

Climate 5000 Series - Gen 4

48K BTU Multi Zone Max Performance Outdoor Unit

Engineering
Submittal
Sheet



BOSCH

Overview and Project Information



Project name

Location

Architect

Engineer

General contractor

Reference #

Date

48K Btu Multi Zone Max Performance Outdoor Unit

Outdoor part number

8-733-962-702

Outdoor model number

BMS500-AAM048-1CSXHD

Efficiency Data

Ducted

Non-Ducted

Mixed Ducted & Non-Ducted

SEER2

20.4

23

21.7

EER2

11.7

12

11.85

HSPF2 (Region IV)

11

11

11.0

HSPF2 (Region V)

9

9

9.0

COP(47°F)

3.52

3.7

3.6

COP (5°F)

2.0

2.0

2.0

Performance Data

Ducted

Non-Ducted

Mixed Ducted & Non-Ducted

Cooling

Capacity Range (Btu/h)

12000~57000

12000~57000

12000~57000

Rated Capacity (Btu/h)

47000

47000

47000

Current (A)

17.9

17.3

17.6

Input Power (W)

4020

3917

3968.5

Heating

Capacity Range (Btu/h)

13000~60000

13000~57000

13000~58500

Rated Capacity (47°F)

48000

49000

48500

Capacity (5°F)

48000

47000

47500

Current (A)

17.5

17.3

17.4

Input Power (W)

4000

3881

3940.5

Operation Range

ODU

Cooling (°F / °C)

-22~122 / -30~50

Heating (°F / °C)

-22~75 / -30~24

Electrical Data

Power supply (V / Ø / Hz)

208-230 / 1 / 60

Min. circuit ampacity (A)

37

Max. fuse (A)

40

Compressor Data

Type:

Twin-Rotary

Refrigerant oil /oil charge (ml)

VG75 / 1300

Input (W)

3430

Rated current (A)

7.3

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Piping	
Refrigerant precharge (ft / m)	24.6(7.5)x6
Refrigerant charge (oz / kg)	151.68 / 4.3
Liquid side (in / mm)	6x1/4in / 6x6.35mm
Gas side (in / mm)	4x3/8in+2x1/2in / 4x9.52mm+2x12.7mm
Additional Charge of Refrigerant - liquid side (oz/ft)/(g/m)	0.16 / 15
Additional Charge of Refrigerant - gas side (oz/ft)/(g/m)	0.32 / 30
Max. refrigerant pipe length (ft / m)	262.4 / 80
Max. length to one IDU (ft / m)	114.8 / 35
Max. height difference between IDU and ODU (ft / m)	49.2 / 15
Max. height difference between IDU's (ft / m)	33 / 10

System Data		
Refrigerant type		R454B
Design pressure (PSIG)		550 / 340
Dehumidification (L/hr)		9.3
ODU	Fan motor model #	ZKFN-85-10-1L
	Fan motor qty (ea)	2
	Fan motor input (W)	126
	Fan motor speed, H / M / L (RPM)	800 / 700 / 650
	Air flow, max (CFM)	4502.8
	Noise level, max (dB(A))	65
	Net weight (lbs / kg)	246.47 / 111.8
IDU	Gross weight (lbs / kg)	276.68 / 125.5
	Minimum # of indoors	1
	Maximum # of indoors	6

Multi Zone Pairing Information	1 ZONE	2 ZONE	3 ZONE			4 ZONE		
BMS500-AAM048-1CSXHD	30	6+24	6+6+18	9+9+9	12+12+36	6+6+6+6	6+9+12+18	9+9+18+24
	36	6+30	6+6+24	9+9+12	12+18+18	6+6+6+9	6+9+12+24	9+12+12+12
		6+36	6+6+30	9+9+18	12+18+24	6+6+6+12	6+9+18+18	9+12+12+18
		9+18	6+6+36	9+9+24	12+18+30	6+6+6+18	6+9+18+24	9+12+12+24
		9+24	6+9+9	9+9+30	12+18+36	6+6+6+24	6+12+12+12	9+12+18+18
		9+30	6+9+12	9+9+36	18+18+18	6+6+9+9	6+12+12+18	9+12+18+24
		9+36	6+9+18	9+12+12		6+6+9+12	6+12+12+24	9+18+18+18
		12+12	6+9+24	9+12+18		6+6+9+18	6+12+18+18	12+12+12+12
		12+18	6+9+30	9+12+24		6+6+9+24	6+12+18+24	12+12+12+18
		12+24	6+9+36	9+12+30		6+6+12+12	6+18+18+18	12+12+12+24
		12+30	6+12+12	9+12+36		6+6+12+18	6+18+18+24	12+12+18+18
		12+36	6+12+18	9+18+18		6+6+12+24	9+9+9+9	12+12+18+24
		18+18	6+12+24	9+18+24		6+6+18+18	9+9+9+12	12+18+18+18
		18+24	6+12+30	9+18+30		6+6+18+24	9+9+9+18	
		18+30	6+12+36	9+18+36		6+9+9+9	9+9+9+24	
		18+36	6+18+18	12+12+12		6+9+9+12	9+9+12+12	
		24+24	6+18+24	12+12+18		6+9+9+18	9+9+12+18	
		24+30	6+18+30	12+12+24		6+9+9+24	9+9+12+24	
		24+36	6+18+36	12+12+30		6+9+12+12	9+9+18+18	
Capacities	Wall Mounted - 6K to 36K Cassette/Ducted - 9K to 24K							

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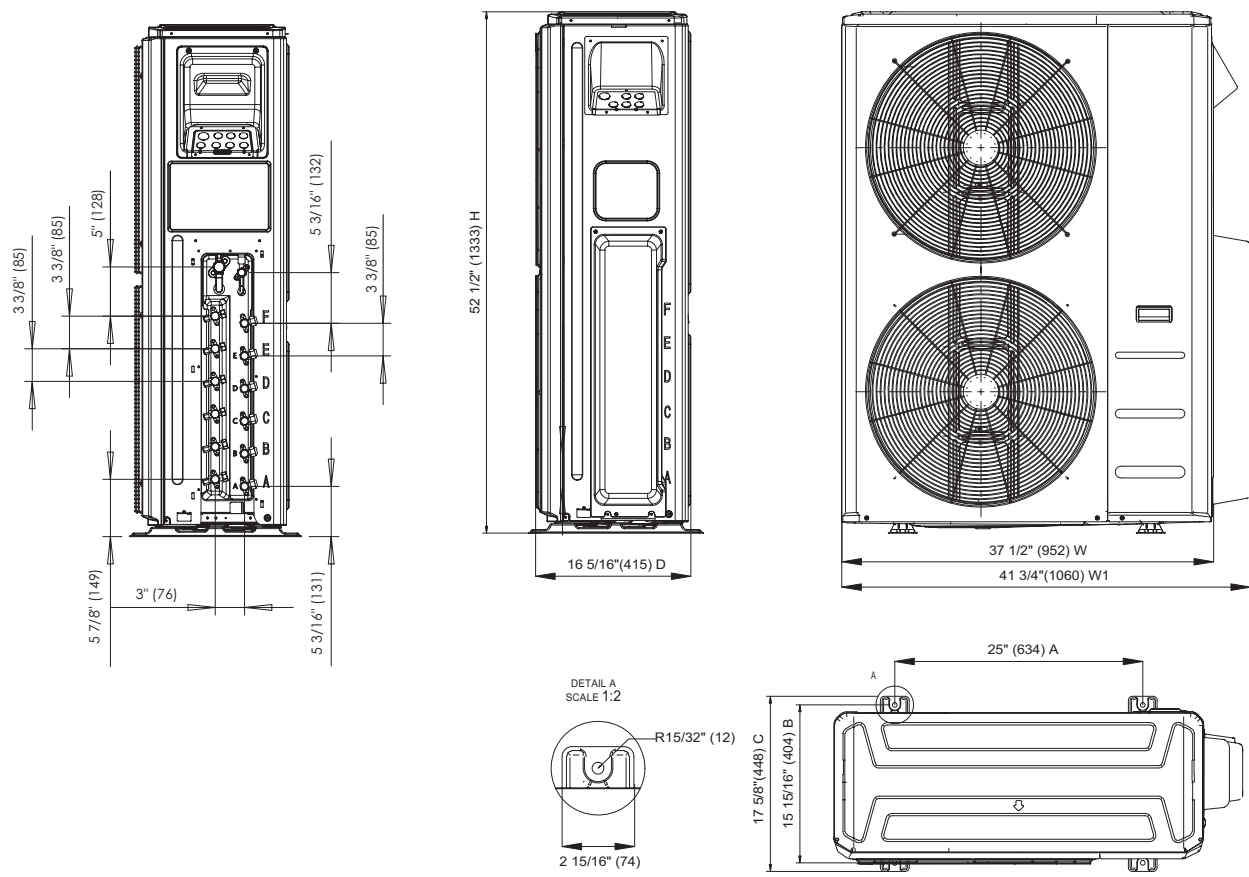


5 ZONE				6 ZONE			
6+6+6+6+6	6+6+9+12+18	6+9+9+18+24	9+9+9+18+18	6+6+6+6+6+6	6+6+6+12+12+12	6+9+9+9+9+24	9+9+9+12+12+18
6+6+6+6+9	6+6+9+12+24	6+9+12+12+12	9+9+9+18+24	6+6+6+6+6+9	6+6+6+12+12+18	6+9+9+9+12+12	9+9+12+12+12+12
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6+6+9+9+12	6+9+9+12+12	9+9+9+9+24	12+12+12+18+18	6+6+6+9+9+24	6+6+12+12+12+24	9+9+9+9+12+12	
6+6+9+9+18	6+9+9+12+18	9+9+9+12+12		6+6+6+9+12+12	6+9+9+9+9+9	9+9+9+9+12+18	
6+6+9+9+24	6+9+9+12+24	9+9+9+12+18		6+6+6+9+12+18	6+9+9+9+9+12	9+9+9+9+12+24	
6+6+9+12+12	6+9+9+18+18	9+9+9+12+24		6+6+6+9+12+24	6+9+9+9+9+18	9+9+9+12+12+12	
Wall Mounted - 6K to 36K Cassette/Ducted - 9K to 24K							

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Outdoor Unit Dimensions and Connections



Model	W (in)	D (in)	H (in)
BMS500-AAM048-1CSXHD	37.48	16.34	52.48