

# Climate 5000 Series - Gen 4

## 27K BTU Multi Zone Max Performance Outdoor Unit

Engineering  
Submittal  
Sheet



# BOSCH

### Overview and Project Information



Project name

Location

Architect

Engineer

General contractor

Reference #

Date

### 27K Btu Multi Zone Max Performance Outdoor Unit

Outdoor part number

8-733-962-700

Outdoor model number

BMS500-AAM027-1CSXHD

#### Efficiency Data

##### Ducted

##### Non-Ducted

##### Mixed Ducted & Non-Ducted

SEER2

19

23

21.0

EER2

12

12.5

12.25

HSPF2 (Region IV)

9.5

10.5

10.0

HSPF2 (Region V)

7.7

8.5

8.1

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)

7200~38000

7200~37000

7200~38000

Rated Capacity (Btu/h)

28000

27000

27500

Current (A)

10.5

9.5

10.0

Input Power (W)

2333

2125

2229.0

Heating

Capacity Range (Btu/h)

8400~38500

8400~36000

8400~37250

Rated Capacity (47°F)

28000

27000

27500

Capacity (5°F)

27000

27000

27000

Current (A)

10

9.1

9.6

Input Power (W)

2279

2082

2180.5

### 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)	30
Max. fuse (A)	35

### Compressor Data

Type:	Rotary
Refrigerant oil /oil charge (ml)	VG74 / 1000
Input (W)	2765
Rated current (A)	5.4

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Piping	
Refrigerant precharge (ft / m)	24.6(7.5)x4
Refrigerant charge (oz / kg)	120.63 / 3.42
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

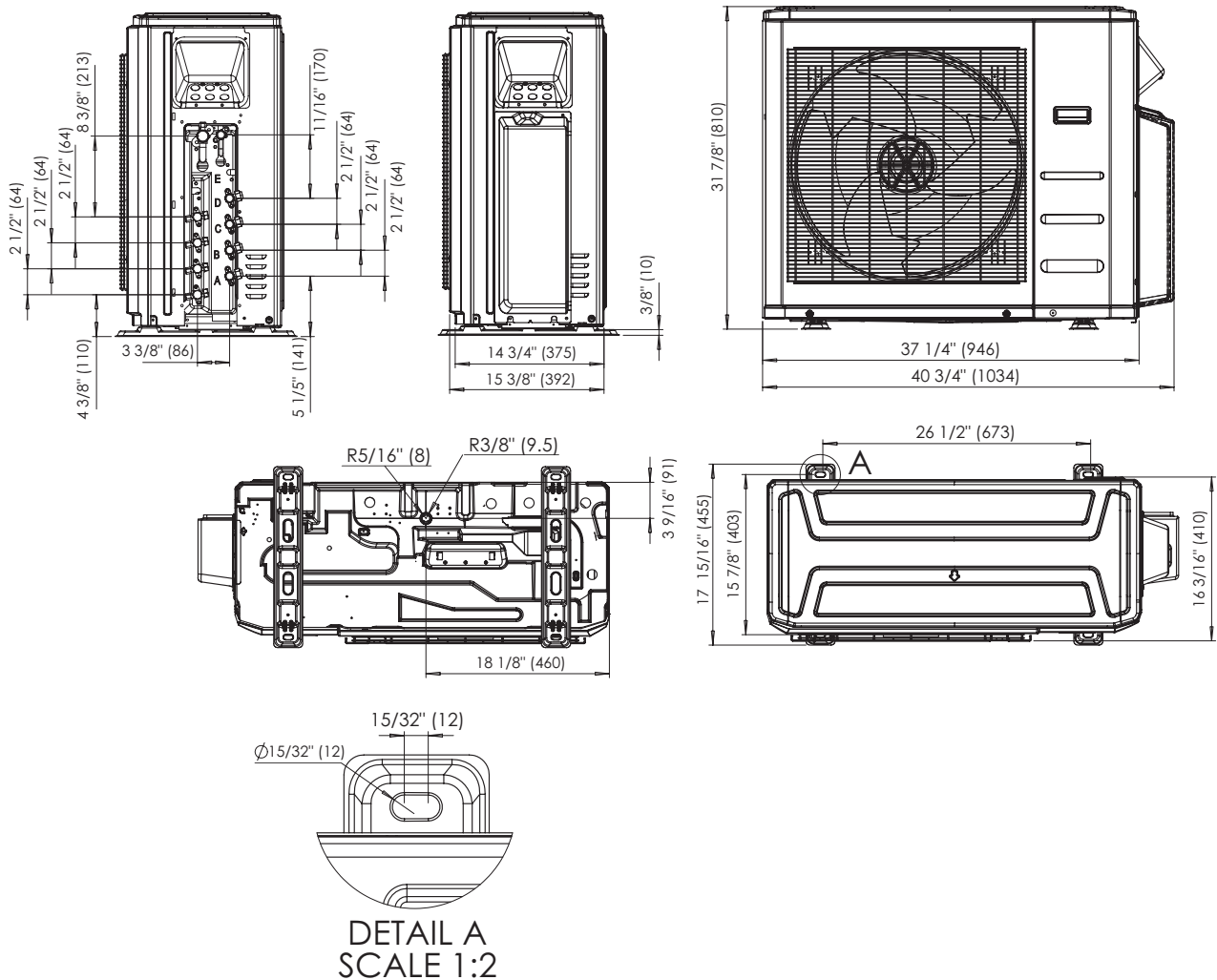
System Data		
Refrigerant type		R454B
Design pressure (PSIG)		550 / 340
Dehumidification (L/hr)		0.423
ODU	Fan motor model #	ZKFN-120-8-9
	Fan motor qty (ea)	1
	Fan motor input (W)	150.0
	Fan motor speed, H / M / L (RPM)	800 / 750 / 600
	Air flow, max (CFM)	2148.4
	Noise level, max (dB(A))	61
	Net weight (lbs / kg)	168.43 / 76.4
IDU	Gross weight (lbs / kg)	179.67 / 81.5
	Minimum # of indoors	1
IDU	Maximum # of indoors	4

Multi Zone Pairing Information	1 ZONE	2 ZONE	3 ZONE		4 ZONE		5 ZONE
BMS500-AAM027-1CSXHD	24	6+18	6+6+6	9+9+12	6+6+6+6	6+9+9+18	
	30	6+24	6+6+9	9+9+18	6+6+6+9	6+9+9+24	
		9+9	6+6+12	9+9+24	6+6+6+12	6+9+12+12	
		9+12	6+6+18	9+12+12	6+6+6+18	6+9+12+18	
		9+18	6+6+24	9+12+18	6+6+6+24	6+12+12+12	
		9+24	6+9+9	9+12+24	6+6+9+9	6+12+12+18	
		12+12	6+9+12	9+18+18	6+6+9+12	9+9+9+9	
		12+18	6+9+18	12+12+12	6+6+9+18	9+9+9+12	
		12+24	6+9+24	12+12+18	6+6+9+24	9+9+9+18	
		18+18	6+12+12	12+12+24	6+6+12+12	9+9+12+12	
			6+12+18	12+18+18	6+6+12+18	9+9+12+18	
			6+12+24		6+6+12+24	9+12+12+12	
			6+18+18		6+6+18+18	12+12+12+12	
			6+18+24		6+9+9+9		
			9+9+9		6+9+9+12		
Capacities	Wall Mounted - 6K to 30K Cassette/Ducted - 9K to 24K						

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Outdoor Unit Dimensions and Connections



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