



# U-MATCH

# 42,000 BTUH Floor/Ceiling Heat Pump System

**Model:  
KU21-FCU42-3**



Item	Unit	Specification
ODU Model	—	KU21-ODU42-3
IDU Model	—	KU21-FCU42-3
<b>System Ratings</b>		
Cooling Capacity	Btu/h	39,500
Heating Capacity (47°F)	Btu/h	44,000
Heating Capacity (17°F)	Btu/h	24,800
Cooling Capacity Range	Btu/h	12,000-42,500
Heating Capacity Range	Btu/h	13,000-52,500
Cooling Power Input (Max)	W	4,700
Heating Power Input (Max)	W	4,800
SEER	—	16.0
HSPF	—	9.0
EER	W/W	9.8
COP	W/W	3.2
Cooling Operation Range	°F(°C)	0~118.0 (-18.0~48.0)
Heating Operation Range	°F(°C)	0~75.0(-18.0~24.0)
Gas Pipe Size (OD)	Inch	5/8
Liquid Pipe Size (OD)	Inch	3/8
Connection Method	—	Flared
Factory Charge	oz	131.2
Additional Charge	oz/ft	0.6
Pre-Charge Length	ft.	25
MAX Refrigerant Pipe Length	ft.	164
Min Refrigerant Pipe Length	ft.	10
MAX Refrigerant Pipe Elevation	ft.	49
<b>Indoor Unit Data</b>		
Air Flow Volume (Cooling Wet)(Lo/Hi)	CFM	767/1115
Air Flow Volume (Heating Dry)(Lo/Hi)	CFM	767/1115
Sound Pressure Level (Min/Max)	dB(A)	47/54
Dehumidification	pt/hr	1.61
Power Supply	—	208/230 V, 1 Phase, 60 Hz
Min/Max Voltage	V	187 - 253
MCA/ Power Cable Size	A	2.0
MOCP/Breaker Size	A	15
Communication Wire Size	—	18-2 AWG / 300V THHN
<b>Outdoor Unit Data</b>		
Compressor Type	—	DC Inverter Driven Rotary
Compressor RLA	A	21.2
Refrigerant Type	—	R410A
Fan Motor Power Output	HP	2 x 1/6
Fan Motor FLA	A	2 x 2.0
Sound Pressure Level(Cooling/Heating)	dB(A)	61/61
Power Supply	—	208/230 V, 1 Phase, 60 Hz
Min/Max Voltage	V	187 - 253
Power Supply Wire Size	—	8-3 AWG
MCA/ Power Cable Size	A	31.0
MOCP/Breaker Size	A	50

**Job Name:**

**Schedule Reference:**

**Date:**

Specification are subject to change without notice.



## Features & Function Summary

KU21-FCU42-3

### SYSTEM FEATURES

Ultra Low Frequency Torque Control	Yes
Power Factor Correction	Yes
Compressor Type	Rotary
Refrigerant Type	R410A
Basepan With Electric Heater	NO
Compressor With Electric Heater	YES
Outdoor Fin Coating	Acrylic Resin
Intelligent Defrosting	YES
Intelligent Preheating	YES
Low Voltage Startup	YES
Memory/Power Failure Recovery	YES
Self Diagnosis	YES
Low Ambient Cooling	YES
Internal Condensate Pump	YES
XK60 (Opt) Wired Controller Interface	YES
Wi-Fi Interface	NO
Indoor Fan Type	Centrifugal
Multi Fan Speeds	3 Speeds
LED Display Indoor Unit	YES
Advance Filter	NO
Auxiliary Electrical Heater	NO
Ventilation (Outdoor Air)	Optional

### WIRED CONTROLLER FUNCTIONS

Auto Mode	YES
Auto Fan	YES
Auto Swing (Continuous Sweep)	YES
Adjustable Swing Louvers (5 pos.)	YES
Clock on Remote Controller	YES
Dry Mode	YES
Dry Anti-Mildew (X-Fan) Mode	YES
Energy Saving Mode	NO
Dirty Filter Alert	NO
I Feel Function	YES
Lock on Remote Controller	YES
Quiet Mode	NO
Room Temperature Display (5 sec.)	YES
Sleep Mode	YES
Timer Mode	YES
Turbo Mode	YES
Display On/Off Control	YES
Freeze Guard Mode	YES



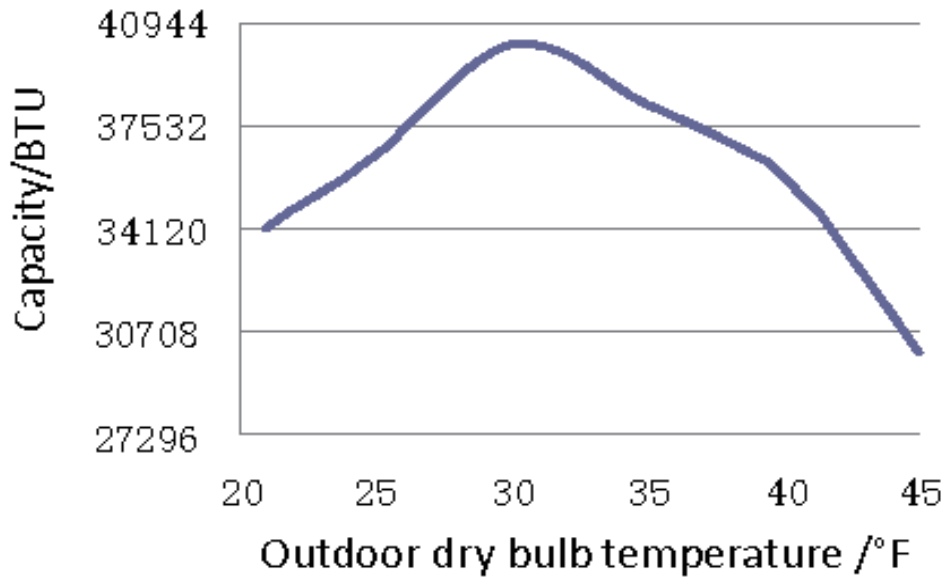


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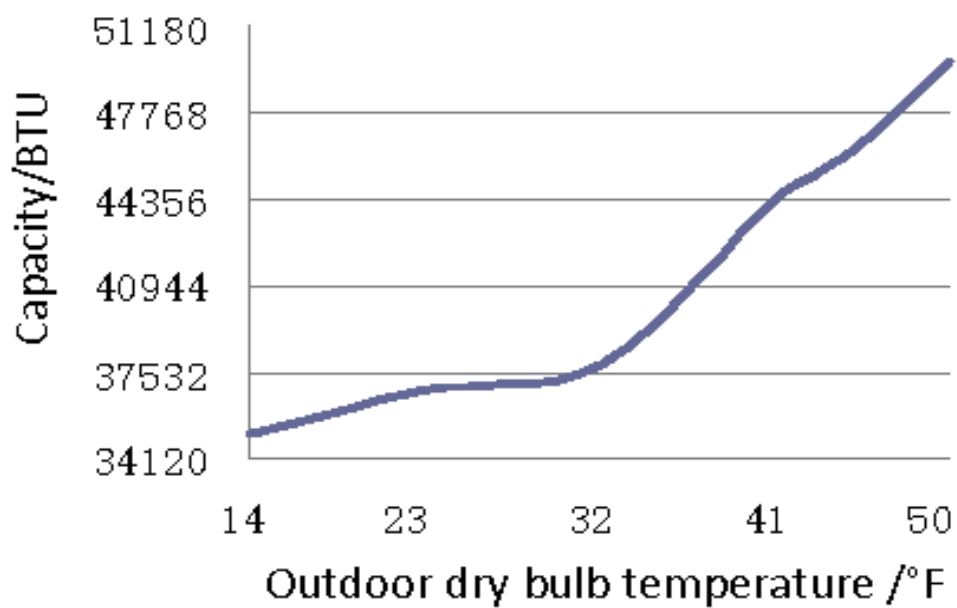
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## EXTENDED RATINGS

### COOLING PERFORMANCE



### HEATING PERFORMANCE



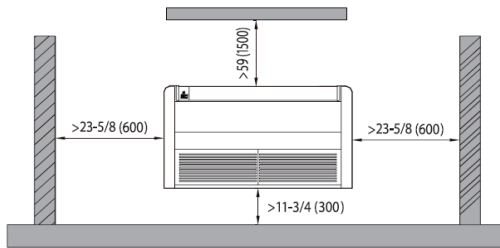


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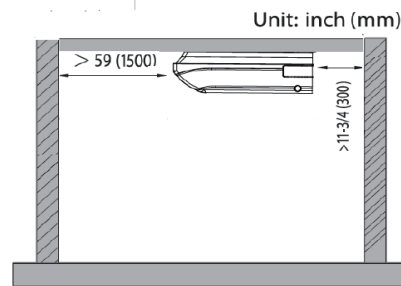
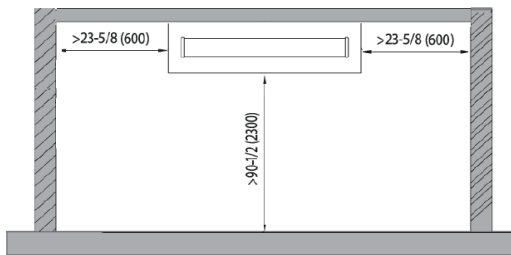
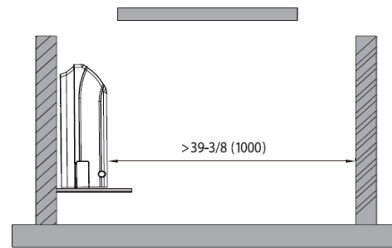
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## MINIMUM SPACING REQUIREMENTS

### INDOOR



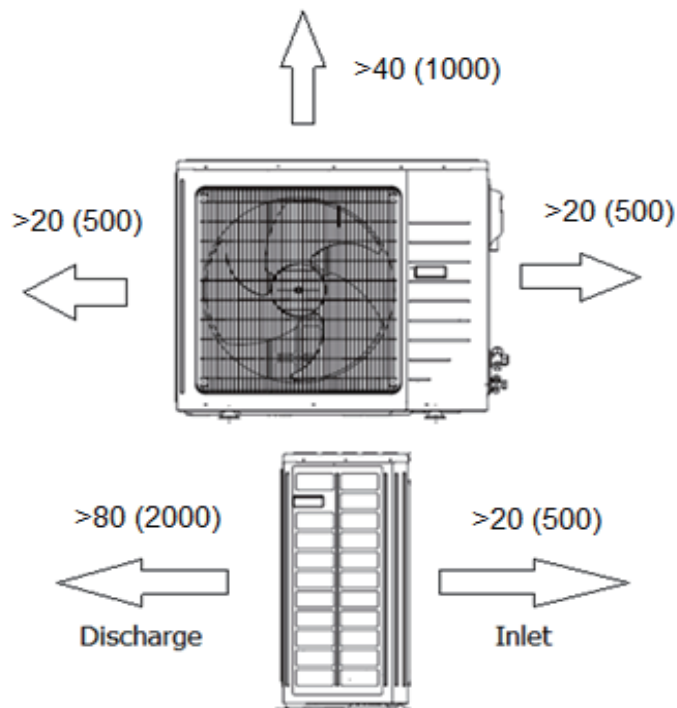
◆ Ceiling type



Unit: inch (mm)

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### OUTDOOR



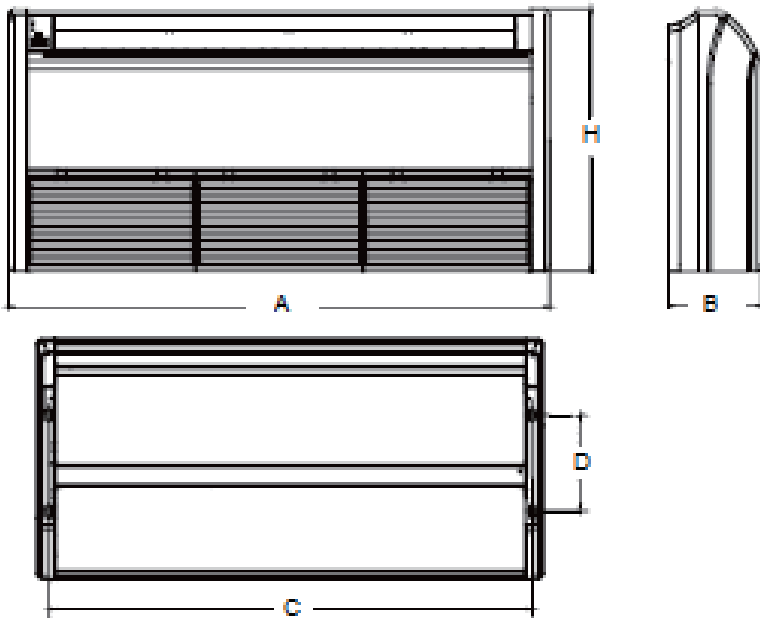
Units: inch (mm)

## DIMENSIONAL SPECIFICATIONS

# KU21-FCU42-3

Units: inch (mm)

### INDOOR UNIT DIMENSIONS & WEIGHTS



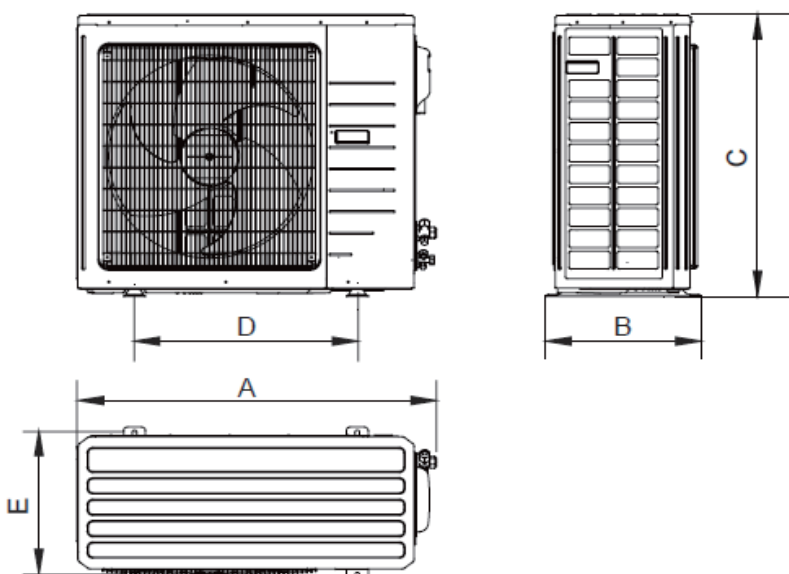
A	55.875	(1420)
B	9.625	(245)
C	53.25	(1354)
D	11	(280)
H	27.5	(700)

Net Weight	110.0 lbs
Shipping Weight	127.6 lbs

Liquid Line Valve	3/8-in OD Flared
Gas Line Valve	5/8-in OD Flared
Drain Connector	11/16 in OD

### OUTDOOR UNIT DIMENSIONS & WEIGHTS

Units: inch (mm)



A	37.75	(958)
B	16.25	(412)
C	53.125	(1349)
D	22.5	(572)
E	14.75	(376)

Net Weight	209.0 lbs
Shipping Weight	232.0 lbs

Liquid Line Valve	3/8-in OD Flared
Gas Line Valve	5/8-in OD Flared

#### Notes:

1. Recommended Communication Wire Type 18-2 AWG Stranded Copper THHN 300V Wire.
2. Power wiring size must comply with applicable national and local codes for both ID and OD dedicated circuits.
3. Test conditions are based on AHRI 210/240.