

Climate 5000 Series

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 Regular System Outdoor Unit

Outdoor part number	8733956203		
Outdoor model number	BMS500-AAM027-1CSXHC		
Efficiency Data	Ducted	Non-Ducted	Mixed Ducted & Non-Ducted
SEER2	20	23	21.5
EER2	11.7	12.5	12.1
HSPF2 (Region IV)	9.5	10.6	10.1
HSPF2 (Region V)	7.5	8.1	7.8
COP(47°F)	3.52	3.66	3.59
COP(5°F)	1.8	1.8	1.8
Performance Data	Ducted	Non-Ducted	Mixed Ducted & Non-Ducted
Cooling	Capacity Range (Btu/h)	7683-33512	7995-32826
	Rated Capacity (Btu/h)	28000	28000
	Current (A)	10.91	12.40
	Input Power (W)	2435	2240
Heating	Capacity Range (Btu/h)	4508-38388	5035-38712
	Rated Capacity (47°F)	28000	28000
	Capacity (5°F)	25000	25000
	Current (A)	11.00	10.50
	Input Power (W)	2331	2240

Operation Range

ODU	Cooling (°F / °C)	-22~122 / -30~50
	Heating (°F / °C)	-22~86 / -30~30
Electrical Data		
Power supply (V / Ø / Hz)		208-230 / 1 / 60
Min. circuit ampacity (A)		25.0
Max. fuse (A)		40.0

Compressor Data

Type:	Rotary
Refrigerant oil /oil charge (ml)	VG74 / 1000
Input (W)	2600
Rated current (A)	20.0

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Piping	
Refrigerant precharge (ft / m)	74 / 22.5
Refrigerant charge (oz / g)	134.04 / 3800
Liquid side (in / mm)	1/4" / Ø6.35 (Qty. 3)
Gas side (in / mm)	3/8" / Ø9.52 (Qty. 3)
Additional charge per ft - liquid side (oz / g)	0.161 / 15
Additional charge per ft - gas side (oz / g)	0.322 / 30
Max. refrigerant pipe length (ft / m)	197 / 60
Max. length to one IDU (ft / m)	98 / 30
Max. height difference between IDU and ODU (ft / m)	49 / 15
Max. height difference between IDU's (ft / m)	33 / 10

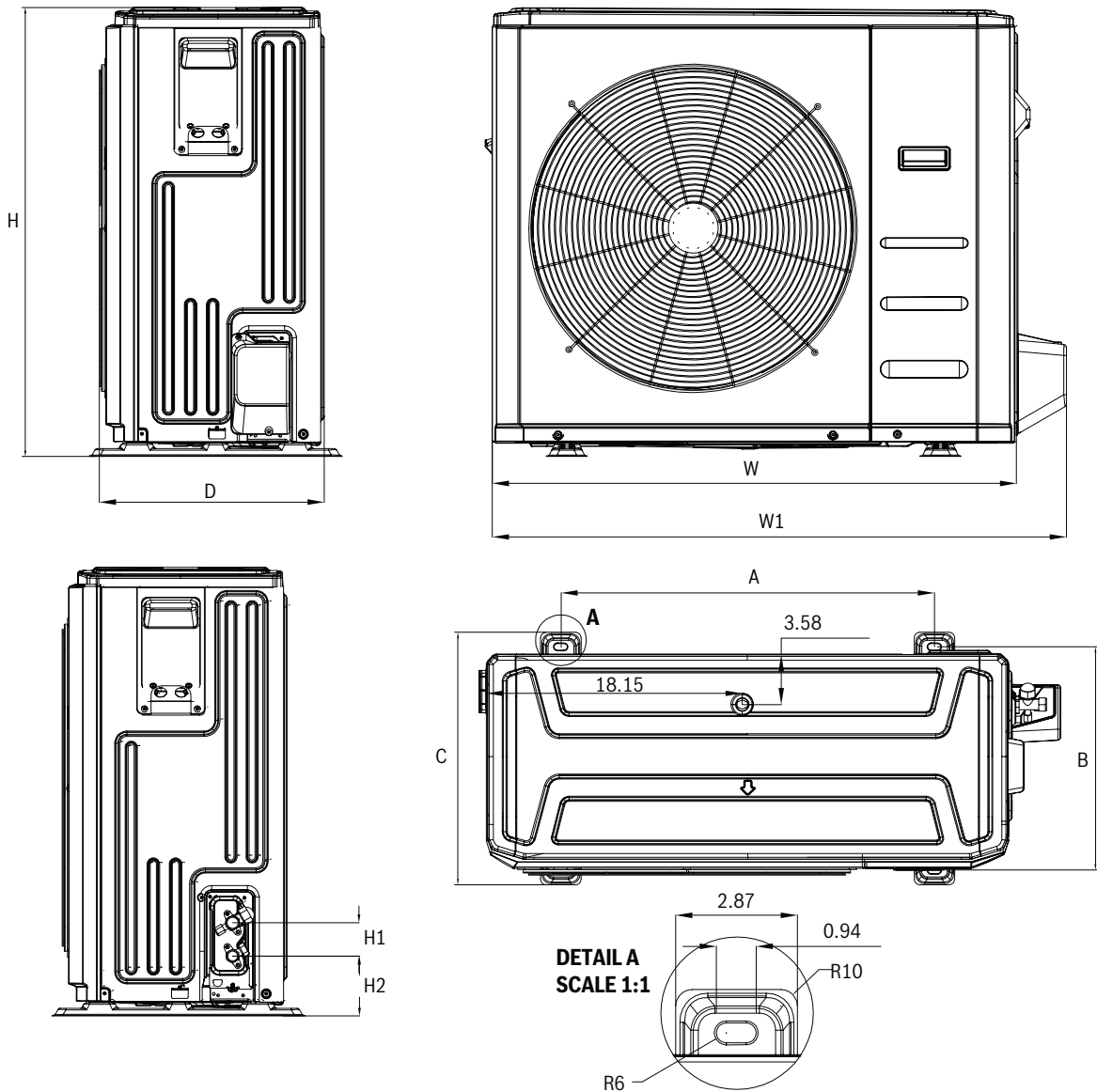
System Data		
Refrigerant type		R410A
Design pressure (PSIG)		550/340
Dehumidification (pts/hr)		6.33
ODU	Fan motor model #	ZKFN-120-8-2
	Fan motor qty (ea)	1
	Fan motor input (W)	150.00
	Fan motor speed, H / M / L (RPM)	1000 / 900 / 750
	Air flow, max (CFM)	2147
	Noise level, max (dB(A))	63.0
	Net weight (lbs / kg)	167.99 / 76.2
IDU	Gross weight (lbs / kg)	179.67 / 81.5
	Minimum # of indoors	2
	Maximum # of indoors	3

Multi Zone Pairing Information	2 ZONE	3 ZONE	4 ZONE	5 ZONE
BMS500-AAM027-1CSXHC	6k + 12k	6k + 6k + 6k		
	6k + 18k	6k + 6k + 9k		
	9k + 9k	6k + 6k + 12k		
	9k + 12k	6k + 6k + 18k		
	9k + 18k	6k + 9k + 9k		
	12k + 12k	6k + 9k + 12k		
	12k + 18k	6k + 9k + 18k		
	18k + 18k	6k + 12k + 12k		
		6k + 12k + 18k		
		9k + 9k + 9k		
		9k + 9k + 12k		
		9k + 9k + 18k		
		9k + 12k + 12k		
		12k + 12k + 12k		

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Outdoor Unit Dimensions and Connections



Model	W (in)	D (in)	H (in)	W1 (in)	H1 (in)	H2 (in)	A (in)	B (in)	C (in)
BMS500-AAM027-1CSXHC	37.24	16.14	31.89	40.55	2.36	4.25	26.5	15.87	17.9