

Climate 5000 Series

36K BTU Multi Zone Max Performance Outdoor Unit

Engineering
Submittal
Sheet



BOSCH

Overview and Project Information



Project Name

Location

Architect

Engineer

General Contractor

Reference #

Date

36K Btu Multi Zone Max Performance Outdoor Unit

Outdoor part number		8733956227		
Outdoor model number		BMS500-AAM036-1CSXHC		
Efficiency Data		Ducted	Non-Ducted	Mixed Ducted & Non-Ducted
SEER2		19.0	22.2	20.6
EER2		11.7	13.6	12.7
HSPF2 (Region IV)		10	10.3	10.2
HSPF2 (Region V)		8.1	8.3	8.2
COP(47°F)		3.9	3.9	3.9
COP(5°F)		1.7	1.9	1.8
Performance Data		Ducted	Non-Ducted	Mixed Ducted & Non-Ducted
Cooling	Capacity Range (Btu/h)	17400-44000	17900-42000	17650-43000
	Rated Capacity (Btu/h)	36000	36000	36000
	Current (A)	14.20	11.80	13.00
	Input Power (W)	3180	2650	2915
Heating	Capacity Range (Btu/h)	13300-52000	12500-51300	12900-51650
	Rated Capacity (47°F)	37000	37000	37000
	Capacity (5°F)	33000	36000	34500
	Current (A)	12.20	12.00	12.10
	Input Power (W)	2795	2780	2788

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)		40.0
Max. fuse (A)		60.0

Compressor Data

Type:	Rotary
Refrigerant oil /oil charge (ml)	VG74/1400
Input (W)	3040
Rated current (A)	26

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Piping	
Refrigerant precharge (ft / m)	98 / 30
Refrigerant charge (oz / g)	162/4600
Liquid side (in / mm)	1/4" / Ø6.35 (Qty. 4)
Gas side (in / mm)	3/8" / Ø9.52 (Qty. 3) 1/2" / Ø12.7 (Qty. 1)
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

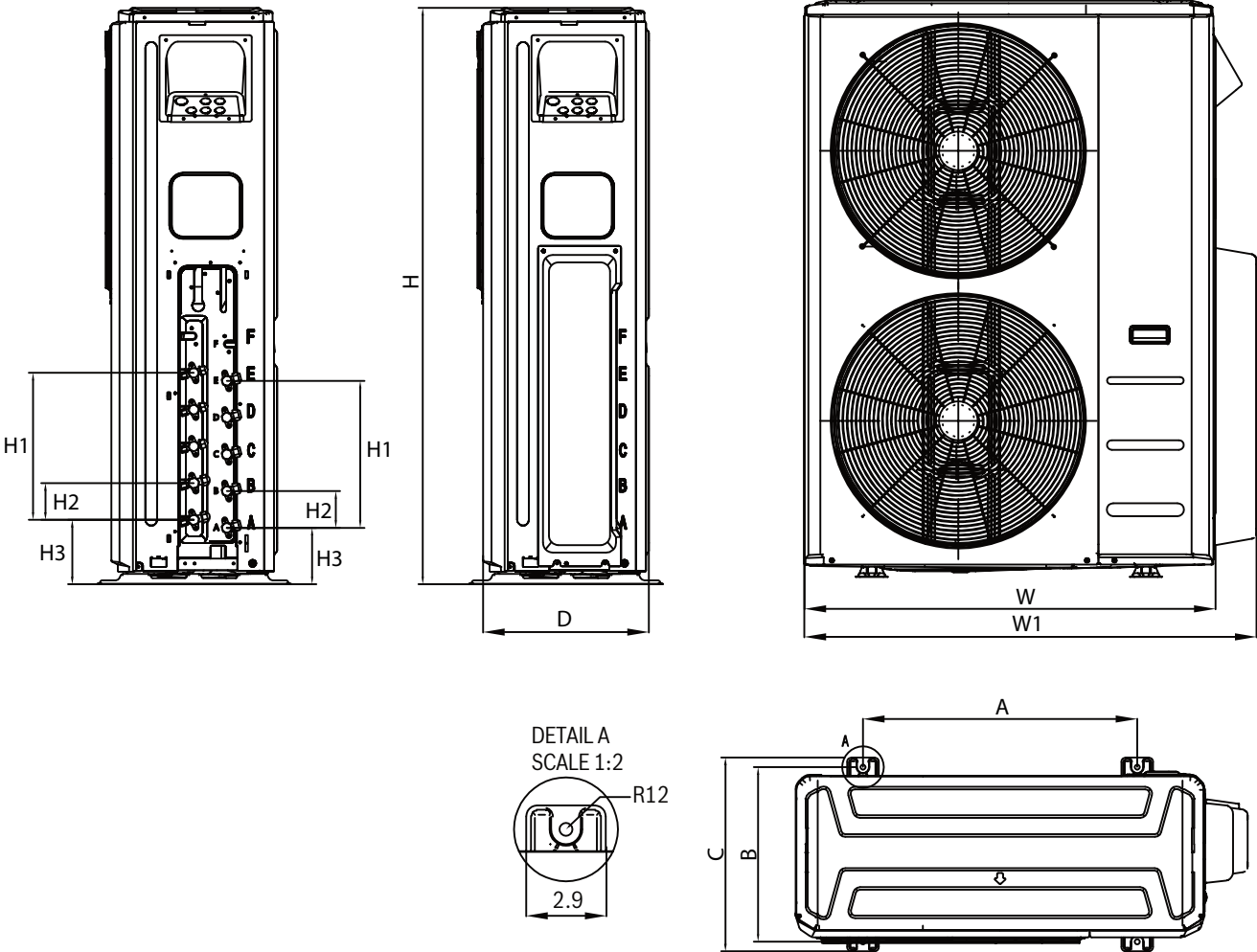
System Data		
Refrigerant type		R410A
Design pressure (PSIG)		550/340
Dehumidification (pts/hr)		8.45
ODU	Fan motor model #	ZKFN-85-8-22-5
	Fan motor qty (ea)	2
	Fan motor input (W)	126.0
	Fan motor speed, H / M / L (RPM)	800 / 700 / 600
	Air flow, max (CFM)	4500
	Noise level, max (dB(A))	63.0
	Net weight (lbs / kg)	223.77 / 101.5
IDU	Gross weight (lbs / kg)	255.07 / 115.7
	Minimum # of indoors	2
Maximum # of indoors		4

Multi Zone Pairing Information	2 ZONE	3 ZONE	4 ZONE	5 ZONE
BMS500-AAM036-1CSXHC	6k + 18k	6k + 6k + 12k	6k + 6k + 6k + 6k	
	6k + 24k	6k + 6k + 18k	6k + 6k + 6k + 9k	
	9k + 18k	6k + 6k + 24k	6k + 6k + 6k + 12k	
	9k + 24k	6k + 9k + 12k	6k + 6k + 6k + 18k	
	12k + 12k	6k + 9k + 18k	6k + 6k + 6k + 24k	
	12k + 18k	6k + 9k + 24k	6k + 6k + 9k + 9k	
	12k + 24k	6k + 12k + 12k	6k + 6k + 9k + 12k	
	18k + 18k	6k + 12k + 18k	6k + 6k + 9k + 18k	
	18k + 24k	6k + 12k + 24k	6k + 6k + 9k + 24k	
	24k + 24k	6k + 18k + 18k	6k + 6k + 12k + 12k	
		6k + 18k + 24k	6k + 6k + 12k + 18k	
		9k + 9k + 9k	6k + 6k + 12k + 24k	
		9k + 9k + 12k	6k + 9k + 9k + 9k	
		9k + 9k + 18k	6k + 9k + 9k + 12k	
		9k + 9k + 24k	6k + 9k + 9k + 18k	
		9k + 12k + 12k	6k + 9k + 9k + 24k	
		9k + 12k + 18k	6k + 9k + 12k + 12k	
		9k + 12k + 24k	6k + 9k + 12k + 18k	
		9k + 18k + 18k	6k + 12k + 12k + 12k	
		12k + 12k + 12k	6k + 12k + 12k + 18k	
		12k + 12k + 18k	9k + 9k + 9k + 9k	
		12k + 12k + 24k	9k + 9k + 9k + 12k	
		12k + 18k + 18k	9k + 9k + 9k + 18k	
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			9k + 9k + 12k + 18k	
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			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)	H3 (in)	A (in)	B (in)	C (in)
BMS500-AAM036-1CSXHC	37.5	16.3	52.5	41.7	13.4	3.3	5.2	25	15.9	17.6