SAMSUNG

EHS Technical Data Book

EHS tank integrated Hydro Unit for Europe (Split, R32, 50Hz, HP)



Model : Outdoor unit (AE***RXED*G/EU)
Hydro unit (AE***RNWS*G/EU)

2. Outdoor Units

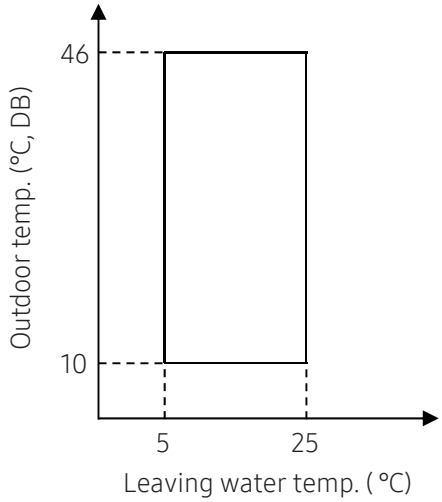
2-1. Specifications

Model Name		Indoor Unit				AE200RNWSEG/EU	AE200RNWSEG/EU	AE200RNWSEG/EU
		Outdoor Unit				AE040RXEDEG/EU	AE060RXEDEG/EU	AE090RXEDEG/EU
Power Supply					Φ, #, V, Hz	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50
Mode					-	Heat Pump (A2W)	Heat Pump (A2W)	Heat Pump (A2W)
System	Performance	Capacity	Cooling	A2W Condition #1 (A7/W35) [1]*	W	5,000	6,500	8,700
					Btu/h	17,100	22,200	29,700
			Heating	A2W Condition #1 (A7/W35) [1]*	W	4,400	6,000	9,000
					Btu/h	15,000	20,500	30,700
				A2W condition #2	W	4,200	5,600	8,600
				A2W condition #3		3,900	5,200	8,000
				A2/W35 [4]*		4,200	5,200	7,700
				A-7/W35 [4]*		4,600	5,500	7,900
	Power	Power Input	Cooling	A2W Condition #1 (A7/W35) [1]*	W	1,090	1,470	2,110
			Heating	A2W Condition #1 (A7/W35) [1]*		846	1,220	1,870
				A2W condition #2		1,090	1,510	2,330
				A2W condition #3		1,320	1,810	2,730
				A2/W35 [4]*		1,100	1,480	2,260
				A-7/W35 [4]*		1,550	2,000	2,900
		Current Input	Cooling	A2W Condition #1 (A7/W35) [1]*	A	4.90	6.70	9.70
			Heating			3.90	5.60	8.60
		Current	MCA		A	16.0	16.0	22.0
			MFA		A	20.0	20.0	27.5
	Efficiency	EER (Nominal Cooling) A2W condition #1				4.59	4.42	4.12
		COP (Nominal Heating) A2W condition #1				5.20	4.92	4.81
		COP		A2W condition #2	W/W	3.85	3.71	3.69
				A2W condition #3		2.95	2.87	2.93
				A2/W35 [4]*		3.82	3.51	3.41
				A-7/W35 [4]*		2.97	2.75	2.72
		PdesignH (LWT 35°C)				5,000	6,000	8,500
		SCOP (35°C)				4.58	4.58	4.45
		SCOP Class (35°C)				A+++	A+++	A+++
		SEER				4.40	4.73	5.09
	Refrigerant	Piping Connections		Liquid Pipe	Φ, mm	6.35	6.35	6.35
					Φ, inch	1/4	1/4	1/4
				Gas Pipe	Φ, mm	15.88	15.88	15.88
					Φ, inch	5/8	5/8	5/8
		Piping length (ODU IDU)		Max.[Equiv.]	m	30	30	35
		Level difference (IDU IDU)		Max.	m	20	20	20
		Chargeless Length			m	15	15	15
		Type			-	R32	R32	R32
		Factory Charging			kg	1.2	1.2	1.4
					tCO_2e	0.81	0.81	0.95
		Control Method			-	EEV	EEV	EEV
Outdoor Unit	Compressor	Type			-	BLDC Twin Rotary	BLDC Twin Rotary	BLDC Twin Rotary
		Model Name			-	UB4TN8200FE4SS	UB4TN8200FE4SS	UB8TN8265FJWSG
		Oil		Type	-	POE /650	POE /650	POE/700
		Quantity			EA	1	1	1
		Output			W	1623	1623	2078
		Starting method			-	Inverter driven	Inverter driven	Inverter driven
	Heat exchanger	Length			mm	906.8	906.8	950
		Rows	Quantity		EA	2	2	2
		Fin pitch			mm	1.5	1.5	1.5
		Passes	Quantity		EA	4	4	8
		Face area			m^2	0.53	0.53	0.92
		Stages	Quantity		EA	28	28	46
		Tube type			-	Φ7	Φ7	Φ7
		Fin	Type		-	Corrugate	Corrugate	Wide Louver
			Treatment		-	NGS	NGS	Anti Salt

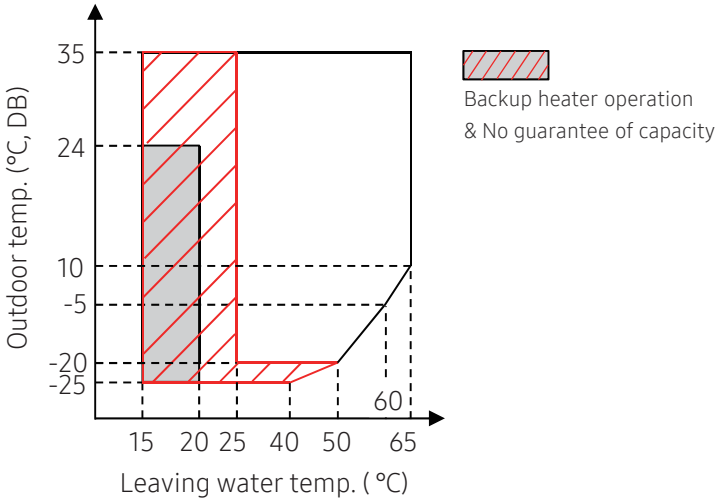
2. Outdoor Units

2-6. Operation range

1) Cooling



2) Heating



MONO Outdoor Unit		Water Temp. (°C)			Water Flow Rates (LPM)			Air Temp. (°C, DB/WB)		
		Min	Std	Max	Min	Std	Max	Min	Std	Max
Controller	Cooling	5	-	25						
	Heating	15	-	65						
Cooling	Inlet	-	23 (12*2)	30	12 (7*1)	Δ 5°C	58 (48*1)	10/-	35/24	46/28
	Outlet	5	18 (7*2)	25						
Heating	Inlet	5	30 (40*2)	-				-25/-	7/6	35/24
	Outlet	25 (15*3)	35 (45*2)	65						

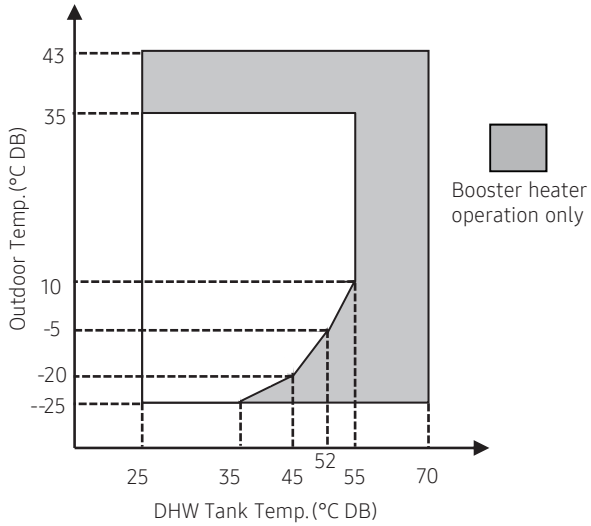
*1) Model : AE040RXEDEG
AE060RXEDEG
AE090RXEDEG
AE090RXEDGG

*2) Eurovent Test Condition #2

*3) Back up heater operation.

※ Operation of outdoor unit possible, but no guarantee of capacity in this condition.
(-25°C ≤ Outdoor temp <-20°C)

3) DHW (Domestic Hot Water Tank)



※ Special condition(35°C < Outdoor temp. ≤ 43°C) is operated by only Booster Heater.
SAMSUNG doesn't supply DHW for EHS Split.
Since it is a reference data, you have to check DHW operation range for yours.