CONFIDENTIAL

MULTI V™ SYNC II System
Heat Recovery Outdoor Unit R410A
SERVICE MANUAL R410A
(Exploded View)

MODEL : ARUB Series

CAUTION

Before Servicing the unit, read the safety precautions in General SVC manual.
Only for authorized service personnel.

ARUB Series

1. Specifications

Heat Recovery

HP(Equivalent horsepower)			8	10	12
Model Name		Combination Unit	**ARUB80LT2**	**ARUB100LT2**	**ARUB120LT2**
		Independent Unit	**ARUB80LT2**	**ARUB100LT2**	**ARUB120LT2**
Capacity	Cooling	kW	22.4	28.0	33.6
		kcal/h	19,300	24,100	28,900
		Btu/h	76,400	95,900	114,700
	Heating	kW	25.2	31.5	37.8
		kcal/h	21,700	27,100	32,500
		Btu/h	86,000	107,500	129,000
Input	Cooling	kW	5.88	7.36	9.43
	Heating	kW	5.88	7.45	9.15
Casing Color			Warm Gray	Warm Gray	Warm Gray
Heat Exchanger			Gold fin	Gold fin	Gold fin
Compressor	Type		DC Scroll	DC Scroll	DC Scroll
	Piston Displacement	cm^3/rev	52	52+72.84	52+72.84
	Number of Revolution	R.P.M	3,600	3,600+2,891	3,600+2,891
	Motor Output x Number	W	5,356x1	(5,356+5,300)x1	(5,356+5,300)x1
	Starting Method		Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Oil Charge	cc	3,300	5,600	5,600
Fan	Type		Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	350 x 1	350 x 2	350 x 2
	Air Flow Rate	CMM	190	190	190
		cfm	6,700	6,700	6,700
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP
Pipe Connctions	Liquid(flare)	mm(inch)	9.52(3/8)	9.52(3/8)	12.7(1/2)
	Suction Gas	mm(inch)	19.05(3/4)	22.2(7/8)	28.58(1 1/8)
	Discharge Gas	mm(inch)	15.88(5/8)	19.05(3/4)	19.05(3/4)
Dimensions (WxHxD)		mm	1,280x1,607x730	1,280x1,607x730	1,280x1,607x730
		inch	50.4x63.3x28.7	50.4x63.3x28.7	50.4x63.3x28.7
Net Weight		kg	240	285	285
		lbs	529	628	628
Transmission Cable		mm^2	CVV-SB 1.25x2C	CVV-SB 1.25x2C	CVV-SB 1.25x2C
Refigerant	Refigerant name		R410A	R410A	R410A
	Control		EEV	EEV	EEV
Power Supply		Ø, V, Hz	3, 380~415, 50 3, 380, 60	3, 380~415, 50 3, 380, 60	3, 380~415, 5060 3, 380, 60

Notes:

1. Capacities are based on the following conditions:
   Cooling * Indoor temp. 27°C[80.6°F]DB/ 19°C[66.2°F]WB
   * Outdoor temp. 35°C[95°F]DB/ 24°C[75.2°F]WB
   * Interconnecting Piping Length 7.5m
   * Level Difference of Zero
   Heating * Indoor temp. 20°C[68°F]DB/ 15°C[59°F]WB
   * Outdoor temp. 7°C[44.6°F]DB/ 6°C[42.8°F]WB
   * Interconnecting Piping Length 7.5m
   * Level Difference of Zero
2. Capacities are net capacities
3. Due to our policy of innovation some specifications may be changed without prior notification
4. EEV : Electronic Expansion Valve

Conversion Formula
kcal/h= kW x 860
Btu/h = kW x 3412
cfm = m^3/min x 35.3
l/s = CMM x 1000/60

HP(Equivalent horsepower)			14	16	18
Model Name		Combination Unit	**ARUB140LT2**	**ARUB160LT2**	**ARUB180LT2**
		Independent Unit	**ARUB140LT2**	**ARUB160LT2**	**ARUB80LT2**
					ARUB100LT2
Capacity	Cooling	kW	39.2	44.8	50.4
		kcal/h	33,700	38,500	43,300
		Btu/h	133,800	152,900	172,000
	Heating	kW	44.1	50.4	56.7
		kcal/h	37,900	43,300	48,800
		Btu/h	150,500	172,000	193,500
Input	Cooling	kW	12.05	14.20	13.24
	Heating	kW	10.80	12.60	13.33
Casing Color			Warm Gray	Warm Gray	Warm Gray
Heat Exchanger			Gold fin	Gold fin	Gold fin
Compressor	Type		DC Scroll	DC Scroll	DC Scroll
	Piston Displacement	cm^3/rev	52+81.02	52+81.02	(52+72.84)+52
	Number of Revolution	R.P.M	3,600+2,891	3,600+2,891	(3,600+2,891)+3,600
	Motor Output x Number	W	(5,356+5,300)x1	(5,356+5,300)x1	(5,356+5,300)x1+5,356
	Starting Method		Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Oil Charge	cc	5,600	5,600	5,600+3,300
Fan	Type		Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	350 x 2	350 x 2	350 x 3
	Air Flow Rate	CMM	190	190	295
		cfm	6,700	6,700	10,400
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP
Pipe Connctions	Liquid(flare)	mm(inch)	12.7(1/2)	12.7(1/2)	15.88(5/8)
	Suction Gas	mm(inch)	28.58(1 1/8)	28.58(1 1/8)	28.58(1 1/8)
	Discharge Gas	mm(inch)	22.2(7/8)	22.2(7/8)	22.2(7/8)
Dimensions (WxHxD)		mm	1,280x1,607x730	1,280x1,607x730	(1,280x1,607x730)x2
		inch	50.4x63.3x28.7	50.4x63.3x28.7	(50.4x63.3x28.7)x2
Net Weight		kg	285	285	240+285
		lbs	628	628	529+628
Transmission Cable		mm^2	CVV-SB 1.25x2C	CVV-SB 1.25x2C	CVV-SB 1.25x2C
Refigerant	Refigerant name		R410A	R410A	R410A
	Control		EEV	EEV	EEV
Power Supply		Ø, V, Hz	3, 380~415, 50 3, 380, 60	3, 380~415, 50 3, 380, 60	3, 380~415, 50 3, 380, 60

Notes:

1. Capacities are based on the following conditions:
   Cooling * Indoor temp. 27°C[80.6°F]DB/ 19°C[66.2°F]WB
   * Outdoor temp. 35°C[95°F]DB/ 24°C[75.2°F]WB
   * Interconnecting Piping Length 7.5m
   * Level Difference of Zero
   Heating * Indoor temp. 20°C[68°F]DB/ 15°C[59°F]WB
   * Outdoor temp. 7°C[44.6°F]DB/ 6°C[42.8°F]WB
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   * Level Difference of Zero
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Conversion Formula
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Btu/h = kW x 3412
cfm = m^3/min x 35.3
l/s = CMM x 1000/60

HP(Equivalent horsepower)			**20**	**22**	**24**
Model Name		Combination Unit	**ARUB200LT2**	**ARUB220LT2**	**ARUB240LT2**
		Independent Unit	**ARUB80LT2**	**ARUB80LT2**	**ARUB80LT2**
			ARUB120LT2	**ARUB140LT2**	**ARUB160LT2**
Capacity	Cooling	kW	56.0	61.6	67.2
		kcal/h	48,200	53,000	57,800
		Btu/h	191,100	210,200	229,300
	Heating	kW	63.0	69.3	75.6
		kcal/h	54,200	59,600	65,000
		Btu/h	225,000	236,500	258,000
Input	Cooling	kW	15.31	17.93	20.08
	Heating	kW	15.03	16.68	18.48
Casing Color			Warm Gray	Warm Gray	Warm Gray
Heat Exchanger			Gold fin	Gold fin	Gold fin
Compressor	Type		DC Scroll	DC Scroll	DC Scroll
	Piston Displacement	cm^3/rev	(52+72.84)+52	(52+81.02)+52	(52+81.02)+52
	Number of Revolution	R.P.M	(3,600+2,891)+3,600	(3,600+2,891)+3,600	(3,600+2,891)+3,600
	Motor Output x Number	W	(5,356+5,300)x1+5,356	(5,356+5,300)x1+5,356	(5,356+5,300)x1+5,356
	Starting Method		Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Oil Charge	cc	5,600+3,300	5,600+3,300	5,600+3,300
Fan	Type		Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	350 x 3	350 x 3	350 x 3
	Air Flow Rate	CMM	295	295	295
		cfm	10,400	10,400	10,400
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP
Pipe Connctions	Liquid(flare)	mm(inch)	15.88(5/8)	15.88(5/8)	15.88(5/8)
	Suction Gas	mm(inch)	28.58(1 1/8)	34.9(1 3/8)	34.9(1 3/8)
	Discharge Gas	mm(inch)	22.2(7/8)	28.58(1 1/8)	28.58(1 1/8)
Dimensions (WxHxD)		mm	(1,280x1,607x730)x2	(1,280x1,607x730)x2	(1,280x1,607x730)x2
		inch	(50.4x63.3x28.7)x2	(50.4x63.3x28.7)x2	(50.4x63.3x28.7)x2
Net Weight		kg	240+285	240+285	240+285
		lbs	529+628	529+628	529+628
Transmission Cable		mm^2	CVV-SB 1.25x2C	CVV-SB 1.25x2C	CVV-SB 1.25x2C
Refigerant	Refigerant name		R410A	R410A	R410A
	Control		EEV	EEV	EEV
Power Supply		Ø, V, Hz	3, 380~415, 50 3, 380, 60	3, 380~415, 50 3, 380, 60	3, 380~415, 50 3, 380, 60

Notes:

1. Capacities are based on the following conditions:
   Cooling * Indoor temp. 27°C[80.6°F]DB/ 19°C[66.2°F]WB
   * Outdoor temp. 35°C[95°F]DB/ 24°C[75.2°F]WB
   * Interconnecting Piping Length 7.5m
   * Level Difference of Zero
   Heating * Indoor temp. 20°C[68°F]DB/ 15°C[59°F]WB
   * Outdoor temp. 7°C[44.6°F]DB/ 6°C[42.8°F]WB
   * Interconnecting Piping Length 7.5m
   * Level Difference of Zero
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4. EEV : Electronic Expansion Valve

Conversion Formula
kcal/h= kW x 860
Btu/h = kW x 3412
cfm = m^3/min x 35.3
l/s = CMM x 1000/60

HP(Equivalent horsepower)			**26**	**28**	**30**
Model Name		Combination Unit	**ARUB260LT2**	**ARUB280LT2**	**ARUB300LT2**
		Independent Unit	**ARUB120LT2**	**ARUB140LT2**	**ARUB140LT2**
			ARUB140LT2	**ARUB140LT2**	**ARUB160LT2**
Capacity	Cooling	kW	72.8	78.4	84.0
		kcal/h	62,600	67,400	72,200
		Btu/h	248,400	267,500	286,600
	Heating	kW	81.9	88.2	94.5
		kcal/h	70,400	75,900	81,300
		Btu/h	279,500	301,000	322,500
Input	Cooling	kW	21.48	24.1	26.25
	Heating	kW	19.95	21.6	23.40
Casing Color			Warm Gray	Warm Gray	Warm Gray
Heat Exchanger			Gold fin	Gold fin	Gold fin
Compressor	Type		DC Scroll	DC Scroll	DC Scroll
	Piston Displacement	cm^3/rev	(52+72.84)+(52+81.02)	(52+81.02)x2	(52+81.02)x2
	Number of Revolution	R.P.M	(3,600+2,891)x2	(3,600+2,891)x2	(3,600+2,891)x2
	Motor Output x Number	W	(5,356+5,300)x2	(5,356+5,300)x2	(5,356+5,300)x2
	Starting Method		Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Oil Charge	cc	5,600x2	5,600x2	5,600x2
Fan	Type		Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	350 x 4	350 x 4	350 x 4
	Air Flow Rate	CMM	380	380	380
		cfm	13,400	13,400	13,400
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP
Pipe Connctions	Liquid(flare)	mm(inch)	19.05(3/4)	19.05(3/4)	19.05(3/4)
	Suction Gas	mm(inch)	34.9(1 3/8)	34.9(1 3/8)	34.9(1 3/8)
	Discharge Gas	mm(inch)	28.58(1 1/8)	28.58(1 1/8)	28.58(1 1/8)
Dimensions (WxHxD)		mm	(1,280x1,607x730)x2	(1,280x1,607x730)x2	(1,280x1,607x730)x2
		inch	(50.4x63.3x28.7)x2	(50.4x63.3x28.7)x2	(50.4x63.3x28.7)x2
Net Weight		kg	285x2	285x2	285x2
		lbs	628x2	628x2	628x2
Transmission Cable		mm^2	CVV-SB 1.25x2C	CVV-SB 1.25x2C	CVV-SB 1.25x2C
Refigerant	Refigerant name		R410A	R410A	R410A
	Control		EEV	EEV	EEV
Power Supply		Ø, V, Hz	3, 380~415, 50 3, 380, 60	3, 380~415, 50 3, 380, 60	3, 380~415, 50 3, 380, 60

Notes:

1. Capacities are based on the following conditions:
   - Cooling * Indoor temp. 27°C[80.6°F]DB/ 19°C[66.2°F]WB
     * Outdoor temp. 35°C[95°F]DB/ 24°C[75.2°F]WB
     * Interconnecting Piping Length 7.5m
     * Level Difference of Zero
   - Heating * Indoor temp. 20°C[68°F]DB/ 15°C[59°F]WB
     * Outdoor temp. 7°C[44.6°F]DB/ 6°C[42.8°F]WB
     * Interconnecting Piping Length 7.5m
     * Level Difference of Zero
2. Capacities are net capacities
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Conversion Formula
kcal/h= kW x 860
Btu/h = kW x 3412
cfm = m^3/min x 35.3
l/s = CMM x 1000/60

HP(Equivalent horsepower)			32	34	36
Model Name		Combination Unit	**ARUB320LT2**	**ARUB340LT2**	**ARUB360LT2**
		Independent Unit	**ARUB160LT2**	**ARUB80LT2**	**ARUB80LT2**
			ARUB160LT2	**ARUB120LT2**	**ARUB140LT2**
				ARUB140LT2	**ARUB140LT2**
Capacity	Cooling	kW	89.6	95.2	100.8
		kcal/h	77,100	81,900	86,700
		Btu/h	305,700	324,800	343,900
	Heating	kW	100.8	107.1	113.4
		kcal/h	86,700	92,100	97,500
		Btu/h	343,900	365,400	386,900
Input	Cooling	kW	28.4	27.36	29.98
	Heating	kW	25.2	25.83	27.48
Casing Color			Warm Gray	Warm Gray	Warm Gray
Heat Exchanger			Gold fin	Gold fin	Gold fin
Compressor	Type		DC Scroll	DC Scroll	DC Scroll
	Piston Displacement	cm^3/rev	(52+81.02)x2	(52+81.02)x2+52	(52+81.02)x2+52
	Number of Revolution	R.P.M	(3,600+2,891)x2	(3,600+2,891)x2+3600	(3,600+2,891)x2+3600
	Motor Output x Number	W	(5,356+5,300)x2	(5,356+5,300)x2+5,356	(5,356+5,300)x2+5,356
	Starting Method		Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Oil Charge	cc	5,600x2	5,600x2+3,300	5,600x2+3,300
Fan	Type		Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	350 x 4	350 x 5	350 x 5
	Air Flow Rate	CMM	380	485	485
		cfm	13,400	17,100	17,100
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP
Pipe Connctions	Liquid(flare)	mm(inch)	19.05(3/4)	19.05(3/4)	19.05(3/4)
	Suction Gas	mm(inch)	34.9(1 3/8)	34.9(1 3/8)	41.3(1 5/8)
	Discharge Gas	mm(inch)	28.58(1 1/8)	28.58(1 1/8)	28.58(1 1/8)
Dimensions (WxHxD)		mm	(1280x1607x730)x2	(1280x1607x730)x3	(1280x1607x730)x3
		inch	(50.4x63.3x28.7)x2	(50.4x63.3x28.7)x3	(50.4x63.3x28.7)x3
Net Weight		kg	285x2	240+285x2	240+285x2
		lbs	628x2	529+628x2	529+628x2
Transmission Cable		mm^2	CVV-SB 1.25x2C	CVV-SB 1.25x2C	CVV-SB 1.25x2C
Refigerant	Refigerant name		R410A	R410A	R410A
	Control		EEV	EEV	EEV
Power Supply		Ø, V, Hz	3, 380~415, 50 3, 380, 60	3, 380~415, 50 3, 380, 60	3, 380~415, 50 3, 380, 60

Notes:

1. Capacities are based on the following conditions:
   - Cooling * Indoor temp. 27°C[80.6°F]DB/ 19°C[66.2°F]WB
     * Outdoor temp. 35°C[95°F]DB/ 24°C[75.2°F]WB
     * Interconnecting Piping Length 7.5m
     * Level Difference of Zero
   - Heating * Indoor temp. 20°C[68°F]DB/ 15°C[59°F]WB
     * Outdoor temp. 7°C[44.6°F]DB/ 6°C[42.8°F]WB
     * Interconnecting Piping Length 7.5m
     * Level Difference of Zero
2. Capacities are net capacities
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Conversion Formula
kcal/h= kW x 860
Btu/h = kW x 3412
cfm = m^3/min x 35.3
l/s = CMM x 1000/60

HP(Equivalent horsepower)			38	40	42
Model Name		Combination Unit	**ARUB380LT2**	**ARUB400LT2**	**ARUB420LT2**
		Independent Unit	**ARUB80LT2**	**ARUB80LT2**	**ARUB100LT2**
			ARUB140LT2	**ARUB160LT2**	**ARUB160LT2**
			ARUB160LT2	**ARUB160LT2**	**ARUB160LT2**
Capacity	Cooling	kW	106.4	112.0	117.6
		kcal/h	91,500	96,300	101,100
		Btu/h	363,100	382,200	401,700
	Heating	kW	119.7	126.0	132.3
		kcal/h	102,900	108,400	113,700
		Btu/h	408,400	429,900	451,500
Input	Cooling	kW	32.13	34.28	35.76
	Heating	kW	29.28	31.08	32.65
Casing Color			Warm Gray	Warm Gray	Warm Gray
Heat Exchanger			Gold fin	Gold fin	Gold fin
Compressor	Type		DC Scroll	DC Scroll	DC Scroll
	Piston Displacement	cm^3/rev	(52+81.02)x2+52	(52+81.02)x2+52	(52+72.84)+(52+81.02)x2
	Number of Revolution	R.P.M	(3,600+2,891)x2+3600	(3,600+2,891)x2+3600	(3,600+2,891)x3
	Motor Output x Number	W	(5,356+5,300)x2+5,356	(5,356+5,300)x2+5,356	(5,356+5,300)x3
	Starting Method		Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Oil Charge	cc	5,600x2+3,300	5,600x2+3,300	5600x3
Fan	Type		Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	350 x 5	350 x 5	350 x 6
	Air Flow Rate	CMM	485	485	570
		cfm	17,100	17,100	20,100
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP
Pipe Connctions	Liquid(flare)	mm(inch)	19.05(3/4)	19.05(3/4)	19.05(3/4)
	Suction Gas	mm(inch)	41.3(1 5/8)	41.3(1 5/8)	41.3(1 5/8)
	Discharge Gas	mm(inch)	34.9(1 3/8)	34.9(1 3/8)	34.9(1 3/8)
Dimensions (WxHxD)		mm	(1,280x1,607x730)x3	(1,280x1,607x730)x3	(1,280x1,607x730)x3
		inch	(50.4x63.3x28.7)x3	(50.4x63.3x28.7)x3	(50.4x63.3x28.7)x3
Net Weight		kg	240+285x2	240+285x2	285x3
		lbs	529+628x2	529+628x2	628x3
Transmission Cable		mm^2	CVV-SB 1.25x2C	CVV-SB 1.25x2C	CVV-SB 1.25x2C
Refigerant	Refigerant name		R410A	R410A	R410A
	Control		EEV	EEV	EEV
Power Supply		Ø, V, Hz	3, 380~415, 50 3, 380, 60	3, 380~415, 50 3, 380, 60	3, 380~415, 50 3, 380, 60

Notes:

1. Capacities are based on the following conditions:
   - Cooling * Indoor temp. 27°C[80.6°F]DB/ 19°C[66.2°F]WB
     * Outdoor temp. 35°C[95°F]DB/ 24°C[75.2°F]WB
     * Interconnecting Piping Length 7.5m
     * Level Difference of Zero
   - Heating * Indoor temp. 20°C[68°F]DB/ 15°C[59°F]WB
     * Outdoor temp. 7°C[44.6°F]DB/ 6°C[42.8°F]WB
     * Interconnecting Piping Length 7.5m
     * Level Difference of Zero
2. Capacities are net capacities
3. Due to our policy of innovation some specifications may be changed without prior notification
4. EEV : Electronic Expansion Valve

Conversion Formula
kcal/h= kW x 860
Btu/h = kW x 3412
cfm = m^3/min x 35.3
l/s = CMM x 1000/60

HP(Equivalent horsepower)			**44**	**46**	**48**
Model Name		Combination Unit	**ARUB440LT2**	**ARUB460LT2**	**ARUB480LT2**
		Independent Unit	**ARUB140LT2**	**ARUB140LT2**	**ARUB160LT2**
			ARUB140LT2	**ARUB160LT2**	**ARUB160LT2**
			ARUB160LT2	**ARUB160LT2**	**ARUB160LT2**
Capacity	Cooling	kW	123.2	128.8	134.4
		kcal/h	105,900	110,700	115,500
		Btu/h	420,500	439,600	458,700
	Heating	kW	138.6	144.9	151.2
		kcal/h	119,100	124,500	129,900
		Btu/h	473,000	494,500	516,000
Input	Cooling	kW	38.3	40.45	42.6
	Heating	kW	34.2	36.00	37.8
Casing Color			Warm Gray	Warm Gray	Warm Gray
Heat Exchanger			Gold fin	Gold fin	Gold fin
Compressor	Type		DC Scroll	DC Scroll	DC Scroll
	Piston Displacement	cm^3/rev	(52+81.02)x3	(52+81.02)x3	(52+81.02)x3
	Number of Revolution	R.P.M	(3,600+2,891)x3	(3,600+2,891)x3	(3,600+2,891)x3
	Motor Output x Number	W	(5,356+5,300)x3	(5,356+5,300)x3	(5,356+5,300)x3
	Starting Method		Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Oil Charge	cc	5,600x3	5,600x3	5,600x3
Fan	Type		Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	350 x 6	350 x 6	350 x 6
	Air Flow Rate	CMM	570	570	570
		cfm	20,100	20,100	20,100
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP
Pipe Connctions	Liquid(flare)	mm(inch)	19.05(3/4)	19.05(3/4)	19.05(3/4)
	Suction Gas	mm(inch)	41.3(1 5/8)	41.3(1 5/8)	41.3(1 5/8)
	Discharge Gas	mm(inch)	34.9(1 3/8)	34.9(1 3/8)	34.9(1 3/8)
Dimensions (WxHxD)		mm	(1,280x1,607x730)x3	(1,280x1,607x730)x3	(1,280x1,607x730)x3
		inch	(50.4x63.3x28.7)x3	(50.4x63.3x28.7)x3	(50.4x63.3x28.7)x3
Net Weight		kg	285x3	285x3	285x3
		lbs	628x3	628x3	628x3
Transmission Cable		mm^2	CVV-SB 1.25x2C	CVV-SB 1.25x2C	CVV-SB 1.25x2C
Refigerant	Refigerant name		R410A	R410A	R410A
	Control		EEV	EEV	EEV
Power Supply		Ø, V, Hz	3, 380~415, 50 3, 380, 60	3, 380~415, 50 3, 380, 60	3, 380~415, 50 3, 380, 60

Notes:

1. Capacities are based on the following conditions:
   - Cooling * Indoor temp. 27°C[80.6°F]DB/ 19°C[66.2°F]WB
     * Outdoor temp. 35°C[95°F]DB/ 24°C[75.2°F]WB
     * Interconnecting Piping Length 7.5m
     * Level Difference of Zero
   - Heating * Indoor temp. 20°C[68°F]DB/ 15°C[59°F]WB
     * Outdoor temp. 7°C[44.6°F]DB/ 6°C[42.8°F]WB
     * Interconnecting Piping Length 7.5m
     * Level Difference of Zero
2. Capacities are net capacities
3. Due to our policy of innovation some specifications may be changed without prior notification
4. EEV : Electronic Expansion Valve

Conversion Formula
kcal/h= kW x 860
Btu/h = kW x 3412
cfm = m^3/min x 35.3
l/s = CMM x 1000/60

2. Functions

Category	Function	Single Unit	Series Unit
Reliability	Defrost/ Deicing	O	O
	High pressure switch	O	O
	Phase protection	O	O
	Restart delay(3-minutes)	O	O
	Self diagnosis	O	O
	Soft start	O	O
	Trial operation	O	O
Convenience	Auto operation(Artificial intelligence)	O	O
	Auto restart operation	O	O
CAC network Function	Network Solution(LGAP)	O	O
	Power Distribution Indicator(PQNUD1S00)	O	O
Other	Thermistor	-	-

O : Applied X : Not applied - : No reation
Option : Model name & price are different according to options, and assembled in factory with main unit
Accessory : Installed at field, ordered and purchased separately by the corresponding model name, supplied with separated package.

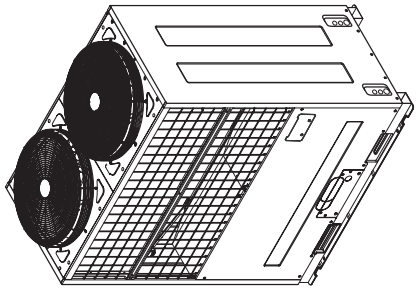
Category	Device	Super II
CAC Network	Network Solution(LGAP)	O
	Simple Central Controller	PQCSB101S0
	Function Controller	PQCSC101S0
	PC Central control Software	PQCSS513A0
	Deluxe Central Controller	PQCSW502A2
	Power Distribution Indicator(PDI)	PQNUD1S00
	CNU2(I-Gataway)	PQNFG14B0
	Dry contact(Outdoor Unit)	PRDSBM
	Dry contact(Indoor Unit)	PQDSB
	AC Smart	PQCSW320A0E
	ACP	PQCPA11A0E/B11A0E
	AC Manager	PQCSS520A0E
	LONWORKS Gateway (BNU-LW)	PQNFB16A1
	BACnet Gateway (BNU-BAC)	PQNFB17B0
Program	LG MV	Option
Other	Y branch	Accessory
	Header branch	Accessory
	Air Guide	PQAGA
	Refrigerant Charging Kit	PRAC1

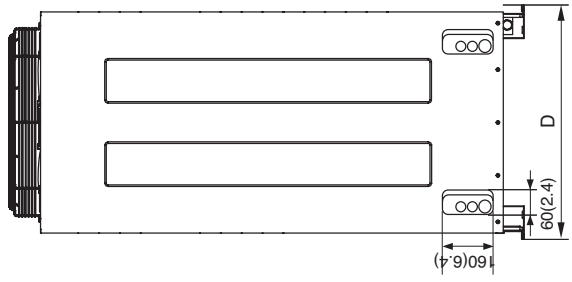
O : Applied X : Not applied - : No reation
Option : Model name & price are different according to options, and assembled in factory with main unit
Accessory : Installed at field, ordered and purchased separately by the corresponding model name, supplied with separated package.

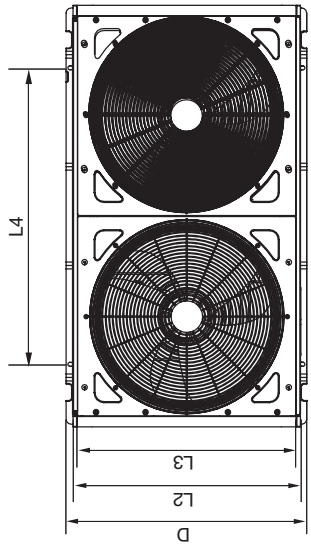
3. Dimensions

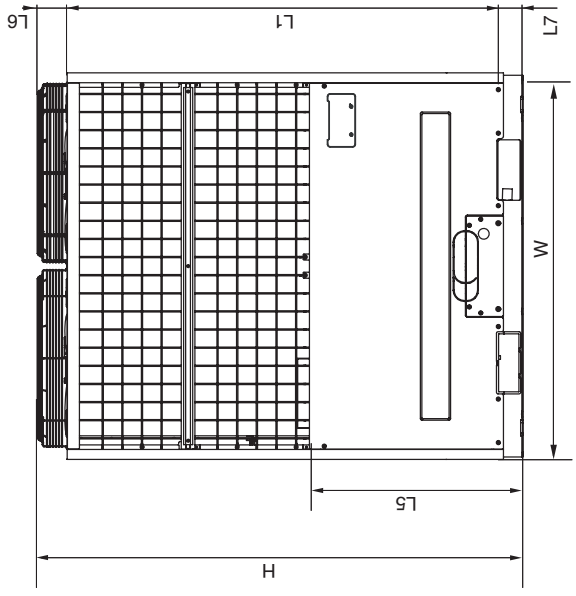
Outdoor Unit
ARUB80LT2 ARUB100LT2 ARUB120LT2 ARUB140LT2 ARUB160LT2

W	mm(inch)	1280(50.4)
H	mm(inch)	1607(63.3)
D	mm(inch)	730(28.7)
L1	mm(inch)	1427(56.1)
L2	mm(inch)	692(27.2)
L3	mm(inch)	670(26.3)
L4	mm(inch)	900(35.4)
L5	mm(inch)	704(27.7)
L6	mm(inch)	99(3.9)
L7	mm(inch)	82(3.2)









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641-713, Korea
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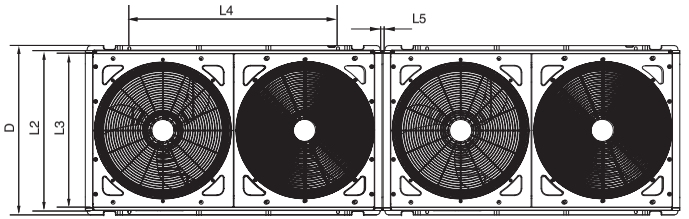
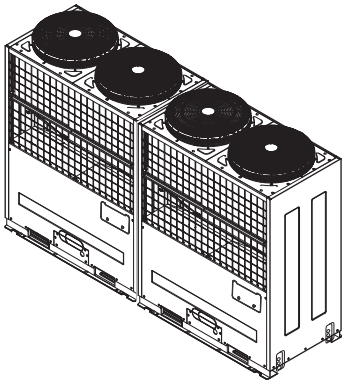
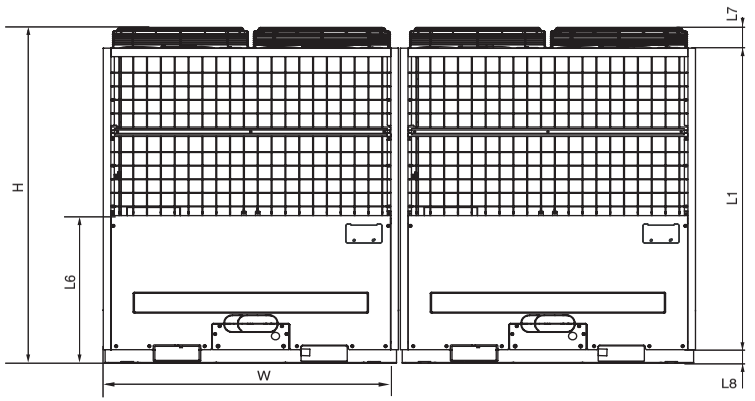
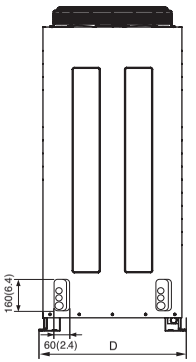






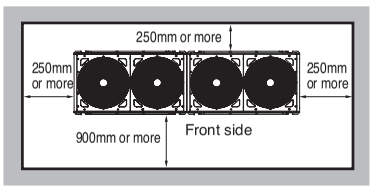


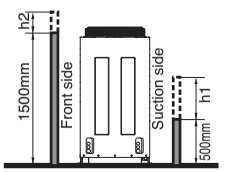
Outdoor Unit	
ARUB180LT2	ARUB260LT2
ARUB200LT2	ARUB280LT2
ARUB220LT2	ARUB300LT2
ARUB240LT2	ARUB320LT2

W	mm(inch)	1280(50.4)
H	mm(inch)	1607(63.3)
D	mm(inch)	730(28.7)
L1	mm(inch)	1427(56.1)
L2	mm(inch)	692(27.2)
L3	mm(inch)	670(26.3)
L4	mm(inch)	900(35.4)
L5	mm(inch)	10(0.4)
L6	mm(inch)	704(27.7)
L7	mm(inch)	99(3.9)
L8	mm(inch)	82(3.2)

Notes:

1. Height of walls in case of pattern1:
   Front side:1500mm, Suction side:500mm
2. If the above wall heights are exceeded, then h1/2 and h2/2 should be added to the front and suction side service spaces respectively as shown in the following figure.
3. When installing the units, the most appropriate pattern should be selected from those shown. In order to obtain the best fit in the space available, always bear in mind the need to leave enough room for a person to pass between units and wall and for the air to circulate freely. Your layout should take into account the possibility of short circuits.
4. The Units should be installed to leave sufficient space in front for the on site refrigerant piping work to be carried out comfortably.





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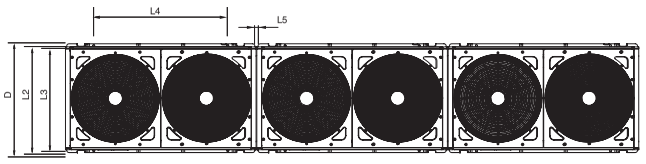
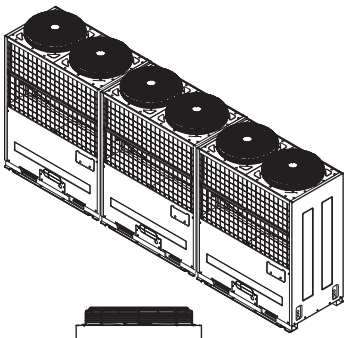
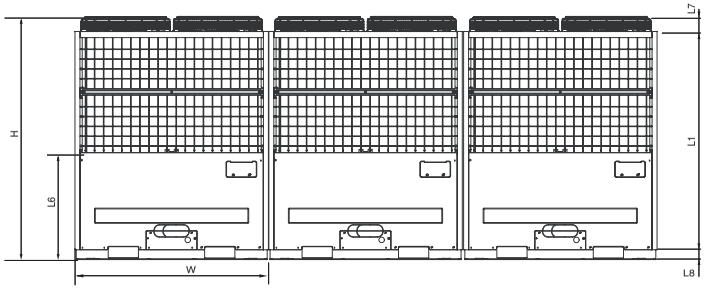
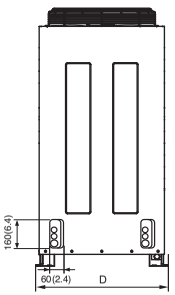
Outdoor Unit	
ARUB340LT2	ARUB420LT2
ARUB360LT2	ARUB440LT2
ARUB380LT2	ARUB460LT2
ARUB400LT2	ARUB480LT2









W	mm(inch)	1280(50.4)
H	mm(inch)	1607(63.3)
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Notes:

1. Height of walls in case of pattern1:
   Front side:1500mm, Suction side:500mm
2. If the above wall heights are exceeded, then h1/2 and h2/2 should be added to the front and suction side service spaces respectively as shown in the following figure.
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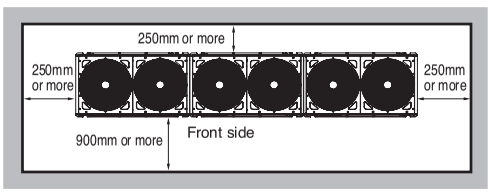
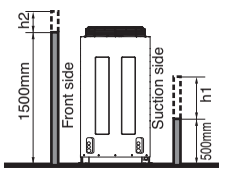
   In order to obtain the best fit in the space available, always bear in mind the need to leave enough room for a person to pass between units and wall and for the air to circulate freely. Your layout should take into account the possibility of short circuits.
4. The Units should be installed to leave sufficient space in front for the on site refrigerant piping work to be carried out comfortably.





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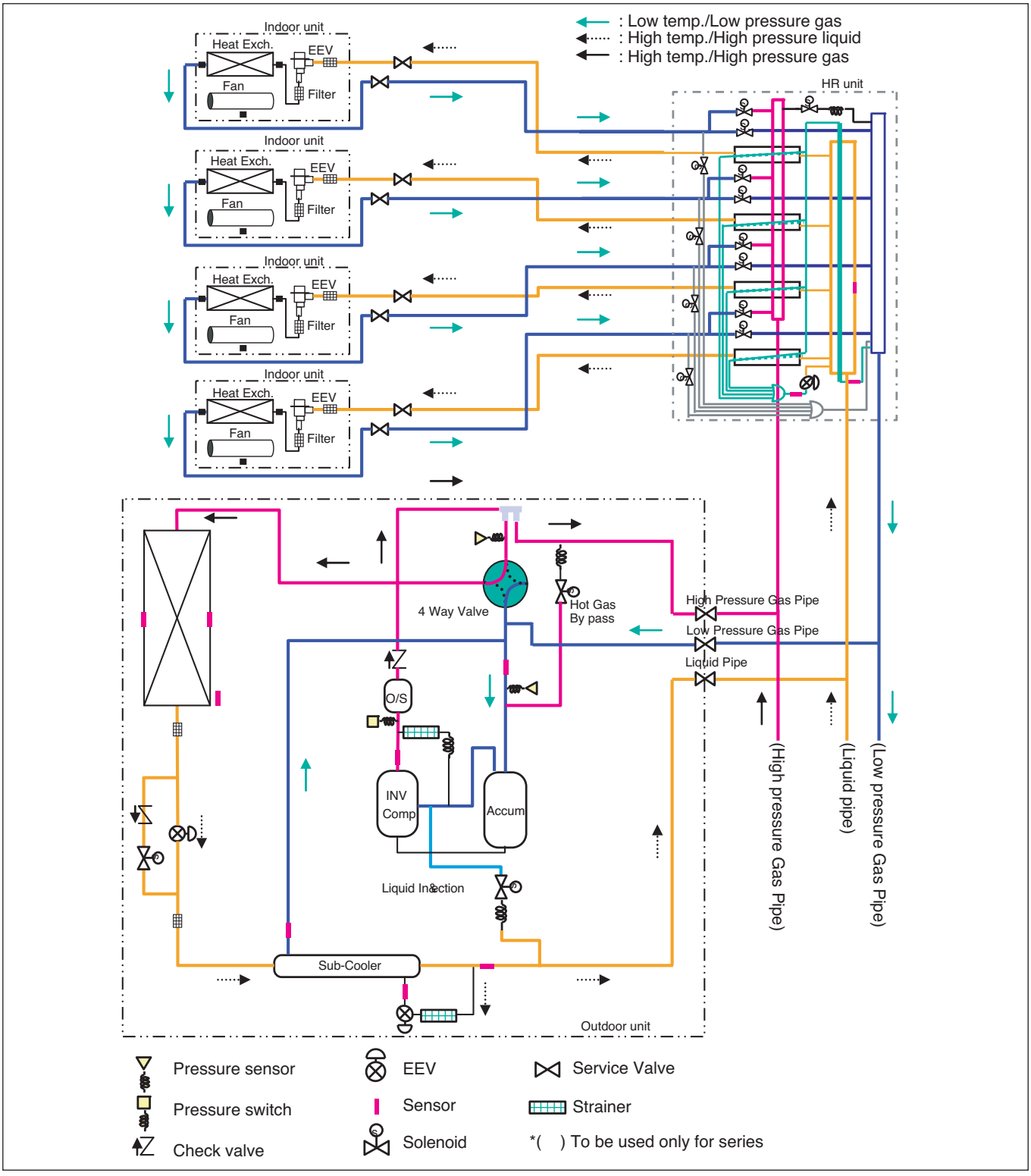
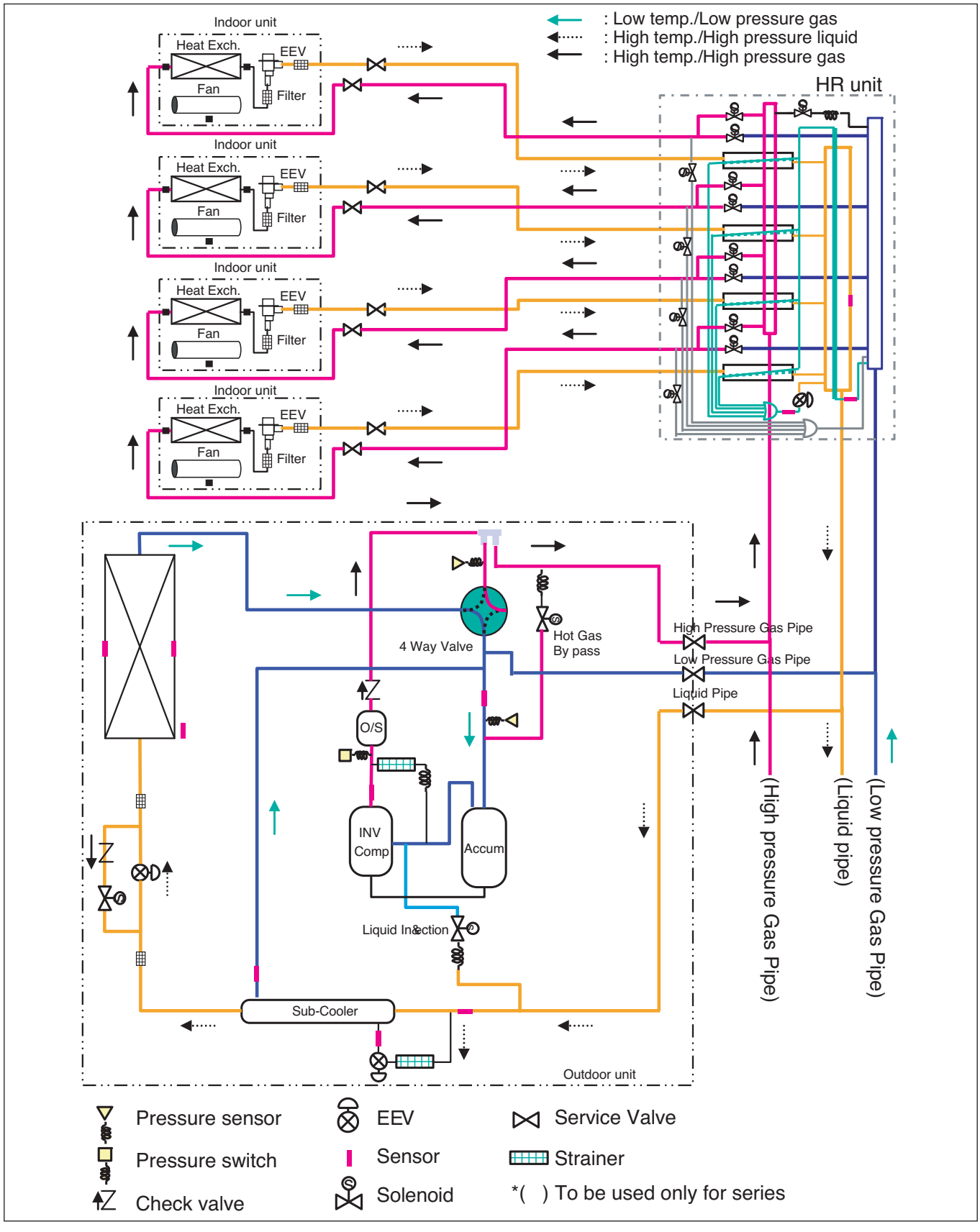
4. Piping Diagrams

4.1 UW1(8HP MODEL) Chassis

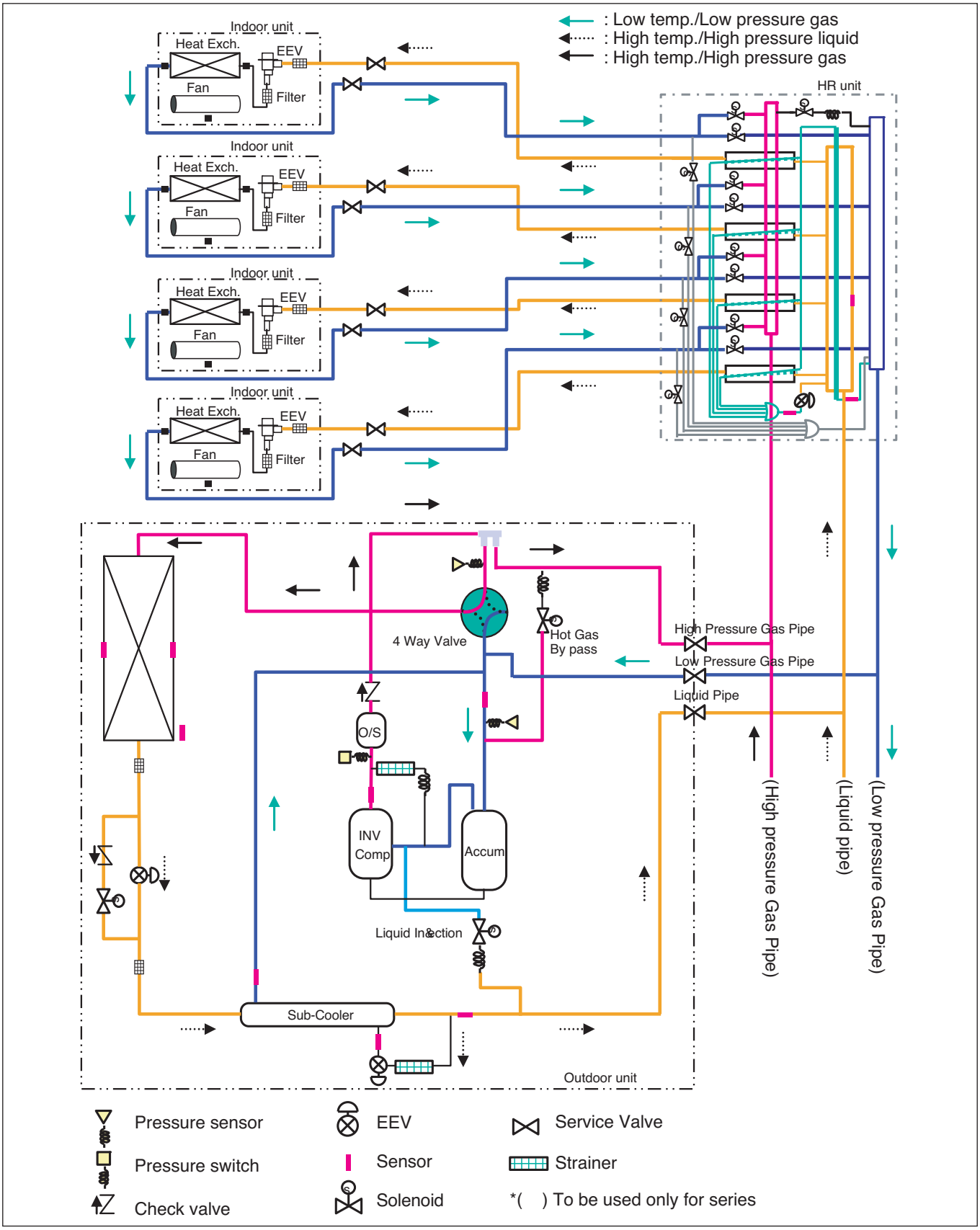
Cooling Operation



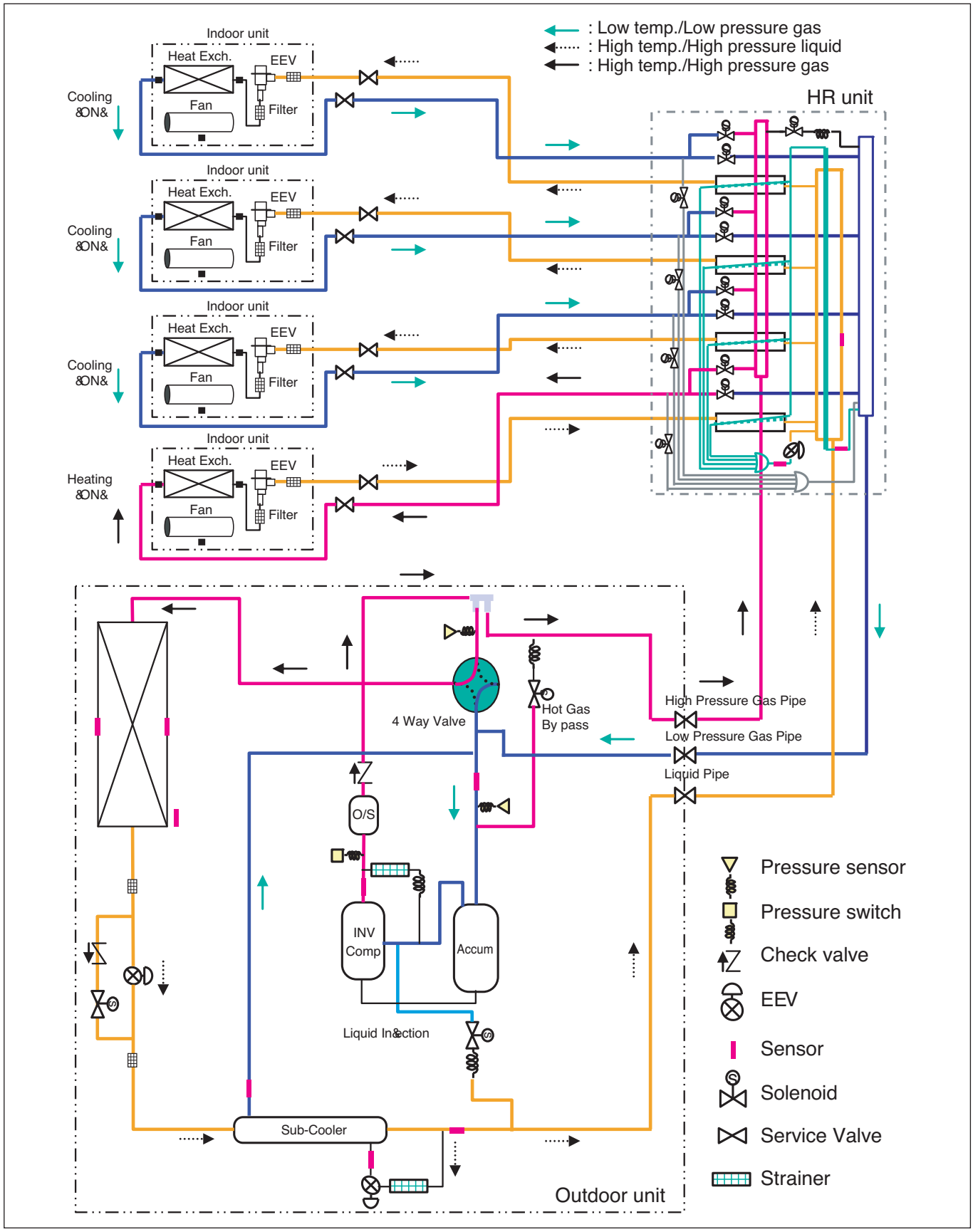
Heating Operation



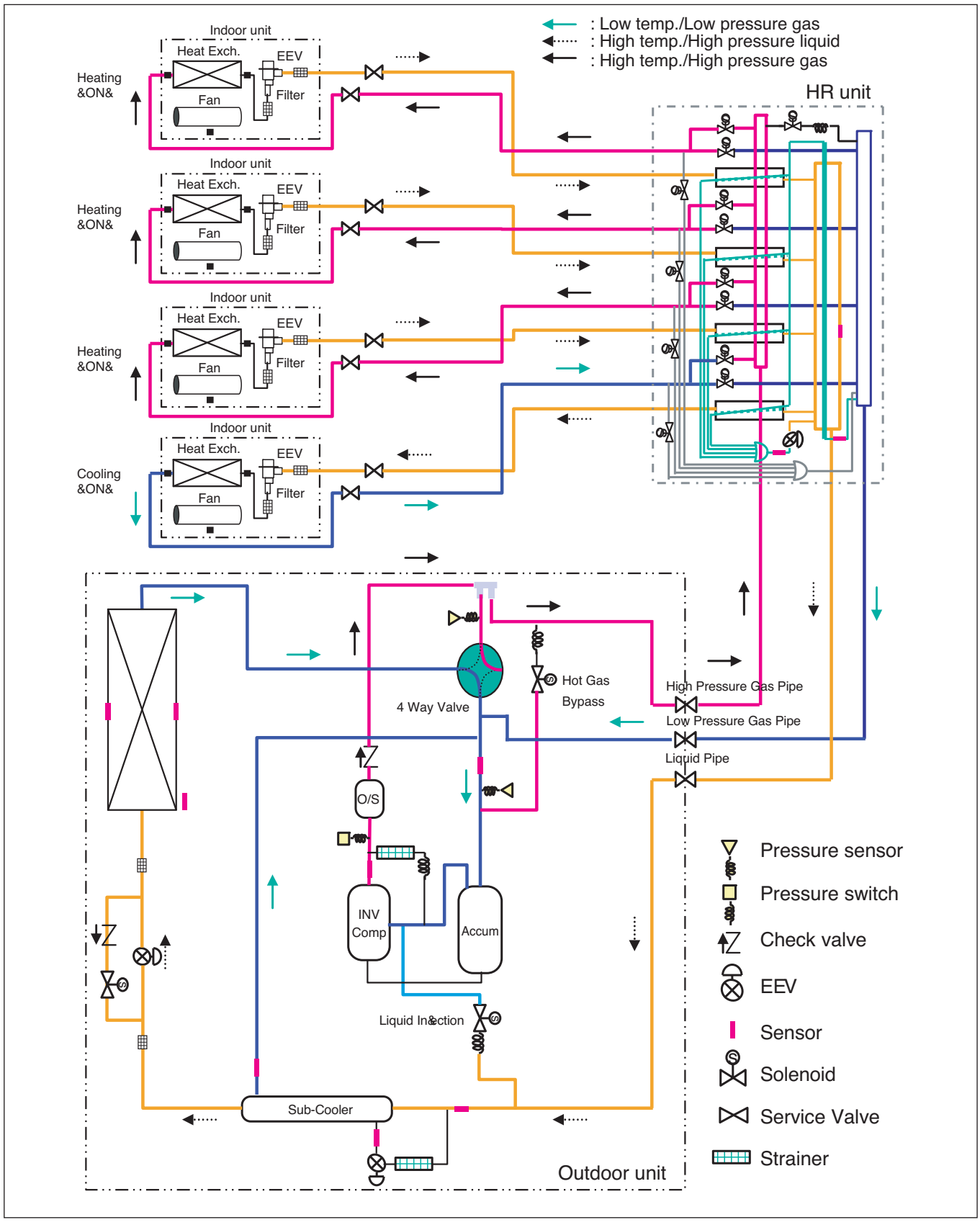
Oil Return/ Defrost Operation



Simultaneous Operation Mode 1(Cooling Based operation)

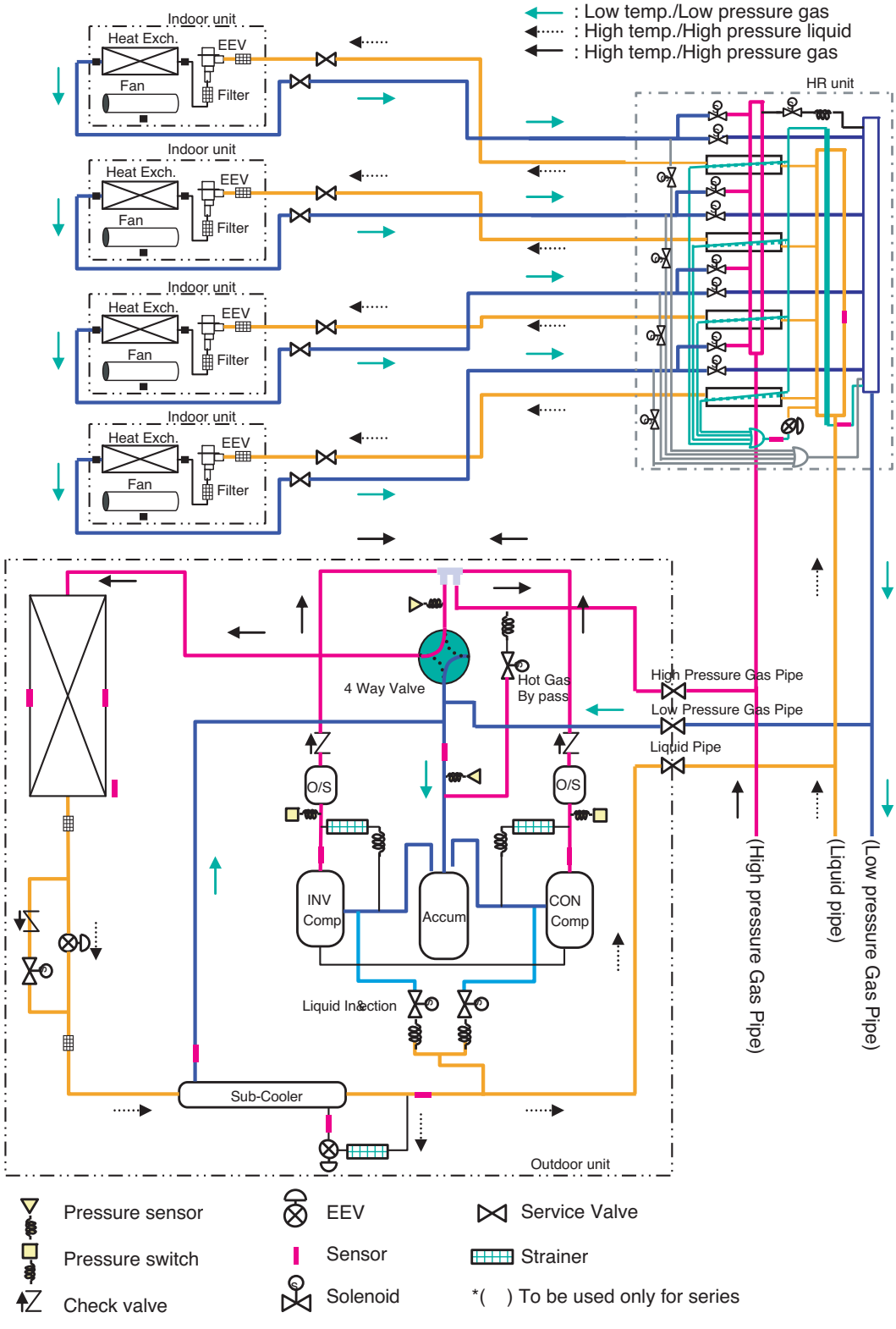


Simultaneous Operation Mode 2(Heating Based operation)

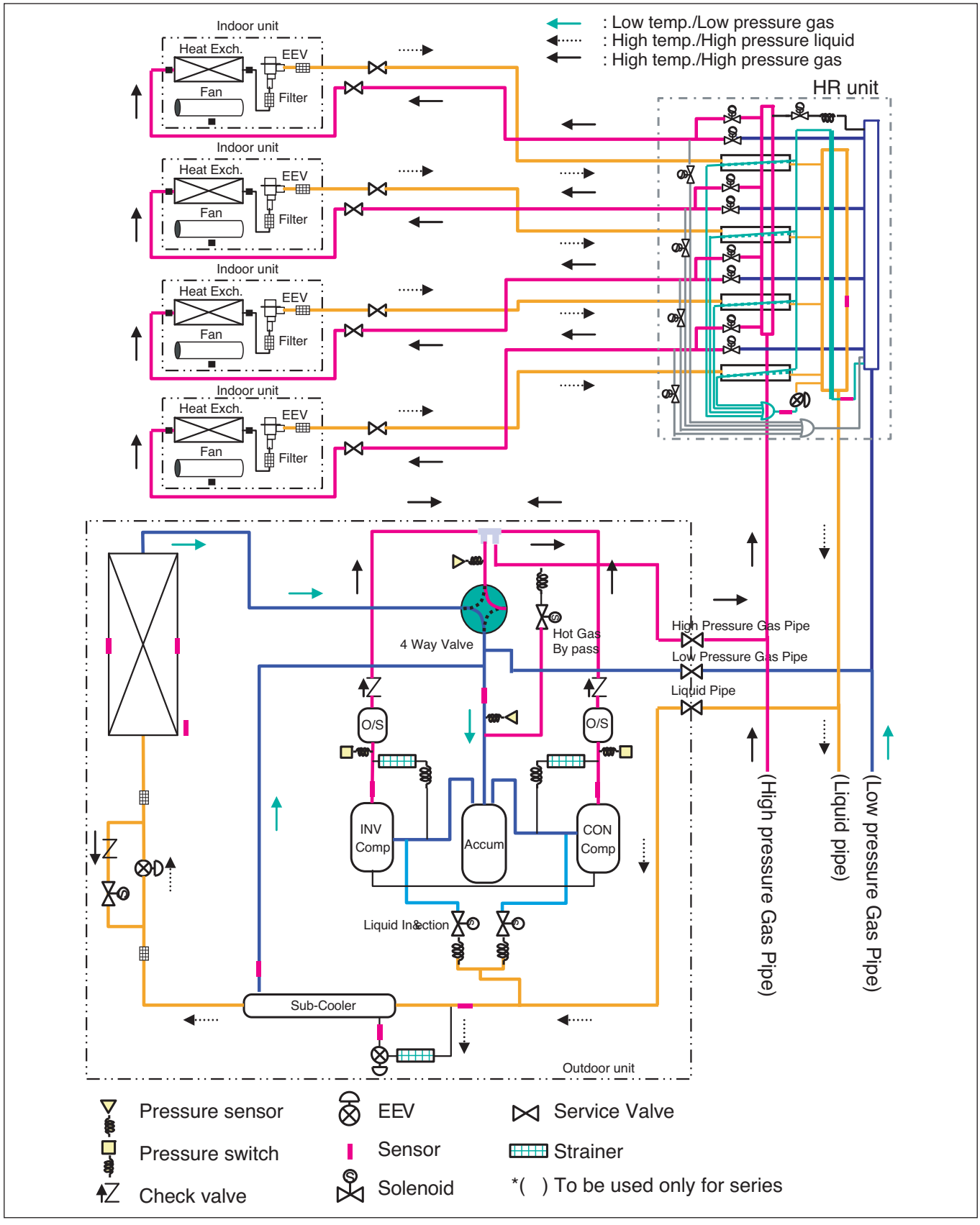


4.2 UW1 Chassis

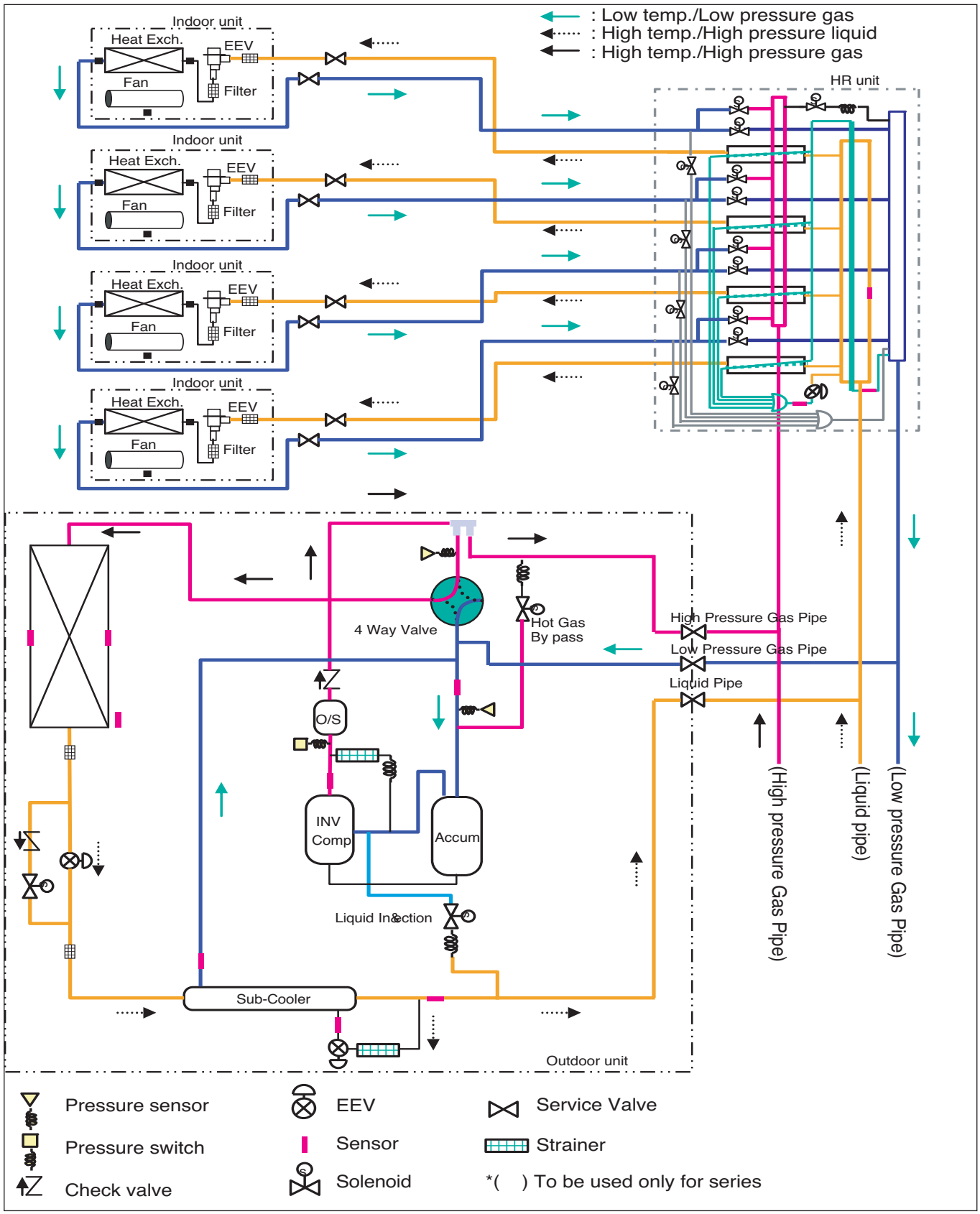
Cooling operation



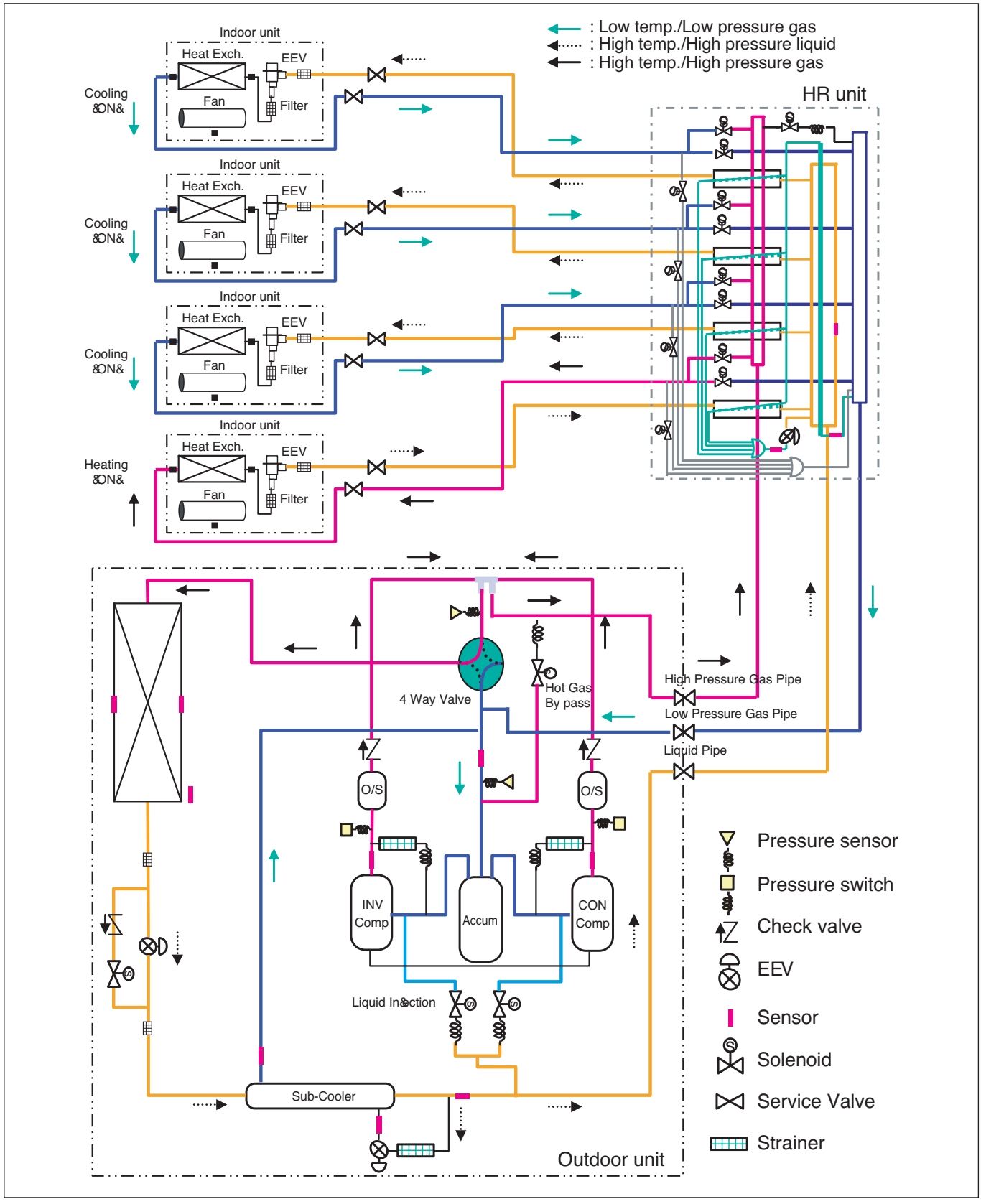
Heating operation



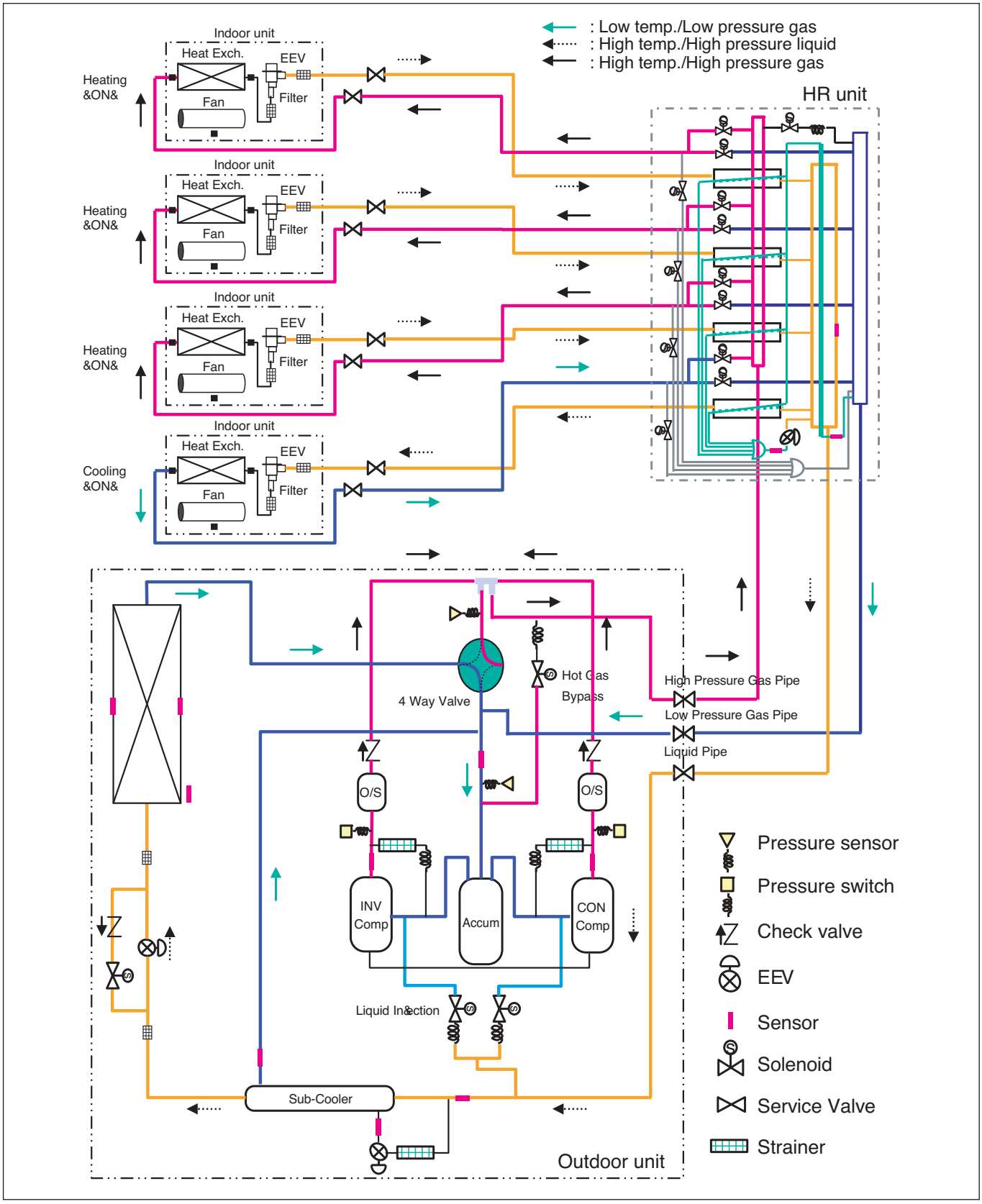
Oil Return/ Defrost Operation



Simultaneous Operation Mode 1(Cooling Based operation)

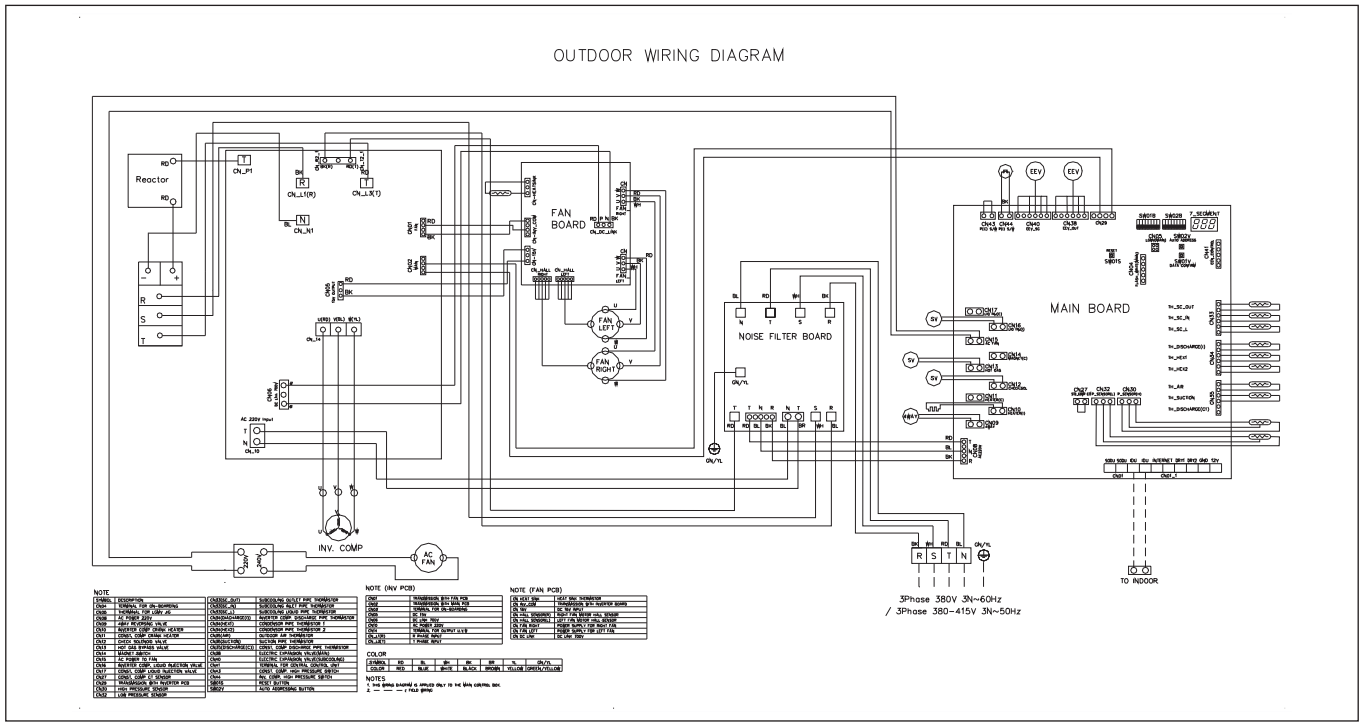


Simultaneous Operation Mode 2(Heating Based operation)

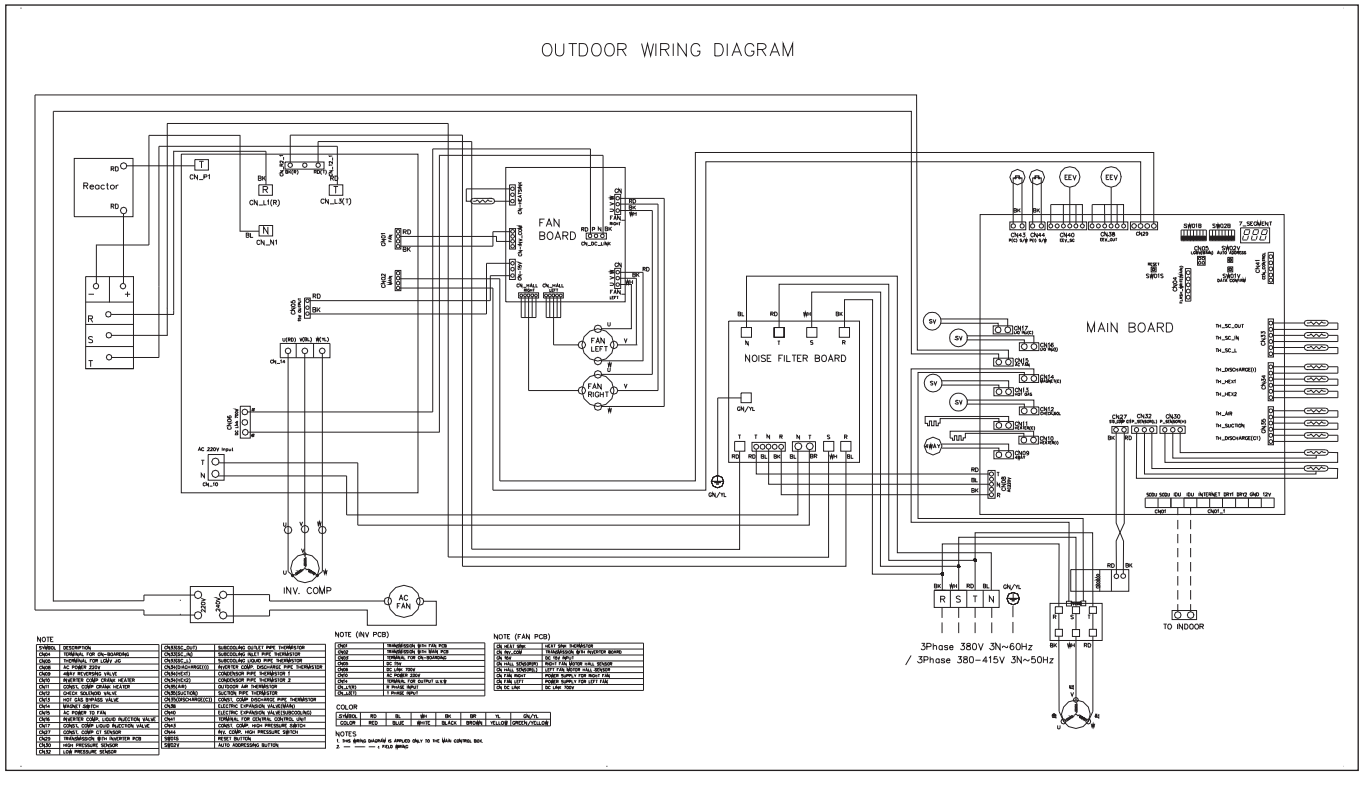


5. Wiring Diagrams

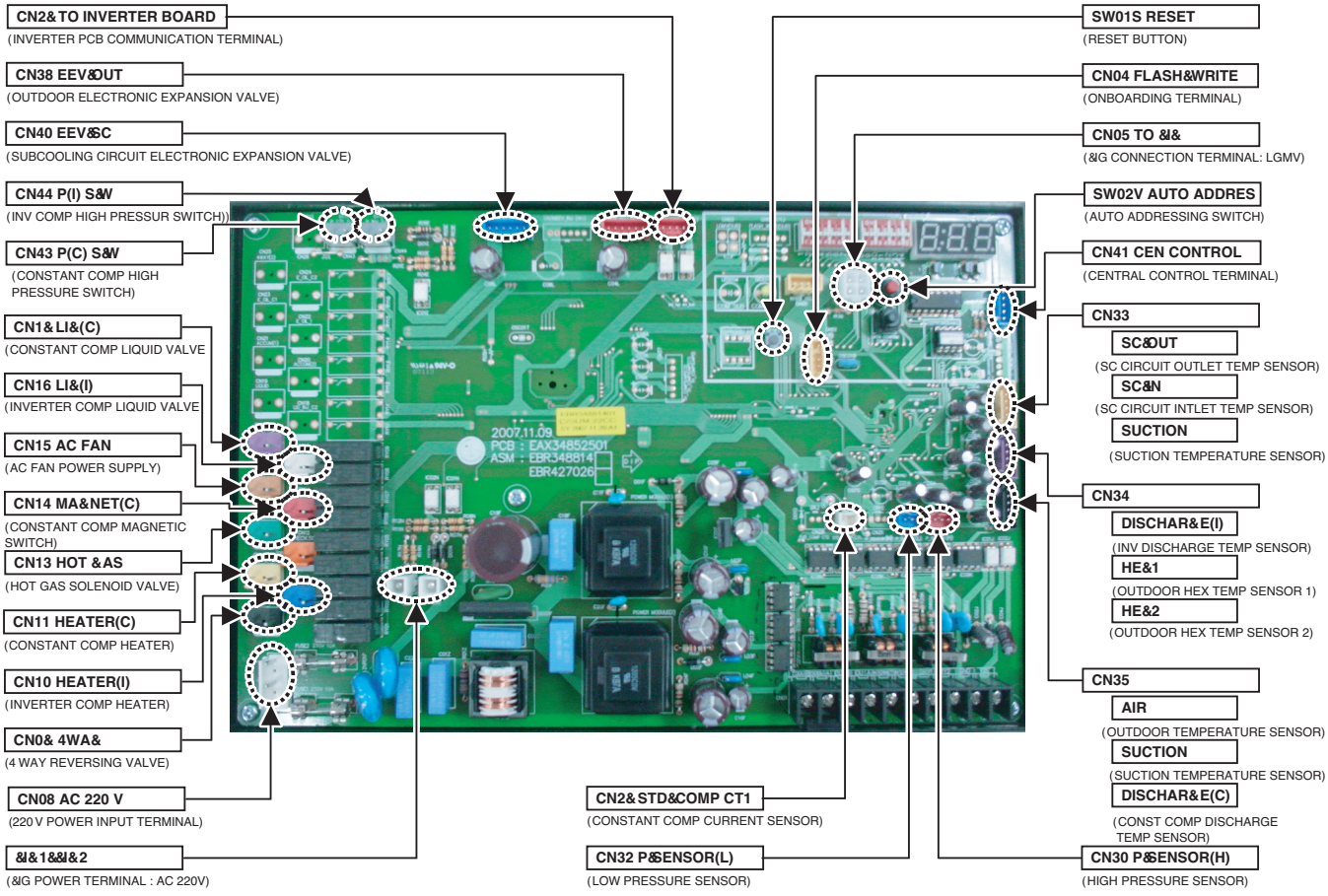
5.1 ARUB80LT2



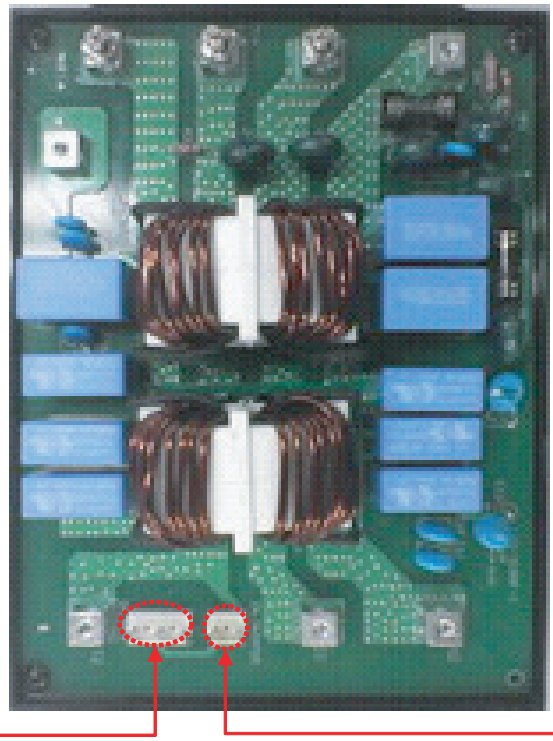
5.2 ARUB100LT2, ARUB120LT2, ARUB140LT2, ARUB160LT2



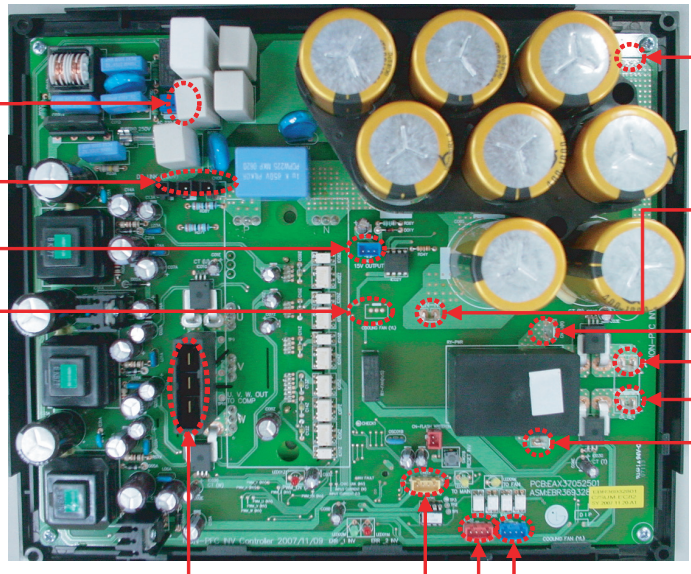
■ Main PCB



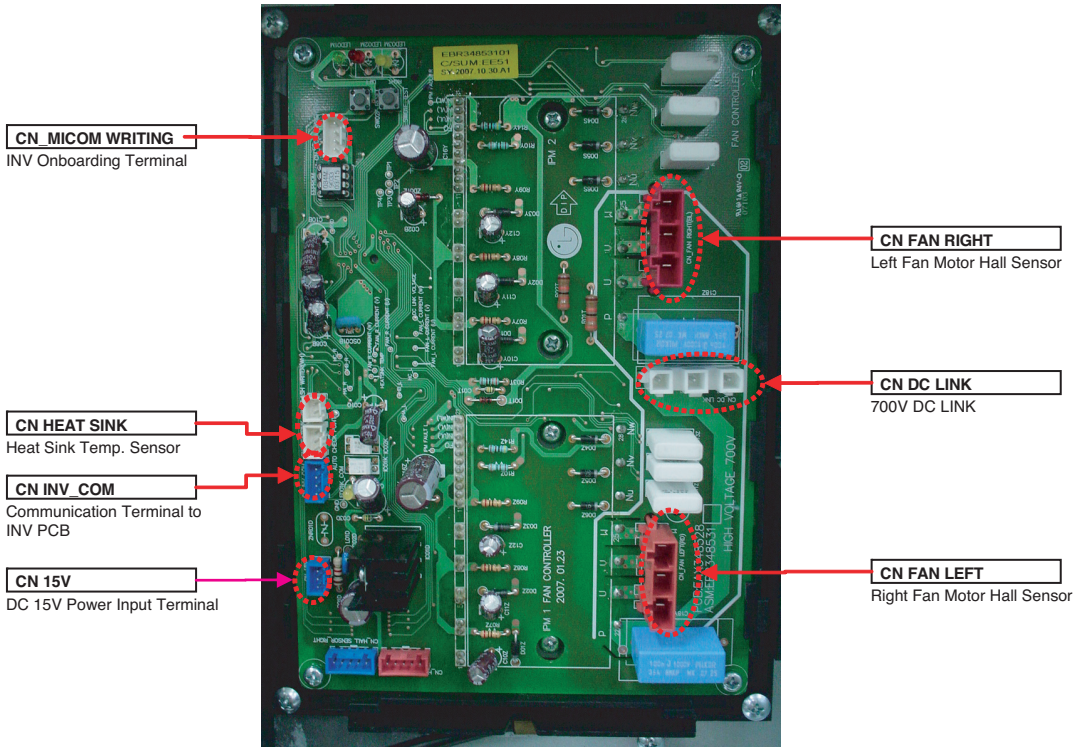
■ Noize Filter



■ Inverter PCB



■ FAN PCB(UW1)

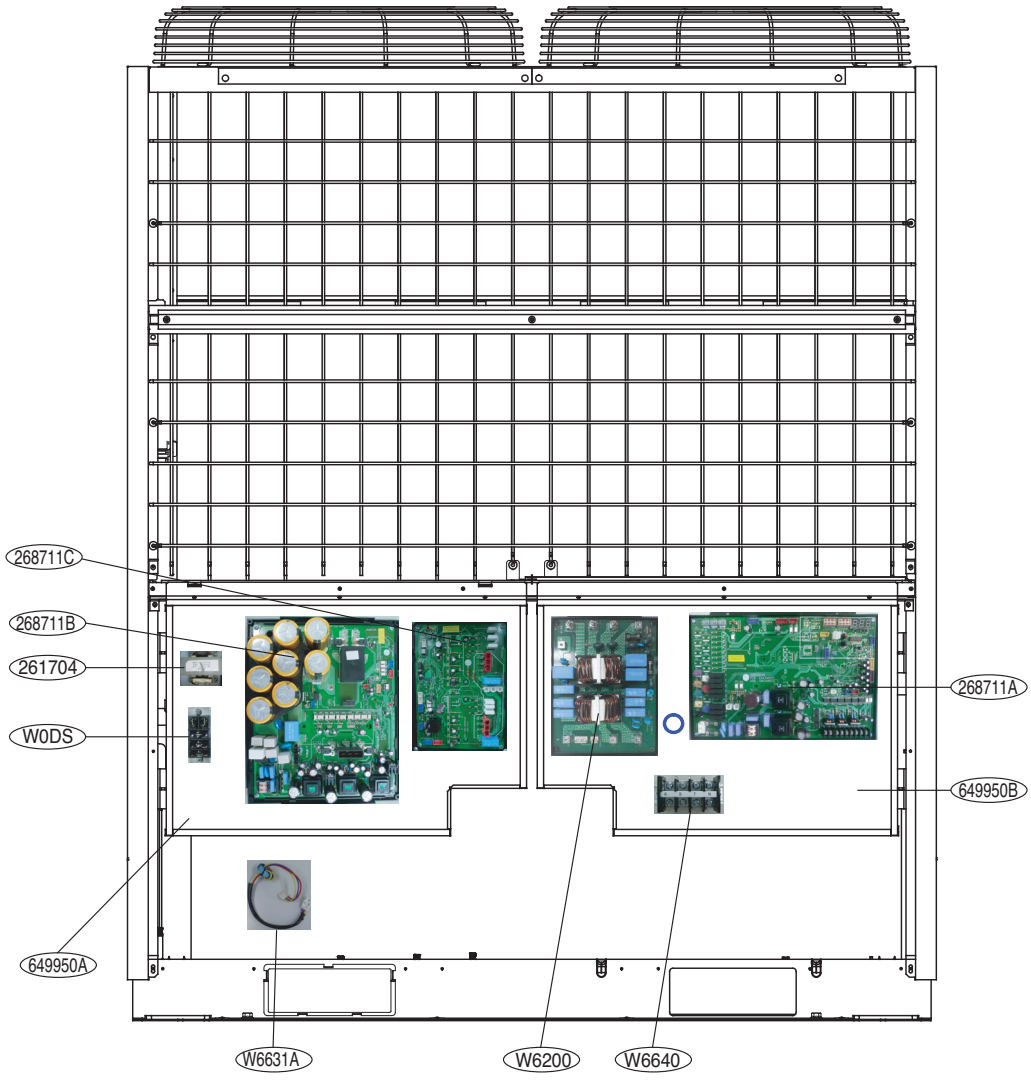


6. Exploded View & Replacement Parts List

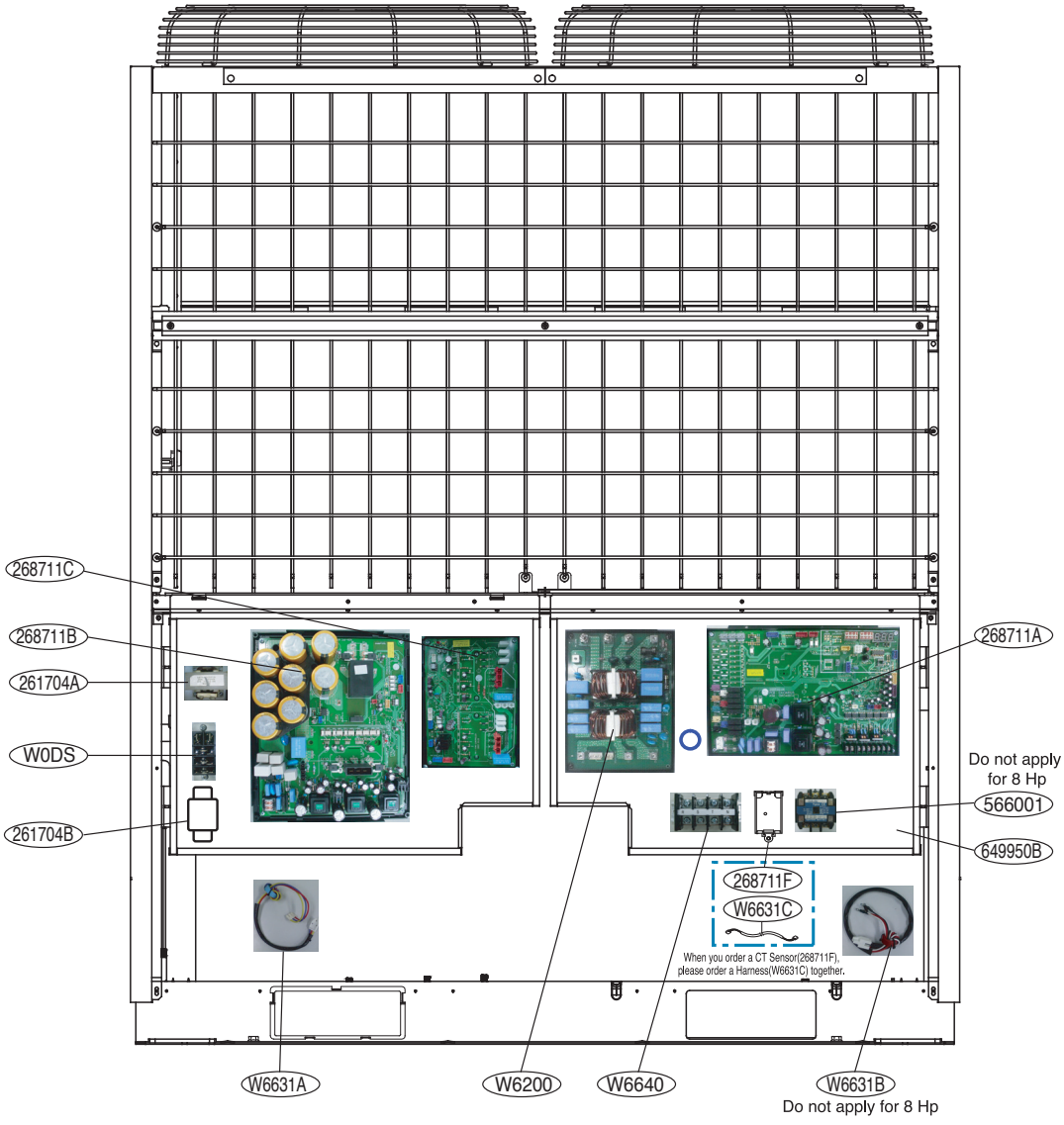
Outdoor Unit

- **Model : 8HP**

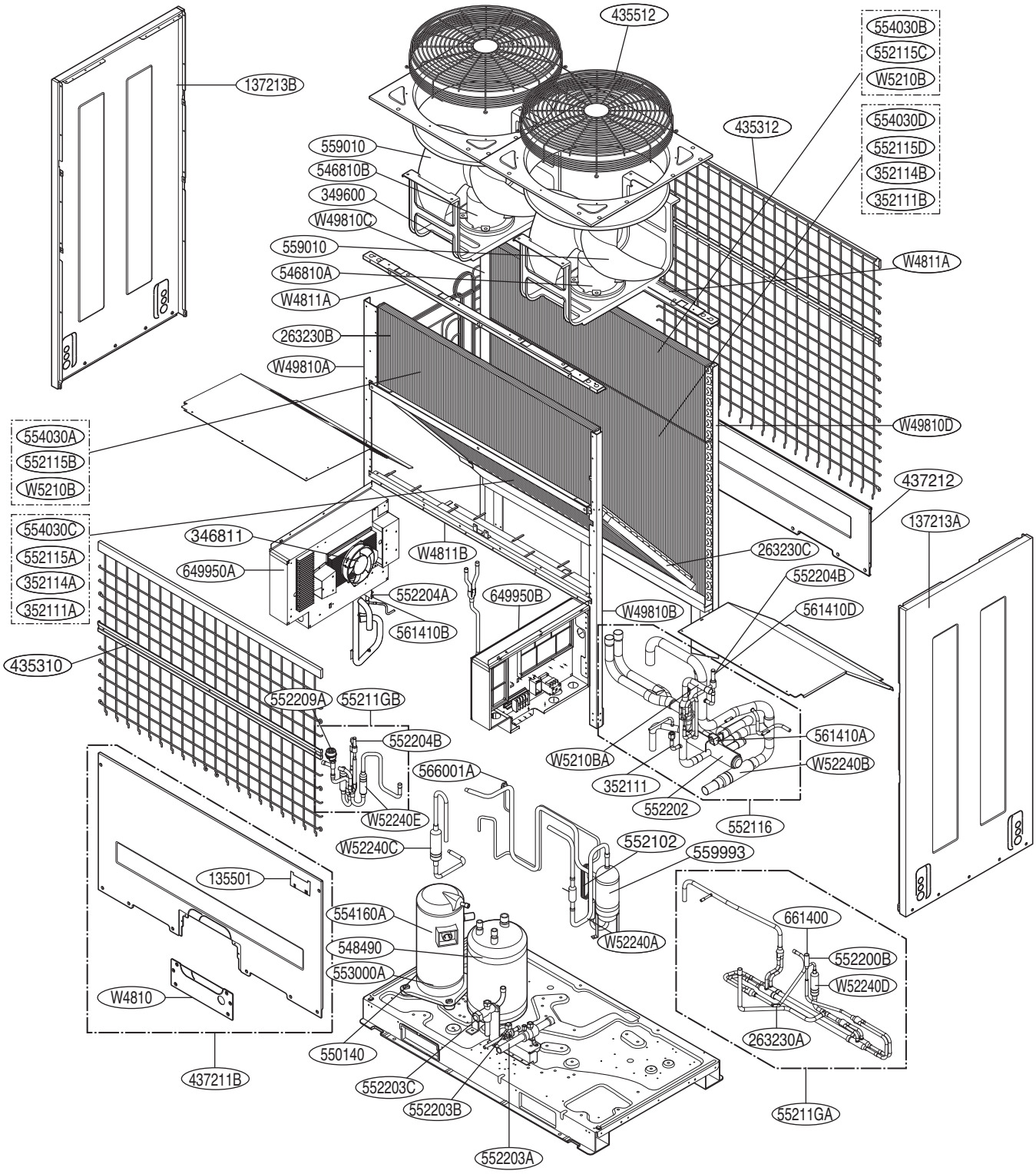
UW 1



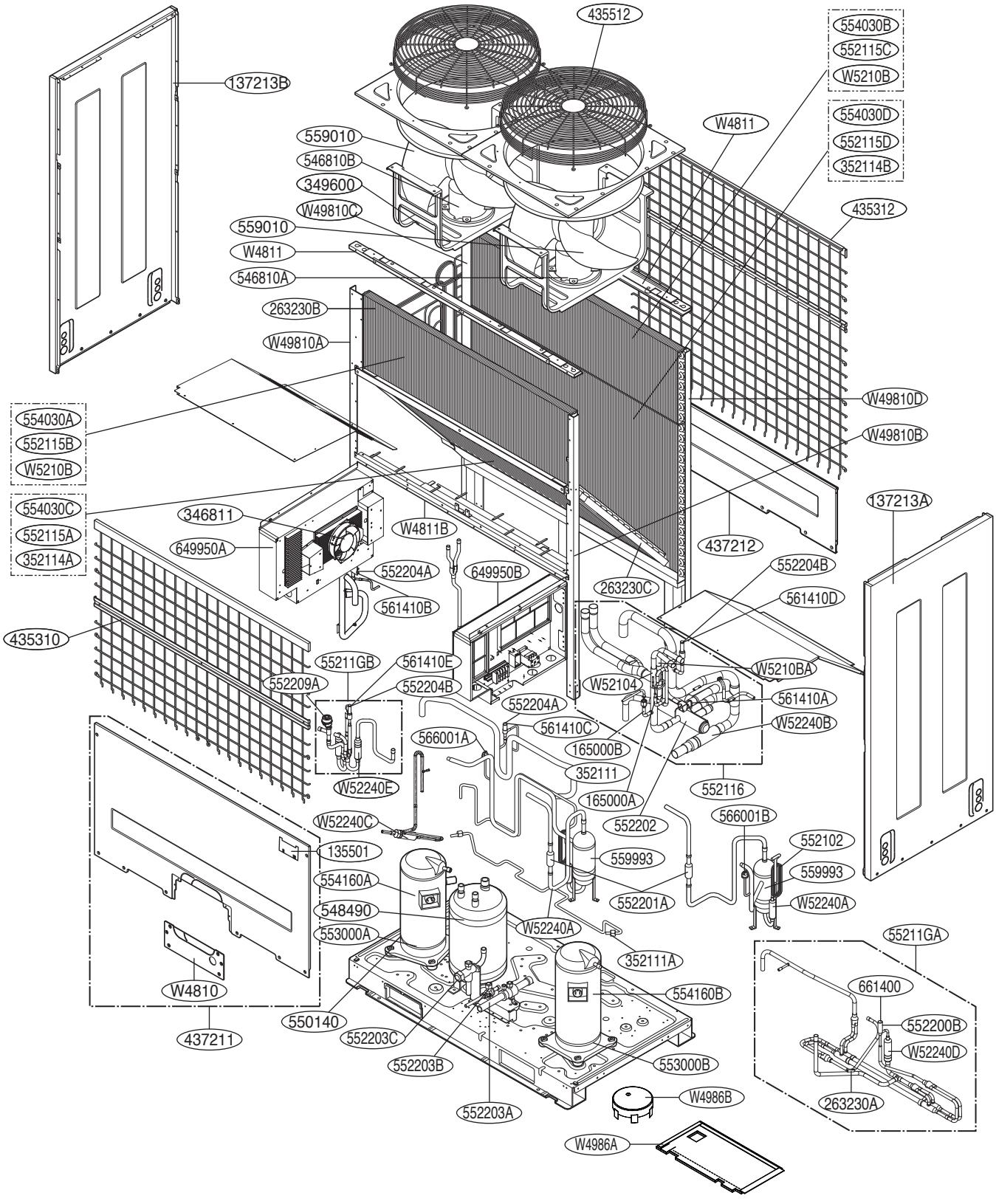
UW 1



Oudoor Unit 1 Compressor Model



Oudoor Unit 2 Compressor Model



P/NO : MFL42767901