EHS Specification - Split (A2W)







Outdoor Unit (Split)

• Outdoor unit works with Air-to-Water (A2W) Hydro unit to supply hot water

Model				AEX060EDEHA	AEX100EDEHA	AEX125EDEHA	AEX140EDEHA	AEX140EDEHA
Hydro Unit				AEN080YDEHA	AEN080YDEHA	AEN160YDEHA	AEN160YDEHA	AEN160YDEHA
Mode				Heat Pump (A2W Only)				
Power Supply			Ф, #, V, Hz	1,220-240,50	1,220-240,50	1,220-240,50	1,220-240,50	1,220-240,50
	Nominal Capacity ¹⁾		W	5,800	10,000	12,500	14,000	16,000
		Heating	Btu/h	19,800	34,100	42,700	47,800	54,600
			W	5,300	9,100	15,000	16,200	17,400
		Cooling	Btu/h	18,100	31,000	51,200	55,300	59,400
	Nominal Power Input ^{*1)}	Heating	W	1,220	2,220	2,660	3,110	3,720
Performance (A2W #1)		Cooling	W	1,905	2,890	4,350	5,150	6,000
(A2W#1) -	Nominal Current Input ^{*1)}	Heating	A	5.7	9.70	11.70	13.70	16.30
		Cooling	A	8.8	12.70	19.10	22.60	26.40
	COP(Heating) ¹¹⁾		W	4.75	4.50	4.70	4.50	4.30
	EER(Cooling) ^{*1)}		W	3.50	3.15	3.45	3.15	2.90
	ESEER ²⁾		A	4.50	4.60	4.80	4.75	4.70
Electric	MCA		A	20.0	22.0	28.0	30.0	32.0
Specification	MFA		A	25.0	27.5	35.0	37.5	40.0
	Compressor	Type		Rotary Inverter				
Refrigerant Side		Model		UG4T200FUAE4	UG8T300FUBJU	UG5T450FUEJX	UG5T450FUEJX	UG5T450FUEJX
	Oil	Type		POE	POE	POE	POE	POE
	Refrigerant	Type		R410A	R410A	R410A	R410A	R410A
	Piping Connections	Liquid	Φ, mm (inch)	6.35(1/4")	9.52(3/8")	9.52(3/8")	9.52(3/8")	9.52(3/8")
		Gas	Φ, mm (inch)	15.88(5/8")	15.88(5/8")	15.88(5/8")	15.88(5/8")	15.88(5/8")
	Installation Limitation	Length	m	30	50	50	50	50
		Height	m	20	30	30	30	30
Base Heater (Opt	ion)	Capacity	W	N/A	150	150	150	150
	Sound Pressure ¹³⁾	Heating	dB(A)	53	50	50	50	53
Sound		Cooling	dB(A)	54	52	51	53	54
	Sound Power		dB(A)	62	66	64	66	68
External Dimension	Weight	Net	kg	47.5	74	98	98	98
		Gross	kg	52.5	82	108	108	108
	Dimensions (WxHxD)	Net	mm	880x638x310	940x998x330	940x1,420x330	940x1,420x330	940x1,420x330
		Gross	mm	1,024x750x414	995x1,906x426	995x1,548x426	995x1,548x426	995x1,548x426
Operating Range -	Ambient (A2W)	Heating	°C	-20~35	-20~35	-20~35	-20~35	-20~35
		Cooling	°C	10~46	10~46	10~46	10~46	10~46
		DHW	°C	-20-43	-20~43	-20~43	-20~43	-20~43
	Leaving Water	Heating	°C	25~55	25~55	25~55	25~55	25~55
		Cooling	°C	5~25	5~25	5~25	5~25	5~25

^{*1)~2)} A2W rating conditions in accordance with Eurovent Rating Standard for Liquid Chilling Packages 6/C/003-2008.

¹⁾ A2W Condition #1 : (Heating) Water In/Out 30°C/S5°C, Outdoor Air 7°CDB/6°CWB; (Cooling) Water In/Out 23°C/18°C, Outdoor Air 35°CDB.

*2) A2W Condition for ESEER(Cooling) at Water Out 18°C.

^{*3)} Sound level was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.

EHS Specification - Split (A2W)



Outdoor Unit (Split)

Model				AEX125EDGHA	AEX140EDGHA	AEX160EDGHA
Hydro Unit				AEN160YDGHA	AEN160YDGHA	AEN160YDGHA
Mode				Heat Pump (A2W Only)	Heat Pump (A2W Only)	Heat Pump (A2W Only)
Power Supply Φ , #, V, Hz			Ф, #, V, Hz	3,380~415,50	3,380~415,50	3,380~415,50
		Heatler	W	12,500	14,000	16,000
	Nominal	Heating	Btu/h	42,700	47,800	54,600
	Capacity ^{*1)}	Cooling	W	15,000	16,200	17,400
			Btu/h	51,200	55,300	59,400
	Nominal Power Input ^{*1)}	Heating	W	2,660	3,110	3,720
Performance (A2W #1)		Cooling	W	4,350	5,150	6,000
(A244 #1)	Nominal Current Input ^{*1)}	Heating	A	4.20	4.90	5.80
		Cooling	A	6.80	8.10	9.40
	Nominal Heating (COP) ^{*1)}		W	4.70	4.50	4.30
	Nominal Cooling (EER) ^{*1)}		W	3.45	3.15	2.90
	ESEER ²⁾		A	4.80	4.75	4.70
Electric	MCA		A	10.0	11.0	12.0
Specification	MFA		A	12.5	13.8	15.0
	Compressor	Туре	-	Rotary Inverter	Rotary Inverter	Rotary Inverter
		Model	-	UG5T450FUEJX	UG5T450FUEJX	UG5T450FUEJX
	Oil	Type		POE	POE	POE
	Refrigerant	Type		R410A	R410A	R410A
Refrigerant Side	Piping Connections	Liquid	Φ, mm (inch)	9.52(3/8")	9.52(3/8")	9.52(3/8")
		Gas	Φ, mm (inch)	15.88(5/8")	15.88(5/8")	15.88(5/8")
	Installation Limitation	Length	m	50	50	50
		Height	m	30	30	30
Base Heater (Option) Capacity W		150	150	150		
	Sound Pressure ⁽³⁾	Heating	dB(A)	50	50	53
Sound		Cooling	dB(A)	51	53	54
	Sound Power		dB(A)	64	66	68
	Weight	Net	kg	98	98	98
External		Gross	kg	108	108	108
	Dimensions (WxHxD)	Net	mm	940x1,420x330	940x1,420x330	940x1,420x330
		Gross	mm	995x1,548x426	995x1,548x426	995x1,548x426
Operating Range –	Ambient (A2W)	Heating	℃	-20~35	-20~35	-20~35
		Cooling	℃	10~46	10~46	10~46
		DHW	°C	-20~43	-20~43	-2043
	1 / 10/	Heating	°C	25~55	25~55	25~55
	Leaving Water	Cooling	°C	5~25	5~25	5~25

EHS Specification - TDM (A2W & A2A), Split (A2W)







Hydro Unit

• Combining with TDM or Split Outdoor units

				TDM		SPLIT		
Model				NH080PHXEA	NH160PHXEA	AEN080YDEHA	AEN160YDEHA	AEN160YDGHA
Power Supply			Ф, #, V, Hz	1,220-240,50	1,220-240,50	1,220-240,50 3,380-415,50	1,220-240,50 3,380-415,50	1,220-240,50 3,380-415,50
Performance -	Nominal Capacity	Heating	W	6,000 / 7,000 / 8,000	11,000 / 14,000 / 16,000	5,200 / 10,000	12,500 / 14,000 / 16,000	12,500 / 14,000 / 16,000
		Cooling	W	7,000 / 7,500 / 8,000	11,300 / 14,200 / 15,600	5,000 / 9,000	11,200 / 12,500 / 14,000	11,200 / 12,500 / 14,000
	Leaving Water Temp. Range	Heating	°C	15~55 (H/P : 25~55)	15~55 (H/P: 25~55)	15~55 (H/P: 25~55)	15~55 (H/P: 25~55)	15~55 (H/P: 25~55)
		Cooling	°C	5~25	5~25	5~25	5~25	5~25
Water Side	Required Water Pressure		bar	Max 3.0	Max 3.0	Max 3.0	Max 3.0	Max 3.0
	Required Flow Rate		LPM	Min 12.0	Min 16.0	Min 12.0	Min 16.0	Min 16.0
	Piping Connections	In/Out	Φ, inch	1 1/4" (BSPP)	1 1/4" (BSPP)	1 1/4" (BSPP)	1 1/4" (BSPP)	1 1/4" (BSPP)
Refrigerant Side	Piping Connections	Liqud	Φ, mm(inch)	9.52(3/8")	9.52(3/8")	9.52(3/8")	9.52(3/8")	9.52(3/8")
		Gas	Φ, mm(inch)	15.88(5/8")	15.88(5/8")	15.88(5/8")	15.88(5/8")	15.88(5/8")
Hvdro Unit	Water Pump	Flow Rate	kg/min	17.0 / 20.5 / 23.0	31.5 / 40.1 / 45.9	17.0 / 20.5 / 23.0	31.5 / 40.1 / 45.9	31.5 / 40.1 / 45.9
	Electric Heater	Input Power	W	4,000	6,000	4,000	6,000	6,000
	Expansion Vessel	Volume	Liter		8	8	8	8
Parts	Pressure Relief Valve	Relief Pressure	bar	2.9	2.9	2.9	2.9	2.9
	Air Purge Valve	Size	Φ, inch	3/8" (BSPP male)	3/8" (BSPP male)	3/8" (BSPP male)	3/8" (BSPP male)	3/8" (BSPP male)
	Service Valve	Size	Φ, inch	1 1/4" (BSPP male)	1 1/4" (BSPP male)	1 1/4" (BSPP male)	1 1/4" (BSPP male)	1 1/4" (BSPP male)
External Dimension	Weight	Net	kg	45	48	45	48	45
		Gross	kg	55	58	55	58	55
	Dimensions	Net	mm	510x850x315	510x850x315	510x850x315	510x850x315	510x850x315
	(WxHxD)	Gross	mm	564x1,024x412	564x1,024x412	564x1,024x412	564x1,024x412	564x1,024x412
External Control -	Back up Boiler			230VAC 1A(DO)	230VAC 1A(DO)	230VAC 1A(DO)	230VAC 1A(DO)	230VAC 1A(DO)
	Room Thermostat			230VAC 1A(DI)	230VAC 1A(DI)	230VAC 1A(DI)	230VAC 1A(DI)	230VAC 1A(DI)
	Solar Pump			230VAC 1A(DI)	230VAC 1A(DI)	230VAC 1A(DI)	230VAC 1A(DI)	230VAC 1A(DI)
	Valves, 2 or 3way			230VAC 1A(DO)	230VAC 1A(DO)	230VAC 1A(DO)	230VAC 1A(DO)	230VAC 1A(DO)

^{*1)-2)} A2W rating conditions in accordance with Eurovent Rating Standard for Liquid Chilling Packages 6/C/003-2008.

1) A2W Condition #1: (Heating) Water In/Out 30°C/35°C, Outdoor Air 7°CDB/6°CWB; (Cooling) Water In/Out 23°C/18°C, Outdoor Air 35°CDB.

^{*2)} A2W Condition for ESEER(Cooling) at Water Out 18°C.