

Climate 5000 Series - Gen 4

27K BTU Multi Zone Regular Outdoor Unit

Engineering
Submittal
Sheet



BOSCH

Overview and Project Information



Project name

Location

Architect

Engineer

General contractor

Reference #

Date

27K Btu Multi Zone Regular Outdoor Unit

Outdoor part number

8-733-962-696

Outdoor model number

BMS500-AAM027-1CSXRD

Efficiency Data

Ducted

Non-Ducted

Mixed Ducted & Non-Ducted

SEER2

21

25

23.0

EER2

12

13

12.5

HSPF2 (Region IV)

9

9.5

9.25

HSPF2 (Region V)

7

7

7.0

COP(47°F)

3.6

3.8

3.7

COP (5°F)

2.0

2.0

2.0

Performance Data

Ducted

Non-Ducted

Mixed Ducted & Non-Ducted

Cooling

Capacity Range (Btu/h)

7200~32000

7200~32000

7200-32000

Rated Capacity (Btu/h)

26600

27000

26800

Current (A)

11.5

9.2

10.35

Input Power (W)

2215

2076

2145.5

Heating

Capacity Range (Btu/h)

8400~28800

8400~29000

8400-28900

Rated Capacity (47°F)

26600

27000

26800

Capacity (5°F)

18800.0

19000.0

3.7

Current (A)

11

9.2

10.1

Input Power (W)

2165

2080

2122.5

Operation Range

ODU	Cooling (°F / °C)	-13~122 / -25~50
	Heating (°F / °C)	-13~75 / -25~24

Electrical Data

Power supply (V / Ø / Hz)	208-230 / 1 / 60
Min. circuit ampacity (A)	23
Max. fuse (A)	25

Compressor Data

Type:	Rotary
Refrigerant oil /oil charge (ml)	V74 / 620
Input (W)	805 / 2045
Rated current (A)	4.15 / 9.30

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Piping	
Refrigerant precharge (ft / m)	24.6(7.5)x4
Refrigerant charge (oz / kg)	84.66 / 2.4
Liquid side (in / mm)	4x1/4in / 4x6.35mm
Gas side (in / mm)	3x3/8in+1x1/2in / 3x9.52mm+1x12.7mm
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

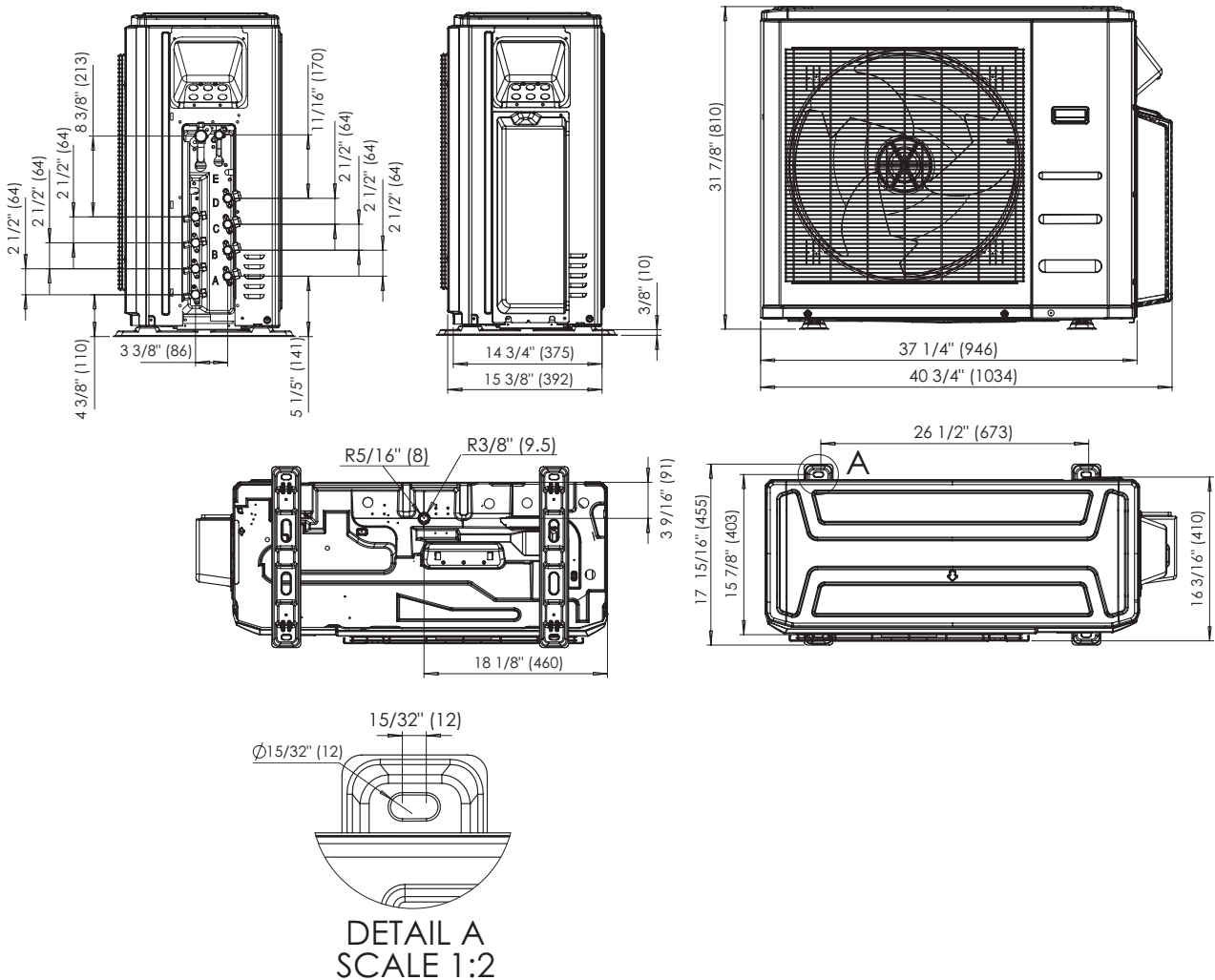
System Data		
Refrigerant type		R454B
Design pressure (PSIG)		550 / 340
Dehumidification (L/hr)		0.8
ODU	Fan motor model #	ZKFN-120-8-9
	Fan motor qty (ea)	1
	Fan motor input (W)	150.0
	Fan motor speed, H / M / L (RPM)	800 / 700 / 650
	Air flow, max (CFM)	2130.7
	Noise level, max (dB(A))	61
	Net weight (lbs / kg)	138.89 / 63.0
	Gross weight (lbs / kg)	149.69 / 67.9
IDU	Minimum # of indoors	1
	Maximum # of indoors	4

Multi Zone Pairing Information	1 ZONE	2 ZONE	3 ZONE	4 ZONE	5 ZONE
BMS500-AAM027-1CSXRD	18	6+6	6+6+6	6+6+6+6	
	24	6+9	6+6+9	6+6+6+9	
		6+12	6+6+12	6+6+6+12	
		6+18	6+6+18	6+6+9+9	
		6+24	6+6+24	6+6+9+12	
		9+9	6+9+9	6+9+9+9	
		9+12	6+9+12	6+9+9+12	
		9+18	6+9+18	9+9+9+9	
		9+24	6+12+12		
		12+12	6+12+18		
		12+18	9+9+9		
		12+24	9+9+12		
		18+18	9+9+18		
			9+12+12		
			12+12+12		
Capacities	Wall Mounted - 6K to 24K Cassette/Ducted - 9K to 24K				

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Outdoor Unit Dimensions and Connections



Model	W (in)	D (in)	H (in)
BMS500-AAM027-1CSXRD	37.24	16.14	31.89