CONFIDENTIAL

LG
Life's Good

MULTI V III

Outdoor Unit R410A

SERVICE MANUAL
(Exploded View)

MODEL : ARUB Series (Heat Recovery)

CAUTION

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

P/NO : MFL54555518

www.lgservice.co.kr

Copyright © 2012 - 2019 LG Electronics Inc. All rights reserved. Only training and service purposes.

ARUB Series

1. Specifications 3
2. Functions 16
3. Dimensions 17
4. Piping Diagrams 25
5. Wiring Diagrams 53
6. Exploded View 60

Copyright © 2012 - 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

1. Specifications

Heat Recovery

Heat Recovery(50Hz/60Hz)

HP				8	10
Model Name			Combination Unit	ARUB80LN3	ARUB100LN3
			Independent Unit	ARUB80LN3	ARUB100LN3
Capacity	Cooling		kW	22.4	28
			kcal/h	19,300	24,100
			Btu/h	76,400	95,900
	Heating		kW	25.2	31.5
			kcal/h	21,700	27,100
			Btu/h	86,000	107,500
Power Input	Cooling		kW	5.25	7.00
	Heating		kW	5.50	7.25
Casing Color				Warm Gray Morning Gray	Warm Gray Morning Gray
Heat Exchanger				Gold fin	Gold fin
Compressor	Type			HSS DC Scroll	HSS DC Scroll
	Piston Displacement		cm^3/rev	50.2	50.2+66.49
	Number of Revolution		R.P.M	3,600	3,600+2,891
	Motor Output x Number		W	5,143	(5,143+4,950)x1
	Starting Method			Direct On Line	Direct On Line
Oil	Oil Type			FVC68D(PVE)	FVC68D(PVE)
	Oil Charge		cc	3,500	5,200
Fan	Type			Propeller fan	Propeller fan
	Motor Output x Number		W	750 x 1	750 x 1
	Air Flow Rate(High)		CMM	180	190
			CFM	6,300	6,700
	Drive			DC INVERTER	DC INVERTER
	Discharge		Side / Top	TOP	TOP
Pipe Connections	Liquid Pipes		mm(inch)	9.52(3/8)	9.52(3/8)
	Low Pressure Gas Pipes		mm(inch)	19.05(3/4)	22.2(7/8)
	High Pressure Gas Pipes		mm(inch)	15.88(5/8)	19.05(3/4)
Dimensions(WxHxD)			mm	(920×1,680×760)×1	(920×1,680×760)×1
			inch	(36.2×66.1×29.9)×1	(36.2×66.1×29.9)×1
Net Weight			kg	190 x 1	240 x 1
			lbs	418 x 1	529 x 1
Protection Devices			High pressure protection	High pressure sensor, High pressure switch	High pressure sensor, High pressure switch
			Comperssor/ Fan	Over-heat protection/ Fan driver overload protector	Over-heat protection/ Fan driver overload protector
			Inverter	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
Communication Cable			mm^2(VCTF-SB)	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C
Refrigerant	Refrigerant name			R410A	R410A
	Control			EEV	EEV
Power Supply			Ø , V, Hz	3, 380-415, 50	3, 380-415, 50
				3, 380, 60	3, 380, 60

Notes:

1. Capacities are based on the following conditions:
   - Cooling: - Indoor Temperature 27°C(80.6°F) DB/19°C(66.2°F) WB
     - Outdoor Temperature 35°C(95°F) DB/24°C(75.2°F) WB
   - Heating: - Indoor Temperature 20°C(68°F) DB/15°C(59°F) WB
     - Outdoor Temperature 7°C(44.6°F) DB/6°C(42.8°F) WB
   - Piping Length - Interconnecting Piping Length 7.5m
     - Level Difference of Zero
2. Capacities are net capacities
3. EEV : Electronic Expansion Valve
4. Wiring cable size must comply with the applicable local and national code.
5. Due to our policy of innovation some specifications may be changed without prior notification

Conversion Formula
RT = kW x 0.284
kcal/h = kW x 860
Btu/h = kW x 3412
CFM = m^3/min x 35.3

Copyright © 2012- 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

Heat Recovery(50Hz/60Hz)

HP			12	14	16
Model Name		Combination Unit	ARUB120LN3	ARUB140LN3	ARUB160LN3
		Independent Unit	ARUB120LN3	ARUB140LN3	ARUB160LN3
Capacity	Cooling	kW	33.6	39.2	44.8
		kcal/h	28,900	33,700	38,500
		Btu/h	114,700	133,800	152,900
	Heating	kW	37.8	44.1	50.4
		kcal/h	32,500	37,900	43,300
		Btu/h	129,000	150,500	172,000
Power Input	Cooling	kW	8.90	9.50	11.00
	Heating	kW	9.00	9.70	11.50
Casing Color			Warm Gray Morning Gray	Warm Gray Morning Gray	Warm Gray Morning Gray
Heat Exchanger			Gold fin	Gold fin	Gold fin
Compressor	Type		HSS DC Scroll	HSS DC Scroll	HSS DC Scroll
	Piston Displacement	cm^3/rev	50.2+66.49	50.2+66.49	50.2+66.49
	Number of Revolution	R.P.M	3,600+2,891	3,600+2,891	3,600+2,891
	Motor Output x Number	W	(5,143+4,950)x1	(5,143+4,950)x1	(5,143+4,950)x1
	Starting Method		Direct On Line	Direct On Line	Direct On Line
Oil	Oil Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Oil Charge	cc	5,200	5,500	5,500
Fan	Type		Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	750 x 1	600 x 2	600 x 2
	Air Flow Rate(High)	CMM	190	210	210
		CFM	6,700	7,400	7,400
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP
Pipe Connections	Liquid Pipes	mm(inch)	12.7(1/2)	12.7(1/2)	12.7(1/2)
	Low Pressure Gas Pipes	mm(inch)	28.58(1 1/8)	28.58(1 1/8)	28.58(1 1/8)
	High Pressure Gas Pipes	mm(inch)	19.05(3/4)	22.2(7/8)	22.2(7/8)
Dimensions(WxHxD)		mm	(920×1,680×760)×1	(1,240×1,680×760)×1	(1,240×1,680×760)×1
		inch	(36.2×66.1×29.9)×1	(48.8×66.1×29.9)×1	(48.8×66.1×29.9)×1
Net Weight		kg	240 x 1	270 x 1	270 x 1
		lbs	529 x 1	595 x 1	595 x 1
Protection Devices		High pressure protection	High pressure sensor, High pressure switch	High pressure sensor, High pressure switch	High pressure sensor, High pressure switch
		Comperssor/ Fan	Over-heat protection/ Fan driver overload protector	Over-heat protection/ Fan driver overload protector	Over-heat protection/ Fan driver overload protector
		Inverter	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
Communication Cable		㎟(VCTF-SB)	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C
Refrigerant	Refrigerant name		R410A	R410A	R410A
	Control		EEV	EEV	EEV
Power Supply		Ø , V, Hz	3, 380-415, 50	3, 380-415, 50	3, 380-415, 50
			3, 380, 60	3, 380, 60	3, 380, 60

Notes:

1. Capacities are based on the following conditions:
   - Cooling: - Indoor Temperature 27°C(80.6°F) DB/19°C(66.2°F) WB
     - Outdoor Temperature 35°C(95°F) DB/24°C(75.2°F) WB
   - Heating: - Indoor Temperature 20°C(68°F) DB/15°C(59°F) WB
     - Outdoor Temperature 7°C(44.6°F) DB/6°C(42.8°F) WB
   - Piping Length - Interconnecting Piping Length 7.5m
     - Level Difference of Zero
2. Capacities are net capacities
3. EEV : Electronic Expansion Valve
4. Wiring cable size must comply with the applicable local and national code.
5. Due to our policy of innovation some specifications may be changed without prior notification

Conversion Formula
RT = kW x 0.284
kcal/h = kW x 860
Btu/h = kW x 3412
CFM = m^3/min x 35.3

Copyright © 2012 - 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

Heat Recovery(50Hz/60Hz)

HP			18	20	22
Model Name		Combination Unit	ARUB180LN3	ARUB200LN3	ARUB220LN3
		Independent Unit	ARUB180LN3	ARUB200LN3	ARUB120LN3
					ARUB100LN3
Capacity	Cooling	kW	50.4	56.0	61.6
		kcal/h	43,300	48,200	53,000
		Btu/h	172,000	191,100	210,600
	Heating	kW	56.7	63.0	69.3
		kcal/h	48,800	54,200	59,600
		Btu/h	193,500	215,000	236,500
Power Input	Cooling	kW	12.80	15.00	15.90
	Heating	kW	13.50	15.50	16.25
Casing Color			Warm Gray Morning Gray	Warm Gray Morning Gray	Warm Gray Morning Gray
Heat Exchanger			Gold fin	Gold fin	Gold fin
Compressor	Type		HSS DC Scroll	HSS DC Scroll	HSS DC Scroll
	Piston Displacement	cm^3/rev	50.2+66.49+66.49	50.2+66.49+66.49	(50.2+66.49) x 2
	Number of Revolution	R.P.M	3,600+2,891+2,891	3,600+2,891+2,891	(3,600+2,891) x 2
	Motor Output x Number	W	(5,143+4,950+4,950)x1	(5,143+4,950+4,950)x1	(5,143+4,950)x2
	Starting Method		Direct On Line	Direct On Line	Direct On Line
Oil	Oil Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Oil Charge	cc	7,200	7,200	10,400
Fan	Type		Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	600 x 2	600 x 2	750 x 2
	Air Flow Rate(High)	CMM	240	250	380
		CFM	8,500	8,800	13,400
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP
Pipe Connections	Liquid Pipes	mm(inch)	15.88(5/8)	15.88(5/8)	15.88(5/8)
	Low Pressure Gas Pipes	mm(inch)	28.58(1 1/8)	28.58(1 1/8)	34.9(1 3/8)
	High Pressure Gas Pipes	mm(inch)	22.2(7/8)	22.2(7/8)	28.58(1 1/8)
Dimensions(WxHxD)		mm	(1,240×1,680×760)×1	(1,240×1,680×760)×1	(920×1,680×760)×2
		inch	(48.8×66.1×29.9)×1	(36.2×66.1×29.9)×1	(36.2×66.1×29.9)×2
Net Weight		kg	320 x 1	330 x 1	240 x 2
		lbs	705 x 1	727 x 1	529 x 2
Protection Devices		High pressure protection	High pressure sensor, High pressure switch	High pressure sensor, High pressure switch	High pressure sensor, High pressure switch
		Comperssor/ Fan	Over-heat protection/ Fan driver overload protector	Over-heat protection/ Fan driver overload protector	Over-heat protection/ Fan driver overload protector
		Inverter	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
Communication Cable		㎟(VCTF-SB)	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C
Refrigerant	Refrigerant name		R410A	R410A	R410A
	Control		EEV	EEV	EEV
Power Supply		Ø , V, Hz	3, 380-415, 50	3, 380-415, 50	3, 380-415, 50
			3, 380, 60	3, 380, 60	3, 380, 60

Notes:

1. Capacities are based on the following conditions:
   - Cooling: - Indoor Temperature 27°C(80.6°F) DB/19°C(66.2°F) WB
     - Outdoor Temperature 35°C(95°F) DB/24°C(75.2°F) WB
   - Heating: - Indoor Temperature 20°C(68°F) DB/15°C(59°F) WB
     - Outdoor Temperature 7°C(44.6°F) DB/6°C(42.8°F) WB
   - Piping Length - Interconnecting Piping Length 7.5m
     - Level Difference of Zero
2. Capacities are net capacities
3. EEV : Electronic Expansion Valve
4. Wiring cable size must comply with the applicable local and national code.
5. Due to our policy of innovation some specifications may be changed without prior notification

Conversion Formula
RT = kW x 0.284
kcal/h = kW x 860
Btu/h = kW x 3412
CFM = m^3/min x 35.3

Copyright © 2012- 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

Heat Recovery(50Hz/60Hz)

HP			24	26	28
Model Name		Combination Unit	ARUB240LN3	ARUB260LN3	ARUB280LN3
		Independent Unit	ARUB120LN3	ARUB140LN3	ARUB160LN3
			ARUB120LN3	ARUB120LN3	ARUB120LN3
Capacity	Cooling	kW	67.2	72.8	78.4
		kcal/h	57,800	62,600	67,400
		Btu/h	229,400	248,500	267,600
	Heating	kW	75.6	81.9	88.2
		kcal/h	65,000	70,400	75,800
		Btu/h	258,000	279,500	301,000
Power Input	Cooling	kW	17.80	18.40	19.90
	Heating	kW	18.00	18.70	20.50
Casing Color			Warm Gray Morning Gray	Warm Gray Morning Gray	Warm Gray Morning Gray
Heat Exchanger			Gold fin	Gold fin	Gold fin
Compressor	Type		HSS DC Scroll	HSS DC Scroll	HSS DC Scroll
	Piston Displacement	cm^3/rev	(50.2+66.49) x 2	(50.2+66.49) x 2	(50.2+66.49) x 2
	Number of Revolution	R.P.M	(3,600+2,891) x 2	(3,600+2,891) x 2	(3,600+2,891) x 2
	Motor Output x Number	W	(5,143+4,950)x2	(5,143+4,950)x2	(5,143+4,950)x2
	Starting Method		Direct On Line	Direct On Line	Direct On Line
Oil	Oil Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Oil Charge	cc	10,700	10,700	10,700
Fan	Type		Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	750 x 2	750 + (600 x 2)	750 + (600 x 2)
	Air Flow Rate(High)	CMM	400	400	400
		CFM	14,100	14,100	14,100
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP
Pipe Connections	Liquid Pipes	mm(inch)	15.88(5/8)	19.05(3/4)	19.05(3/4)
	Low Pressure Gas Pipes	mm(inch)	34.9(1 3/8)	34.9(1 3/8)	34.9(1 3/8)
	High Pressure Gas Pipes	mm(inch)	28.58(1 1/8)	28.58(1 1/8)	28.58(1 1/8)
Dimensions(WxHxD)		mm	(920×1,680×760)×2	(920×1,680×760)×1 (1,240×1,680×760)×1	(920×1,680×760)×1 (1,240×1,680×760)×1
		inch	(36.2×66.1×29.9)×2	(36.2×66.1×29.9)×1 (48.8×66.1×29.9)×1	(36.2×66.1×29.9)×1 (48.8×66.1×29.9)×1
Net Weight		kg	240 x 2	240 x 1 + 270 x 1	240 x 1 + 270 x 1
		lbs	529 x 2	529 x 1 + 595 x 1	529 x 1 + 595 x 1
Protection Devices		High pressure protection	High pressure sensor, High pressure switch	High pressure sensor, High pressure switch	High pressure sensor, High pressure switch
		Comperssor/ Fan	Over-heat protection/ Fan driver overload protector	Over-heat protection/ Fan driver overload protector	Over-heat protection/ Fan driver overload protector
		Inverter	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
Communication Cable		㎟(VCTF-SB)	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C
Refrigerant	Refrigerant name		R410A	R410A	R410A
	Control		EEV	EEV	EEV
Power Supply		Ø , V, Hz	3, 380-415, 50	3, 380-415, 50	3, 380-415, 50
			3, 380, 60	3, 380, 60	3, 380, 60

Notes:

1. Capacities are based on the following conditions:
   - Cooling: - Indoor Temperature 27°C(80.6°F) DB/19°C(66.2°F) WB
     - Outdoor Temperature 35°C(95°F) DB/24°C(75.2°F) WB
   - Heating: - Indoor Temperature 20°C(68°F) DB/15°C(59°F) WB
     - Outdoor Temperature 7°C(44.6°F) DB/6°C(42.8°F) WB
   - Piping Length - Interconnecting Piping Length 7.5m
     - Level Difference of Zero
2. Capacities are net capacities
3. EEV : Electronic Expansion Valve
4. Wiring cable size must comply with the applicable local and national code.
5. Due to our policy of innovation some specifications may be changed without prior notification

Conversion Formula
RT = kW x 0.284
kcal/h = kW x 860
Btu/h = kW x 3412
CFM = m^3/min x 35.3

Copyright © 2012 - 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

Heat Recovery(50Hz/60Hz)

HP			30	32	34
Model Name		Combination Unit	ARUB300LN3	ARUB320LN3	ARUB340LN3
		Independent Unit	ARUB160LN3	ARUB160LN3	ARUB180LN3
			ARUB140LN3	ARUB160LN3	ARUB160LN3
Capacity	Cooling	kW	84.0	89.6	95.2
		kcal/h	72,200	77,000	81,800
		Btu/h	286,700	305,800	324,900
	Heating	kW	94.5	100.8	107.1
		kcal/h	81,200	86,600	92,100
		Btu/h	322,500	344,000	365,300
Power Input	Cooling	kW	20.50	22.00	23.80
	Heating	kW	21.20	23.00	25.00
Casing Color			Warm Gray Morning Gray	Warm Gray Morning Gray	Warm Gray Morning Gray
Heat Exchanger			Gold fin	Gold fin	Gold fin
Compressor	Type		HSS DC Scroll	HSS DC Scroll	HSS DC Scroll
	Piston Displacement	cm^3/rev	(50.2+66.49) x 2	(50.2+66.49) x 2	(50.2+66.49) x 1 (50.2+66.49+66.49) x 1
	Number of Revolution	R.P.M	(3,600+2,891) x 2	(3,600+2,891) x 2	(3,600+2,891) x 1 (3,600+2,891+2,891) x 1
	Motor Output x Number	W	(5,143+4,950)x2	(5,143+4,950)x2	(5,143+4,950)x1 (5,143+4,950+4,950)x1
	Starting Method		Direct On Line	Direct On Line	Direct On Line
Oil	Oil Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Oil Charge	cc	11,000	11,000	12,700
Fan	Type		Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	(600 x 2) x 2	(600 x 2) x 2	(600 x 2) x 2
	Air Flow Rate(High)	CMM	420	420	450
		CFM	14,800	14,800	15,900
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP
Pipe Connections	Liquid Pipes	mm(inch)	19.05(3/4)	19.05(3/4)	19.05(3/4)
	Low Pressure Gas Pipes	mm(inch)	34.9(1 3/8)	34.9(1 3/8)	34.9(1 3/8)
	High Pressure Gas Pipes	mm(inch)	28.58(1 1/8)	28.58(1 1/8)	28.58(1 1/8)
Dimensions(WxHxD)		mm	(1,240×1,680×760)×2	(1,240×1,680×760)×2	(1,240×1,680×760)×2
		inch	(48.8×66.1×29.9)×2	(48.8×66.1×29.9)×2	(48.8×66.1×29.9)×2
Net Weight		kg	270 x 2	270 x 2	270 x 1 + 320 x 1
		lbs	595 x 2	595 x 2	595 x 1 + 705 x 1
Protection Devices		High pressure protection	High pressure sensor, High pressure switch	High pressure sensor, High pressure switch	High pressure sensor, High pressure switch
		Comperssor/ Fan	Over-heat protection/ Fan driver overload protector	Over-heat protection/ Fan driver overload protector	Over-heat protection/ Fan driver overload protector
		Inverter	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
Communication Cable		㎟(VCTF-SB)	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C
Refrigerant	Refrigerant name		R410A	R410A	R410A
	Control		EEV	EEV	EEV
Power Supply		Ø , V, Hz	3, 380-415, 50	3, 380-415, 50	3, 380-415, 50
			3, 380, 60	3, 380, 60	3, 380, 60

Notes:

1. Capacities are based on the following conditions:
   - Cooling: - Indoor Temperature 27°C(80.6°F) DB/19°C(66.2°F) WB
     - Outdoor Temperature 35°C(95°F) DB/24°C(75.2°F) WB
   - Heating: - Indoor Temperature 20°C(68°F) DB/15°C(59°F) WB
     - Outdoor Temperature 7°C(44.6°F) DB/6°C(42.8°F) WB
   - Piping Length - Interconnecting Piping Length 7.5m
     - Level Difference of Zero
2. Capacities are net capacities
3. EEV : Electronic Expansion Valve
4. Wiring cable size must comply with the applicable local and national code.
5. Due to our policy of innovation some specifications may be changed without prior notification

Conversion Formula
RT = kW x 0.284
kcal/h = kW x 860
Btu/h = kW x 3412
CFM = m^3/min x 35.3

Copyright © 2012- 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

Heat Recovery(50Hz/60Hz)

HP			36	38	40
Model Name		Combination Unit	ARUB360LN3	ARUB380LN3	ARUB400LN3
		Independent Unit	ARUB200LN3	ARUB200LN3	ARUB200LN3
			ARUB160LN3	ARUB180LN3	ARUB200LN3
Capacity	Cooling	kW	100.8	106.4	112.0
		kcal/h	86,700	91,500	96,400
		Btu/h	344,000	363,100	382,200
	Heating	kW	113.4	119.7	126.0
		kcal/h	97,500	103,000	108,400
		Btu/h	397,000	408,400	429,900
Power Input	Cooling	kW	26.00	27.80	30.00
	Heating	kW	27.00	29.00	31.00
Casing Color			Warm Gray Morning Gray	Warm Gray Morning Gray	Warm Gray Morning Gray
Heat Exchanger			Gold fin	Gold fin	Gold fin
Compressor	Type		HSS DC Scroll	HSS DC Scroll	HSS DC Scroll
	Piston Displacement	cm^3/rev	(50.2+66.49) x 1 (50.2+66.49+66.49) x 1	(50.2+66.49+66.49) x 2	(50.2+66.49+66.49) x 2
	Number of Revolution	R.P.M	(3,600+2,891) x 1 (3,600+2,891+2,891) x 1	(3,600+2,891+2,891) x 2	(3,600+2,891+2,891) x 2
	Motor Output x Number	W	(5,143+4,950)x1 (5,143+4,950+4,950)x1	(5,143+4,950+4,950)x2	(5,143+4,950+4,950)x2
	Starting Method		Direct On Line	Direct On Line	Direct On Line
Oil	Oil Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Oil Charge	cc	12,700	14,400	14,400
Fan	Type		Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	(600 x 2) x 2	(600 x 2) x 2	(600 x 2) x 2
	Air Flow Rate(High)	CMM	460	490	500
		CFM	16,200	17,300	17,600
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP
Pipe Connections	Liquid Pipes	mm(inch)	19.05(3/4)	19.05(3/4)	19.05(3/4)
	Low Pressure Gas Pipes	mm(inch)	41.3(1 5/8)	41.3(1 5/8)	41.3(1 5/8)
	High Pressure Gas Pipes	mm(inch)	28.58(1 1/8)	34.9(1 3/8)	34.9(1 3/8)
Dimensions(WxHxD)		mm	(1,240×1,680×760)×2	(1,240×1,680×760)×2	(1,240×1,680×760)×2
		inch	(48.8×66.1×29.9)×2	(48.8×66.1×29.9)×2	(48.8×66.1×29.9)×2
Net Weight		kg	270 x 1 + 330 x 1	320 x 1 + 330 x 1	330 x 2
		lbs	595 x 1 + 727 x 1	705 x 1 + 727 x 1	727 x 2
Protection Devices		High pressure protection	High pressure sensor, High pressure switch	High pressure sensor, High pressure switch	High pressure sensor, High pressure switch
		Comperssor/ Fan	Over-heat protection/ Fan driver overload protector	Over-heat protection/ Fan driver overload protector	Over-heat protection/ Fan driver overload protector
		Inverter	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
Communication Cable		㎟(VCTF-SB)	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C
Refrigerant	Refrigerant name		R410A	R410A	R410A
	Control		EEV	EEV	EEV
Power Supply		Ø , V, Hz	3, 380-415, 50	3, 380-415, 50	3, 380-415, 50
			3, 380, 60	3, 380, 60	3, 380, 60

Notes:

1. Capacities are based on the following conditions:
   - Cooling: - Indoor Temperature 27°C(80.6°F) DB/19°C(66.2°F) WB
     - Outdoor Temperature 35°C(95°F) DB/24°C(75.2°F) WB
   - Heating: - Indoor Temperature 20°C(68°F) DB/15°C(59°F) WB
     - Outdoor Temperature 7°C(44.6°F) DB/6°C(42.8°F) WB
   - Piping Length - Interconnecting Piping Length 7.5m
     - Level Difference of Zero
2. Capacities are net capacities
3. EEV : Electronic Expansion Valve
4. Wiring cable size must comply with the applicable local and national code.
5. Due to our policy of innovation some specifications may be changed without prior notification

Conversion Formula
RT = kW x 0.284
kcal/h = kW x 860
Btu/h = kW x 3412
CFM = m^3/min x 35.3

Copyright © 2012 - 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

Heat Recovery(50Hz/60Hz)

HP			42	44	46
Model Name		Combination Unit	ARUB420LN3	ARUB440LN3	ARUB460LN3
		Independent Unit	ARUB160LN3	ARUB160LN3	ARUB160LN3
			ARUB140LN3	ARUB160LN3	ARUB160LN3
			ARUB120LN3	ARUB120LN3	ARUB140LN3
Capacity	Cooling	kW	117.6	123.2	128.8
		kcal/h	101,100	105,900	110,700
		Btu/h	401,400	420,500	439,600
	Heating	kW	132.3	139.0	144.9
		kcal/h	113,700	119,100	124,500
		Btu/h	451,500	473,000	494,500
Power Input	Cooling	kW	29.40	30.90	31.50
	Heating	kW	30.20	32.00	32.70
Casing Color			Warm Gray Morning Gray	Warm Gray Morning Gray	Warm Gray Morning Gray
Heat Exchanger			Gold fin	Gold fin	Gold fin
Compressor	Type		HSS DC Scroll	HSS DC Scroll	HSS DC Scroll
	Piston Displacement	cm^3/rev	(50.2+66.49) x 3	(50.2+66.49) x 3	(50.2+66.49) x 3
	Number of Revolution	R.P.M	(3,600+2,891) x 3	(3,600+2,891) x 3	(3,600+2,891) x 3
	Motor Output x Number	W	(5,143+4,950) x3	(5,143+4,950) x3	(5,143+4,950) x3
	Starting Method		Direct On Line	Direct On Line	Direct On Line
Oil	Oil Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Oil Charge	cc	16,200	16,200	16,500
Fan	Type		Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	750 + (600 x 2) x 2	750 + (600 x 2) x 2	(600 x 2) x 3
	Air Flow Rate(High)	CMM	610	610	630
		CFM	21,500	21,500	22,200
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP
Pipe Connections	Liquid Pipes	mm(inch)	19.05(3/4)	19.05(3/4)	19.05(3/4)
	Low Pressure Gas Pipes	mm(inch)	41.3(1 5/8)	41.3(1 5/8)	41.3(1 5/8)
	High Pressure Gas Pipes	mm(inch)	34.9(1 3/8)	34.9(1 3/8)	34.9(1 3/8)
Dimensions(WxHxD)		mm	(920x1,680x760)x1 (1,240x1,680x760)x2	(920x1,680x760)x1 (1,240x1,680x760)x2	(1,240x1,680x760)x3
		inch	(36.2x66.1x29.9)x1 (48.8x66.1x29.9)x2	(36.2x66.1x29.9)x1 (48.8x66.1x29.9)x2	(48.8x66.1x29.9)x3
Net Weight		kg	240 x 1 + 270 x 2	240 x 1 + 270 x 2	270 x 3
		lbs	529 x 1 + 595 x 2	529 x 1 + 595 x 2	595 x3
Protection Devices		High pressure protection	High pressure sensor, High pressure switch	High pressure sensor, High pressure switch	High pressure sensor, High pressure switch
		Comperssor/ Fan	Over-heat protection/ Fan driver overload protector	Over-heat protection/ Fan driver overload protector	Over-heat protection/ Fan driver overload protector
		Inverter	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
Communication Cable		㎟(VCTF-SB)	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C
Refrigerant	Refrigerant name		R410A	R410A	R410A
	Control		EEV	EEV	EEV
Power Supply		Ø , V, Hz	3, 380-415, 50	3, 380-415, 50	3, 380-415, 50
			3, 380, 60	3, 380, 60	3, 380, 60

Notes:

1. Capacities are based on the following conditions:
   - Cooling: - Indoor Temperature 27°C(80.6°F) DB/19°C(66.2°F) WB
     - Outdoor Temperature 35°C(95°F) DB/24°C(75.2°F) WB
   - Heating: - Indoor Temperature 20°C(68°F) DB/15°C(59°F) WB
     - Outdoor Temperature 7°C(44.6°F) DB/6°C(42.8°F) WB
   - Piping Length - Interconnecting Piping Length 7.5m
     - Level Difference of Zero
2. Capacities are net capacities
3. EEV : Electronic Expansion Valve
4. Wiring cable size must comply with the applicable local and national code.
5. Due to our policy of innovation some specifications may be changed without prior notification

Conversion Formula
RT = kW x 0.284
kcal/h = kW x 860
Btu/h = kW x 3412
CFM = m^3/min x 35.3

Copyright © 2012- 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

Heat Recovery(50Hz/60Hz)

HP			48	50	52
Model Name		Combination Unit	ARUB480LN3	ARUB500LN3	ARUB520LN3
		Independent Unit	ARUB160LN3	ARUB180LN3	ARUB200LN3
			ARUB160LN3	ARUB160LN3	ARUB160LN3
			ARUB160LN3	ARUB160LN3	ARUB160LN3
Capacity	Cooling	kW	134.4	140.0	145.6
		kcal/h	115,500	120,300	125,200
		Btu/h	458,700	477,800	496,900
	Heating	kW	151.2	157.5	163.8
		kcal/h	129,900	135,400	140,800
		Btu/h	516,000	537,500	559,000
Power Input	Cooling	kW	33.00	34.80	37.00
	Heating	kW	34.50	36.50	38.50
Casing Color			Warm Gray Morning Gray	Warm Gray Morning Gray	Warm Gray Morning Gray
Heat Exchanger			Gold fin	Gold fin	Gold fin
Compressor	Type		HSS DC Scroll	HSS DC Scroll	HSS DC Scroll
	Piston Displacement	cm^3/rev	(50.2+66.49) x 3	(50.2+66.49) x 2 (50.2+66.49+66.49) x 1	(50.2+66.49) x 2 (50.2+66.49+66.49) x 1
	Number of Revolution	R.P.M	(3,600+2,891) x 3	(3,600+2,891) x 2 (3,600+2,891+2,891) x 1	(3,600+2,891) x 2 (3,600+2,891+2,891) x 1
	Motor Output x Number	W	(5,143+4,950) x3	(5,143+4,950)x2 (5,143+4,950+4,950)x1	(5,143+4,950)x2 (5,143+4,950+4,950)x1
	Starting Method		Direct On Line	Direct On Line	Direct On Line
Oil	Oil Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Oil Charge	cc	16,500	18,200	18,200
Fan	Type		Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	(600 x 2) x 3	(600 x 2) x 3	(600 x 2) x 3
	Air Flow Rate(High)	CMM	630	660	670
		CFM	22,200	23,300	23,600
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP
Pipe Connections	Liquid Pipes	mm(inch)	19.05(3/4)	19.05(3/4)	19.05(3/4)
	Low Pressure Gas Pipes	mm(inch)	41.3(1 5/8)	41.3(1 5/8)	41.3(1 5/8)
	High Pressure Gas Pipes	mm(inch)	34.9(1 3/8)	34.9(1 3/8)	34.9(1 3/8)
Dimensions(WxHxD)		mm	(1,240×1,680×760)×3	(1,240×1,680×760)×3	(1,240×1,680×760)×3
		inch	(48.8×66.1×29.9)×3	(48.8×66.1×29.9)×3	(48.8×66.1×29.9)×3
Net Weight		kg	270 x 3	270 x 2 + 320 x 1	270 x 2 + 330 x 1
		lbs	595 ×3	595 x 2 + 705 x 1	595 x 2 + 727 x 1
Protection Devices		High pressure protection	High pressure sensor, High pressure switch	High pressure sensor, High pressure switch	High pressure sensor, High pressure switch
		Comperssor/ Fan	Over-heat protection/ Fan driver overload protector	Over-heat protection/ Fan driver overload protector	Over-heat protection/ Fan driver overload protector
		Inverter	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
Communication Cable		㎟(VCTF-SB)	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C
Refrigerant	Refrigerant name		R410A	R410A	R410A
	Control		EEV	EEV	EEV
Power Supply		Ø , V, Hz	3, 380-415, 50	3, 380-415, 50	3, 380-415, 50
			3, 380, 60	3, 380, 60	3, 380, 60

Notes:

1. Capacities are based on the following conditions:
   - Cooling: - Indoor Temperature 27°C(80.6°F) DB/19°C(66.2°F) WB
     - Outdoor Temperature 35°C(95°F) DB/24°C(75.2°F) WB
   - Heating: - Indoor Temperature 20°C(68°F) DB/15°C(59°F) WB
     - Outdoor Temperature 7°C(44.6°F) DB/6°C(42.8°F) WB
   - Piping Length - Interconnecting Piping Length 7.5m
     - Level Difference of Zero
2. Capacities are net capacities
3. EEV : Electronic Expansion Valve
4. Wiring cable size must comply with the applicable local and national code.
5. Due to our policy of innovation some specifications may be changed without prior notification

Conversion Formula
RT = kW x 0.284
kcal/h = kW x 860
Btu/h = kW x 3412
CFM = m^3/min x 35.3

Copyright © 2012 - 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

Heat Recovery(50Hz/60Hz)

HP			54	56	58
Model Name		Combination Unit	ARUB540LN3	ARUB560LN3	ARUB580LN3
		Independent Unit	ARUB200LN3	ARUB200LN3	ARUB200LN3
			ARUB200LN3	ARUB200LN3	ARUB200LN3
			ARUB140LN3	ARUB160LN3	ARUB180LN3
Capacity	Cooling	kW	151.2	156.8	162.4
		kcal/h	130,100	134,900	139,700
		Btu/h	516,000	535,100	554,200
	Heating	kW	170.1	176.4	182.7
		kcal/h	146,300	151,600	157,200
		Btu/h	580,500	602,000	623,500
Power Input	Cooling	kW	39.50	41.00	42.80
	Heating	kW	40.70	42.50	44.50
Casing Color			Warm Gray Morning Gray	Warm Gray Morning Gray	Warm Gray Morning Gray
Heat Exchanger			Gold fin	Gold fin	Gold fin
Compressor	Type		HSS DC Scroll	HSS DC Scroll	HSS DC Scroll
	Piston Displacement	cm^3/rev	(50.2+66.49) x 1 (50.2+66.49+66.49) x 2	(50.2+66.49) x 1 (50.2+66.49+66.49) x 2	(50.2+66.49+66.49) x 3
	Number of Revolution	R.P.M	(3,600+2,891) x 1 (3,600+2,891+2,891) x 2	(3,600+2,891) x 1 (3,600+2,891+2,891) x 2	(3,600+2,891+2,891) x 3
	Motor Output x Number	W	(5,143+4,950)x1 (5,143+4,950+4,950)x2	(5,143+4,950)x1 (5,143+4,950+4,950)x2	(5,143+4,950+4,950) x 3
	Starting Method		Direct On Line	Direct On Line	Direct On Line
Oil	Oil Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Oil Charge	cc	19,900	19,900	21,600
Fan	Type		Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	(600 x 2) x 3	(600 x 2) x 3	(600 x 2) x 3
	Air Flow Rate(High)	CMM	710	710	740
		CFM	25,000	25,000	26,100
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP
Pipe Connections	Liquid Pipes	mm(inch)	19.05(3/4)	19.05(3/4)	19.05(3/4)
	Low Pressure Gas Pipes	mm(inch)	41.3(1 5/8)	41.3(1 5/8)	41.3(1 5/8)
	High Pressure Gas Pipes	mm(inch)	34.9(1 3/8)	34.9(1 3/8)	34.9(1 3/8)
Dimensions(WxHxD)		mm	(1,240×1,680×760)×3	(1,240×1,680×760)×3	(1,240×1,680×760)×3
		inch	(48.8×66.1×29.9)×3	(48.8×66.1×29.9)×3	(48.8×66.1×29.9)×3
Net Weight		kg	270 x 1 + 330 x 2	270 x 1 + 330 x 2	320 x 1 + 330 x 2
		lbs	595 x 1 + 727 x 2	595 x 1 + 727 x 2	7705 x 1 + 727 x 2
Protection Devices		High pressure protection	High pressure sensor, High pressure switch	High pressure sensor, High pressure switch	High pressure sensor, High pressure switch
		Comperssor/ Fan	Over-heat protection/ Fan driver overload protector	Over-heat protection/ Fan driver overload protector	Over-heat protection/ Fan driver overload protector
		Inverter	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
Communication Cable		㎟(VCTF-SB)	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C
Refrigerant	Refrigerant name		R410A	R410A	R410A
	Control		EEV	EEV	EEV
Power Supply		Ø , V, Hz	3, 380-415, 50	3, 380-415, 50	3, 380-415, 50
			3, 380, 60	3, 380, 60	3, 380, 60

Notes:

1. Capacities are based on the following conditions:
   - Cooling: - Indoor Temperature 27°C(80.6°F) DB/19°C(66.2°F) WB
     - Outdoor Temperature 35°C(95°F) DB/24°C(75.2°F) WB
   - Heating: - Indoor Temperature 20°C(68°F) DB/15°C(59°F) WB
     - Outdoor Temperature 7°C(44.6°F) DB/6°C(42.8°F) WB
   - Piping Length - Interconnecting Piping Length 7.5m
     - Level Difference of Zero
2. Capacities are net capacities
3. EEV : Electronic Expansion Valve
4. Wiring cable size must comply with the applicable local and national code.
5. Due to our policy of innovation some specifications may be changed without prior notification

Conversion Formula
RT = kW x 0.284
kcal/h = kW x 860
Btu/h = kW x 3412
CFM = m^3/min x 35.3

Copyright © 2012- 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

Heat Recovery(50Hz/60Hz)

HP			60	62	64
Model Name		Combination Unit	ARUB600LN3	ARUB620LN3	ARUB640LN3
		Independent Unit	ARUB200LN3	ARUB160LN3	ARUB160LN3
			ARUB200LN3	ARUB160LN3	ARUB160LN3
			ARUB200LN3	ARUB160LN3	ARUB160LN3
				ARUB140LN3	ARUB160LN3
Capacity	Cooling	kW	168.0	173.6	179.2
		kcal/h	144,600	149,200	154,000
		Btu/h	573,300	592,500	611,600
	Heating	kW	189.0	195.3	201.6
		kcal/h	162,600	167,800	173,200
		Btu/h	645,000	666,500	688,000
Power Input	Cooling	kW	45.00	42.50	44.00
	Heating	kW	46.50	44.20	46.00
Casing Color			Warm Gray Morning Gray	Warm Gray Morning Gray	Warm Gray Morning Gray
Heat Exchanger			Gold fin	Gold fin	Gold fin
Compressor	Type		HSS DC Scroll	HSS DC Scroll	HSS DC Scroll
	Piston Displacement	cm^3/rev	(50.2+66.49+66.49) x 3	(50.2+66.49) x 4	(50.2+66.49) x 4
	Number of Revolution	R.P.M	(3,600+2,891+2,891) x 3	(3,600+2,891) x 4	(3,600+2,891) x 4
	Motor Output x Number	W	(5,143+4,950+4,950) x 3	(5,143+4,950) x 4	(5,143+4,950) x 4
	Starting Method		Direct On Line	Direct On Line	Direct On Line
Oil	Oil Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Oil Charge	cc	21,600	22,000	22,000
Fan	Type		Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	(600 x 2) x 3	(600 x 2) x 4	(600 x 2) x 4
	Air Flow Rate(High)	CMM	750	840	840
		CFM	26,400	29,600	29,600
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP
Pipe Connections	Liquid Pipes	mm(inch)	19.05(3/4)	22.2(7/8)	22.2(7/8)
	Low Pressure Gas Pipes	mm(inch)	41.3(1 5/8)	44.5(1 3/4)	44.5(1 3/4)
	High Pressure Gas Pipes	mm(inch)	34.9(1 3/8)	41.3(1 5/8)	41.3(1 5/8)
Dimensions(WxHxD)		mm	(1,240×1,680×760) x 3	(1,240×1,680×760) x 4	(1,240×1,680×760) x 4
		inch	(48.8×66.1×29.9) x 3	(48.8×66.1×29.9) x 4	(48.8×66.1×29.9) x 4
Net Weight		kg	330 x 3	270 x 4	270 x 4
		lbs	727 x 3	595 x 4	595 x 4
Protection Devices		High pressure protection	High pressure sensor, High pressure switch	High pressure sensor, High pressure switch	High pressure sensor, High pressure switch
		Comperssor/ Fan	Over-heat protection/ Fan driver overload protector	Over-heat protection/ Fan driver overload protector	Over-heat protection/ Fan driver overload protector
		Inverter	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
Communication Cable		㎟(VCTF-SB)	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C
Refrigerant	Refrigerant name		R410A	R410A	R410A
	Control		EEV	EEV	EEV
Power Supply		Ø , V, Hz	3, 380-415, 50	3, 380-415, 50	3, 380-415, 50
			3, 380, 60	3, 380, 60	3, 380, 60

Notes:

1. Capacities are based on the following conditions:
   - Cooling: - Indoor Temperature 27°C(80.6°F) DB/19°C(66.2°F) WB
     - Outdoor Temperature 35°C(95°F) DB/24°C(75.2°F) WB
   - Heating: - Indoor Temperature 20°C(68°F) DB/15°C(59°F) WB
     - Outdoor Temperature 7°C(44.6°F) DB/6°C(42.8°F) WB
   - Piping Length - Interconnecting Piping Length 7.5m
     - Level Difference of Zero
2. Capacities are net capacities
3. EEV : Electronic Expansion Valve
4. Wiring cable size must comply with the applicable local and national code.
5. Due to our policy of innovation some specifications may be changed without prior notification

Conversion Formula
RT = kW x 0.284
kcal/h = kW x 860
Btu/h = kW x 3412
CFM = m^3/min x 35.3

Copyright © 2012 - 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

Heat Recovery(50Hz/60Hz)

HP			66	68	70
Model Name		Combination Unit	ARUB660LN3	ARUB680LN3	ARUB700LN3
		Independent Unit	ARUB180LN3	ARUB180LN3	ARUB200LN3
			ARUB160LN3	ARUB180LN3	ARUB180LN3
			ARUB160LN3	ARUB160LN3	ARUB160LN3
			ARUB160LN3	ARUB160LN3	ARUB160LN3
Capacity	Cooling	kW	184.8	190.4	196.0
		kcal/h	158,800	163,600	168,500
		Btu/h	630,700	649,800	668,900
	Heating	kW	207.9	214.2	220.5
		kcal/h	178,700	184,200	189,600
		Btu/h	709,500	731,000	752,500
Power Input	Cooling	kW	45.80	47.60	49.80
	Heating	kW	48.00	50.00	52.00
Casing Color			Warm Gray Morning Gray	Warm Gray Morning Gray	Warm Gray Morning Gray
Heat Exchanger			Gold fin	Gold fin	Gold fin
Compressor	Type		HSS DC Scroll	HSS DC Scroll	HSS DC Scroll
	Piston Displacement	cm^3/rev	(50.2+66.49) x 3 (50.2+66.49+66.49) x 1	(50.2+66.49) x 2 (50.2+66.49+66.49) x 2	(50.2+66.49) x 2 (50.2+66.49+66.49) x 2
	Number of Revolution	R.P.M	(3,600+2,891) x 3 (3,600+2,891+2,891) x 1	(3,600+2,891) x 2 (3,600+2,891+2,891) x 2	(3,600+2,891) x 2 (3,600+2,891+2,891) x 2
	Motor Output x Number	W	(5,143+4,950) x 3 (5,143+4,950+4,950) x 1	(5,143+4,950) x 2 (5,143+4,950+4,950) x 2	(5,143+4,950) x 2 (5,143+4,950+4,950) x 2
	Starting Method		Direct On Line	Direct On Line	Direct On Line
Oil	Oil Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Oil Charge	cc	23,700	25,400	25,400
Fan	Type		Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	(600 x 2) x 4	(600 x 2) x 4	(600 x 2) x 4
	Air Flow Rate(High)	CMM	870	900	910
		CFM	30,700	31,800	32,100
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP
Pipe Connections	Liquid Pipes	mm(inch)	22.2(7/8)	22.2(7/8)	22.2(7/8)
	Low Pressure Gas Pipes	mm(inch)	53.98(2 1/8)	53.98(2 1/8)	53.98(2 1/8)
	High Pressure Gas Pipes	mm(inch)	44.5(1 3/4)	44.5(1 3/4)	44.5(1 3/4)
Dimensions(WxHxD)		mm	(1,240×1,680×760)×4	(1,240×1,680×760)×4	(1,240×1,680×760)×4
		inch	(48.8×66.1×29.9)×4	(48.8×66.1×29.9)×4	(48.8×66.1×29.9)×4
Net Weight		kg	270 x 3 + 320× 1	270 x 2 + 320× 2	270×2 + 320×1 + 330×1
		lbs	595 x 3 + 705× 1	595 x 2 + 705× 2	595×2 + 705×1 + 727×1
Protection Devices		High pressure protection	High pressure sensor, High pressure switch	High pressure sensor, High pressure switch	High pressure sensor, High pressure switch
		Comperssor/ Fan	Over-heat protection/ Fan driver overload protector	Over-heat protection/ Fan driver overload protector	Over-heat protection/ Fan driver overload protector
		Inverter	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
Communication Cable		㎟(VCTF-SB)	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C
Refrigerant	Refrigerant name		R410A	R410A	R410A
	Control		EEV	EEV	EEV
Power Supply		Ø , V, Hz	3, 380-415, 50	3, 380-415, 50	3, 380-415, 50
			3, 380, 60	3, 380, 60	3, 380, 60

Notes:

1. Capacities are based on the following conditions:
   - Cooling: - Indoor Temperature 27°C(80.6°F) DB/19°C(66.2°F) WB
     - Outdoor Temperature 35°C(95°F) DB/24°C(75.2°F) WB
   - Heating: - Indoor Temperature 20°C(68°F) DB/15°C(59°F) WB
     - Outdoor Temperature 7°C(44.6°F) DB/6°C(42.8°F) WB
   - Piping Length - Interconnecting Piping Length 7.5m
     - Level Difference of Zero
2. Capacities are net capacities
3. EEV : Electronic Expansion Valve
4. Wiring cable size must comply with the applicable local and national code.
5. Due to our policy of innovation some specifications may be changed without prior notification

Conversion Formula
RT = kW x 0.284
kcal/h = kW x 860
Btu/h = kW x 3412
CFM = m^3/min x 35.3

Copyright © 2012- 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

Heat Recovery(50Hz/60Hz)

HP			72	74	76
Model Name		Combination Unit	ARUB720LN3	ARUB740LN3	ARUB760LN3
		Independent Unit	ARUB200LN3	ARUB200LN3	ARUB200LN3
			ARUB200LN3	ARUB200LN3	ARUB200LN3
			ARUB160LN3	ARUB180LN3	ARUB200LN3
			ARUB160LN3	ARUB160LN3	ARUB160LN3
Capacity	Cooling	kW	201.6	207.2	212.8
		kcal/h	173,400	178,200	183,100
		Btu/h	688,000	707,100	726,200
	Heating	kW	226.8	233.1	239.4
		kcal/h	195,000	200,500	205,900
		Btu/h	774,000	795,500	817,000
Power Input	Cooling	kW	52.00	53.80	56.00
	Heating	kW	54.00	56.00	58.00
Casing Color			Warm Gray Morning Gray	Warm Gray Morning Gray	Warm Gray Morning Gray
Heat Exchanger			Gold fin	Gold fin	Gold fin
Compressor	Type		HSS DC Scroll	HSS DC Scroll	HSS DC Scroll
	Piston Displacement	cm^3/rev	(50.2+66.49) x 2 (50.2+66.49+66.49) x 2	(50.2+66.49) x 1 (50.2+66.49+66.49) x 3	(50.2+66.49) x 1 (50.2+66.49+66.49) x 3
	Number of Revolution	R.P.M	(3,600+2,891) x 2 (3,600+2,891+2,891) x 2	(3,600+2,891) x 1 (3,600+2,891+2,891) x 3	(3,600+2,891) x 1 (3,600+2,891+2,891) x 3
	Motor Output x Number	W	(5,143+4,950) x 2 (5,143+4,950+4,950) x 2	(5,143+4,950) x 1 (5,143+4,950+4,950) x 3	(5,143+4,950) x 1 (5,143+4,950+4,950) x 3
	Starting Method		Direct On Line	Direct On Line	Direct On Line
Oil	Oil Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Oil Charge	cc	25,400	27,100	27,100
Fan	Type		Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	(600 x 2) x 4	(600 x 2) x 4	(600 x 2) x 4
	Air Flow Rate(High)	CMM	920	950	960
		CFM	32,400	33,500	33,800
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP
Pipe Connections	Liquid Pipes	mm(inch)	22.2(7/8)	22.2(7/8)	22.2(7/8)
	Low Pressure Gas Pipes	mm(inch)	53.98(2 1/8)	53.98(2 1/8)	53.98(2 1/8)
	High Pressure Gas Pipes	mm(inch)	44.5(1 3/4)	44.5(1 3/4)	44.5(1 3/4)
Dimensions(WxHxD)		mm	(1,240×1,680×760)×4	(1,240×1,680×760)×4	(1,240×1,680×760)×4
		inch	(48.8×66.1×29.9)×4	(48.8×66.1×29.9)×4	(48.8×66.1×29.9)×4
Net Weight		kg	270 x 2 + 330 x 2	270×1 + 320×1 + 330×2	270 x 1 + 330 x 3
		lbs	595 x 2 + 727 x 2	595×1 + 705×1 + 727×2	595 x 1 + 727 x 3
Protection Devices		High pressure protection	High pressure sensor, High pressure switch	High pressure sensor, High pressure switch	High pressure sensor, High pressure switch
		Comperssor/ Fan	Over-heat protection/ Fan driver overload protector	Over-heat protection/ Fan driver overload protector	Over-heat protection/ Fan driver overload protector
		Inverter	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
Communication Cable		㎟(VCTF-SB)	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C
Refrigerant	Refrigerant name		R410A	R410A	R410A
	Control		EEV	EEV	EEV
Power Supply		Ø , V, Hz	3, 380-415, 50	3, 380-415, 50	3, 380-415, 50
			3, 380, 60	3, 380, 60	3, 380, 60

Notes:

1. Capacities are based on the following conditions:
   - Cooling: - Indoor Temperature 27°C(80.6°F) DB/19°C(66.2°F) WB
     - Outdoor Temperature 35°C(95°F) DB/24°C(75.2°F) WB
   - Heating: - Indoor Temperature 20°C(68°F) DB/15°C(59°F) WB
     - Outdoor Temperature 7°C(44.6°F) DB/6°C(42.8°F) WB
   - Piping Length - Interconnecting Piping Length 7.5m
     - Level Difference of Zero
2. Capacities are net capacities
3. EEV : Electronic Expansion Valve
4. Wiring cable size must comply with the applicable local and national code.
5. Due to our policy of innovation some specifications may be changed without prior notification

Conversion Formula
RT = kW x 0.284
kcal/h = kW x 860
Btu/h = kW x 3412
CFM = m^3/min x 35.3

Copyright © 2012 - 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

Heat Recovery(50Hz/60Hz)

HP			78	80
Model Name		Combination Unit	ARUB780LN3	ARUB800LN3
		Independent Unit	ARUB200LN3	ARUB200LN3
			ARUB200LN3	ARUB200LN3
			ARUB200LN3	ARUB200LN3
			ARUB180LN3	ARUB200LN3
Capacity	Cooling	kW	218.4	224.0
		kcal/h	187,900	192,800
		Btu/h	745,300	764,400
	Heating	kW	245.7	252.0
		kcal/h	211,400	216,800
		Btu/h	838,500	860,000
Power Input	Cooling	kW	57.80	60.00
	Heating	kW	60.00	62.00
Casing Color			Warm Gray Morning Gray	Warm Gray Morning Gray
Heat Exchanger			Gold fin	Gold fin
Compressor	Type		HSS DC Scroll	HSS DC Scroll
	Piston Displacement	cm^3/rev	(50.2+66.49+66.49) x 4	(50.2+66.49+66.49) x 4
	Number of Revolution	R.P.M	(3,600+2,891+2,891) x 4	(3,600+2,891+2,891) x 4
	Motor Output x Number	W	(5,143+4,950+4,950) x 4	(5,143+4,950+4,950) x 4
	Starting Method		Direct On Line	Direct On Line
Oil	Oil Type		FVC68D(PVE)	FVC68D(PVE)
	Oil Charge	cc	28,800	28,800
Fan	Type		Propeller fan	Propeller fan
	Motor Output x Number	W	(600 x 2) x 4	(600 x 2) x 4
	Air Flow Rate(High)	CMM	990	1,000
		CFM	34,900	35,200
	Drive		DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP
Pipe Connections	Liquid Pipes	mm(inch)	22.2(7/8)	22.2(7/8)
	Low Pressure Gas Pipes	mm(inch)	53.98(2 1/8)	53.98(2 1/8)
	High Pressure Gas Pipes	mm(inch)	44.5(1 3/4)	44.5(1 3/4)
Dimensions(WxHxD)		mm	(1,240×1,680×760)×4	(1,240×1,680×760)×4
		inch	(48.8×66.1×29.9)×4	(48.8×66.1×29.9)×4
Net Weight		kg	320 x 1 + 330 x 3	330 x 4
		lbs	705 x 1 + 727 x 3	727 x 4
Protection Devices		High pressure protection	High pressure sensor, High pressure switch	High pressure sensor, High pressure switch
		Comperssor/ Fan	Over-heat protection/ Fan driver overload protector	Over-heat protection/ Fan driver overload protector
		Inverter	Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
Communication Cable		㎟(VCTF-SB)	1.0 ~ 1.5 x 2C	1.0 ~ 1.5 x 2C
Refrigerant	Refrigerant name		R410A	R410A
	Control		EEV	EEV
Power Supply		Ø , V, Hz	3, 380-415, 50	3, 380-415, 50
			3, 380, 60	3, 380, 60

Notes:

1. Capacities are based on the following conditions:
   - Cooling: - Indoor Temperature 27°C(80.6°F) DB/19°C(66.2°F) WB
     - Outdoor Temperature 35°C(95°F) DB/24°C(75.2°F) WB
   - Heating: - Indoor Temperature 20°C(68°F) DB/15°C(59°F) WB
     - Outdoor Temperature 7°C(44.6°F) DB/6°C(42.8°F) WB
   - Piping Length - Interconnecting Piping Length 7.5m
     - Level Difference of Zero
2. Capacities are net capacities
3. EEV : Electronic Expansion Valve
4. Wiring cable size must comply with the applicable local and national code.
5. Due to our policy of innovation some specifications may be changed without prior notification

Conversion Formula
RT = kW x 0.284
kcal/h = kW x 860
Btu/h = kW x 3412
CFM = m^3/min x 35.3

Copyright © 2012- 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

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

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		MULTI V III Heat Recovery
CAC Network	Remote Controller	Wired Remote Controller (Standard type)	PQRCVSL0(Black)
			PQRCVSL0QW(White)
		Wireless Remote Controller (Standard type)	PQWRH(C)DF0
	Central Controller	Simple Controller	PQCSB101S0
		AC Smart II	PQCSW320A1E
		ACP	PQCPA11A0E(Without IO)
			PQCPB11A0E(With IO)
		AC Manager	PQCSS520A0E
	BNU	LONWORKS Gateway	PQNFB16A1
		BACnet Gateway	PQNFB17B0
	Dry Contact(Indoor Unit)		PQDSB
	ODU Dry Contact		PQDSBCDVM0
Program	LG MV		Option
Other	Y branch		Accessory
	Header branch		Accessory
	Heat Recovery Unit	PRHR021	Accessory
		PRHR031	Accessory
		PRHR041	Accessory
	Air Guide		Accessory
	Refrigerant Charging Kit		PRAC1

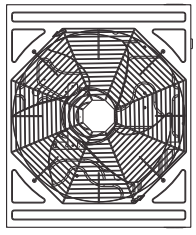
O : Applied X : Not applied - : No reation
Option : Model name & price are different according to options, and assembled in factory with main unit
Accessory : Installed at field, ordered and purchased separately by the corresponding model name, supplied with separated package.

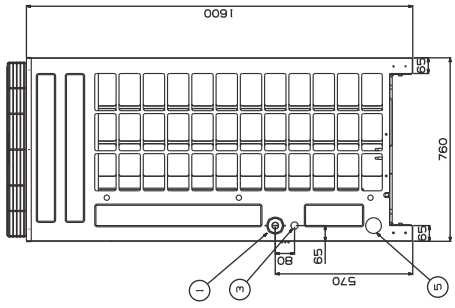
Copyright © 2012 - 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

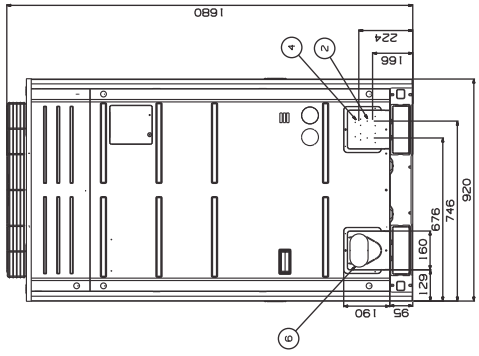
3. Dimensions

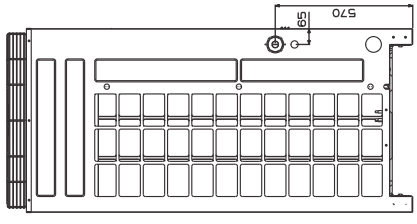
Outdoor Unit

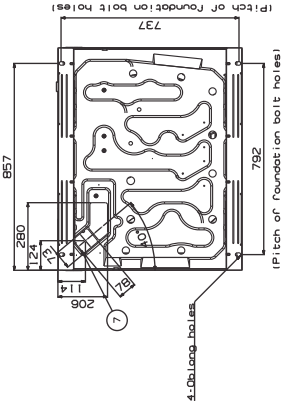
ARUB80LN3
ARUB100LN3
ARUB120LN3











No.	Parts name	Remarks
1	Power cord routing hole(side)	Ø66
2	Power cord routing hole(front)	Ø45
3	Wire routing hole(side)	Ø30
4	Wire routing hole(front)	Ø30
5	Pipe routing hole(side)	Ø65
6	Pipe routing hole(front)	
7	Pipe routing hole(front)	

[Unit : mm]

LG Electronics

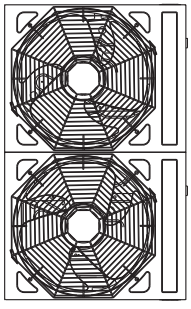
76, Seongsan-dong, Changwon City, Gyeongnam,
641-713, Korea

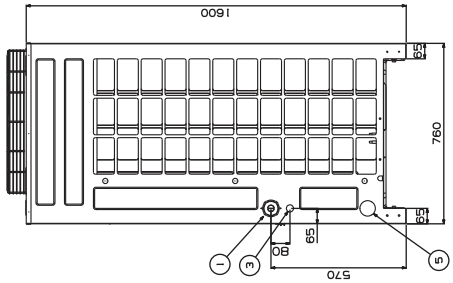
CHASSIS CODE: UX2

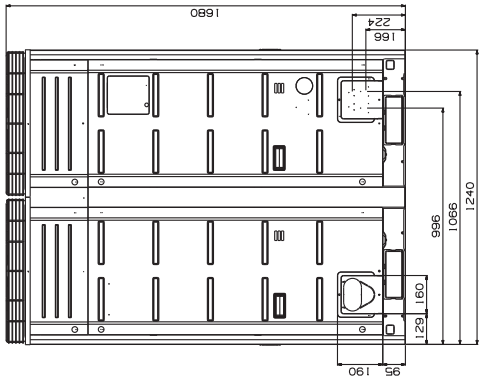
Copyright © 2012- 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

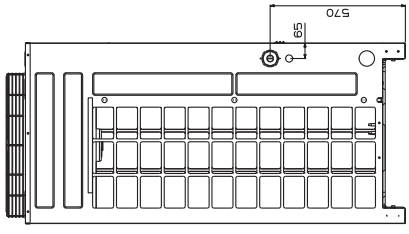
Outdoor Unit

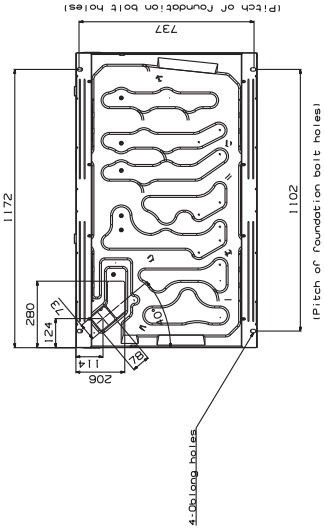
ARUB140LN3
ARUB160LN3
ARUB180LN3
ARUB200LN3











No.	Parts name	Remarks
1	Power cord routing hole(side)	Ø66
2	Power cord routing hole(front)	Ø45
3	Wire routing hole(side)	Ø30
4	Wire routing hole(front)	Ø30
5	Pipe routing hole(side)	Ø65
6	Pipe routing hole(front)	
7	Pipe routing hole(front)	

[Unit : mm]

LG Electronics

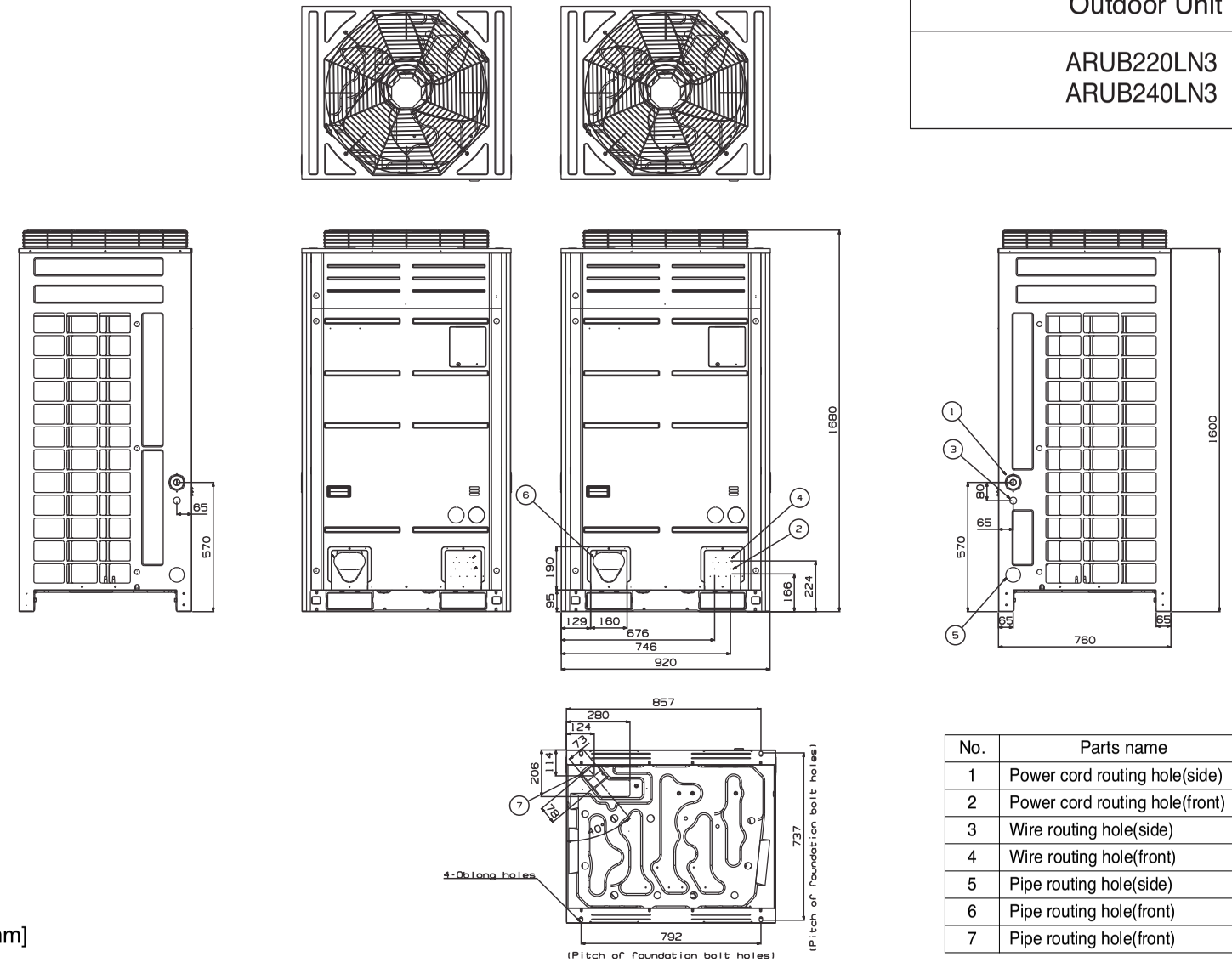
76, Seongsan-dong, Changwon City, Gyeongnam,
641-713, Korea

CHASSIS CODE: UX3

Copyright © 2012 - 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

Outdoor Unit

ARUB220LN3
ARUB240LN3



No.	Parts name	Remarks
1	Power cord routing hole(side)	Ø66
2	Power cord routing hole(front)	Ø45
3	Wire routing hole(side)	Ø30
4	Wire routing hole(front)	Ø30
5	Pipe routing hole(side)	Ø65
6	Pipe routing hole(front)	
7	Pipe routing hole(front)	

[Unit : mm]

Copyright © 2012- 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

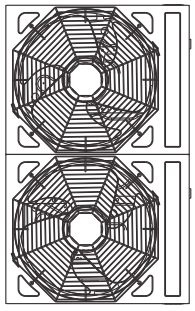
LG Electronics

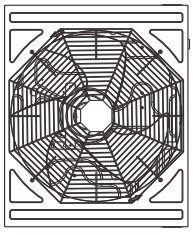
76, Seongsan-dong, Changwon City, Gyeongnam,
641-713, Korea

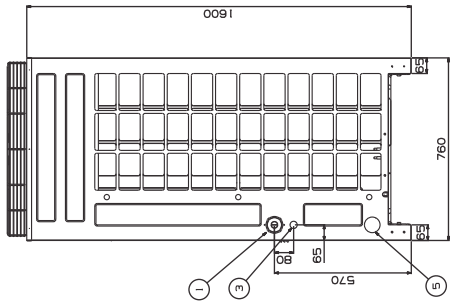
CHASSIS CODE: UX2 + UX2

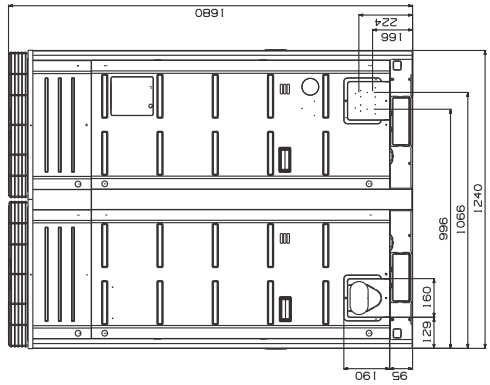
Outdoor Unit

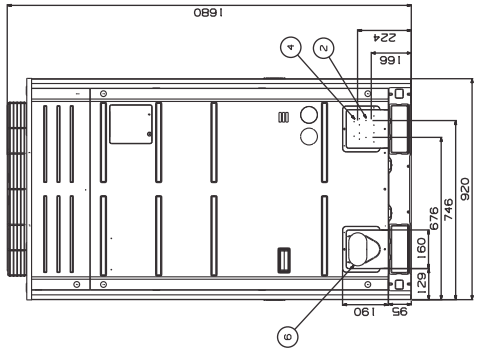
ARUB260LN3
ARUB280LN3

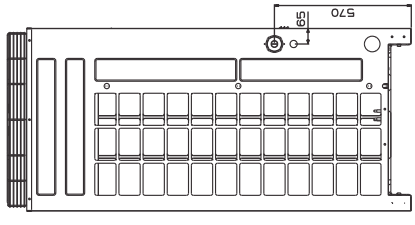


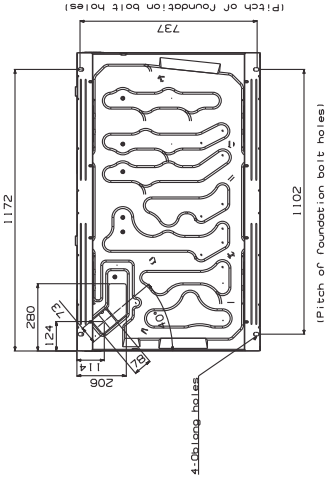


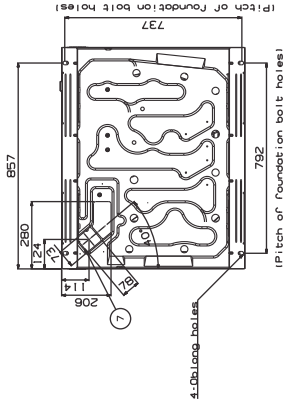












No.	Parts name	Remarks
1	Power cord routing hole(side)	Ø66
2	Power cord routing hole(front)	Ø45
3	Wire routing hole(side)	Ø30
4	Wire routing hole(front)	Ø30
5	Pipe routing hole(side)	Ø65
6	Pipe routing hole(front)	
7	Pipe routing hole(front)	

[Unit : mm]

LG Electronics

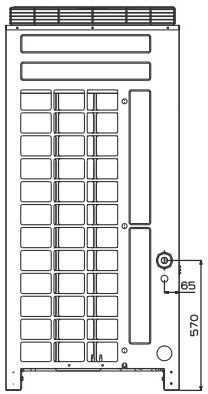
76, Seongsan-dong, Changwon City, Gyeongnam,
641-713, Korea

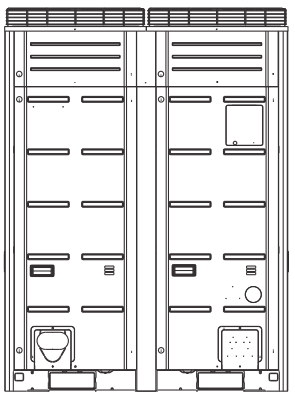
CHASSIS CODE: UX2 + UX3

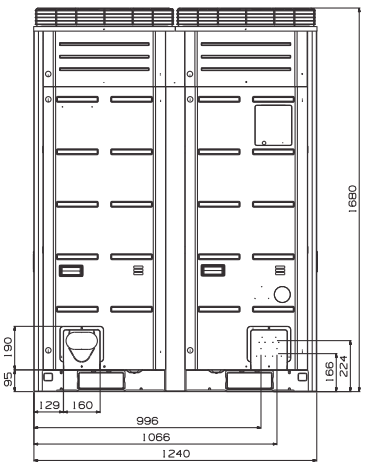
Copyright © 2012 - 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

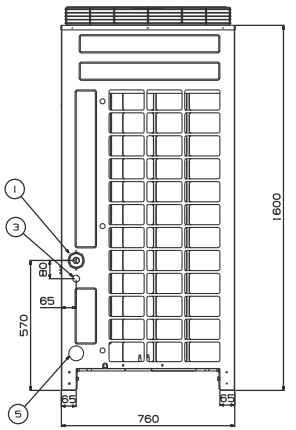
Outdoor Unit

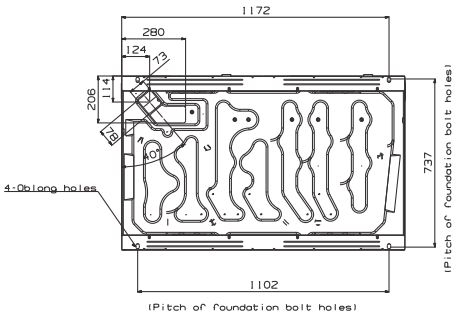
ARUB300LN3
ARUB320LN3
ARUB340LN3
ARUB360LN3
ARUB380LN3
ARUB400LN3









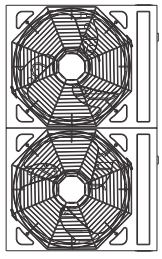


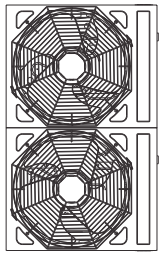
No.	Parts name	Remarks
1	Power cord routing hole(side)	Ø66
2	Power cord routing hole(front)	Ø45
3	Wire routing hole(side)	Ø30
4	Wire routing hole(front)	Ø30
5	Pipe routing hole(side)	Ø65
6	Pipe routing hole(front)	
7	Pipe routing hole(front)	

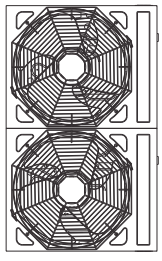
[Unit : mm]

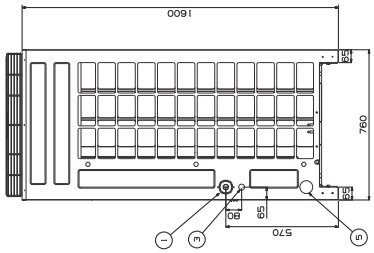
Copyright © 2012- 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

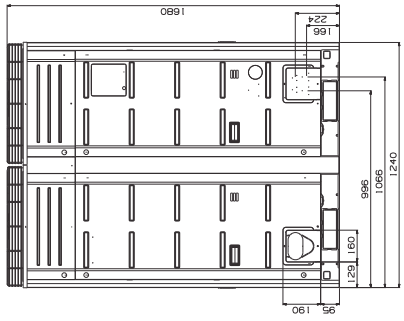
Outdoor Unit
ARUB460LN3
ARUB480LN3
ARUB500LN3
ARUB520LN3
ARUB540LN3
ARUB560LN3
ARUB580LN3
ARUB600LN3

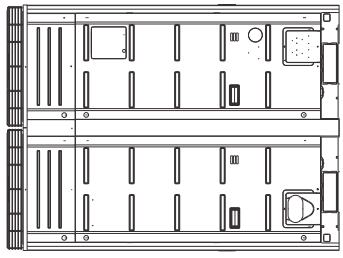


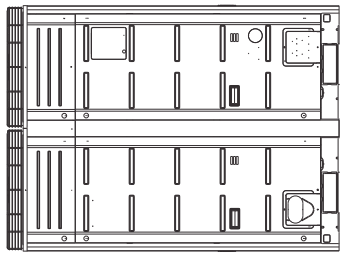


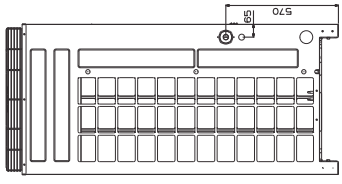


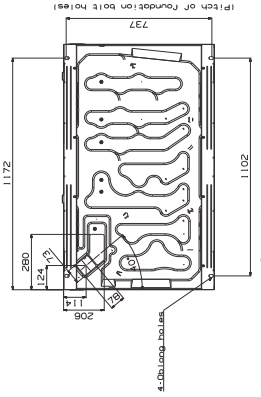












No.	Parts name	Remarks
1	Power cord routing hole(side)	Ø66
2	Power cord routing hole(front)	Ø45
3	Wire routing hole(side)	Ø30
4	Wire routing hole(front)	Ø30
5	Pipe routing hole(side)	Ø65
6	Pipe routing hole(front)	
7	Pipe routing hole(front)	

[Unit : mm]

LG Electronics

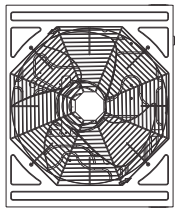
76, Seongsan-dong, Changwon City, Gyeongnam,
641-713, Korea

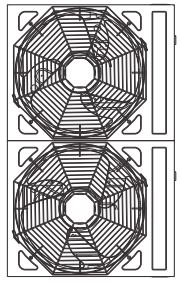
CHASSIS CODE:
UX3 + UX3 + UX3

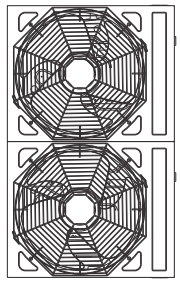
Copyright © 2012 - 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

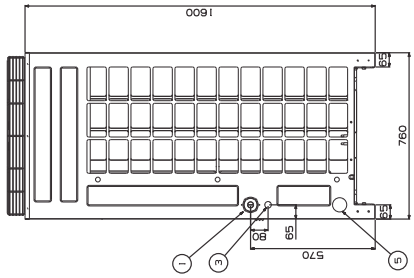
Outdoor Unit

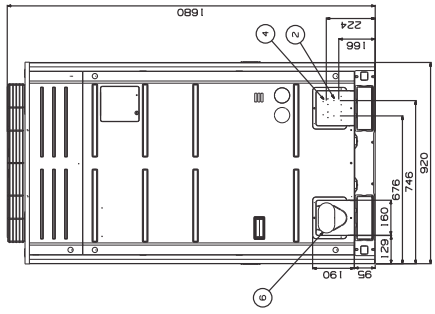
ARUB420LN3
ARUB440LN3

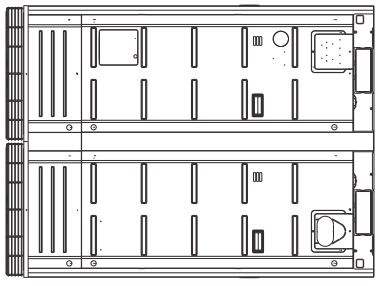


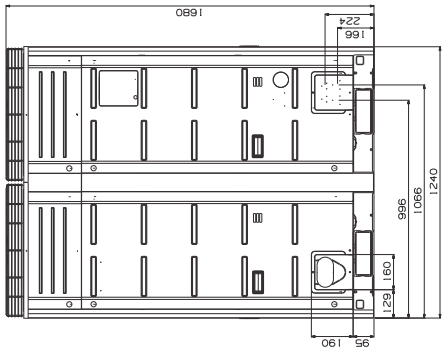


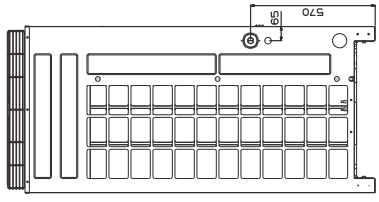


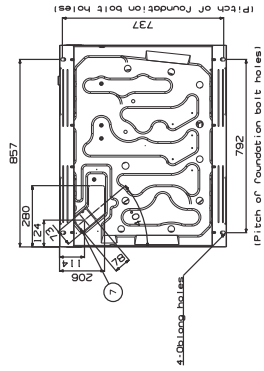


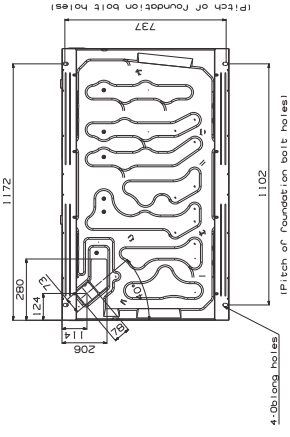












No.	Parts name	Remarks
1	Power cord routing hole(side)	Ø66
2	Power cord routing hole(front)	Ø45
3	Wire routing hole(side)	Ø30
4	Wire routing hole(front)	Ø30
5	Pipe routing hole(side)	Ø65
6	Pipe routing hole(front)	
7	Pipe routing hole(front)	

[Unit : mm]

LG Electronics

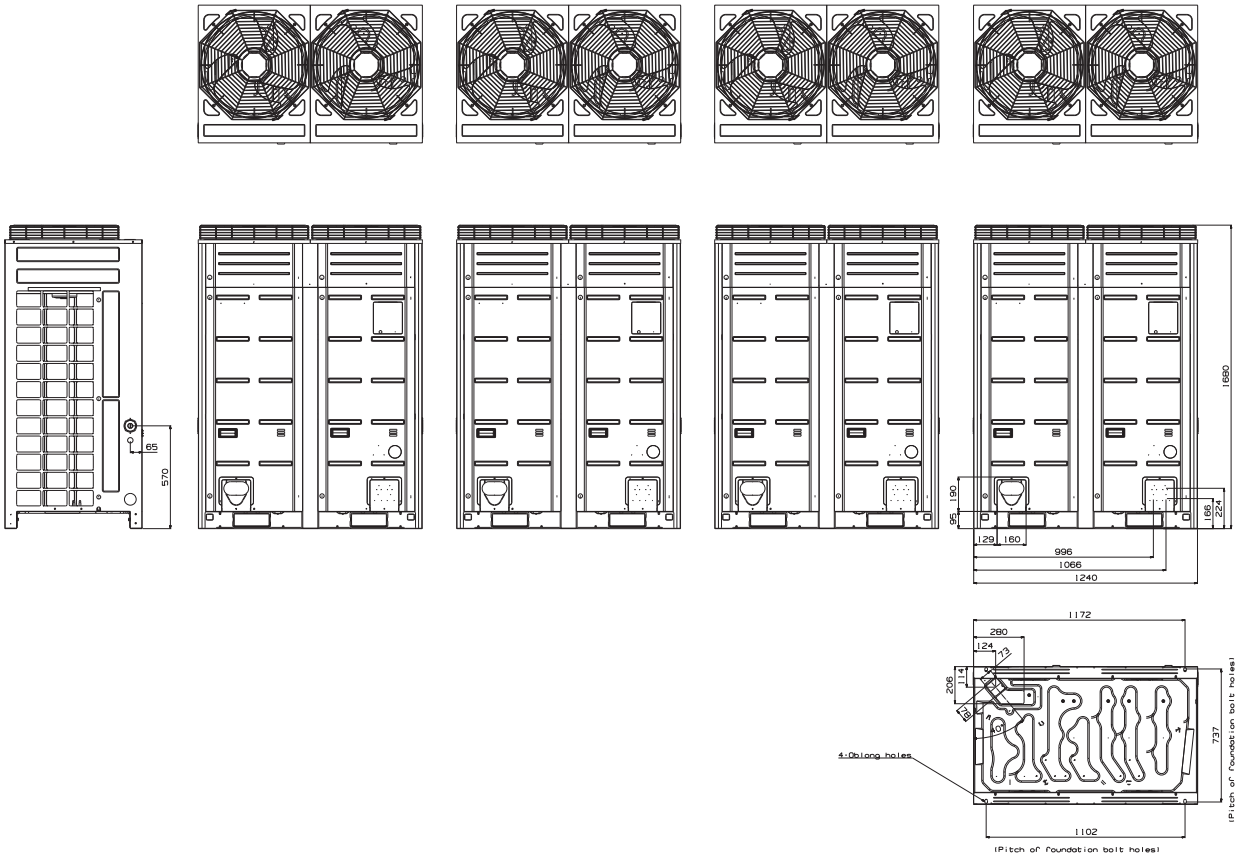
76, Seongsan-dong, Changwon City, Gyeongnam,
641-713, Korea

CHASSIS CODE:
UX2 + UX3 + UX3

Copyright © 2012- 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

Outdoor Unit

ARUB620LN3
ARUB640LN3
ARUB660LN3
ARUB680LN3
ARUB700LN3
ARUB720LN3
ARUB740LN3
ARUB760LN3
ARUB780LN3
ARUB800LN3



No.	Parts name	Remarks
1	Power cord routing hole(side)	Ø66
2	Power cord routing hole(front)	Ø45
3	Wire routing hole(side)	Ø30
4	Wire routing hole(front)	Ø30
5	Pipe routing hole(side)	Ø65
6	Pipe routing hole(front)	
7	Pipe routing hole(front)	

[Unit : mm]

LG Electronics

76, Seongsan-dong, Changwon City, Gyeongnam,
641-713, Korea

CHASSIS CODE:
UX3 + UX3 + UX3+ UX3

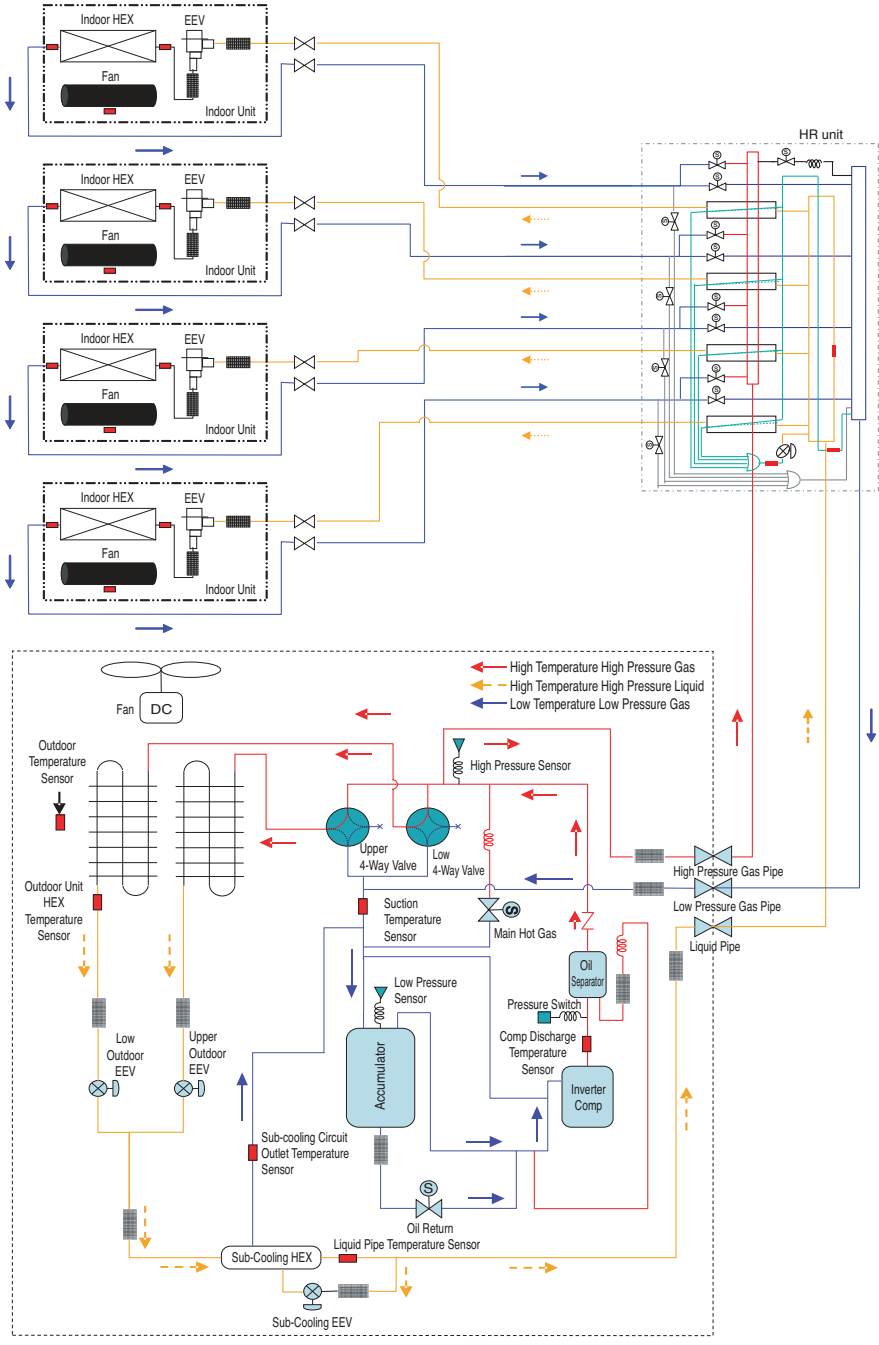
Copyright © 2012 - 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

4. Piping Diagrams

4.1 Heat Recovery Model

4.1.1 8HP(UX2 1Comp.)

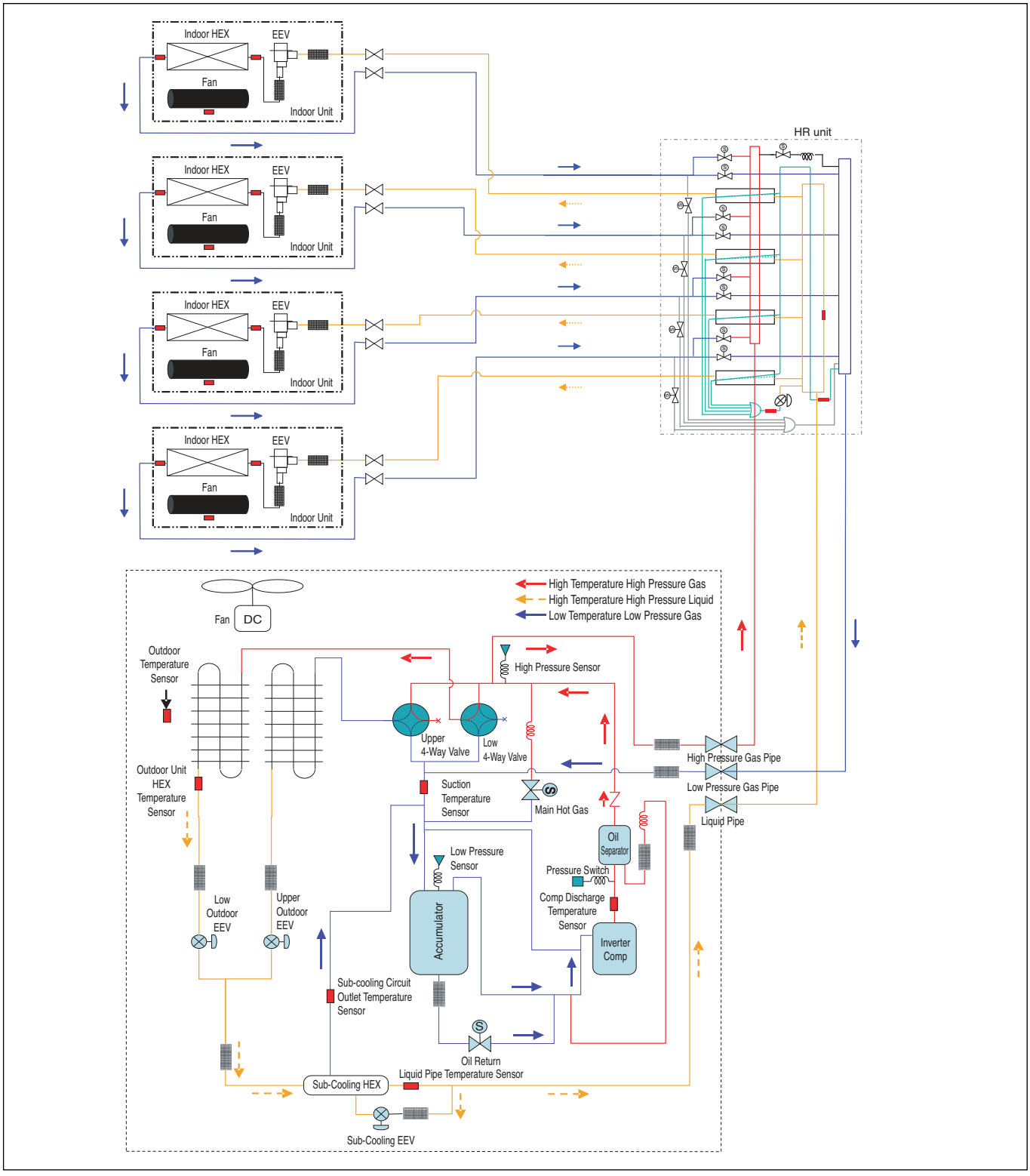
Cooling Operation



Remarks				
	Pressure Sensor	Temperature Sensor	Check valve	Solenoid valve
	Pressure Switch	SVC Valve	EEV	Strainer

Copyright © 2012- 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

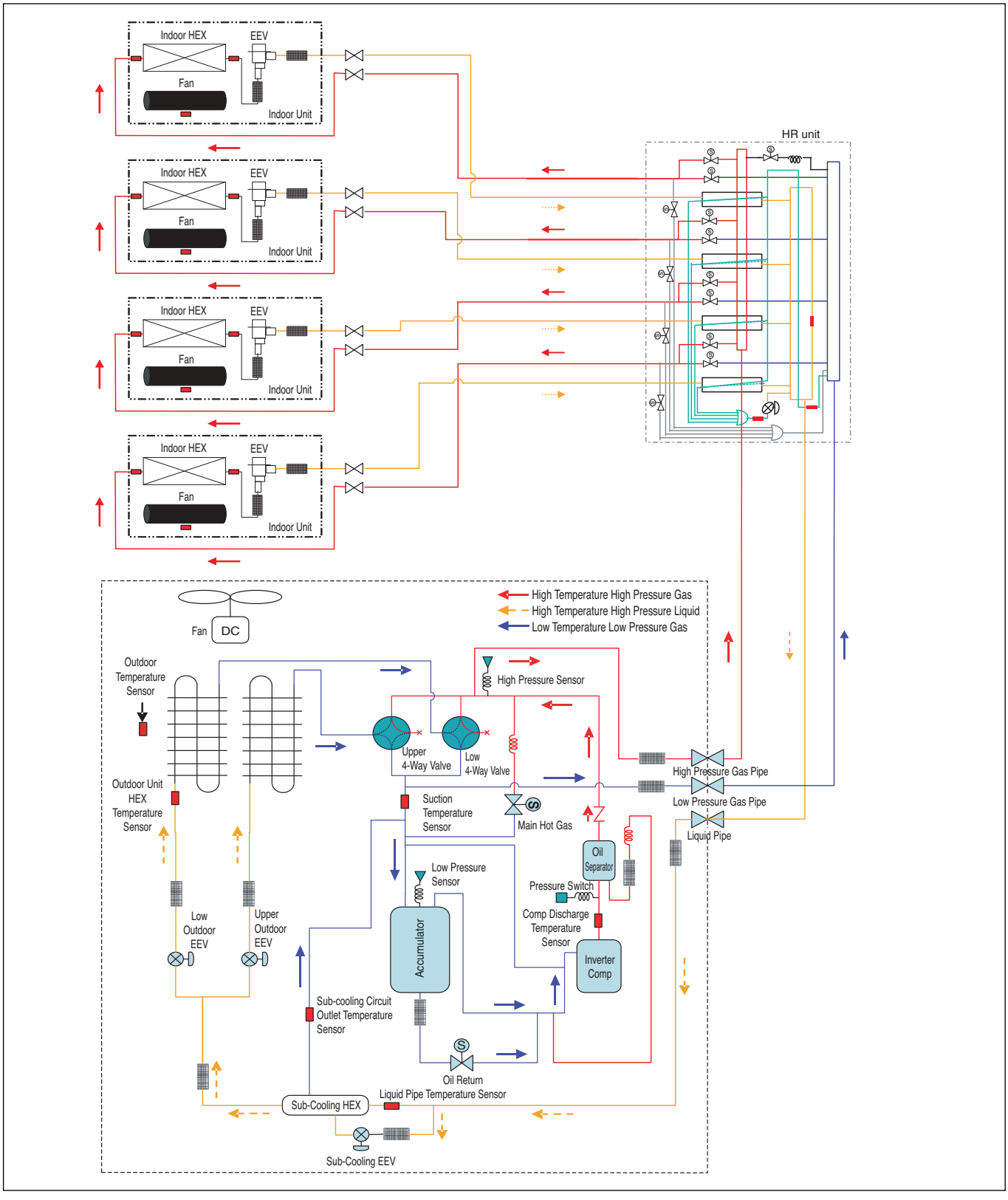
Cooling Operation at low ambient temperature



Remarks				
	Pressure Sensor	Temperature Sensor	Check valve	Solenoid valve
	Pressure Switch	SVC Valve	EEV	Strainer

Copyright © 2012 - 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

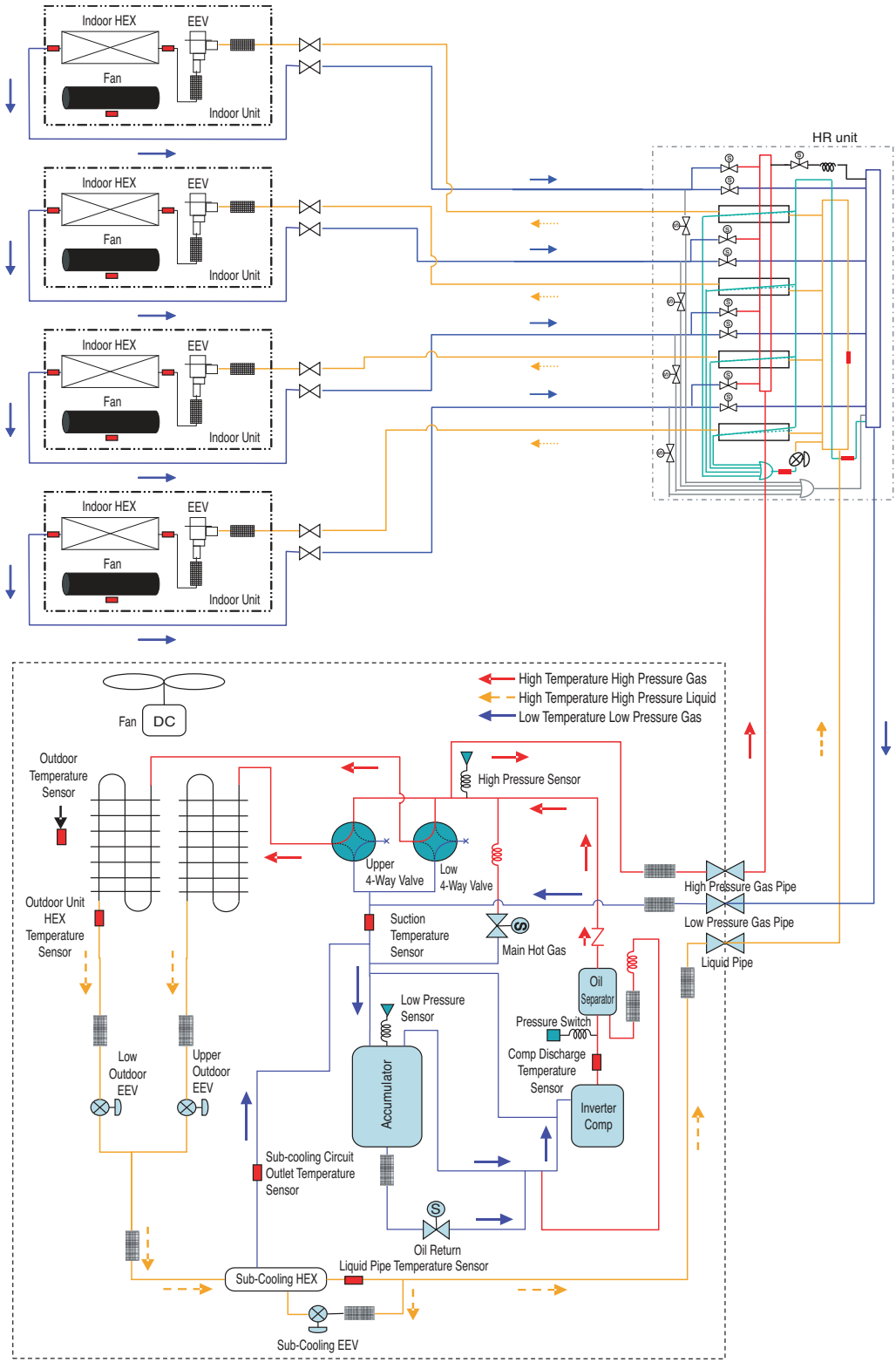
Heating Operation



Remarks				
	Pressure Sensor	Temperature Sensor	Check valve	Solenoid valve
	Pressure Switch	SVC Valve	EEV	Strainer

Copyright © 2012- 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

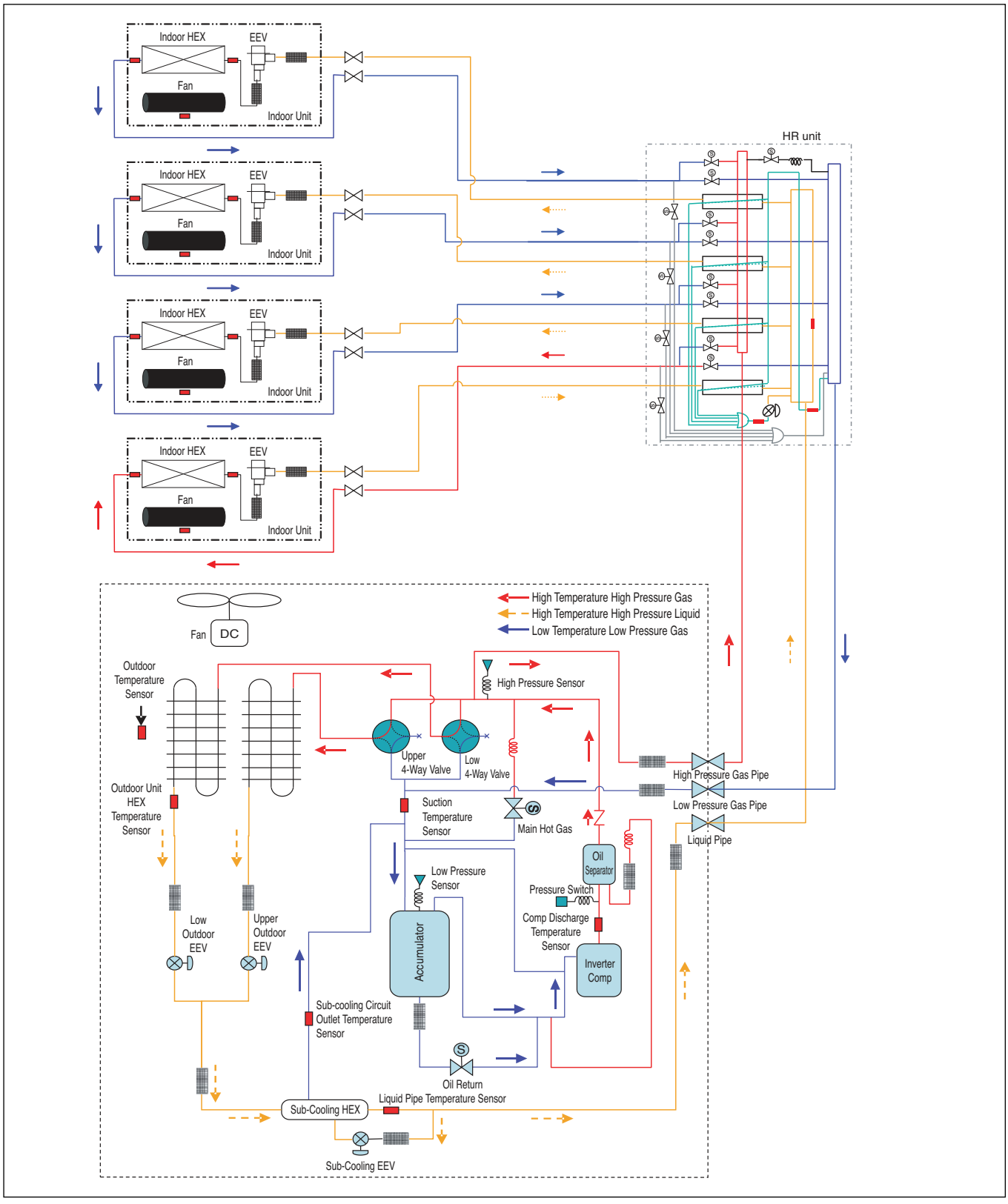
Oil Return/ Defrost Operation



Remarks				
	Pressure Sensor	Temperature Sensor	Check valve	Solenoid valve
	Pressure Switch	SVC Valve	EEV	Strainer

Copyright © 2012 - 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

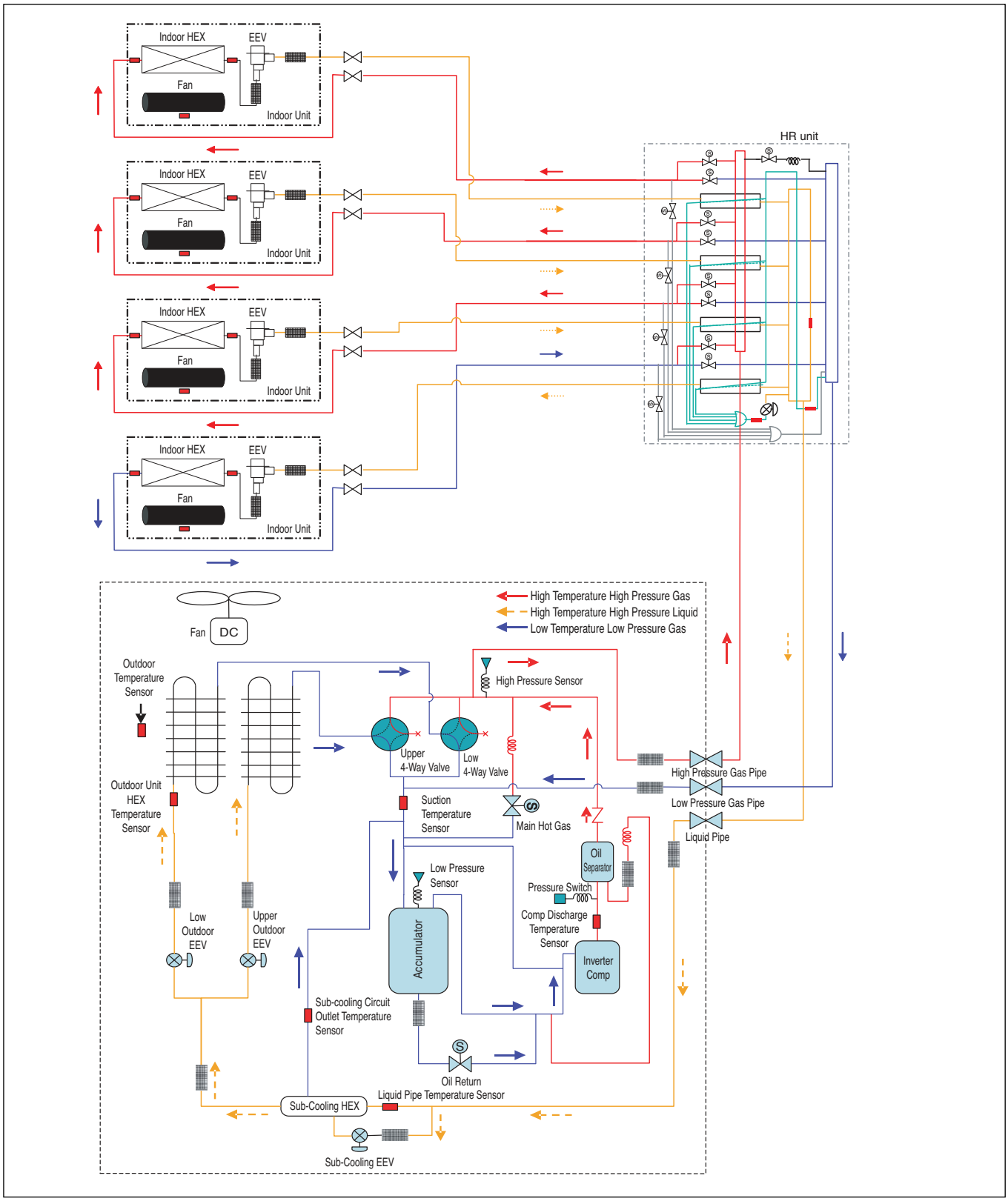
Simultaneous Operation Mode 1(Cooling Based Operation)



Remarks				
Pressure Sensor	Temperature Sensor	Check valve	Solenoid valve
Pressure Switch	SVC Valve	EEV	Strainer

Copyright © 2012- 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

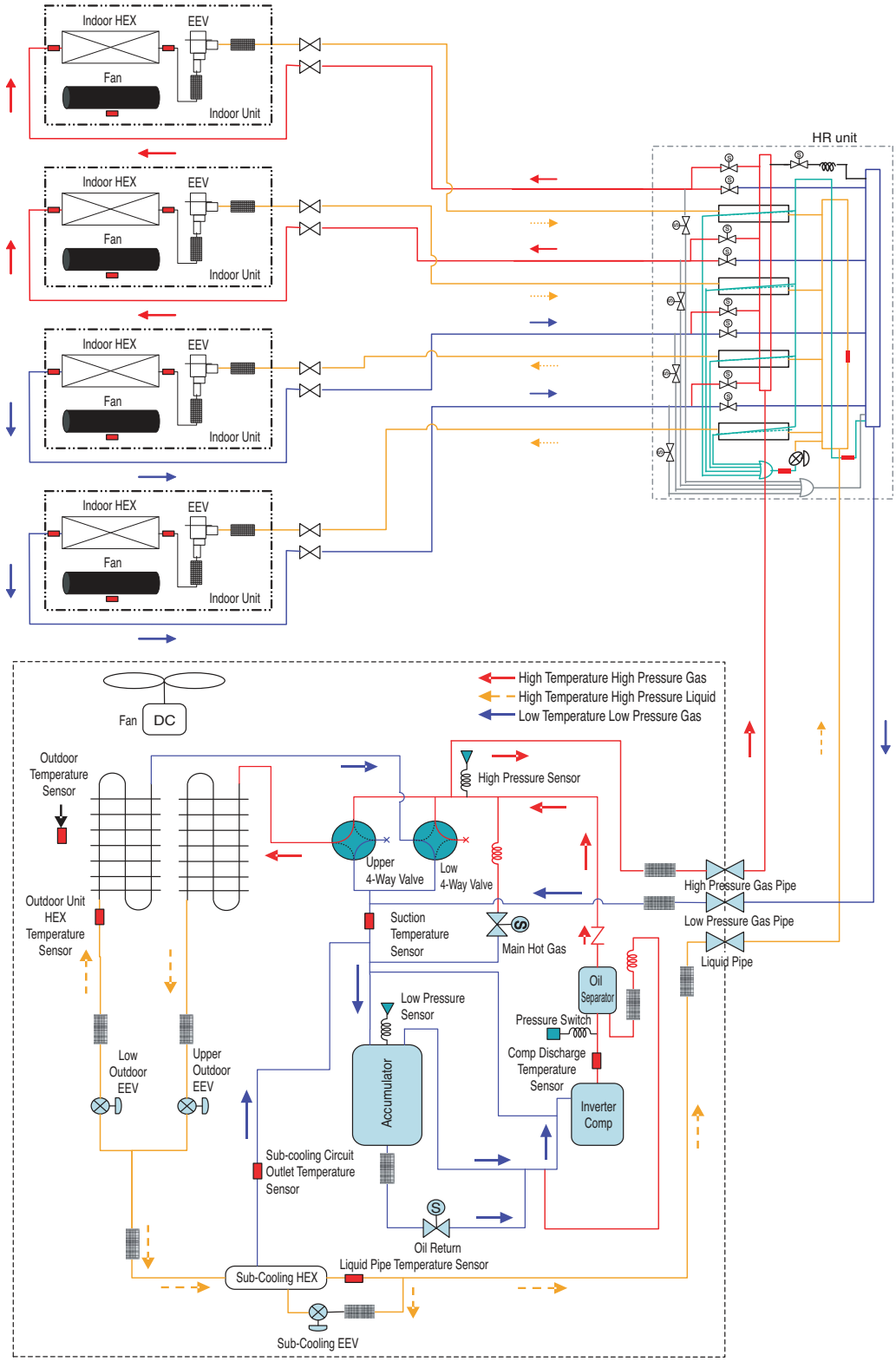
Simultaneous Operation Mode 2(Heating Based Operation)



Remarks				
	Pressure Sensor	Temperature Sensor	Check valve	Solenoid valve
	Pressure Switch	SVC Valve	EEV	Strainer

Copyright © 2012 - 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

Simultaneous Operation Mode 3(Heating and Cooling Operation)

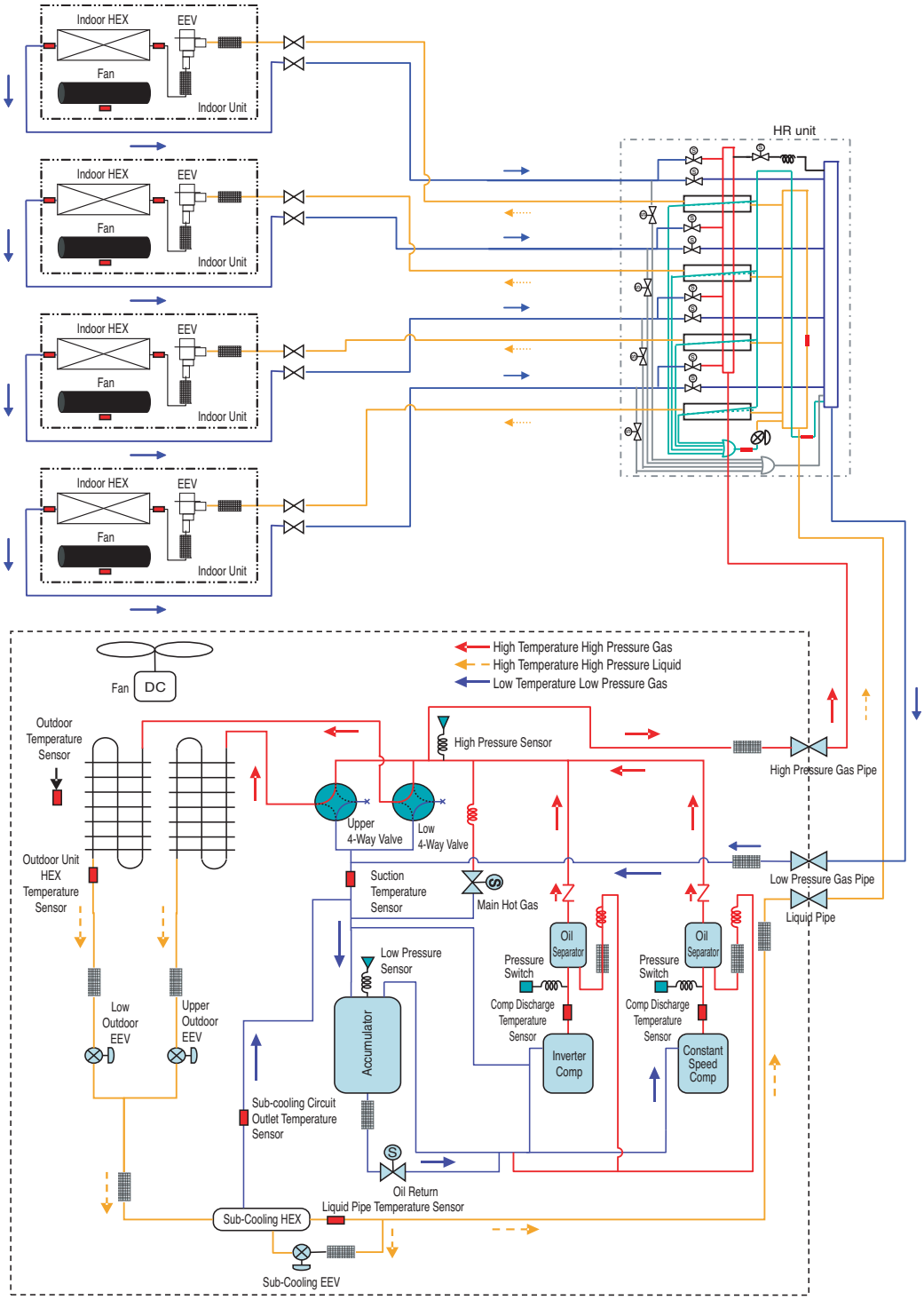


Remarks				
Pressure Sensor	Temperature Sensor	Check valve	Solenoid valve
Pressure Switch	SVC Valve	EEV	Strainer

Copyright © 2012- 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

4.1.2 10, 12HP(UX2 2Comp.)

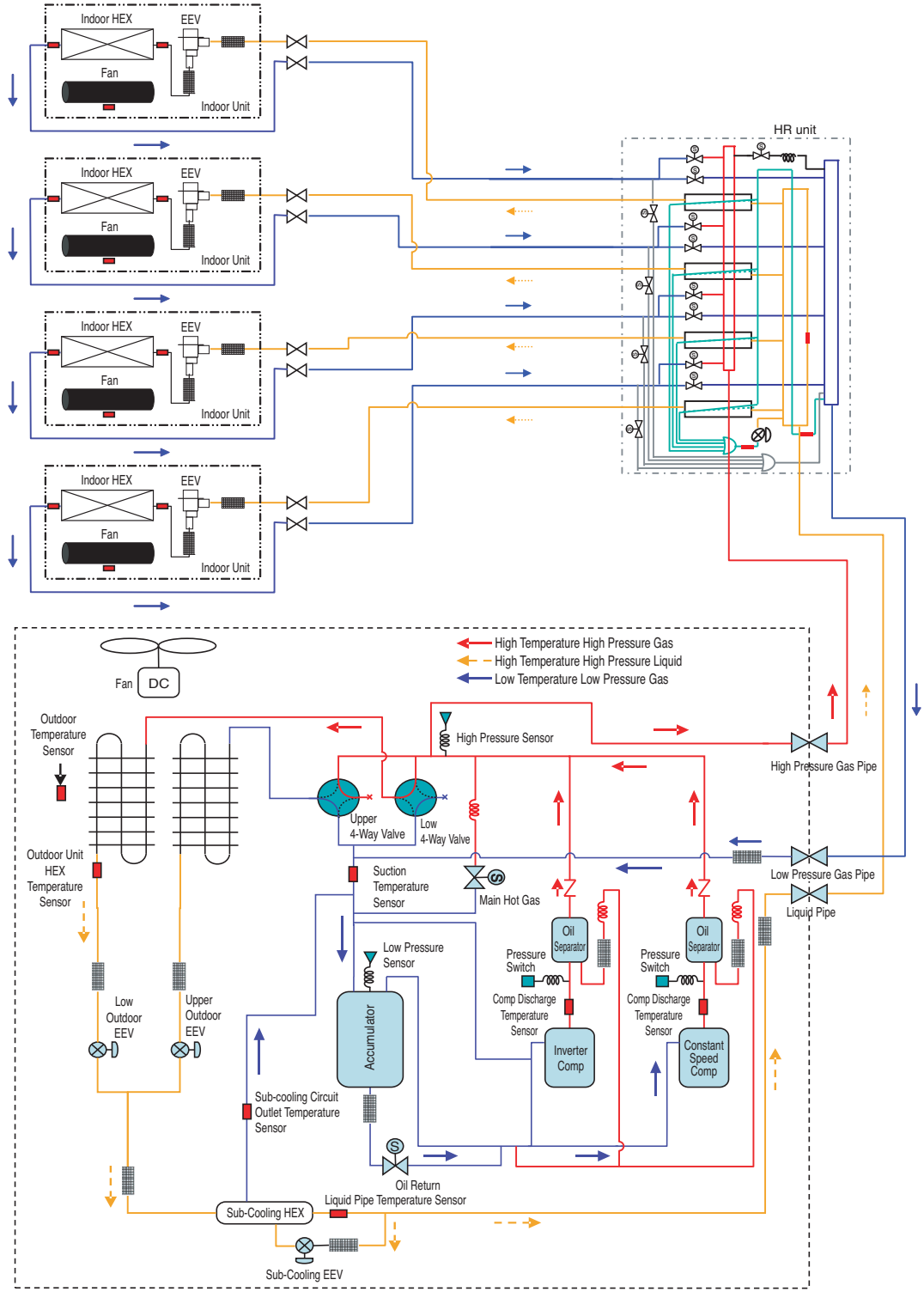
Cooling Operation



Remarks				
	Pressure Sensor	Temperature Sensor	Check valve	Solenoid valve
	Pressure Switch	SVC Valve	EEV	Strainer

Copyright © 2012 - 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

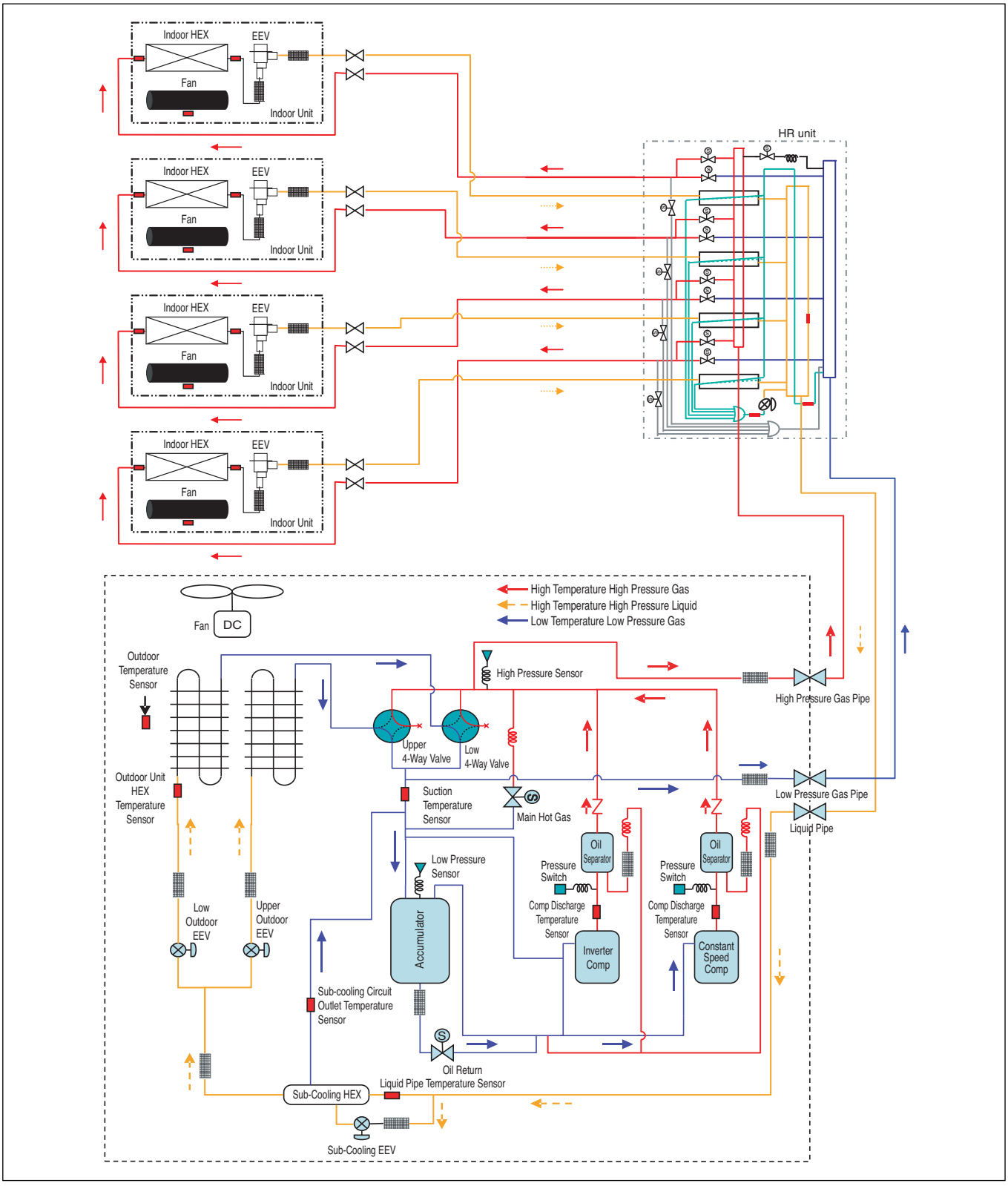
Cooling Operation at low ambient temperature



Remarks				
	Pressure Sensor	Temperature Sensor	Check valve	Solenoid valve
	Pressure Switch	SVC Valve	EEV	Strainer

Copyright © 2012- 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

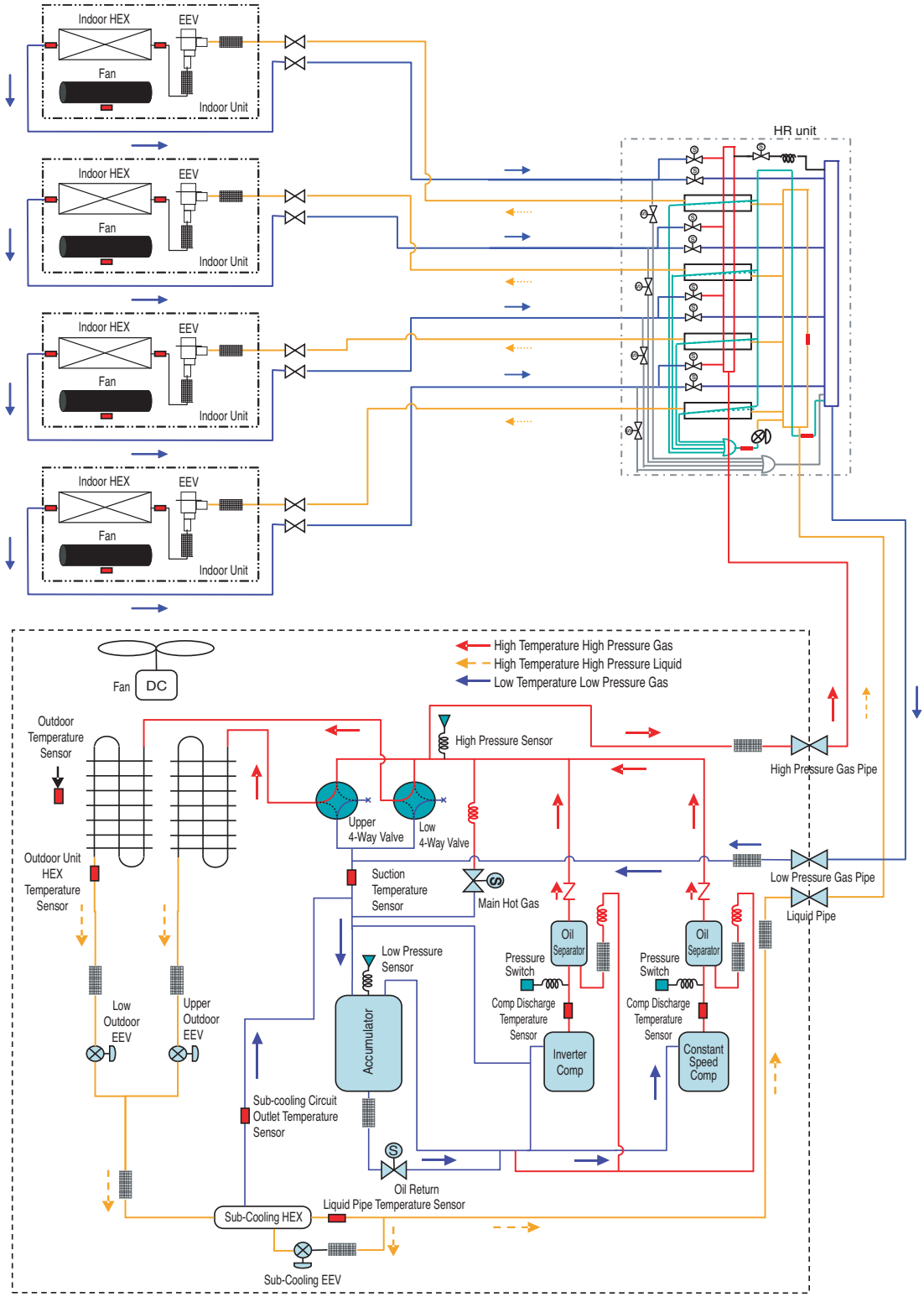
Heating Operation



Remarks				
	Pressure Sensor	Temperature Sensor	Check valve	Solenoid valve
	Pressure Switch	SVC Valve	EEV	Strainer

Copyright © 2012 - 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

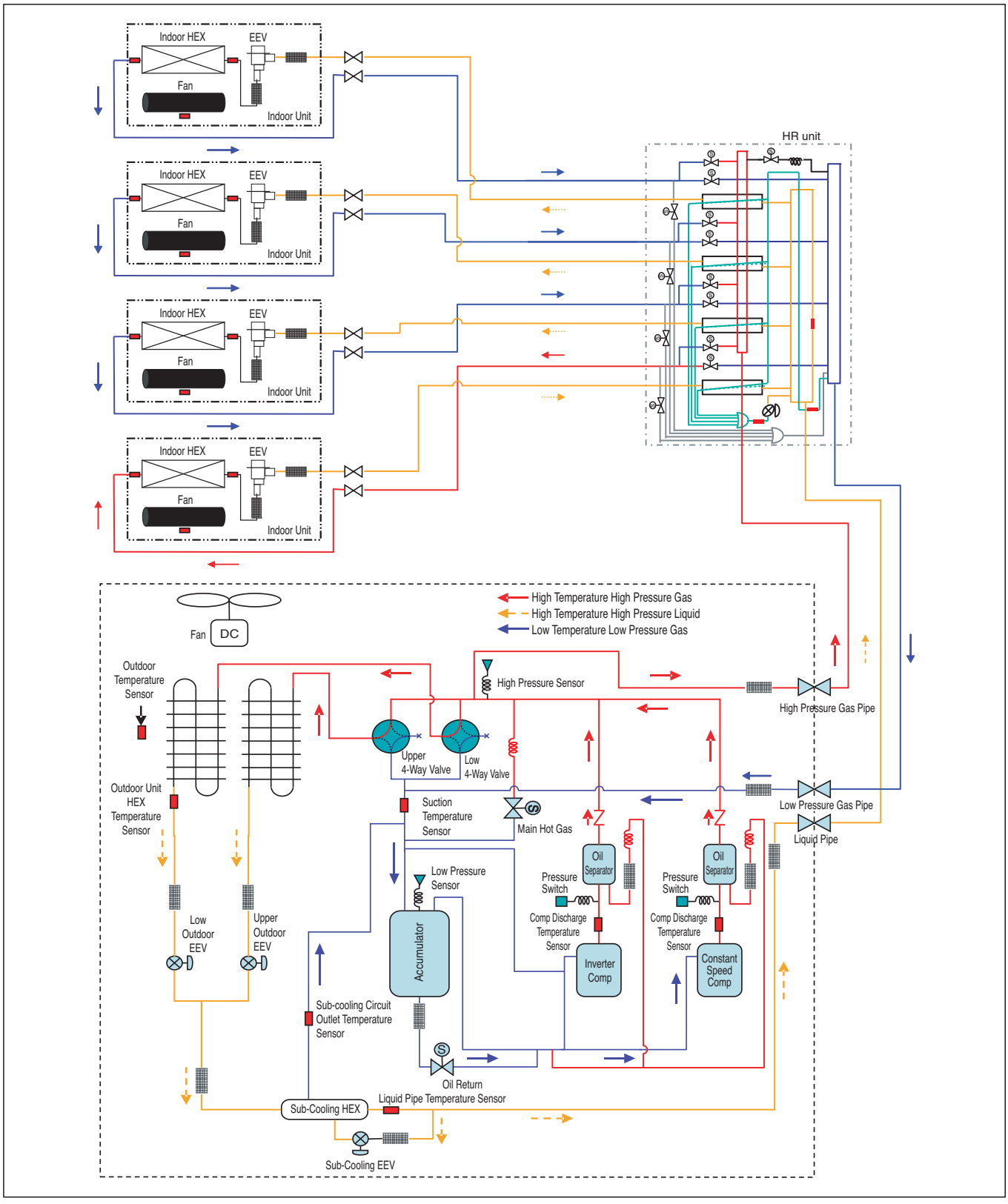
Oil Return/ Defrost Operation



Remarks				
	Pressure Sensor	Temperature Sensor	Check valve	Solenoid valve
	Pressure Switch	SVC Valve	EEV	Strainer

Copyright © 2012- 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

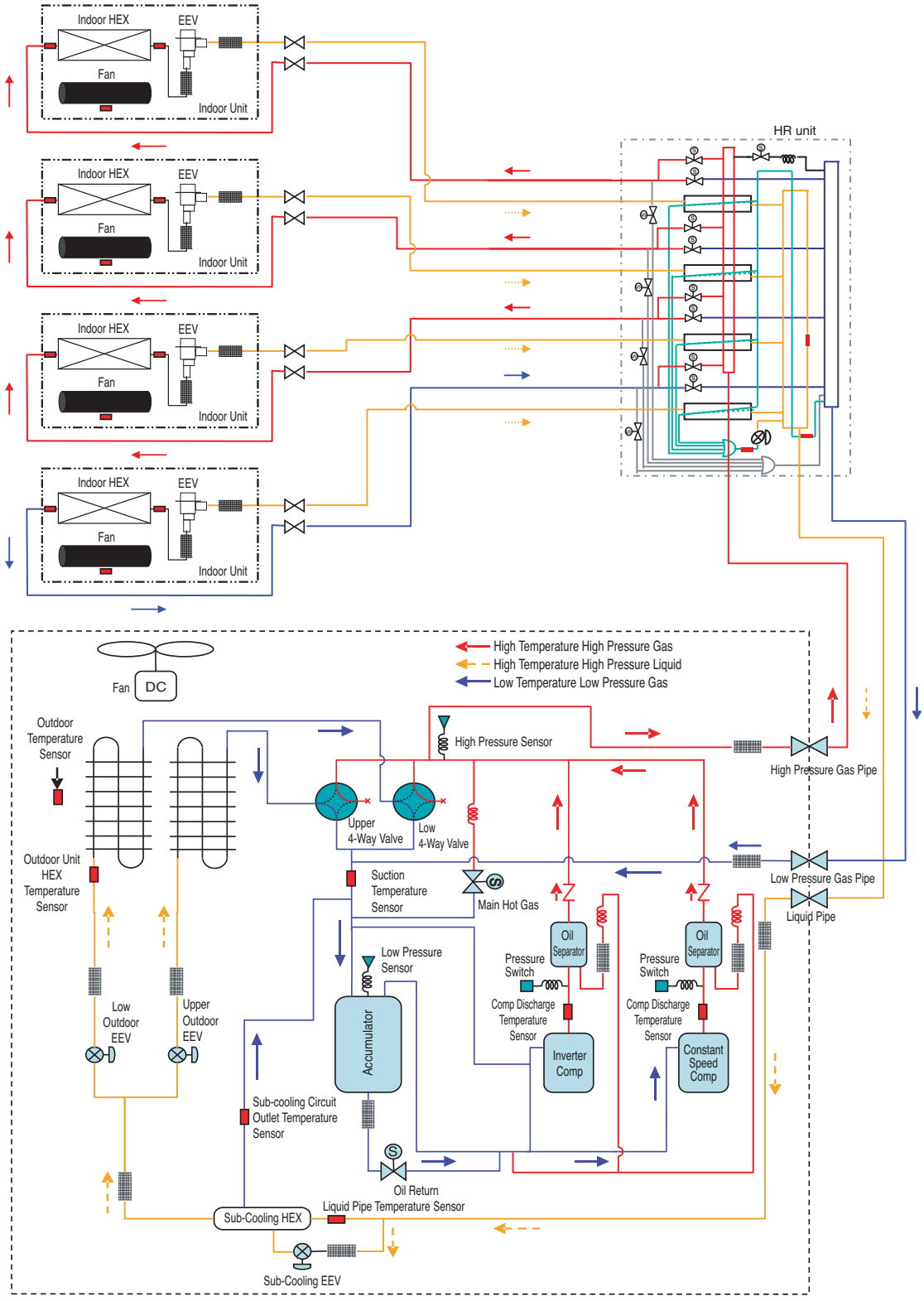
Simultaneous Operation Mode 1(Cooling Based Operation)



Remarks				
Pressure Sensor	Temperature Sensor	Check valve	Solenoid valve
Pressure Switch	SVC Valve	EEV	Strainer

Copyright © 2012 - 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

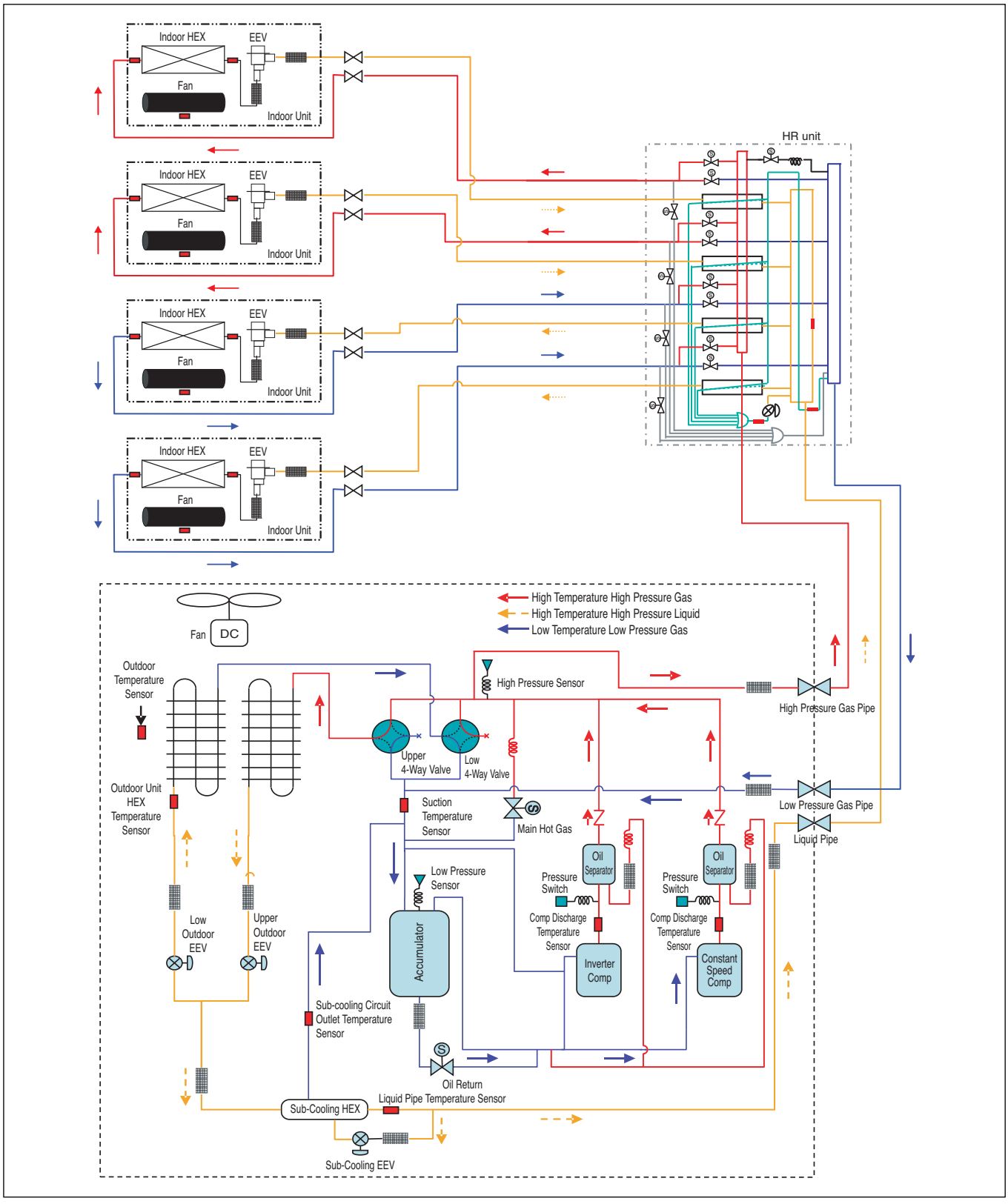
Simultaneous Operation Mode 2(Heating Based Operation)



Remarks				
Pressure Sensor	Temperature Sensor	Check valve	Solenoid valve
Pressure Switch	SVC Valve	EEV	Strainer

Copyright © 2012- 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

Simultaneous Operation Mode 3(Heating and Cooling Operation)

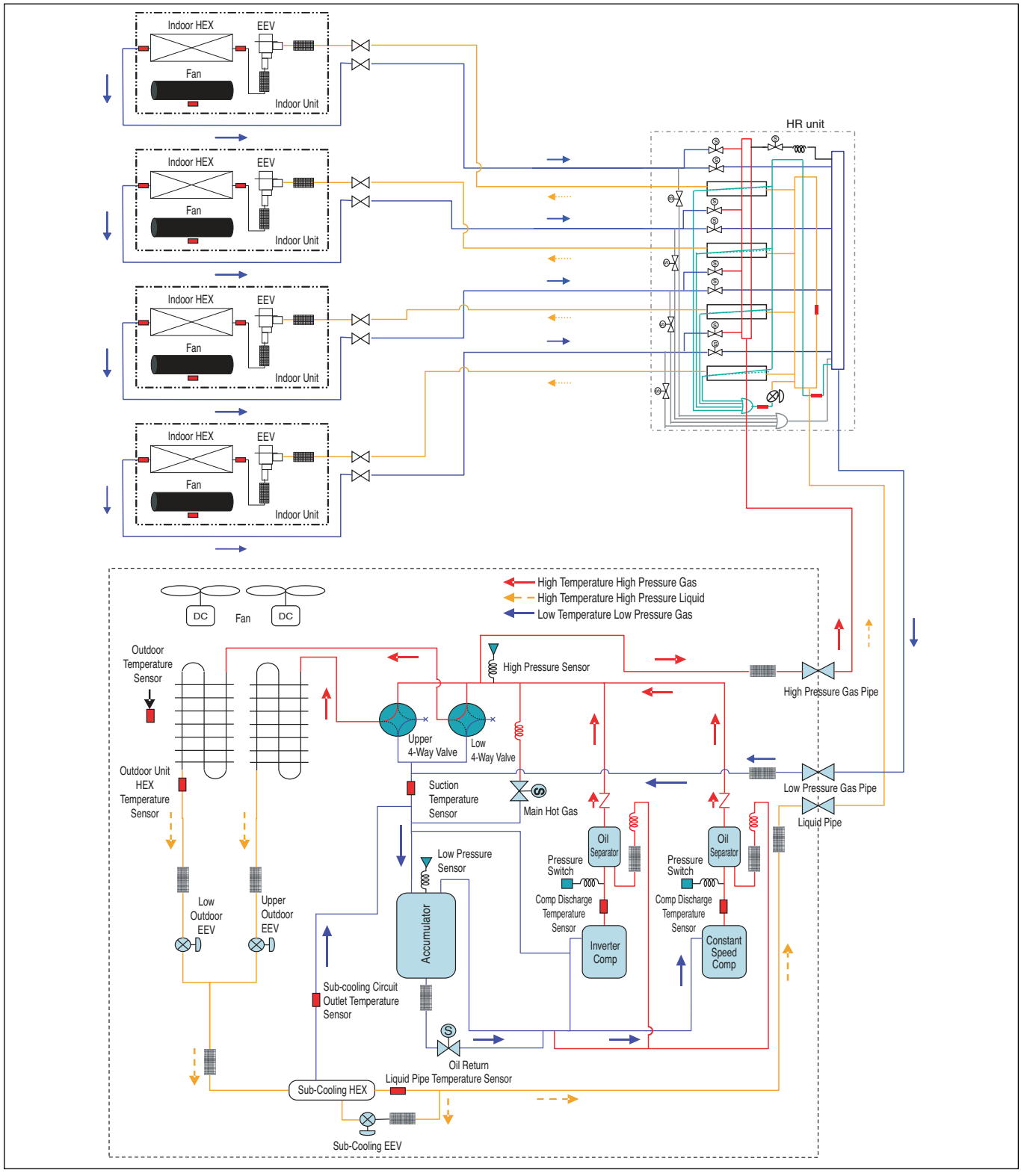


Remarks				
Pressure Sensor	Temperature Sensor	Check valve	Solenoid valve
Pressure Switch	SVC Valve	EEV	Strainer

Copyright © 2012 - 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

4.1.3 14, 16HP(UX3 2Comp.)

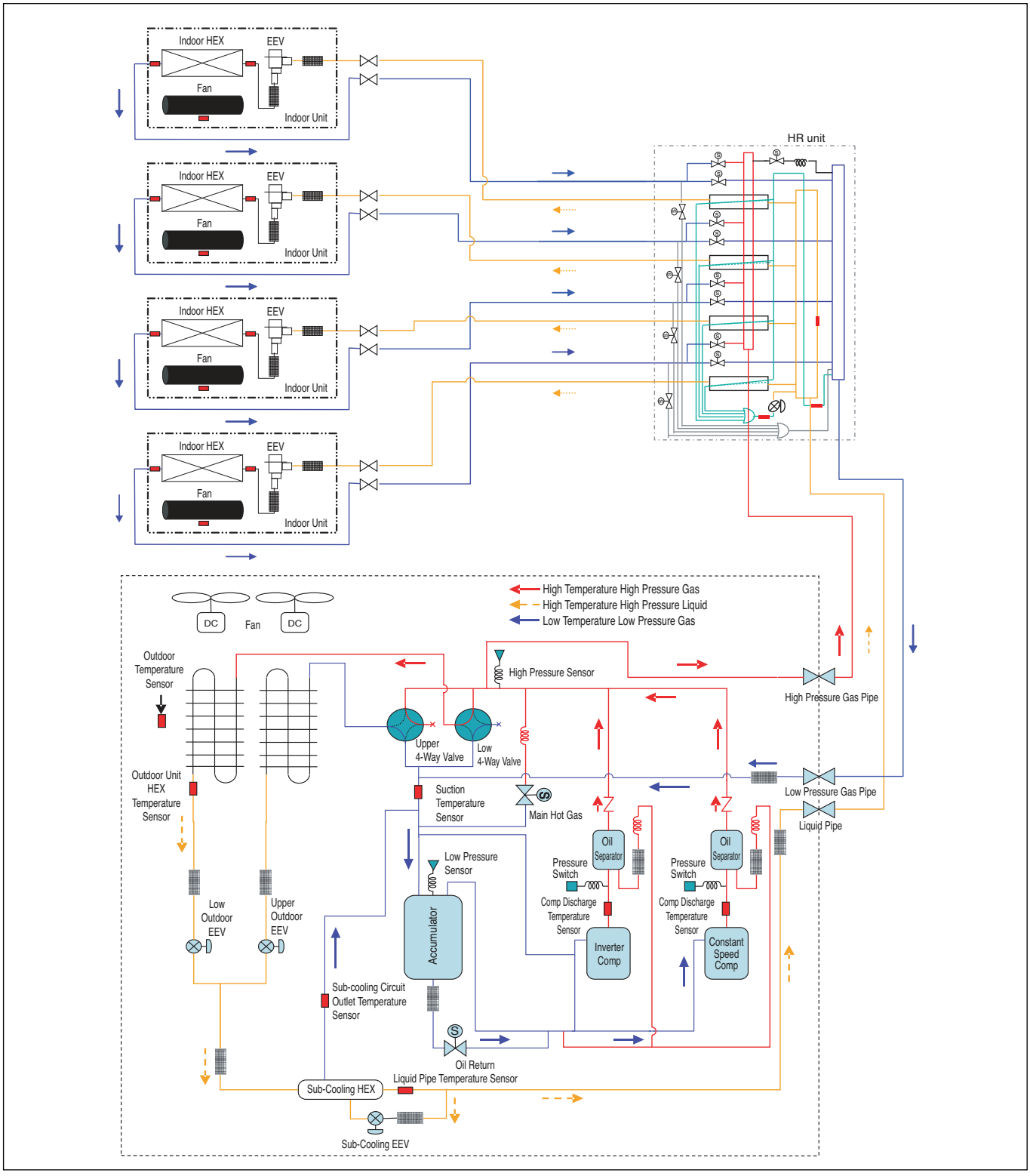
Cooling Operation



Remarks				
	Pressure Sensor	Temperature Sensor	Check valve	Solenoid valve
	Pressure Switch	SVC Valve	EEV	Strainer

Copyright © 2012- 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

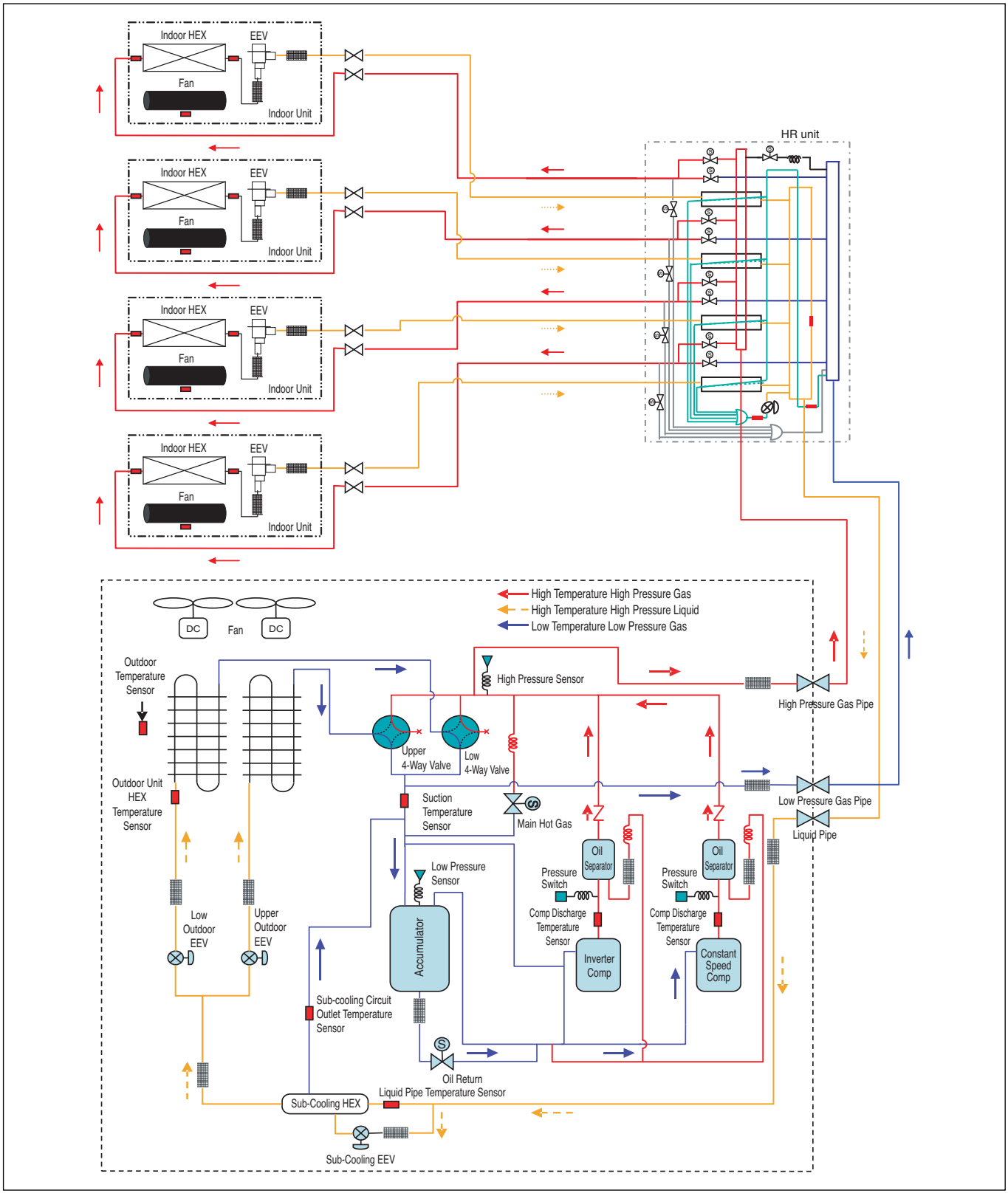
Cooling Operation at low ambient temperature



Remarks				
	Pressure Sensor	Temperature Sensor	Check valve	Solenoid valve
	Pressure Switch	SVC Valve	EEV	Strainer

Copyright © 2012 - 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

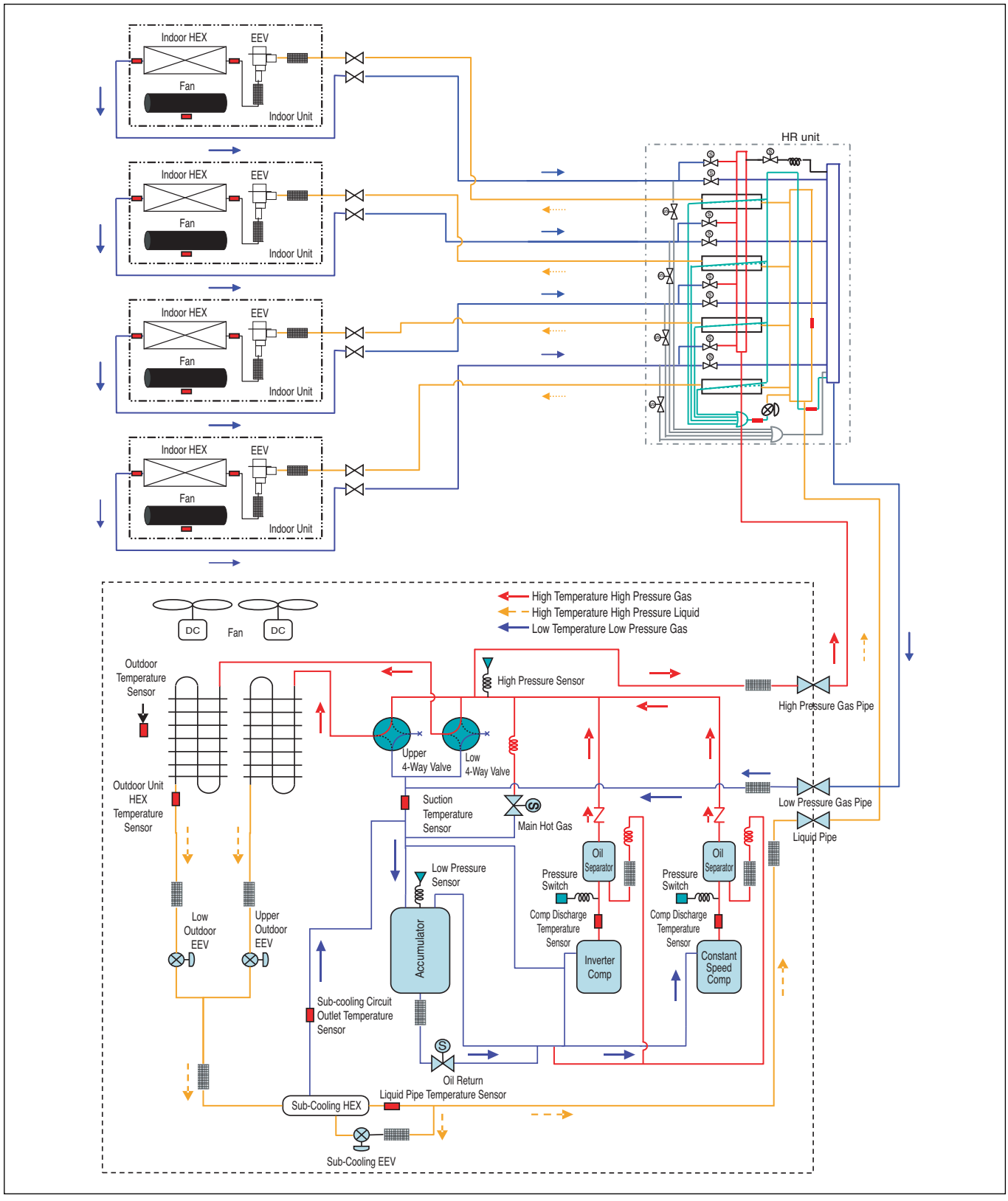
Heating Operation



Remarks							
	Pressure Sensor		Temperature Sensor		Check valve		Solenoid valve
	Pressure Switch		SVC Valve		EEV		Strainer

Copyright © 2012- 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

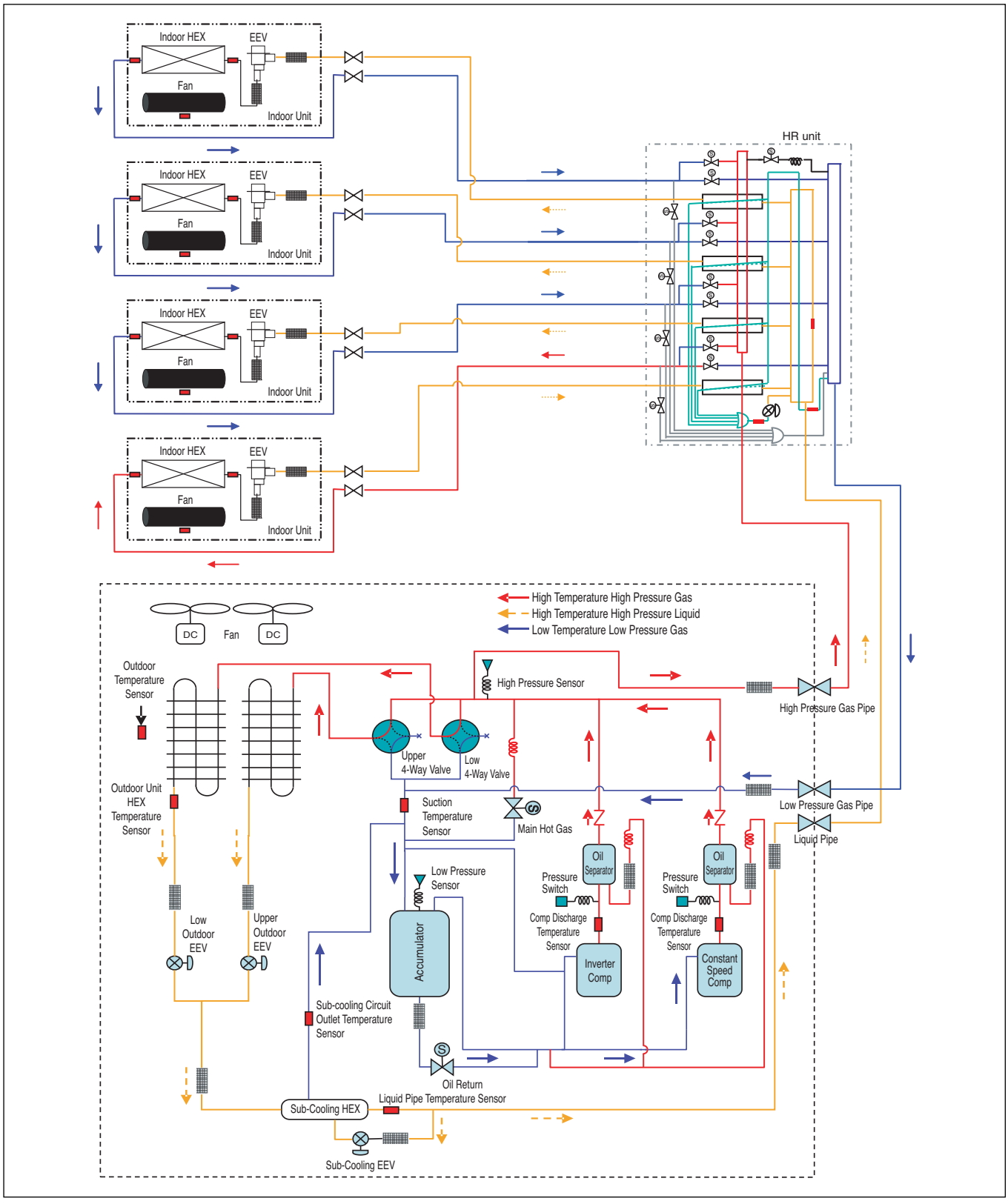
Oil Return/ Defrost Operation



Remarks				
	Pressure Sensor	Temperature Sensor	Check valve	Solenoid valve
	Pressure Switch	SVC Valve	EEV	Strainer

Copyright © 2012 - 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

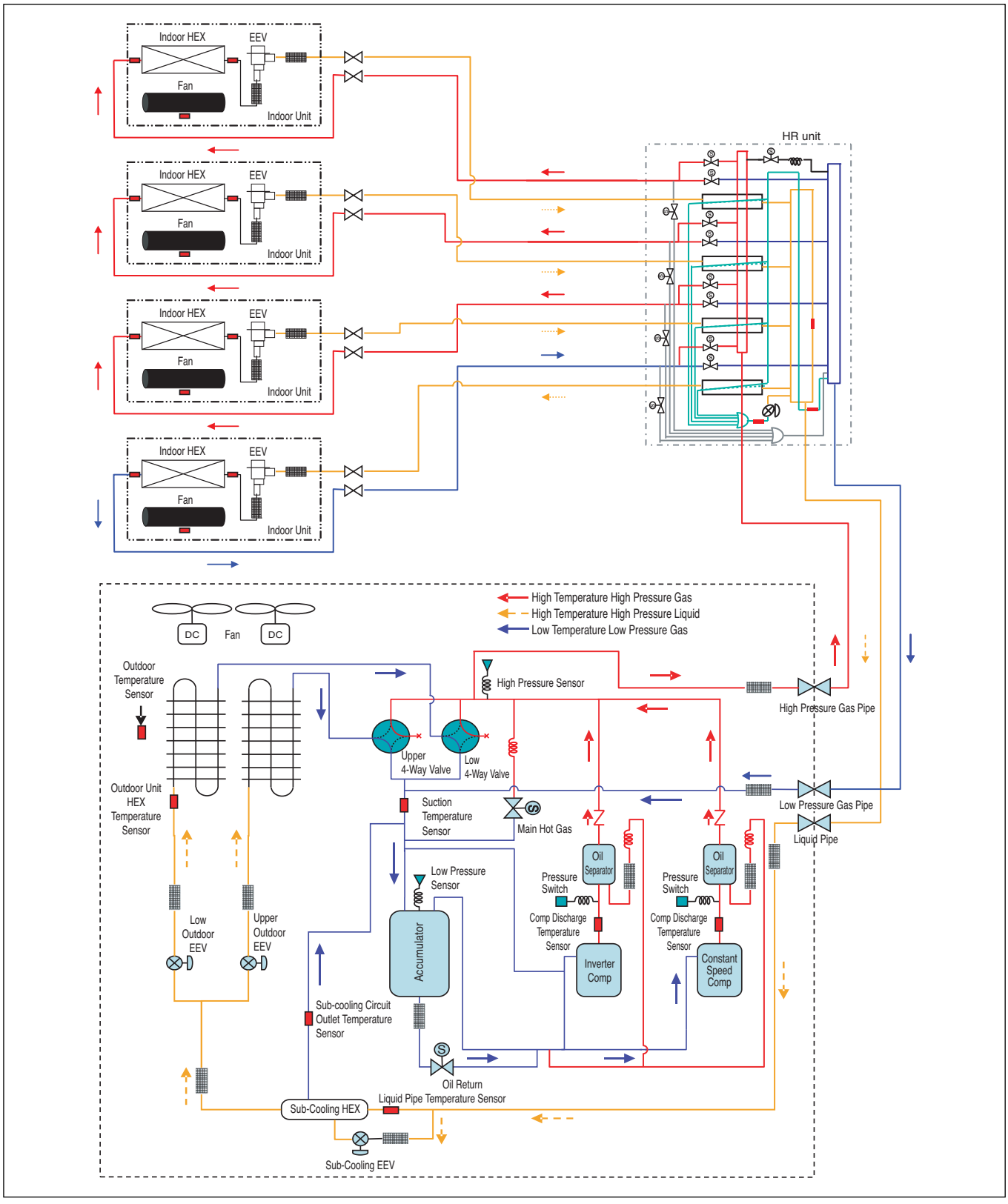
Simultaneous Operation Mode 1(Cooling Based Operation)



Remarks				
Pressure Sensor	Temperature Sensor	Check valve	Solenoid valve
Pressure Switch	SVC Valve	EEV	Strainer

Copyright © 2012- 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

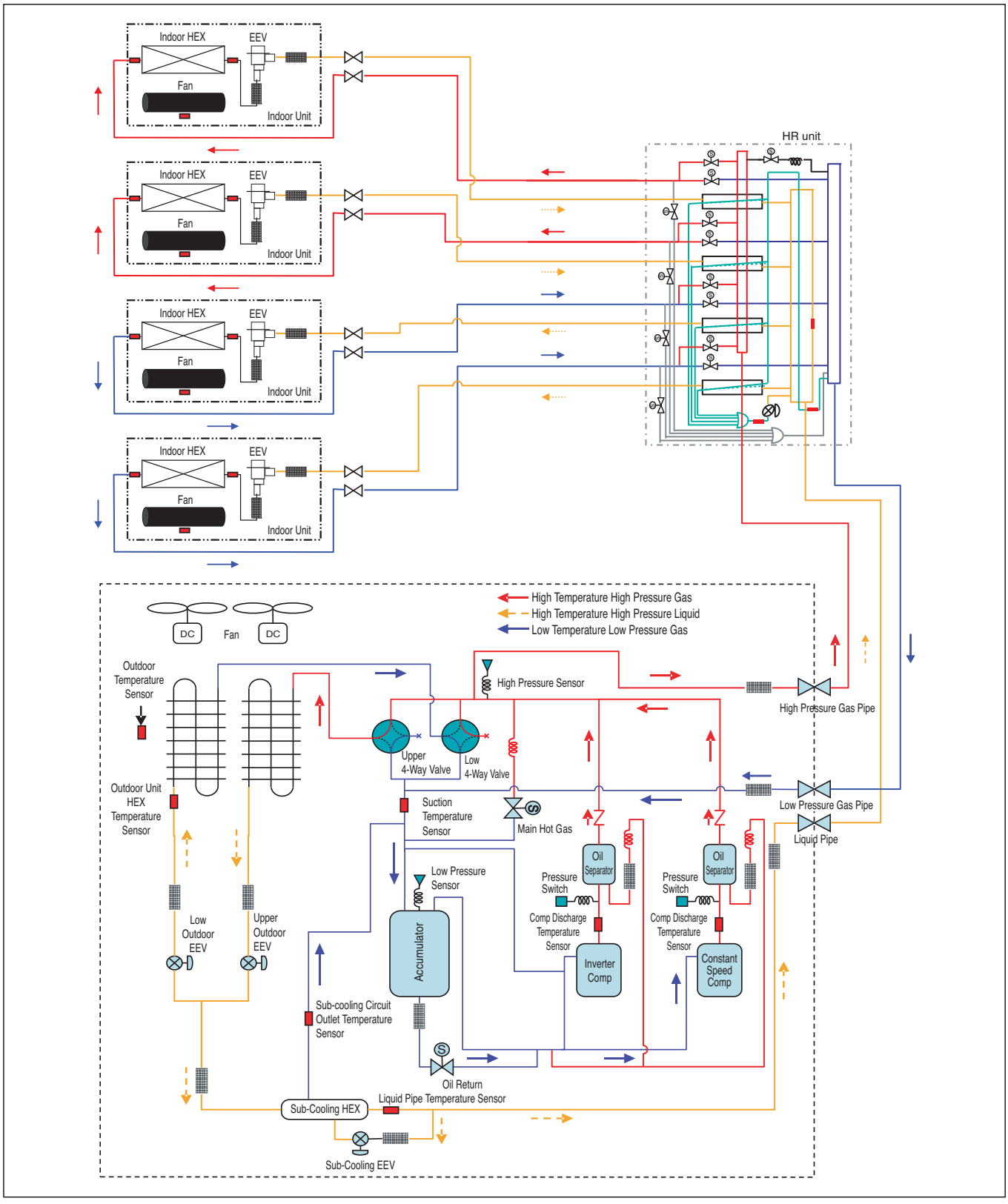
Simultaneous Operation Mode 2(Heating Based Operation)



Remarks				
Pressure Sensor	Temperature Sensor	Check valve	Solenoid valve
Pressure Switch	SVC Valve	EEV	Strainer

Copyright © 2012 - 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

Simultaneous Operation Mode 3(Heating and Cooling Operation)

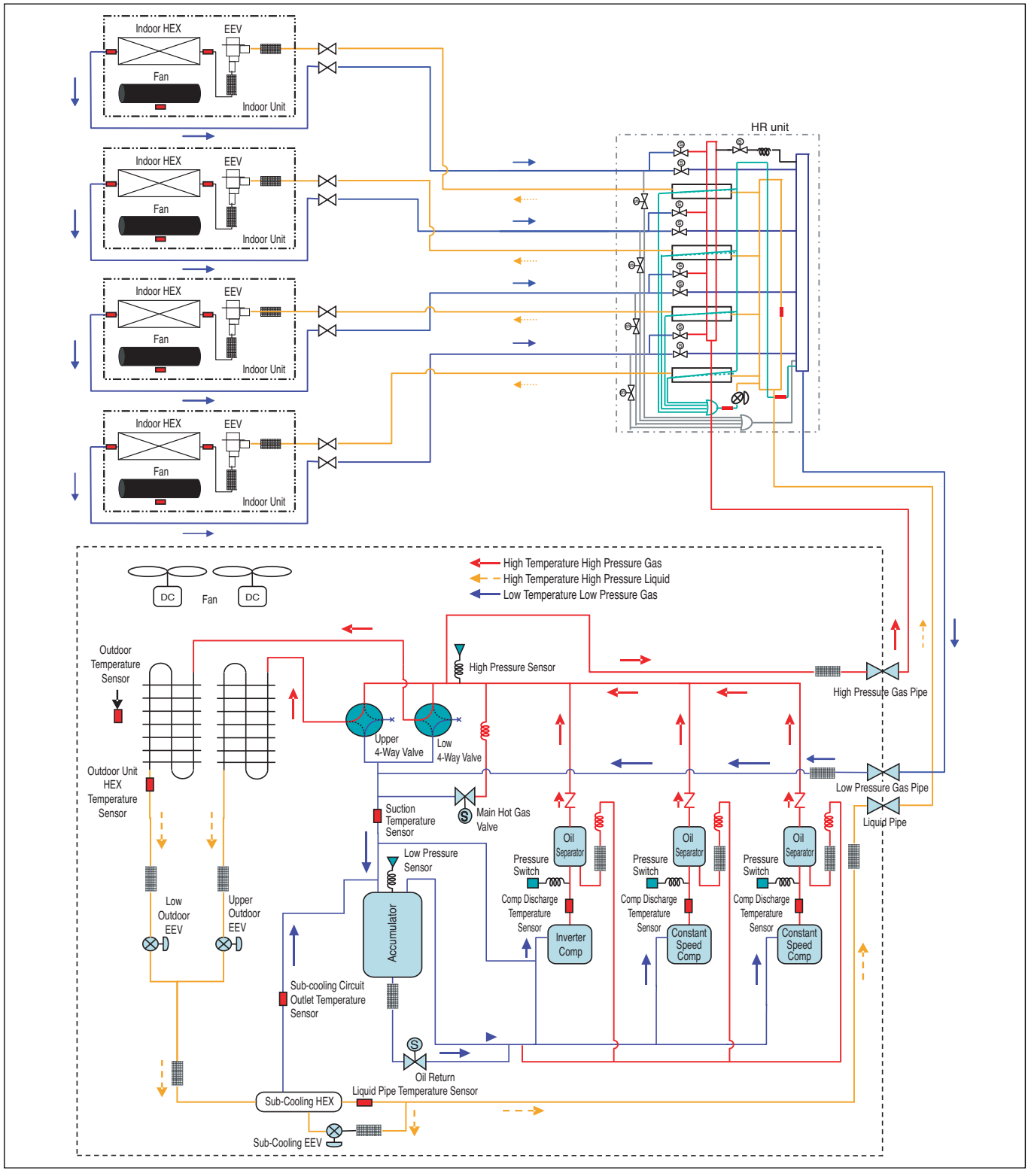


Remarks				
Pressure Sensor	Temperature Sensor	Check valve	Solenoid valve
Pressure Switch	SVC Valve	EEV	Strainer

Copyright © 2012- 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

4.1.4 18, 20HP(UX3 3Comp.)

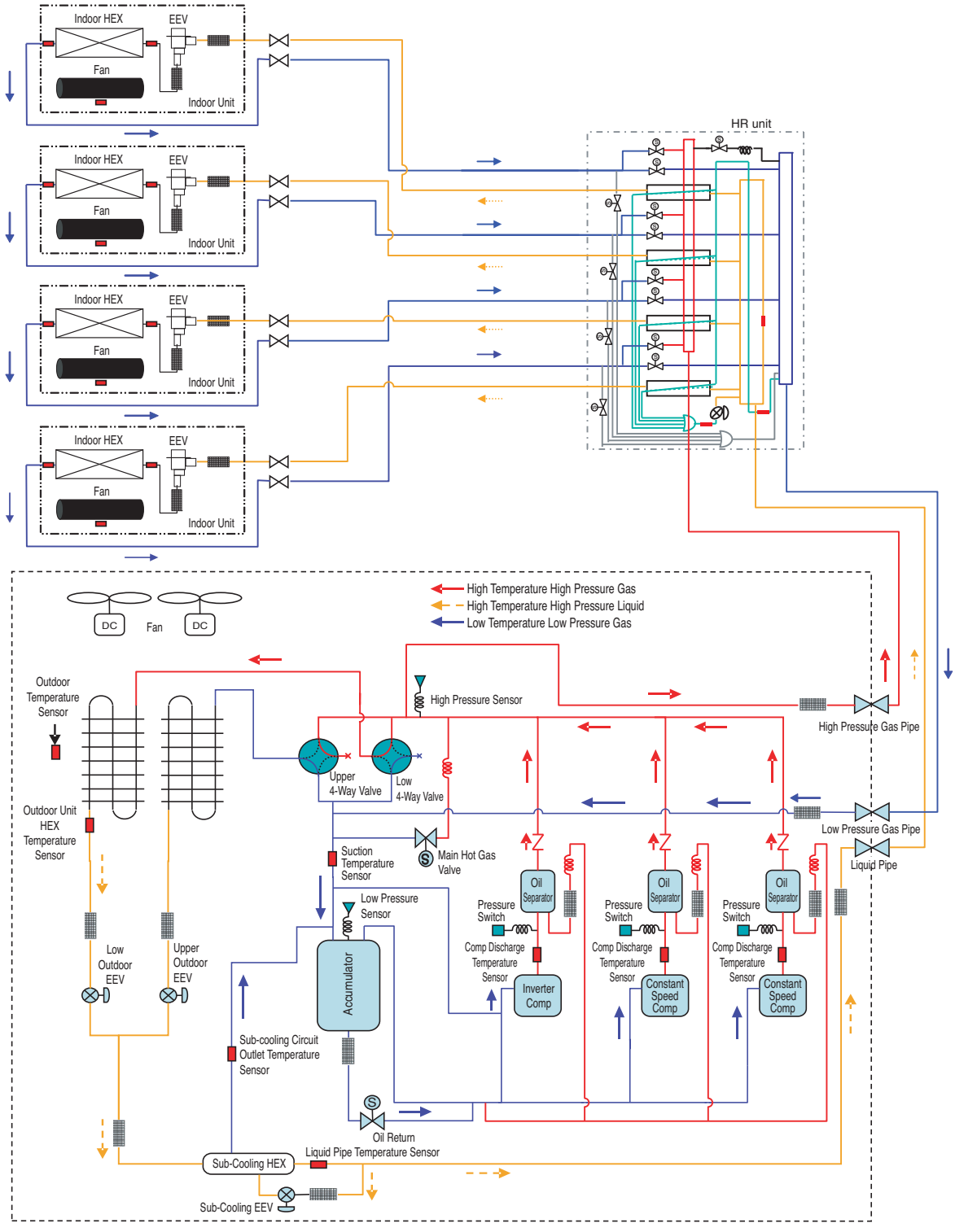
Cooling Operation



Remarks				
	Pressure Sensor	Temperature Sensor	Check valve	Solenoid valve
	Pressure Switch	SVC Valve	EEV	Strainer

Copyright © 2012 - 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

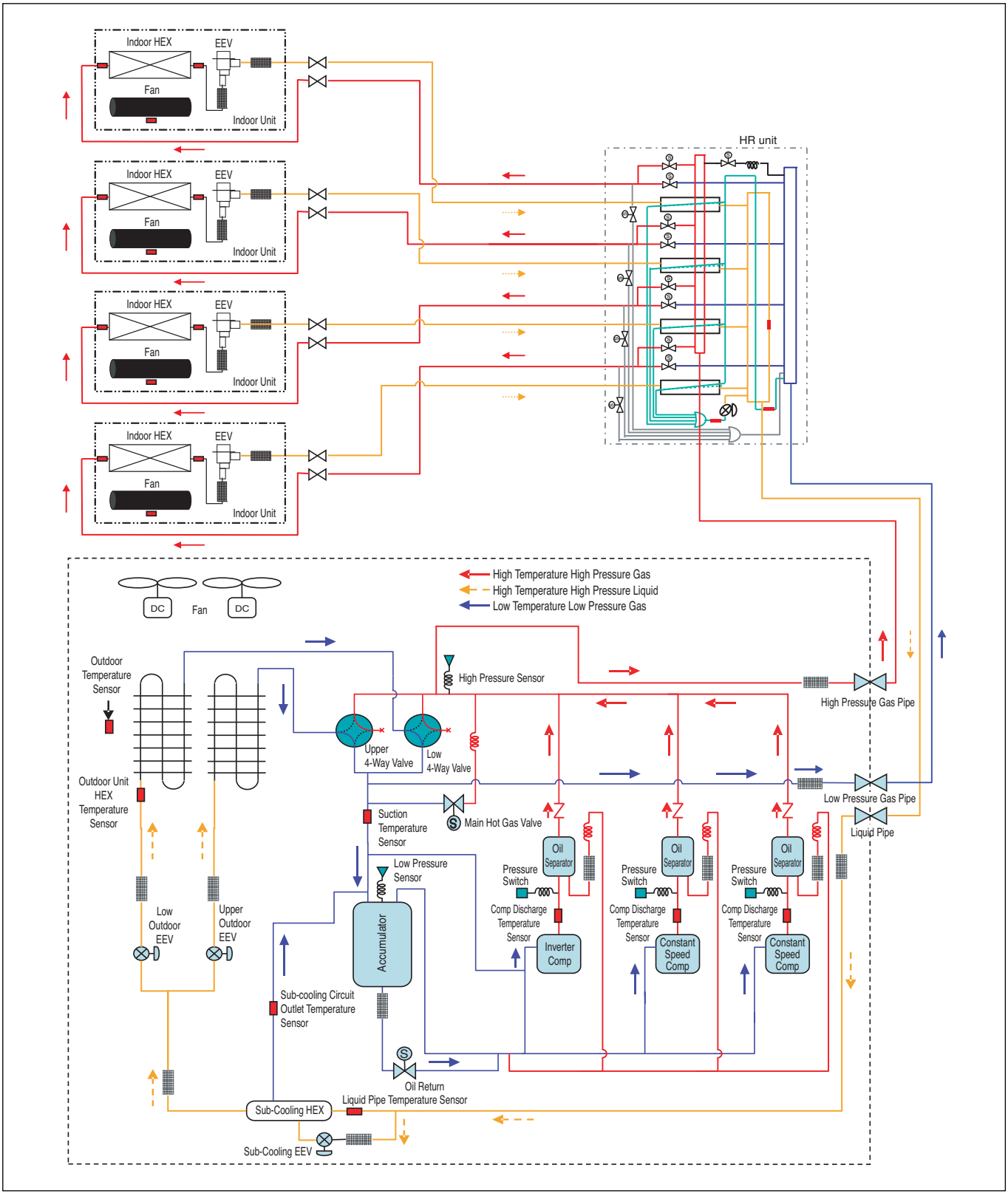
Cooling Operation at low ambient temperature



Remarks				
	Pressure Sensor	Temperature Sensor	Check valve	Solenoid valve
	Pressure Switch	SVC Valve	EEV	Strainer

Copyright © 2012- 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

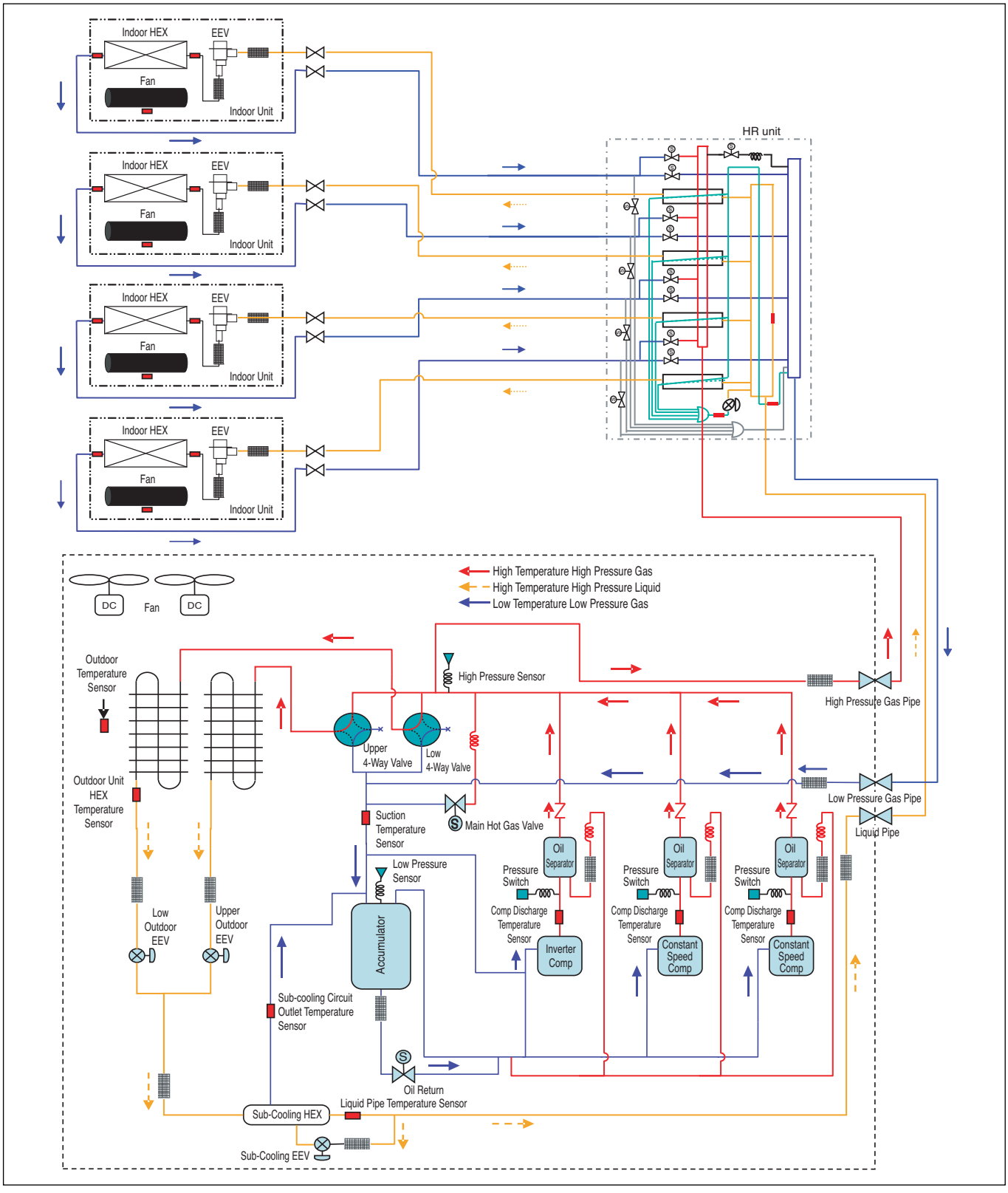
Heating Operation



Remarks				
	Pressure Sensor	Temperature Sensor	Check valve	Solenoid valve
	Pressure Switch	SVC Valve	EEV	Strainer

Copyright © 2012 - 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

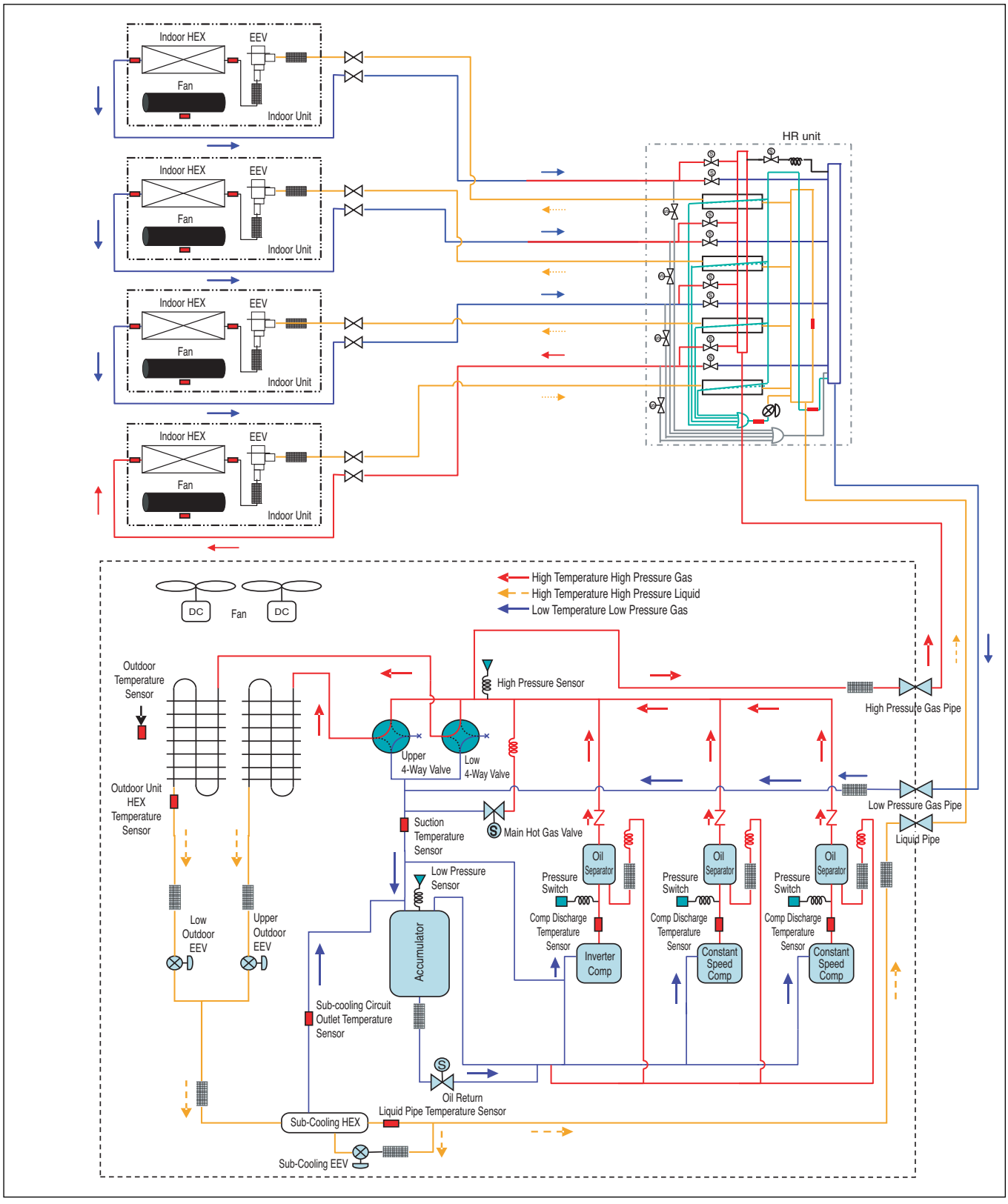
Oil Return/ Defrost Operation



Remarks				
	Pressure Sensor	Temperature Sensor	Check valve	Solenoid valve
	Pressure Switch	SVC Valve	EEV	Strainer

Copyright © 2012- 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

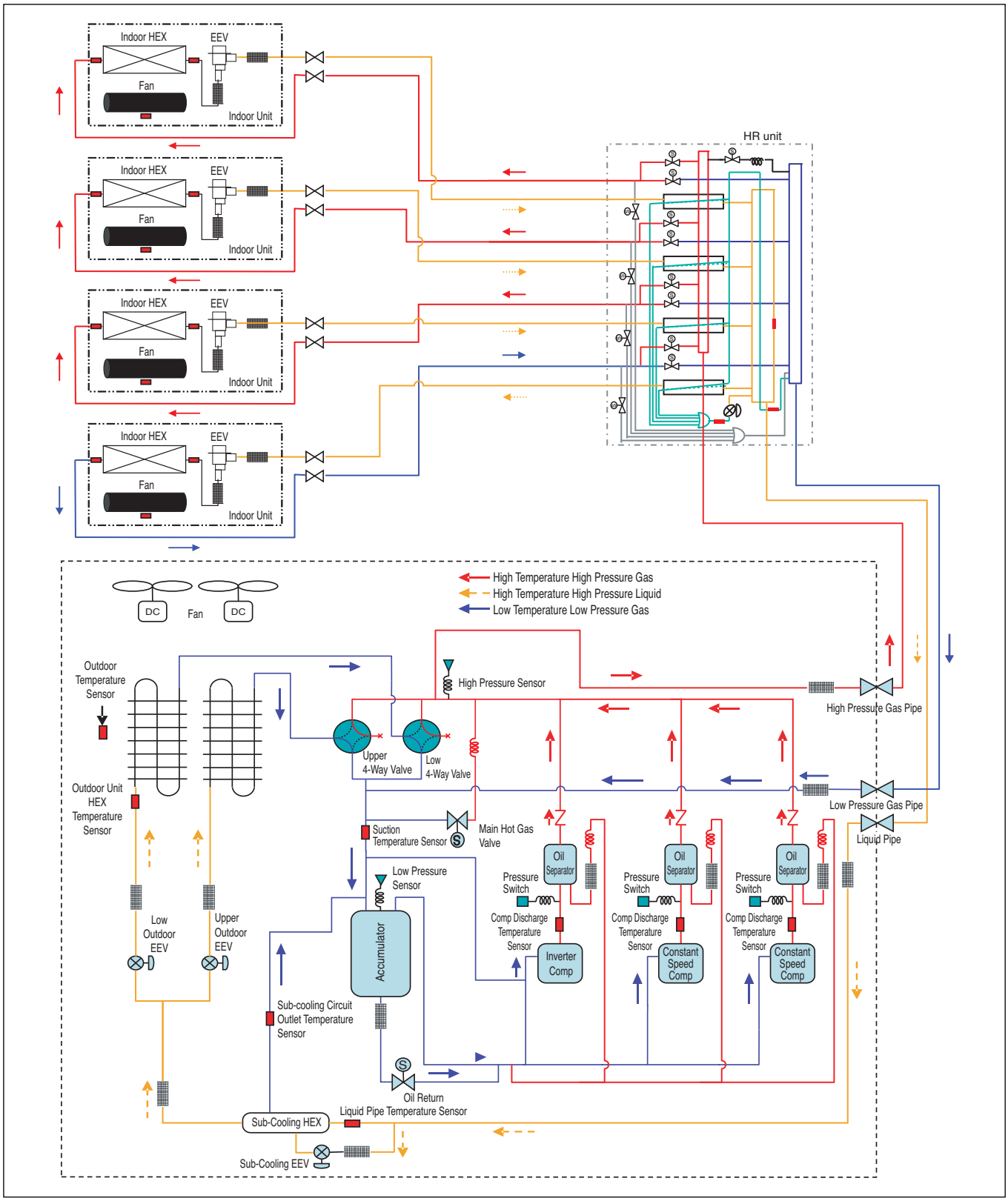
Simultaneous Operation Mode 1(Cooling Based Operation)



Remarks							
	Pressure Sensor		Temperature Sensor		Check valve		Solenoid valve
	Pressure Switch		SVC Valve		EEV		Strainer

Copyright © 2012 - 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

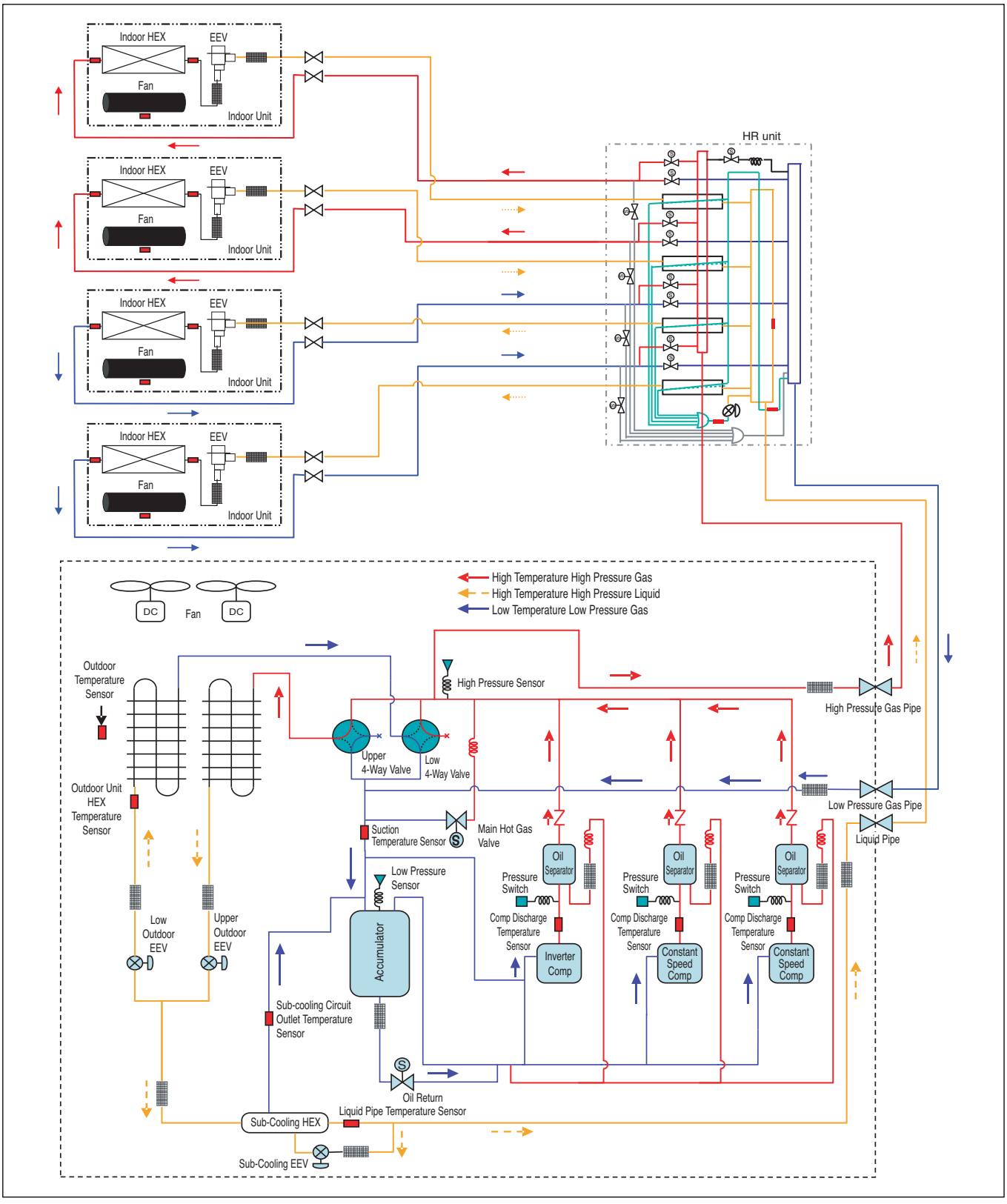
Simultaneous Operation Mode 2(Heating Based Operation)



Remarks				
Pressure Sensor	Temperature Sensor	Check valve	Solenoid valve
Pressure Switch	SVC Valve	EEV	Strainer

Copyright © 2012- 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

Simultaneous Operation Mode 3(Heating and Cooling Operation)



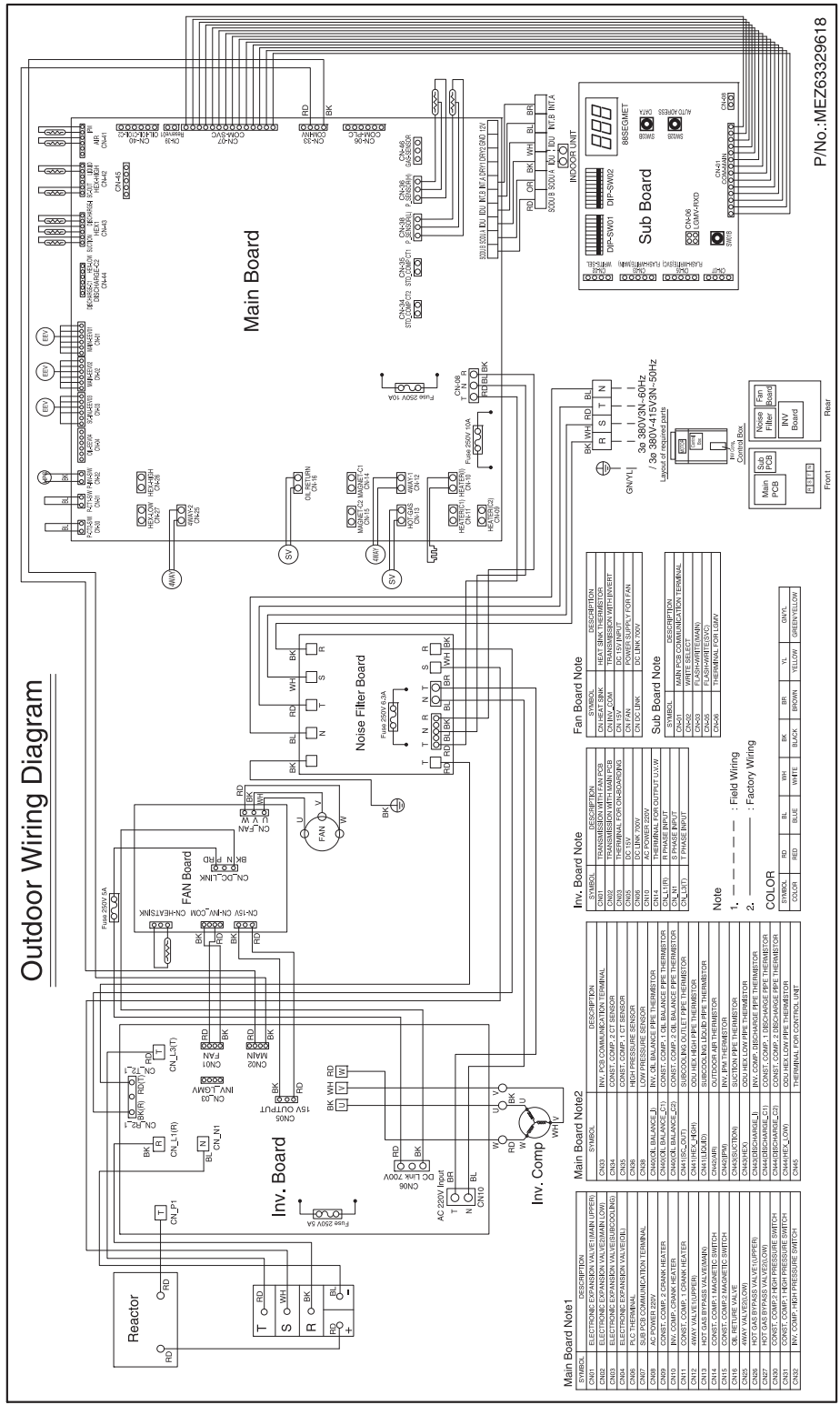
Remarks				
Pressure Sensor	Temperature Sensor	Check valve	Solenoid valve
Pressure Switch	SVC Valve	EEV	Strainer

Copyright © 2012 - 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

5. Wiring Diagrams

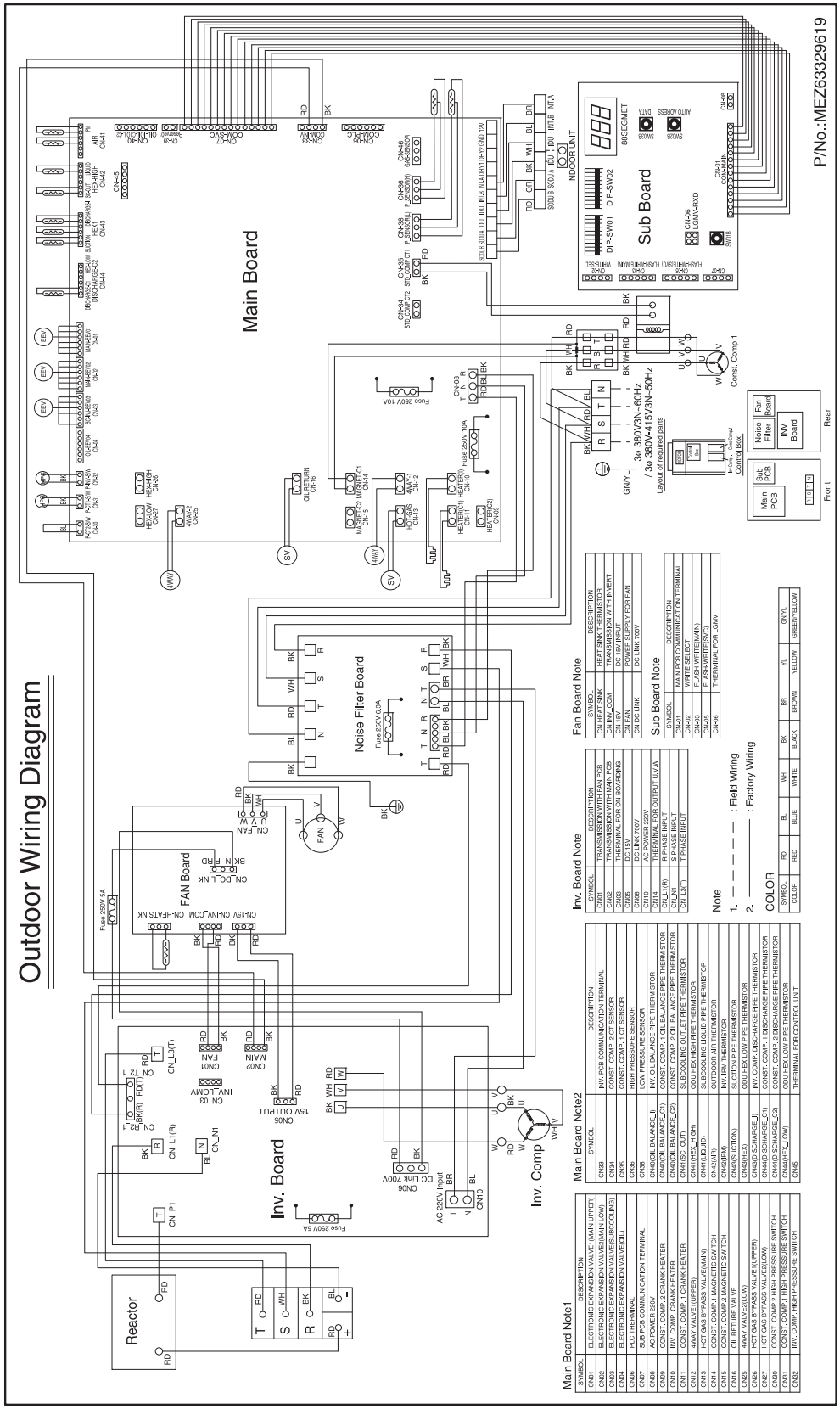
5.1 Heat Recovery Model

5.1.1 8HP(UX2 1Comp.)



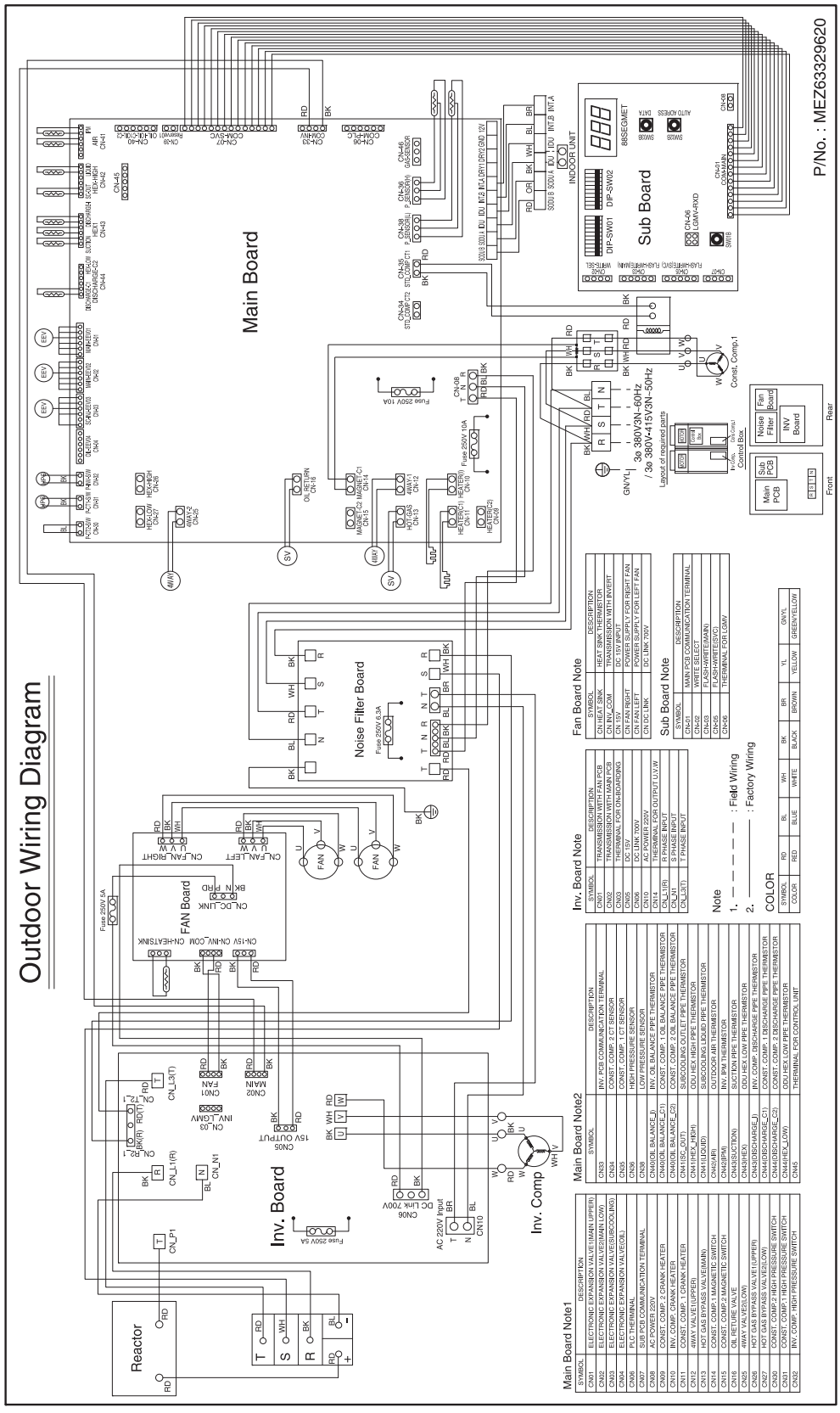
Copyright © 2012- 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

5.1.2 10, 12HP(UX2 2Comp.)



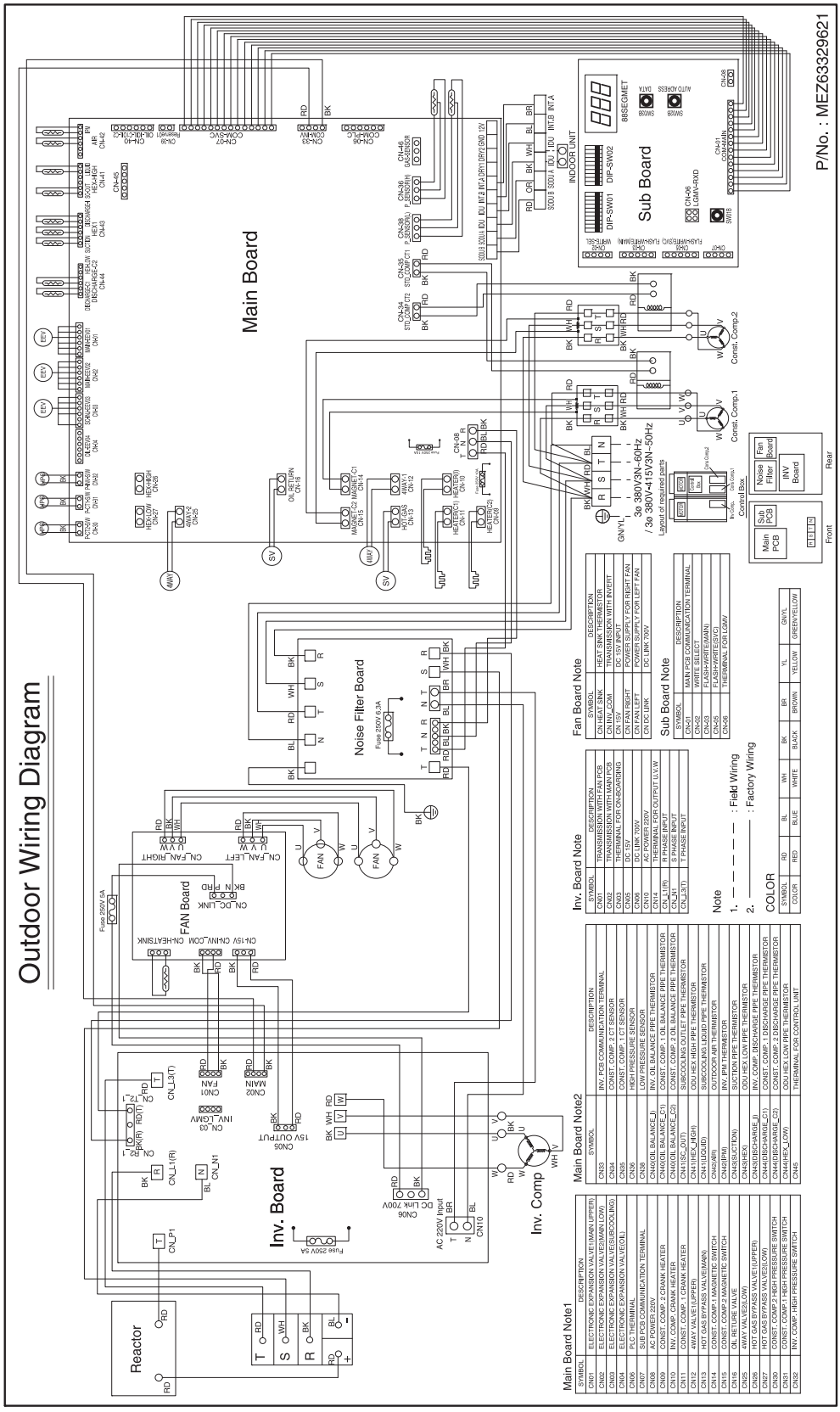
Copyright © 2012 - 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

5.1.3 14, 16HP(UX3 2Comp.)



Copyright © 2012- 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

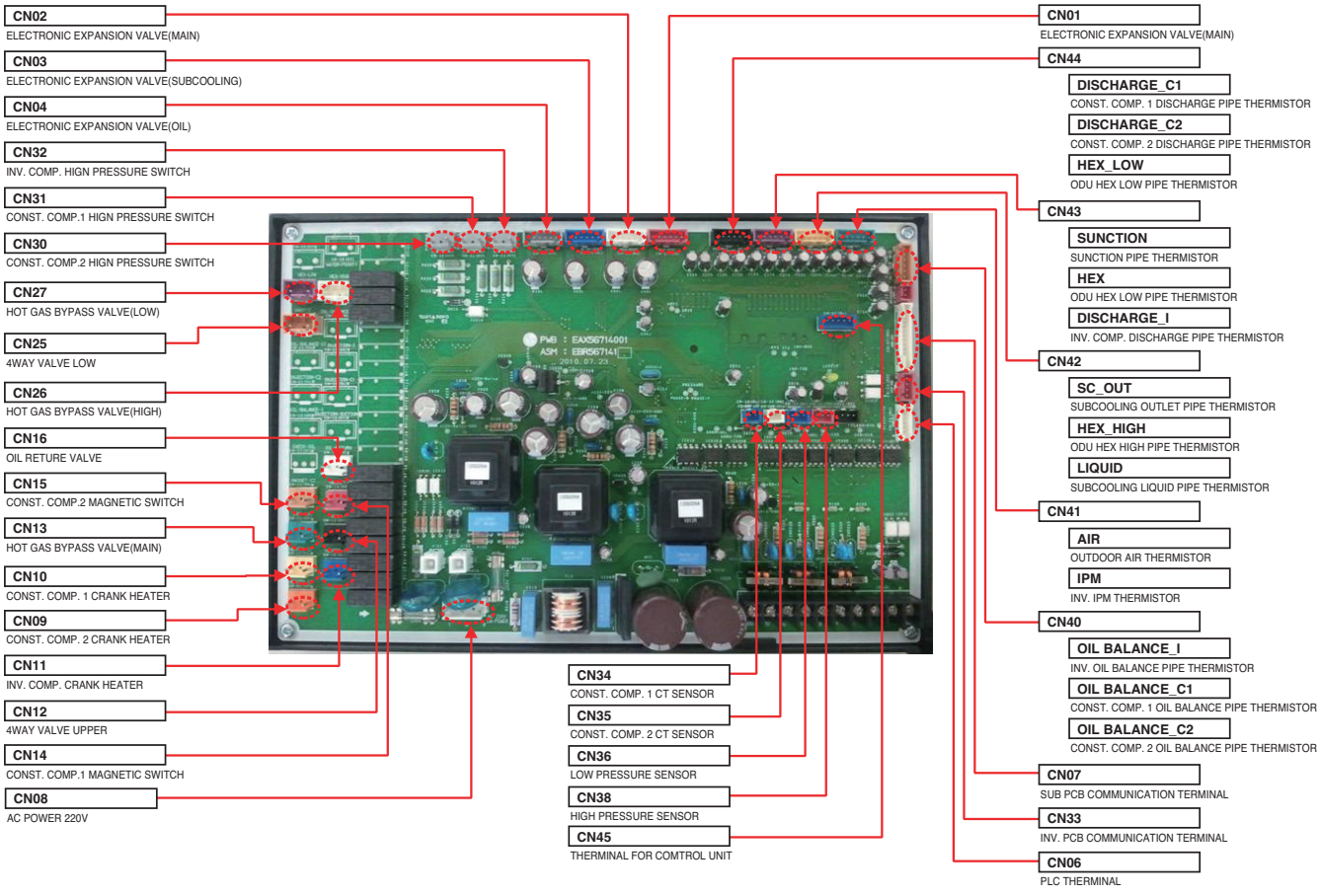
5.1.4 18, 20HP(UX3 3Comp.)



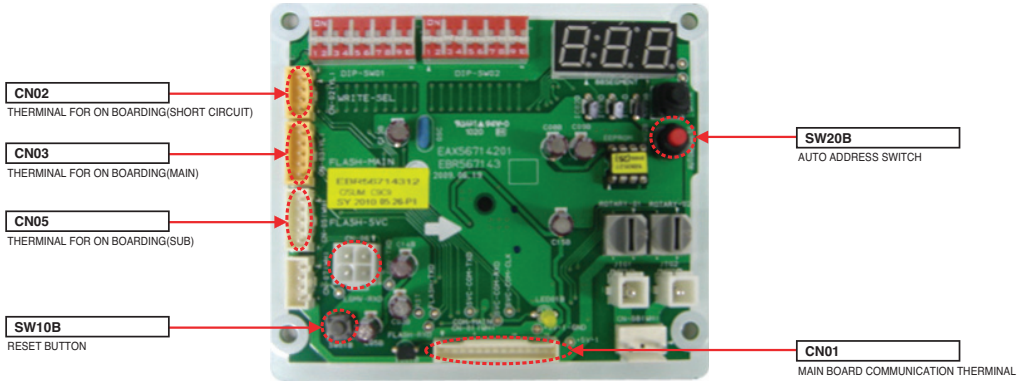
Copyright © 2012 - 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

Description of PCB

■ Main PCB



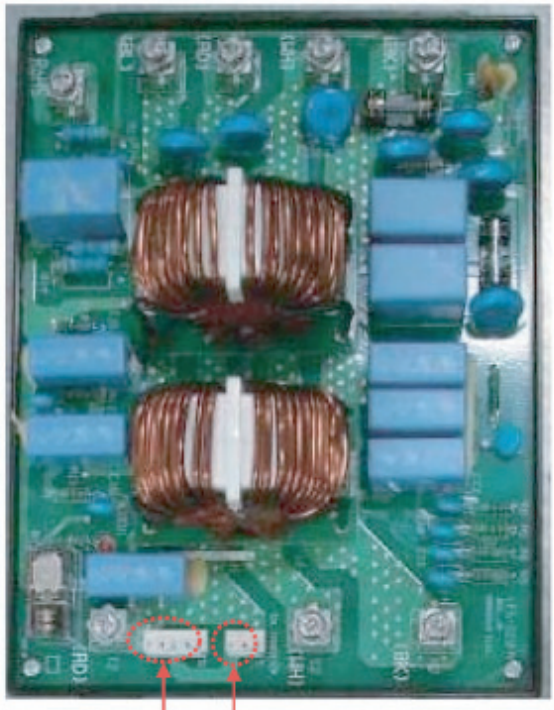
■ SUB PCB



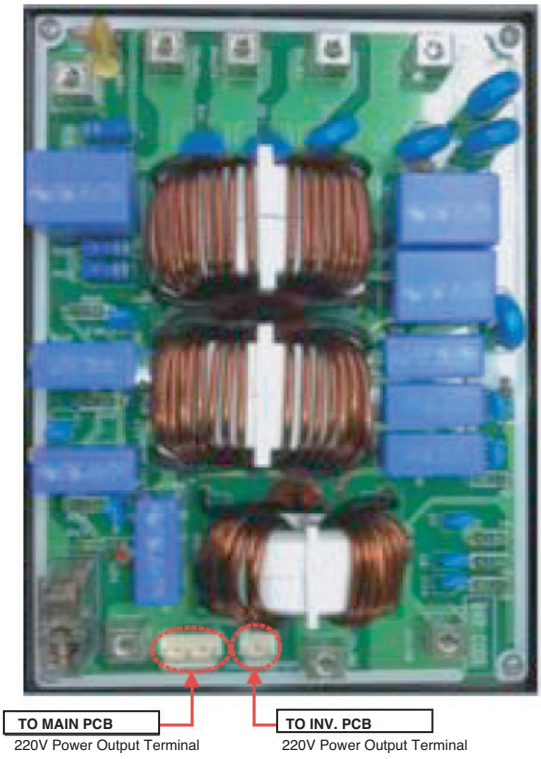
Copyright © 2012- 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

■ Noise Filter

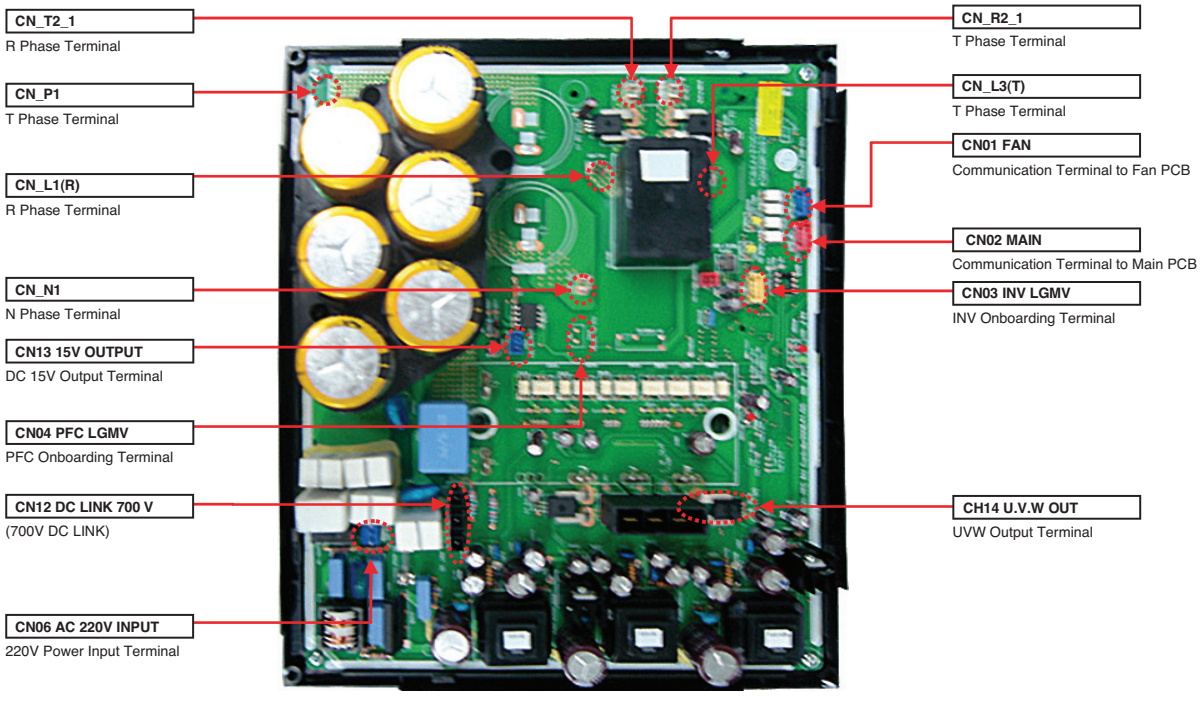
Model produced Before 2012.07



Model produced After 2012.07

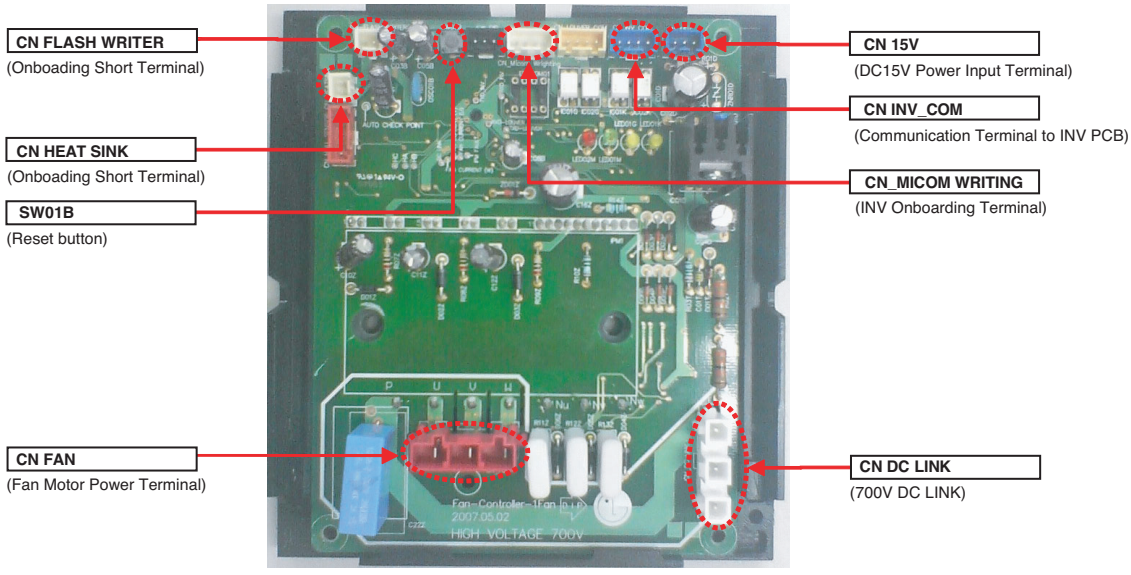


■ Inverter PCB

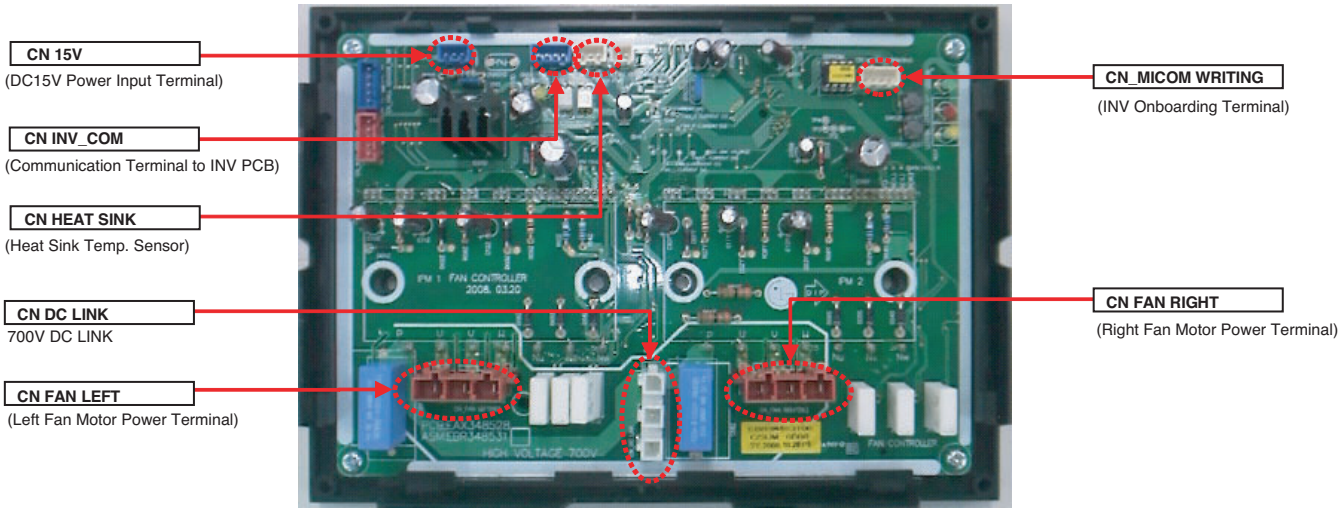


Copyright © 2012 - 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

■ FAN PCB(UX2)



■ FAN PCB(UX3)



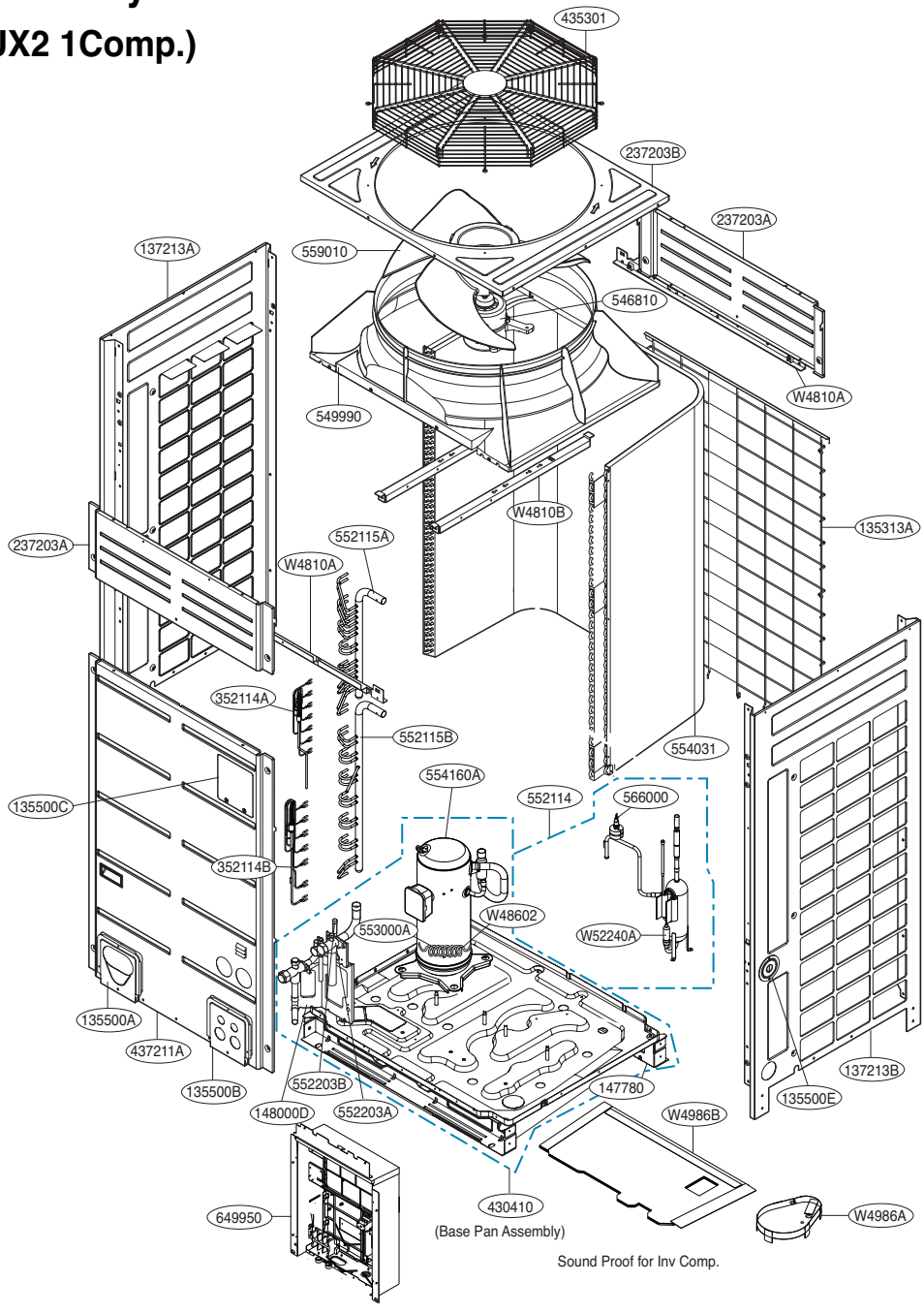
Copyright © 2012- 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

6. Exploded View

Outdoor Unit

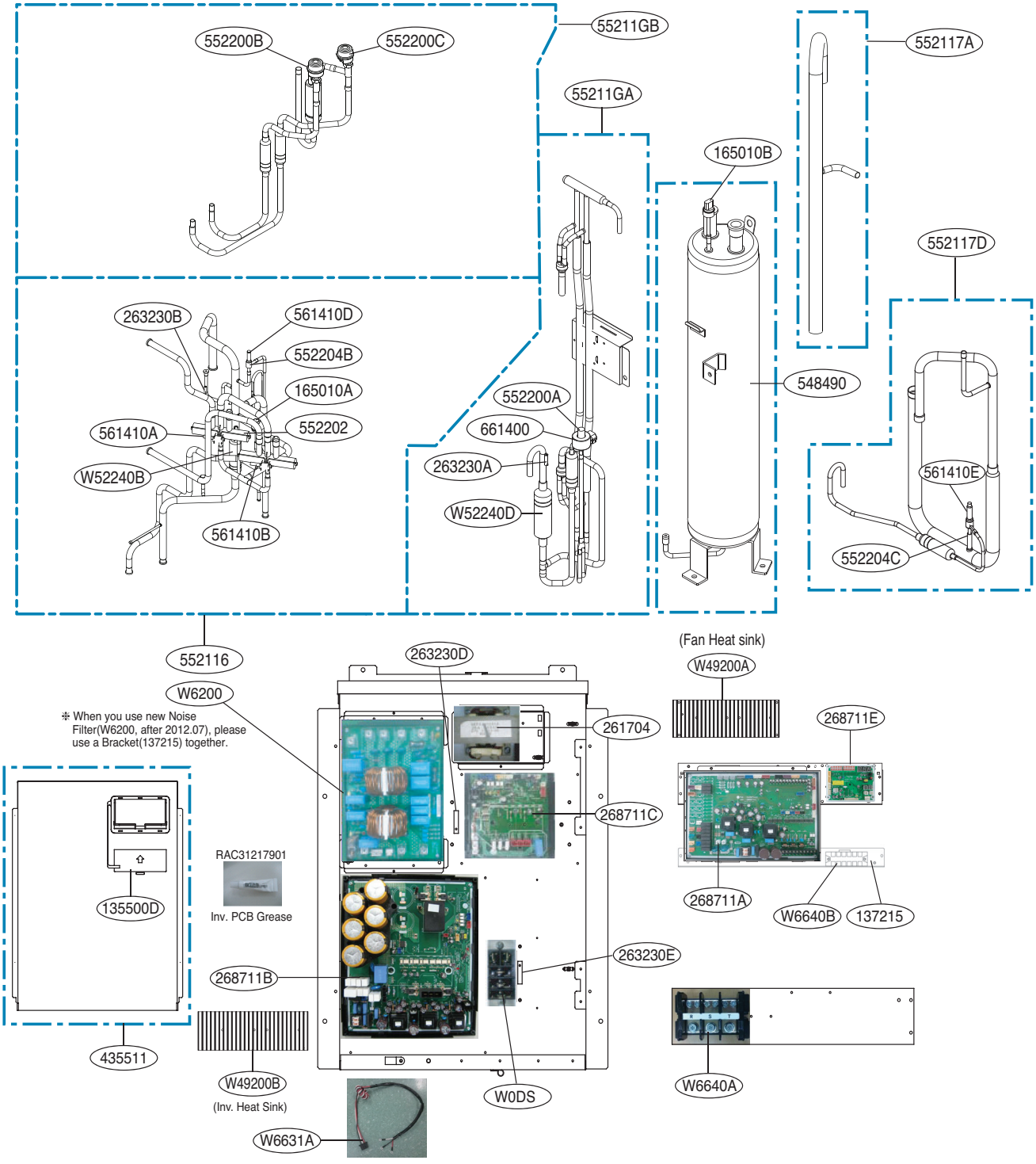
6.1 Heat Recovery Model

6.1.1 8HP(UX2 1Comp.)



Part	L/No.	Remark
Inv Comp. Heater	553000A	Housing Color : Blue
Heater Spring	W48602	-
Low HEX3 Temp. Sensor	263230C	Housing Color : Black

Copyright © 2012 - 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

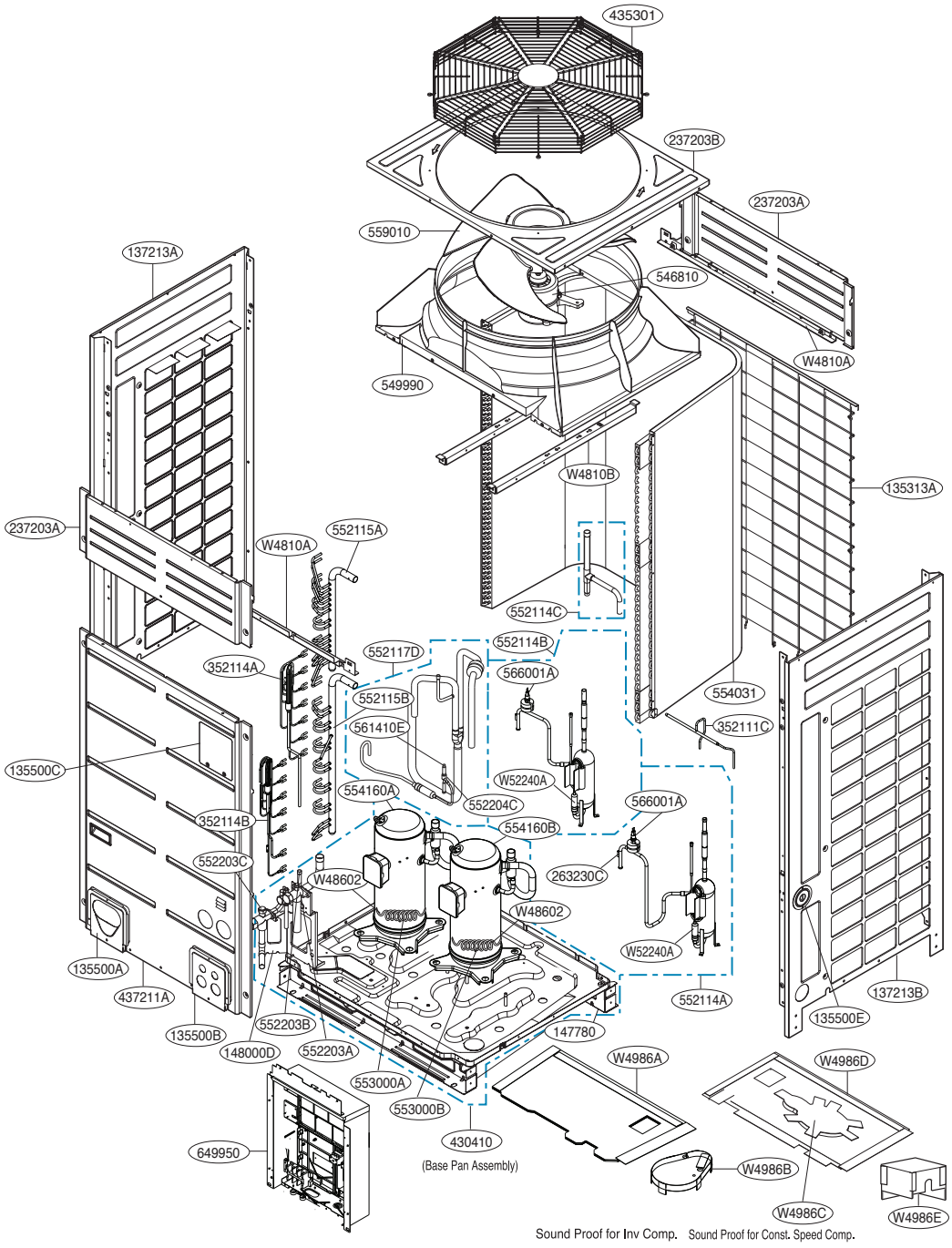


Part	L/No.	Sensor location	Remark
Temp. Sensor 1	263230A	Sub Cool Out + HEX2(Upper Temp. Sensor) + Liquid Pipe	Housing Color : Yellow
Temp. Sensor 2	263230B	Suction Pipe + HEX1(Temp. Sensor) + Inv. Discharge	Housing Color : Purple
Temp. Sensor 3	263230E	Air + Inv. IPM	Housing Color : Green

L/No	Description	P/No	
		Model produced Before 2012.07	Model produced After 2012.07
W6200	Noise Filter	EAM39080203	EAM39080204
137215	PCB Bracket	-	MGC61855107

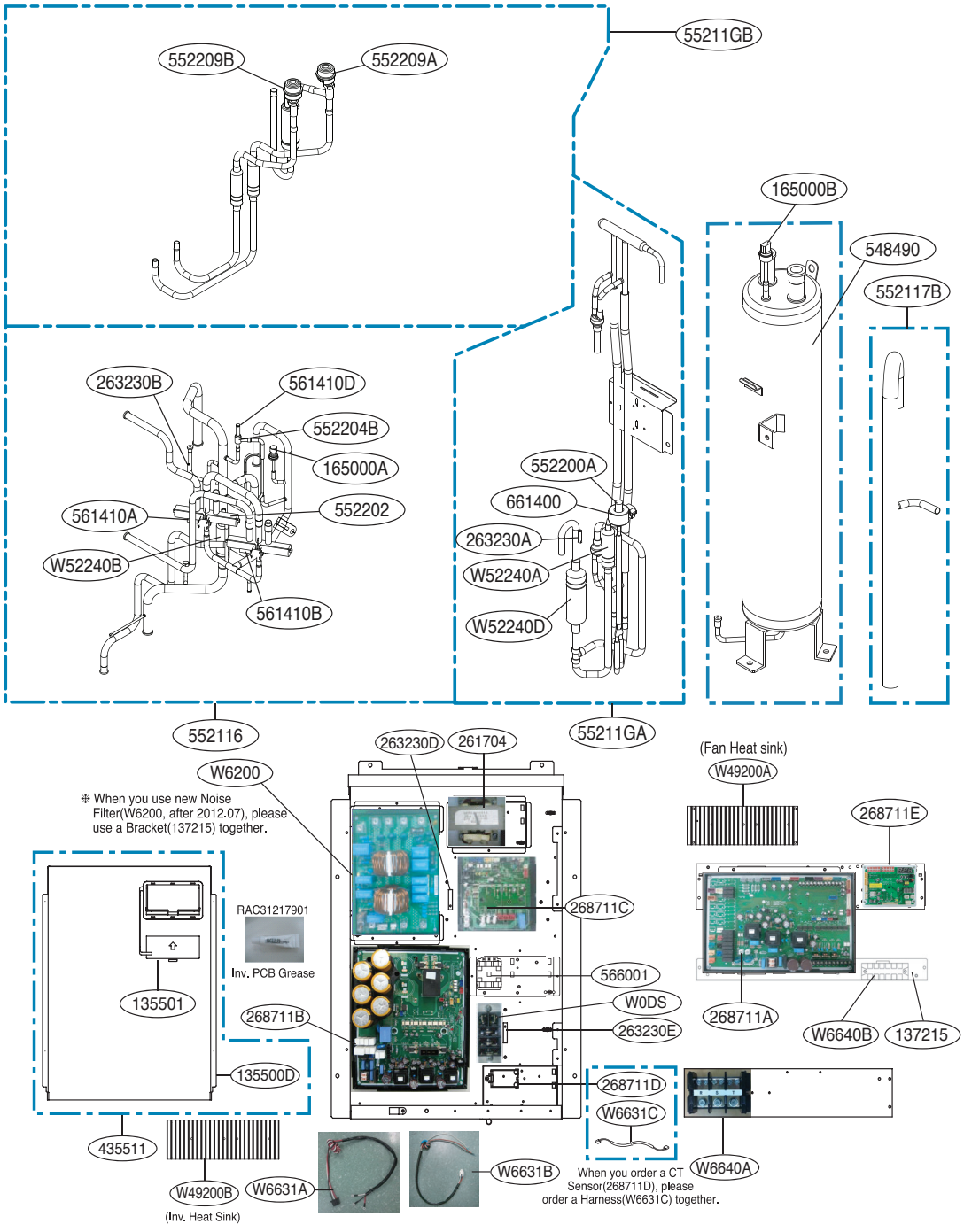
Copyright © 2012 - 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

6.1.2 10, 12HP(UX2 2Comp.)



Part	L/No.	Remark
Inv Comp. Heater	553000A	Housing Color : Blue
Const. Speed Comp. Heater	553000B	Housing Color : Yellow
Heater Spring	W48602	-
Const. Speed Comp. Discharge + Low HEX3 Temp. Sensor	263230C	Housing Color : Black

Copyright © 2012 - 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

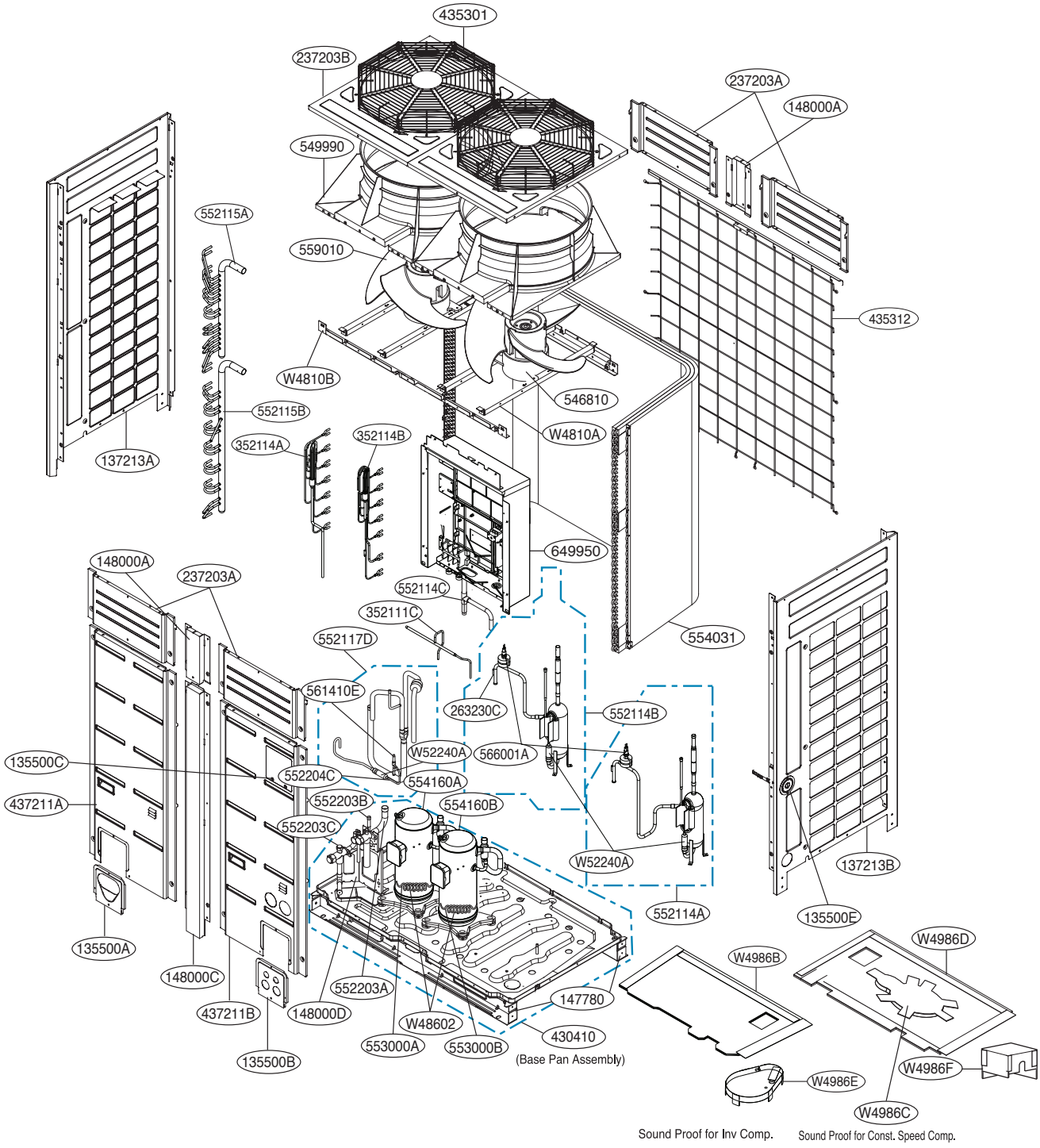


Part	L/No.	Sensor location	Remark
Temp. Sensor 1	263230A	Sub Cool Out + HEX2(Upper Temp. Sensor) + Liquid Pipe	Housing Color : Yellow
Temp. Sensor 2	263230B	Suction Pipe + HEX1(Temp. Sensor) + Inv. Discharge	Housing Color : Purple
Temp. Sensor 3	263230E	Air + Inv. IPM	Housing Color : Green

L/No	Description	P/No	
		Model produced Before 2012.07	Model produced After 2012.07
W6200	Noise Filter	EAM39080203	EAM39080204
137215	PCB Bracket	-	MGC61855107

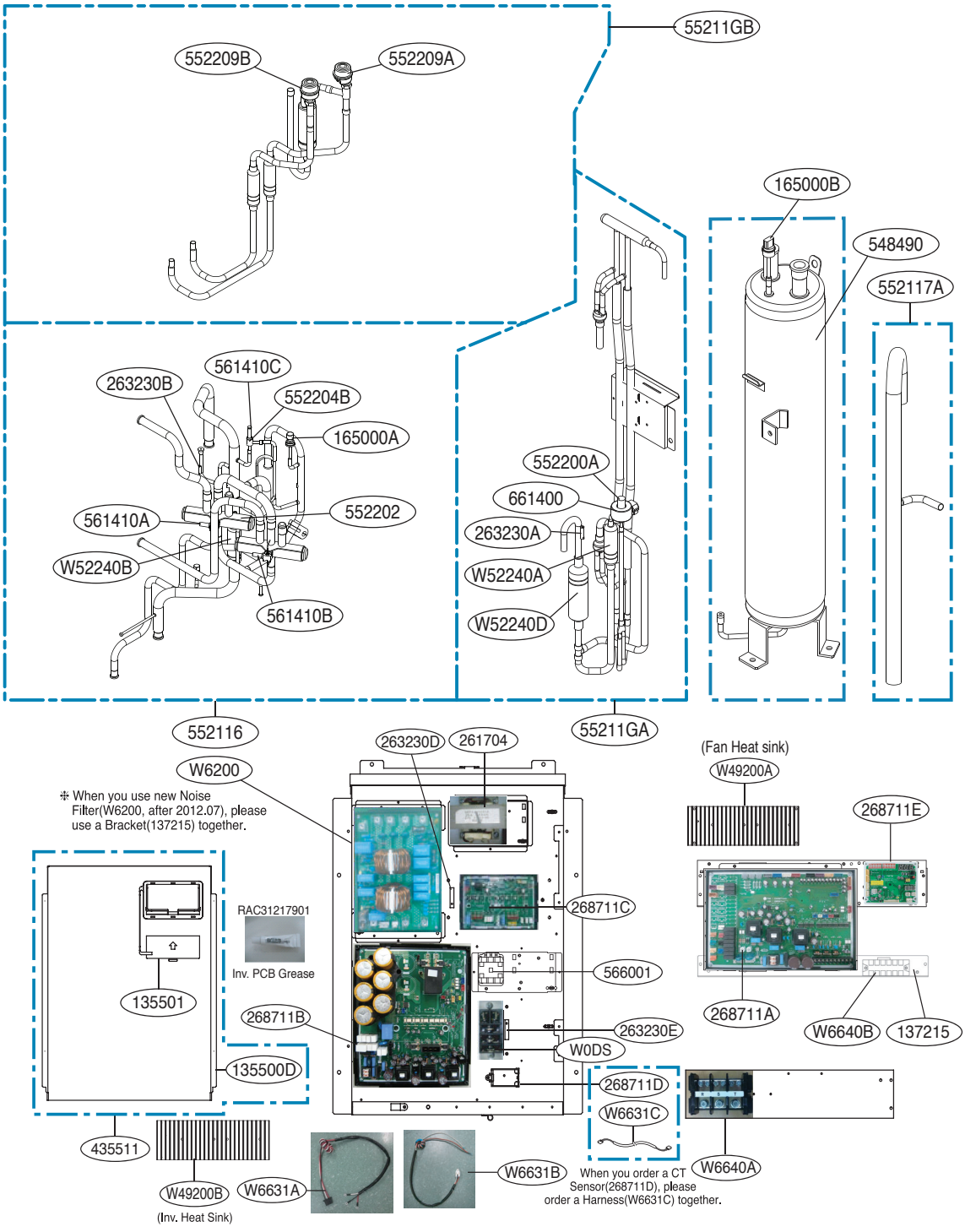
Copyright © 2012- 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

6.1.3 14, 16HP(UX3 2Comp.)



Part	L/No.	Remark
Inv Comp. Heater	553000A	Housing Color : Blue
Const. Speed Comp. Heater	553000B	Housing Color : Yellow
Heater Spring	W48602	-
Const. Speed Comp. Discharge + Low HEX3 Temp. Sensor	263230C	Housing Color : Black

Copyright © 2012 - 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

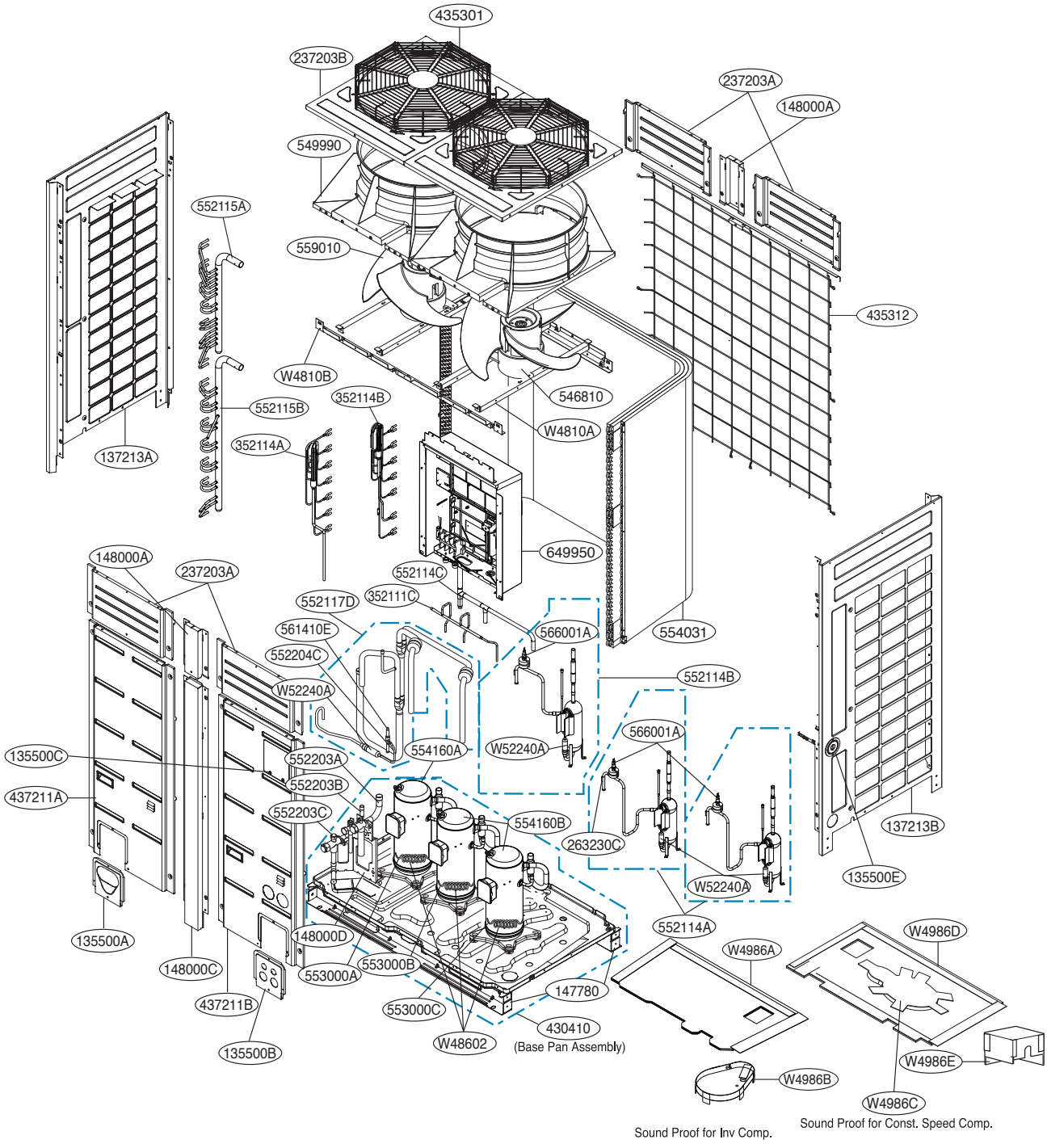


Part	L/No.	Sensor location	Remark
Temp. Sensor 1	263230A	Sub Cool Out + HEX2(Upper Temp. Sensor) + Liquid Pipe	Housing Color : Yellow
Temp. Sensor 2	263230B	Suction Pipe + HEX1(Temp. Sensor) + Inv. Discharge	Housing Color : Purple
Temp. Sensor 3	263230E	Air + Inv. IPM	Housing Color : Green

L/No	Description	P/No	
		Model produced Before 2012.07	Model produced After 2012.07
W6200	Noise Filter	EAM39080203	EAM39080204
137215	PCB Bracket	-	MGC61855107

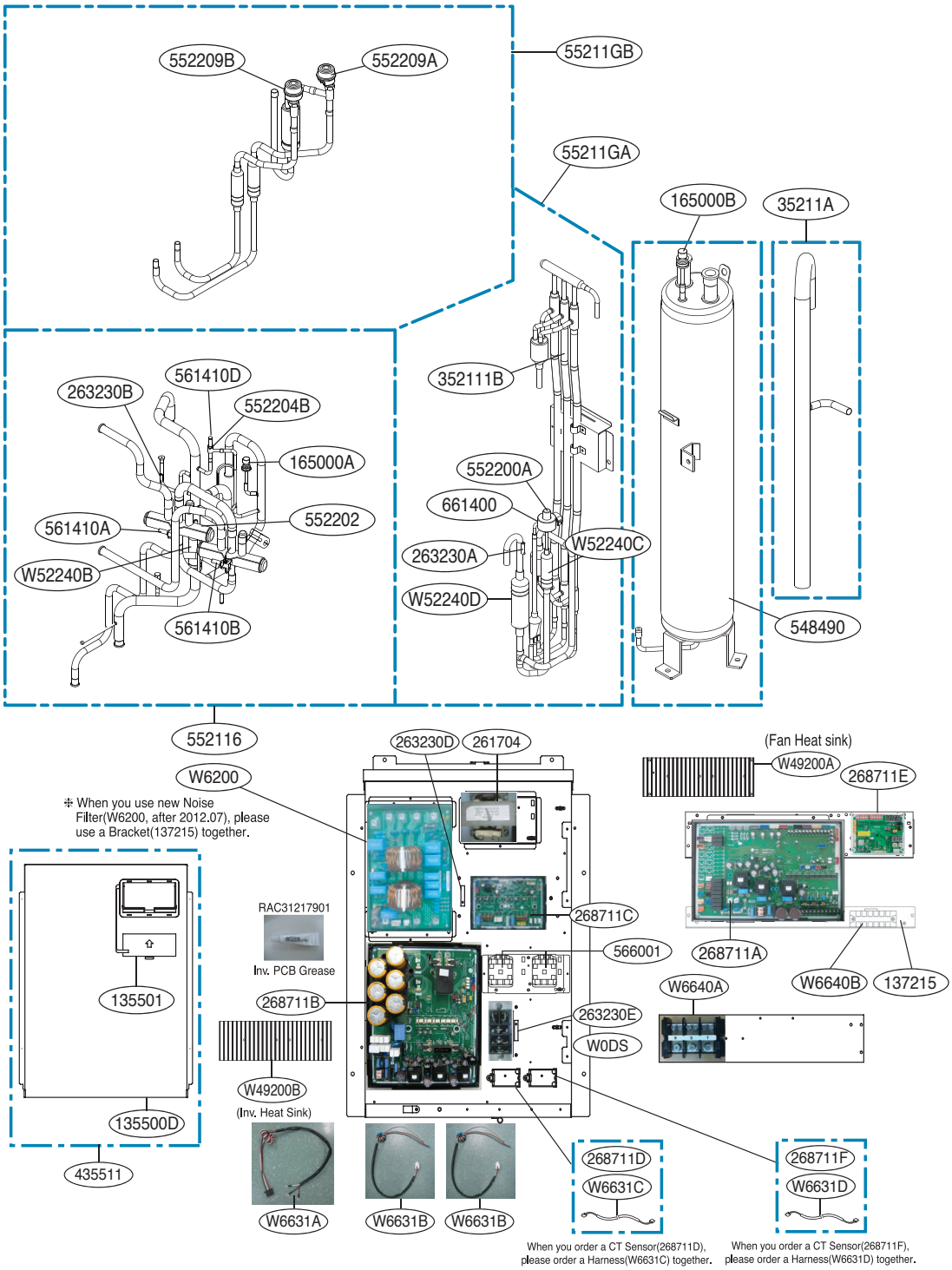
Copyright © 2012 - 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.

6.1.4 18, 20HP(UX3 3Comp.)



Part	L/No.	Remark
Inv Comp. Heater	553000A	Housing Color : Blue
Const. Speed Comp.1 Heater	553000B	Housing Color : Yellow
Const. Speed Comp.2 Heater	553000C	Housing Color : Orange
Heater Spring	W48602	-
Const. Speed Comp.1 Discharge + Const. Speed Comp.2 Discharge + Low HEX3 Temp. Sensor	263230C	Housing Color : Black

Copyright © 2012 - 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.



Part	L/No.	Sensor location	Remark
Temp. Sensor 1	263230A	Sub Cool Out + HEX2(Upper Temp. Sensor) + Liquid Pipe	Housing Color : Yellow
Temp. Sensor 2	263230B	Suction Pipe + HEX1(Temp. Sensor) + Inv. Discharge	Housing Color : Purple
Temp. Sensor 3	263230E	Air + Inv. IPM	Housing Color : Green

L/No	Description	P/No	
		Model produced Before 2012.07	Model produced After 2012.07
W6200	Noise Filter	EAM39080203	EAM39080204
137215	PCB Bracket	-	MGC61855107

Copyright © 2012- 2019 LG Electronics Inc.
All rights reserved. Only training and service purposes.



Copyright © 2012 - 2019 LG Electronics Inc. All rights reserved. Only training and service purposes.