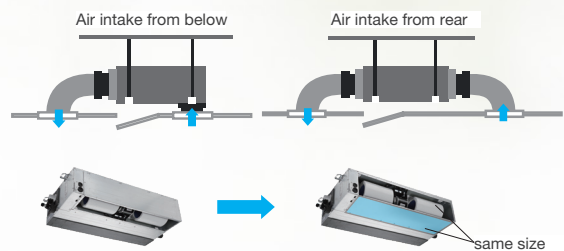
Built-in Water Pump (Optional)

The built-in pump can lift condensing water up to 1200mm high from the drainage pan.



Flexible Air Intake Options

Air intake from rear as standard, from bottom is optional. The size of the plate from bottom is the same as the flange from back, which makes it convenient to change installation style due to different decoration requirements.



DUCTED INVERTER



TECHNICAL SPECIFICATION - SINGLE-PHASE

Model	Indoor		RIAL-018TH00-K	RIAL-024TH00-K	RIAL-030TH00-K	RIAL-036TH00-K
	Outdoor		RVAL-018THB00-K	RVAL-024THB00-K	RVAL-030THB00-K	RVAL-036THB00-K
Capacity	Cooling (T1/T3/T4)	Btu/h	17400/16000/12000	23100/21100/17000	27000/26000/21600	32000/30000/27000
		RT	1.45/1.33/1.00	1.93/1.76/1.42	7.90/7.60/1.80	2.67/2.50/2.26
		kW	5.10/4.68/3.52	6.78/6.18/4.98	9.4/8.8/6.33	9.4/8.8/7.91
	Heating(T1)	Btu/h	19800	27600	35800	35800
		RT	1.65	2.30	2.99	2.99
		kW	5.80	8.10	10.50	10.50
Electric Data	Power Supply	V-, Hz, Ph	220-240,50,1	220-240,50,1	220-240,50,1	220-240,50,1
	Cooling Power Input(T1/T3/T4)	W	1426/1860/1400	1893/2482/1984	2634/3488/2520	2634/3488/3151
	Cooling Current(T1/T3/T4)	A	6.74/8.79/6.41	8.95/11.73/9.08	12.45/16.49/11.53	12.45/16.49/14.42
	Heating Power Input(T1)	W	1506	2104	2763	2763
	Heating Current(T1)	A	7.12	9.94	13.06	13.06
	Performance	EER(T1/T3)	(Btu/h)/W	12.20/8.60	12.20/8.50	12.15/8.60
W/W			3.58/2.52	3.58/2.49	3.56/2.52	3.56/2.52
kW/RT			1.40	1.40	1.40	1.40
EER(T4)		W/W	2.51	2.51	2.51	2.51
		(Btu/h)/W	13.14	13.14	12.96	12.96
COP(T1)		W/W	3.85	3.85	3.80	3.80
		Air Flow Volume(Hi/Mid/Low)	m3/h	1130/910/780	1500/1350/1200	2100/1900/1600
		CFM	665/535/459	882/794/706	1235/1117/1000	1235/1117/1000
Noise Level(Hi/Mid/Low)		dB(A)	42/39/38	45/43/41	45/42/40	45/42/40
External Static Pressure(ESP)		Pa	0-80	0-80	0-160	0-160
Dimension (W×D×H)	Net	mm	1000×700×245	1000×700×245	1250×735×320	1250×735×320
	Packing	mm	1230X830X300	1230X830X300	1430×800×390	1430×800×390
Dimension	Air Outlet	mm	811×175	811×175	967×214	967×214
	Air Return	mm	874×204	874×204	1175×280	1175×280
Weight	Net/Gross	kg	30/36	30/36	48/54	48/54
Piping Size	Drainage	mm(inch)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)
Stuffing Quantity	20/40/40H	set	77/161/184	77/161/184	66/138/138	66/138/138

TECHNICAL SPECIFICATION - THREE-PHASE

Model	Indoor		RIAL-042TH00-K	RIAL-048TH00-K	RIAL-055TH00-K
	Outdoor		RVAL-042NHB00-K	RVAL-048NHB00-K	RVAL-055NHB00-K
Capacity	Cooling (T1/T3/T4)	Btu/h	40000/35000/33000	47000/43000/40000	52000/47000/45000
		RT	3.33/2.91/2.76	3.91/3.58/3.34	4.34/3.92/3.76
		kW	11.70/10.25/9.67	13.75/12.60/11.72	15.25/13.80/13.19
	Heating(T1)	Btu/h	46000	52200	61400
		RT	3.84	4.35	5.12
		kW	13.50	15.30	18.00
Electric Data	Power Supply	V-, Hz, Ph	380-415,50,3	380-415,50,3	380-415,50,3
	Cooling Power Input(T1/T3/T4)	W	3292/4023/3851	3852/4943/4667	4280/5402/5251
	Cooling Current(T1/T3/T4)	A	6.3/7.7/6.49	6.9/8.8/7.86	7.3/9.2/8.85
	Heating Power Input(T1)	W	3553	3923	4737
	Heating Current(T1)	A	6.80	7.00	8.00
	Performance	EER(T1/T3)	(Btu/h)/W	12.15/8.70	12.20/8.7
W/W			3.56/2.55	3.58/2.55	3.56/2.55
kW/RT			1.40	1.40	1.40
EER(T4)		W/W	2.51	2.51	2.51
		(Btu/h)/W	12.96	13.30	12.96
COP(T1)		W/W	3.80	3.90	3.80
		Air Flow Volume(Hi/Mid/Low)	m3/h	2300/2100/1700	2800/2500/2100
		CFM	1353/1235/1000	1647/1471/1235	1824/1647/1471
Noise Level(Hi/Mid/Low)		dB(A)	48/45/43	49/47/44	52/50/47
External Static Pressure(ESP)		Pa	0-160	0-160	0-160
Dimension (W×D×H)	Net	mm	1250×735×320	1400×820×380	1400×820×380
	Packing	mm	1430×800×390	1580×880×450	1580×880×450
Dimension	Air Outlet	mm	967×214	1117×273	1117×273
	Air Return	mm	1175×280	1320×340	1320×340
Weight	Net/Gross	kg	48/54	56/63	56/63
Piping Size	Drainage	mm(inch)	DN20(R3/4in)	DN20(R3/4in)	DN20(R3/4in)
Stuffing Quantity	20/40/40H	set	66/138/138	35/75/75	35/75/75

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- Heating Capacity and Heating Input Power : Indoor Temperature 20°C DB; Ambient Temperature 7°C DB/6°C WB.
- The Max.Ambient temperature for units running is 55 °C.
- T: Tropical High Efficiency, N: Normal

18K SYSTEM NET PERFORMANCE DATA

Indoor Model Name	RIAL-018TH00-K		Outdoor Air Temperature (°CDB)																		
	Outdoor Model Name	Indoor Air Temperature °CWB	35			40			43			46			48			52			
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	
Low	780	14	20	3.62	3.29	1.33	3.49	3.21	1.41	3.37	3.14	1.46	3.36	3.09	1.74	3.26	3.03	1.75	3.12	2.99	1.77
		16	22	4.23	3.72	1.35	4.07	3.63	1.44	3.94	3.43	1.48	3.90	3.50	1.76	3.78	3.43	1.77	3.62	3.38	1.80
		18	25	4.72	4.03	1.37	4.54	3.93	1.46	4.39	3.83	1.51	4.38	3.79	1.79	4.25	3.72	1.80	4.06	3.66	1.82
		19	27	4.94	4.16	1.39	4.75	4.05	1.48	4.60	3.95	1.53	4.56	3.91	1.82	4.42	3.83	1.83	4.23	3.78	1.86
		22	30	5.42	4.39	1.41	5.22	4.20	1.50	5.05	4.13	1.55	5.01	4.13	1.84	4.86	4.05	1.85	4.65	3.99	1.88
		24	32	5.62	4.45	1.43	5.41	4.32	1.52	5.24	4.20	1.57	5.19	4.19	1.87	5.04	4.10	1.88	4.82	4.05	1.91
Medium	910	14	20	3.68	3.37	1.34	3.54	3.29	1.43	3.43	3.22	1.48	3.41	3.17	1.76	3.31	3.11	1.77	3.16	3.06	1.79
		16	22	4.29	3.81	1.37	4.13	3.72	1.45	4.00	3.63	1.50	3.96	3.58	1.78	3.84	3.51	1.79	3.67	3.46	1.82
		18	25	4.79	4.13	1.39	4.61	4.02	1.47	4.46	3.92	1.52	4.45	3.88	1.81	4.31	3.81	1.82	4.13	3.75	1.85
		19	27	5.01	4.26	1.41	4.83	4.15	1.50	4.67	4.04	1.55	4.63	4.01	1.84	4.49	3.93	1.85	4.30	3.87	1.88
		22	30	5.50	4.50	1.43	5.30	4.37	1.52	5.12	4.25	1.57	5.09	4.23	1.86	4.93	4.15	1.88	4.72	4.09	1.90
		24	32	5.71	4.56	1.45	5.50	4.43	1.54	5.32	4.31	1.59	5.27	4.29	1.89	5.11	4.21	1.90	4.89	4.15	1.93
High	1130	14	20	3.74	3.43	1.36	3.60	3.35	1.45	3.49	3.27	1.49	3.46	3.22	1.78	3.35	3.16	1.79	3.20	3.12	1.81
		16	22	4.37	3.88	1.38	4.20	3.89	1.47	4.07	3.69	1.52	4.01	3.65	1.80	3.89	3.57	1.81	3.72	3.52	1.84
		18	25	4.87	4.20	1.40	4.69	4.10	1.49	4.54	3.99	1.54	4.50	3.95	1.83	4.37	3.87	1.84	4.18	3.82	1.87
		19	27	5.10	4.33	1.43	4.91	4.22	1.52	4.75	4.11	1.57	4.68	4.08	1.86	4.54	4.00	1.87	4.35	3.94	1.90
		22	30	5.60	4.58	1.44	5.39	4.45	1.54	5.21	4.33	1.59	5.15	4.31	1.89	5.00	4.22	1.90	4.78	4.16	1.93
		24	32	5.81	4.64	1.47	5.59	4.51	1.56	5.41	4.38	1.61	5.34	4.37	1.91	5.18	4.28	1.93	4.95	4.22	1.95

24K SYSTEM NET PERFORMANCE DATA

Indoor Model Name	RIAL-024TH00-K		Outdoor Air Temperature (°CDB)																		
	Outdoor Model Name	Indoor Air Temperature °CWB	35			40			43			46			48			52			
			TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	
Low	1200	14	20	4.74	4.23	1.77	4.56	4.14	1.88	4.41	4.04	1.94	4.35	3.98	2.32	4.22	3.90	2.34	4.03	3.85	2.37
		16	22	5.53	4.79	1.80	5.33	4.67	1.91	5.15	4.56	1.97	5.07	4.50	2.36	4.89	4.41	2.37	4.68	4.35	2.41
		18	25	6.17	5.19	1.82	5.94	5.06	1.94	5.75	4.93	2.00	5.67	4.88	2.39	5.50	4.78	2.40	5.26	4.71	2.44
		19	27	6.46	5.35	1.86	6.22	5.21	1.97	6.01	5.08	2.04	5.90	5.04	2.43	5.72	4.94	2.45	5.47	4.87	2.48
		22	30	7.09	5.65	1.88	6.82	5.50	2.00	6.60	5.35	2.06	6.48	5.32	2.47	6.29	5.21	2.48	6.01	5.14	2.52
		24	32	7.36	5.73	1.91	7.08	5.57	2.03	6.85	5.41	2.09	6.71	5.39	2.50	6.51	5.28	2.51	6.23	5.21	2.55
Medium	1350	14	20	4.89	4.44	1.78	4.71	4.34	1.90	4.56	4.24	1.96	4.49	4.18	2.34	4.35	4.10	2.36	4.16	4.04	2.39
		16	22	5.71	5.02	1.81	5.50	4.90	1.93	5.32	4.78	1.99	5.21	4.73	2.37	5.05	4.63	2.39	4.83	4.57	2.43
		18	25	6.37	5.44	1.84	6.13	5.31	1.96	5.93	5.03	2.02	5.85	5.12	2.41	5.68	5.02	2.42	5.43	4.95	2.46
		19	27	6.67	5.62	1.87	6.42	5.47	1.99	6.21	5.33	2.06	6.09	5.29	2.45	5.91	5.18	2.47	5.65	5.11	2.50
		22	30	7.32	5.93	1.89	7.05	5.77	2.01	6.82	5.61	2.08	6.69	5.68	2.49	6.49	5.47	2.50	6.21	5.39	2.54
		24	32	7.59	6.01	1.92	7.31	5.84	2.04	7.07	5.68	2.11	6.93	5.66	2.52	6.72	5.55	2.53	6.43	5.47	2.57
High	1500	14	20	4.97	4.55	1.81	4.78	4.45	1.92	4.63	4.34	1.98	4.56	4.28	2.37	4.42	4.20	2.38	4.23	4.14	2.42
		16	22	5.80	5.15	1.83	5.58	5.02	1.95	5.40	4.90	2.01	5.29	4.84	2.40	5.13	4.75	2.42	4.91	4.68	2.45
		18	25	6.47	5.58	1.86	6.23	5.44	1.98	6.02	5.30	2.05	5.94	5.25	2.44	5.76	5.14	2.45	5.51	5.07	2.49
		19	27	6.78	5.75	1.89	6.52	5.61	2.01	6.30	5.46	2.08	6.18	5.42	2.48	6.00	5.31	2.50	5.74	5.23	2.53
		22	30	7.43	6.08	1.92	7.15	5.91	2.04	6.92	5.75	2.11	6.79	5.72	2.52	6.59	5.60	2.53	6.30	5.52	2.57
		24	32	7.71	6.16	1.95	7.42	5.98	2.07	7.18	5.82	2.14	7.04	5.80	2.55	6.83	5.68	2.56	6.53	5.60	2.60

◆Symbol

- AFR : Air Flow Rate m³/h
- DB : Dry Bulb Temperature [°C]
- WB : Wet Bulb Temperature [°C]
- TC : Total Capacity [kW]
- SHC : Sensible Heating Capacity [kW]
- PI : Power Input (compressor + indoor fan motor + outdoor fan motor) [kW]

◆Notes

1. All capacities are net. A deduction (cooling) or an addition (heating) of Capacity due to operating heat of indoor unit motor is reflected.
2. indicates rated capacity at standard condition.
3. Direct interpolation is permissible. Do not extrapolate
4. Capacities are based on the following conditions:
 - Interconnecting Piping Length : 5m
 - Level Difference : Zero



42K SYSTEM NET PERFORMANCE DATA

Indoor Model Name	Outdoor Air Temperature (°CDB)																		
	35			40			43			46			48			52			
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	
Fan gear	Indoor Model Name																		
	Outdoor Model Name																		
Air flow Rate	Indoor Air Temperature																		
	°CWB																		
Low	14	8.19	6.97	3.08	7.89	6.61	3.27	7.63	6.65	3.38	7.20	6.56	3.76	6.99	6.43	3.79	6.68	6.33	3.65
	16	9.56	7.88	3.12	9.20	7.70	3.32	8.90	7.50	3.43	8.36	7.42	3.82	8.11	7.27	3.84	7.76	7.16	3.90
	18	10.66	8.54	3.17	10.27	8.33	3.37	9.93	8.11	3.49	9.39	8.04	3.87	8.71	7.88	3.89	8.71	7.76	3.95
	19	11.16	8.81	3.23	10.75	8.59	3.43	10.39	8.36	3.54	9.78	8.29	3.94	9.48	8.13	3.97	9.07	8.01	4.03
	22	12.25	9.31	3.27	11.79	9.05	3.48	11.41	8.80	3.59	10.74	8.76	4.00	10.42	8.58	4.02	9.97	8.46	4.08
	24	12.71	9.43	3.32	12.24	9.17	3.53	11.84	8.91	3.64	11.13	8.88	4.05	10.80	8.70	4.07	10.32	8.58	4.14
	14	8.46	7.31	3.10	8.14	7.15	3.30	7.88	6.98	3.41	7.44	6.88	3.60	7.22	6.74	3.62	6.90	6.65	3.88
	16	9.87	8.27	3.15	9.50	8.08	3.35	9.19	7.88	3.46	8.63	7.78	3.65	8.38	7.63	3.87	8.01	7.52	3.99
	18	11.01	8.96	3.20	10.80	8.74	3.40	10.25	8.51	3.51	9.70	8.43	3.90	9.41	8.27	3.93	9.00	8.15	3.99
	19	11.52	9.25	3.25	11.10	9.01	3.46	10.72	8.76	3.57	10.10	8.71	3.97	9.79	8.53	4.00	9.26	8.41	4.06
	22	12.65	9.77	3.29	12.16	9.50	3.50	11.76	9.24	3.62	11.49	9.32	4.03	10.76	9.01	4.05	10.29	8.68	4.11
	24	13.12	9.90	3.34	12.64	9.62	3.55	12.22	9.36	3.67	11.49	9.32	4.08	11.15	9.13	4.11	10.66	9.00	4.17
	14	8.59	7.49	3.14	8.27	7.33	3.34	8.00	7.15	3.45	7.55	7.05	3.84	7.33	6.91	3.86	7.01	6.81	3.92
	16	10.02	8.47	3.19	9.65	8.27	3.39	9.33	8.07	3.50	8.77	7.98	3.90	8.50	7.82	3.82	8.13	7.70	3.98
	18	11.18	9.18	3.24	10.76	8.95	3.44	10.41	8.72	3.56	9.84	8.64	3.95	9.55	8.47	3.95	9.13	8.35	4.03
	19	11.70	9.48	3.29	11.26	9.23	3.50	10.90	8.99	3.62	10.25	8.92	4.02	9.94	8.74	4.05	9.51	8.62	4.11
	22	12.84	10.01	3.33	12.36	9.73	3.55	11.96	9.47	3.66	11.26	9.42	4.08	10.92	9.23	4.10	10.45	9.10	4.16
	24	13.32	10.14	3.38	12.83	9.86	3.60	12.41	9.58	3.72	11.67	9.55	4.13	11.32	9.36	4.16	10.82	9.22	4.22

48K SYSTEM NET PERFORMANCE DATA

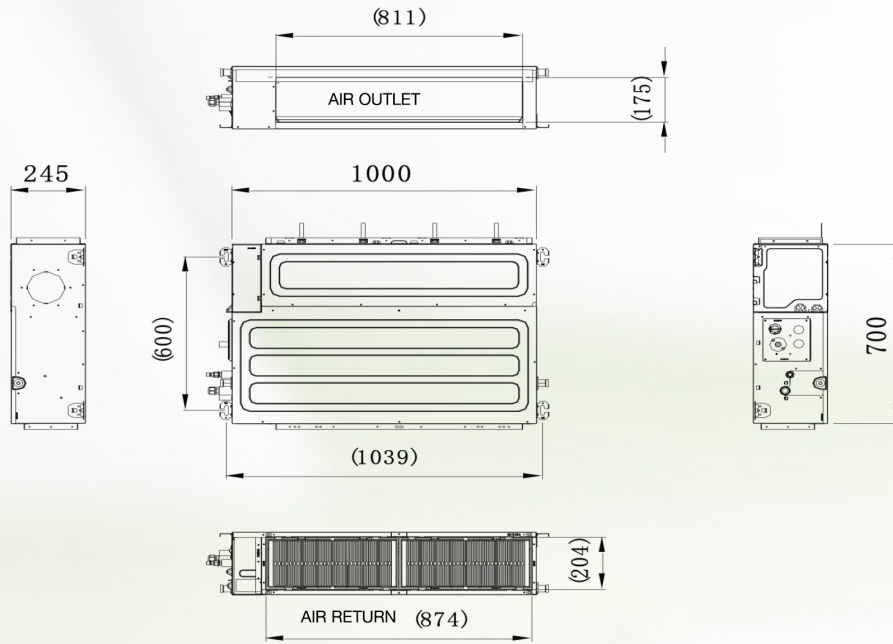
Indoor Model Name	Outdoor Air Temperature (°CDB)																		
	35			40			43			46			48			52			
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	
Fan gear	Indoor Model Name																		
	Outdoor Model Name																		
Air flow Rate	Indoor Air Temperature																		
	°CWB																		
Low	14	9.63	8.19	3.60	9.27	8.01	3.83	8.97	8.82	3.96	8.86	7.71	4.63	8.57	7.55	4.65	8.22	7.44	4.72
	16	11.23	9.26	3.66	10.81	9.04	3.89	10.46	8.82	4.02	10.28	8.72	4.69	9.97	8.54	4.72	9.54	8.42	4.79
	18	12.53	10.04	3.71	12.07	9.79	3.95	11.67	9.53	4.08	11.55	9.45	4.76	11.20	9.26	4.79	10.71	9.12	4.86
	19	13.12	10.36	3.77	12.63	10.09	4.02	12.22	9.83	4.15	12.02	9.75	4.84	11.66	9.55	4.87	11.15	9.42	4.95
	22	14.40	10.94	3.82	13.86	10.64	4.07	13.41	10.35	4.20	13.21	10.29	4.91	12.81	10.09	4.94	12.25	9.94	5.01
	24	14.94	11.09	3.88	14.38	10.77	4.13	13.91	10.47	4.26	13.68	10.44	4.98	13.27	10.23	5.00	12.69	10.08	5.08
	14	9.94	8.69	3.63	9.57	8.40	3.66	9.26	8.20	3.99	9.15	8.09	4.66	8.87	7.93	4.69	8.48	7.81	4.76
	16	11.60	9.72	3.69	11.17	9.49	3.92	10.80	9.26	4.05	10.62	9.15	4.73	10.30	8.96	4.76	9.85	8.84	4.83
	18	12.94	10.53	3.74	12.46	10.27	3.98	12.05	10.00	4.11	11.92	9.91	4.80	11.57	9.71	4.82	11.06	9.58	4.90
	19	13.54	10.87	3.81	13.04	10.59	4.05	12.61	10.31	4.18	12.41	10.23	4.88	12.04	10.03	4.91	11.51	9.88	4.99
	22	14.86	11.48	3.85	14.31	11.16	4.10	13.84	10.86	4.24	13.64	10.80	4.95	13.23	10.59	4.98	12.65	10.43	5.05
	24	15.42	11.64	3.91	14.85	11.30	4.16	14.36	10.99	4.30	14.13	10.95	5.02	13.70	10.73	5.05	13.11	10.58	5.12
	14	10.09	8.80	3.67	9.72	8.61	3.91	9.40	8.41	4.04	9.29	8.29	4.72	9.01	8.12	4.75	8.61	8.00	4.82
	16	11.77	9.86	3.73	11.34	9.72	3.97	10.97	9.48	4.10	10.78	9.37	4.79	10.45	9.19	4.82	10.00	9.05	4.89
	18	13.14	10.79	3.79	12.85	10.52	4.03	12.24	10.25	4.16	12.04	10.16	4.85	11.74	9.95	4.88	11.23	9.81	4.96
	19	13.75	11.14	3.85	13.24	10.85	4.10	12.80	10.57	4.23	12.60	10.48	4.94	12.22	10.27	4.97	11.69	10.12	5.05
	22	15.09	11.76	3.90	14.53	11.44	4.15	14.05	11.12	4.29	13.85	11.07	5.01	13.43	10.85	5.04	12.84	10.69	5.12
	24	15.66	11.92	3.96	15.08	11.58	4.21	14.58	11.26	4.35	14.34	11.22	5.08	13.91	11.00	5.11	13.30	10.84	5.18

55K SYSTEM NET PERFORMANCE DATA

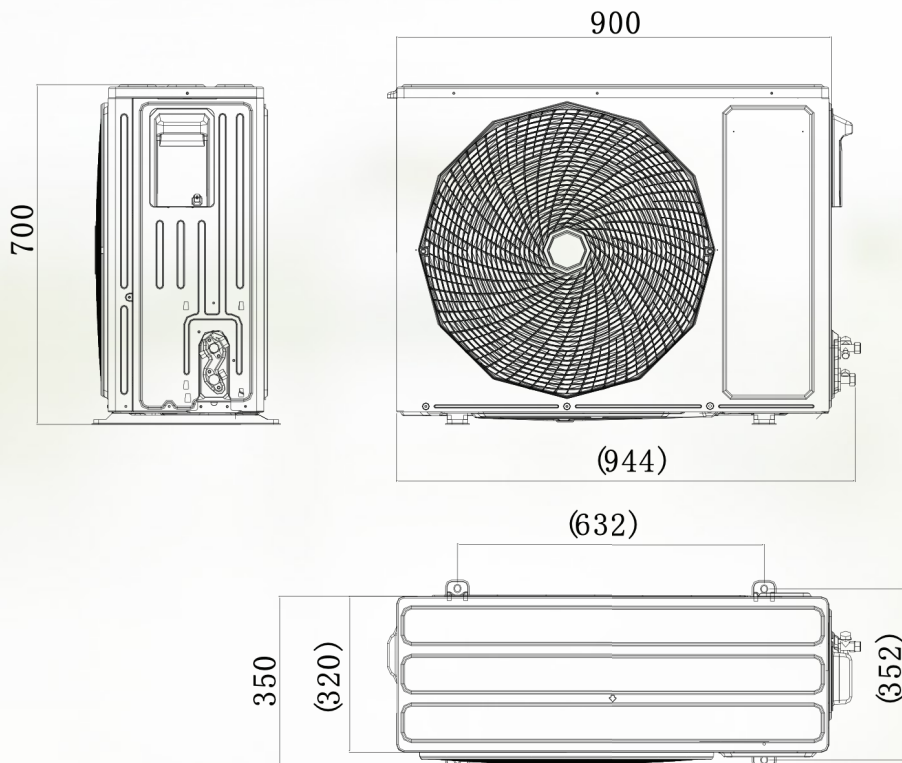
Indoor Model Name	Outdoor Air Temperature (°CDB)																		
	35			40			43			46			48			52			
	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	
Fan gear	Indoor Model Name																		
	Outdoor Model Name																		
Air flow Rate	Indoor Air Temperature																		
	°CWB																		
Low	14	10.68	9.08	4.00	10.28	8.88	4.26	9.94	8.67	4.40	9.70	8.55	5.06	9.41	8.38	5.09	9.00	8.26	5.16
	16	12.48	10.27	4.06	11.99	10.03	4.32	11.60	9.78	4.46	11.26	9.67	5.13	10.92	9.47	5.16	10.44	9.34	5.24
	18	13.90	11.13	4.12	13.38	10.85	4.39	12.95	10.57	4.53	12.64	10.48	5.20	12.27	10.27	5.23	11.73	10.12	5.31
	19	14.55	11.49	4.19	14.01	11.19	4.46	13.55	10.90	4.61	13.16	10.81	5.29	12.77	10.60	5.33	12.21	10.44	5.41
	22	15.97	12.13	4.25	15.37	11.80	4.52	14.87	11.47	4.74	14.46	11.42	5.37	14.03	11.19	5.40	13.42	11.03	5.48
	24	16.57	12.30	4.31	15.95	11.95	4.58	15.43	11.61	4.74	14.98	11.57	5.44	14.53	11.34	5.47	13.90	11.18	5.55
	14	11.02	9.53	4.03	10.61	9.32	4.29	10.27	9.10	4.43	10.02	8.97	5.10	9.71	8.79	5.13	9.29	8.66	5.21
	16	12.86	10.78	4.10	12.38	10.53	4.36	11.98	10.27	4.50	11.62	10.15	5.17	11.28	9.94	5.20	10.78	9.80	5.28
	18	14.35	11.68	4.16	13.82	11.39	4.42	13.37	11.10	4.57	13.06	10.99	5.24	12.66	10.77	5.27	12.11	10.62	5.35
	19	15.02	12.06	4.23	14.46	11.75	4.50	13.99	11.44	4.65	13.59	11.35	5.34	13.18	11.12	5.37	12.61	10.96	5.45
	22	16.48	12.73	4.28	15.38	12.38	4.56	15.35	12.04	4.71	14.93	11.98	5.41	14.49	11.74	5.44	13.85	11.57	5.52
	24	17.11	12.91	4.35	16.47	12.54	4.62	15.93	12.19	4.77	15.47	12.15	5.48	15.01	11.90	5.51	14.35	11.73	5.60
	14	11.19	9.76	4.08	10.78	9.55	4.34	10.42	9.32	4.49	10.17	9.19	5.16	9.86	9.01	5.19	9.43	8.88	5.27
	16	13.06	11.07	4.15	12.57	10.78	4.41	12.16	10.52	4.56	11.80	10.40	5.23	11.45	10.19	5.26	10.95	10.04	5.34
	18	14.57	11.94	4.21	14.03	11.67	4.48	13.57	11.37	4.62	13.25	11.26	5.30	12.86	11.04	5.34	12.29	10.88	5.42
	19	15.25	12.35	4.28	14.68	12.04	4.55	14.20	11.72	4.70	13.80	11.63	5.40	13.39	11.39	5.43	12.80	11.23	5.52
	22	16.74	13.04	4.33	16.11	12.88	4.61	15.59	12.34	4.76	15.16	12.28	5.47	14.71	12.03	5.51	14.06	11.86	5.59
	24	17.37	13.22	4.40	16.72	12.85	4.68	16.17	12.49	4.83	15.71	12.44	5.55	15.23	12.20	5.58	14.57	12.02	5.67



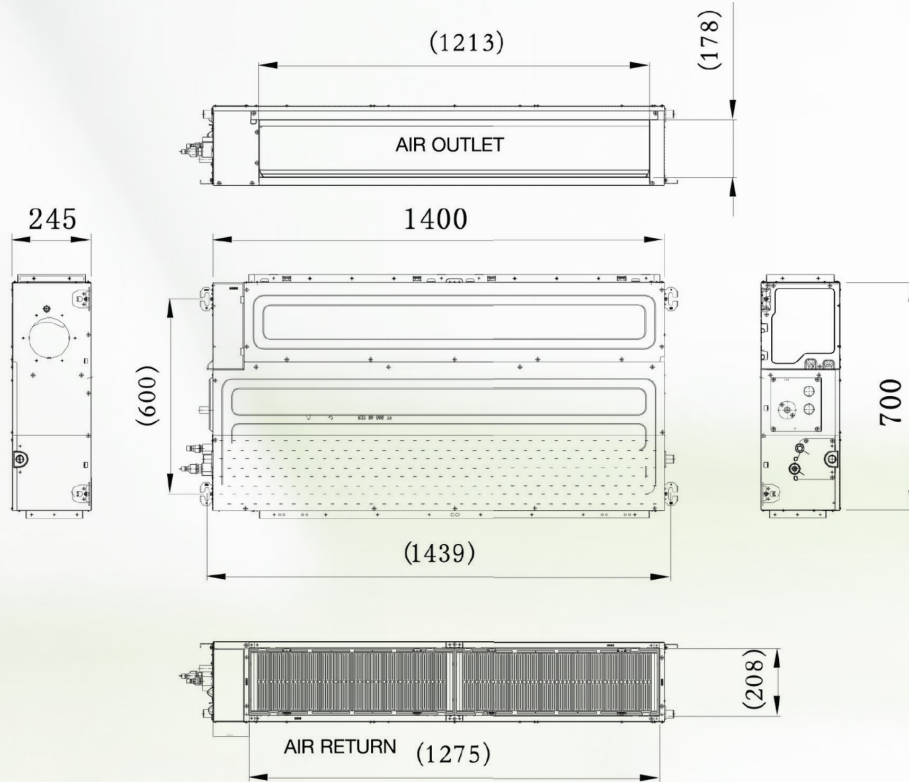
INDOOR DIMENSIONS - RIAL-018TH00-K / RIAL-024TH00-K



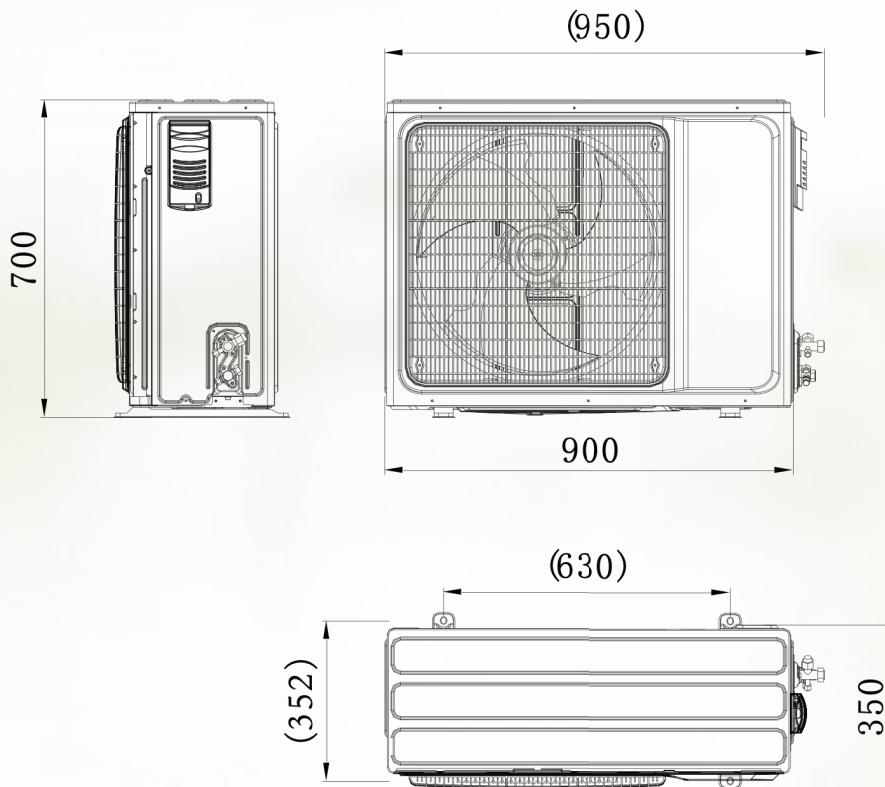
OUTDOOR DIMENSIONS - RVAL-018THB00-K / RVAL-024THB00-K



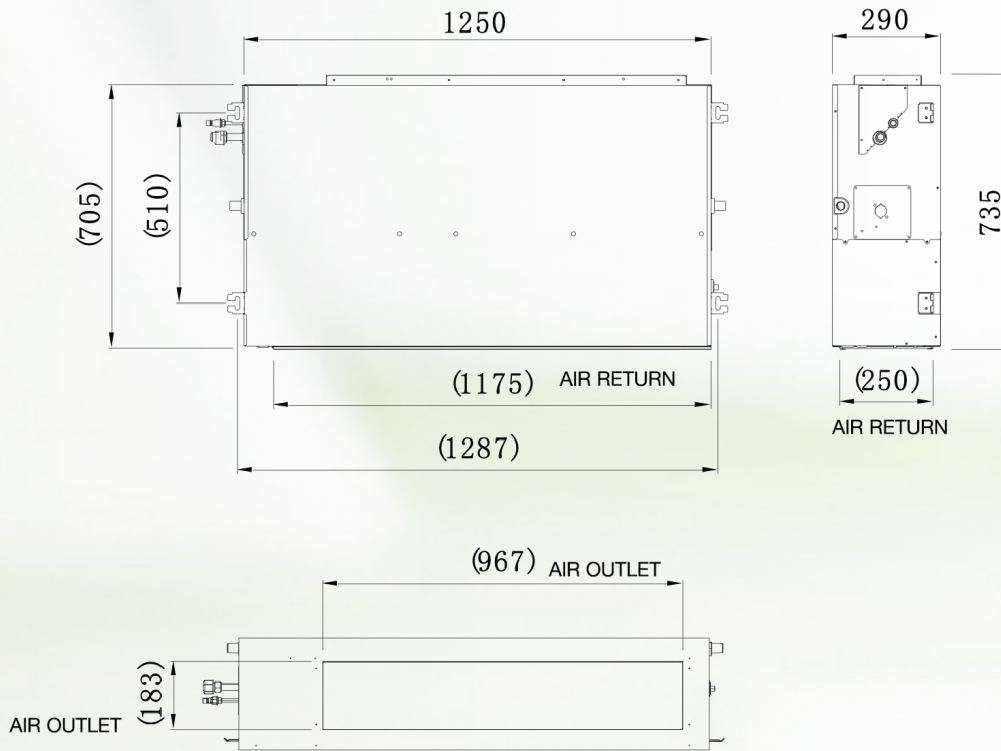
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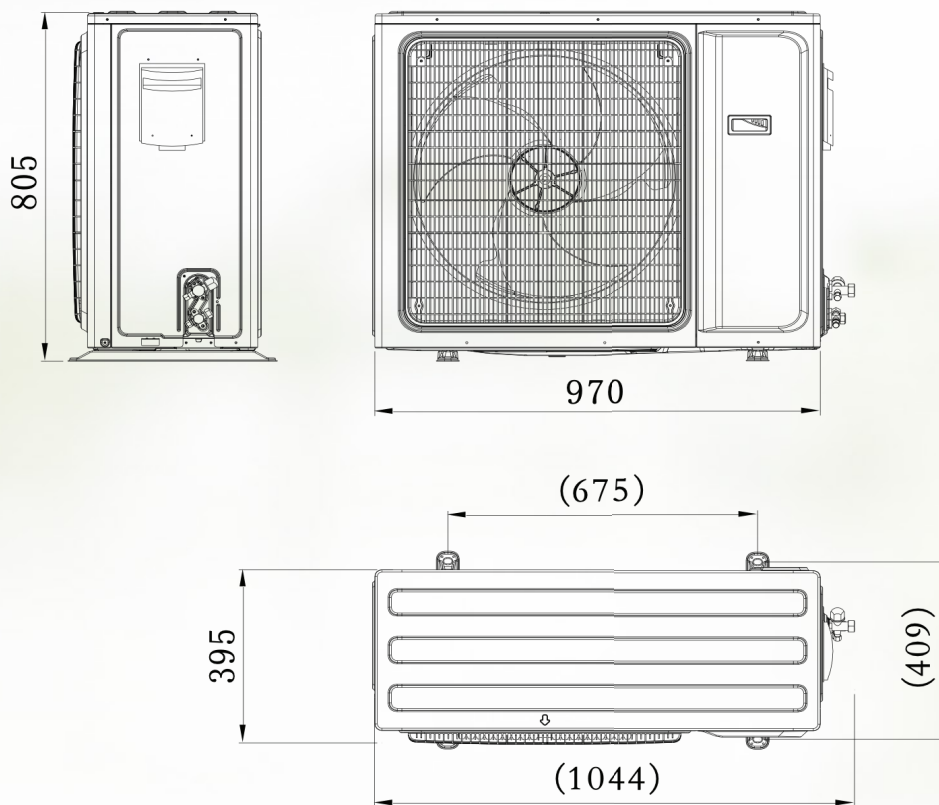
OUTDOOR DIMENSIONS - RVAL-030THB00-K



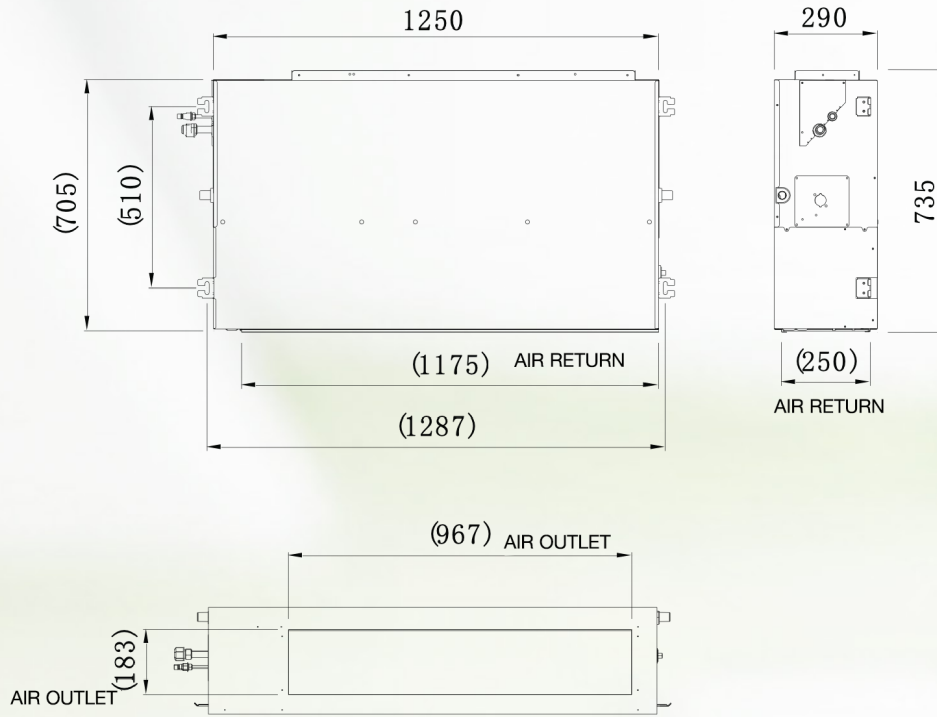
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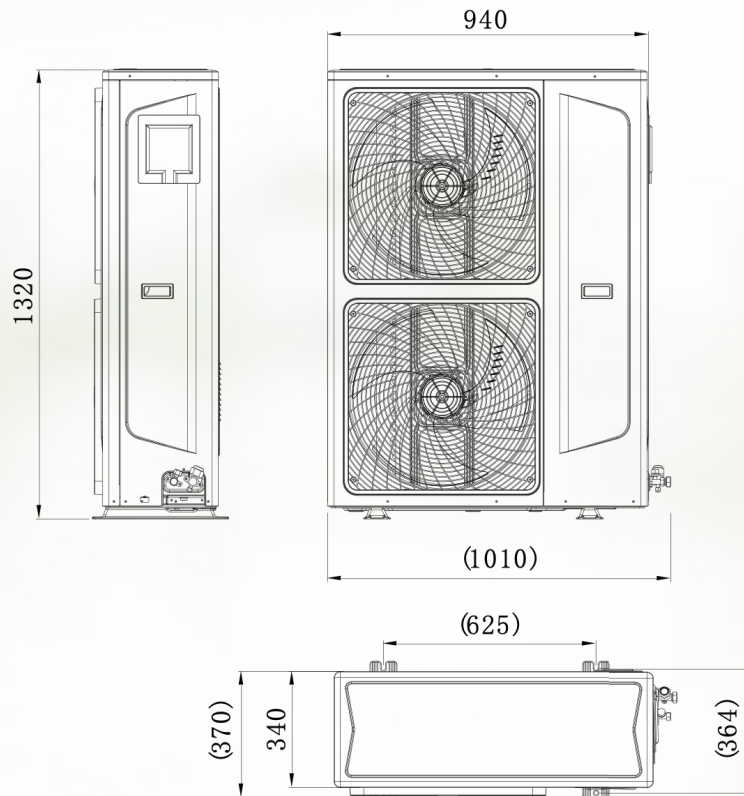
OUTDOOR DIMENSIONS - RVAL-036THB00-K



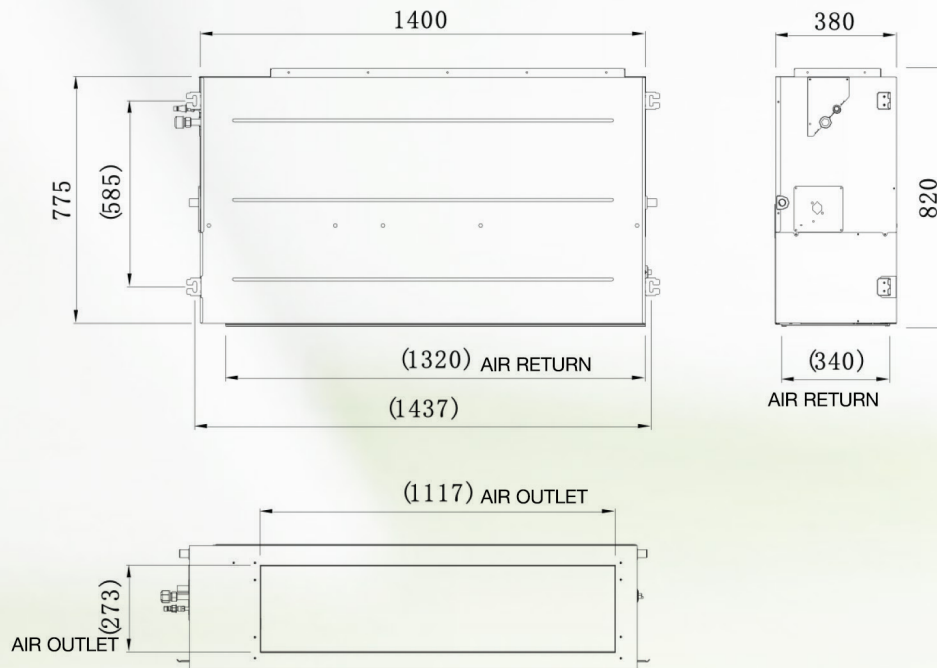
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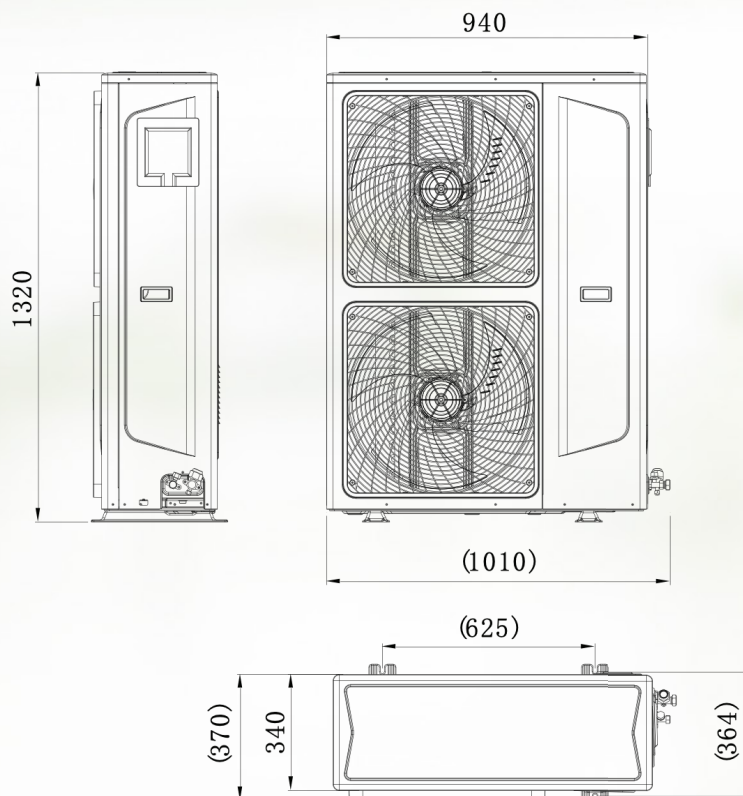
OUTDOOR DIMENSIONS - RVAL-042NHB00-K



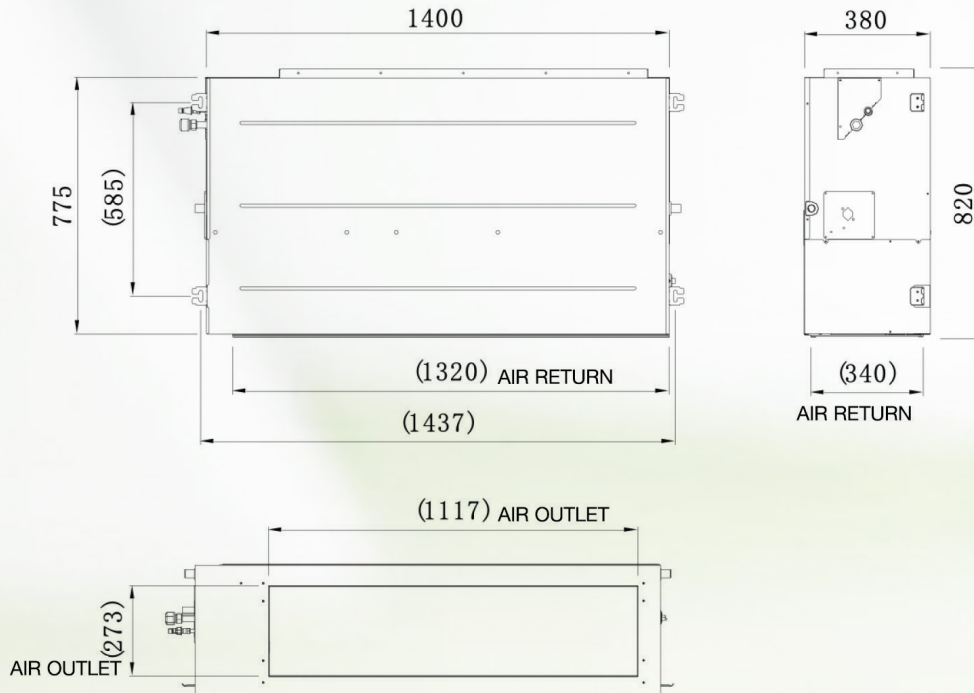
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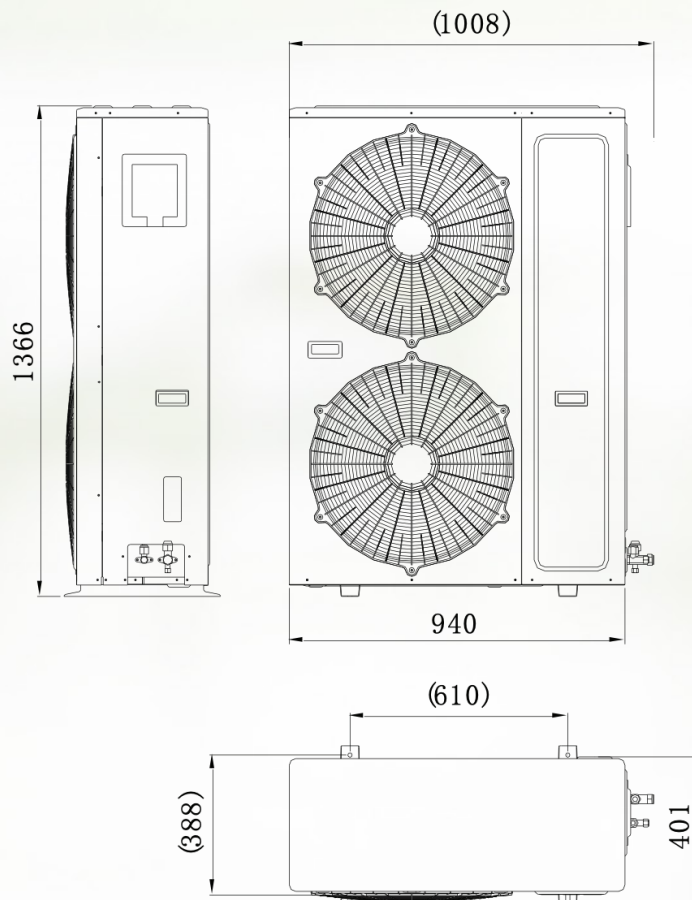
OUTDOOR DIMENSIONS - RVAL-048NHB00-K



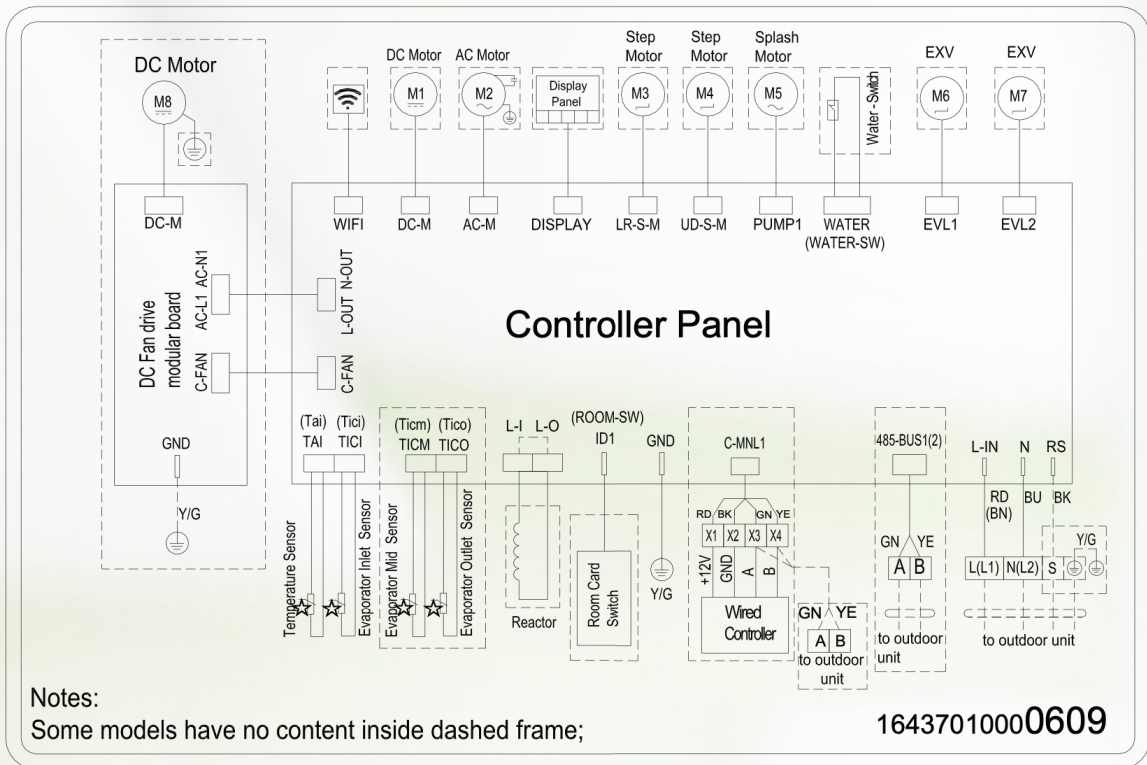
INDOOR DIMENSIONS - RIAL-055TH00-K



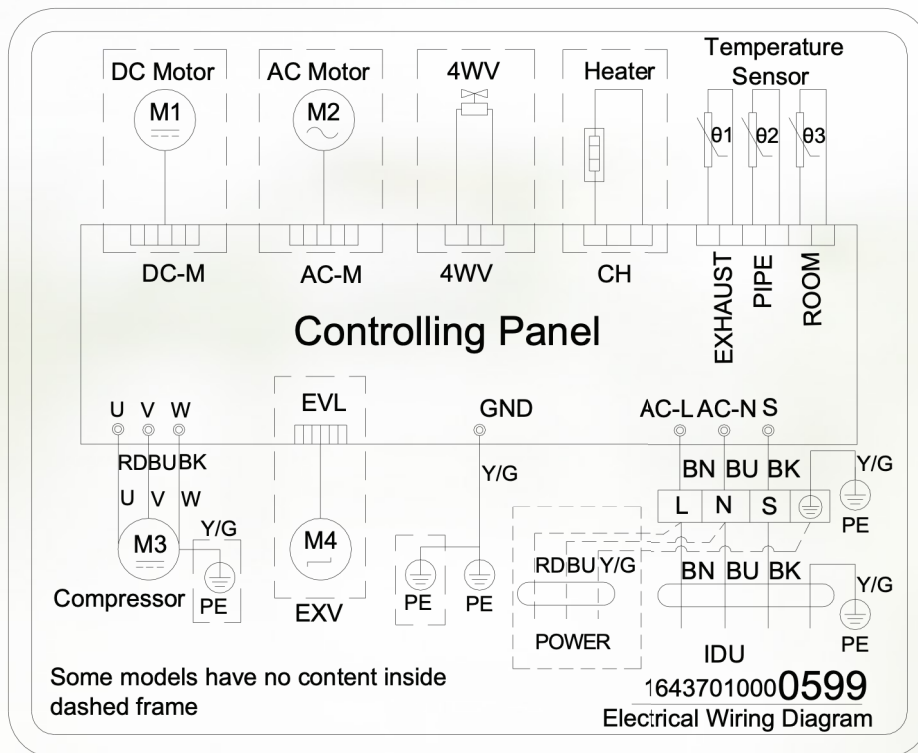
OUTDOOR DIMENSIONS - RVAL-055NHB00-K



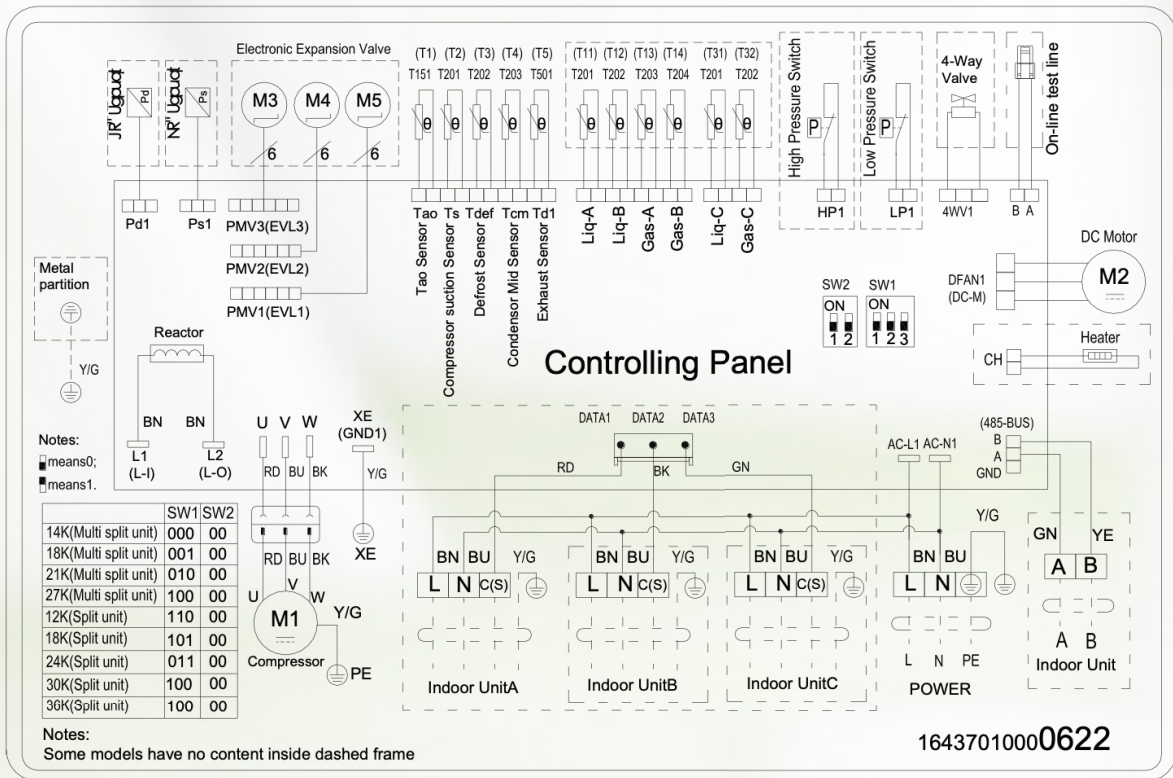
ALL INDOOR MODELS WIRING DIAGRAM



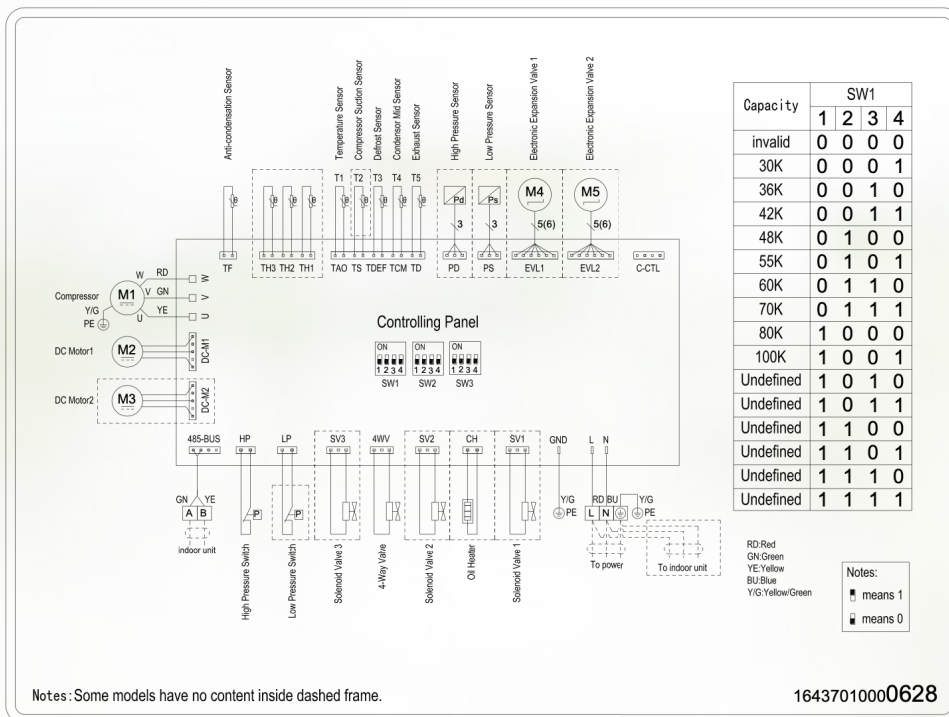
OUTDOOR MODELS WIRING DIAGRAM - RVAL-018THB00-K / RVAL-024THB00-K



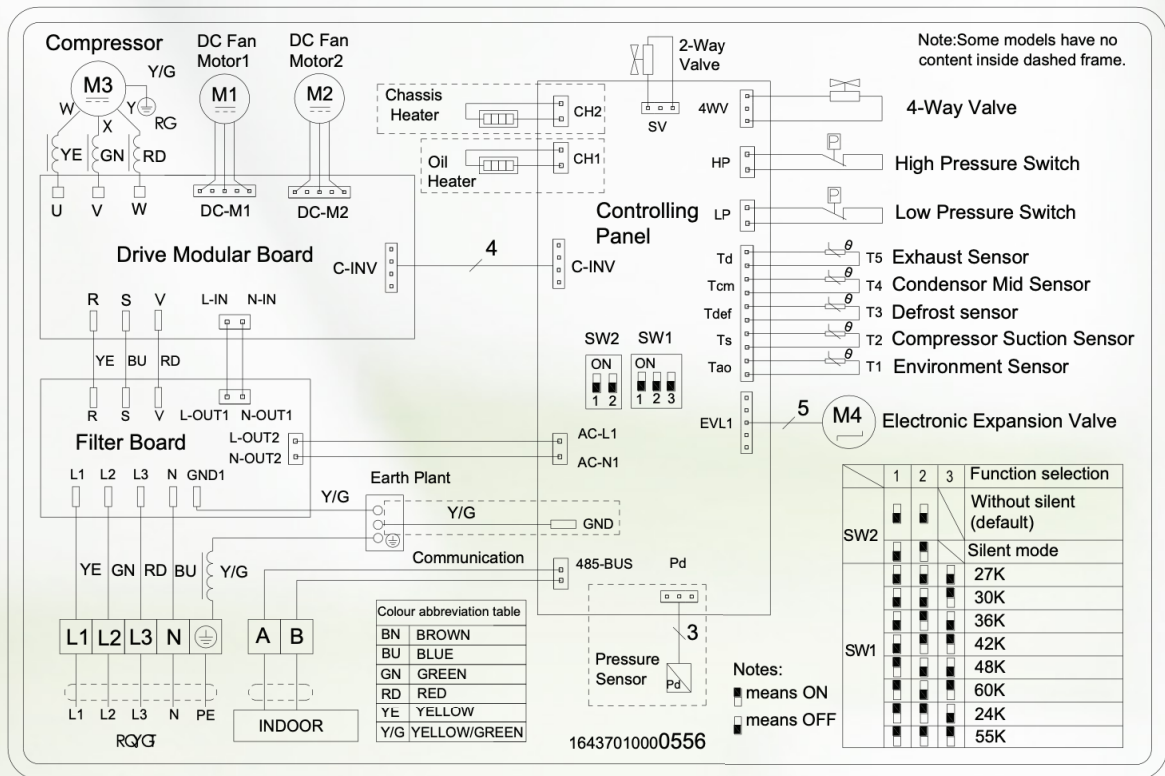
OUTDOOR MODEL WIRING DIAGRAM - RVAL-030THB00-K



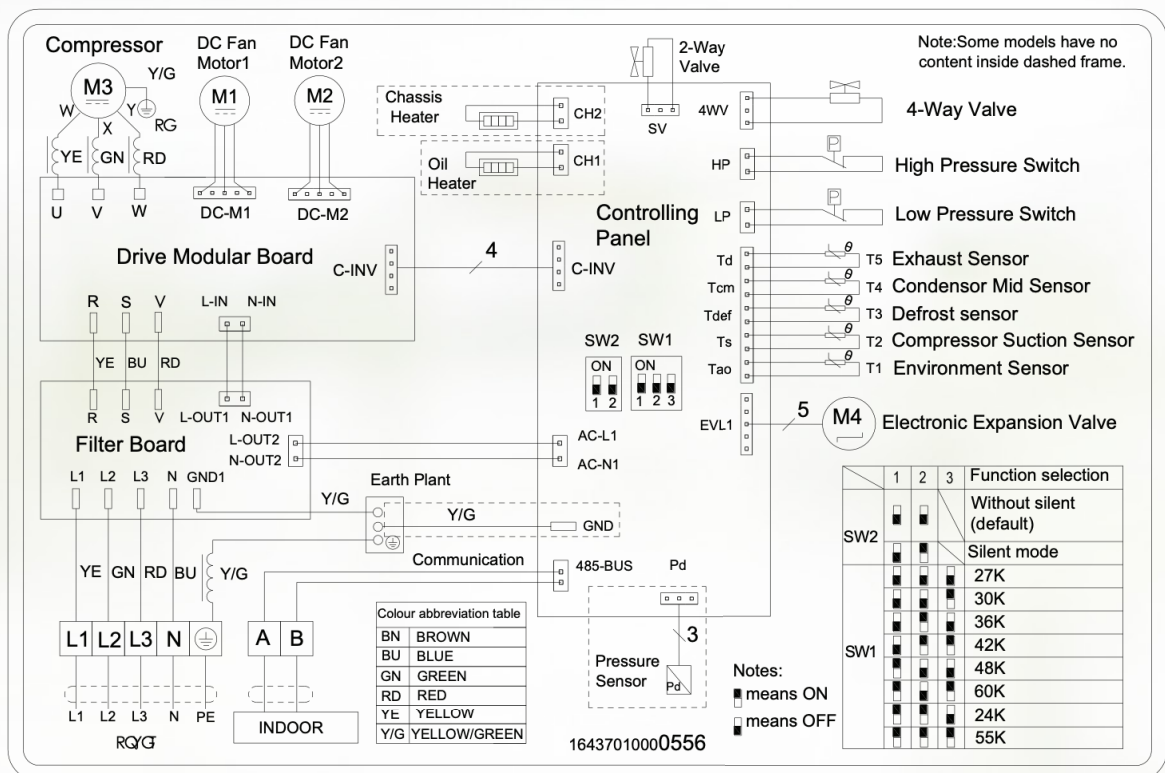
OUTDOOR MODEL WIRING DIAGRAM - RVAL-036THB00-K



OUTDOOR MODELS WIRING DIAGRAM - RVAL-042NHB00-K / RVAL-048NHB00-K



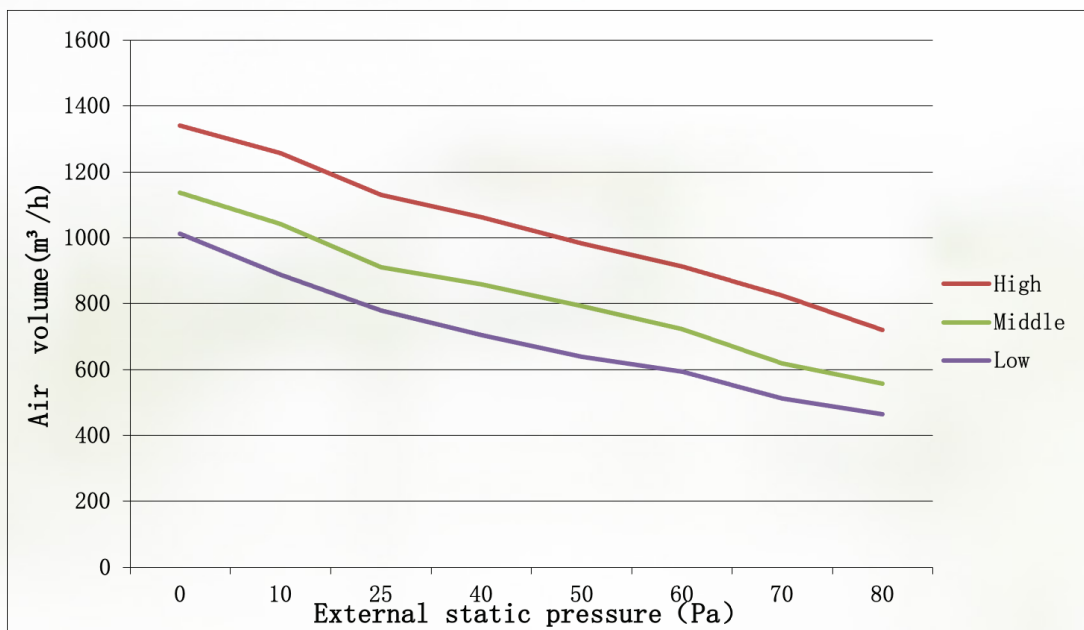
OUTDOOR MODEL WIRING DIAGRAM - RVAL-055NHB00-K



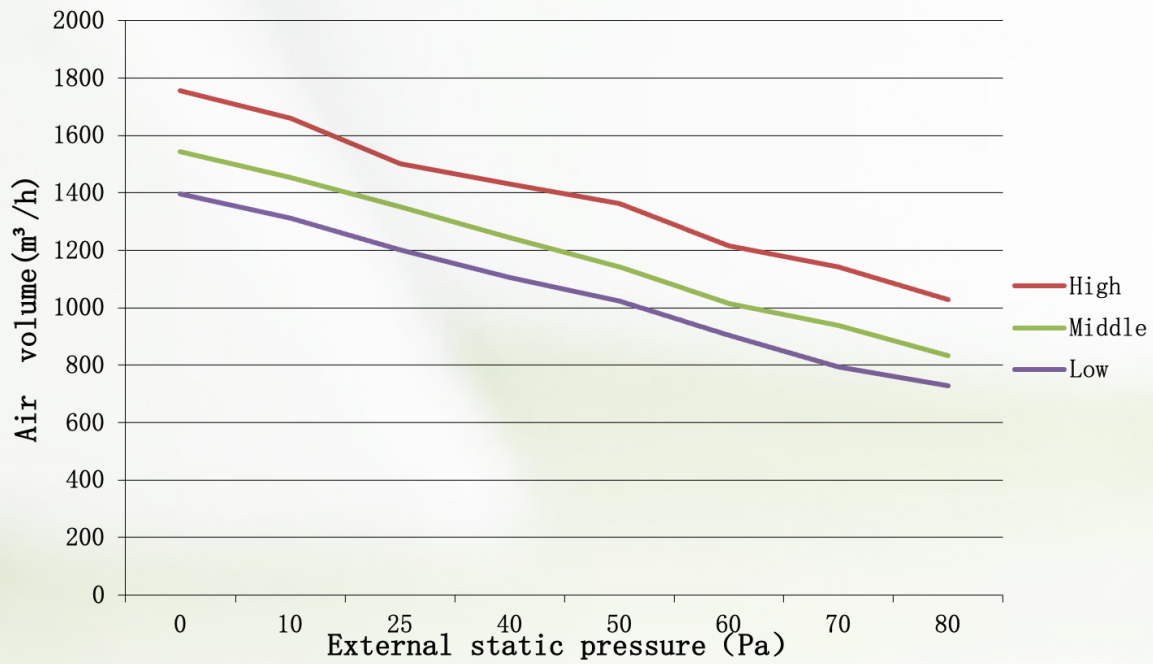
SOUND LEVEL DATA

MODELS	NOISE LEVEL UNDER THREE SPEEDS OF FAN (DB(A))		
	H	M	L
RIAL-018TH00-K	42	39	38
RIAL-024TH00-K	45	43	41
RIAL-030TH00-K	47	45	44
RIAL-036TH00-K	45	42	40
RIAL-042TH00-K	48	45	43
RIAL-048TH00-K	49	47	44
RIAL-055TH00-K	52	50	47

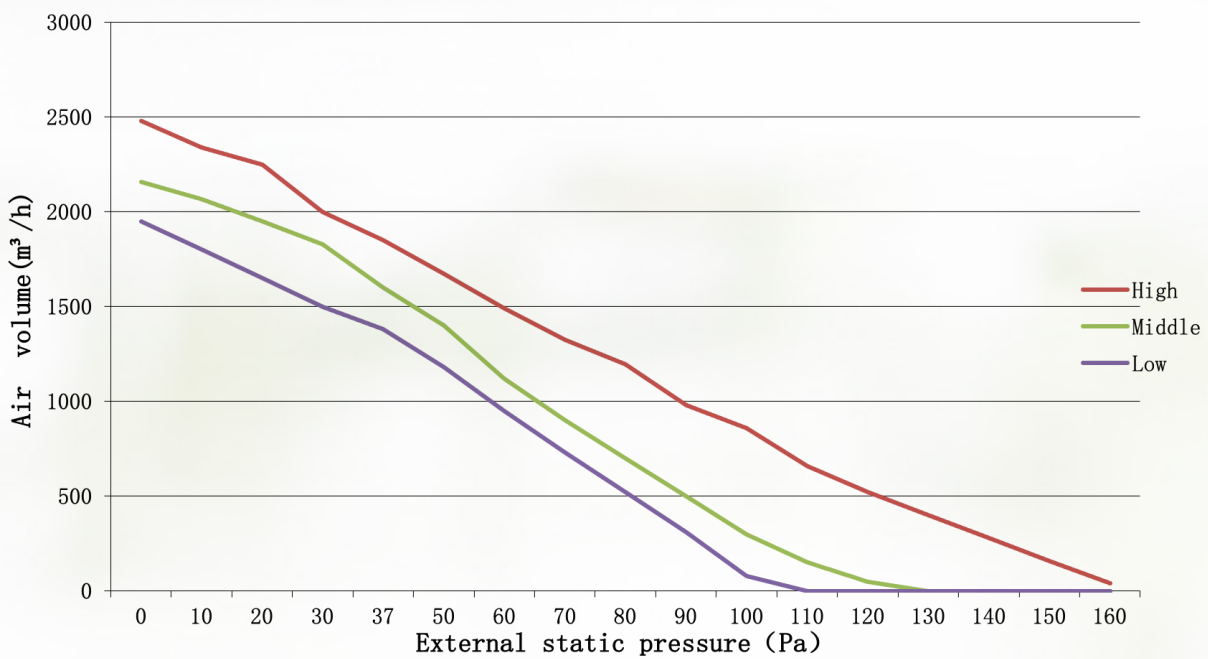
RIAL-018TH00-K STATIC PRESSURE CURVE



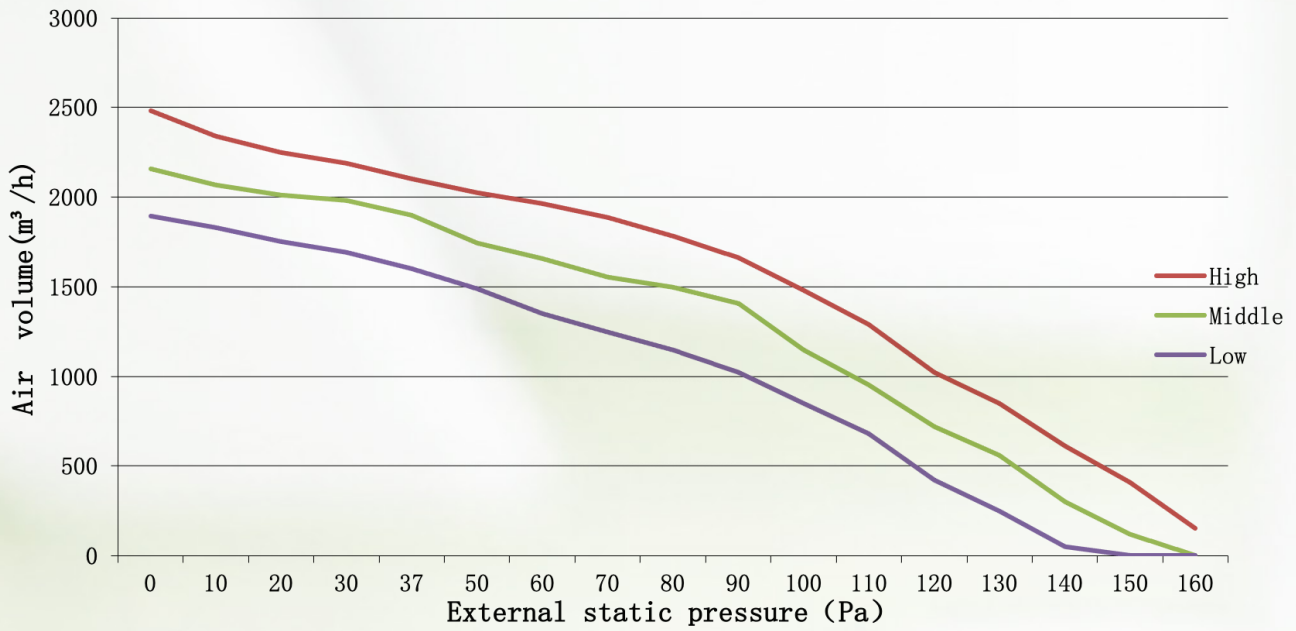
RIAL-024TH00-K STATIC PRESSURE CURVE



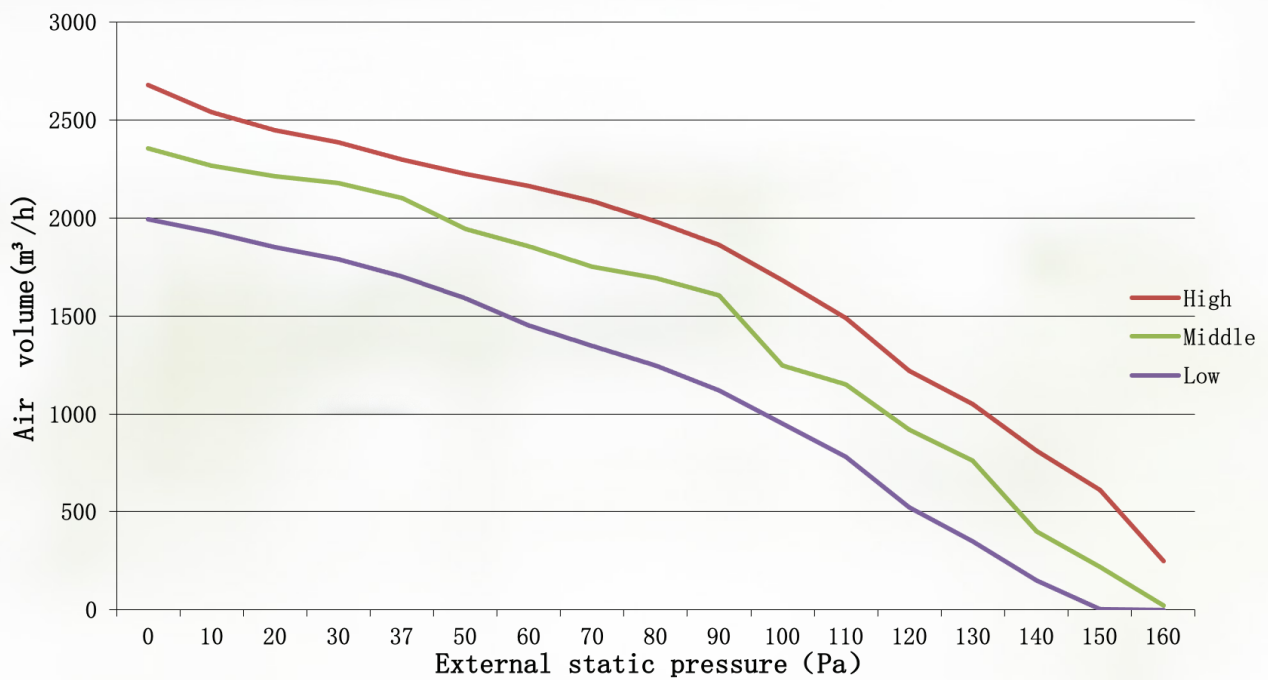
RIAL-030TH00-K STATIC PRESSURE CURVE



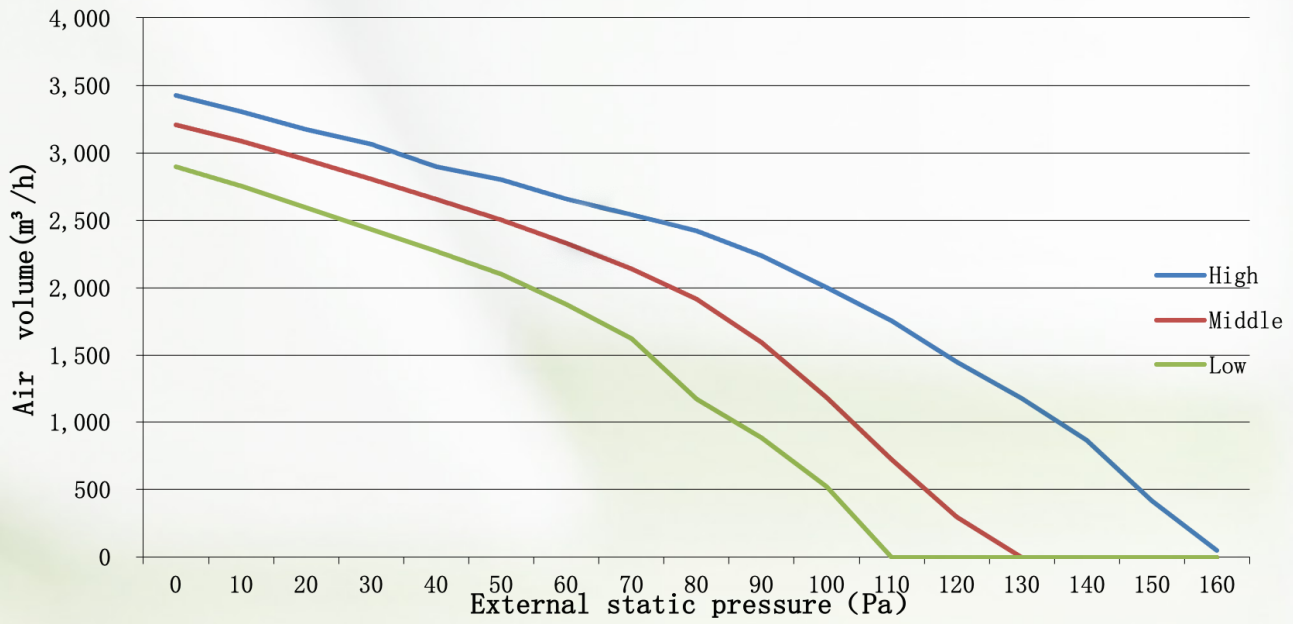
RIAL-036TH00-K STATIC PRESSURE CURVE



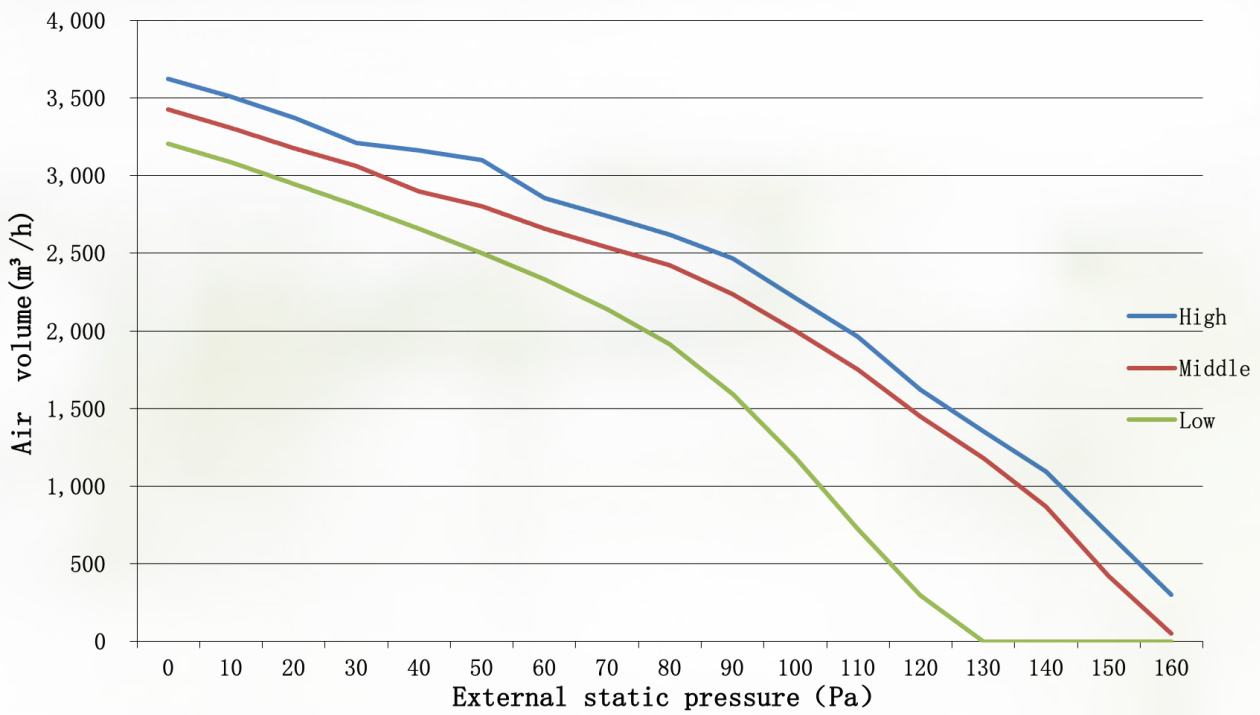
RIAL-042TH00-K STATIC PRESSURE CURVE



RIAL-048TH00-K STATIC PRESSURE CURVE

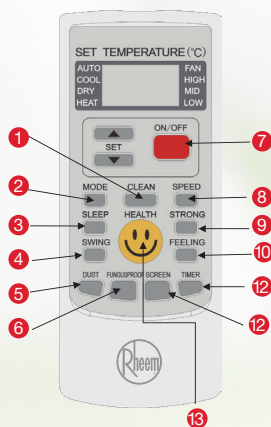


RIAL-055TH00-K STATIC PRESSURE CURVE



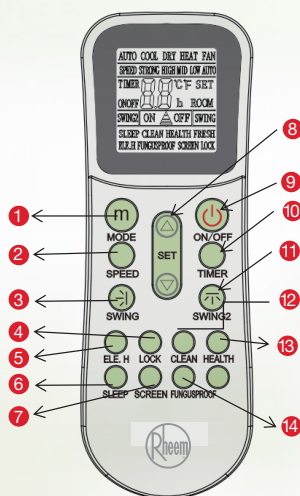
REMOTE CONTROLLER

YK-H



- 1 Clean Function
- 2 Mode Setting AUTO/COOL/DRY/HEAT/FAN
- 3 Sleep Function
- 4 Up and down wind
- 5 No Function
- 6 Anti-fungus Function
- 7 ON/OFF
- 8 Fan Speed Setting HIGH/MED/LOW/AUTO
- 9 Strong Wind
- 10 I Feel Function
- 11 Timer On/Off
- 12 LED Display On/Off
- 13 Health Function

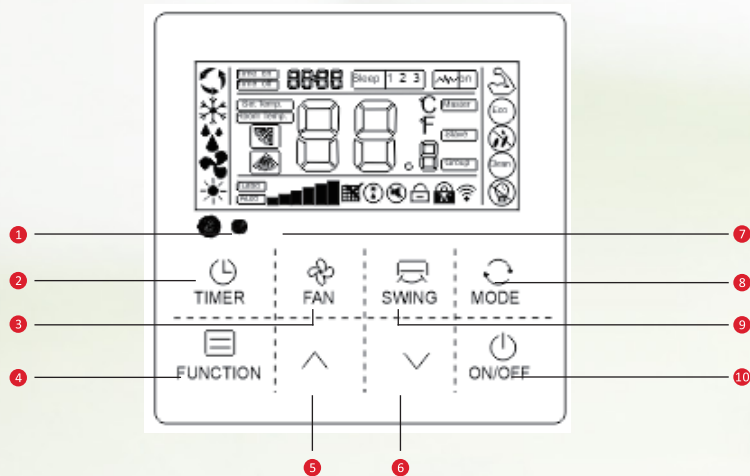
YK-K



- 1 Mode Setting AUTO/COOL/DRY/HEAT/FAN
- 2 Fan Speed Setting HIGH/MED/LOW/AUTO
- 3 Vertical Swing
- 4 Lock
- 5 Electrical Heating
- 6 Sleep Function
- 7 LED Display On/Off
- 8 Temperature-Setting /Timer Range Setting
- 9 ON/OFF
- 10 Timer On/Off
- 11 Horizontal Swing
- 12 Clean Function
- 13 Health
- 14 Fungusproof Function

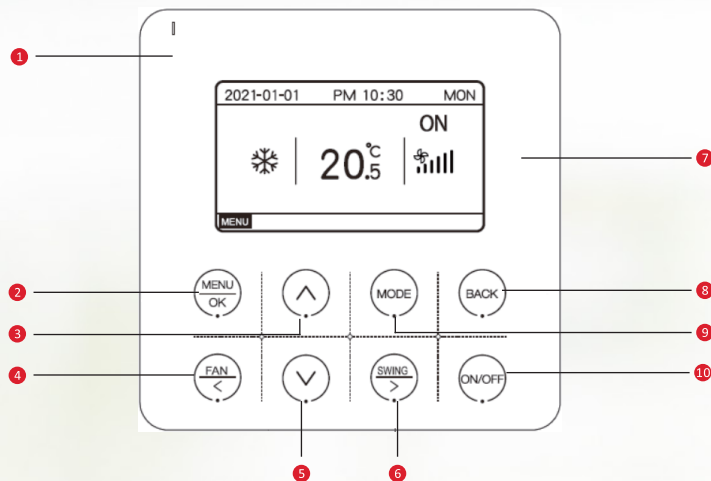
WIRED CONTROLLER

XK-05 (120x120mm)



- 1 Remote Signal Receiver
- 2 Timer Button
- 3 Fan Button
- 4 Function Button
- 5 "+" Button
- 6 "-" Button
- 7 Photosensitive Sensor Receiver
- 8 Mode Button
- 9 Swing Button
- 10 ON/OFF Button

XK-06 (120x120mm)




- 1 Indicator light
- 2 MENU/OK Key
- 3 Up Key
- 4 FAN/Left Key
- 5 Down Key
- 6 SWING/Right Key
- 7 Active Area
- 8 BACK Key
- 9 MODE Key
- 10 ON/OFF Key

Remark: The above wired controllers all use 485 communication protocol.

CENTRAL CONTROL OF LIGHT COMMERCIAL



CM-MTD/AM01(NEW adapter)	
	
Dimension	127 ×65.8×20.8
Power Supply	DC 12V

1. CC02 can be used to centrally control up to 64 indoor units.
2. Weekly schedule: CC02 can include up to 64 indoor units in the weekly schedule, users can select the desired running mode and room temperature. The operation object can be a single indoor unit, a zone or all the indoor units.
3. CC02 can display the error codes and running status of indoor unit, so users can easily identify faults via checking the error codes table in user's manual.



SMART CONTROL -WIFI MODULE AND AC FREEDOM APP

SMART CONTROL WIFI MODULE CONNECTION DIAGRAM



WiFi module (for LCAC)	
Dimension	70×46×15.6mm
Powersupply	DC 12V
Introduction	Control only 1 IDU

AC freedom APP User Interface

Remark

1. Wireless Router (field supplied) is necessary to be connected to achieve remote control
2. AC freedom APP can be search and download from APP store or Google store
3. Remote control indoor units mode, fan speed , set temperature , swing, timing ...

T^oROPICAL SERIES

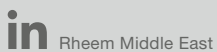
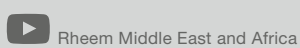




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