



BMAHC1816B Submittal Sheet



Models

| | |
|------------|---|
| BMAH1820C | 18000 BTU 16.1 SEER2 Ducted Heat Pump Condenser |
| BMAHC24B | 18000 BTU 16.1 SEER2 Ducted A-Coil |
| BMAHC1816B | 18000 BTU 16.1 SEER2 Ducted Heat Pump/Coil System |

What's in the Box

Ducted Heat Pump System

BMAHC1816B

18000 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 BMAHC1816B
 Outdoor unit model BMAHC24B
 Outdoor unit model BMAH1820C

Certified



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) | 16.0 |
| Max.fuse(Outdoor) | (A) | 20.0 |
| Connection wiring | | N/A |
| Cooling | | |
| Capacity | (Btu/h) | 18000(9600~22000) |
| Power Input | (W) | 1538(450~2100) |
| Current | (A) | 7.0(2.2~8.22) |
| SEER2 | (Btu/W) | 16.1 |
| EER2 | (Btu/W) | 11.7 |
| Heating | | |
| Capacity | (Btu/h) | 19000(6000~23600) |
| Power Input | (W) | 1610(470~2200) |
| Current | (A) | 8.5(2.4~9.6) |
| HSPF2-4 | (Btu/W) | 9.5 |
| COP | W/W | 3.46 |
| Heat at 17F(AHRI Rating) | (Btu/h) | 14700 |
| Heat at 5F(AHRI Rating) | (Btu/h) | 15000 |
| COP at 5F(AHRI Rating) | W/W | 2.20 |

REFRIGERANT PIPE DATA

| | | |
|--------------------------------|--------------|-----------------|
| Throttle type | Indoor unit | TXV |
| | Outdoor unit | EEV for heating |
| Design pressure | (PSIG) | 550/340 |
| Refrigerant Type | | R410A |
| Refrigerant charge | oz | 81.13 |
| | (ft) | 25.0 |
| Refrigerant precharge | (m) | 7.5 |
| 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" / 5/8" |
| Max. pipe length | (ft) | 98.4 |
| Max. difference in level | (ft) | 65.6 |
| 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 |

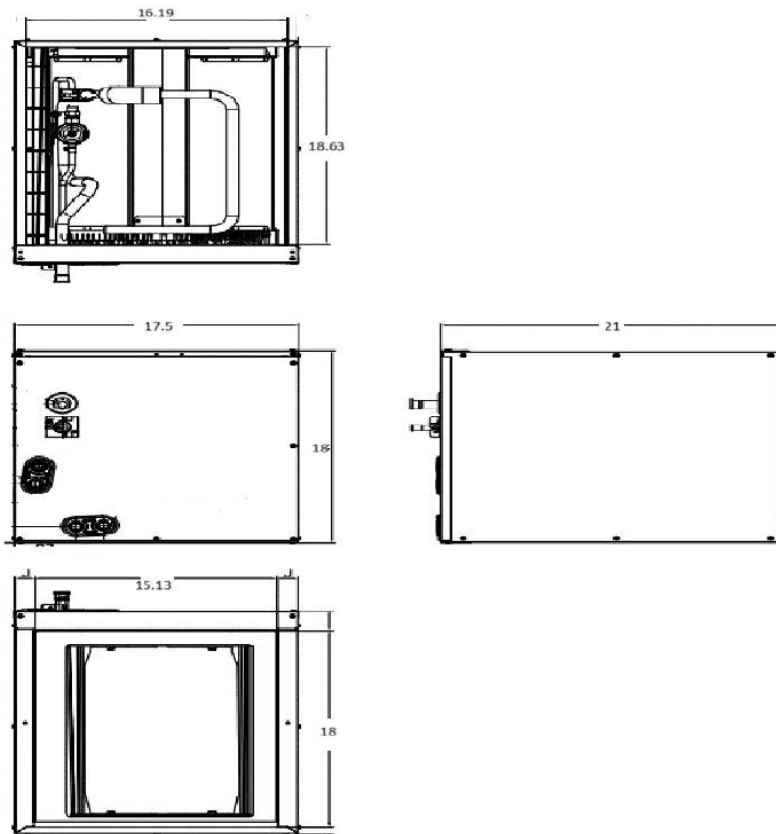
INDOOR UNIT DATA

| | | |
|--------------------|---------|--------------------------------|
| Pressure drop | Pa | 32.70 |
| | In. wg. | 0.13 |
| Configuration | | Upflow / DownFlow / Horizontal |
| Indoor unit | | |
| Dimension (WxDxH) | (inch) | 17.52x20.98x17.99 |
| Packing(WxDxH) | (inch) | 20.47x26.18x20.28 |
| Net/Gross weight | (lbs.) | 42.77/52.03 |

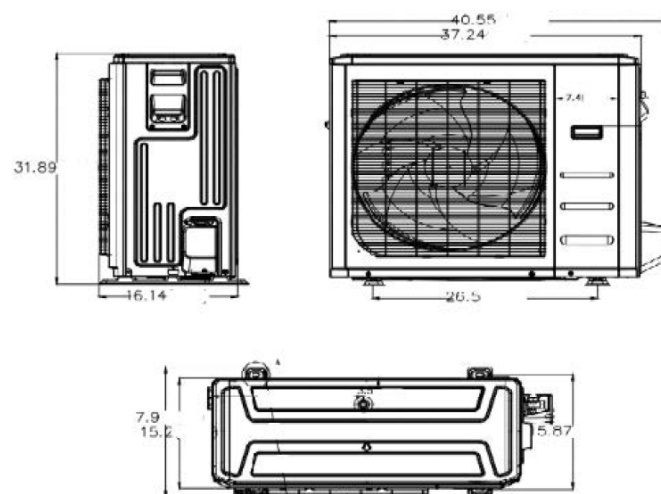
OUTDOOR UNIT DATA

| | | |
|-----------------------------------|---------|--------------------|
| Compressor | | |
| Type | | Twin-ROTARY |
| Model | | KTM240D57UMT |
| Brand | | GMCC |
| Capacity | (Btu/h) | 26409 |
| Input | (W) | 2085 |
| Rated current (RLA) | (A) | 10 |
| Refrigerant oil/oil charge | (ml) | ESTER OIL VG74 670 |
| Outdoor fan motor | | |
| Model | | ZKFN-80-8-3 |
| Qty | | 1 |
| Input | (W) | / |
| Output | (W) | 80 |
| RLA | (A) | 1.0 |
| Speed | (r/min) | 800/700/580 |
| Air flow & Noise level | | |
| Outdoor air flow (Max.) | (CFM) | 1279 |
| Outdoor noise level | [dB(A)] | 57.0 |
| Outdoor unit | | |
| Dimension (WxDxH) | (inch) | 35.04x13.46x26.50 |
| Packing (WxDxH) | (inch) | 39.17x15.67x29.13 |
| Net/ Gross weight | (lbs.) | 102.95/109.79 |
| Accessories | | |
| Adaptor for welding(3/4") | Qty | 1 |
| Adaptor for welding(3/8") | Qty | 1 |
| Adaptor (5/8" to 3/4") | Qty | 1 |

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 |
| | | | | | | | | | | | | | | | | | | | |
| BMAHC24B BMAH1820C | 73.4F | TC | 24031 | 24186 | 24237 | 24402 | 24649 | 24277 | 23822 | 24063 | 24786 | 25509 | 26232 | 26633 | 25705 | 23616 | 21528 | 19021 | 17350 |
| | | Input | 1.30 | 1.24 | 1.22 | 1.18 | 1.12 | 1.13 | 1.18 | 1.20 | 1.29 | 1.38 | 1.47 | 1.52 | 1.74 | 2.23 | 2.72 | 3.31 | 3.70 |
| | 77.0F | TC | 24058 | 24212 | 24263 | 24428 | 24676 | 24303 | 23848 | 24089 | 24813 | 25537 | 26260 | 26662 | 25733 | 23642 | 21551 | 19042 | 17369 |
| | | Input | 1.30 | 1.24 | 1.22 | 1.18 | 1.12 | 1.14 | 1.18 | 1.21 | 1.30 | 1.39 | 1.47 | 1.52 | 1.74 | 2.23 | 2.72 | 3.31 | 3.70 |
| | 80.0F | TC | 24084 | 24238 | 24290 | 24455 | 24703 | 24330 | 23874 | 24115 | 24840 | 25564 | 26289 | 26691 | 25761 | 23668 | 21575 | 19063 | 17388 |
| | | Input | 1.30 | 1.24 | 1.22 | 1.18 | 1.12 | 1.14 | 1.18 | 1.21 | 1.30 | 1.39 | 1.48 | 1.53 | 1.74 | 2.24 | 2.73 | 3.32 | 3.71 |
| | 80.6F | TC | 24087 | 24242 | 24294 | 24459 | 24707 | 24333 | 23878 | 24119 | 24844 | 25568 | 26293 | 26696 | 25765 | 23671 | 21578 | 19066 | 17391 |
| | | Input | 1.30 | 1.24 | 1.22 | 1.18 | 1.12 | 1.14 | 1.18 | 1.21 | 1.30 | 1.39 | 1.48 | 1.53 | 1.74 | 2.24 | 2.73 | 3.32 | 3.71 |
| | 84.2F | TC | 24117 | 24272 | 24324 | 24489 | 24737 | 24364 | 23907 | 24149 | 24875 | 25600 | 26326 | 26729 | 25797 | 23701 | 21605 | 19089 | 17412 |
| | | Input | 1.30 | 1.24 | 1.22 | 1.18 | 1.12 | 1.14 | 1.18 | 1.21 | 1.30 | 1.39 | 1.48 | 1.53 | 1.75 | 2.24 | 2.73 | 3.32 | 3.71 |

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 |
| | | | | | | | | | | | | | | | | | | | | | | |
| BMAHC24B BMAH1820C | 60.8 F | TC | 10563 | 12819 | 12888 | 13024 | 14073 | 15383 | 17229 | 17844 | 18476 | 19109 | 19741 | 20825 | 22588 | 23293 | 24350 | 23133 | 21976 | 20877 | 19834 | 18842 |
| | | Input | 1.92 | 2.01 | 1.93 | 1.75 | 1.85 | 1.98 | 2.06 | 2.09 | 2.13 | 2.16 | 2.20 | 2.21 | 2.17 | 2.16 | 2.11 | 2.07 | 2.03 | 1.99 | 1.95 | 1.91 |
| | 68 F | TC | 10352 | 12563 | 12630 | 12764 | 13791 | 15075 | 16884 | 17487 | 18107 | 18726 | 19346 | 20409 | 22136 | 22827 | 23863 | 22670 | 21537 | 20460 | 19437 | 18465 |
| | | Input | 1.93 | 2.03 | 1.94 | 1.77 | 1.87 | 1.99 | 2.08 | 2.10 | 2.14 | 2.18 | 2.22 | 2.23 | 2.19 | 2.17 | 2.13 | 2.09 | 2.05 | 2.00 | 1.96 | 1.93 |
| | 70 F | TC | 10300 | 12500 | 12567 | 12700 | 13722 | 15000 | 16800 | 17400 | 18016 | 18633 | 19249 | 20307 | 22025 | 22713 | 23744 | 22557 | 21429 | 20358 | 19340 | 18373 |
| | | Input | 1.94 | 2.04 | 1.95 | 1.77 | 1.87 | 2.00 | 2.08 | 2.11 | 2.15 | 2.19 | 2.23 | 2.23 | 2.19 | 2.18 | 2.13 | 2.09 | 2.05 | 2.01 | 1.97 | 1.93 |
| | 71.6 F | TC | 10259 | 12450 | 12516 | 12649 | 13667 | 14940 | 16733 | 17330 | 17944 | 18558 | 19172 | 20225 | 21937 | 22622 | 23649 | 22467 | 21343 | 20276 | 19262 | 18299 |
| | | Input | 1.94 | 2.04 | 1.95 | 1.78 | 1.88 | 2.00 | 2.08 | 2.11 | 2.15 | 2.19 | 2.23 | 2.23 | 2.20 | 2.18 | 2.14 | 2.10 | 2.05 | 2.01 | 1.97 | 1.93 |
| | 75.2 F | TC | 10166 | 12338 | 12404 | 12535 | 13544 | 14806 | 16582 | 17174 | 17783 | 18391 | 19000 | 20043 | 21740 | 22418 | 23436 | 22264 | 21151 | 20094 | 19089 | 18135 |
| | | Input | 1.95 | 2.05 | 1.96 | 1.78 | 1.88 | 2.01 | 2.09 | 2.12 | 2.16 | 2.20 | 2.24 | 2.24 | 2.21 | 2.19 | 2.15 | 2.10 | 2.06 | 2.02 | 1.98 | 1.94 |

LEGEND

DB --- Dry Bulb

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

Input --- Total Power (kW)



Certificate of Product Ratings

AHRI Certified Reference Number : 215359198 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) : BMAH1820C

Indoor Unit Model Number (Evaporator and/or Air Handler) : BMAHC24B

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 - 2017 with Addendum 1, 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 (A2) - Single or High Stage (95F), btuh : 18000

SEER : 15.60

EER (A2) - Single or High Stage (95F) : 11.60

Heating Capacity (H12) - Single or High Stage (47F) : 18000

HSPF (Region IV) : 8.80

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 : 18000

SEER2 : 16.10

EER2 (A_{Full}) – Single or High Stage (95F) : 11.70

Heating Capacity (H1_{Full}) – Single or High Stage (47F), btuh : 19000

HSPF2 (Region IV) : 9.50

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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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