



ULTRA HEAT

ULTRA COOL

MULTI⁺ULTRA

Multi-Room Ductless heat-pump systems 36,000 BTU

Submission Data: MULTIU36HP230V1DO Heat Pump System

Job Name Location Date

Purchaser Engineer

Submitted To For Reference Approval Construction

Unit Designation Schedule No.

- GENERAL FEATURES**
- Up to Four Indoor Units (4-Port)
 - G10 DC Inverter Technology
 - Quiet Operation - Both Indoor & Outdoor
 - Blue Fin Coil Coating
 - Intelligent Defrost
 - Auto Restart on Power Outages
 - Mult-point Diagnostics
 - Limited 5 yr Parts & Compressor Warranty-Residential Only



System Ratings

Rated Cooling Capacity	36,000 BTUH
Cooling Capacity (min-max)	8,871-42,514 BTUH
Rated Heating Capacity	36,000 BTUH
Heating Capacity (min-max)	8,871-42,514 BTUH
SEER/EER	23.0 / 9.0
HSPF/COP	10.0 / 3.21

Outdoor Unit Data

Compressor	Type	DC Inverter Driven Rotary
	RLA	27.0 A
	Starting Current	5.0 A
Fan Motor	Output Power	90 W
	FLA	1.0 A
	Air Flow (Max)	3,060 CFM
Sound Pressure Level		
	Cooling	62 dB(A)
	Heating	62 dB(A)
Dimensions & Weights		
	Unit Dimensions Overall (WxDxH)*	42.8 x 17.3 x 43.4 -in
	* including Valve Covers and Grilles	
	Weight (Net/Shipping)	280/298 lbs
	Min. Number of Indoor Units	2
	Max. Number of Indoor Units	4

Operating Range

Cooling	(min-max)	0 - 115°F
		-18 - 46°C
Heating	(min-max)	-31 - 75°F
		-35 - 24°C

Refrigerant Piping Data

Refrigerant Type	R410A
Refrigerant Charge	158.8-oz
Additional Charge Per Line Length	0.2-oz/ft
Refrigerant Tubing Size (Flared) - 4 Ports	1/4 x 3/8-in
Factory Charge for Total Line Length	131-ft
Total Refrigerant Pipe Length	246-ft
Max Refrigerant Piping Length to any Indoor Unit	82-ft
Min Refrigerant Piping Length to any Indoor Unit	10-ft
Max Elevation between Indoor Units	49-ft
Max Lift from Outdoor to Indoor Unit	49-ft
Max Drop from Outdoor to Indoor Unit	49-ft

Power Supply

Normal Operational Voltage	208/230 V, 1 Phase, 60 Hz
Voltage Range	187 - 253 V
Main Power Wire Size	8-2 AWG
Interconnecting Cable Wire Size	14-4 AWG
MCA	36.0 A
MOCP/Breaker Size	60 A



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SYSTEM FEATURES

Compressor Type	Inverter Rotary
Core Technology Three Cylinder Two Stage Compressor	G10
Ultra Low Frequency Torque Control	YES
Power Factor Correction	YES
Refrigerant Type	R410A
Electronic Expansion Valve (EEV)	4
Basepan With Electric Heater	YES
Compressor Preheat	YES
Compressor With Electric Heater (-40°F)	YES
-40°F Wiring UL Approved	YES
Multi "Independent" Port Design	YES
Condenser Fan	Axial
Condenser Motor Type	DC
Condenser Motor Drive	Direct
Condenser Coil	Aluminum Fin/Copper Tube
Outdoor Fin Coating (Blue)	Acrylic Resin
Intelligent Defrosting	YES
Low Voltage Startup	YES
Memory/Power Failure Recovery	YES
Self Diagnosis	YES
Ultra Heating (-31°F - 75°F)	YES
Ultra Cooling (0°F - 118°F)	YES
XK19 Wired Controller Interface	YES

REMOTE CONTROLLER FUNCTIONS¹

See individual Indoor Unit
Controllers Functions

¹ Not all Remote Controller functions are supported.

XK19 WIRED CONTROLLER FUNCTIONS²

On/Off	YES
Operating Mode	YES
Fan Speed	YES
Room Setpoint	YES
Model Numbers	YES
Timer Mode	YES
Sleep Mode	YES
Turbo Mode	YES
X-Fan Mode	YES
Privacy Lock	YES

² Note: Some indoor models may not support specific system features or functions.

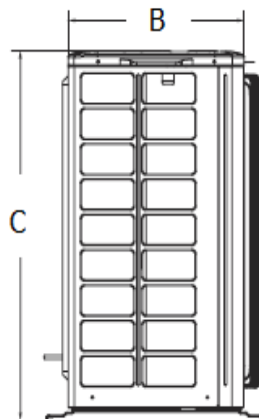
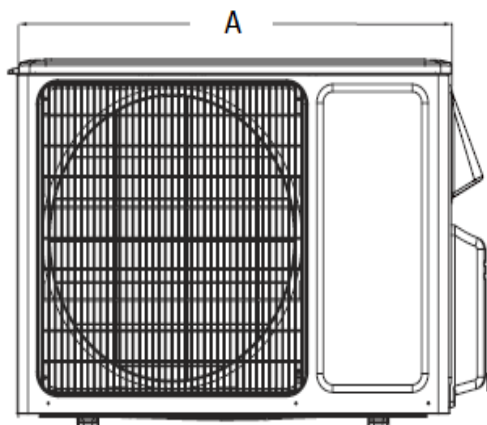
OUTDOOR UNIT DIMENSIONAL SPECIFICATIONS

MULTIU36HP230V1DO

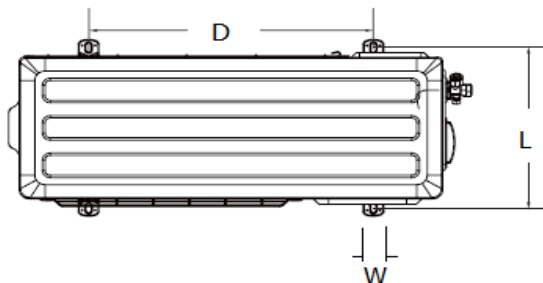
Units: inch

36,000 BTUH MODEL

Model # MULTIU36HP230V1DO 36,000 BTUH 230V



A (in)	40
B (in)	17.3
C (in)	43.5



D (in)	24.8
L (in)	16.2
W (in)	3.1

Suction/Gas Line Port Size

Port A	3/8-in OD Flared
Port B	3/8-in OD Flared
Port C	3/8-in OD Flared
Port D	3/8-in OD Flared
Port E	3/8-in OD Flared

Weight (Net/Shipping) 280/298 lbs

Factory Supplied Piping Adapters

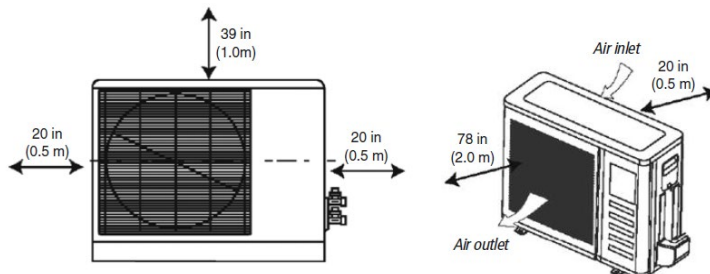
Adapter	P/N	Qty
3/8 (F) to 5/8 (M)	6654100009	3
3/8 (F) to 1/2 (M)	6654100013	4
1/4 (F) to 3/8 (M)	6654104	2

Liquid Line Port Size

Port A	1/4-in OD Flared
Port B	1/4-in OD Flared
Port C	1/4-in OD Flared
Port D	1/4-in OD Flared
Port E	1/4-in OD Flared

MINIMUM SPACING REQUIREMENTS

Units: inch (mm)



Notes:

1. Recommended Interconnecting Cable Type Stranded Copper Conductors THHN 600V Unshielded Wire
2. Power wiring cable size must comply with applicable national and local codes.
3. Test conditions are based on AHRI 210/240.

Specifications are subject to change without notice. Manufacturer reserves the right to discontinue or modify specifications or designs without notice or without incurring obligations. All rights reserved.

EXTENDED RATINGS

MULTIU36HP230V1DO

ULTRA COOL

COOLING PERFORMANCE (BtuH)*

Outdoor Ambient Temperature (DB) °F	Indoor Entering Air Temperatures											
	68F DB		73°F DB				80°F DB					
	57F WB		61°F WB				67°F WB					
	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
0°F	21827	16500	22800		18000		24000		19500			
5°F	21927	17196	23181		18162		25527		20029			
14°F	22968	18014	24264		19023		27384		21478			
23°F	25164	19740	26916		21113		30840		24188			
32°F	25758	45964	27663		49363		31994		57088			
41°F	23613	65750	25520		71058		29746		82822			
50°F	21549	81552	23437		88695		27533		104195			
59°F	30516	23933	32640		25598		35748		28029			
68°F	34560	27106	36720		28795		39240		30776			
77°F	34152	26790	36324		28491		38880		30497			
86°F	32472	25465	34632		27166		37800		29646			
95°F	30732	24103	32880		25781		36000		28236			
104°F	29244	22936	31380		24614		35064		27507			
113°F	27744	21757	29880		23435		33576		26328			
115°F												

ULTRA HEAT

HEATING PERFORMANCE (BtuH)*

Outdoor Ambient Temperature (DB)	Indoor Entering Air Temperatures								
	68°F DB			73°F DB			80°F DB		
	57°F WB			61°F WB			67°F WB		
	TC	Power Input (KW)	COP	TC	Power Input (KW)	COP	TC	Power Input (KW)	COP
-31°F	23000	5.50	1.23	24000	5.72	1.23	24500	5.85	1.23
-22°F	25563	5.57	1.34	25910	5.73	1.33	24899	5.91	1.24
-13°F	28859	5.65	1.50	28373	5.81	1.43	27293	5.99	1.33
-5°F	33638	5.64	1.75	33072	5.79	1.67	31837	5.98	1.56
0°F	36089	5.73	1.85	35488	5.89	1.77	34105	6.08	1.64
5°F	36259	5.70	1.86	35648	5.86	1.78	34291	6.05	1.66
10°F	39753	5.76	2.02	39091	5.92	1.94	37581	6.11	1.80
17°F	41794	5.72	2.14	41097	5.88	2.05	39475	6.06	1.91
19°F	41758	5.50	2.23	41075	5.65	2.13	39443	5.83	1.98
24°F	40398	5.42	2.18	39787	5.58	2.09	38397	5.75	1.96
32°F	39260	5.19	2.22	38728	5.33	2.13	37514	5.50	2.00
41°F	40725	5.11	2.33	40247	5.26	2.24	39090	5.42	2.11
43°F	41822	5.10	2.40	41330	5.24	2.31	40199	5.41	2.18
47°F	45450	5.22	2.55	44663	5.36	2.44	42837	5.53	2.27
53°F	45900	4.74	2.84	45098	4.87	2.71	43272	5.03	2.52
59°F	42259	4.78	2.59	41513	4.92	2.47	39818	5.07	2.30
64°F	43158	4.39	2.88	42398	4.51	2.75	40678	4.65	2.56
70°F	43968	4.46	2.89	43208	4.58	2.76	41437	4.73	2.57
75°F	44588	4.07	3.21	43803	4.19	3.07	42031	4.32	2.85
78°F	44993	4.11	3.21	44208	4.22	3.07	42411	4.36	2.85

* Maximum system capacity
 TC- Total Capacity (BtuH)
 COP- Coefficient of Performance

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 TC- Total Capacity (BtuH)
 COP- Coefficient of Performance

ULTRA COOL

COOLING CAPACITY (BTUH)

Indoor Units Combinations	Rated System (BtuH)	Indoor Unit A (BtuH)	Indoor Unit B (BtuH)	Indoor Unit C (BtuH)	Indoor Unit D (BtuH)
9+9	18,000	9,000	9,000	NA	NA
9+12	21,000	9,000	12,000	NA	NA
9+18	26,000	8,000	18,000	NA	NA
9+24	29,000	9,000	20,000	NA	NA
12+12	24,000	12,000	12,000	NA	NA
12+18	27,000	10,000	17,000	NA	NA
12+24	31,000	11,000	20,000	NA	NA
18+18	31,000	15,500	15,500	NA	NA
18+24	35,000	15,000	20,000	NA	NA
24+24	38,000	19,000	19,000	NA	NA
9+9+9	27,000	9,000	9,000	9,000	NA
9+9+12	29,000	9,000	9,000	11,000	NA
9+9+18	33,000	8,500	8,500	16,000	NA
9+9+24	37,000	8,500	8,500	20,000	NA
9+12+12	32,000	8,000	12,000	12,000	NA
9+12+18	36,000	9,000	12,000	15,000	NA
9+12+24	37,500	7,500	10,000	20,000	NA
9+18+18	37,500	7,500	15,000	15,000	NA
9K+18K+24K	39,500	9,000	13,500	17,000	NA
12+12+12	33,000	11,000	11,000	11,000	NA
12+12+18	37,000	10,500	10,500	16,000	NA
12+12+24	38,000	9,500	9,500	19,000	NA
12+18+18	38,000	9,000	14,500	14,500	NA
12K+18K+24K	39,500	10,000	13,000	16,500	NA
18K+18K+18K	39,600	13,200	13,200	13,200	NA
9+9+9+9	36,000	9,000	9,000	9,000	9,000
9+9+9+12	36,500	8,500	8,500	8,500	11,000
9+9+9+18	37,500	7,500	7,500	7,500	15,000
9+9+9+24	39,500	8,000	8,000	8,000	15,500
9+9+12+12	37,000	8,500	8,500	10,000	10,000
9+9+12+18	38,000	7,500	7,500	9,000	14,000
9K+9K+12K+24K	40,000	7,000	7,000	9,000	17,000
9+9+18+18	40,000	7,000	7,000	13,000	13,000
9+12+12+12	37,500	7,500	10,000	10,000	10,000
9K+12K+12K+18K	39,500	8,000	9,000	9,000	13,500
12+12+12+12	38,000	9,500	9,500	9,500	9,500
12+12+12+18	40,000	9,000	9,000	9,000	13,000

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HEATING CAPACITY (BTUH)

Indoor Units Combinations	Rated System Capacity (BtuH)	Indoor Unit A (BtuH)	Indoor Unit B (BtuH)	Indoor Unit C (BtuH)	Indoor Unit D (BtuH)
9+9	18,000	9,000	9,000	NA	NA
9+12	21,000	9,000	12,000	NA	NA
9+18	26,000	8,000	18,000	NA	NA
9+24	30,000	9,000	21,000	NA	NA
12+12	24,000	12,000	12,000	NA	NA
12+18	30,000	12,000	18,000	NA	NA
12+24	31,000	11,000	20,000	NA	NA
18+18	31,000	15,500	15,500	NA	NA
18+24	37,000	17,000	20,000	NA	NA
24+24	40,000	20,000	20,000	NA	NA
9+9+9	27,000	9,000	9,000	9,000	NA
9+9+12	29,000	9,000	9,000	11,000	NA
9+9+18	34,500	9,000	9,000	16,500	NA
9+9+24	37,000	8,500	8,500	20,000	NA
9+12+12	31,000	9,000	11,000	11,000	NA
9+12+18	36,000	8,500	11,500	16,000	NA
9+12+24	39,000	8,000	11,000	20,000	NA
9+18+18	39,000	8,000	15,500	15,500	NA
9K+18K+24K	41,000	8,000	15,000	18,000	NA
12+12+12	34,500	11,500	11,500	11,500	NA
12+12+18	37,000	11,000	11,000	15,000	NA
12+12+24	40,000	10,000	10,000	20,000	NA
12+18+18	40,000	10,000	15,000	15,000	NA
12K+18K+24K	42,500	10,000	14,500	18,000	NA
18K+18K+18K	42,000	14,000	14,000	14,000	NA
9+9+9+9	36,000	9,000	9,000	9,000	9,000
9+9+9+12	36,500	8,500	8,500	8,500	11,000
9+9+9+18	39,000	8,000	8,000	8,000	15,000
9+9+9+24	41,500	8,000	8,000	8,000	17,500
9+9+12+12	38,000	8,000	8,000	11,000	11,000
9+9+12+18	40,000	7,500	7,500	10,000	15,000
9K+9K+12K+24K	42,500	8,000	8,000	9,500	17,000
9+9+18+18	42,000	8,000	8,000	13,000	13,000
9+12+12+12	38,900	8,000	10,300	10,300	10,300
9K+12K+12K+18K	41,500	7,500	10,000	10,000	14,000
12+12+12+12	40,000	10,000	10,000	10,000	10,000
12+12+12+18	42,500	9,500	9,500	9,500	14,000

Note:

- 1) It is critical to size the outdoor unit for the entire building load and each indoor unit for its individual zone load.

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