

Climate 5000 Series - Gen 4

12K BTU Single Zone Regular System

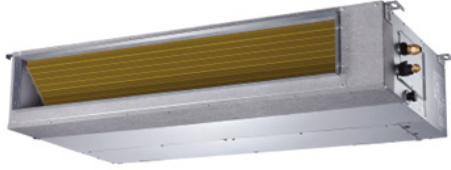
Ducted IDU

Engineering
 Submittal
 Sheet



BOSCH

Overview and Project Information



Project name	
Location	
Architect	
Engineer	
General contractor	
Reference #	

12K Btu Single Zone Regular System - Ducted IDU

Indoor part number		8-733-962-710
Indoor model number		BMS500-AAU012-1AHDXD
Outdoor part number		8-733-962-685
Outdoor model number		BMS500-AAS012-1CSXRD
Efficiency Data		AHRI 210/240 2023
SEER2		19.0
EER2		11.7
HSPF2 Region IV		10.2
HSPF2 Region V		8.0
COP(47F)		3.42
COP (5F)		2.25
Performance Data		AHRI 210/240 2023
Cooling	Capacity Range	3100~13000
	Rated Capacity	11500
	Current	4.5
	Input Power	983
Heating	Capacity Range	3700~15600
	Rated Capacity (47F)	12000
	Rated Capacity (5F)	8800
	Current	4.7
	Input Power	1028
Electrical Data		
Power supply (V / Ø / Hz)		208-230 / 1 / 60
Min. circuit ampacity indoor/outdoor (A)		3.0 / 12.0
Max. fuse indoor/outdoor (A)		15.0 / 15.0
Compressor Data		
Type:		Rotary
Refrigerant oil /oil charge (ml)		VG74 / 310
Input (W)		325 / 826
Rated current (RLA/A)		2.40 / 5.65
Piping		
Refrigerant precharge (oz/kg)		32.45 / 0.92
Length for precharge (ft/m)		24.6 / 7.5
Liquid side (in/mm)		1/4" / Ø6.35
Gas side (in/mm)		3/8" / Ø9.52
Additional Charge of Refrigerant (oz/ft)/(g/m)		0.16 / 15
Max. refrigerant pipe length (ft/m)		82.00 / 25
Max. difference in height (ft/m)		49.20 / 15

Operation Range

ODU	Cooling (°F / °C)	-13 ~ 122 / -25 ~ 50
	Heating (°F / °C)	-13 ~ 75 / -25 ~ 24
IDU	Cooling (°F / °C)	60 ~ 90 / 16 ~ 32
	Heating (°F / °C)	32 ~ 86 / 0 ~ 30

System Data

Refrigerant type		R454B
Design pressure (PSIG)		550 / 340
Dehumidification (pts/hr)		2.18
IDU	Fan motor model	ZKFN-81-8-1
	Fan motor qty (ea)	1
	Fan motor input (W)	150.0
	Fan speed, H / M / L (RPM)	1070 / 990 / 910
	Air flow, Turbo / H / M / L / Si (CFM)	400.2 / 323.7 / 264.9 / 176.6 / 117.7
	Noise level, Turbo / H / M / L / Si (dB(A))	N/A / 37 / 35 / 33.5 / 26
	Net weight (lbs / kg)	39.46 / 17.9
	Gross weight (lbs / kg)	46.74 / 21.2
ODU	ESP range (Pa)	0-100
	Drain pipe outside diameter in. (mm)	OD 0.98 (25)
	Fan motor model	ZKFN-34-10-1L
	Fan motor qty (ea)	1
	Fan motor input (W)	50
	Fan motor speed, H / / L (RPM)	800 / 700 / 600
	Air flow, Max (CFM)	1236.1
	Noise level, Max (dB(A))	55.5
Accessories	Net weight (lbs / kg)	62.17 / 28.2
	Gross weight (lbs / kg)	67.68 / 30.7

Accessories

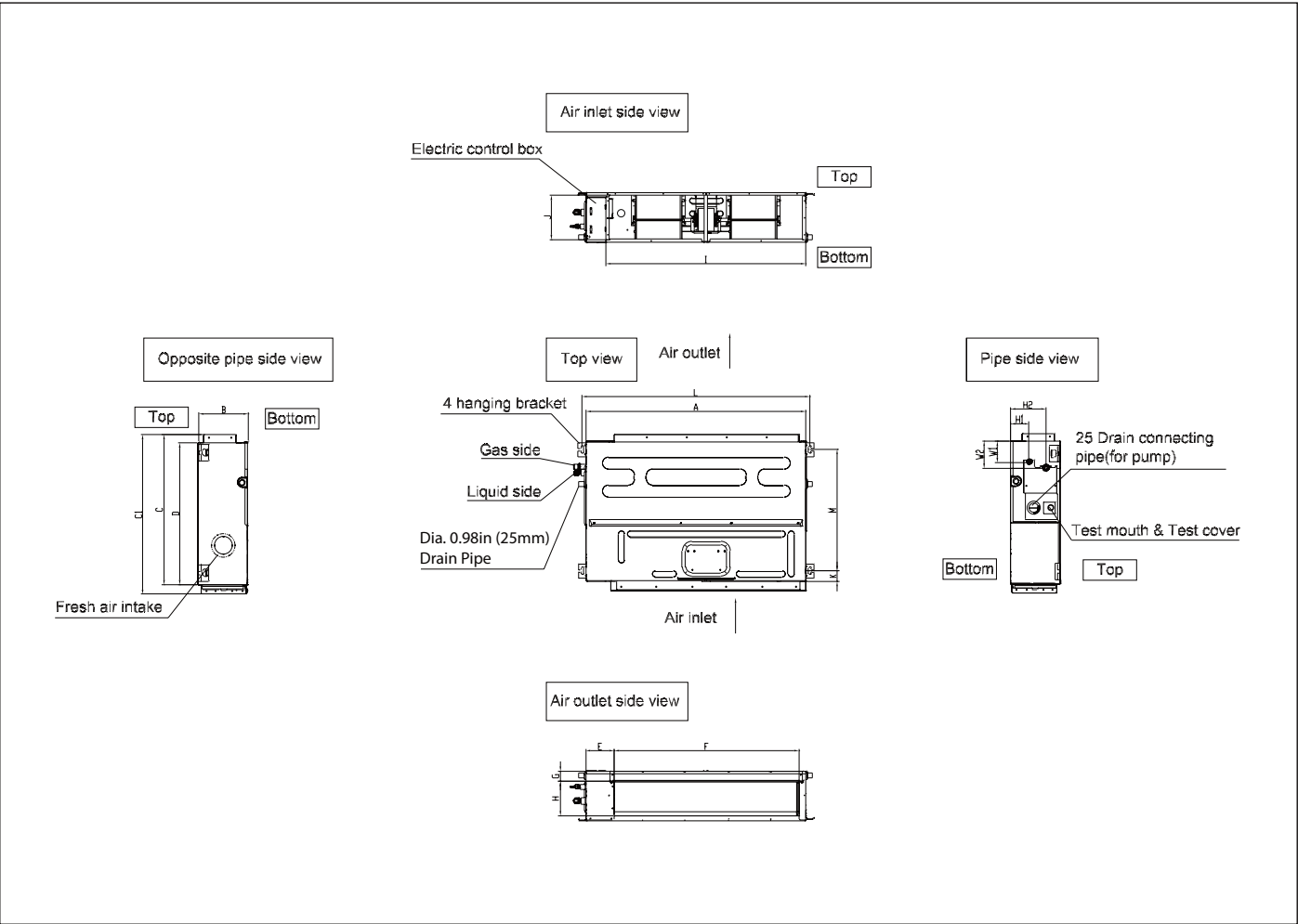
BMS-WT2-XXD (8733962707)	Wired Wall Thermostat
BMS-DRY-XXD (8733969263)	24V Interface
BMS-PK2-7X1 (8733951011)	25ft Lineset

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Indoor Unit Dimensions and Connections

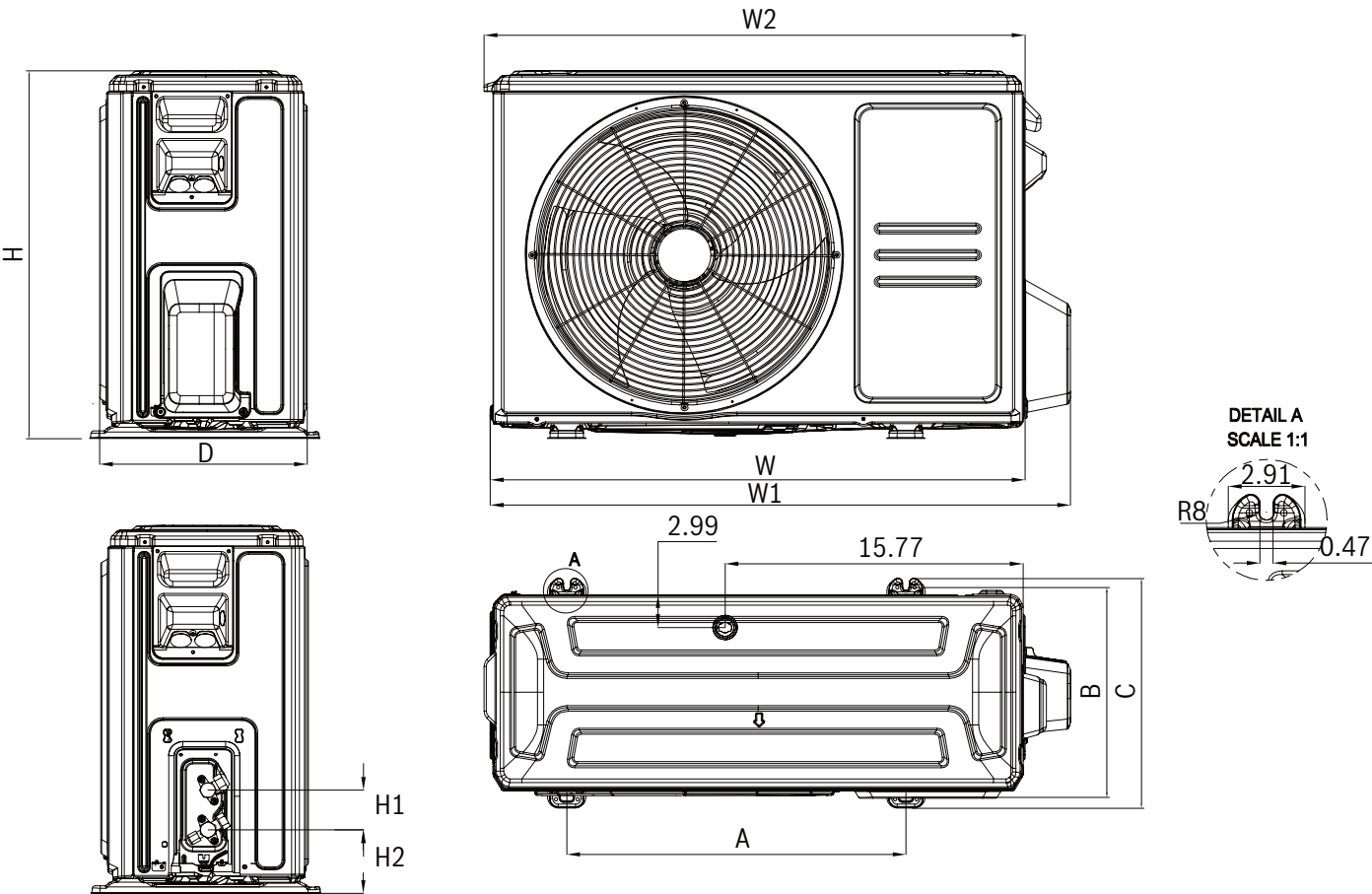


Model	Outline dimension (in)				Air outlet dimension (in)				Return air (in)			Mounting (in)		Gas and liquid valve (in)			
	A	B	C	D	E	F	G	H	I	J	K	L	M	H1	H2	W1	W2
BMS500-AAU012-1AHDXD	27.6	7.9	19.9	17.7	5.4	21.1	1.2	6.0	23.6	7.3	2.0	29.2	14.2	3.3	5.5	3.3	3.3

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Outdoor Unit Dimensions and Connections



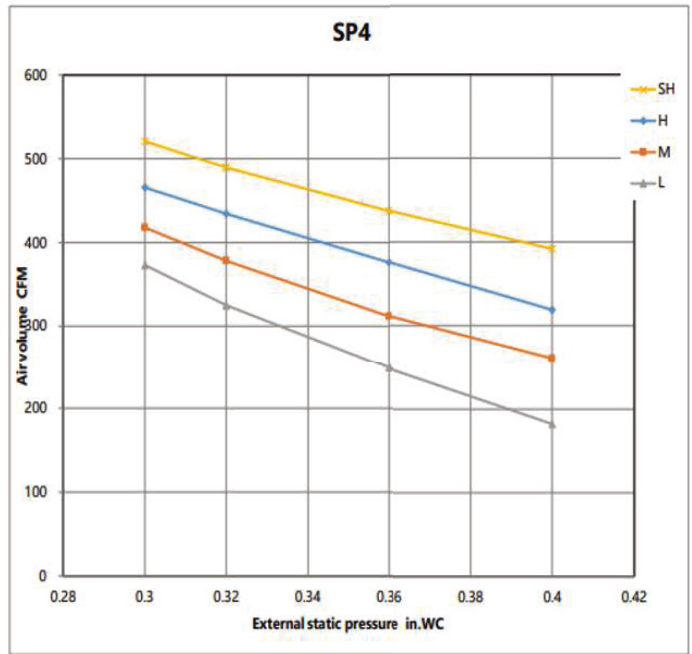
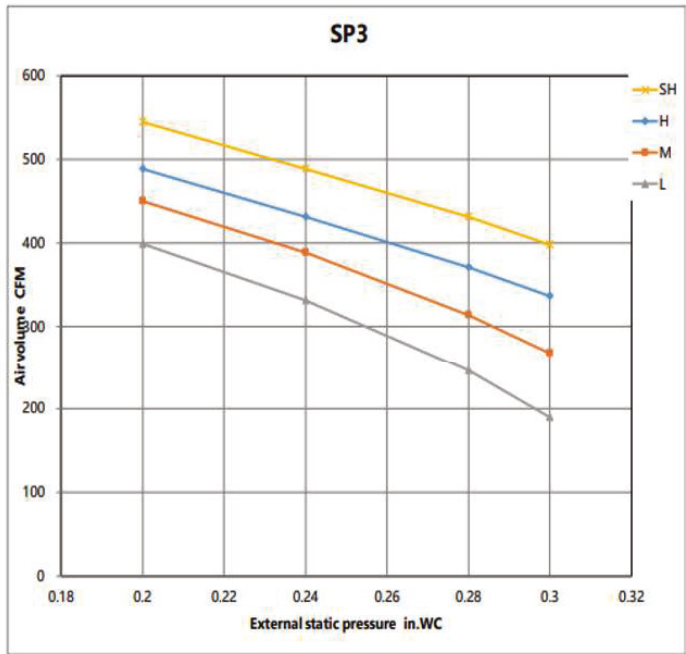
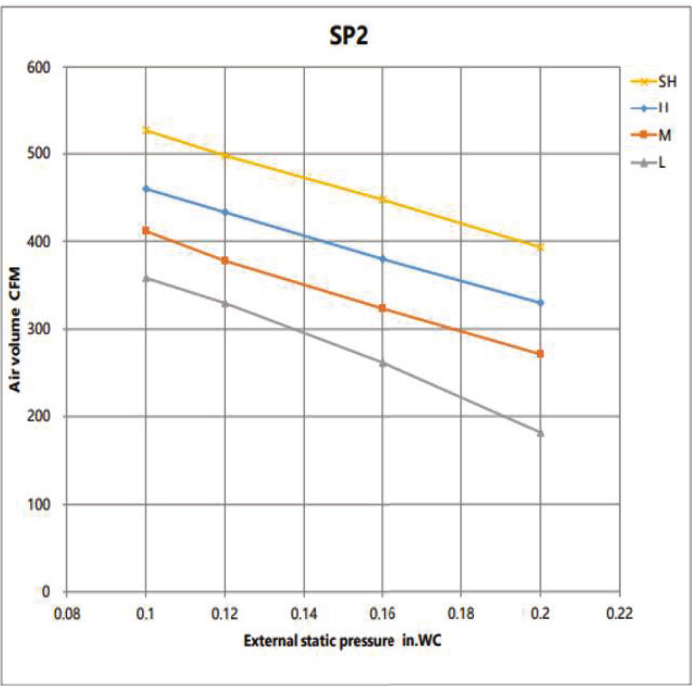
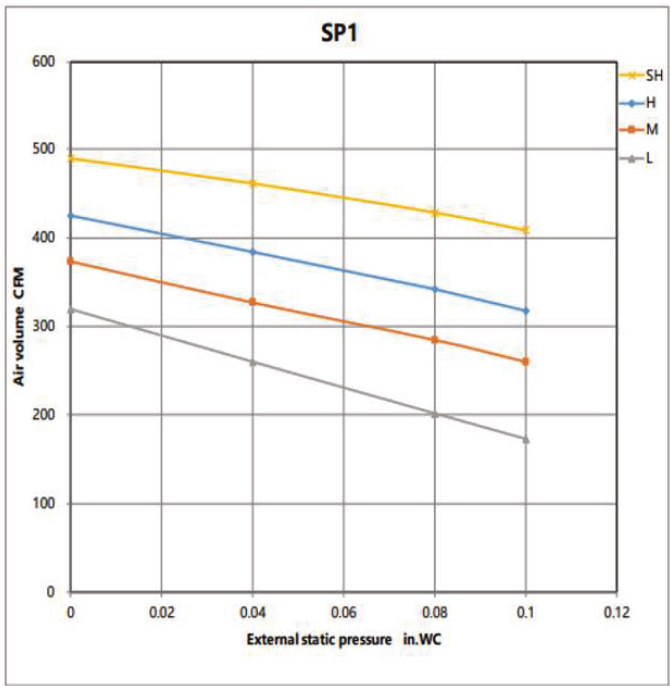
Model	W (in)	D (in)	H (in)	W1 (in)	W2 (in)	H1 (in)	H2 (in)	A (in)	B (in)	C (in)
BMS500-AAS012-1CSXRD	30.12	11.93	21.85	32.9	30.87	2.36	3.67	17.8	11.26	12.36

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Air Volume



Air Volume

