



## HIGH EFFICIENCY DUCTED INVERTER UVRL - UIRL SERIES



Learn more at: www.ruud-mea.com

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■ in Ruud Middle East and Africa



## SERVING YOU FOR NEAR 100 YEARS

## **ABOUT RUUD**

More than 100 years ago, Edwin Ruud, a Norwegian mechanical engineer, came to America and developed the first successful automatic water heater. That early success marked the beginning of a tradition of innovation and value that led to the introduction of RUUD® air conditioning and water heating equipment in the 1950s. Since then, the RUUD® has grown into one of North America's largest manufacturers of quality air conditioning and water heating products for residential and light commercial use. Today, RUUD® operates manufacturing facilities employing highly trained workers and state-of-the-art equipment. Over the years, the product lines have expanded, changed, and improved significantly as new design techniques and better manufacturing technologies have become available. What remains unchanged throughout our history, however, is our commitment to producing the most reliable, long-lasting, efficient equipment you can buy.

Our approach as a company is to keep the dialogue ongoing, listen, and then act. As a result, RUUD is able to constantly deliver innovations in the heating, cooling and water heating industries to provide our valued customers with new degrees of comfort.







## **RUUD COMMITMENT & DESIGN PHILOSOPHY**

## Our commitment to

## A GREATER DEGREE OF GOOD

From the 2019 launch of our sustainability program, we have focused on making a difference. And as our program has grown and expanded globally through the years, we've amplified our impact. But one thing has remained unchanged: our steadfast commitment to delivering A Greater Degree of Good™

This initiative has helped us develop a deeper understanding of Ruud's place in this world. And while our operations span the globe across borders and customs, we speak a common language- sustainability.

We built our A Greater Degree of Good initiative on three key pillars, each with its corresponding Ruud® 2025 goal and each strategically aligning with 2030 United Nations Sustainable Development Goals (SDGs).

## DESIGNED FORZZETZO WASTE



## DEGREES OF LEADERSHIP

Our 2025 goal: Train 250,000 plumbers, contractors and key influencers on ustainable products or sustainable instalation and recycing best practices.



## DEGREES OF INNOVATION

Our 2025 goal: Lcauch a line of heating, cooling and water heating products that boast a 50% reduction in green house gas footprint.



## DEGREES OF

Our 2025 goal: Reduce greenhouse gas emissions by 50% and achieve Zero Waste to Landfill in our global manufacturing operations.



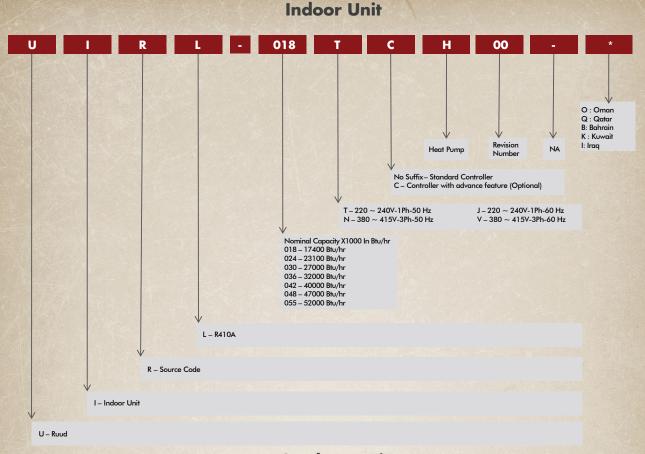
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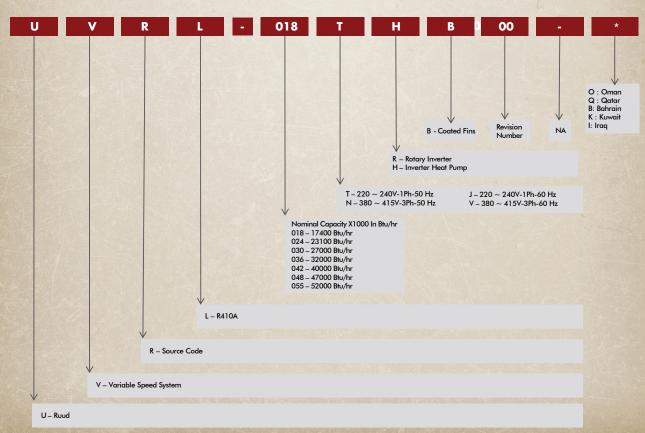
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## **NOMENCLATURE-LIGHT COMMERCIAL**



## **Outdoor Unit**





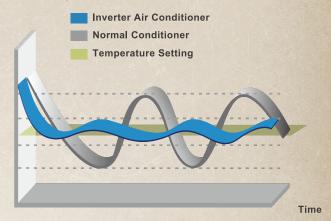
## INVERTER TECHNOLOGY

## 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.

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

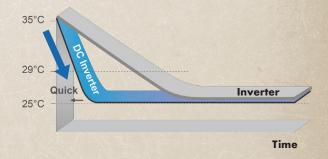


±0.5℃ temperature control

## **FASTER COOLING**

In addition to adjustable DC inverter compressor Ruud 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.







## **FEATURES**

## COMFORT



Fast Cooling / Heating

Startup at high frequency increases cool ing/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.



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

## 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 op eration even when the outdoor ambient temperature down to -15°C.



**Intelligent Defrosting** 

Normal defrost function can only be oper ated in certain time, but Ruud commercial air conditioner's intelligent defrost can start automatically according to the sur rounding 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.

\*optional



## CONVENIENCE



24-hour Timer

Users can turn on or turn off the air condi tioner 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



**Dual side Drainage** 

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



**Digital Tube Display** 

Easily for the running parameters check ing and more convenient for troubleshoot ing, digital tube displays work status such as indoor temperature, setting tempera ture, the mode of operation, etc.



**Remote Control** 

Help users to control the air conditioner easily, you can design your most comfort able 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.



Standard



**Optional** 



## **FEATURES**



## **Central Control**

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



## **Auto Restart Function**

If the air conditioner breaks off unexpect - edly due to the power cut, it will restart with the previous setting mode automati - cally when the power resume.



## 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

\*optional

## **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.



## 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.



## **Full Process By DC Drive**

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

## 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 fre quency has been decreased, and mainte nance is also much easier.

Standard

Optional









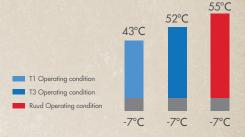
## **UVRL-UIRL SERIES- OUTDOOR UNIT**

## **ENVIRONMENT FRIENDLY-R410A**

## HIGH RUNNING TEMPERATURE



Enjoy excellent performance even under ambient temperature up to  $55^{\circ}\mathrm{C}$  , suitable for T3 operating condition.



## **MULTIPLE PROTECTION**

With Multiple Protection contents: High pressure protection, Low pressure protection, Compressor overloadding 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**

Helps to reduce the operation temperature of PCB by 30°C, prevent the PCB from overheating to make sure it can run steadily, also prolong its service life. \*Only DC Inverter 36/48/55K Single Phase







## **UVRL-UIRL SERIES - OUTDOOR UNIT**





## **TECHNICAL SPECIFICATION - SINGLE-PHASE**

Model	Outdoor		UVRL-018THB00-*	UVRL-024THB00-*	UVRL-030THB00-*	UVRL-036THB00-*	UVRL-048THB00-*	UVRL-055THB00-*
Electric Data	Power Supply	V~,Hz,Ph	220-240,50,1	220-240,50,1	220-240,50,1	220-240,50,1	220-240, 50, 1	220-240, 50, 1
	Air Flow Volume	m3/h	3500	3500	3500	4200	6800	7800
Performance	Air riow volume	CFM	2059	2059	2059	2471	4000	4588
	Noise Level	dB(A)	56	58	58	59	60	61
Dimension	Net	mm	900×350×700	900×350×700	900×350×700	970×395×805	940×370×1320	940×401×1366
(W×D×H)	Packing	mm	1020×430×770	1020×430×770	1020x430x760	1110x500x900	1080×430×1440	1080×460×1490
Weight	Net/Gross	kg	40/44	42/46	45.5/49	61/66	86/95	99/109
	Liquid	mm(inch)	6.35	9.52	9.52	9.52	9.52	9.52
Piping	Gas	mm (inch)	12.7	15.88	15.88	15.88	19.05	19.05
	Max. Length/Max. Height	m	30/15	30/15	30/20	50/30	50/30	50/30
Stuffing Quantity	20/40/40H	unit	87/183/183	87/183/183	87/183/183	44/96/96	27/55/55	27/55/55

## **TECHNICAL SPECIFICATION - THREE-PHASE**

Model	Outdoor		UVRL-042NHB00-*	UVRL-048NHB00-*	UVAL-055NHB00-*
Electric Data	Power Supply	V~,Hz,Ph	380-415,50,3	380-415,50,3	380-415,50,3
	4: El 3/ l	m3/h	6800	6800	6800
Performance	Air Flow Volume	CFM	4000	4000	4000
	Noise Level	dB(A)	60	60	60
Dimension	Net	mm	940×370×1325	940×370×1325	940×401×1366
(W×D×H)	Packing	mm	1080×430×1440	1080×430×1440	1080×460×1490
Weight	Net/Gross	kg	96/106	96/106	105/118
	Liquid	mm(inch)	Ф9.52	Ф9.52	Ф9.52
Piping	Gas	mm (inch)	Ф19.05	Ф19.05	Ф19.05
	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.

## **UVRL-UIRL SERIES**

## **T4 SUMMARY DATA TABLE**

MODEL	Indoor Moo	del	UIRL-018TH00-*	UIRL-024TH00-*	UIRL-030TH00-*	UIRL-036TH00-*	UIRL-042NH00-*	UIRL-048NH00-*	UIRL-055NH00-*
MODEL	Outdoor Mo	4) Btu/h	UVRL-018THB00-*	UVRL-024THB00-*	UVRL-030THB00-*	UVRL-036THB00-*	UVRL-042NHB00-*	UVRL-048NHB00-*	UVRL-055NHB00-*
Capacity	Cooling (T4)	Btu/h	12000	17000	19000	27000	33000	40000	45000
Electric Data	Power Input (T4)	W	1400	1984	2219	3151	3851	4667	5251
Performance	EER (T4)	kW/RT	1.40	1.40	1.42	1.40	1.40	1.40	1.40





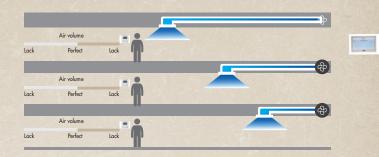




## **UVRL-UIRL SERIES**MID ESP DUCT

## 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 (OPTIONAL)**

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.



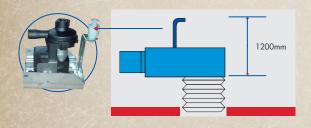
## **FRESH AIR INTAKE**

Fresh air makes a healthy, comfortable life.



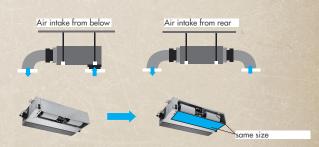
## **BUILT-IN WATER PUMP (OPTIONAL)**

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**

	Indoor		UIRL-018TH00-*	UIRL-024TH00-*	UIRL-030TH00-*
Model	Outdoor		UVRL-018THB00-*	UVRL-024THB00-*	UVRL-030THB00-*
		Btu/h	17400/16000/12000	23100/21100/17000	28000/27000/19000
	Cooling (T1/T3/T4)	RT	1.45/1.33/1.00	1.93/1.76/1.41	2.33/2.25/1.58
C		kW	5.10/4.68/3.52	6.78/6.18/4.98	8.21/7.9/5.57
Capacity		Btu/h	19800	27600	30026
	Heating(H1)	RT	1.65	2.30	2.5
	-	kW	5.80	8.10	8.80
	Power Supply	V~,Hz,Ph	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	2295/3140/2219
Electric Data	Cooling Current(T1/T3/T4)	Α	6.74/8.79/6.41	8.95/11.73/9.08	10.84/14.84/9.84
	Heating Power Input(H1)	W	1506	2104	2316
	Heating Current(H1)	A	7.12	9.94	10.28
	FFD(T1 /T2)	(Btu/h)/W	12.20/8.60	12.20/8.50	12.2/8.60
	EER(T1/T3)	W/W	3.58/2.52	3.58/2.49	3.58/2.52
	EER(T4)	kW/RT	1.4	1.4	1.4
	` '	W/W	2.51	2.51	2.51
Performance	COP(H1)	(Btu/h)/W	13.14	13.14	12.96
	COT(1117)	W/W	3.85	3.85	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
	Noise Level(Hi/Mid/Low)	dB(A)	42/39/38	45/43/41	45/42/40
	External Static Pressure(ESP)	Pa	0~80	0~80	0~160
Dimension	Net	mm	1000×700×245	1000×700×245	1250×735×320
W×D×H)	Packing	mm	1230X830X300	1230X830X300	1630x830x300
Dimension	Air Outlet	mm	811×175	811×175	967×214
	Air Return	mm	874×204	874×204	1175×280
Weight	Net/Gross	kg	30/36	30/36	38/44.5
Piping Size	Drainage	mm(inch)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4)
Stuffing Quantity	20/40/40H	set	77/161/184	77/161/184	66/138/138

	Indoor		UIRL-036TH00-*	UIRL-048TH00-*	UIRL-055TH00-*
Model	Outdoor		UVRL-036THB00-*	UVRL-048THB00-*	UVRL-055THB00-*
		Btu/h	32000/30000/27000	45000/42000	52000/47000
	Cooling (T1/T3/T4)	RT	2.67/2.50/2.26	3.75/3.5	4.34/3.91
	_	kW	9.4/8.8/7.91	13.2/12.3	15.25/13.75
Capacity		Btu/h	35800	51100	60000
	Heating(H1)	RT	2.99	4.27	5.00
	-	kW	10.50	14.7	17.60
	Power Supply	V~,Hz,Ph	220-240,50,1	220-240, 50, 1	220-240, 50, 1
	Cooling Power Input(T1/T3/T4)	W	2634/3488/3151	3704/4828	4280/5465
lectric Data	Cooling Current(T1/T3/T4)	A	12.45/16.49/14.42	17.50/22.81	19.59/25.01
	Heating Power Input(H1)	W	2763	3868	4632
•	Heating Current(H1)	A	13.06	18.28	21.20
	EER(T1/T3)	(Btu/h)/W W/W	12.15/8.60 3.56/2.52	12.15/8.70 3.56/2.55	12.15/8.60 3.56/2.52
	EER(T4)	kW/RT W/W	1.40 2.51		
erformance		(Btu/h)/W	12.96	12.96	12.96
	COP(H1)	W/W	3.80	3.80	3.80
ľ		m3/h	2100/1900/1600	2800/2500/2100	3100/2800/2500
	Air Flow Volume(Hi/Mid/Low)	CFM	1235/1117/1000	1647/1471/1235	1824/1647/1471
	Noise Level(Hi/Mid/Low)	dB(A)	45/42/40	52/50/47	52/50/47
	External Static Pressure(ESP)	Pa	0~160	0~160	0~160
imension	Net	mm	1250×735×320	1400×820×380	1400×820×380
W×D×H)	Packing	mm	1460x800x400	1610x880x460	1610x880x460
imension	Air Outlet	mm	967×214	1117×273	1117×273
rimension	Air Return	mm	1175×280	1320×340	1320×340
Veight	Net/Gross	kg	48/54	56/63	56/63
iping Size	Drainage	mm(inch)	DN20(R3/4)	DN20(R3/4)	DN20(R3/4in)
tuffing Quantity	20/40/40H	set	66/138/138	35/75/75	35/75/75

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 20C DB;Ambient Temperature 7°C DB/6°C WB.

4. The Max. Ambient temperature for units running is 55°C.







## **DUCTED INVERTER**





## **TECHNICAL SPECIFICATION - THREE-PHASE**

	Indoor		UIRL-042NH00-*	UIRL-048NH00-*	UIRL-055NH00-*
Model	Outdoor		UVRL-042NHB00-*	UVRL-048NHB00-*	UVRL-055NHB00-*
		Btu/h	40000/35000/33000	47000/43000/40000	52000/47000/45000
	Cooling (T1/T3/T4)	RT	3.33/2.91/2.75	3.91/3.58/3.33	4.34/3.92/3.75
· .	_	kW	11.70/10.25/9.67	13.75/12.60/11.72	15.25/13.77/13.19
Capacity		Btu/h	46000	52200	61400
	Heating(H1)	RT	3.84	4.35	5.12
	<b>5</b>	kW	13.50	15.30	18.00
	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
Electric Data	Cooling Current(T1/T3/T4)	A	5.5/6.78/6.49	6.49/8.33/7.86	7.21/9.10/8.85
	Heating Power Input(H1)	W	3553	3923	4737
	Heating Current(H1)	A	6.80	7.00	8.00
	FED/T1 /T0)	(Btu/h)/W	12.15/8.70	12.20/8.7	12.15/8.70
	EER(T1/T3)	W/W	3.56/2.55	3.58/2.55	3.56/2.55
	EER(T4)	kW/RT	1.40	1.40	1.40
	2211(1-7)	W/W	2.51	2.51	2.51
Performance	COP(H1)	(Btu/h)/W	12.96	13.30	12.96
	COT(TT)	W/W	3.80	3.90	3.80
	Air Flow Volume(Hi/Mid/Low)	m3/h	2300/2100/1700	2800/2500/2100	3100/2800/2500
	All flow volottle(Fil/Mild/Low)	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	Net	mm	1250×735×320	1400×820×380	1400×820×380
(W×D×H)	Packing	mm	1460x800x400	1610x880x460	1610x880x460
Dimension	Air Outlet	mm	967×214	1117×273	1117×273
Dimension	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

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 20C DB; Ambient Temperature 7°C DB/6°C WB.

4. The Max. Ambient temperature for units running is 55°C.



## **18K SYSTEM NET PERFORMANCE DATA**

Indoor Model Name	Outdoor Model Name	<b>∀</b>	Fan gear Rail M3/h M3/h Low 780																_			
el Name	lel Name	Air Folw	Rate	m3/h			700	007					070	0.0					7700	0611		
UIRL-01	UVRL-01	Indoor Air	Tempe	°CWB	14	16	18	19	22	24	14	16	18	19	22	24	14	16	18	19	22	
UIRL-018TH00-*	UVRL-018THB00-*	or Air	Temperature	SCDB	20	22	25	27	30	32	20	22	25	27	30	32	20	22	25	27	30	00
				TC	3.62	4.23	4.72	4.94	5.42	5.62	3.68	4.29	4.79	5.01	5.50	5.71	3.74	4.37	4.87	5.10	9.60	, 0
			35	SHC	3.29	3.72	4.03	4.16	4.39	4.45	3.37	3.81	4.13	4.26	4.50	4.56	3.43	3.88	4.20	4.33	4.58	, 0 ,
				Ы	1.33	1.35	1.37	1.39	1.41	1.43	1.34	1.37	1.39	1.41	1.43	1.45	1.36	1.38	1.40	1.43	1.44	1, ,
				TC	3.49	4.07	4.54	4.75	5.22	5.41	3.54	4.13	4.61	4.83	5.30	5.50	3.60	4.20	4.69	4.91	5.39	011
			40	SHC	3.21	3.63	3.93	4.05	4.27	4.32	3.29	3.72	4.02	4.15	4.37	4.43	3.35	3.78	4.10	4.22	4.45	,
				Ы	1.41	1.44	1.46	1.48	1.50	1.52	1.43	1.45	1.47	1.50	1.52	1.54	1.45	1.47	1.49	1.52	1.54	01,
				TC	3.37	3.94	4.39	4.60	5.05	5.24	3.43	4.00	4.46	4.67	5.12	5.32	3.49	4.07	4.54	4.75	5.21	
		Ontdool	43	SHC	3.14	3.54	3.83	3.95	4.15	4.20	3.22	3.63	3.92	4.04	4.25	4.31	3.27	3.69	3.99	4.11	4.33	00,
		Outdoor Air Temperature (°CDB)		Ы	1.46	1.48	1.51	1.53	1.55	1.57	1.48	1.50	1.52	1.55	1.57	1.59	1.49	1.52	1.54	1.57	1.59	, ,
		rature (°CD		TC	3.36	3.90	4.38	4.56	5.01	5.19	3.41	3.96	4.45	4.63	60.3	5.27	3.46	4.01	4.50	4.68	5.15	, 0 ,
		B)	46	SHC	3.09	3.50	3.79	3.91	4.13	4.19	3.17	3.58	3.88	4.01	4.23	4.29	3.22	3.65	3.95	4.08	4.31	100
				Ы	1.74	1.76	1.79	1.82	1.84	1.87	1.76	1.78	1.81	1.84	1.86	1.89	1.78	1.80	1.83	1.86	1.89	
				TC	3.26	3.78	4.25	4.42	4.86	5.04	3.31	3.84	4.31	4.49	4.93	5.11	3.35	3.89	4.37	4.54	2.00	0
			48	SHC	3.03	3.43	3.72	3.83	4.05	4.10	3.11	3.51	3.81	3.93	4.15	4.21	3.16	3.57	3.87	4.00	4.22	
				Ы	1.75	1.77	1.80	1.83	1.85	1.88	1.77	1.79	1.82	1.85	1.88	1.90	1.79	1.81	1.84	1.87	1.90	
				TC	3.12	3.62	4.06	4.23	4.65	4.82	3.16	3.67	4.13	4.30	4.72	4.89	3.20	3.72	4.18	4.35	4.78	
			52	SHC	2.99	3.38	3.66	3.78	3.99	4.05	3.06	3.46	3.75	3.87	4.09	4.15	3.12	3.52	3.82	3.94	4.16	
				Ы	1.77	1.80	1.82	1.86	1.88	1.91	1.79	1.82	1.85	1.88	1.90	1.93	1.81	1.84	1.87	1.90	1.93	10

## 24K SYSTEM NET PERFORMANCE DATA

all participation of the state	Outdoor Model Name	Air Folw	Fan gear Rate	m3/h			1200	Low 1200					4250	OCCI IIII					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0061		
OUIE OF THE OF	UVRL-024THB00-*	Indoor Air	Temperature	SCWB COB	14 20	16 22	18 25	19 27	22 30	24 32	14 20	16 22	18 25	19 27	22 30	24 32	14 20	16 22	18 25	19 27	22 30	
				TC	4.74	5.53	6.17	6.46	7.09	7.36	4.89	5.71	6.37	6.67	7.32	7.59	4.97	5.80	6.47	6.78	7.43	
			35	SHC	4.23	4.79	5.19	5.35	5.65	5.73	4.44	5.02	5.44	5.62	5.93	6.01	4.55	5.15	5.58	5.75	80.9	
				Ы	1.77	1.80	1.82	1.86	1.88	1.91	1.78	1.81	1.84	1.87	1.89	1.92	1.81	1.83	1.86	1.89	1.92	
				TC	4.56	5.33	5.94	6.22	6.82	7.08	4.71	5.50	6.13	6.42	7.05	7.31	4.78	5.58	6.23	6.52	7.15	
			40	SHC	4.14	4.67	5.06	5.21	5.50	5.57	4.34	4.90	5.31	5.47	5.77	5.84	4.45	5.02	5.44	5.61	5.91	
				PI	1.88	1.91	1.94	1.97	2.00	2.03	1.90	1.93	1.96	1.99	2.01	2.04	1.92	1.95	1.98	2.01	2.04	
				TC	4.41	5.15	5.75	6.01	09.9	6.85	4.56	5.32	5.93	6.21	6.82	70.7	4.63	5.40	6.02	6.30	6.92	
		Outdoor	43	SHC	4.04	4.56	4.93	5.08	5.35	5.41	4.24	4.78	5.17	5.33	5.61	99.9	4.34	4.90	5.30	5.46	5.75	
		Outdoor Air Temperature (°CDB)		Ы	1.94	1.97	2.00	2.04	2.06	2.09	1.96	1.99	2.02	2.06	2.08	2.11 (	1.98	2.01	2.05	2.08	2.11 (	
		ature (°CDB		TC s	4.35 3	5.05	5.67 4	5.90 5	6.48 5	6.71 5	4.49 4	5.21 4	5.85 5	6.09	69.9	6.93 5	4.56 4	5.29 4	5.94 5	6.18 5	6.79 5	
		1	46	SHC   I	.98 2.	4.50 2.	4.88 2.	5.04 2.	5.32 2.	5.39 2.	4.18 2.	4.73 2.	5.12 2.	5.29 2.	5.58 2.	5.66 2.	4.28 2.	4.84 2.	5.25 2.	5.42 2.	5.72 2.	
				PI T	2.32 4.	2.36 4.	2.39 5.	2.43 5.	2.47 6.	2.50 6.	2.34 4.	2.37 5.	2.41 5.	2.45 5.	2.49 6	2.52 6.	2.37 4.	2.40 5.	2.44 5.	2.48 6.	2.52 6.	
			48	тс знс	4.22 3.90	4.89 4.41	5.50 4.78	5.72 4.94	6.29 5.21	6.51 5.28	4.35 4.10	5.05 4.63	5.68 5.02	5.91 5.18	6.49 5.47	6.72 5.55	4.42 4.20	5.13 4.75	5.76 5.14	6.00 5.31	6.59 5.6	
				IG DI	30 2.34	11 2.37	78 2.40	34 2.45	21 2.48	28 2.51	10 2.36	33 2.39	2.42	18 2.47	17 2.50	55 2.53	20 2.38	75 2.42	14 2.45	31 2.50	60 2.53	
				TC	4 4.03	7 4.68	0 5.26	5 5.47	8 6.01	1 6.23	6 4.16	9 4.83	2 5.43	7 5.65	0 6.21	3 6.43	8 4.23	2 4.91	5 5.51	0 5.74	3 6.30	
			52	SHC	3.85	4.35	4.71	4.87	5.14	5.21	4.04	4.57	4.95	5.11	5.39	5.47	4.14	4.68	20.3	5.23	5.52	
				PI	2.37	2.41	2.44	2.48	2.52	2.55	2.39	2.43	2.46	2.50	2.54	2.57	2.42	2.45	2.49	2.53	2.57	

DB : Dry Bulb Temperature ◆Symbol AFR: Air Flow Rate

WB: Wet Bulb Temperature TC: Total Capacity SHC: Sensible Heating Capacity

1. All capacities are net. A deduction (cooling) or an addition (heating) 3. Direct interpolation is permissible. Do not extrapolate

♦Notes

4. Capacities are based on the following conditions: - Interconnecting Piping Length :5m - Level Difference : Zero.

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## 30K SYSTEM NET PERFORMANCE DATA

Indoor Model Name UIRL-030TH00-*	Outdoor Model Name UVRL-030THB00-*	Air folw Indoor Air	Temperature	CWB CDB	14 20	16 22	18 25	19 27	22 30	24 32	14 20	16 22	18 25	19 27	22 30	24 32	14 20	16 22	18 25	19 27	22 30	24 32
				TC	5.53	6.45	7.20	7.54	8.27	8.58	5.71	99'9	7.43	7.78	8.54	8.86	5.80	92.9	7.55	7.90	8.67	000
			35	SHC	4.76	5.39	5.84	6.02	98.9	6.45	5.00	5.65	6.13	6.32	89.9	6.77	5.12	62.5	6.28	6.48	6.84	6 93
				Ы	2.07	2.10	2.13	2.17	2.20 7	2.23	2.09	2.12	2.15 7	2.19	2.21	2.25	2.11	2.14	2.18	2.21	2.24	2 700
			4	TC SI	5.33 4.	6.21 5.	6.93 5.	7.26 5.	7.96 6.	8.26 6.	5.50 4.	6.42 5.	7.16 5.	7.49 6.	8.22 6.	8.53 6.	5.58 5.	6.51 5.	7.27 6.	7.61 6.	8.35 6.	9 88
			40	SHC PI	.66 2.20	5.26 2.23	5.69 2.27	5.87 2.31	6.19 2.34	6.27 2.37	4.89 2.22	5.52 2.25	5.97 2.29	6.16 2.33	6.49 2.36	6.58 2.39	5.01 2.25	5.66 2.28	6.12 2.31	6.31 2.35	6.65 2.38	CAC AT A
				TC	0 5.15	3 6.01	7 6.71	1 7.02	4 7.70	7.99	2 5.32	5 6.21	9 6.92	3 7.25	6 7.95	9 8.25	5 5.40	8 6.30	1 7.03	5 7.36	8 8.07	0000
		ō	43	SHC	5 4.55	1 5.13	1 5.55	2 5.72	0 6.02	60.9	2 4.77	1 5.38	2 5.82	9 6.00	5 6.32	6:39	0 4.89	0 5.52	3 5.96	5 6.15	7 6.47	2 2 2
		Outdoor Air Temperature (°CDB)		Ы	2.27	2.31	2.34	2.38	2.41	2.45	2.29	2.33	2.36	2.40	2.43	2.47	2.32	2.36	2.39	2.43	2.46	0 20
		mperature ('		TC	5.34	6.20	96.9	7.25	7.97	8.25	5.52	6.40	7.19	7.49	8.22	8.52	2.60	6.50	7.30	7.60	8.35	900
		CDB)	46	SHC	4.48	5.07	5.49	29.6	5.99	6.07	4.70	5.32	5.77	5.95	6.28	6.37	4.82	5.45	5.91	6.10	6.44	6 63
				П	2.80	2.84	2.88	2.93	2.97	3.01	2.82	2.86	2.90	2.95	2.99	3.03	2.86	2.90	2.94	2.99	3.03	202
				TC	5.18	6.01	6.75	7.03	7.73	8.00	5.35	6.21	6.97	7.26	7.98	8.26	5.43	6.30	7.08	7.37	8.10	000
			48	SHC	4.39	4.97	5.38	5.56	5.87	5.95	4.61	5.21	5.65	5.83	6.16	6.24	4.72	5.34	5.79	5.97	6.31	0 70
				Ы	2.81	2.85	2.89	2.95	2.99	3.03	2.84	2.88	2.92	2.97	3.01	3.05	2.87	2.91	2.95	3.01	3.05	0000
				TC	4.96	5.75	6.46	6.73	7.39	7.65	5.12	5.94	6.67	6.94	7.63	7.90	5.19	6.03	6.77	7.05	7.75	8 02
			52	SHC	4.33 2.86	4.90 2.90	5.31 2.94	5.48 2.99	5.78 3.03	5.86 3.07	4.54 2.88	5.14 2.92	5.57 2.96	5.75 3.02	90.8 3.06	6.15 3.10	4.66 2.92	5.27 2.96	5.71 3.00	5.89 3.05	6.22 3.09	630 311

## 36K SYSTEM NET PERFORMANCE DATA

Indoor N	Outdoor		Fan gear					LOW					Man di						1	E E		
Indoor Model Name	Outdoor Model Name	Rate	m3/h			7600	0001					7000	0061					2400	7 100			
UIRL-036TH00-*	UVRL-036THB00-*	Indo	Temp	SCWB	14	16	18	19	22	24	14	16	18	19	22	24	14	16	18	19	22	7
*-00HTS	*-008H1	Indoor Air	Temperature	SCDB	20	22	25	27	30	32	20	22	25	27	30	32	20	22	25	27	30	00
				TC	6.57	99.7	8.55	8.95	9.82	10.19	6.78	7.91	8.83	9.24	10.14	10.52	6.88	8.03	96.8	9.40	10.29	40.68
			35	SHC	5.86	6.63	7.18	7.41	7.83	7.94	6.15	96.9	7.54	7.78	8.22	8.33	6.30	7.13	7.72	7.97	8.42	8 53
				Ы	2.46	2.50	2.54	2.58	2.61	2.65	2.48	2.52	2.56	2.60	2.64	2.67	2.51	2.55	2.59	2.63	2.67	274
				TC	6.32	7.38	8.23	8.61	9.45	9.81	6.53	7.62	8.50	8.89	9.76	10.13	6.63	7.73	8.63	9.03	9.91	40.28
			40	SHC	5.73	6.47	7.00	7.22	7.61	7.71	6.02	6.79	7.35	7.58	7.99	8.09	6.16	96.9	7.53	7.77	8.19	00 8
				Ы	2.62	2.66	2.70	2.75	2.78	2.82	2.64	2.68	2.72	2.77	2.80	2.84	2.67	2.71	2.75	2.80	2.84	2 88
				TC	6.25	7.27	8.14	8.50	9.33	89.6	6.44	7.52	8.41	8.87	9.63	9.99	95.9	7.62	8.52	8.91	68.6	10 11
		Outdoor	43	SHC	5.60	6.31	6.82	7.04	7.41	7.49	5.87	6.62	7.16	7.38	7.77	7.86	6.02	6.79	7.34	7.56	7.96	30 0
		Outdoor Air Temperature (°CDB)		Ы	2.71	2.75	2.79	2.84	2.87	2.91	2.73	7.77	2.81	2.86	2.90	2.94	2.76	2.80	2.85	2.89	2.93	207
		ature (°CDB	,	TC s	6.18 5	7.17	8.06	8.39 6	9.22 7	9.55 7	6.38 5	7.41 6	8.32 7	8.66	9.51 7	98.6	6.48 5	7.52 6	8.45 7	8.80 7	99.6	40.04
		(	46	SHC	5.52 3	6.24 3	6.76 3	6.98	7.37	7.47	5.79 3	6.55 3	7.10 3	7.32 3	7.73 3	7.84 3	5.93 3	6.71 3	7.27	7.50 3	7.92 3	000
				PI I	3.26 5.	3.31 6.	3.36 7.	3.42 8.	3.46 8.	3.51 9.	3.29 6.	3.34 7.	3.38 8.	3.45 8.	3.49 9.	3.54 9.	3.33 6.	3.38 7.	3.43 8.	3.49 8.	3.54 9.	2 58 0
			4	TC SI	66	96	7.81 6.	8.14 6.	94 7	9.26 7.	6.19 5.	7.18 6.	8.07 6.	8.40 7.	9.23 7.	99	6.28 5.	7.29 6.	8.19 7.	8.54 7.	9.37 7.	071 787
			48	SHC P	5.41 3.	6.11 3.	6.63 3.	6.84 3.	.22 3.	7.32 3.	5.67 3.3	6.42 3.	6.95 3.	7.18 3.	.58 3.	7.68 3.	.81 3.	.57 3.	7.12 3.	7.35 3.3	7.76 3.	10 P. S. C.
				PI T	3.28 5.	3.33 6.	3.38 7.	3.44 7.	3.49 8.	3.53 8.	3.31 5.92	3.36 6.87	3.40 7.	3.47 8.	.51 8.	3.56 9.	3.35 6.01	3.40 6.98	3.45 7.	3.51 8.	3.56 8.	360 038
			52	TC SHC	5.73 5.33	6.65 6.03	7.47 6.53	7.78 6.74	8.55 7.12	8.86 7.21	5.	37 6.32	7.72 6.85	8.03 7.07	8.83 7.47	9.14 7.57	01 5.73	98 6.48	7.83 7.02	8.16 7.25	8.96 7.65	7 7 80
				C bl	3 3.33	3 3.38	3 3.43	4 3.49	2 3.54	1 3.59	59 3.36	2 3.41	5 3.46	7 3.52	7 3.57	3.	3 3.40	8 3.45	2 3.50	5 3.56	5 3.61	3 66
					3	8	6	6	4	6	9	1	و	2	2	.61	0	2	0	9	-	9

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# 42K SYSTEM NET PERFORMANCE DATA

	The same of		L																			100000
Indoor	Outdoor		Fan gear				-	NO T					Madinis						4217			
Indoor Model Name	Outdoor Model Name	Air folw	Rate	m3/h			7100	00/1					0400	7100					0000	7200		
UIRL-04	UVRL-04	Indoor Air	Temperature	°CWB	14	16	18	19	22	24	14	16	18	19	22	24	14	16	18	19	22	70
UIRL-042NH00-*	UVRL-042NHB00-*	r Air	rature	SCDB	20	22	25	27	30	32	20	22	25	27	30	32	20	22	25	27	30	22
				TC	8.19	9.56	10.66	11.16	12.25	12.71	8.46	9.87	11.01	11.52	12.65	13.12	8.59	10.02	11.18	11.70	12.84	13 33
			35	SHC	6.97	7.88	8.54	8.81	9.31	9.43	7.31	8.27	96.8	9.25	9.77	9.90	7.49	8.47	9.18	9.48	10.01	10 11
				Ы	3.08	3.12	3.17	3.23	3.27	3.32	3.10	3.15	3.20	3.25	3.29	3.34	3.14	3.19	3.24	3.29	3.33	3 38
				TC	7.89	9.20	10.27	10.75	11.79	12.24	8.14	9.50	10.60	11.10	12.18	12.64	8.27	9.65	10.76	11.26	12.36	1283
			40	SHC	6.81	7.70	8.33	8.59	9.05	9.17	7.15	8.08	8.74	9.01	9.50	9.62	7.33	8.27	8.95	9.23	9.73	98 0
				Ы	3.27	3.32	3.37	3.43	3.48	3.53	3.30	3.35	3.40	3.46	3.50	3.55	3.34	3.39	3.44	3.50	3.55	3 60
				TC	7.63	8.90	9.93	10.39	11.41	11.84	7.88	9.19	10.25	10.73	11.78	12.22	8.00	9.33	10.41	10.90	11.96	12 11
		Outdoor	43	SHC	6.65	7.50	8.11	8.36	8.80	8.91	6.98	7.88	8.51	8.78	9.24	9.35	7.15	8.07	8.72	8.99	9.47	0 58
		Outdoor Air Temperature (°CDB)		Ы	3.38	3.43	3.49	3.54	3.59	3.64	3.41	3.46	3.51	3.57	3.62	3.67	3.45	3.50	3.56	3.62	3.66	3 72
		ature (°CDF		TC	7.20	8.36	9.39	9.78	10.74	11.13	7.44	8.63	9.70	10.10	11.09	11.49	7.55	8.77	9.84	10.25	11.26	11 67
		3)	46	SHC	6.56	7.42	8.04	8.29	8.76	8.88	6.88	7.78	8.43	8.71	9.19	9.32	7.05	7.98	8.64	8.92	9.42	0 55
				Ы	3.76	3.82	3.87	3.94	4.00	4.05	3.80	3.85	3.90	3.97	4.03	4.08	3.84	3.90	3.95	4.02	4.08	1 13
				TC	66.9	8.11	9.11	9.48	10.42	10.80	7.22	8.38	9.41	62.6	10.76	11.15	7.33	8.50	9.55	9.94	10.92	11 32
			48	SHC	6.43	7.27	7.88	8.13	8.58	8.70	6.74	7.63	8.27	8.53	9.01	9.13	6.91	7.82	8.47	8.74	9.23	98 0
				Ы	3.79	3.84	3.89	3.97	4.02	4.07	3.82	3.87	3.93	4.00	4.05	4.11	3.86	3.92	3.97	4.05	4.10	1 16
				TC	6.68	7.76	8.71	9.07	76.6	10.32	06.9	8.01	00.6	9:36	10.29	10.66	7.01	8.13	9.13	9.51	10.45	40 82
			52	SHC	6.33	7.16	7.76	8.01	8.46	8.58	6.65	7.52	8.15	8.41	8.88	9.00	6.81	7.70	8.35	8.62	9.10	000
				Ы	3.85	3.90	3.95	4.03	4.08	4.14	3.88	3.93	3.99	4.06	4.11	4.17	3.92	3.98	4.03	4.11	4.16	4 22

# **48K SYSTEM NET PERFORMANCE DATA - SINGLE PHASE**

# **48K SYSTEM NET PERFORMANCE DATA - THREE PHASE**

Cuttoor Model Name         UNICASIANHBOG**         S         40         Outdoor Air Temperature (*CDB)         Ais         <	Indoo	Indoor Model Name	UIRL-04	UIRL-048NH00-*																		
Main	Outdoo	or Model Name	UVRL-04	*-009HN8												The state of						
Rate         Tompletium         Tompletium         35         40         43         46         91         46         86         48         48         85         48         85         48         7         48         8         7         48         8         7         48         8         7         48         8         7         48         8         9         7         48         8         9         48         1         48         8         9         1         1         48         8		Air folw	opul	or Air								Outdo	or Air Temp	erature (°C	(BO)							
4.00         CVB         ***CDB         TC         SHC         PI	Fan gear	Rate	Temp	erature		35			40			43			46			48			52	
14		m3/h	°CWB	°CDB	TC	SHC	Ы	TC	SHC	Ы	TC	SHC	Ы	TC	SHC	Ы	TC	SHC	Ы	TC	SHC	ᆸ
16         22         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         8.72         4.69         9.97         8.54         4.72         9.53         4.02         11.55         4.08         11.57         9.45         4.75         11.20         9.55         4.87         11.50         9.55         4.87         11.51         9.45         4.75         11.50         9.55         4.87         11.51         9.45         9.26         9.26         4.05         9.26         4.05         9.26         4.05         9.26         4.05         9.15         4.05         9.45         4.05         9.15         4.05         9.15         4.05         9.15         4.05			14	20	9.63	8.19	3.60	9.27	8.01	3.83	8.97	7.82	3.96	8.86	7.71	4.63	8.59	7.55	4.65	8.22	7.44	4.72
240         25         11.55         10.04         3.7.1         12.07         9.26         11.67         9.53         4.06         11.55         11.07         9.79         3.96         11.67         9.53         4.06         11.56         9.15         4.17         11.20         9.26         4.15         11.50         9.26         4.15         11.50         9.26         4.15         11.50         9.56         4.17         11.50         9.56         4.17         11.50         9.56         4.17         11.50         9.58         4.15         11.50         9.56         4.99         4.15         11.50         9.59         4.99         4.15         11.50         9.59         4.15         11.50         9.59         4.15         11.50         9.59         4.15         11.50         9.59         4.15         11.50         9.59         4.15         11.50         9.59         4.15         11.50         9.59         4.15         11.50         9.59         4.15         11.50         9.59         4.15         11.50         9.59         4.15         11.50         9.59         4.15         11.50         9.59         4.15         11.50         9.59         4.15         11.50         9.59         4.15			16	22	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
10         27         13.5         10.09         4.02         12.2         9.83         4.15         10.29         4.94         11.25         9.85         4.84         11.66         9.55         4.87         11.25         9.42           22         30         14.94         10.93         3.87         1.26         10.09         4.01         12.21         9.85         4.81         10.09         4.94         12.25         9.82         4.94         10.09         4.94         12.25         9.82         10.09         4.01         12.21         9.83         4.91         10.29         9.82         4.94         10.09         9.82         4.91         10.29         9.82         4.94         10.09         9.82         4.91         10.20         9.83         9.91         4.95         10.20         9.83         9.80		0070	18	25	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
22         30         11.09         3.82         13.66         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           24         32         14.94         11.09         3.63         9.57         4.10         13.81         10.47         4.26         13.29         10.44         4.98         13.27         10.23         6.99         4.69         4.69         9.57         3.69         9.57         8.09         9.56         8.09         4.66         8.09         4.66         8.09         4.66         8.09         9.16         8.09         4.66         8.09         9.16         8.09         4.66         8.09         9.16         8.09         9.16         8.09         9.16         8.09         9.16         8.09         9.16         9.16         9.10	LOW	7100	19	27	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
24         32         19.40         10.50         3.88         14.38         10.77         4.13         13.91         10.47         4.26         13.68         10.44         4.96         13.27         10.23         5.00         12.00         10.00			22	30	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
44         20         994         8 59         3 65         3 60         9 26         8 20         9 15         8 69         4 66         8 87         7 93         4 69         7 84         7 84         7 84         7 84         7 84         7 84         7 84         7 84         8 80         9 15         8 80         4 66         8 87         7 93         4 69         8 80         8 80         8 80         8 80         9 10         9 10         1 10         9 10			24	32	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
250         11 60         22         11 60         35 2         36 9         11 70         36 9         4 10 8 <th< th=""><th></th><th></th><th>14</th><th>20</th><td>9.94</td><td>8.59</td><td>3.63</td><td>9.57</td><td>8.40</td><td>3.86</td><td>9.26</td><td>8.20</td><td>3.99</td><td>9.15</td><td>8.09</td><td>4.66</td><td>8.87</td><td>7.93</td><td>4.69</td><td>8.48</td><td>7.81</td><td>4.76</td></th<>			14	20	9.94	8.59	3.63	9.57	8.40	3.86	9.26	8.20	3.99	9.15	8.09	4.66	8.87	7.93	4.69	8.48	7.81	4.76
250         18         25         17.54         10.67         3.96         12.05         10.00         4.11         11.92         4.80         11.57         9.71         4.81         11.57         9.71         4.81         11.57         9.71         4.82         11.57         9.71         4.81         11.51         9.88         4.81         11.51         9.81         4.91         11.51         9.88         4.81         11.51         9.88         4.91         11.51         9.88         11.51         9.88         11.51         9.88         11.52         11.51         9.88         11.52         11.54         9.88         11.52         11.54         9.88         11.52         11.54         9.88         11.52         11.54         9.88         11.54         11.54         9.88         11.54         9.88         11.54         9.88         11.54         9.88         11.54         9.88         11.54         9.89         4.72         11.54         9.89         4.72         9.89         4.72         4.72         11.54         9.89         4.72         11.54         9.89         4.72         11.54         9.89         4.72         11.54         9.89         4.72         11.54         9.89         4.72			16	22	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	96.8	4.76	9.85	8.84	4.83
230         19         27         13.54         10.87         3.81         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           22         30         14.48         3.18         11.05         4.10         13.64         10.80         4.25         13.73         10.59         4.95         13.64         10.63         4.88         10.63         4.95         13.70         10.73         4.08         10.89         4.36         14.13         10.89         4.29         13.64         10.73         4.18         11.30         4.16         14.86         10.99         4.30         14.13         10.95         4.20         14.13         10.95         4.20         14.13         10.95         4.20         4.14         10.80         4.25         13.70         10.80         8.00	Madium	2500	18	25	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
22 30 14.86 11.48 3.85 14.31 11.16 14.00 13.84 10.86 4.24 13.64 10.80 4.24 13.64 10.80 4.95 13.72 10.73 10.59 4.98 12.65 10.43 11.14 10.80 4.16 14.35 10.89 4.30 14.13 10.80 4.10 14.13 10.80 4.10 14.13 10.80 4.10 14.13 10.80 4.10 14.13 10.80 4.10 14.13 10.80 4.10 14.13 10.80 4.10 14.13 10.80 4.10 14.13 10.80 4.10 14.13 10.80 4.10 14.13 10.80 4.10 14.13 10.80 4.10 14.13 10.80 4.10 14.13 10.80 4.10 14.13 10.80 4.10 14.13 10.80 4.10 14.13 10.80 4.10 14.13 10.80 4.10 14.13 10.80 4.10 14.13 10.14 10		0007	19	27	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
24         32         1542         1164         391         1486         1436         1099         430         1413         1095         502         1370         1073         505         1311         1056           44         20         100         880         3.77         11.34         9.72         3.97         10.97         9.46         4.10         10.78         9.27         4.72         9.07         8.13         4.72         9.07         8.13         4.72         9.07         8.13         4.10         10.78         9.37         4.79         10.89         4.10         10.78         9.37         4.82         11.02         9.48         4.10         10.78         9.37         4.82         11.02         9.48         4.10         10.78         9.37         4.82         11.02         9.48         11.02         9.37         4.82         10.25         4.10         10.25         4.16         10.25         4.16         10.25         4.16         10.25         4.16         10.25         4.16         10.27         4.29         11.22         9.07         9.81         11.23         9.81           18         13.0         13.0         13.2         14.29         14.29 <t< th=""><th></th><th></th><th>22</th><th>30</th><td>14.86</td><td>11.48</td><td>3.85</td><td>14.31</td><td>11.16</td><td>4.10</td><td>13.84</td><td>10.86</td><td>4.24</td><td>13.64</td><td>10.80</td><td>4.95</td><td>13.23</td><td>10.59</td><td>4.98</td><td>12.65</td><td>10.43</td><td>5.05</td></t<>			22	30	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
14         20         10.09         8.86         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         8.			24	32	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
2800         16         22         11.77         10.96         3.79         10.52         4.90         10.78         9.40         10.78         9.97         4.79         10.45         9.19         4.88         11.23         9.05           16         25         13.14         10.79         3.79         10.27         4.10         10.76         4.89         11.74         9.95         4.88         11.23         9.81           20         27         13.75         11.14         3.85         13.24         10.85         4.10         10.57         4.23         12.60         10.48         4.94         12.22         10.27         4.89         10.72         9.95         4.88         10.22         10.27         4.23         12.60         10.48         4.94         12.22         10.27         4.89         10.12         9.85         10.27         10.27         4.89         10.12         9.85         10.27         4.89         10.27         4.29         10.27         4.29         10.27         4.29         10.27         4.29         10.27         4.29         10.27         4.29         10.27         4.29         10.27         4.29         10.27         4.29         10.27         4.29			14	20	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
280         18         25         13.14         10.79         3.79         12.65         10.52         4.03         12.24         10.25         4.16         12.10         10.16         4.85         11.74         9.95         4.88         11.23         9.81           19         27         13.75         11.74         3.85         13.24         10.65         4.10         10.87         4.23         12.80         10.57         4.23         12.80         10.57         4.29         13.86         11.07         50.1         13.87         10.85         6.04         12.84         10.65         6.04         12.84         10.65         6.04         12.84         10.65         6.04         12.84         10.65         6.04         12.84         10.65         6.04         12.84         10.65         6.04         12.84         10.65         6.04         12.84         10.65         6.04         12.84         10.65         6.04         12.84         10.65         6.04         12.84         10.65         6.04         12.84         10.65         6.04         12.84         10.65         6.04         12.84         10.65         6.04         12.84         10.65         6.04         12.84         10.65			16	22	11.77	96.6	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
27 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 10	4011	0000	18	25	13.14	10.79	3.79	12.65	10.52	4.03	12.24	10.25	4.16	12.10	10.16	4.85	11.74	9.95	4.88	11.23	9.81	4.96
30     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       32     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	50 00	7007	19	27	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
<b>32</b> 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			22	30	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	32	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

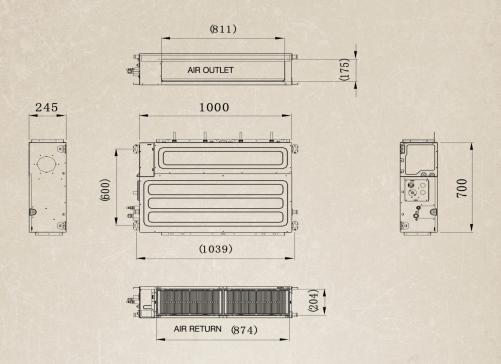
# 55K SYSTEM NET PERFORMANCE DATA - SINGLE PHASE

Indoo	Indoor Model Name	UIRL-0.	UIRL-055TH00-*															
Outdo	Outdoor Model Name	UVRL-0	UVRL-055THB00-*															
	Air Folw	opul	Indoor Air							Outdoor Air Temperature (°CDB)	Temperate	ure (°CDB)						
Fan gear	Rate	Temp	Temperature		35			40			43			46			52	
	CFM m3/h	°CWB	°CDB	TC	SHC	Ы	TC	SHC	Ы	TC	SHC	Ы	TC	SHC	Ы	TC	SHC	Ы
		14	20	10.67	9.52	4.00	10.27	9.31	4.26	9.94	60.6	4.40	89.6	8.96	5.11	8.98	99'8	5.22
		16	22	12.45	10.77	4.06	11.99	10.52	4.32	11.59	10.26	4.46	11.24	10.14	5.19	10.43	62.6	5.30
	2500	18	25	13.89	11.67	4.12	13.38	11.38	4.39	12.94	11.09	4.53	12.62	10.99	5.26	11.71	10.01	5.37
A C C	0007	19	27	14.54	12.05	4.19	14.00	11.74	4.46	13.54	11.43	4.61	13.14	11.34	5.36	12.19	10.95	5.47
		22	30	15.96	12.72	4.25	15.36	12.37	4.52	14.86	12.03	4.67	14.44	11.97	5.43	13.39	11.56	5.54
		24	32	16.56	12.90	4.31	15.94	12.53	4.58	15.42	12.18	4.74	14.96	12.14	9:20	13.87	11.72	5.62
		14	20	11.02	66.6	4.03	10.61	9.78	4.29	10.26	9.54	4.43	10.00	9.41	5.16	9.27	60'6	5.27
		16	22	12.85	11.31	4.10	12.38	11.04	4.36	11.97	10.77	4.50	11.60	10.64	5.23	10.76	10.28	5.34
Modium	0000	18	25	14.34	12.25	4.16	13.81	11.94	4.42	13.36	11.64	4.57	13.03	11.53	5.30	12.09	11.14	5.41
	70007	19	27	15.01	12.64	4.23	14.45	12.32	4.50	13.98	12.00	4.65	13.57	11.90	5.40	12.59	11.49	5.51
		22	30	16.47	13.35	4.28	15.86	12.98	4.56	15.34	12.63	4.71	14.91	12.56	5.47	13.83	12.14	5.59
		24	32	17.10	13.53	4.35	16.46	13.15	4.62	15.92	12.78	4.77	15.44	12.74	5.55	14.32	12.30	5.66
		14	20	11.18	10.24	4.08	10.77	10.02	4.34	10.42	9.78	4.49	10.15	9.64	5.22	9.41	9.31	5.33
		16	22	13.05	11.58	4.15	12.57	11.31	4.41	12.15	11.03	4.56	11.78	10.90	5.29	10.93	10.53	5.41
42:1	2,00	18	25	14.56	12.55	4.21	14.02	12.24	4.48	13.56	11.92	4.62	13.23	11.81	5.37	12.27	11.41	5.48
	0010	19	27	15.25	12.95	4.28	14.67	12.62	4.55	14.19	12.29	4.70	13.75	12.19	5.47	12.78	11.78	5.58
		22	30	16.72	13.68	4.33	16.10	13.30	4.61	15.58	12.94	4.76	15.13	12.87	5.54	14.04	12.43	5.66
		24	32	17.36	13.87	4.40	16.71	13.47	4.68	16.16	13.09	4.83	15.68	13.05	5.61	14.54	12.61	5.73

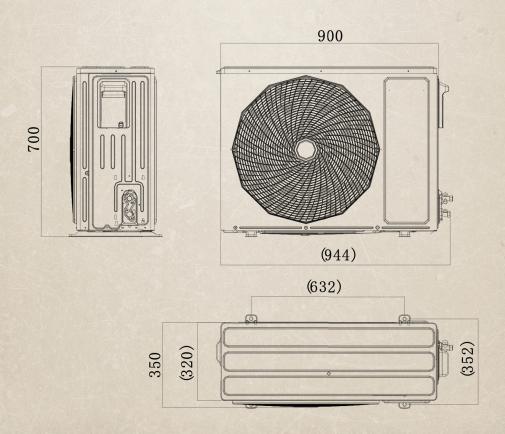
# 55K SYSTEM NET PERFORMANCE DATA - THREE PHASE

Indoc	Outdo		Fan gear					LOW					Modilie	in i			100		4:17	E E		
Indoor Model Name	Outdoor Model Name	Air folw	Rate	m3/h			0020	0067					0000						2400	0010		
UIRL-05	UVRL-055NHB00-*	Indoc	Tempe	SCWB	14	16	18	19	22	24	14	16	18	19	22	24	14	16	18	19	22	2.4
UIRL-055NH00-*	*-00HN	Indoor Air	Temperature	°CDB	20	22	25	27	30	32	20	22	25	27	30	32	20	22	25	27	30	33
				7T	10.68	12.46	13.90	14.55	15.97	16.57	11.02	12.86	14.35	15.02	16.48	17.11	11.19	13.06	14.57	15.25	16.74	17.37
			35	SHC	80.6	10.27	11.13	11.49	12.13	12.30	9.53	10.78	11.68	12.06	12.73	12.91	9.76	11.04	11.97	12.35	13.04	13.22
				E.	4.00	4.06	4.12	4.19	4.25	4.31	4.03	4.10	4.16	4.23	4.28	4.35	4.08	4.15	4.21	4.28	4.33	4 40
				5T	10.28	11.99	13.38 1	14.01	15.37	15.95	10.61	12.38 1	13.82	14.46	15.87	16.47	10.78	12.57	14.03	14.68	16.11	1672 1
			40	SHC	8.88	10.03	10.85	11.19	11.80	11.95	9.32	10.53	11.39	11.75	12.38	12.54	9.55	10.78	11.67	12.04	12.68	12.85
				Ы	4.26	4.32	4.39	4.46 1	4.52 1	1.58 1	4.29 1	4.36 1	4.42	4.50 1	4.56 1	4.62	4.34	4.41	4.48	4.55 1	1 4.61	4 68 1
				TC S	9.94 8	11.60	12.95 10	13.55 10	14.87	15.43 1	10.27	11.98	13.37 1	13.99 1	15.35 12	15.93 12	10.42	12.16 10	13.57 1	14.20 1	15.59 12	16 17 13
		Outdoor A	43	SHC	8.67 4.	9.78 4.	10.57 4.	10.90 4.	11.47 4.	11.61 4.	9.10 4.	10.27 4.	11.10 4.	11.44 4.	12.04 4.	12.19 4.	9.32 4.	10.52 4.	11.37 4.	11.72 4.	12.34 4.	12 49 4
		Outdoor Air Temperature (°CDB)		PI I	4.40 9	4.46 11.	4.53 12.	4.61 13.	4.67 14.	4.74 14.	4.43 10.	4.50 11.	4.57 13.	4.65 13.	4.71 14.	4.77 15.	4.49 10.	4.56 11.	4.62 13.	4.70 13.	4.76 15.	4 83 15 71
		ure (°CDB)	46	TC SHC	9.70 8.55	11.26 9.67	12.64 10.48	13.16 10.81	14.46 11.42	14.98 11.57	10.02 8.97	11.62 10.15	13.06 10.99	13.59 11.35	14.93 11.98	15.47 12.15	10.17 9.19	11.80 10.40	13.25 11.26	13.80 11.63	15.16 12.28	71 12 44
				I I	55 5.06	5.13	48 5.20	81 5.29	42 5.37	57 5.44	97 5.10	15 5.17	99 5.24	35 5.34	98 5.41	15 5.48	9 5.16	40 5.23	26 5.30	63 5.40	28 5.47	44 5.55
				77	6 9.41	3 10.92	0 12.27	9 12.77	7 14.03	4 14.53	17.6 0	7 11.28	4 12.66	4 13.18	1 14.49	15.01	98.6	3 11.45	0 12.86	0   13.39	7 14.71	15 23
			48	SHC	1 8.38	92 9.47	72 10.27	77   10.60	11.19	53 11.34	1 8.79	9.94	36 10.77	11.12	11.74	11.90	6 9.01	10.19	11.04	11.39	12.03	12 20
				<u>a</u>	3 5.09	7 5.16	7 5.23	0 5.33	9 5.40	4 5.47	9 5.13	4 5.20	7 5.27	2 5.37	4 5.44	0 5.51	1 5.19	9 5.26	4 5.34	9 5.43	3 5.51	5.58
				DT.	00.6	10.44	11.73	12.21	13.42	13.90	9.29	10.78	12.11	12.61	13.85	14.35	9.43	10.95	12.29	12.80	14.06	14.57
			52	SHC	8.26	9.34	10.12	10.44	11.03	11.18	99'8	9.80	10.62	10.96	11.57	11.73	88.88	10.04	10.88	11.23	11.86	12 02
				ਾ	5.16	5.24	5.31	5.41	5.48	5.55	5.21	5.28	5.35	5.45	5.52	9.60	5.27	5.34	5.42	5.52	5.59	5.67
		_												-			_	100	288			_

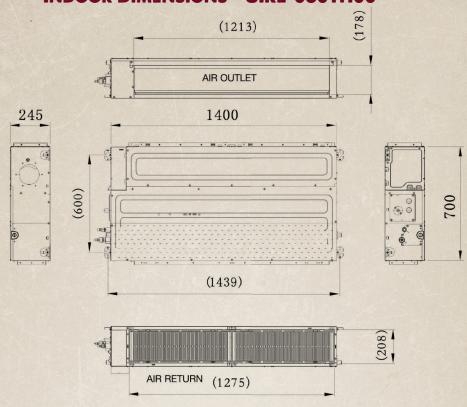
## INDOOR DIMENSIONS - UIRL-018TH00-\* / UIRL-024TH00-\*



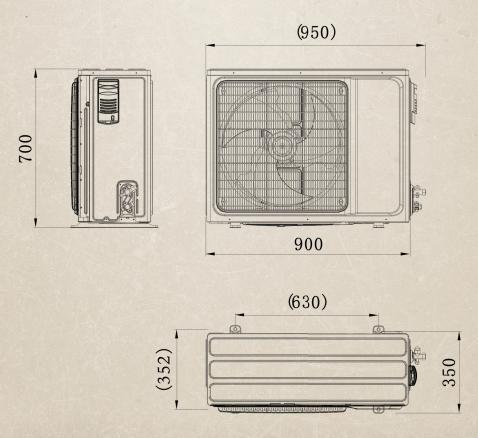
## OUTDOOR DIMENSIONS - UVRL-018THB00-\* / UVRL-024THB00-\*



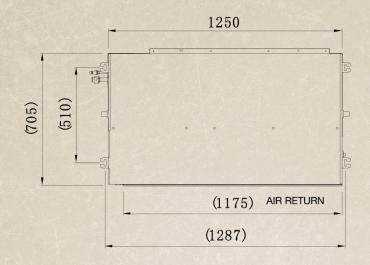
## INDOOR DIMENSIONS - UIRL-030TH00-\*

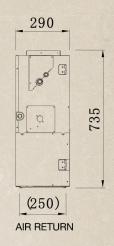


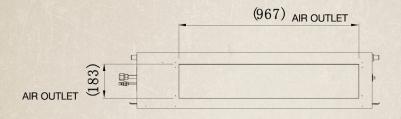
## **OUTDOOR DIMENSIONS - UVRL-030THB00-\***



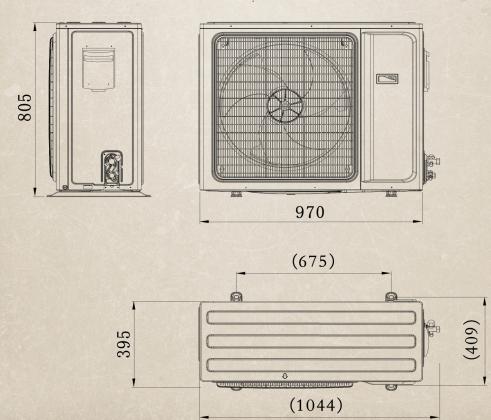
## **INDOOR DIMENSIONS - UIRL-036TH00-\***



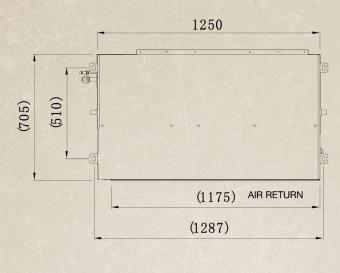


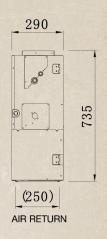


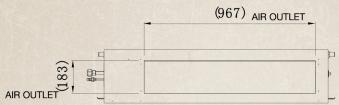
## **OUTDOOR DIMENSIONS - UVRL-036THB00-\***



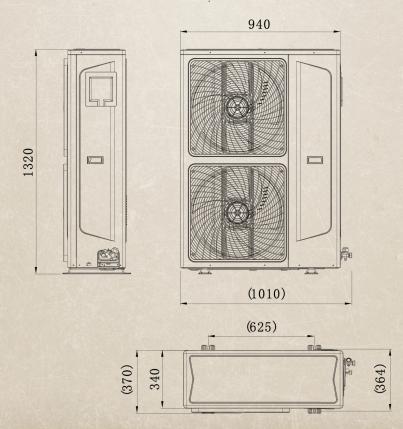
## **INDOOR DIMENSIONS - UIRL-042NH00-\***



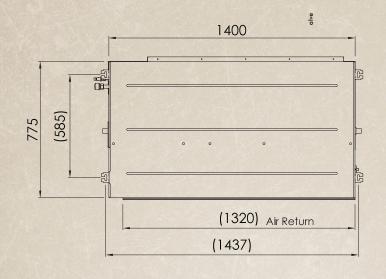


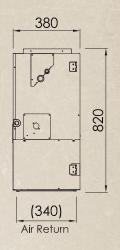


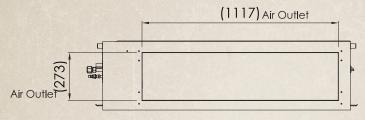
## **OUTDOOR DIMENSIONS - UVRL-042NHB00-\***



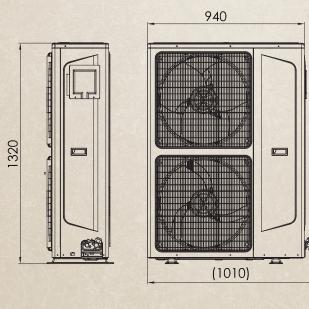
## **INDOOR DIMENSIONS - UIRL-048TH00-\***

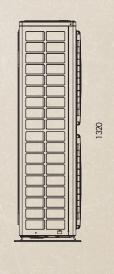


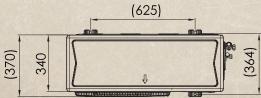




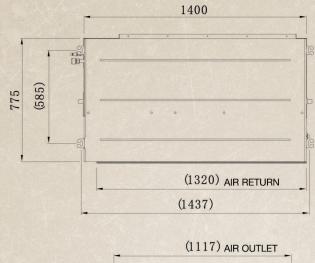
## **OUTDOOR DIMENSIONS - UVRL-048THB00-\***

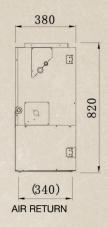


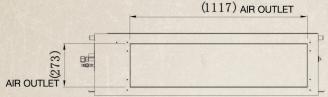




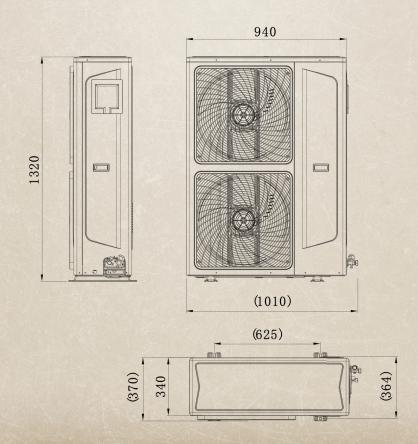
## **INDOOR DIMENSIONS - UIRL-048TH00-\***



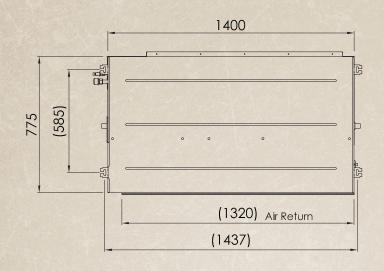


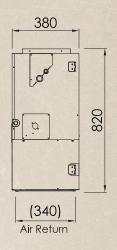


## **OUTDOOR DIMENSIONS - UVRL-048NHB00-\***

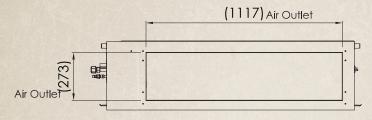


## **INDOOR DIMENSIONS - UIRL-055TH00-\***

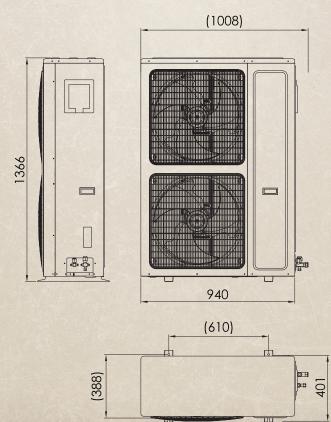




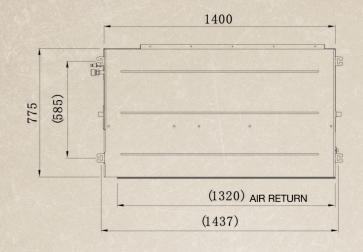
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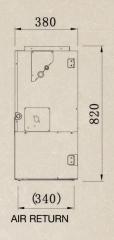


## **OUTDOOR DIMENSIONS - UVRL-055THB00-\***

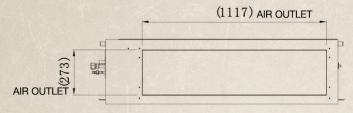


## **INDOOR DIMENSIONS - UIRL-055TH00-\***

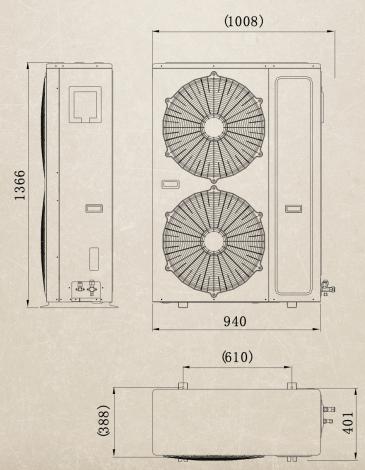




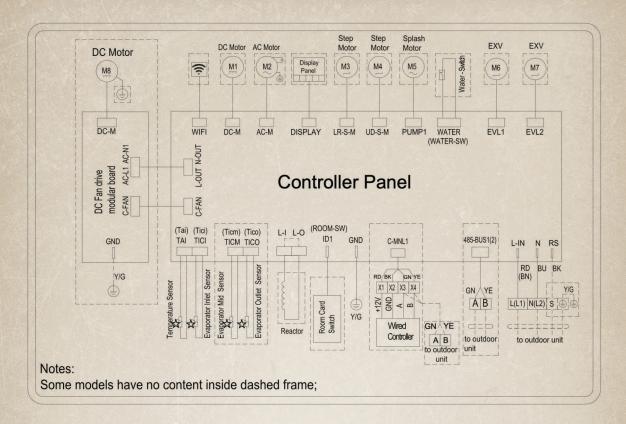
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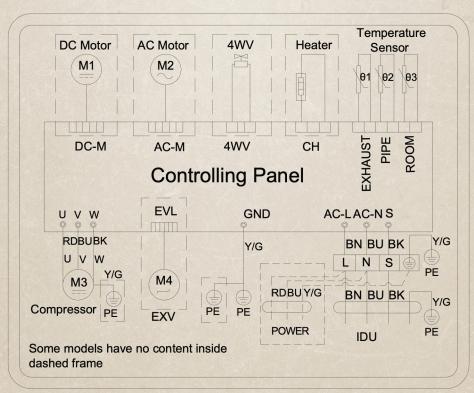
## **OUTDOOR DIMENSIONS - UVRL-055NHB00-\***



## ALL INDOOR MODELS WIRING DIAGRAM

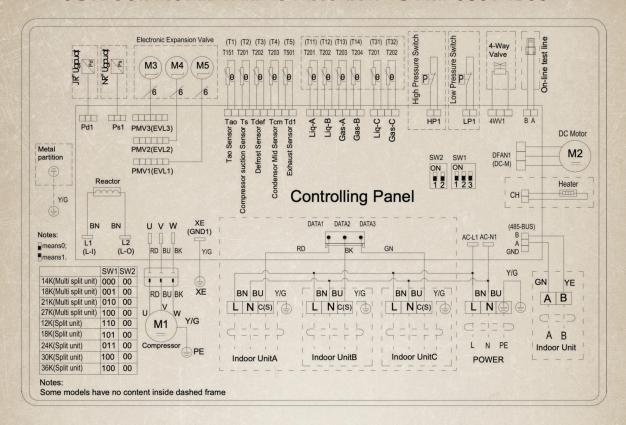


## OUTDOOR MODELS WIRING DIAGRAM UVRL-018THB00-\* /UVRL-024THB00-\*

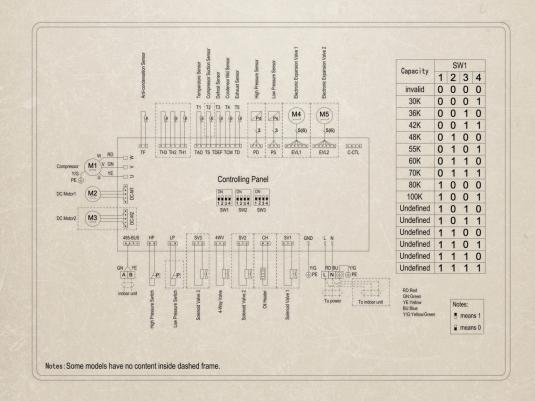


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## **OUTDOOR MODEL WIRING DIAGRAM - UVRL-030THB00-\***

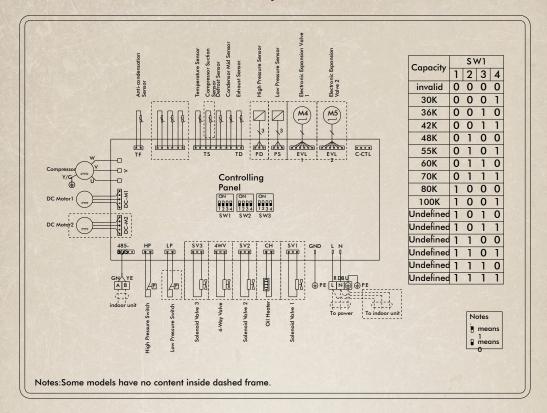


## **OUTDOOR MODEL WIRING DIAGRAM - UVRL-036THB00-\***

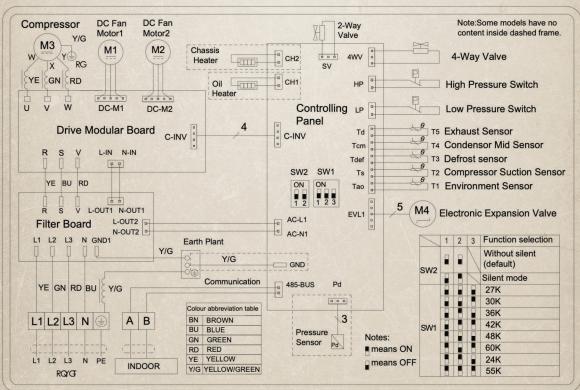


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## OUTDOOR MODELS WIRING DIAGRAM UVRL-048THB00-\* / UVRL-055THB00-\*



## OUTDOOR MODEL WIRING DIAGRAM UVRL-042NHB00-\* / UVRL-048NHB00-\* / UVRL-055NHB00-\*

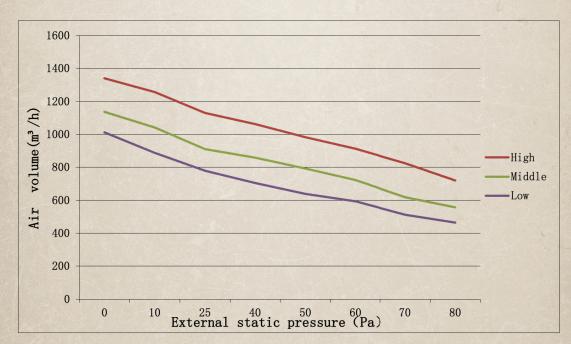


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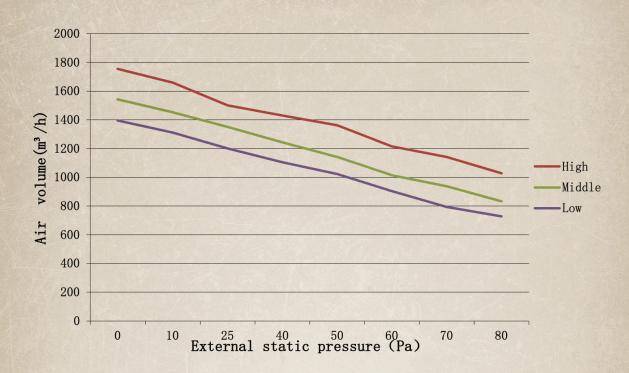
## **SOUND LEVEL DATA**

MODELS	NOISE LEVEL UN	IDER THREE SPEEDS	OF FAN (DB(A))
MODELS	Н	M	L
UIRL-018TH00-*	42	39	38
UIRL-024TH00-*	45	43	41
UIRL-030TH00-*	47	45	44
UIRL-036TH00-*	45	42	40
UIRL-042NH00-*	48	45	43
UIRL-048TH00-*	49	47	44
UIRL-055TH00-*	52	50	47

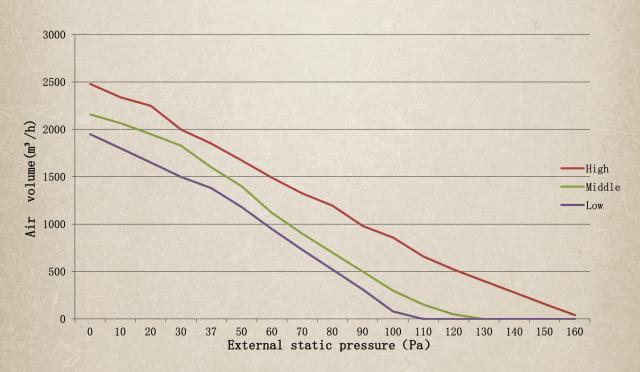
## **UIRL-018TH00-\* STATIC PRESSURE CURVE**



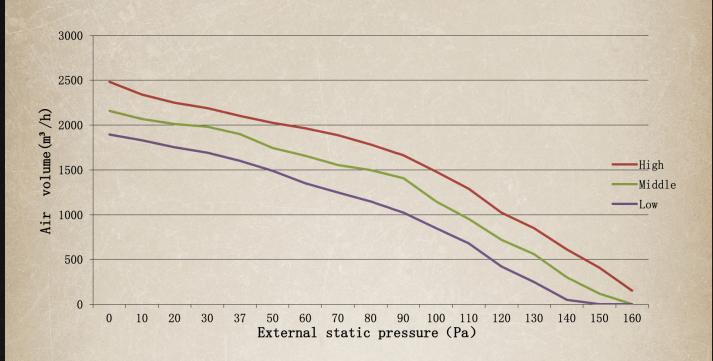
## **UIRL-024TH00-\* STATIC PRESSURE CURVE**



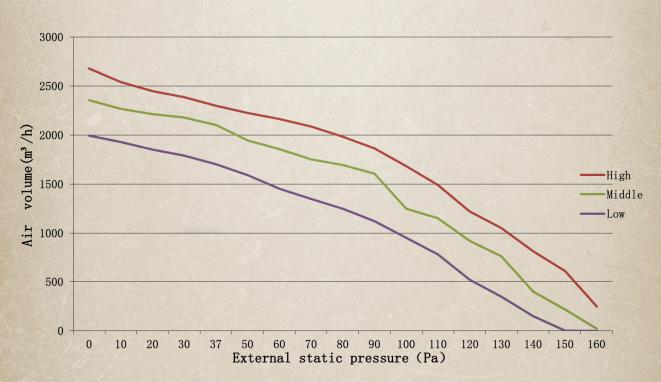
## **UIRL-030TH00-\* STATIC PRESSURE CURVE**



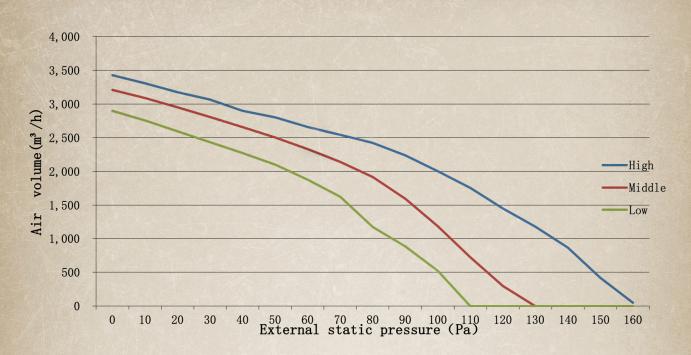
## **UIRL-036TH00-\* STATIC PRESSURE CURVE**



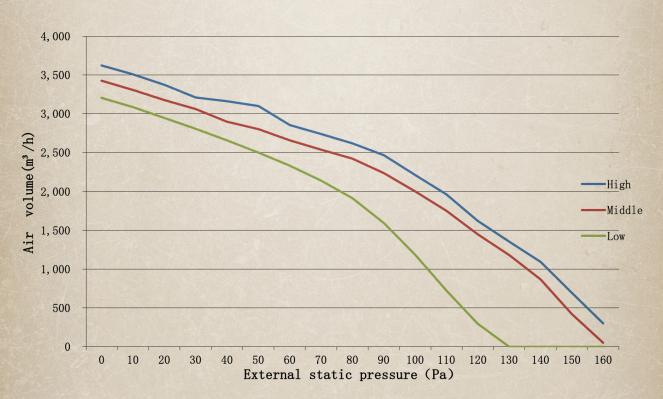
## **UIRL-042NH00-\* STATIC PRESSURE CURVE**



## **UIRL-048TH00-\* STATIC PRESSURE CURVE**



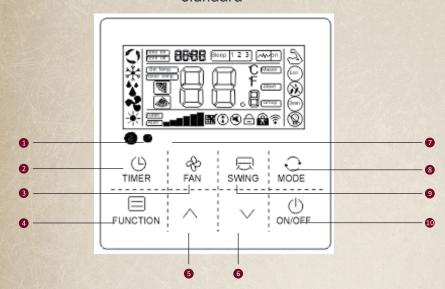
## **UIRL-055TH00-\* STATIC PRESSURE CURVE**



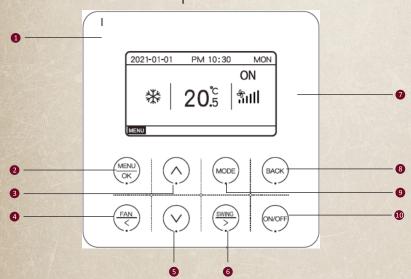
## 0

## WIRED CONTROLLER

## XK-05 (120x120mm) Standard



## XK-06 (120x120mm) Optional

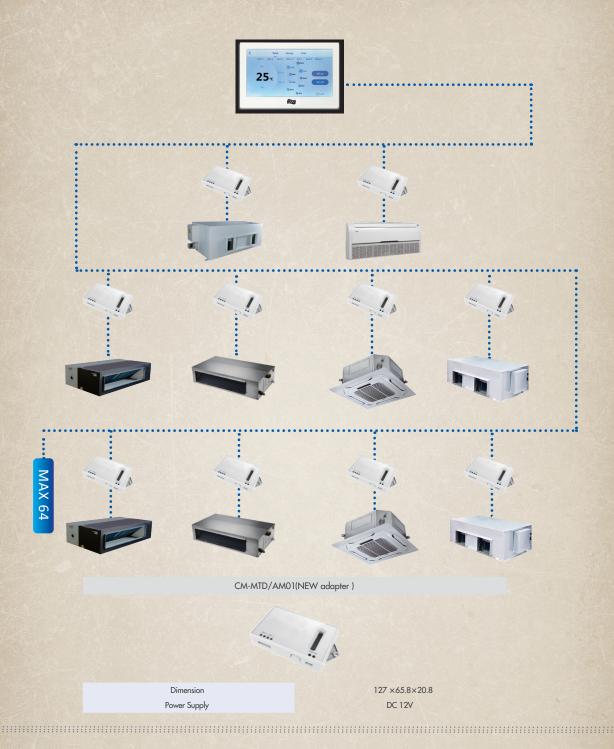


- 1 Remote Signal Receiver
- 2 Timer Button
- 3 Fan Button
- 4 Function Button
- 5 "+"Button
- 6 "-"Button
- 7 Photosensitive Sensor Receiver
- 8 Mode Button
- 9 Swing Button
- 10 ON/OFF Button
- 1 Indicator light
- 2 MEUN/OK Key
- 3 Up Key
- 4 FAN/Left Key
- 5 Down Key
- 6 SWING/Right Key
- 7 Active Area
- 8 BACK Key
- 9 MODE Key
- 10 ON/OFF Key

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

## 0

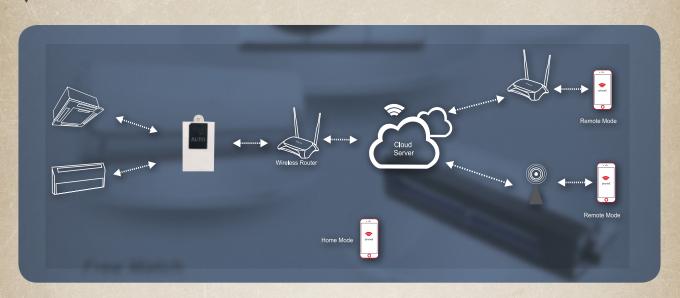
## **CENTRAL CONTROL OF LIGHT COMMERCIAL**



- 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 ta ble in user's manual.

## SMART CONTROL - WIFI MODULE AND RUUD AC COMFORT APP

## SMART CONTROL WIFI MODULE CONNECTION DIAGRAM





## WiFi module (for LCAC)



## **▼** Remark

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















More than 100 years ago, Edwin Ruud, a Norwegian mechanical engineer, came to America and developed the first successful automatic water heater. That early success marked the beginning of a tradition of innovation and value that led to the introduction of RUUD® air conditioning and water heating equipment in the 1950s. Since then, the RUUD® has grown into one of North America's largest manufacturers of quality air conditioning and water heating products for residential and light commercial use. Today, RUUD® operates manufacturing facilities employing highly trained workers and state-of-the-art equipment. Over the years, the product lines have expanded, changed, and improved significantly as new design techniques and better manufacturing technologies have become available. What remains unchanged throughout our history, however, is our commitment to producing the most reliable, long-lasting, efficient equipment you can buy.