

Climate 5000 Series

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 8733956204

Outdoor model number BMS500-AAM048-1CSXHC

Efficiency Data

	Ducted	Non-Ducted	Mixed Ducted & Non-Ducted
SEER2	20.9	21.8	21.4
EER2	11.7	11.7	11.7
HSPF2 (Region IV)	8.9	9.8	9.4
HSPF2 (Region V)	7.4	7.6	7.5
COP(47°F)	3.7	3.8	3.8
COP(5°F)	2.0	2.0	2.0

Performance Data

	Ducted	Non-Ducted	Mixed Ducted & Non-Ducted
Cooling	Capacity Range (Btu/h)	18500-51000	19300-51000
	Rated Capacity (Btu/h)	47000	48000
	Current (A)	18.20	18.00
	Input Power (W)	4020	4190
Heating	Capacity Range (Btu/h)	12000-59000	11500-58000
	Rated Capacity (47°F)	49000	49000
	Capacity (5°F)	42500	45000
	Current (A)	17.20	17.80
	Input Power (W)	3900	3780

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)	42.0
Max. fuse (A)	50.0

Compressor Data

Type:	Rotary
Refrigerant oil /oil charge (ml)	VG74/1460
Input (W)	3565
Rated current (A)	26

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Piping	
Refrigerant precharge (ft / m)	123 / 37.5
Refrigerant charge (oz / g)	162 / 4600
Liquid side (in / mm)	1/4" / Ø6.35 (Qty. 5)
Gas side (in / mm)	3/8" / Ø9.52 (Qty. 3) 1/2" / Ø12.7 (Qty. 2)
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)	262 / 80
Max. length to one IDU (ft / m)	115 / 35
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)		11.63
ODU	Fan motor model #	ZKFN-85-8-22-5
	Fan motor qty (ea)	2
	Fan motor input (W)	126.0
	Fan motor speed, H / M / L (RPM)	900 / 850 / 800 / 750
	Air flow, max (CFM)	4500
	Noise level, max (dB(A))	65.0
	Net weight (lbs / kg)	238.32 / 108.1
	Gross weight (lbs / kg)	269.84 / 122.4
IDU	Minimum # of indoors	2
	Maximum # of indoors	5

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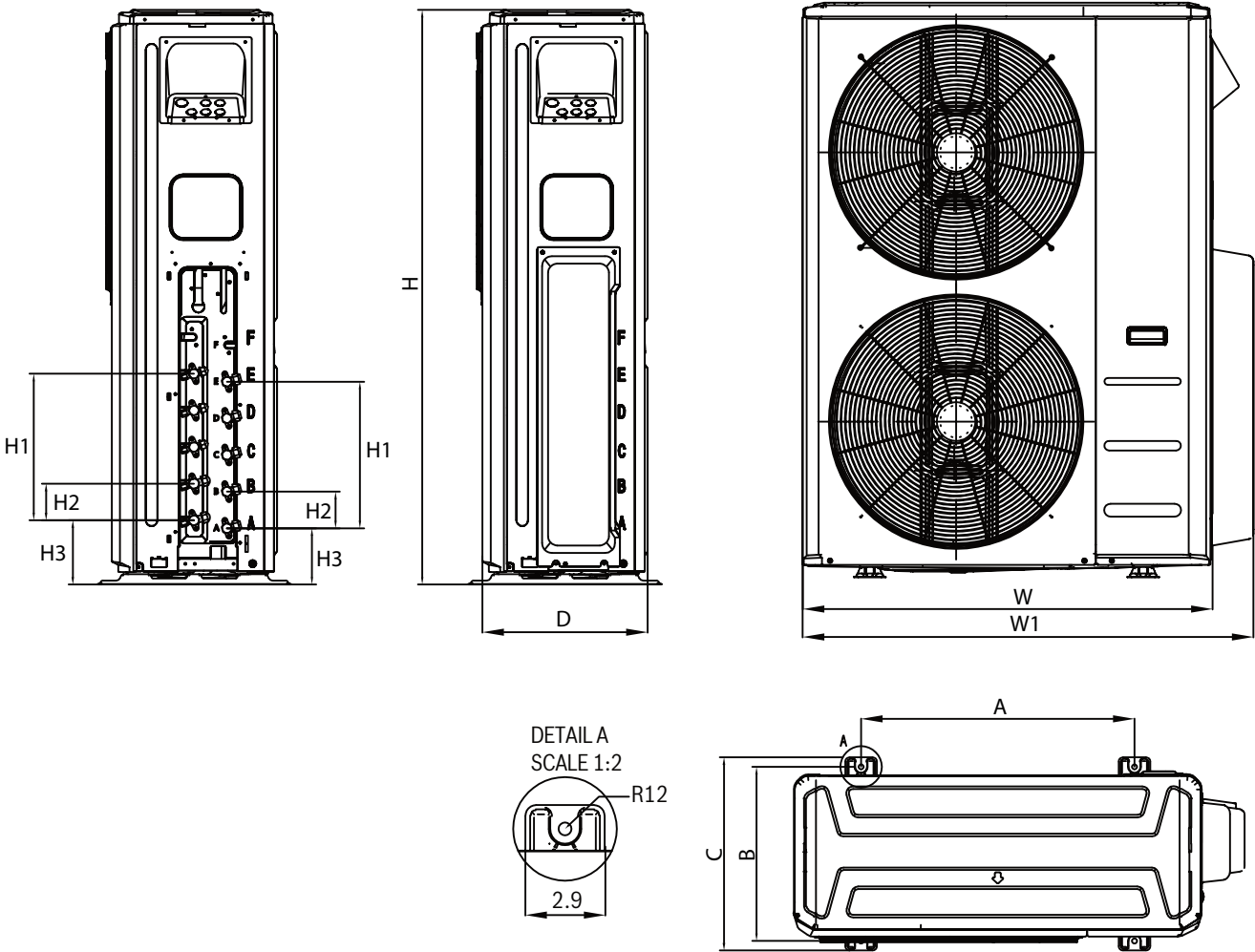
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Multi Zone Pairing Information	2 ZONE	3 ZONE	4 ZONE	5 ZONE
BMS500-AAM048-1CSXHC	9+24	6+6+24	6+6+6+18	6+6+6+6+9
	9+30	6+6+30	6+6+6+24	6+6+6+6+12
	9+36	6+6+36	6+6+6+30	6+6+6+6+18
	12+24	6+9+24	6+6+6+36	6+6+6+6+24
	12+30	6+9+30	6+6+9+18	6+6+6+6+30
	12+36	6+9+36	6+6+9+24	6+6+6+6+36
	18+18	6+12+18	6+6+9+30	6+6+6+9+9
	18+24	6+12+24	6+6+9+36	6+6+6+9+12
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			9+12+18+24	9+9+9+12+24
			12+12+12+12	9+9+12+12+12
			12+12+12+18	9+9+12+12+18
			12+12+12+24	9+12+12+12+12
			12+12+18+18	12+12+12+12+12

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Outdoor Unit Dimensions and Connections



Model	W (in)	D (in)	H (in)	W1 (in)	H1 (in)	H2 (in)	H3 (in)	A (in)	B (in)	C (in)
BMS500-AAM048-1CSXHC	37.5	16.3	52.5	41.7	13.4	3.3	5.2	25	15.9	17.6