



BMY1820 Specifications and Certifications



Models



BMY1820C	18000 BTU 19.5 SEER2 208/230V Minisplit Heat Pump Condenser
BMY1820WM	18000 BTU 19.5 SEER2 208/230V Minisplit Heat Pump Air Handler
BMY1820	18000 BTU 19.5 SEER2 208/230V Minisplit Heat Pump System
BMY1820 KIT15	18000 BTU 19.5 SEER2 208/230V Minisplit Heat Pump W/ 15 Ft Installation Kit
BMY1820 KIT25	18000 BTU 19.5 SEER2 208/230V Minisplit Heat Pump W/ 25 Ft Installation Kit

What's in the Box

Mini-Split System

BMY1820

18000 BTU 19.5 SEER2 208/230V Mini-Split Heat Pump Condenser

18000 BTU 19.5 SEER2 208/230V Mini-Split Heat Pump Air Handler

Remote Controller



Mini-Split System with Installation Kit

BMY1820 KIT15

18000 BTU 19.5 SEER2 208/230V Mini-Split Heat Pump Condenser

18000 BTU 19.5 SEER2 208/230V Mini-Split Heat Pump Air Handler

15 Foot 1/4 LL 1/2 SL Ductless Mini-Split Line Set

25 Foot Stranded Ductless Mini-Split Communication Wire

2.5" Wall Sleeve for SpeediChannel™ Line Set Covers

1/2 x 48 Inches, #10 Gauge Electrical Whip

Nylog Blue Gasket, Flare and Thread Sealant

Safety Non-Fused Electrical Disconnect

5/8in Inner Diameter Drain Hose, 20ft Length

Adapter 5/16" x 1/4" for Ductless Mini-Split Systems

Remote controller



BMY1820 KIT25

18000 BTU 19.5 SEER2 208/230V Mini-Split Heat Pump Condenser

18000 BTU 19.5 SEER2 208/230V Mini-Split Heat Pump Air Handler

25 Foot 1/4 LL 1/2 SL Ductless Mini-Split Line Set

35 Foot Stranded Ductless Mini-Split Communication Wire

2.5" Wall Sleeve for SpeediChannel™ Line Set Covers

1/2 x 48 Inches, #10 Gauge Electrical Whip

Nylog Blue Gasket, Flare and Thread Sealant

Safety Non-Fused Electrical Disconnect

5/8in Inner Diameter Drain Hose, 20ft Length

Adapter 5/16" x 1/4" for Ductless Mini-Split Systems

Remote controller





SUBMITTAL DATA SHEET

Wall Mounted Heat Pump System

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

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

Set Model BMY1820
15 Ft Kit Model BMY1820 KIT15
25 Ft Kit Model BMY1820 KIT25

Certified

AHRI



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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) 15.0
Max. fuse (Outdoor) (A) 20.0
Connection wiring 14#x4

Cooling

Capacity (Btu/h) 18000(3900~20000)
Power Input (W) 1638(180~1480)
Current (A) 7.5(0.78~6.43)
SEER2 (Btu/W) 19.5
EER2 (Btu/W) 11.0

Heating

Capacity (Btu/h) 18800(6300~19400)
Power Input (W) 1806(375~1770)
Current (A) 1(1.63~7.69)
HSPF2-4 (Btu/W) 8.7

COP W/W 3.05
Heat at 17F(AHRI Rating) (Btu/h) 11400
Heat at 5F(AHRI Rating) (Btu/h) 11700
COP at 5F(AHRI Rating) W/W 2.06

REFRIGERANT PIPE DATA

Throttle type	Indoor unit	N/A
	Outdoor unit	Capillary
Design pressure	(PSIG)	550/340
Refrigerant Type		R410A
Refrigerant charge	oz	47.62
Refrigerant precharge	(ft)	25.0
Additional charge for each ft	(oz/ft)	0.16
Liquid side/ Gas side(indoor)	(inch)	1/4"/1/2"
Liquid side/ Gas side(outdoor)	(inch)	1/4"/1/2"
Max. pipe length	(ft)	98.4
Max. difference in level	(ft)	65.6
Connection method		Flared
Remote Control Temp Range(cooling)	(Deg. F)	62 ~ 86
Remote Control Temp Range(heating)	(Deg. F)	62 ~ 86
Outdoor(cooling)	(Deg. F)	5~122
Outdoor(heating)	(Deg. F)	5~75

INDOOR UNIT DATA

Indoor fan motor

Model	ZKFP-30-8-3-10
Qty	1
Input (W)	36.0
Output (W)	30.0
RLA (A)	0.4

Air flow & Noise level

Indoor air flow (Turbo/Hi/Med/Lo) (CFM)	//458.82/329.41/270.59
Indoor noise level (Hi/Med/Lo) [dB(A)]	45/38/30.0

Dehumidification

(L/H)	2.49
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Indoor unit

Dimension (WxDxH) (inch)	38.23x8.98x12.64
Packing(WxDxH) (inch)	41.14x12.01x15.94
Net/Gross weight (lbs.)	24.47/31.75

OUTDOOR UNIT DATA

Compressor

Type	ROTARY
Model	KSN140D21UFZ
Brand	GMCC
Capacity (Btu/h)	14962
Input (W)	1140
Rated current (RLA) (A)	10
Refrigerant oil/oil charge (ml)	VG74 440

Outdoor fan motor

Model	ZKFN-34-10-1-3
Qty	1
Input (W)	/
Output (W)	34
RLA (A)	0.7

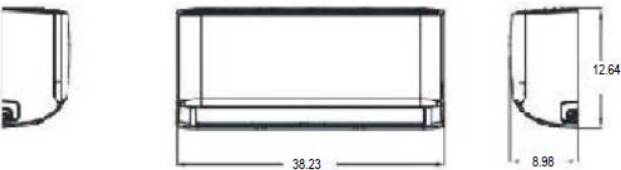
Air flow & Noise level

Outdoor air flow (Max.) (CFM)	1235
Outdoor noise level [dB(A)]	57.0

Outdoor unit

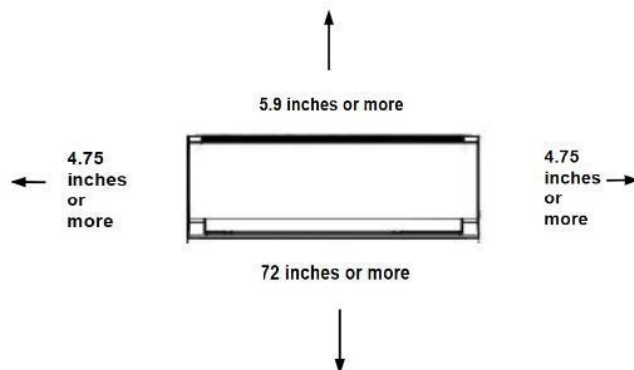
Dimension (WxDxH) (inch)	31.69x12.99x21.81
Packing (WxDxH) (inch)	36.02x14.57x24.21
Net/ Gross weight (lbs.)	73.85/79.81

Indoor unit dimension (Inches)

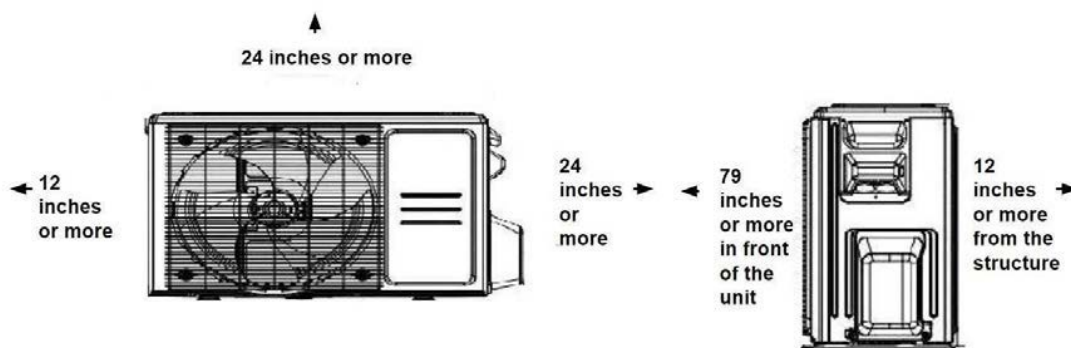


Outdoor unit dimension (Inches)

Indoor unit clearance (Inches)



Outdoor unit clearance (Inches)



COOLING PERFORMANCE DATA

Model	Cooling																	
	Indoor Conditions DB		5°F	17°F	25°F	35°F	47°F	55°F	65°F	75°F	80°F	85°F	95°F	105°F	110°F	115°F	122°F	
BMY1820WM BMY1820C Wall Mounted (208-230V)	65°F	TC	14730	14894	14968	15897	16093	16368	16434	16971	17111	16822	16475	16017	15189	14418	13105	
		Input	894	920	946	1029	1088	1156	1205	1345	1392	1583	1778	1704	1708	1603	1521	
	70°F	TC	15392	15596	15756	16611	16904	17050	17409	17770	17937	17877	17453	16772	16159	15225	13867	
		Input	887	909	944	1017	1092	1140	1223	1326	1377	1588	1787	1711	1713	1604	1527	
	75°F	TC	16202	16556	16673	17340	17627	17966	18481	18825	19021	18897	18469	17599	16920	15925	14690	
		Input	882	916	955	1012	1089	1142	1236	1322	1382	1580	1789	1724	1686	1594	1538	
	80°F	TC	17199	17355	17719	18138	18752	19092	19454	19795	20171	19726	19299	18604	17755	16589	15334	
		Input	887	921	961	1011	1095	1163	1236	1312	1404	1697	1795	1744	1678	1593	1511	

HEATING PERFORMANCE DATA

Model	Heating		5°F	10°F	17°F	20°F	25°F	32°F	35°F	40°F	47°F	50°F	57°F
	Indoor Conditions DB												
BMY1820WM BMY1820C Wall Mounted (208-230V)	60°F	TC	11387	12298	13380	14417	15566	16537	17662	18885	19685	20442	20826
		Input	1470	1584	1664	1682	1710	1724	1749	1773	1802	1787	1813
	65°F	TC	11034	11998	13016	14038	15040	16102	17081	18282	19112	19789	20259
		Input	1514	1623	1705	1731	1752	1761	1786	1826	1845	1838	1854
	70°F	TC	10755	11705	12600	13616	14602	15587	16665	17715	18591	19138	19707
		Input	1560	1661	1749	1772	1793	1808	1838	1873	1883	1888	1896
	75°F	TC	10367	11237	12121	13044	14076	14948	15965	16918	17811	18411	18860
		Input	1602	1709	1803	1834	1847	1868	1889	1931	1933	1954	1943

LEGEND

DB --- Dry Bulb (Air Temperature without considering humidity)
TC --- Total Net Capacity 1000 Btu/hour (Actual Capacity + Dehumidifying Capacity)
Input --- Total Power (W)

Certificate of Product Ratings

AHRI Certified Reference Number : 207339175 Date : 02-28-2024 Model Status : Active

AHRI Type : HRCU-A-CB-O (Mini-Split Heat Pump, with Remote Outdoor Unit Air-Source, Free Delivery)

Outdoor Unit Brand Name : BLUERIDGE

Outdoor Unit Model Number : BMY1820C

Indoor Type : Mini-Splits (Non-Ducted)

Indoor Model Number(s) : BMY1820WM

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 : 19.50

EER (A2) - Single or High Stage (95F) : 11.00

Heating Capacity (H12) - Single or High Stage (47F) : 18800

HSPF (Region IV) : 10.00

Rated as follows in accordance with the latest edition of AHRI 210/240 – 2023, 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 : 19.50

EER2 (A_{Full}) – Single or High Stage (95F) : 11.00

Heating Capacity (H1_{Full}) – Single or High Stage (47F), btuh : 18800

HSPF2 (Region IV) : 8.70

Sold in? : USA, Canada

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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.AHRI.net.org for more information about updated energy efficiency metrics.

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