

SINGLE ZONE

MULTI MIX

ULTRA HEAT



WILLIS

Ultra Heat Catalog

Extreme Weather Solutions



WELCOME



SERVICE & SUPPORT

We believe that the best way to ensure the complete satisfaction of our customers is by offering the greatest service and support to our installers' network. This way, they will systematically propose optimal solutions and complete installations with unmatched professionalism.

We have developed all the necessary tools to provide the best after sales and service support.



EXCELLENCE & INNOVATION

Every Willis system is designed to be the best in its class. Only first class materials are used throughout the manufacturing of a Willis system. A strict quality control is in place to insure the premium quality of all Willis units. From engineering to after sales support our team of professionals strive to deliver customer satisfaction. Through our commitment to excellence we have developed partnerships of qualified installers. These exclusive partnerships allow us to train, support and monitor our installations to ensure the best consumer experience in every region where we operate. Our warranties are a testament to our quality innovations and our fully integrated process.

What can I find in this catalog ?

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Want to know more about us and our products ?

Visit our website willisac.com

SINGLE-ZONE PHOENIX

25-20 SEER INVERTER
9,000 BTU TO 24,000 BTU



- Auto Swing (vertical)
- Multiple Fan Speeds
- Dehumidify
- WIFI
- 100% capacity at -8°F
- -22°F Ultra Heat
- Intelligent Defrost
- Intelligent Pre-Heating
- Comfortable Sleep Mode
- LED Display
- Automatic Operation
- Self-diagnosis
- Memory Function
- Control Lock
- Fan Delay Function
- Timer


MODEL		WUHI09KHW	WUHI12KHW	WUHI18KHW	WUHI24KHW
Power Supply		208-230V~ 60Hz, 1Ph	208-230V~ 60Hz, 1Ph	208-230V~ 60Hz, 1Ph	208-230V~ 60Hz, 1Ph
Rated Current Cooling	A	2.7	4.2	5.95	8.4
Rated Current Heating	A	3.6	4.2	7.4	10.9
System Performance					
Dehumidification	pt/h	2.11	2.54	3.59	5.49
Cooling Capacity	Btu/h	9,000 (3,000 - 11,000)	12,000 (3,000 - 14,500)	17,000 (6,000 - 19,500)	24,000 (8,000 - 26,500)
Heating Capacity	Btu/h	10,900 (3,500 - 13,500)	11,800 (3,500 - 14,500)	18,000 (6,000 - 21,000)	24,000 (9,000 - 34,500)
SEER/EER		25 / 14.5	22.5 / 12.5	20 / 12.5	20.5 / 12.5
HSPF/COP		11 / 3.86	12 / 3.5	10.3 / 3.1	10.3 / 3.6
Indoor Unit					
Airflow	CFM	418 / 324 / 247	418 / 324 / 247	599 / 411 / 353	794 / 647 / 500
Sound Pressure Level	dB(A)	44.5 / 36 / 27	45.5 / 36 / 27	48 / 38.5 / 29	50 / 44.5 / 39
Unit Dimensions	in.	32.87 x 7.80 x 11.02	32.87 x 7.80 x 11.02	38.98 x 8.58 x 12.40	46.69 x 10.16 x 13.39
Net/Gross Weight	lbs	19.84 / 25.35	19.84 / 26.68	26.89 / 34.83	40.12 / 50.26
Outdoor Unit		WUHOS09KW25S/O	WUHOS12KW22S/O	WUHOS18KW20S/O	WUHOS24KW20S/O
Compressor Type		ROTARY	ROTARY	ROTARY	ROTARY
Sound Pressure Level	dB(A)	58	58.5	59	61
Unit Dimensions	in.	31.50 x 13.11 x 21.81	31.50 x 13.11 x 21.81	33.27 x 14.29 x 27.64	37.24 x 16.54 x 31.89
Net/Gross Weight	lbs	88.2 / 93.7	88.2 / 93.7	107.4 / 115.1	135.58 / 148.81
Refrigerant/Charge	oz.	R410A / 52.9	R410A / 52.9	R410A / 68.8	R410A / 91.7
Line Set					
Line Set Size (liquid - Suction)	in.	1/4" - 3/8"	1/4" - 1/2"	1/4" - 1/2"	3/8" - 5/8"
Max. Line Run	ft	82	82	98	164
Max. Elevation	ft	33	33	66	82
MCA	A	9	9	18	20
MOCP	A	15	15	25	30
Wire Size/# Wires	16 AWG*4 Stranded, unshielded				

MULTI-MIX OUTDOOR UNIT

ULTRA HEAT
DIFFERENT COMBINATIONS



Outdoor Unit			WUHOM 27K2PU23S	WUHOM 36K3PU22S
Number of ports			3	4
Capacity	cooling	Btu/h	19,000	28,000
	heating	Btu/h	20,000	28,000
SEER			21.5	22
HSPF			9.8	10.4
Operational voltage			208~230V, 60Hz, 1Ph	208~230V, 60Hz, 1Ph
Power input	cooling	W	1,520	2,200
	heating	W	1,700	2,300
Rated current	cooling	A	6.9	9.8
	heating	A	7.7	10.3
Airflow		CFM	2,130	2,355
		m3/h	3,619	4,001
Operating range	cooling	°F	-22 / 122	-22 / 122
	heating	°F	-22 / 86	-22 / 86
Sound Pressure Level		dB(A)	63.4	62.3
piping connection	gas	inch	3/8	3/8
	liquid	inch	1/4	1/4
Dimensions	WxHxD	inch	37.24 x 31.89 x 16.14	37.24 x 31.89 x 16.14
Net/Gross Weight		Lbs	149.91 / 160.94	156.53 / 167.55
Max. Total Distance		ft.	98	148
Max. Single Distance		ft.	66	82
Max Elevation		ft.	33	33
Pre-charge		ft.	25	25
MCA		A	19	27



MULTI-MIX


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INDOOR UNIT
WALLMOUNT

9,000 BTU TO 24,000 BTU
Easy installation



MODEL			WUHI 09KHW	WUHI 12KHW	WUHI 18KHW	WUHI 24KHW
Sound Pressure Level	dB(A)		58	58,5	59	61
Dimension W x H x D	in		32.87 x 7.80 x 11.02	32.87 x 7.80 x 11.02	38.98 x 8.58 x 12.40	46.69 x 10.16 x 13.39
Net/Gross Weight	Lbs		19.84/25.35	19.84/26.68	26.89/34.83	40.12/50.26
Air Flow	m3/h		418/324/247	418/324/247	599/411/353	794/647/500
	CFM		710/550/420	710/550/420	1,018/698/600	1,349/1,099/850
Piping Connection	gas	in	1/4	1/4	1/4	3/8
	liquid	in	3/8	1/2	1/2	5/8



MULTI-MIX


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MULTI-MIX
INDOOR UNIT
DUCTABLE

9,000 BTU TO 24,000 BTU
Powerful and Concealed



MODEL			WUHI 09KDT	WUHI 12KDT	WUHI 18KDT	WUHI 24KDT
Sound Pressure Level	dB(A)		39/37/33	40/38/33	36/34/30	50/46/45
Dimension W x H x D	in		27.56x25x8.27	27.56x25x8.27	36.22x25x8.27	36.22x25x10.63
Net/Gross Weight	Lbs		39.90/50.27	42.11/51.59	50.71/60.63	57.32/68.34
Air Flow	m3/h		330	380	613	879
	CFM		560	646	1,042	1,493
Piping Connection	gas	in	1/4	1/4	1/4	3/8
	liquid	in	3/8	1/2	1/2	5/8



MULTI-MIX

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INDOOR UNIT
CASSETTE

12,000 BTU TO 24,000 BTU
Breeze free discharge



MODEL			WUHI 12KCT	WUHI 18KCT	WUHI 24KCT
Sound Pressure Level	dB(A)		42/38/33	44/40/38	52/50/47
Dimensions WxHxD	body	inch	22.44x22.44x10.24	22.44x22.44x10.24	33.07x33.07x8.07
	panel	inch	25.47x25.47x1.97	25.47x25.47x1.97	37.4x37.4x2.17
Net/Gross weight	body	Lbs	35.27/41	35.49/41.23	46.3/54.23
	panel	Lbs	5.51/9.92	5.51/9.92	11.02/17.64
Airflow	CFM		380	550	878
	m3/h		645	884	1,492
Piping connection	Liquid	inch	1/4	1/4	3/8
	Gas	inch	1/2	1/2	5/8

ULTRA HEAT MULTI-MIX COMBINATIONS



For our Multi-Mix Ultra Heat we can propose many combinations according to your specific needs. You can find below all our possible combinations for 27 and 36 outdoor unit model.

The icon represent our Wallmount indoor unit but you can do combinations with our other multi-mix products: Ductable and Cassette. You can also combined different multi-zone products together like its illustrated page 4.

Depending of our model of outdoor unit you can do combinations between one to four units.



One Unit



Two Units



Three Units



Four Units

● Ultra Heat

COMBINATIONS	WUHOM27K2PU23S	WUHOM36K3PU22S
09 + 09	●	
09 + 12	●	
09 + 18	●	
09 + 24		●
12 + 12	●	●
12 + 18	●	●
12 + 24		●
18 + 18	●	●
09 + 09 + 09	●	●
09 + 09 + 12	●	
09 + 09 + 18	●	
09 + 12 + 12	●	●
09 + 12 + 18		
09 + 18 + 18		●
12 + 12 + 12	●	●
12 + 12 + 18		●
12 + 12 + 24		●
12 + 18 + 18		
18 + 18 + 18		
09 + 09 + 09 + 09		●
09 + 09 + 09 + 12		●
09 + 09 + 09 + 18		●
09 + 09 + 12 + 12		●
09 + 09 + 12 + 18		●
09 + 12 + 12 + 12		●
12 + 12 + 12 + 12		●



WANT MORE INFORMATION ?

We'll be there for you



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WARRANTY

We propose two types of warranties 5-1 years and 7-7 years. These warranties depend on the location in the United States or the province in Canada. We also propose extended warranties. For more information, contact us.



Canada & Latin America



United States
except Godwin Series

GLOSSARY

AIRFLOW

A measure of the amount of air per unit of time that passes through the device. It is measured either in CFM (cubic foot per minute) or m³/h (cubic meter per hour).

COP

COP stands for Coefficient of Performance. It is the ratio between the cooling or heating provided and the electrical power consumption.

EER

EER stands for Energy Efficiency Rating. It measures the ratio of output power to the input power.

REFRIGERANT

A refrigerant is the substance used to "move" the heat outside (or inside) of the room where the device is. We use the refrigerant R-410A as it is environment friendly and allows for the design of smaller and more efficient systems compared to R-22.

BTU/h

BTU or Btu is the British thermal unit. It is the amount of energy needed to cool or heat 1 pound of water by 1°F. The Btu/h is the unit of power used in HVAC. It corresponds to approximately 0.29 Watt.

DEHUMIDIFICATION

A measure of the amount of water per unit of time that the device is able to extract from the ambient air. It is measured in Pt/h.

HSPF

HSPF stands for Heating Seasonal Performance Factor. It is the ratio between the seasonal heating output and the electricity used.

SEER

SEER stands for Seasonal Energy Efficiency Ratio. It is the ratio between the seasonal cooling output and the electricity used.

SOUND PRESSURE LEVEL

Sound Pressure is the force of a sound on a surface perpendicular to its direction. It is measured in Pa (Pascal). The lowest sound pressure that can be heard is 2x10 Pa. The Sound Pressure Level is a comparison of the measured sound to the lowest sound pressure hearable. The units are expressed in terms of dB (decibel) which is not linear, that is, if the pressure is doubled, the Sound Pressure Level increases by 6dB. For example, the lowest hearable sound is 0dB while a quiet room is 40dB.



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