BMKH2420LM Specifications and Certifications

Models

BMKH24LM/O	24000 BTU 20 SEER2 208/230V Minisplit Heat Pump Condenser
BMKH24M-LM	24000 BTU 20 SEER2 208/230V Minisplit Heat Pump Air Handler
BMKH2420LM	24000 BTU 20 SEER2 208/230V Minisplit Heat Pump System
BMKH2420LM KIT15	24000 BTU 20 SEER2 208/230V Minisplit Heat Pump W/ 15 Ft Installation Kit
BMKH2420LM KIT25	24000 BTU 20 SEER2 208/230V Minisplit Heat Pump W/ 25 Ft Installation Kit

BLUERIDGE

SUBMITTAL DATA SHEET

Wall Mounted Heat Pump System

Location: _____
Engineer: _____
Submitted to: _____
Submitted by: _____
Reference: _____

Approval: _____
Date: _____
Construction: _____
Unit #: _____
Drawing #: _____

Set Model	BMKH2420LM
15 Ft Kit Model	BMKH2420LM KIT15
25 Ft Kit Model	BMKH2420LM KIT25

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SYSTEM PERFORMANCE DATA

Power supply		
Normal Operational Voltage	(V, Ph, Hz)	208/230,1,60
Voltage Range	(V)	187/253
Electrical		
Minimum circuit ampacity(Outdoor)	(A)	16.0
Max.fuse(Outdoor)	(A)	25.0
Connection wiring		14#4
Cooling		
Capacity	(Btu/h)	22000(6620~24740)
Power Input	(W)	1830(290 ~ 2600)
Current	(A)	8.40(2.3~15.4)
SEER2	(Btu/W)	20.0
EER2	(Btu/W)	12.0
Heating		
Capacity	(Btu/h)	24000(7160~30700)
Power Input	(W)	2030(420~3100)
Current	(A)	9.20(9.2~14)
HSPF2-4	(Btu/W)	9.0
COP	W/W	3.45
Heat at 17F(AHRI Rating)	(Btu/h)	Not Rated
Heat at 5F(AHRI Rating)	(Btu/h)	Not Rated
COP at 5F(AHRI Rating)	W/W	Not Rated

REFRIGERANT PIPE DATA

Throttle type	Indoor unit Outdoor unit	N/A Electron expansion valve
Design pressure	(PSIG)	/
Refrigerant Type		R410A
Refrigerant charge	oz	60.00
Refrigerant precharge	(ft)	25.0
Additional charge for each ft	(oz/ft)	0.54
Liquid side/ Gas side(indoor)	(inch)	1/4"
Liquid side/ Gas side(outdoor)	(inch)	5/8"
Max. pipe length	(ft)	131.2
Max. difference in level	(ft)	82.0
Connection method		Flared
Remote Control Temp Range(cooling)	(Deg. °F)	61 ~ 86
Remote Control Temp Range(heating)	(Deg. °F)	61 ~ 86
Outdoor(cooling)	(Deg. °F)	-20~122
Outdoor(heating)	(Deg. °F)	-22~86

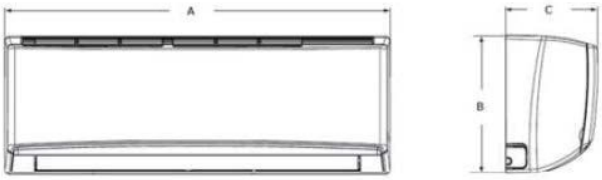
INDOOR UNIT DATA

Indoor fan motor		
Model		MP35CJ
Qty		1
Input	(W)	/
Output	(W)	60
RLA	(A)	0.38
Air flow & Noise level		
Indoor air flow (Turbo/Hi/Med/Lo)	(CFM)	700/ 647/ 589/ 530
Indoor noise level (Hi/Med/Lo)	[dB(A)]	48/ 44/ 40/ 36
Dehumidification	(L/H)	/
Indoor unit		
Dimension (WxDxH)	(inch)	42.44 × 12.80 × 9.69
Packing(WxDxH)	(inch)	45.20×16.26×13.78
Net/Gross weight	(lbs.)	34.2 / 41.9

OUTDOOR UNIT DATA

Compressor		
Type		Twin Rotary
Model		QXFS-M180zX170
Brand		ZHUHAI LANDA COMPRESSOR CO., LTD.
Capacity	(Btu/h)	22000
Input	(W)	1350
Rated current (RLA)	(A)	11.00
Refrigerant oil/oil charge	(ml)	450
Outdoor fan motor		
Model		B-LW92R-ZL(10P)
Qty		1
Input	(W)	
Output	(W)	90.0
RLA	(A)	0.6
Air flow & Noise level		
Outdoor air flow (Max.)	(CFM)	2648.00
Outdoor noise level	[dB(A)]	62.0
Outdoor unit		
Dimension (W×D×H)	(inch)	39.37 x 29.37 x 16.811
Packing (W×D×H)	(inch)	42.52 x 31.89 x 19.016
Net/ Gross weight	(lbs.)	108.0 / 119.1

Indoor unit dimension (Inches)

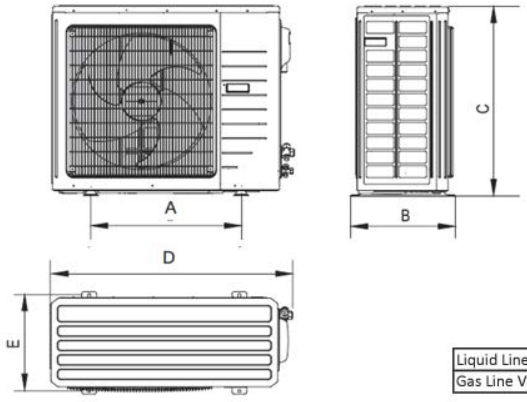


Dimensions	
A	**42.44**
B	**12.80**
C	**9.69**

Liquid Line Valve	1/4-in OD Flared
Gas Line Valve	1/2-in OD Flared
Drain Connector	5/8-in OD

Units: inch

Outdoor unit dimension (Inches)



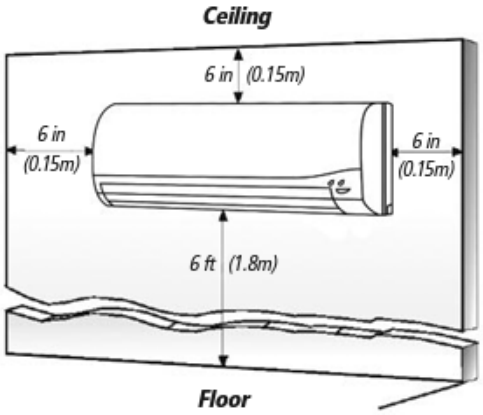
Dimensions	
A	22
B	16 4/5
C	29 1/3
D	39 1/3
E	16 4/5

Units: inch

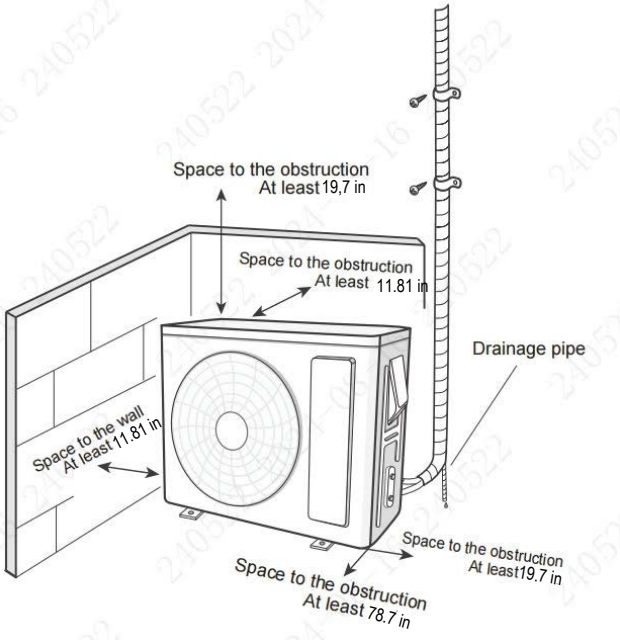
Liquid Line Valve	1/4-in OD Flared
Gas Line Valve	5/8-in OD Flared

Net Weight IDU	35.3 lb
Gross Weight IDU	41.9 lb
Net Weight ODU	125.7 lb
Gross Weight ODU	136.7 lb

Indoor unit clearance (Inches)



Outdoor unit clearance (Inches)



EXTENDED RATINGS — **Indoor / Outdoor**

COOLING PERFORMANCE

Outdoor Ambient Temperature (DB)	Return Air Temperature																			
	70°F (DB)					75°F (DB)					80°F (DB)					90°F (DB)				
	TC (Btu/h)	SC (Btu/h)	SHR	EER	Power Input (W)	TC (Btu/h)	SC (Btu/h)	SHR	EER(Btu/(h·W))	Power Input (W)	TC (Btu/h)	SC (Btu/h)	SHR	EER(Btu/(h·W))	Power Input (W)	TC (Btu/h)	SC (Btu/h)	SHR	EER(Btu/(h·W))	Power Input (W)
-20°F	11761	8527	73%	8.36	1407	12601	9136	73%	8.67	1454	13021	9440	73%	8.54	1524	14281	10354	73%	8.70	1642
-15°F	12289	8909	73%	8.47	1451	13122	9513	72%	8.59	1528	13538	9815	73%	8.42	1608	14788	10721	73%	8.34	1773
-10°F	12741	9270	73%	8.77	1453	13570	9873	73%	8.87	1530	13984	10175	73%	8.50	1610	15227	11079	73%	8.58	1775
-5°F	13697	9999	73%	9.39	1459	14553	10624	73%	9.47	1536	14981	10936	73%	8.47	1617	16265	11874	73%	9.12	1783
0°F	14387	10539	73%	9.83	1463	15272	11188	73%	9.91	1540	15715	11512	73%	8.52	1621	17043	12485	73%	9.53	1788
5°F	15197	11169	74%	9.94	1529	16118	11846	74%	10.02	1609	16578	12185	74%	9.79	1694	17960	13200	74%	9.62	1868
10°F	16312	12031	74%	10.63	1534	17278	12744	74%	10.70	1615	17762	13100	74%	10.45	1700	19212	14170	74%	10.25	1874
15°F	16664	12331	74%	10.75	1551	17630	13046	74%	10.80	1632	18113	13404	74%	10.54	1718	19562	14476	74%	10.33	1894
20°F	17010	12631	74%	10.58	1607	17982	13352	74%	10.63	1692	18468	13713	74%	10.37	1781	19926	14796	74%	10.15	1963
25°F	17268	12864	75%	10.54	1638	18241	13589	74%	10.58	1724	18727	13952	75%	10.32	1815	20186	15039	75%	10.09	2001
30°F	17570	13135	75%	10.44	1683	18526	13850	75%	10.46	1772	19005	14207	75%	10.19	1865	20439	15280	75%	9.94	2056
35°F	17926	13444	75%	10.52	1704	18869	14152	75%	10.52	1793	19341	14506	75%	10.25	1888	20756	15567	75%	9.97	2081
40°F	19661	14796	75%	11.25	1747	20676	15559	75%	11.24	1839	21183	15941	75%	10.94	1936	22705	17087	75%	10.64	2134
45°F	20503	15480	75%	11.35	1807	21541	16264	75%	11.32	1902	22060	16655	75%	11.02	2002	23617	17831	76%	10.70	2207
50°F	21446	16247	76%	11.55	1856	22499	17044	76%	11.51	1954	23025	17443	76%	11.19	2057	24604	18639	76%	10.85	2268
55°F	21946	16679	76%	11.59	1893	22991	17473	76%	11.54	1993	23513	17870	76%	11.21	2098	25081	19061	76%	10.85	2313
60°F	22680	17295	76%	11.80	1922	23729	18095	76%	11.73	2023	24253	18495	76%	11.39	2130	25826	19694	76%	11.00	2348
65°F	22975	17576	76%	11.68	1967	24007	18366	76%	11.59	2071	24524	18761	76%	11.25	2180	26073	19946	77%	10.85	2403
70°F	23648	18153	77%	11.90	1987	24665	18933	77%	11.79	2092	25174	19324	77%	11.43	2202	26700	20495	77%	11.00	2428
75°F	24391	18781	77%	12.14	2009	25397	19556	77%	12.01	2115	25900	19943	77%	12.44	2226	27409	21105	77%	11.17	2455
80°F	24634	19031	77%	11.66	2113	25635	19804	77%	11.53	2224	26135	20190	77%	13.04	2341	27636	21349	77%	10.71	2581
85°F	25329	19630	78%	11.70	2165	26342	20415	78%	11.56	2279	26849	20808	78%	13.42	2399	28369	21986	78%	10.73	2645
90°F	25781	20042	78%	11.61	2220	26844	20869	78%	11.49	2337	27375	21282	78%	11.82	2460	28970	22522	78%	10.68	2712
95°F	26442	20625	78%	11.65	2271	27567	21503	78%	11.53	2390	28130	21941	78%	11.37	2516	29818	23258	78%	10.75	2774
100°F	26325	20598	78%	11.34	2321	27476	21498	78%	11.24	2443	28051	21948	78%	11.35	2572	29778	23299	78%	10.50	2836
105°F	25597	20094	79%	10.75	2381	26748	20997	79%	10.67	2506	27323	21449	78%	10.36	2638	29049	22803	79%	9.99	2908
110°F	25448	20039	79%	10.48	2428	26611	20955	79%	10.41	2556	27193	21413	79%	9.75	2690	28938	22788	79%	9.76	2966
115°F	23819	18817	79%	9.74	2446	24927	19692	79%	9.68	2575	25481	20130	79%	9.08	2710	27143	21443	79%	9.08	2988
120°F	22263	17641	79%	9.20	2420	23343	18497	79%	8.99	2595	23883	18925	79%	9.23	2732	25502	20208	79%	8.47	3012
122°F	20829	16559	80%	8.67	2403	21884	17398	80%	8.34	2625	22411	17817	79%	8.52	2763	23993	19074	80%	7.88	3046

MAX OUTPUT*

*Maximum Output values are not based on AHRI test conditions

HEATING PERFORMANCE

Outdoor Ambient Temperature	Return Air Temperature											
	70°F (DB)			75°F (DB)			80°F (DB)			90°F (DB)		
DB	TC (Btu/h)	COP(W/W)	Power Input (W)	TC (Btu/h)	COP(W/W)	Power Input (W)	TC (Btu/h)	COP(W/W)	Power Input (W)	TC (Btu/h)	COP(W/W)	Power Input (W)
-22°F	15311	1.96	2292	14852	1.82	2385	14622	1.76	2433	14048	1.66	2482
-20°F	15612	1.97	2322	15144	1.84	2417	14909	1.77	2465	14342	1.67	2514
-15°F	16250	2.04	2338	15763	1.90	2434	15519	1.83	2483	14944	1.73	2532
-10°F	16842	2.08	2376	16337	1.94	2473	16084	1.87	2522	15525	1.77	2573
-5°F	17909	2.20	2386	17371	2.05	2484	17103	1.98	2533	16542	1.88	2584
0°F	17960	2.16	2435	17421	2.01	2534	17152	1.94	2585	16616	1.85	2637
5°F	19225	2.27	2485	18648	2.11	2586	18360	2.04	2638	17812	1.94	2690
10°F	20768	2.40	2535	20145	2.24	2639	19834	2.16	2692	19275	2.06	2745
15°F	21989	2.49	2587	21330	2.32	2693	21000	2.24	2746	20436	2.14	2801
17°F	22103	2.47	2621	21440	2.30	2728	21108	2.22	2783	20567	2.12	2838
20°F	22205	2.47	2640	21538	2.30	2748	21205	2.22	2803	20662	2.12	2859
25°F	23521	2.56	2694	22815	2.39	2804	22463	2.30	2860	21908	2.20	2917
30°F	24174	2.58	2749	23449	2.40	2861	23086	2.32	2918	22527	2.22	2976
35°F	25842	2.72	2785	25067	2.53	2899	24679	2.45	2957	24092	2.34	3016
40°F	27496	2.87	2805	26671	2.68	2919	26258	2.58	2978	25681	2.48	3037
45°F	30491	3.12	2862	30546	3.01	2979	30074	2.90	3038	29434	2.78	3099
47°F	30708	3.08	2920	30189	2.91	3040	29807	2.82	3100	29767	2.76	3162
50°F	32059	3.17	2965	31467	2.99	3086	30812	2.87	3148	30607	2.79	3211
55°F	32486	3.17	3008	32481	3.04	3131	31979	2.93	3193	31298	2.82	3257
60°F	33817	3.09	3210	33743	3.07	3225	33205	2.96	3289	32470	2.84	3355
65°F	34712	3.07	3312	34641	3.06	3321	34105	2.95	3388	33355	2.83	3456
70°F	33907	3.10	3210	32890	2.82	3421	32381	2.72	3490	31662	2.61	3559
75°F	32802	3.05	3154	31818	2.65	3524	31326	2.55	3594	30622	2.45	3666
80°F	30128	3.02	2921	29225	2.36	3629	28773	2.28	3702	28062	2.18	3776
86°F	29891	3.02	2902	28994	2.36	3606	28546	2.27	3678	27742	2.17	3752

MAX OUTPUT*

*Maximum Output values are not based on AHRI test conditions

LEGEND: **W - Watts**
DB - Dry Bulb
TC - Total Capacity
COP - Coeffecient of Performance