



BMAHC2416A Submittal Sheet



Models

BMAH2420C	24000 BTU 16.1 SEER2 Ducted Heat Pump Condenser
BMAHC24A	Up to 24,000 BTU Hyper Heat A Coil
BMAHC2416A	24000 BTU 16.1 SEER2 Ducted Heat Pump/Coil System

What's in the Box

Ducted Heat Pump System

BMAHC2416A

24000 BTU 16.1 SEER2 Ducted Heat Pump Condenser

Up to 24,000 BTU Hyper Heat A Coil

Remote Controller

Wired Controller



SUBMITTAL DATA SHEET

A-Coil Heat Pump System

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

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

Set Model
 Indoor unit model BMAHC2416A
 Outdoor unit model BMAHC24A
 BMAH2420C

Certified

AHRI



UL



SYSTEM PERFORMANCE DATA

Power supply

Normal Operational Voltage (V, Ph, Hz) 208/230V, 1Ph, 60Hz
 Voltage Range (V) 187-253

Electrical

Minimum circuit ampacity (Outdoor) (A) 20.0
 Max.fuse (Outdoor) (A) 35.0
 Connection wiring N/A

Cooling

Capacity (Btu/h) 24000(9900~27000)
 Power Input (W) 2240(380~2700)
 Current (A) 9.0(2.58~10.8)
 SEER2 (Btu/W) 16.1
 EER2 (Btu/W) 10.7

Heating

Capacity (Btu/h) 25000(9000~34000)
 Power Input (W) 2207(500~3260)
 Current (A) 8.7(2.15~13.2)
 HSPF2-4 (Btu/W) 9.8

COP W/W 3.32
 Heat at 17F(AHRI Rating) (Btu/h) 22400
 Heat at 5F(AHRI Rating) (Btu/h) 20000
 COP at 5F(AHRI Rating) W/W 2.00

REFRIGERANT PIPE DATA

Throttle type	Indoor unit	TXV
	Outdoor unit	EEV for heating
Design pressure	(PSIG)	550/340
Refrigerant Type		R410A
Refrigerant charge	oz	102.32
Refrigerant precharge	(ft)	25.0
Additional charge for each ft	(oz/ft)	0.69
Liquid side/ Gas side(indoor)	(inch)	3/8" / 3/4"
Liquid side/ Gas side(outdoor)	(inch)	3/8" / 3/4"
Max. pipe length	(ft)	164.0
Max. difference in level	(ft)	82.0
Connection method		Flared
Indoor(cooling)	(Deg. °F)	60~90
Indoor(heating)	(Deg. °F)	32~86
Outdoor(cooling)	(Deg. °F)	5~122
Outdoor(heating)	(Deg. °F)	-22~75

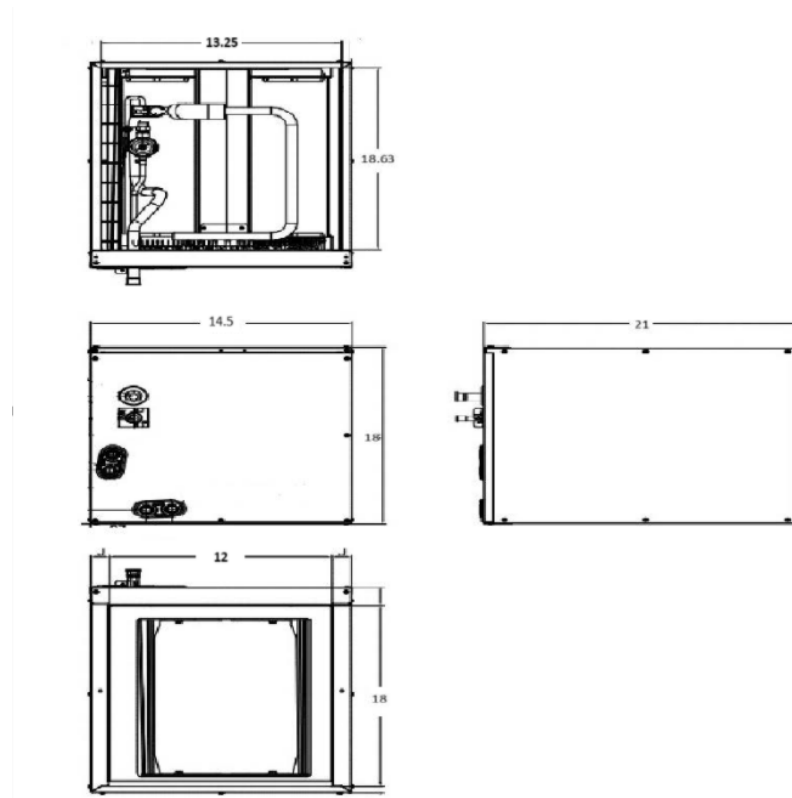
INDOOR UNIT DATA

Pressure drop	Pa	63.00
	In. wg.	0.25
Configuration	Upflow / DownFlow / Horizontal	
Indoor unit		
Dimension (WxDxH)	(inch)	21.02x14.49x17.99
Packing(WxDxH)	(inch)	17.60x26.06x20.55
Net/Gross weight	(lbs.)	41.67/46.52

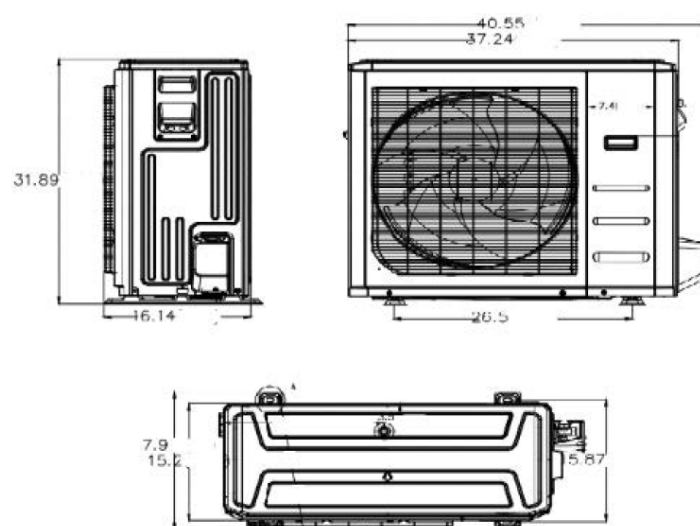
OUTDOOR UNIT DATA

Compressor		
Type	Twin-ROTARY	
Model	KTM240D57UMT	
Brand	GMCC	
Capacity	(Btu/h)	26409
Input	(W)	2085
Rated current (RLA)	(A)	15
Refrigerant oil/oil charge	(ml)	ESTER OIL VG74 670
Outdoor fan motor		
Model	ZKFN-120-8-2	
Qty	1	
Input	(W)	150.0
Output	(W)	120
RLA	(A)	1.4
Air flow & Noise level		
Outdoor air flow (Max.)	(CFM)	3000
Outdoor noise level	[dB(A)]	63.5
Outdoor unit		
Dimension (WxDxH)	(inch)	37.24x16.14x31.89
Packing (WxDxH)	(inch)	42.91x19.69x34.84
Net/ Gross weight	(lbs.)	136.69/145.50

Indoor Unit Dimensions (Inches)



Outdoor Unit Dimensions (Inches)



COOLING PERFORMANCE DATA

YS Model	Cooling		Outdoor conditions (DB)																
	Indoor DB		5F	14F	17F	23F	32F	41F	47F	50F	59F	68F	77F	82F	86F	95F	104F	114.8F	122F
BMAHC24A BMAH2420C	73.4F	TC	33162	33124	33111	32256	30973	31211	31877	32056	32594	33131	33668	33967	32406	28896	27746	26365	25445
		Input	1.93	1.87	1.85	1.77	1.64	1.73	1.87	1.89	1.96	2.03	2.10	2.14	2.36	2.84	2.88	2.94	2.97
	77.0F	TC	33198	33160	33147	32291	31007	31245	31912	32091	32629	33167	33705	34004	32442	28928	27776	26394	25473
		Input	1.93	1.87	1.85	1.77	1.64	1.74	1.87	1.89	1.96	2.04	2.11	2.15	2.36	2.84	2.89	2.94	2.98
	80.0F	TC	33234	33196	33183	32326	31040	31279	31946	32126	32664	33203	33741	34041	32477	28959	27806	26423	25501
		Input	1.93	1.87	1.85	1.77	1.65	1.74	1.87	1.90	1.97	2.04	2.11	2.15	2.36	2.84	2.89	2.94	2.98
	80.6F	TC	33239	33201	33189	32331	31045	31284	31951	32131	32670	33208	33747	34046	32482	28964	27811	26427	25505
		Input	1.93	1.87	1.85	1.77	1.65	1.74	1.87	1.90	1.97	2.04	2.11	2.15	2.36	2.84	2.89	2.95	2.98
	84.2F	TC	33281	33243	33230	32372	31084	31323	31991	32171	32710	33249	33789	34088	32523	29000	27845	26460	25536
		Input	1.94	1.87	1.85	1.77	1.65	1.74	1.87	1.90	1.97	2.04	2.11	2.15	2.37	2.85	2.89	2.95	2.99

HEATING PERFORMANCE DATA

YS Model	Heating		Outdoor conditions (DB)																			
	Indoor Conditions DB		-22F	-13F	-10F	-4F	0F	5F	14F	17F	22F	27F	32F	37F	42F	44.6F	47F	52F	57F	59F	62F	64.4F
BMAHC24A BMAH2420C	60.8F	TC	15178	18665	18289	17537	18858	20511	24356	25638	27450	29262	31073	32604	33714	34158	34823	33082	31428	29857	28364	26946
		Input	2.63	3.11	2.86	2.36	2.60	2.90	3.15	3.24	3.35	3.47	3.58	3.58	3.44	3.39	3.23	3.16	3.10	3.04	2.98	2.92
	68F	TC	14874	18291	17923	17186	18481	20101	23869	25126	26901	28677	30452	31952	33040	33474	34127	32421	30799	29260	27797	26407
		Input	2.66	3.13	2.88	2.38	2.62	2.92	3.18	3.26	3.38	3.49	3.61	3.61	3.47	3.41	3.25	3.19	3.12	3.06	3.00	2.94
	70F	TC	14800	18200	17833	17100	18389	20000	23750	25000	26767	28533	30300	31792	32874	33307	33956	32258	30645	29113	27658	26275
		Input	2.66	3.14	2.89	2.39	2.63	2.93	3.19	3.27	3.39	3.50	3.62	3.61	3.48	3.42	3.26	3.19	3.13	3.07	3.01	2.95
	71.6F	TC	14741	18127	17762	17032	18315	19920	23655	24900	26660	28419	30179	31665	32743	33174	33820	32129	30523	28997	27547	26170
		Input	2.67	3.14	2.89	2.39	2.63	2.94	3.19	3.28	3.39	3.51	3.62	3.62	3.49	3.43	3.27	3.20	3.14	3.07	3.01	2.95
	75.2F	TC	14608	17964	17602	16878	18150	19741	23442	24676	26420	28163	29907	31380	32448	32875	33516	31840	30248	28736	27299	25934
		Input	2.68	3.16	2.90	2.40	2.64	2.95	3.21	3.29	3.41	3.52	3.64	3.64	3.50	3.44	3.28	3.21	3.15	3.09	3.03	2.96

LEGEND

DB --- Dry Bulb

TC --- Total Net Capacity (1000 Btu/hour)

Input --- Total Power (kW)



Certificate of Product Ratings

AHRI Certified Reference Number : 215359199 Date : 09-10-2024 Model Status : Active

AHRI Type : HRCU-A-C (Split System: Heat Pump with Remote Outdoor Unit with No Indoor Fan --Air Source)

Series : BMAH Series

Outdoor Unit Brand Name : BLUERIDGE

Outdoor Unit Model Number (Condenser or Single Package) : BMAH2420C

Indoor Unit Model Number (Evaporator and/or Air Handler) : BMAHC24A

The manufacturer of this BLUERIDGE product is responsible for the rating of this system combination.

Rated as follows in accordance with the latest edition of AHRI 210/240 – 2024, Performance Rating of Unitary Air-Conditioning & Air-Source Heat Pump Equipment and subject to rating accuracy by AHRI-sponsored, independent, third party testing:

Cooling Capacity (A_{Full}) – Single or High Stage (95F), btuh : 24000

SEER2 : 16.10

EER2 (A_{Full}) – Single or High Stage (95F) : 10.70

Heating Capacity (H1_{Full}) – Single or High Stage (47F), btuh : 25000

HSPF2 (Region IV) : 9.80



†"Active" Model Status are those that an AHRI Certification Program Participant is currently producing AND selling or offering for sale; OR new models that are being marketed but are not yet being produced. "Production Stopped" Model Status are those that an AHRI Certification Program Participant is no longer producing BUT is still selling or offering for sale.

Ratings that are accompanied by WAS indicate an involuntary re-rate. The new published rating is shown along with the previous (i.e. WAS) rating.

The Department of Energy has published updated energy efficiency metrics for central air conditioners and heat pumps. This publication reflects both the 1987 metric (SEER) and the 2023 metric (SEER2). Efficiency requirements are published at 10 C.F.R. 430.32(c). Please refer to www.AHRInet.org for more information about updated energy efficiency metrics.

*This refers to the federal tax credit that may be known to consumers as "Inflation Reduction Act (IRA) of 2022 Tax Credit," "25C Tax Credit," or "Energy Efficient Home Improvement Credit." This is not intended to constitute tax or legal advice. Instead, it is for general informational purposes only. AHRI makes no representation or warranty, express or implied or assumes any legal liability or responsibility for the accuracy, completeness, any third party's use of, or the results of the use of potential eligibility for tax credit disclosed on the AHRI Directory of Certified Product Performance and AHRI Certificate of Product Ratings. Potential eligibility for tax credit may not constitute the most up to date information. AHRI is unable to advise or confirm tax credit eligibility. Individuals considering eligibility for the tax credit are advised to confirm eligibility with their equipment installers, tax attorneys or preparers.

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