



Internal Use Only

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**MULTI V™ IV**

**Outdoor Unit R410A**

**SERVICE MANUAL  
(Exploded View)**

**MODEL : ARUN\*\*\*LTE4**

**CAUTION**

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

# ARUN\*\*\*LTE4

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# 1. Specifications

## Heat Pump

Heat Pump(50Hz/60Hz)

HP			8	10	12
Model Name	Combination Unit		ARUN080LTE4	ARUN100LTE4	ARUN120LTE4
	Independent Unit		ARUN080LTE4	ARUN100LTE4	ARUN120LTE4
Capacity (Rated)	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 (Rated)	Cooling	kW	4.38	5.38	6.85
	Heating	kW	4.58	5.49	7.80
Power Factor	Rated	-	0.90	0.90	0.90
Casing Color			Warm Gray /Morning Gray	Warm Gray /Morning Gray	Warm Gray /Morning Gray
Heat Exchanger			Gold fin	Gold fin	Gold fin
Compressor	Type		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Piston Displacement	cm <sup>3</sup> /rev	43.8	62.1	62.1
	Number of Revolution	rev/min	3,600	3,600	3,600
	Motor Output x Number	W x No.	4,200	6,800	6,800
	Starting Method		Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Oil Charge	cc	2,400	2,600	2,600
Fan	Type		Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	750 x 1	750 x 1	750 x 1
	Air Flow Rate(High)	m <sup>3</sup> /min	210	210	210
		ft <sup>3</sup> /min	7,416	7,416	7,416
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP
Pipe Connctions	Liquid	mm(inch)	9.52(3/8)	9.52(3/8)	12.7(1/2)
	Gas	mm(inch)	19.05(3/4)	22.2(7/8)	28.58(1 1/8)
Dimensions(WxHxD)	mm		(920x1,680x760)x1	(920x1,680x760)x1	(920x1,680x760)x1
	inch		(36-7/32x66-5/32x29-29/32)x1	(36-7/32x66-5/32x29-29/32)x1	(36-7/32x66-5/32x29-29/32)x1
Net Weight	kg		202 x 1	208 x 1	208 x 1
	lbs		445 x 1	458 x 1	458 x 1
Sound Pressure Level	Cooling	dB(A)	58.5	59.0	59.0
	Heating	dB(A)	58.5	59.0	59.0
Sound Power Level		dB(A)	69.5	70.0	70.0
Protection Devices	High pressure protection	-	High pressure sensor / High pressure switch	High pressure sensor / High pressure switch	High pressure sensor / High pressure switch
	Compressor/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	No.xmm <sup>2</sup> (VCTF-SB)	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5
Refrigerant	Refrigerant name		R410A	R410A	R410A
	Precharged Amount	kg	7.5	7.5	7.5
		lbs	16.5	16.5	16.5
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply	Ø , V, Hz		380~415, 3, 50	380~415, 3, 50	380~415, 3, 50
			380, 3, 60	380, 3, 60	380, 3, 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 capacity

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<sup>3</sup>/min x 35.3

## Heat Pump(50Hz/60Hz)

HP			14	16	18
Model Name	Combination Unit		ARUN140LTE4	ARUN160LTE4	ARUN180LTE4
	Independent Unit		ARUN140LTE4	ARUN160LTE4	ARUN180LTE4
Capacity (Rated)	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 (Rated)	Cooling	kW	8.48	10.42	9.85
	Heating	kW	9.60	11.40	11.25
Power Factor	Rated	-	0.90	0.90	0.90
Casing Color			Warm Gray /Morning Gray	Warm Gray /Morning Gray	Warm Gray /Morning Gray
Heat Exchanger			Gold fin	Gold fin	Gold fin
Compressor	Type		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Piston Displacement	cm <sup>3</sup> /rev	62.1	62.1	43.8 x 2
	Number of Revolution	rev/min	3,600	3,600	3,600 x2
	Motor Output x Number	W x No.	6,800	6,800	4,200 x2
	Starting Method		Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Oil Charge	cc	2,600	2,600	3,600
Fan	Type		Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	600 x 2	600 x 2	600 x 2
	Air Flow Rate(High)	m <sup>3</sup> /min	290	290	290
		ft <sup>3</sup> /min	10,241	10,241	10,241
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP
Pipe Connctions	Liquid	mm(inch)	12.7(1/2)	12.7(1/2)	15.88(5/8)
	Gas	mm(inch)	28.58(1 1/8)	28.58(1 1/8)	28.58(1 1/8)
Dimensions(WxHxD)		mm	(1,240x1,680x760)x1	(1,240x1,680x760)x1	(1,240x1,680x760)x1
		inch	(48-13/16x66-5/32x29-29/32)x1	(48-13/16x66-5/32x29-29/32)x1	(48-13/16x66-5/32x29-29/32)x1
Net Weight		kg	245 x 1	245 x 1	280 x 1
		lbs	540 x 1	540 x 1	617 x 1
Sound Pressure Level	Cooling	dB(A)	59.0	59.0	59.5
	Heating	dB(A)	59.0	59.0	59.5
Sound Power Level		dB(A)	70.0	70.0	70.5
Protection Devices	High pressure protection	-	High pressure sensor / High pressure switch	High pressure sensor / High pressure switch	High pressure sensor / High pressure switch
	Compressor/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	No.xmm <sup>2</sup> (VCTF-SB)		2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5
Refrigerant	Refrigerant name		R410A	R410A	R410A
	Precharged Amount	kg	10.5	10.5	10.5
		lbs	23.1	23.1	23.1
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply		Ø , V, Hz	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50
			380, 3, 60	380, 3, 60	380, 3, 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 <sup>3</sup> /min x 35.3

# Specification

## Heat Pump(50Hz/60Hz)

HP			20	22	24
Model Name	Combination Unit		ARUN200LTE4	ARUN220LTE4	ARUN240LTE4
	Independent Unit		ARUN200LTE4	ARUN120LTE4	ARUN120LTE4
				ARUN100LTE4	ARUN120LTE4
Capacity (Rated)	Cooling	kW	56.0	61.6	67.2
		kcal/h	48,200	53,000	57,800
		Btu/h	191,100	210,600	229,400
	Heating	kW	63.0	69.3	75.6
		kcal/h	54,200	59,600	65,000
		Btu/h	215,000	236,500	258,000
Input (Rated)	Cooling	kW	11.54	12.23	13.69
	Heating	kW	13.36	13.29	15.60
Power Factor	Rated	-	0.90	0.90	0.90
Casing Color			Warm Gray /Morning Gray	Warm Gray /Morning Gray	Warm Gray /Morning Gray
Heat Exchanger			Gold fin	Gold fin	Gold fin
Compressor	Type		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Piston Displacement	cm <sup>3</sup> /rev	43.8 × 2	62.1 × 2	62.1 × 2
	Number of Revolution	rev/min	3,600 × 2	3,600 × 2	3,600 × 2
	Motor Output x Number	W x No.	4,200 × 2	6,800 × 2	6,800 × 2
	Starting Method		Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Oil Charge	cc	3,600	5,200	5,200
Fan	Type		Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	600 × 2	750 × 2	750 × 2
	Air Flow Rate(High)	m <sup>3</sup> /min	290	210 × 2	210 × 2
		ft <sup>3</sup> /min	10,241	7,416 × 2	7,416 × 2
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
	Discharge	Side / Top	TOP	TOP	TOP
Pipe Connctions	Liquid	mm(inch)	15.88(5/8)	15.88(5/8)	15.88(5/8)
	Gas	mm(inch)	28.58(1 1/8)	28.58(1 1/8)	34.9(1 3/8)
Dimensions(WxHxD)		mm	(1,240×1,680×760)×1	(920×1,680×760)×2	(920×1,680×760)×2
		inch	(48-13/16×66-5/32×29-29/32)×1	(36-7/32×66-5/32×29-29/32)×2	(36-7/32×66-5/32×29-29/32)×2
Net Weight		kg	280 × 1	208 × 2	208 × 2
		lbs	617 × 1	458 × 2	458 × 2
Sound Pressure Level	Cooling	dB(A)	59.5	62.0	62.0
	Heating	dB(A)	59.5	62.0	62.0
Sound Power Level		dB(A)	70.5	73.0	73.0
Protection Devices	High pressure protection	-	High pressure sensor / High pressure switch	High pressure sensor / High pressure switch	High pressure sensor / High pressure switch
	Compressor/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	No.xmm <sup>2</sup> (VCTF-SB)		2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5
Refrigerant	Refrigerant name		R410A	R410A	R410A
	Precharged Amount	kg	10.5	7.5 × 2	7.5 × 2
		lbs	23.1	16.5 × 2	16.5 × 2
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply		Ø , V, Hz	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50
			380, 3, 60	380, 3, 60	380, 3, 60

### Notes:

- 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

- Capacities are net capacities
- EEV : Electronic Expansion Valve
- Wiring cable size must comply with the applicable local and national code.
- Due to our policy of innovation some specifications may be changed without prior notification

### Conversion Formula

$$RT = kW \times 0.284$$

$$kcal/h = kW \times 860$$

$$Btu/h = kW \times 3412$$

$$cfm = m^3/min \times 35.3$$

Heat Pump(50Hz/60Hz)

HP			26	28	30
Model Name	Combination Unit		ARUN260LTE4	ARUN280LTE4	ARUN300LTE4
	Independent Unit		ARUN140LTE4	ARUN160LTE4	ARUN180LTE4
			ARUN120LTE4	ARUN120LTE4	ARUN120LTE4
Capacity (Rated)	Cooling	kW	72.8	78.4	84.0
		kcal/h	62,600	67,400	72,200
		Btu/h	248,500	267,600	286,700
	Heating	kW	81.9	88.2	94.5
		kcal/h	70,400	75,800	81,300
		Btu/h	279,500	301,000	322,500
Input (Rated)	Cooling	kW	15.33	17.26	16.69
	Heating	kW	17.40	19.20	19.05
Power Factor	Rated	-	0.90	0.90	0.90
Casing Color			Warm Gray /Morning Gray	Warm Gray /Morning Gray	Warm Gray /Morning Gray
Heat Exchanger			Gold fin	Gold fin	Gold fin
Compressor	Type		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Piston Displacement	cm <sup>3</sup> /rev	62.1 × 2	62.1 × 2	(43.8 × 2) + 62.1
	Number of Revolution	rev/min	3,600 × 2	3,600 × 2	(3,600 × 2) + 3,600
	Motor Output x Number	W x No.	6,800 × 2	6,800 × 2	(4,200 × 2) + 6,800
	Starting Method		Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Oil Charge	cc	5,200	5,200	6,200
Fan	Type		Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	(600 × 2) + 750	(600 × 2) + 750	(600 × 2) + 750
	Air Flow Rate(High)	m <sup>3</sup> /min	290 + 210	290 + 210	290 + 210
		ft <sup>3</sup> /min	10,241 + 7,416	10,241 + 7,416	10,241 + 7,416
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
Discharge	Side / Top	TOP	TOP	TOP	
Pipe Connctions	Liquid	mm(inch)	19.05(3/4)	19.05(3/4)	19.05(3/4)
	Gas	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)×1 + (920×1,680×760)×1	(1,240×1,680×760)×1 + (920×1,680×760)×1	(1,240×1,680×760)×1 + (920×1,680×760)×1
		inch	(48-13/16×66-5/32×29-29/32)×1 + (36-7/32×66-5/32×29-29/32)	(48-13/16×66-5/32×29-29/32)×1 + (36-7/32×66-5/32×29-29/32)	(48-13/16×66-5/32×29-29/32)×1 + (36-7/32×66-5/32×29-29/32)
Net Weight		kg	245 × 1 + 208 × 1	245 × 1 + 208 × 1	280 × 1 + 208 × 1
		lbs	540 × 1 + 458 × 1	540 × 1 + 458 × 1	617 × 1 + 458 × 1
Sound Pressure Level	Cooling	dB(A)	62.0	62.0	62.3
	Heating	dB(A)	62.0	62.0	62.3
Sound Power Level		dB(A)	73.0	73.0	73.3
Protection Devices	High pressure protection	-	High pressure sensor / High pressure switch	High pressure sensor / High pressure switch	High pressure sensor / High pressure switch
	Compressor/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	No.xmm <sup>2</sup> (VCTF-SB)		2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5	2C × 1.0 ~ 1.5
Refrigerant	Refrigerant name		R410A	R410A	R410A
	Precharged Amount	kg	8.5 + 7.5	7.5 × 2	8.5 × 2
		lbs	18.7 + 16.5	16.5 × 2	18.7 × 2
Control			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply		Ø , V, Hz	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50
			380, 3, 60	380, 3, 60	380, 3, 60

Notes:

- 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

- Capacities are net capacities
- EEV : Electronic Expansion Valve
- Wiring cable size must comply with the applicable local and national code.
- 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<sup>3</sup>/min x 35.3

# Specification

## Heat Pump(50Hz/60Hz)

HP			32	34	36
Model Name	Combination Unit		ARUN320LTE4	ARUN340LTE4	ARUN360LTE4
	Independent Unit		ARUN200LTE4	ARUN200LTE4	ARUN200LTE4
			ARUN120LTE4	ARUN140LTE4	ARUN160LTE4
Capacity (Rated)	Cooling	kW	89.6	95.2	100.8
		kcal/h	77,100	81,900	86,700
		Btu/h	305,800	324,900	344,000
	Heating	kW	100.8	107.1	113.4
		kcal/h	86,700	92,100	97,500
		Btu/h	344,000	365,500	387,000
Input (Rated)	Cooling	kW	18.38	20.02	21.96
	Heating	kW	21.16	22.96	24.76
Power Factor	Rated	-	0.90	0.90	0.90
Casing Color			Warm Gray /Morning Gray	Warm Gray /Morning Gray	Warm Gray /Morning Gray
Heat Exchanger			Gold fin	Gold fin	Gold fin
Compressor	Type		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Piston Displacement	cm <sup>3</sup> /rev	(43.8 x 2) + 62.1	(43.8 x 2) + 62.1	(43.8 x 2) + 62.1
	Number of Revolution	rev/min	(3,600 x 2) + 3,600	(3,600 x 2) + 3,600	(3,600 x 2) + 3,600
	Motor Output x Number	W x No.	(4,200 x 2) + 6,800	(4,200 x 2) + 6,800	(4,200 x 2) + 6,800
	Starting Method		Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Oil Charge	cc	6,200	6,200	6,200
Fan	Type		Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	(600 x 2) + 750	(600 x 2) x 2	(600 x 2) x 2
	Air Flow Rate(High)	m <sup>3</sup> /min	250 + 210	290 x 2	290 x 2
		ft <sup>3</sup> /min	10,241 + 7,416	10,241 x 2	10,241 x 2
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
Discharge	Side / Top	TOP	TOP	TOP	
Pipe Connctions	Liquid	mm(inch)	19.05(3/4)	19.05(3/4)	19.05(3/4)
	Gas	mm(inch)	34.9(1 3/8)	34.9(1 3/8)	41.3(1 5/8)
Dimensions(WxHxD)		mm	(1,240x1,680x760)x1 + (920x1,680x760)x1	(1,240x1,680x760)x2	(1,240x1,680x760)x2
		inch	(48-13/16x66-5/32x29-29/32)x1 + (36-7/32x66-5/32x29-29/32)	(48-13/16x66-5/32x29-29/32)x2	(48-13/16x66-5/32x29-29/32)x2
Net Weight		kg	280 x 1 + 208 x 1	280 x 1 + 245 x 1	280 x 1 + 245 x 1
		lbs	617 x 1 + 458 x 1	617 x 1 + 540 x 1	617 x 1 + 540 x 1
Sound Pressure Level	Cooling	dB(A)	62.3	62.3	62.3
	Heating	dB(A)	62.3	62.3	62.3
Sound Power Level		dB(A)	73.3	73.3	73.3
Protection Devices	High pressure protection	-	High pressure sensor / High pressure switch	High pressure sensor / High pressure switch	High pressure sensor / High pressure switch
	Compressor/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	No.xmm <sup>2</sup> (VCTF-SB)		2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5
Refrigerant	Refrigerant name		R410A	R410A	R410A
	Precharged Amount	kg	8.5 x 2	10.5 + 8.5	10.5 + 8.5
		lbs	18.7 x 2	23.1 + 18.7	23.1 + 18.7
Control			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply		Ø , V, Hz	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50
			380, 3, 60	380, 3, 60	380, 3, 60

### Notes:

- 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

- Capacities are net capacities
- EEV : Electronic Expansion Valve
- Wiring cable size must comply with the applicable local and national code.
- Due to our policy of innovation some specifications may be changed without prior notification

### Conversion Formula

$$RT = kW \times 0.284$$

$$kcal/h = kW \times 860$$

$$Btu/h = kW \times 3412$$

$$cfm = m^3/min \times 35.3$$

Heat Pump(50Hz/60Hz)

HP		38	40	42	
Model Name	Combination Unit		ARUN380LTE4	ARUN400LTE4	ARUN420LTE4
	Independent Unit		ARUN200LTE4	ARUN200LTE4	ARUN180LTE4
			ARUN180LTE4	ARUN200LTE4	ARUN140LTE4
					ARUN100LTE4
Capacity (Rated)	Cooling	kW	106.4	112.0	117.6
		kcal/h	91,500	96,400	101,100
		Btu/h	363,100	382,200	401,700
	Heating	kW	119.7	126.0	132.3
		kcal/h	103,000	108,400	113,800
		Btu/h	408,400	429,900	451,500
Input (Rated)	Cooling	kW	21.38	23.08	23.71
	Heating	kW	24.61	26.72	26.34
Power Factor	Rated	-	0.90	0.90	0.90
Casing Color		Warm Gray /Morning Gray		Warm Gray /Morning Gray	Warm Gray /Morning Gray
Heat Exchanger		Gold fin		Gold fin	Gold fin
Compressor	Type		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Piston Displacement	cm <sup>3</sup> /rev	(43.8 x 2) x 2	(43.8 x 2) x 2	(43.8 x 2) + 62.1 x 2
	Number of Revolution	rev/min	(3,600 x 2) x 2	(3,600 x 2) x 2	(3,600 x 2) + 3,600 x 2
	Motor Output x Number	W x No.	(4,200 x 2) x 2	(4,200 x 2) x 2	(4,200 x 2) + 6,800 x 2
	Starting Method		Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Oil Charge	cc	7,200	7,200	8,800
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 + 750
	Air Flow Rate(High)	m <sup>3</sup> /min	290 x 2	290 x 2	250 x 2 + 210
		ft <sup>3</sup> /min	10,241 x 2	10,241 x 2	10,241 x 2 + 7,416
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
Discharge	Side / Top	TOP	TOP	TOP	
Pipe Connctions	Liquid	mm(inch)	19.05(3/4)	19.05(3/4)	19.05(3/4)
	Gas	mm(inch)	41.3(1 5/8)	41.3(1 5/8)	41.3(1 5/8)
Dimensions(WxHxD)		mm	(1,240x1,680x760)x2	(1,240x1,680x760)x2	(1,240x1,680x760)x2 + (920x1,680x760)x1
		inch	(48-13/16x66-5/32x29-29/32)x2	(48-13/16x66-5/32x29-29/32)x2	(48-13/16x66-5/32x29-29/32)x2 + (36-7/32x66-5/32x29-29/32)
Net Weight		kg	280 x 2	280 x 2	280 x 1 + 245 x 1 + 208 x 1
		lbs	617 x 2	617 x 2	617 x 1 + 540 x 1 + 458 x 1
Sound Pressure Level	Cooling	dB(A)	62.5	62.5	63.9
	Heating	dB(A)	62.5	62.5	63.9
Sound Power Level		dB(A)	73.5	73.5	74.9
Protection Devices	High pressure protection	-	High pressure sensor / High pressure switch	High pressure sensor / High pressure switch	High pressure sensor / High pressure switch
	Compressor/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	No.xmm <sup>2</sup> (VCTF-SB)		2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5
Refrigerant	Refrigerant name		R410A	R410A	R410A
	Precharged Amount	kg	10.5 x 2	10.5 x 2	(8.5 x 2) + 7.5
		lbs	23.1 x 2	23.1 x 2	(18.7 x 2) + 16.5
Control			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply		Ø , V, Hz	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50
			380, 3, 60	380, 3, 60	380, 3, 60

Notes:

- 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

- Capacities are net capacities
- EEV : Electronic Expansion Valve
- Wiring cable size must comply with the applicable local and national code.
- 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<sup>3</sup>/min x 35.3



# Specification

## Heat Pump(50Hz/60Hz)

HP			44	46	48
Model Name	Combination Unit		ARUN440LTE4	ARUN460LTE4	ARUN480LTE4
	Independent Unit		ARUN200LTE4	ARUN200LTE4	ARUN200LTE4
			ARUN140LTE4	ARUN160LTE4	ARUN180LTE4
			ARUN100LTE4	ARUN100LTE4	ARUN100LTE4
Capacity (Rated)	Cooling	kW	123.2	128.8	134.4
		kcal/h	106,000	110,800	115,600
		Btu/h	420,800	439,900	459,000
	Heating	kW	138.6	144.9	151.2
		kcal/h	119,200	124,600	130,100
		Btu/h	473,000	494,500	516,000
Input (Rated)	Cooling	kW	25.41	27.34	26.77
	Heating	kW	28.46	30.25	30.10
Power Factor	Rated	-	0.90	0.90	0.90
Casing Color			Warm Gray /Morning Gray	Warm Gray /Morning Gray	Warm Gray /Morning Gray
Heat Exchanger			Gold fin	Gold fin	Gold fin
Compressor	Type		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Piston Displacement	cm <sup>3</sup> /rev	(43.8 x 2) + 62.1 x 2	(43.8 x 2) + 62.1 x 2	(43.8 x 2) x 2 + 62.1
	Number of Revolution	rev/min	(3,600 x 2) + 3,600 x 2	(3,600 x 2) + 3,600 x 2	(3,600 x 2) x 2 + 3,600
	Motor Output x Number	W x No.	(4,200 x 2) + 6,800 x 2	(4,200 x 2) + 6,800 x 2	(4,200 x 2) x 2 + 6,800
	Starting Method		Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Oil Charge	cc	8,800	8,800	9,800
Fan	Type		Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	(600 x 2) x 2 + 750	(600 x 2) x 2 + 750	(600 x 2) x 2 + 750
	Air Flow Rate(High)	m <sup>3</sup> /min	290 x 2 + 210	290 x 2 + 210	290 x 2 + 210
		ft <sup>3</sup> /min	10,241 x 2 + 7,416	10,241 x 2 + 7,416	10,241 x 2 + 7,416
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
Discharge	Side / Top	TOP	TOP	TOP	
Pipe Connctions	Liquid	mm(inch)	19.05(3/4)	19.05(3/4)	19.05(3/4)
	Gas	mm(inch)	41.3(1 5/8)	41.3(1 5/8)	41.3(1 5/8)
Dimensions(WxHxD)		mm	(1,240x1,680x760)x2 + (920x1,680x760)x1	(1,240x1,680x760)x2 + (920x1,680x760)x1	(1,240x1,680x760)x2 + (920x1,680x760)x1
		inch	(48-13/16x66-5/32x29-29/32)x2 + (36-7/32x66-5/32x29-29/32)	(48-13/16x66-5/32x29-29/32)x2 + (36-7/32x66-5/32x29-29/32)	(48-13/16x66-5/32x29-29/32)x2 + (36-7/32x66-5/32x29-29/32)
Net Weight		kg	280 x 1 + 245 x 1 + 208 x 1	280 x 1 + 245 x 1 + 208 x 1	280 x 2 + 208 x 1
		lbs	617 x 1 + 540 x 1 + 458 x 1	617 x 1 + 540 x 1 + 458 x 1	617 x 2 + 458 x 1
Sound Pressure Level	Cooling	dB(A)	63.9	63.9	64.1
	Heating	dB(A)	63.9	63.9	64.1
Sound Power Level		dB(A)	74.9	74.9	75.1
Protection Devices	High pressure protection	-	High pressure sensor / High pressure switch	High pressure sensor / High pressure switch	High pressure sensor / High pressure switch
	Compressor/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	No.xmm <sup>2</sup> (VCTF-SB)		2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5
Refrigerant	Refrigerant name		R410A	R410A	R410A
	Precharged Amount	kg	(8.5 x 2) + 7.5	8.5 x 3	8.5 x 3
		lbs	(18.7 x 2) + 16.5	18.7 x 3	18.7 x 3
Control			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply		Ø , V, Hz	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50
			380, 3, 60	380, 3, 60	380, 3, 60

### Notes:

- 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

- Capacities are net capacities
- EEV : Electronic Expansion Valve
- Wiring cable size must comply with the applicable local and national code.
- Due to our policy of innovation some specifications may be changed without prior notification

### Conversion Formula

$$RT = kW \times 0.284$$

$$kcal/h = kW \times 860$$

$$Btu/h = kW \times 3412$$

$$cfm = m^3/min \times 35.3$$

Heat Pump(50Hz/60Hz)

HP			50	52	54
Model Name	Combination Unit		ARUN500LTE4	ARUN520LTE4	ARUN540LTE4
	Independent Unit		ARUN200LTE4	ARUN200LTE4	ARUN200LTE4
			ARUN200LTE4	ARUN200LTE4	ARUN200LTE4
			ARUN100LTE4	ARUN120LTE4	ARUN140LTE4
Capacity (Rated)	Cooling	kW	140.0	145.6	151.2
		kcal/h	120,500	125,300	130,100
		Btu/h	478,100	496,900	516,000
	Heating	kW	157.5	163.8	170.1
		kcal/h	135,500	140,900	146,300
		Btu/h	537,500	559,000	580,500
Input (Rated)	Cooling	kW	28.46	29.92	31.56
	Heating	kW	32.22	34.53	36.33
Power Factor	Rated	-	0.90	0.90	0.90
Casing Color			Warm Gray /Morning Gray	Warm Gray /Morning Gray	Warm Gray /Morning Gray
Heat Exchanger			Gold fin	Gold fin	Gold fin
Compressor	Type		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Piston Displacement	cm <sup>3</sup> /rev	(43.8 x 2) x 2 + 62.1	(43.8 x 2) x 2 + 62.1	(43.8 x 2) x 2 + 62.1
	Number of Revolution	rev/min	(3,600 x 2) x 2 + 3,600	(3,600 x 2) x 2 + 3,600	(3,600 x 2) x 2 + 3,600
	Motor Output x Number	W x No.	(4,200 x 2) x 2 + 6,800	(4,200 x 2) x 2 + 6,800	(4,200 x 2) x 2 + 6,800
	Starting Method		Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Oil Charge	cc	9,800	9,800	9,800
Fan	Type		Propeller fan	Propeller fan	Propeller fan
	Motor Output x Number	W	(600 x 2) x 2 + 750	(600 x 2) x 2 + 750	(600 x 2) x 3
	Air Flow Rate(High)	m <sup>3</sup> /min	290 x 2 + 210	290 x 2 + 210	290 x 3
		ft <sup>3</sup> /min	10,241 x 2 + 7,416	10,241 x 2 + 7,416	10,241 x 3
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
Discharge	Side / Top	TOP	TOP	TOP	
Pipe Connctions	Liquid	mm(inch)	19.05(3/4)	19.05(3/4)	19.05(3/4)
	Gas	mm(inch)	41.3(1 5/8)	41.3(1 5/8)	41.3(1 5/8)
Dimensions(WxHxD)		mm	(1,240x1,680x760)x2 + (920x1,680x760)x1	(1,240x1,680x760)x2 + (920x1,680x760)x1	(1,240x1,680x760)x3
		inch	(48-13/16x66-5/32x29-29/32)x2 + (36-7/32x66-5/32x29-29/32)	(48-13/16x66-5/32x29-29/32)x2 + (36-7/32x66-5/32x29-29/32)	(48-13/16x66-5/32x29-29/32)x3
Net Weight		kg	280 x 2 + 208 x 1	280 x 2 + 208 x 1	280 x 1 + 245 x 1
		lbs	617 x 2 + 458 x 1	617 x 2 + 458 x 1	617 x 2 + 540 x 1
Sound Pressure Level	Cooling	dB(A)	64.1	64.1	64.1
	Heating	dB(A)	64.1	64.1	64.1
Sound Power Level		dB(A)	75.1	75.1	75.1
Protection Devices	High pressure protection	-	High pressure sensor / High pressure switch	High pressure sensor / High pressure switch	High pressure sensor / High pressure switch
	Compressor/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	No.xmm <sup>2</sup> (VCTF-SB)		2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5
Refrigerant	Refrigerant name		R410A	R410A	R410A
	Precharged Amount	kg	10.5 + (8.5 x 2)	10.5 + (8.5 x 2)	(10.5 x 2) + 8.5
		lbs	23.1 + (18.7 x 2)	23.1 + (18.7 x 2)	(23.1 x 2) + 18.7
Control			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply		Ø , V, Hz	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50
			380, 3, 60	380, 3, 60	380, 3, 60

Notes:

- 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

- Capacities are net capacities
- EEV : Electronic Expansion Valve
- Wiring cable size must comply with the applicable local and national code.
- 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<sup>3</sup>/min x 35.3

# Specification

## Heat Pump(50Hz/60Hz)

HP		56	58	60	
Model Name	Combination Unit	ARUN560LTE4	ARUN580LTE4	ARUN600LTE4	
	Independent Unit	ARUN200LTE4	ARUN200LTE4	ARUN200LTE4	
		ARUN200LTE4	ARUN200LTE4	ARUN200LTE4	
		ARUN160LTE4	ARUN180LTE4	ARUN200LTE4	
Capacity (Rated)	Cooling	kW	156.8	162.4	168.0
		kcal/h	134,900	139,700	144,600
		Btu/h	535,100	554,200	573,300
	Heating	kW	176.4	182.7	189.0
		kcal/h	151,600	157,200	162,600
		Btu/h	602,000	623,500	645,000
Input (Rated)	Cooling	kW	33.50	32.92	34.62
	Heating	kW	38.12	37.97	40.09
Power Factor	Rated	-	0.90	0.90	0.90
Casing Color		Warm Gray /Morning Gray	Warm Gray /Morning Gray	Warm Gray /Morning Gray	
Heat Exchanger		Gold fin	Gold fin	Gold fin	
Compressor	Type	Hermetically Sealed Scroll		Hermetically Sealed Scroll	
	Piston Displacement	cm <sup>3</sup> /rev	(43.8 x 2) x 2 + 62.1	(43.8 x 2) x 3	(43.8 x 2) x 3
	Number of Revolution	rev/min	(3,600 x 2) x 2 + 3,600	(3,600 x 2) x 3	(3,600 x 2) x 3
	Motor Output x Number	W x No.	(4,200 x 2) x 2 + 6,800	(4,200 x 2) x 3	(4,200 x 2) x 3
	Starting Method		Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
Oil Charge	cc	9,800	10,800	10,800	
Fan	Type	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)	m <sup>3</sup> /min	290 x 3	290 x 3	290 x 3
		ft <sup>3</sup> /min	10,241 x 3	10,241 x 3	10,241 x 3
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
Discharge	Side / Top	TOP	TOP	TOP	
Pipe Connctions	Liquid	mm(inch)	19.05(3/4)	19.05(3/4)	19.05(3/4)
	Gas	mm(inch)	41.3(1 5/8)	41.3(1 5/8)	41.3(1 5/8)
Dimensions(WxHxD)		mm	(1,240x1,680x760)x3	(1,240x1,680x760)x3	(1,240x1,680x760)x3
		inch	(48-13/16x66-5/32x29-29/32)x3	(48-13/16x66-5/32x29-29/32)x3	(48-13/16x66-5/32x29-29/32)x3
Net Weight		kg	280 x 1 + 245 x 1	280 x 3	280 x 3
		lbs	617 x 2 + 540 x 1	617 x 3	617 x 3
Sound Pressure Level	Cooling	dB(A)	64.1	64.3	64.3
	Heating	dB(A)	64.1	64.3	64.3
Sound Power Level		dB(A)	75.1	75.3	75.3
Protection Devices	High pressure protection	-	High pressure sensor / High pressure switch	High pressure sensor / High pressure switch	High pressure sensor / High pressure switch
	Compressor/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	No.xmm <sup>2</sup> (VCTF-SB)		2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5
Refrigerant	Refrigerant name		R410A	R410A	R410A
	Precharged Amount	kg	(10.5 x 2) + 8.5	10.5 x 3	10.5 x 3
		lbs	(23.1 x 2) + 18.7	23.1 x 3	23.1 x 3
Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	
Power Supply	Ø , V, Hz		380~415, 3, 50	380~415, 3, 50	380~415, 3, 50
			380, 3, 60	380, 3, 60	380, 3, 60

### Notes:

- 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

- Capacities are net capacities
- EEV : Electronic Expansion Valve
- Wiring cable size must comply with the applicable local and national code.
- Due to our policy of innovation some specifications may be changed without prior notification

### Conversion Formula

$$RT = kW \times 0.284$$

$$kcal/h = kW \times 860$$

$$Btu/h = kW \times 3412$$

$$cfm = m^3/min \times 35.3$$

Heat Pump(50Hz/60Hz)

HP			62	64	66
Model Name	Combination Unit		ARUN620LTE4	ARUN640LTE4	ARUN660LTE4
	Independent Unit		ARUN180LTE4	ARUN180LTE4	ARUN180LTE4
			ARUN160LTE4	ARUN180LTE4	ARUN180LTE4
			ARUN140LTE4	ARUN140LTE4	ARUN160LTE4
			ARUN140LTE4	ARUN140LTE4	ARUN140LTE4
Capacity (Rated)	Cooling	kW	173.6	179.2	184.8
		kcal/h	149,200	154,000	158,800
		Btu/h	592,500	611,600	630,700
	Heating	kW	195.3	201.6	207.9
		kcal/h	167,900	173,400	178,800
		Btu/h	666,500	688,000	709,500
Input (Rated)	Cooling	kW	37.23	36.66	38.59
	Heating	kW	41.85	41.70	43.50
Power Factor	Rated	-	0.90	0.90	0.90
Casing Color			Warm Gray /Morning Gray	Warm Gray /Morning Gray	Warm Gray /Morning Gray
Heat Exchanger			Gold fin	Gold fin	Gold fin
Compressor	Type		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Piston Displacement	cm <sup>3</sup> /rev	(43.8 x 2) + 62.1 x 3	(43.8 x 2) x 2 + 62.1 x 2	(43.8 x 2) x 2 + 62.1 x 2
	Number of Revolution	rev/min	(3,600 x 2) + 3,600 x 3	(3,600 x 2) x 2 + 3,600 x 2	(3,600 x 2) x 2 + 3,600 x 2
	Motor Output x Number	W x No.	(4,200 x 2) + 6,800 x 3	(4,200 x 2) x 2 + 6,800 x 2	(4,200 x 2) x 2 + 6,800 x 2
	Starting Method		Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Oil Charge	cc	11,400	12,400	12,400
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)	m <sup>3</sup> /min	290 x 4	290 x 4	290 x 4
		ft <sup>3</sup> /min	10,241 x 4	10,241 x 4	10,241 x 4
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
Discharge	Side / Top	TOP	TOP	TOP	
Pipe Connctions	Liquid	mm(inch)	22.2(7/8)	22.2(7/8)	22.2(7/8)
	Gas	mm(inch)	44.5(1 3/4)	44.5(1 3/4)	53.98(2 1/8)
Dimensions(WxHxD)		mm	(1,240x1,680x760)x4	(1,240x1,680x760)x4	(1,240x1,680x760)x4
		inch	(48-13/16x66-5/32x29-29/32)x4	(48-13/16x66-5/32x29-29/32)x4	(48-13/16x66-5/32x29-29/32)x4
Net Weight		kg	280 x 1 + 245 x 3	280 x 2 + 245 x 2	280 x 2 + 245 x 2
		lbs	617 x 1 + 540 x 3	617 x 2 + 540 x 2	617 x 2 + 540 x 2
Sound Pressure Level	Cooling	dB(A)	65.2	65.3	65.3
	Heating	dB(A)	65.2	65.3	65.3
Sound Power Level		dB(A)	76.2	76.3	76.3
Protection Devices	High pressure protection	-	High pressure sensor / High pressure switch	High pressure sensor / High pressure switch	High pressure sensor / High pressure switch
	Compressor/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	No.xmm <sup>2</sup> (VCTF-SB)		2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5
Refrigerant	Refrigerant name		R410A	R410A	R410A
	Precharged Amount	kg	8.5 x 4	8.5 x 4	10.5 + (8.5 x 3)
		lbs	18.7 x 4	18.7 x 4	23.1 + (18.7 x 3)
	Control		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply		Ø , V, Hz	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50
			380, 3, 60	380, 3, 60	380, 3, 60

Notes:

- 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

- Capacities are net capacities
- EEV : Electronic Expansion Valve
- Wiring cable size must comply with the applicable local and national code.
- 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<sup>3</sup>/min x 35.3

# Specification

## Heat Pump(50Hz/60Hz)

HP			68	70	72
Model Name	Combination Unit		ARUN680LTE4	ARUN700LTE4	ARUN720LTE4
	Independent Unit		ARUN200LTE4	ARUN200LTE4	ARUN200LTE4
			ARUN200LTE4	ARUN200LTE4	ARUN200LTE4
			ARUN140LTE4	ARUN160LTE4	ARUN180LTE4
			ARUN140LTE4	ARUN140LTE4	ARUN140LTE4
Capacity (Rated)	Cooling	kW	190.4	196.0	201.6
		kcal/h	163,800	168,600	173,400
		Btu/h	649,800	668,900	688,000
	Heating	kW	214.2	220.5	226.8
		kcal/h	184,200	189,600	195,100
		Btu/h	731,000	752,500	774,000
Input (Rated)	Cooling	kW	40.04	41.98	41.41
	Heating	kW	45.93	47.73	47.58
Power Factor	Rated	-	0.90	0.90	0.90
Casing Color			Warm Gray /Morning Gray	Warm Gray /Morning Gray	Warm Gray /Morning Gray
Heat Exchanger			Gold fin	Gold fin	Gold fin
Compressor	Type		Hermetically Sealed Scroll	Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Piston Displacement	cm <sup>3</sup> /rev	(43.8 x 2) x 2 + 62.1 x 2	(43.8 x 2) x 2 + 62.1 x 2	(43.8 x 2) x 3 + 62.1
	Number of Revolution	rev/min	(3,600 x 2) x 2 + 3,600 x 2	(3,600 x 2) x 2 + 3,600 x 2	(3,600 x 2) x 3 + 3,600
	Motor Output x Number	W x No.	(4,200 x 2) x 2 + 6,800 x 2	(4,200 x 2) x 2 + 6,800 x 2	(4,200 x 2) x 3 + 6,800
	Starting Method		Direct On Line	Direct On Line	Direct On Line
	Oil Type		FVC68D(PVE)	FVC68D(PVE)	FVC68D(PVE)
	Oil Charge	cc	12,400	12,400	13,400
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)	m <sup>3</sup> /min	290 x 4	290 x 4	290 x 4
		ft <sup>3</sup> /min	10,241 x 4	10,241 x 4	10,241 x 4
	Drive		DC INVERTER	DC INVERTER	DC INVERTER
Discharge	Side / Top	TOP	TOP	TOP	
Pipe Connctions	Liquid	mm(inch)	22.2(7/8)	22.2(7/8)	22.2(7/8)
	Gas	mm(inch)	53.98(2 1/8)	53.98(2 1/8)	53.98(2 1/8)
Dimensions(WxHxD)		mm	(1,240x1,680x760)x4	(1,240x1,680x760)x4	(1,240x1,680x760)x4
		inch	(48-13/16x66-5/32x29-29/32)x4	(48-13/16x66-5/32x29-29/32)x4	(48-13/16x66-5/32x29-29/32)x4
Net Weight		kg	280 x 2 + 245 x 2	280 x 2 + 245 x 2	280 x 3 + 245 x 1
		lbs	617 x 2 + 540 x 2	617 x 2 + 540 x 2	617 x 3 + 540 x 1
Sound Pressure Level	Cooling	dB(A)	65.3	65.3	65.4
	Heating	dB(A)	65.3	65.3	65.4
Sound Power Level		dB(A)	76.3	76.3	76.4
Protection Devices	High pressure protection	-	High pressure sensor / High pressure switch	High pressure sensor / High pressure switch	High pressure sensor / High pressure switch
	Compressor/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	No.xmm <sup>2</sup> (VCTF-SB)		2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5
Refrigerant	Refrigerant name		R410A	R410A	R410A
	Precharged Amount	kg	(10.5 x 2) + (8.5 x 2)	(10.5 x 2) + (8.5 x 2)	(10.5 x 2) + (8.5 x 2)
		lbs	(23.1 x 2) + (18.7 x 2)	(23.1 x 2) + (18.7 x 2)	(23.1 x 2) + (18.7 x 2)
Control			Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Power Supply		Ø , V, Hz	380~415, 3, 50	380~415, 3, 50	380~415, 3, 50
			380, 3, 60	380, 3, 60	380, 3, 60

### Notes:

- 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<sup>3</sup>/min x 35.3

**Heat Pump(50Hz/60Hz)**

HP			74	76
Model Name	Combination Unit		ARUN740LTE4	ARUN760LTE4
	Independent Unit		ARUN200LTE4	ARUN200LTE4
			ARUN200LTE4	ARUN200LTE4
			ARUN180LTE4	ARUN180LTE4
			ARUN160LTE4	ARUN180LTE4
Capacity (Rated)	Cooling	kW	207.2	212.8
		kcal/h	178,200	183,000
		Btu/h	707,100	726,200
	Heating	kW	233.1	239.4
		kcal/h	200,500	206,000
		Btu/h	795,500	817,000
Input (Rated)	Cooling	kW	43.34	42.77
	Heating	kW	49.37	49.22
Power Factor	Rated	-	0.90	0.90
Casing Color			Warm Gray /Morning Gray	Warm Gray /Morning Gray
Heat Exchanger			Gold fin	Gold fin
Compressor	Type		Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Piston Displacement	cm <sup>3</sup> /rev	(43.8 x 2) x 3 + 62.1	(43.8 x 2) x 4
	Number of Revolution	rev/min	(3,600 x 2) x 3 + 3,600	(3,600 x 2) x 4
	Motor Output x Number	W x No.	(4,200 x 2) x 3 + 6,800	(4,200 x 2) x 4
	Starting Method		Direct On Line	Direct On Line
	Oil Type		FVC68D(PVE)	FVC68D(PVE)
	Oil Charge	cc	13,400	14,400
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)	m <sup>3</sup> /min	290 x 4	290 x 4
		ft <sup>3</sup> /min	10,241 x 4	10,241 x 4
	Drive		DC INVERTER	DC INVERTER
Pipe Connctions	Liquid	mm(inch)	22.2(7/8)	22.2(7/8)
	Gas	mm(inch)	53.98(2 1/8)	53.98(2 1/8)
Dimensions(WxHxD)	mm		(1,240x1,680x760)x4	(1,240x1,680x760)x4
	inch		(48-13/16x66-5/32x29-29/32)x4	(48-13/16x66-5/32x29-29/32)x4
Net Weight	kg		280 x 3 + 245 x 1	280 x 4
	lbs		617 x 3 + 540 x 1	617 x 4
Sound Pressure Level	Cooling	dB(A)	65.4	65.5
	Heating	dB(A)	65.4	65.5
Sound Power Level		dB(A)	76.4	76.5
Protection Devices	High pressure protection	-	High pressure sensor / High pressure switch	High pressure sensor / High pressure switch
	Compressor/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	No.xmm <sup>2</sup> (VCTF-SB)		2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5
Refrigerant	Refrigerant name		R410A	R410A
	Precharged Amount	kg	(10.5 x 3) + 8.5	(10.5 x 3) + 8.5
		lbs	(23.1 x 3) + 18.7	(23.1 x 3) + 18.7
	Control		Electronic Expansion Valve	Electronic Expansion Valve
Power Supply	Ø , V, Hz		380~415, 3, 50	380~415, 3, 50
			380, 3, 60	380, 3, 60

**Notes:**

- 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

- Capacities are net capacities
- EEV : Electronic Expansion Valve
- Wiring cable size must comply with the applicable local and national code.
- 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<sup>3</sup>/min x 35.3

# Specification

## Heat Pump(50Hz/60Hz)

HP			78	80
Model Name	Combination Unit		ARUN780LTE4	ARUN800LTE4
	Independent Unit		ARUN200LTE4	ARUN200LTE4
			ARUN200LTE4	ARUN200LTE4
			ARUN200LTE4	ARUN200LTE4
			ARUN180LTE4	ARUN200LTE4
Capacity (Rated)	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
Input (Rated)	Cooling	kW	44.46	46.15
	Heating	kW	51.34	53.45
Power Factor	Rated	-	0.90	0.90
Casing Color			Warm Gray /Morning Gray	Warm Gray /Morning Gray
Heat Exchanger			Gold fin	Gold fin
Compressor	Type		Hermetically Sealed Scroll	Hermetically Sealed Scroll
	Piston Displacement	cm <sup>3</sup> /rev	(43.8 x 2) x 4	(43.8 x 2) x 4
	Number of Revolution	rev/min	(3,600 x 2) x 4	(3,600 x 2) x 4
	Motor Output x Number	W x No.	(4,200 x 2) x 4	(4,200 x 2) x 4
	Starting Method		Direct On Line	Direct On Line
	Oil Type		FVC68D(PVE)	FVC68D(PVE)
	Oil Charge	cc	14,400	14,400
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)	m <sup>3</sup> /min	290 x 4	290 x 4
		ft <sup>3</sup> /min	10,241 x 4	10,241 x 4
	Drive		DC INVERTER	DC INVERTER
Pipe Connctions	Liquid	mm(inch)	22.2(7/8)	22.2(7/8)
	Gas	mm(inch)	53.98(2 1/8)	53.98(2 1/8)
Dimensions(WxHxD)		mm	(1,240x1,680x760)x4	(1,240x1,680x760)x4
		inch	(48-13/16x66-5/32x29-29/32)x4	(48-13/16x66-5/32x29-29/32)x4
Net Weight		kg	280 x 4	280 x 4
		lbs	617 x 4	617 x 4
Sound Pressure Level	Cooling	dB(A)	65.5	65.5
	Heating	dB(A)	65.5	65.5
Sound Power Level		dB(A)	76.5	76.5
Protection Devices	High pressure protection	-	High pressure sensor / High pressure switch	High pressure sensor / High pressure switch
	Compressor/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		No.xmm <sup>2</sup> (VCTF-SB)	2C x 1.0 ~ 1.5	2C x 1.0 ~ 1.5
Refrigerant	Refrigerant name		R410A	R410A
	Precharged Amount	kg	10.5 x 4	10.5 x 4
		lbs	23.1 x 4	23.1 x 4
	Control		Electronic Expansion Valve	Electronic Expansion Valve
Power Supply		Ø , V, Hz	380~415, 3, 50 380, 3, 60	380~415, 3, 50 380, 3, 60

### Notes:

- 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

$$RT = kW \times 0.284$$

$$kcal/h = kW \times 860$$

$$Btu/h = kW \times 3412$$

$$cfm = m^3/min \times 35.3$$

## 2. Functions

Category	Functions	Multi V IV
Reliability	Defrost / Deicing	O
	High pressure switch	O
	Low pressure switch	X
	Phase protection	O
	Restart delay (3-minutes)	O
	Self diagnosis	O
	Soft start	O
	Test function	O
Convenience	Night Silent Operation	O
CAC network function	Network solution(LGAP)	O

[Note]

O : Applied, X : Not applied

\* Option : Model name & price are different according to options, and assembled in factory with main unit.

Accessory model name : Installed at field, ordered and purchased separately by the corresponding model name, supplied with separate package.

ex) Group control is not available for 4 way cassette which is connected with synchro models.

Device	Multi V IV	
Central Controller	AC EZ	PQCSZ250S0
	AC Smart II	PQCSW320A1E
	128 Unit Expansion Kit	PQCSE440U0
	ACP Standard	PQCPC22NO
	ACP Premium	PQCPC22AO
BNU (Building Network Unit)	LONWORKS Gateway	PQNFB16A1
	BACnet Gateway	PQNFB17B0 / PQNFB17C0
Installation	Y branch	Accessory
	Header branch	Accessory
	Air Guide	Accessory
Cool / Heat Selector		PRDSBM
Program	LG MV	Option

[Note]

O : Applied, X : Not applied

\* Option : Model name & price are different according to options, and assembled in factory with main unit.

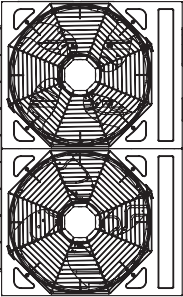
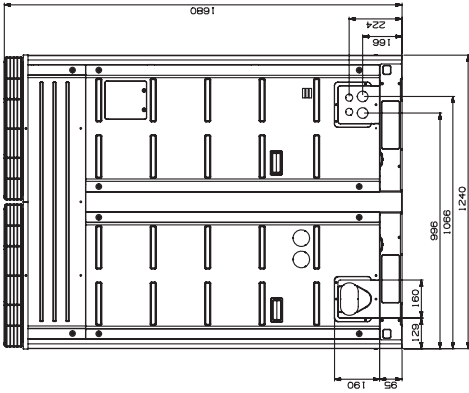
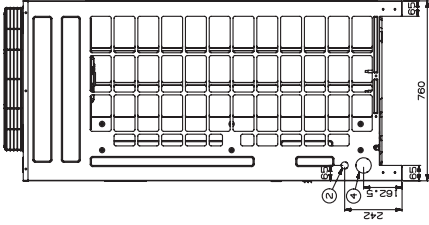
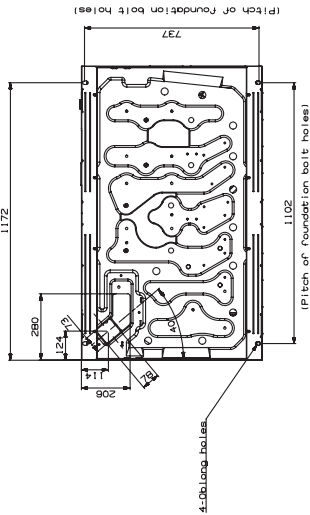
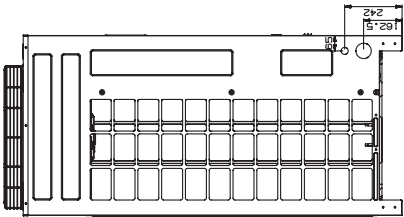

Accessory model name : Installed at field, ordered and purchased separately by the corresponding model name, supplied with separate package.

ex) Group control is not available for 4 way cassette which is connected with synchro models.



# 3. Dimensions

<p>Outdoor Unit</p> <p>ARUN080LTE4 ARUN100LTE4 ARUN120LTE4</p>		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>No.</th> <th>Parts name</th> <th>Remarks</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Power cord routing hole (front)</td> <td>Ø45</td> </tr> <tr> <td>2</td> <td>Wire routing hole (side)</td> <td>Ø30</td> </tr> <tr> <td>3</td> <td>Wire routing hole (front)</td> <td>Ø30</td> </tr> <tr> <td>4</td> <td>Pipe routing hole (side)</td> <td>Ø65</td> </tr> <tr> <td>5</td> <td>Pipe routing hole (front)</td> <td></td> </tr> <tr> <td>6</td> <td>Pipe routing hole (front)</td> <td></td> </tr> </tbody> </table>	No.	Parts name	Remarks	1	Power cord routing hole (front)	Ø45	2	Wire routing hole (side)	Ø30	3	Wire routing hole (front)	Ø30	4	Pipe routing hole (side)	Ø65	5	Pipe routing hole (front)		6	Pipe routing hole (front)	
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3	Wire routing hole (front)	Ø30																					
4	Pipe routing hole (side)	Ø65																					
5	Pipe routing hole (front)																						
6	Pipe routing hole (front)																						
<p>[Unit : mm]</p>		<p>76, Seongsan-dong, Changwon City, Gyeongnam, 641-713, Korea</p>																					
		<p>CHASSIS CODE: UX2</p>																					

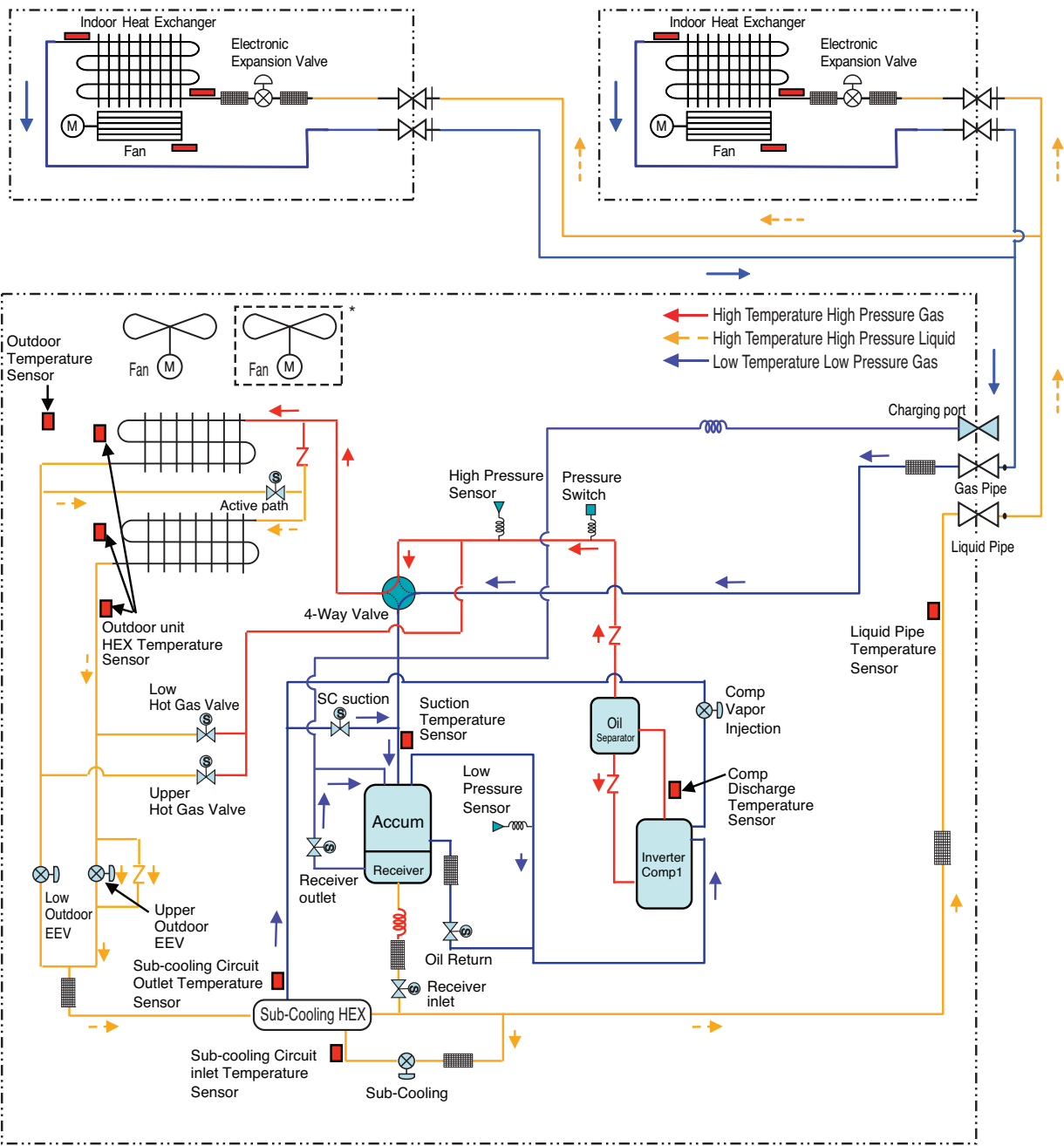
<p>Outdoor Unit</p> <p>ARUN140LTE4 ARUN160LTE4 ARUN180LTE4 ARUN200LTE4</p>																								
	 <p style="font-size: small;">4-Ø6(Long_bolts) [Pitch of foundation bolt holes]</p>																							
			<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>No.</th> <th>Parts name</th> <th>Remarks</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Power cord routing hole(front)</td> <td>Ø45</td> </tr> <tr> <td>2</td> <td>Wire routing hole(side)</td> <td>Ø30</td> </tr> <tr> <td>3</td> <td>Wire routing hole(front)</td> <td>Ø30</td> </tr> <tr> <td>4</td> <td>Pipe routing hole(side)</td> <td>Ø65</td> </tr> <tr> <td>5</td> <td>Pipe routing hole(front)</td> <td></td> </tr> <tr> <td>6</td> <td>Pipe routing hole(front)</td> <td></td> </tr> </tbody> </table>	No.	Parts name	Remarks	1	Power cord routing hole(front)	Ø45	2	Wire routing hole(side)	Ø30	3	Wire routing hole(front)	Ø30	4	Pipe routing hole(side)	Ø65	5	Pipe routing hole(front)		6	Pipe routing hole(front)	
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6	Pipe routing hole(front)																							
	<p>[Unit : mm]</p>																							
 <p><b>LG Electronics</b></p>		<p>76, Seongsan-dong, Changwon City, Gyeongnam, 641-713, Korea</p> <p>CHASSIS CODE: UX3</p>																						

# 4. Piping Diagrams

## 4.1 Heat Pump Model

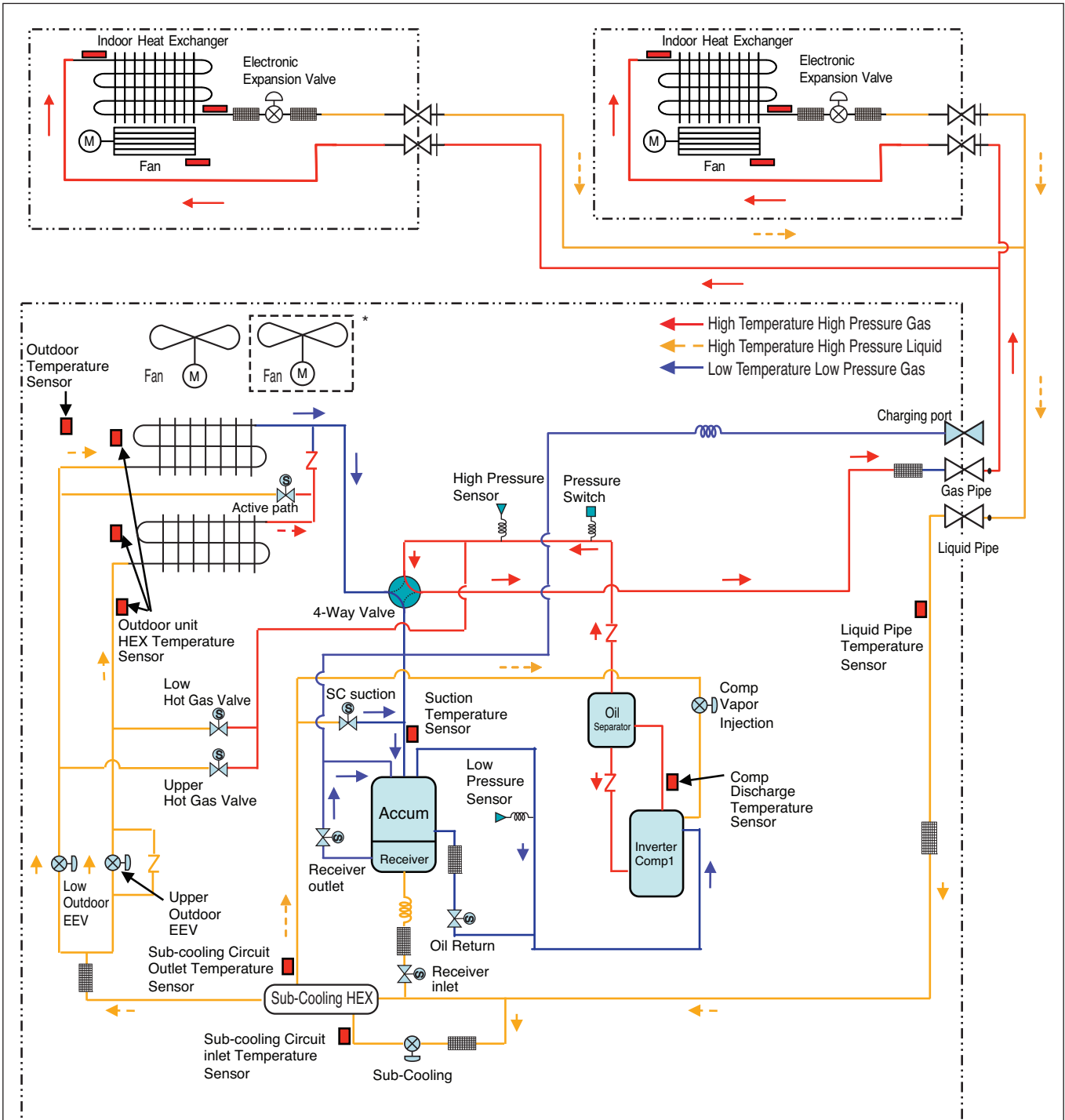
### 4.1.1 8~16HP

#### Cooling Operation



\*14,16HP have 2fans.

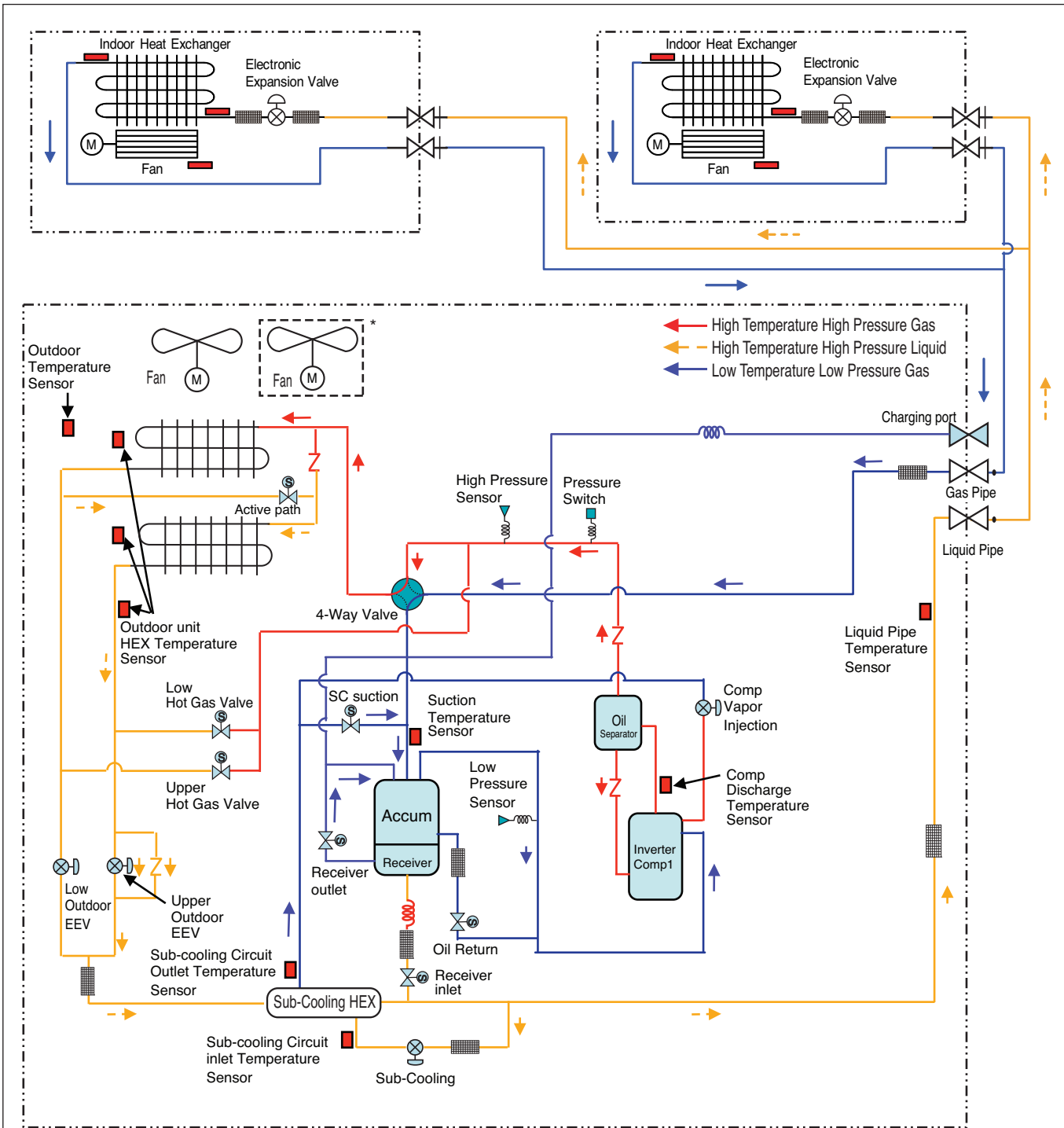
# Heating Operation



\*14, 16HP have 2fans.

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

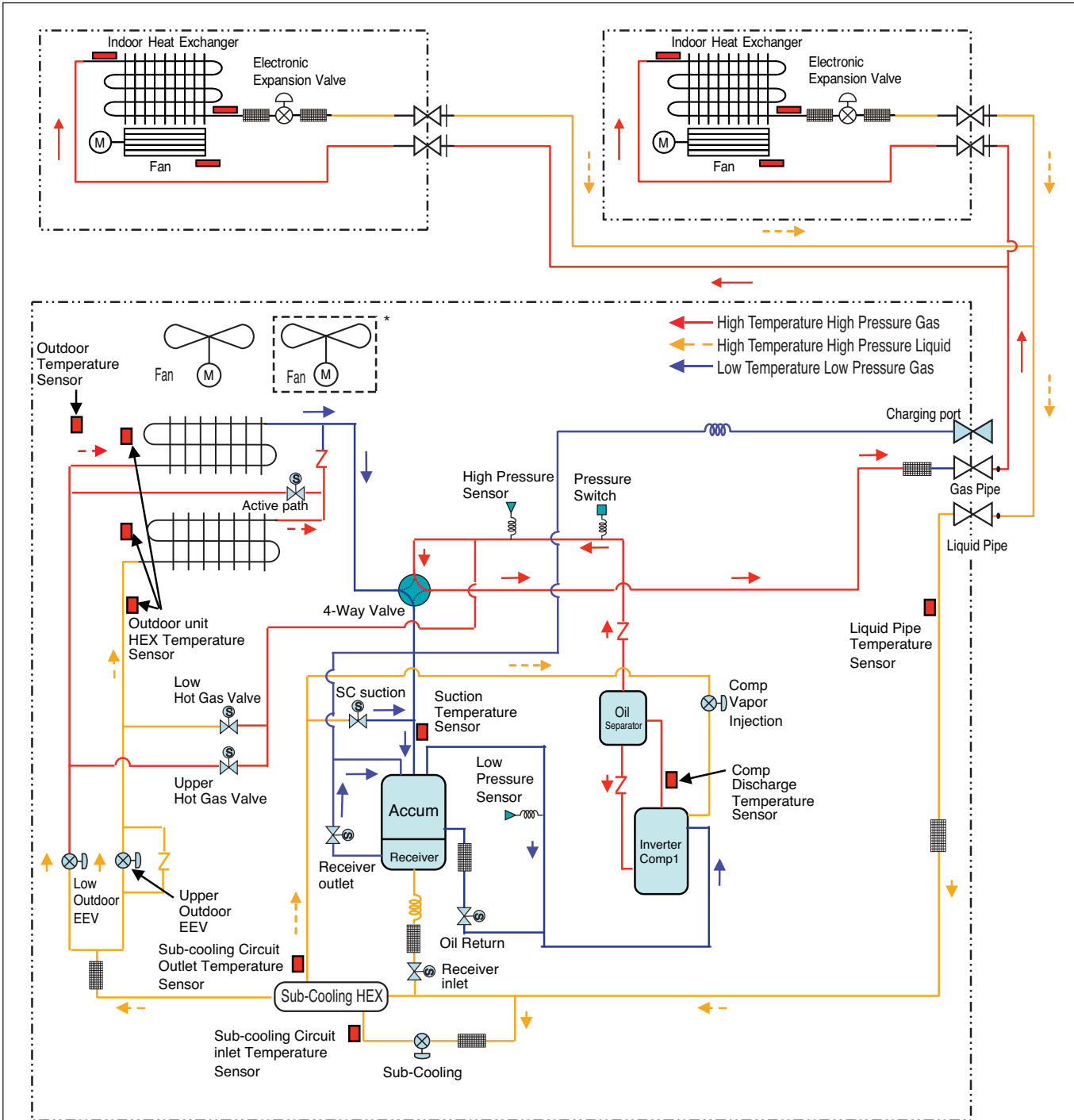
### Oil Return / Defrost Operation



\*14,16HP have 2fans.

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

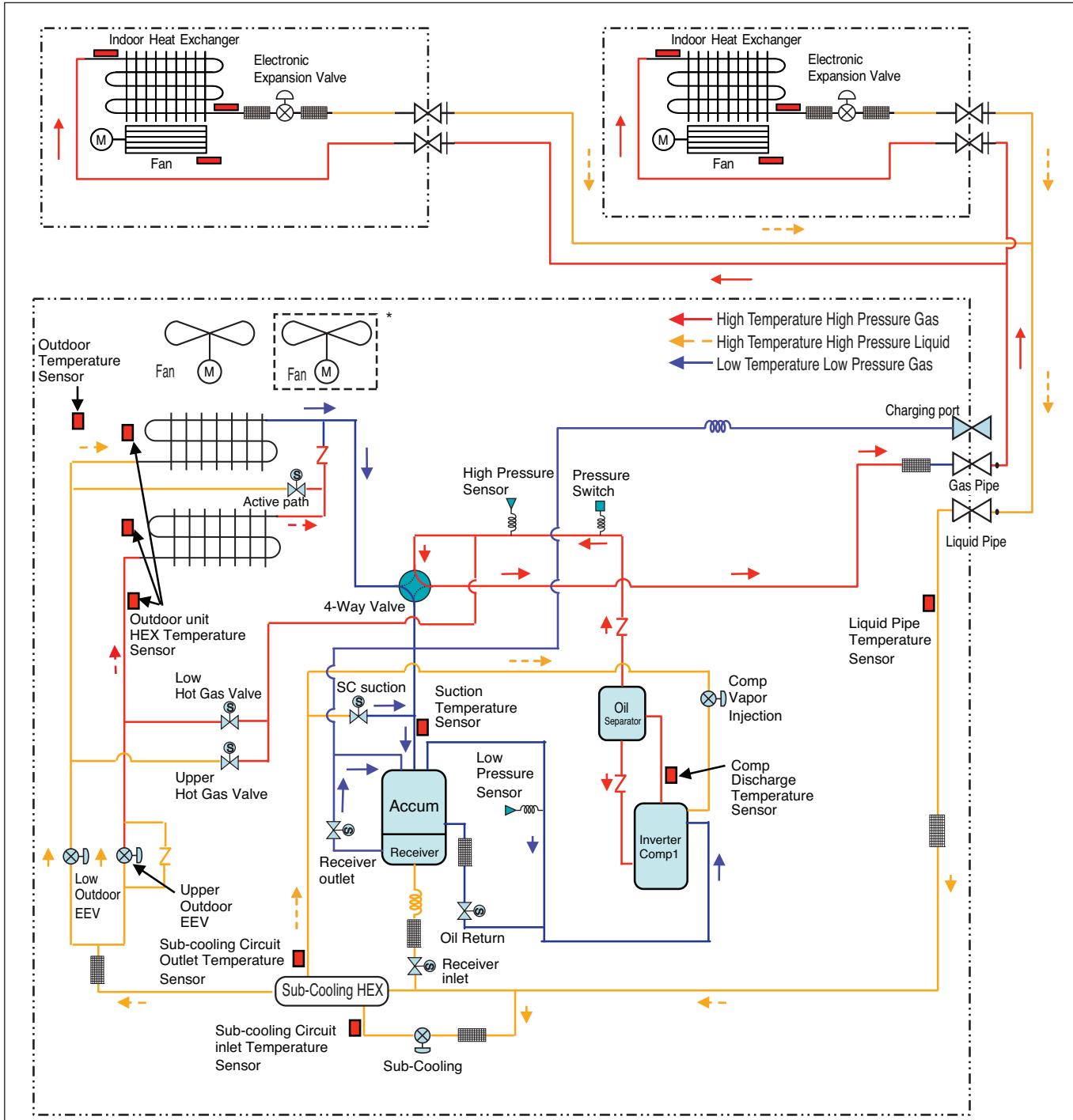
### Upper HEX Defrost Operation



\*14,16HP have 2fans.

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

**Low HEX Defrost Operation**

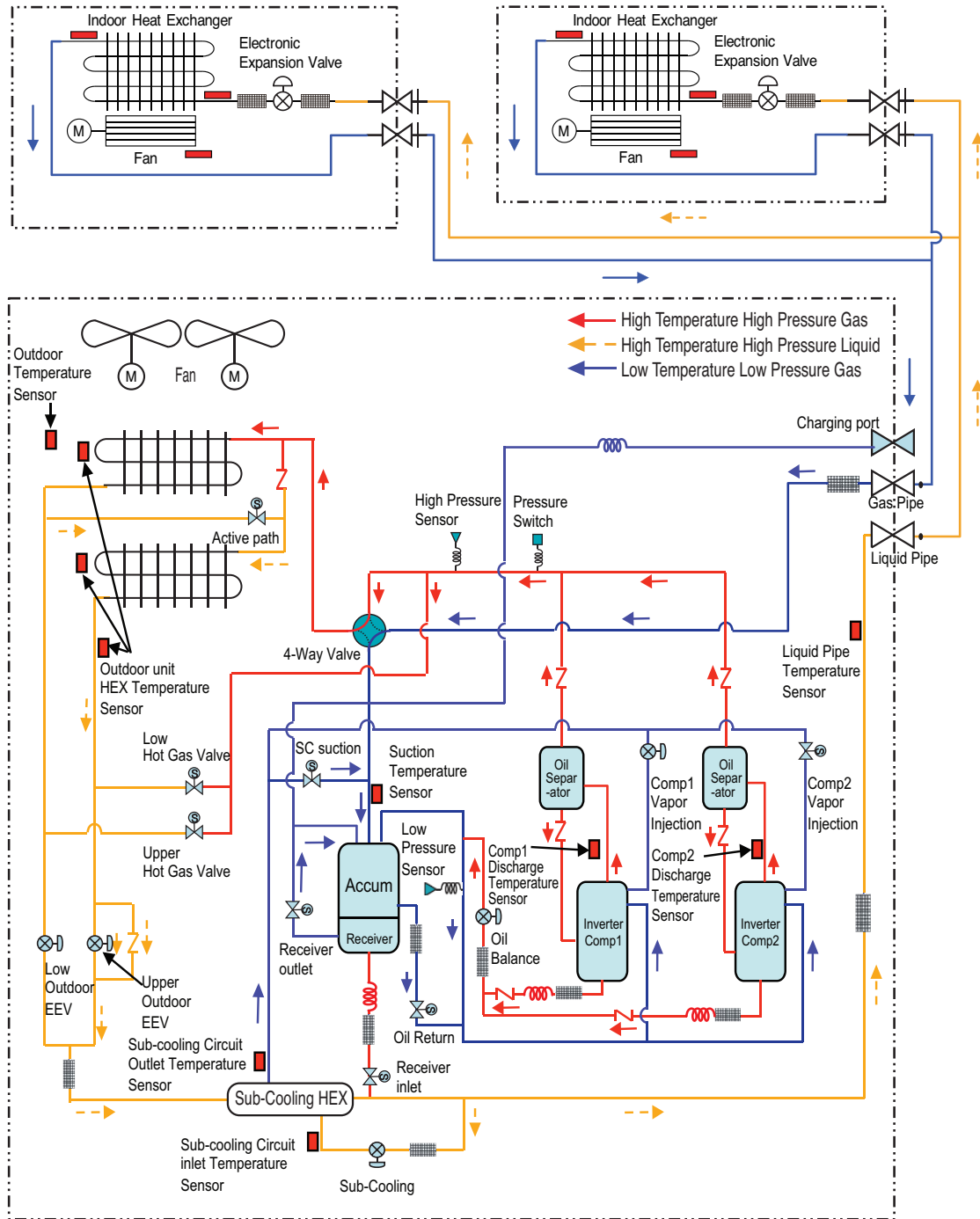


\*14,16HP have 2fans.

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

4.1.2 18~20HP

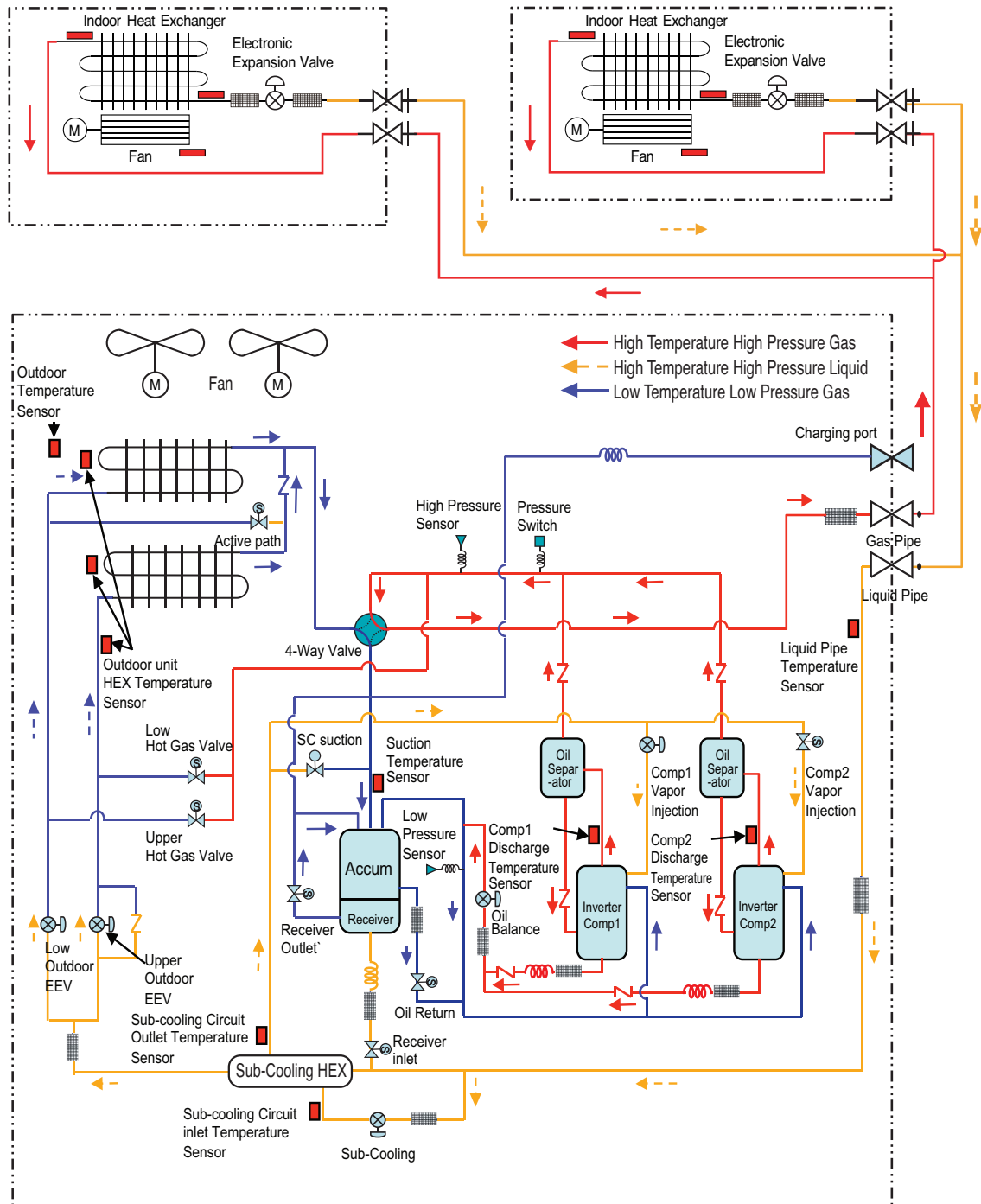
**Cooling Operation**



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

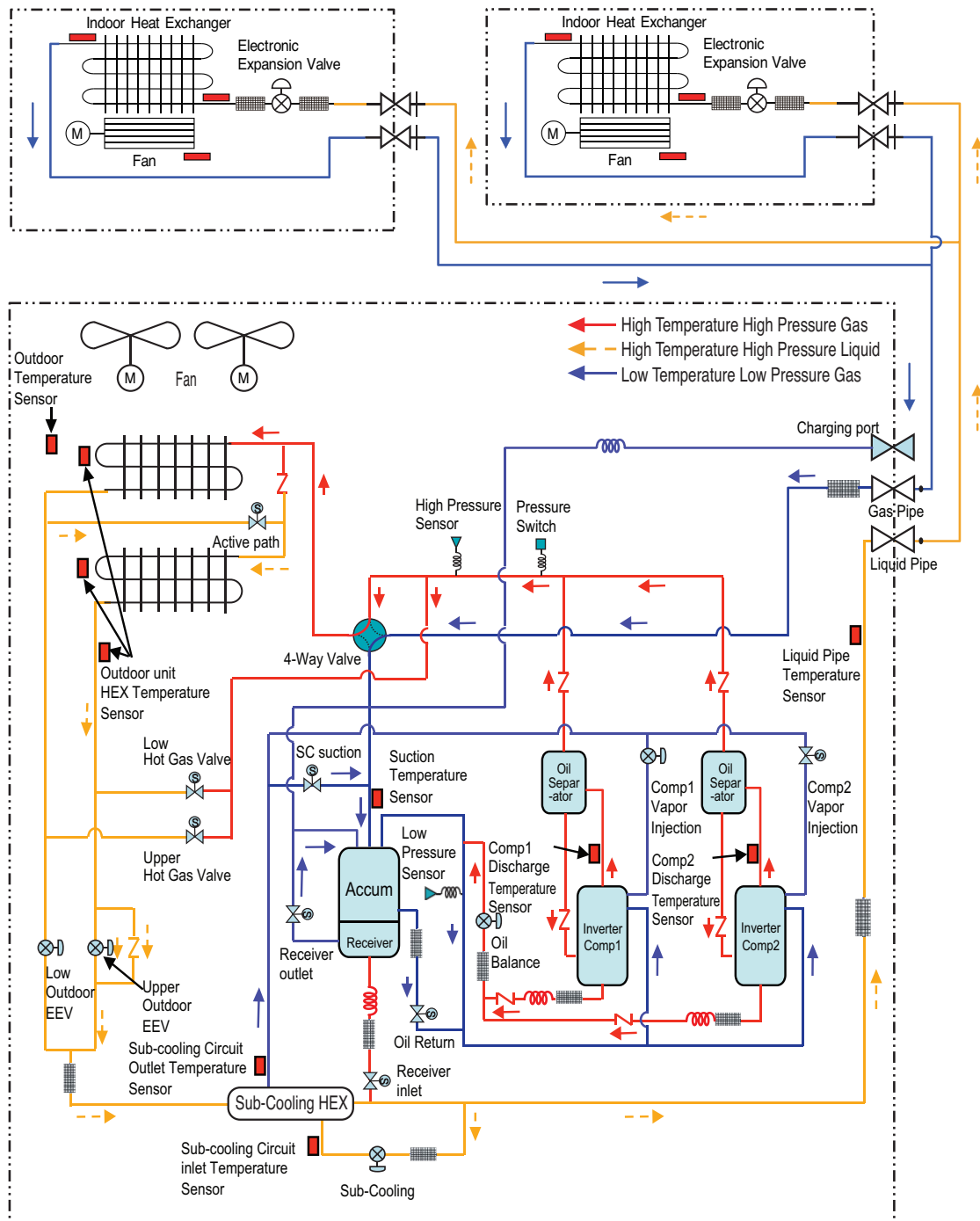


# Heating Operation



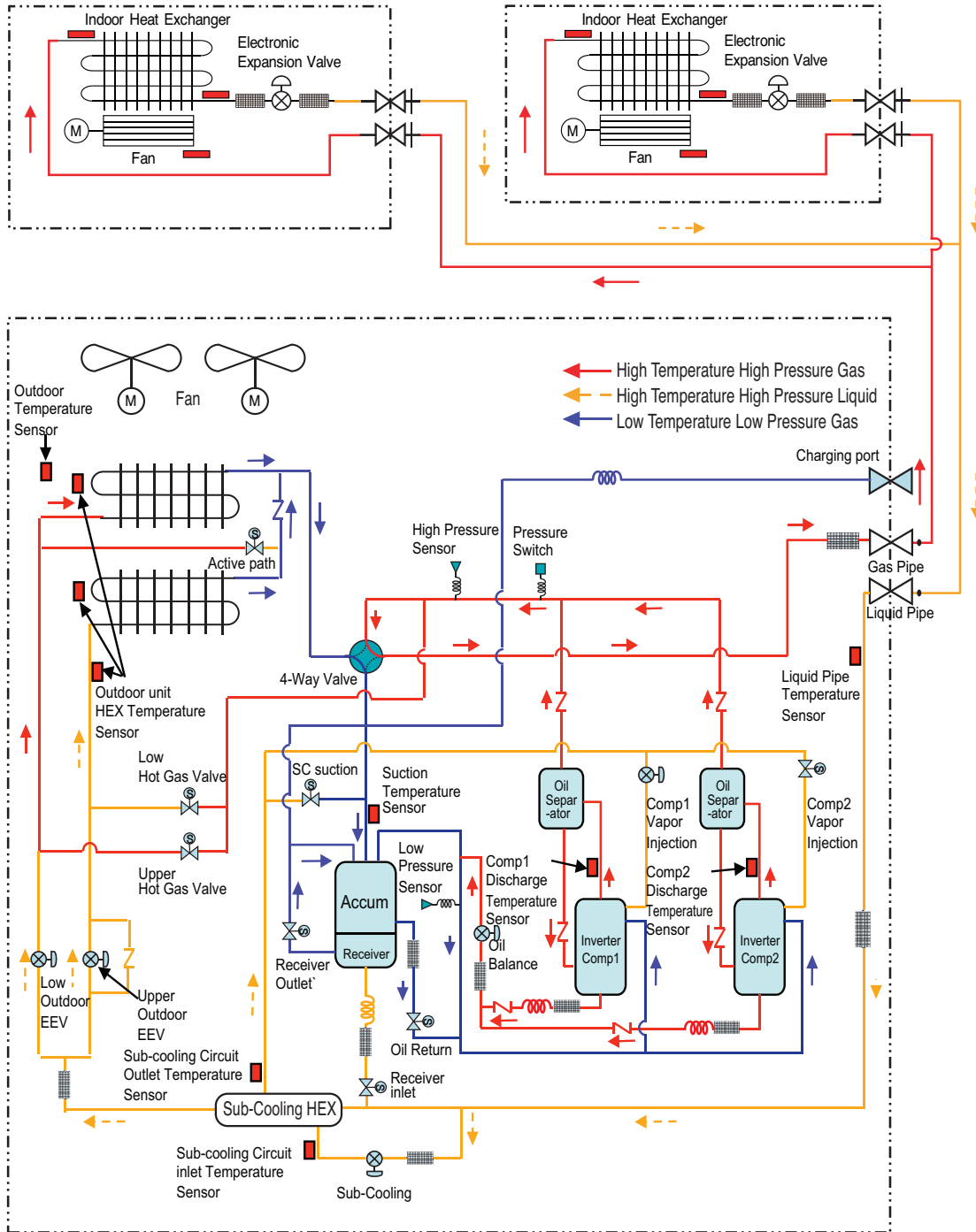
Remarks	Pressure Sensor	Temperature Sensor	Check valve
	Pressure Switch	SVC Valve	EEV
		Strainer	Solenoid valve

## Oil Return/ Defrost Operation



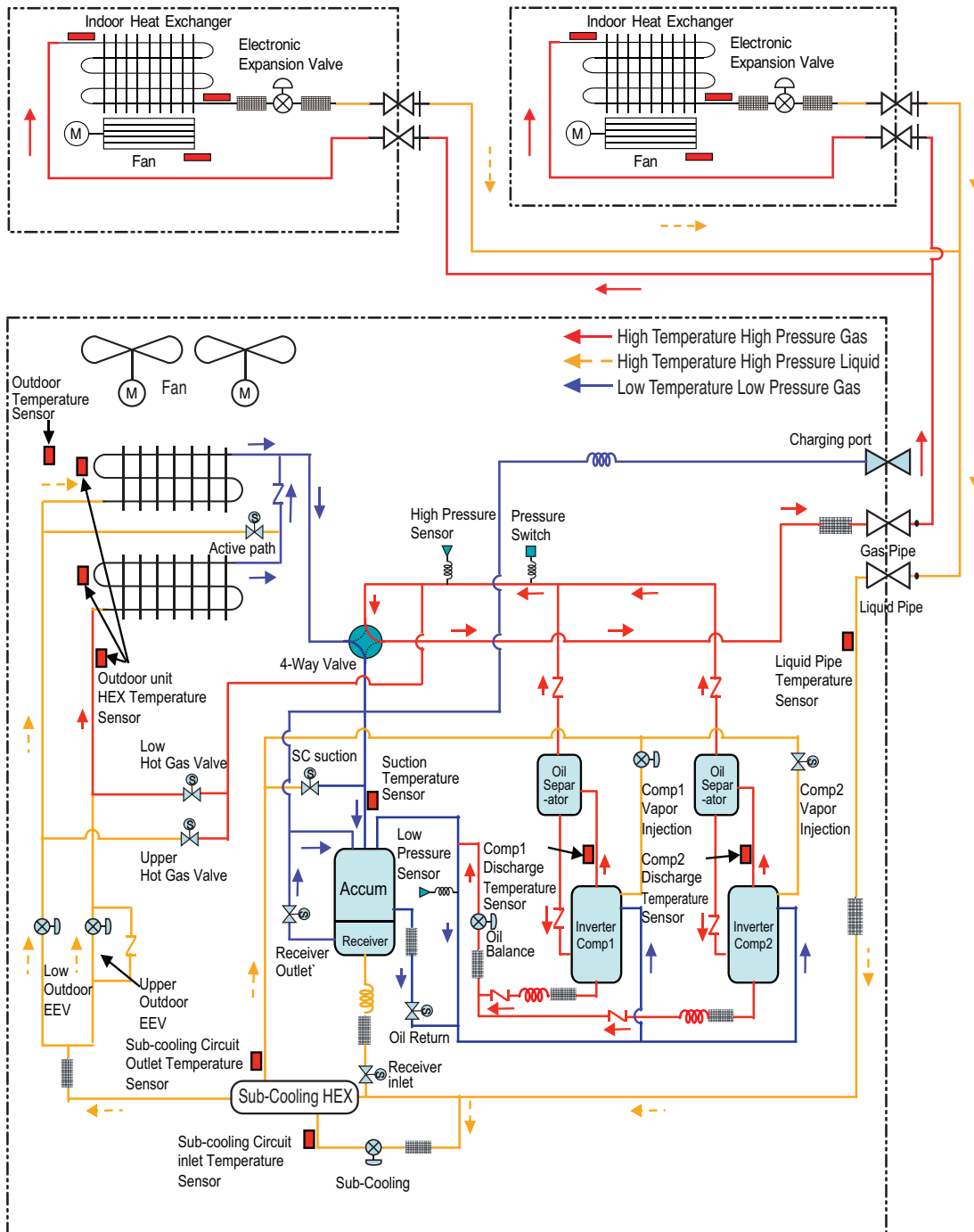
Remarks	Pressure Sensor	Temperature Sensor	Check valve	Solenoid valve
	Pressure Switch	SVC Valve	EEV	Strainer

## Upper HEX Defrost Operation



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

## Low HEX Defrost Operation

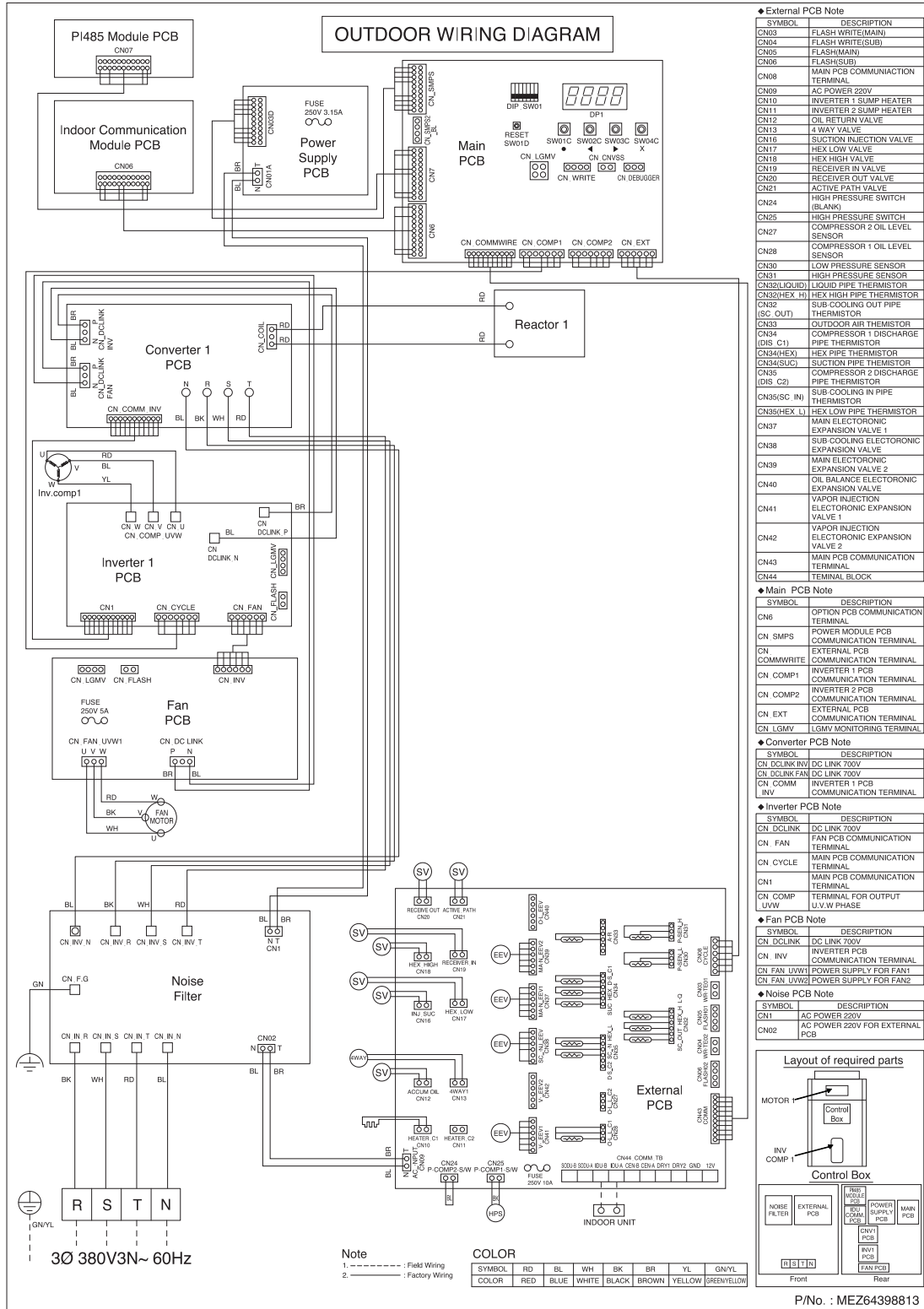


Remarks	Pressure Sensor	Temperature Sensor	Check valve	Solenoid valve
	Pressure Switch	SVC Valve	EEV	Strainer

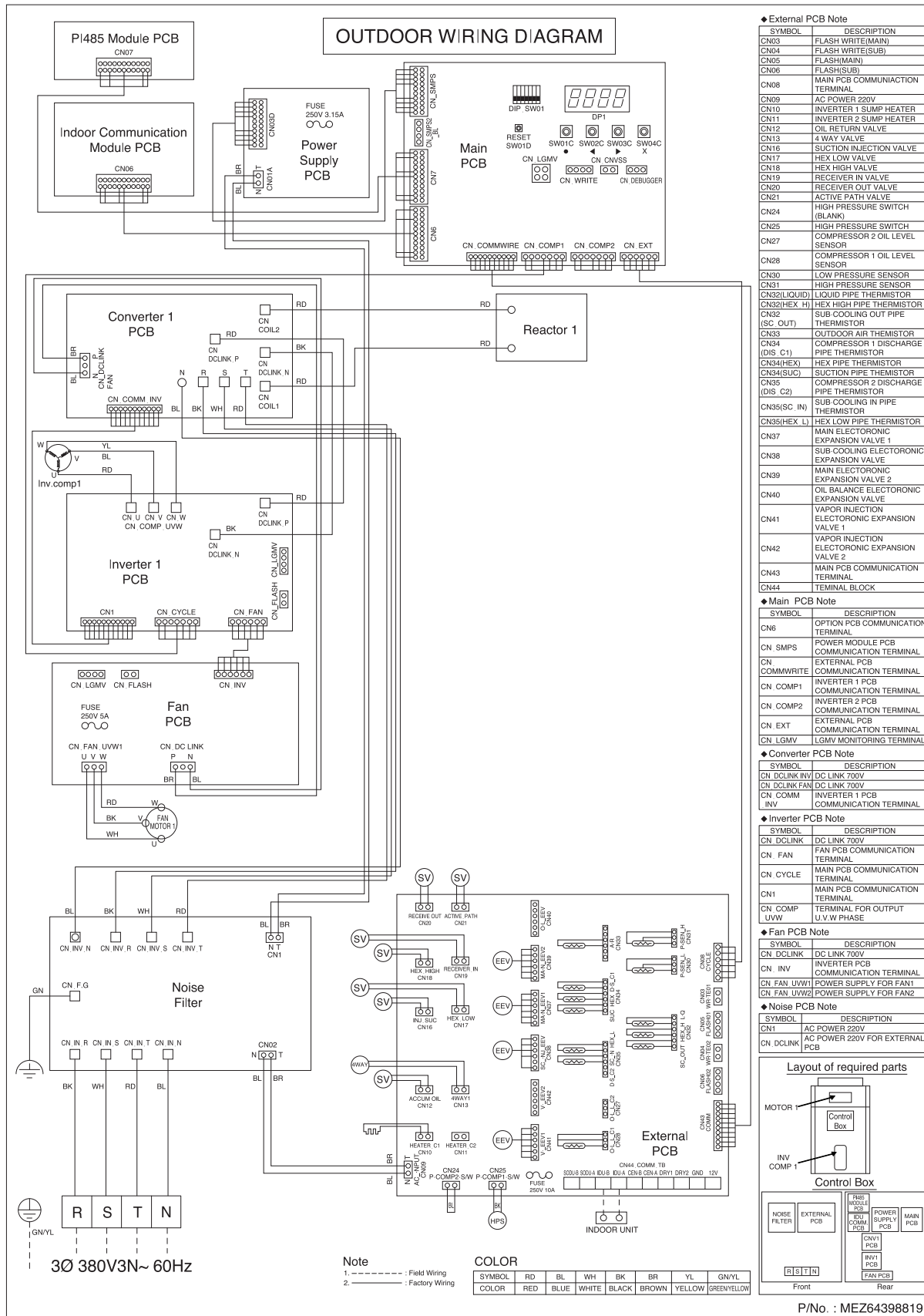
# 5. Wiring Diagrams

## 5.1 Heat Pump Model

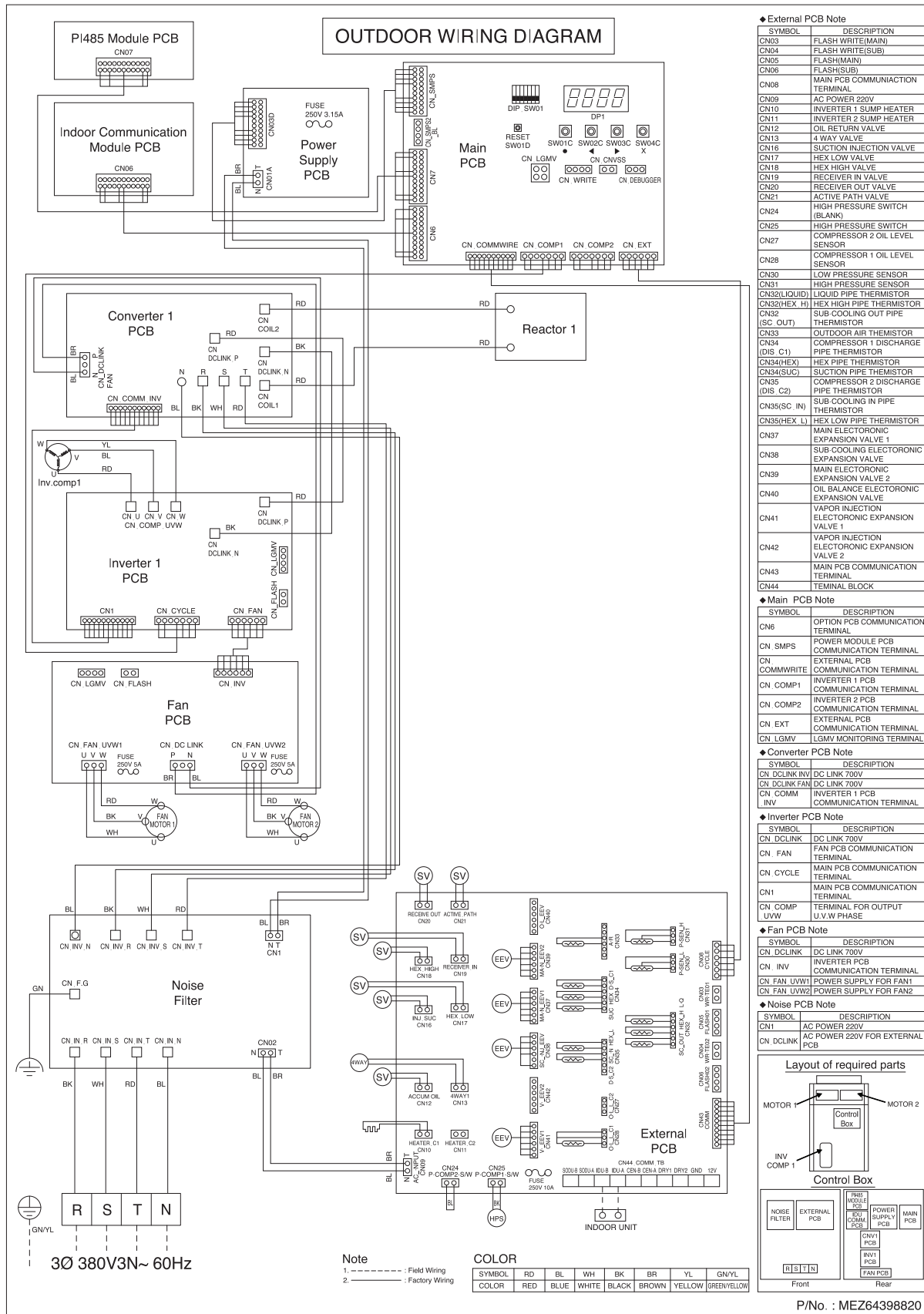
### 5.1.1 8 HP



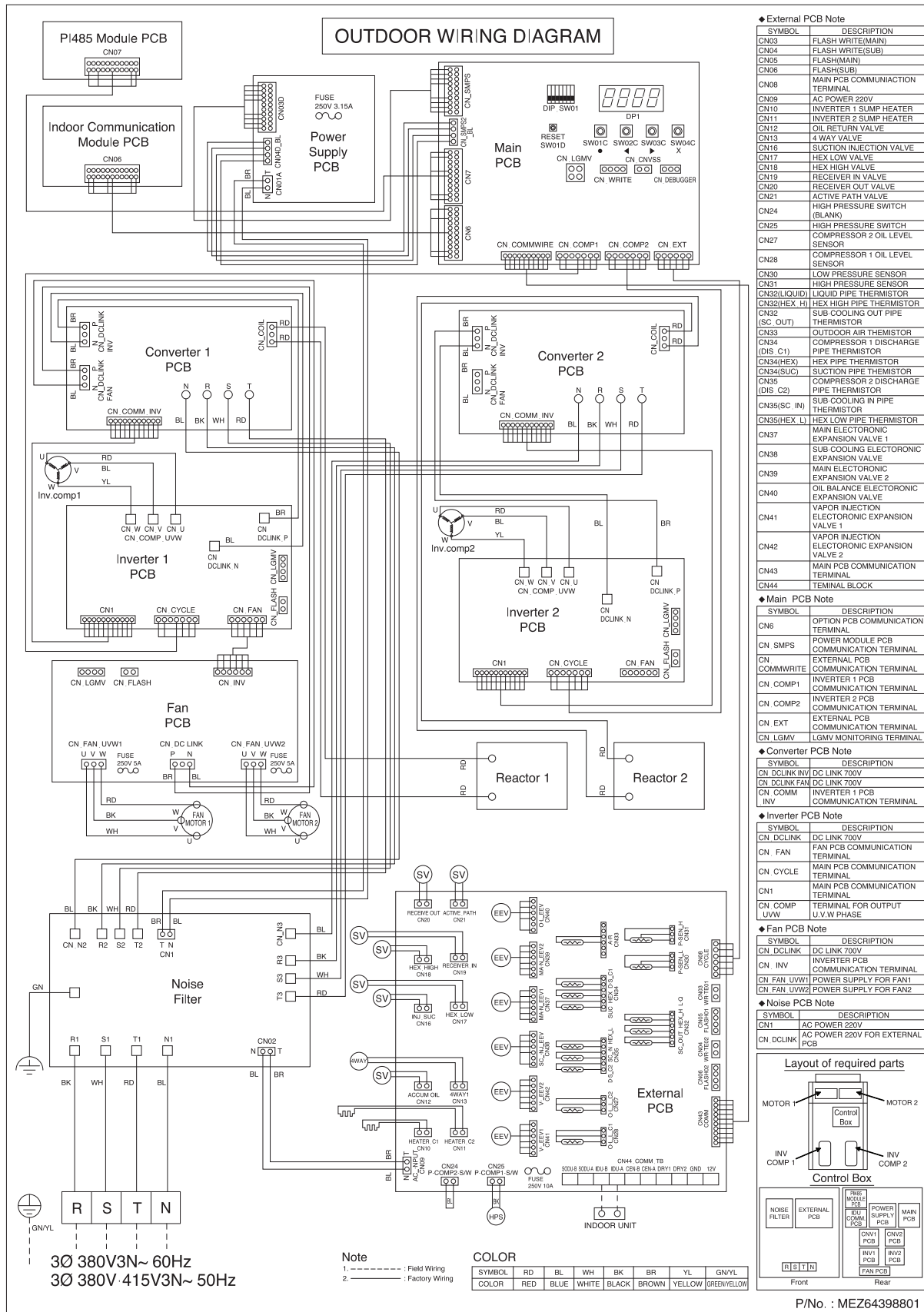
5.1.2 10~12HP



5.1.3 14~16HP

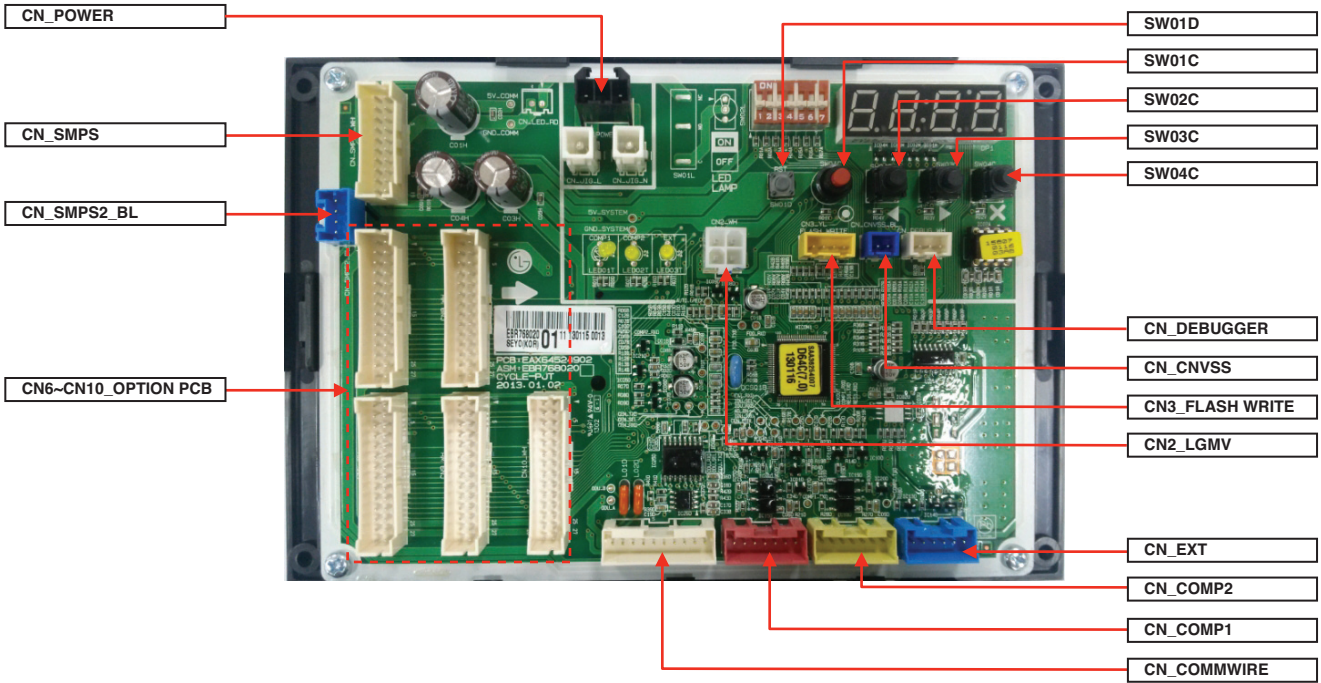


5.1.4 18~20HP

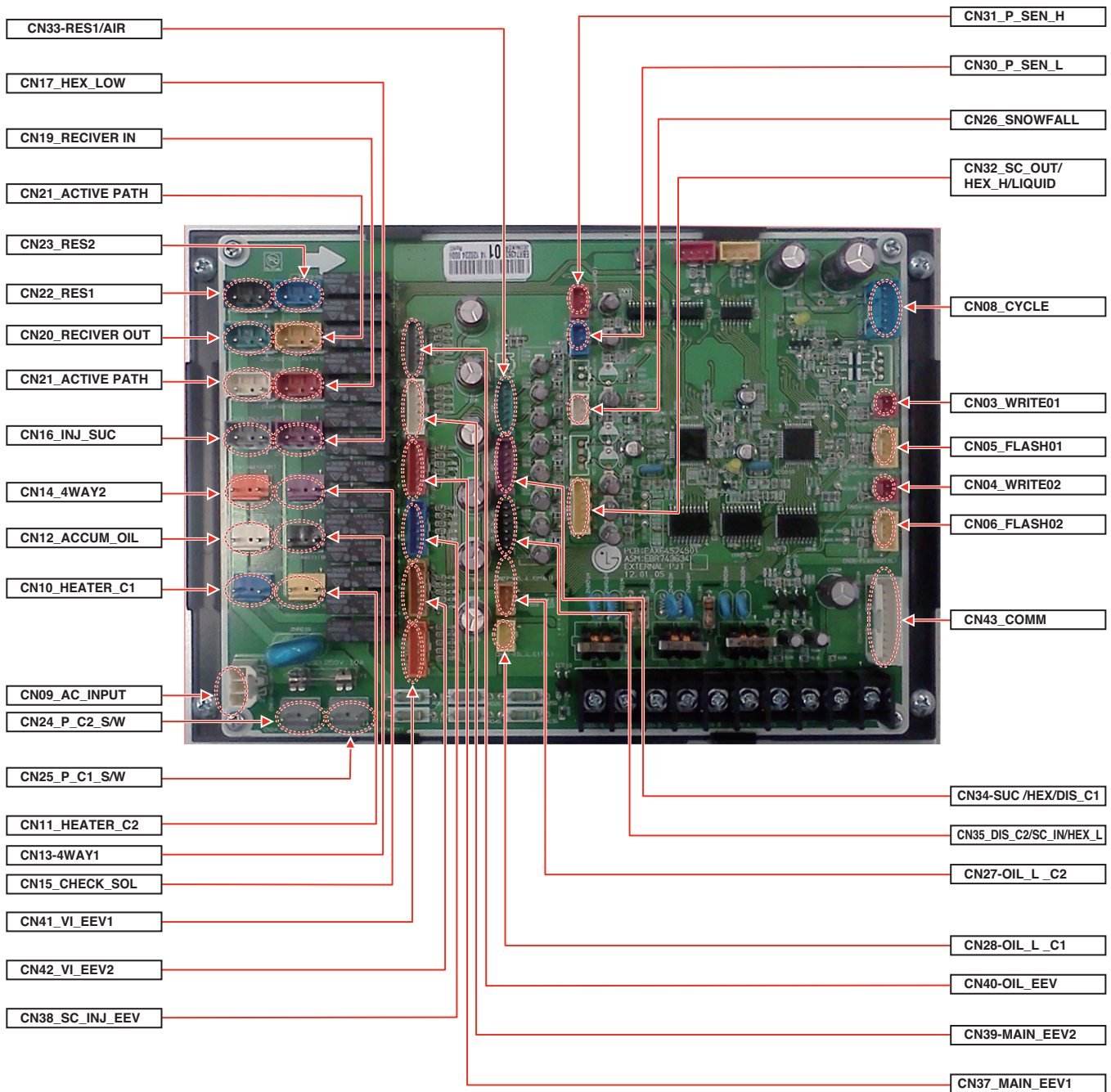




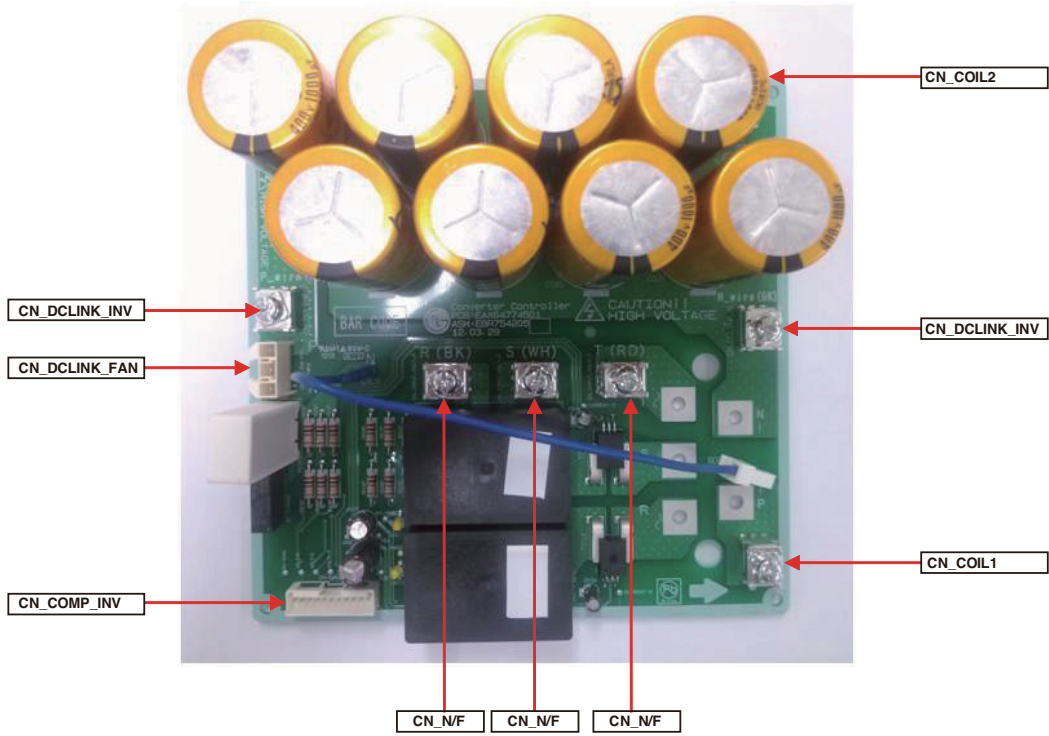
n MAIN PCB



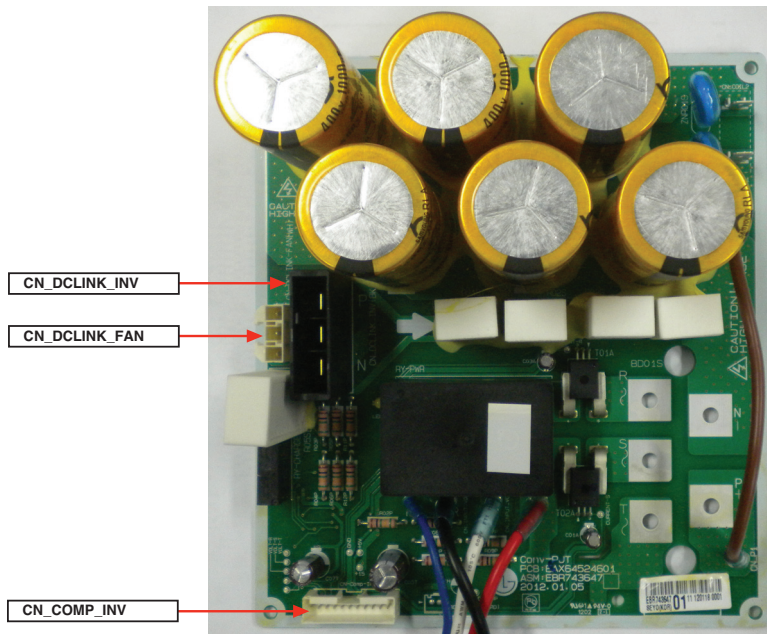
n External PCB



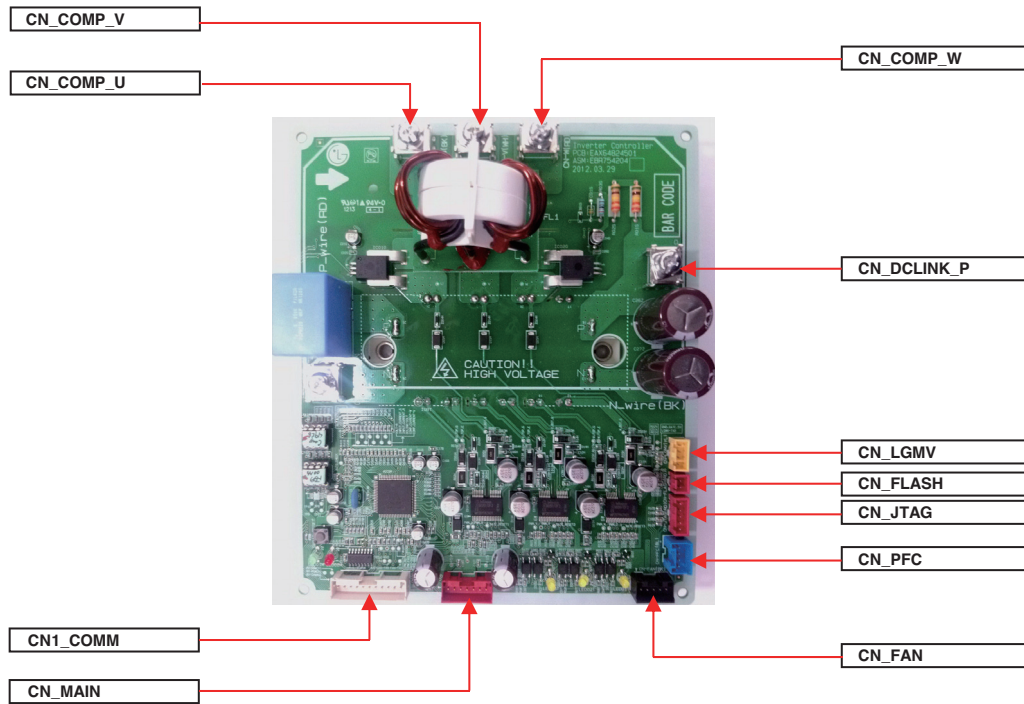
n Converter PCB (10~16HP)



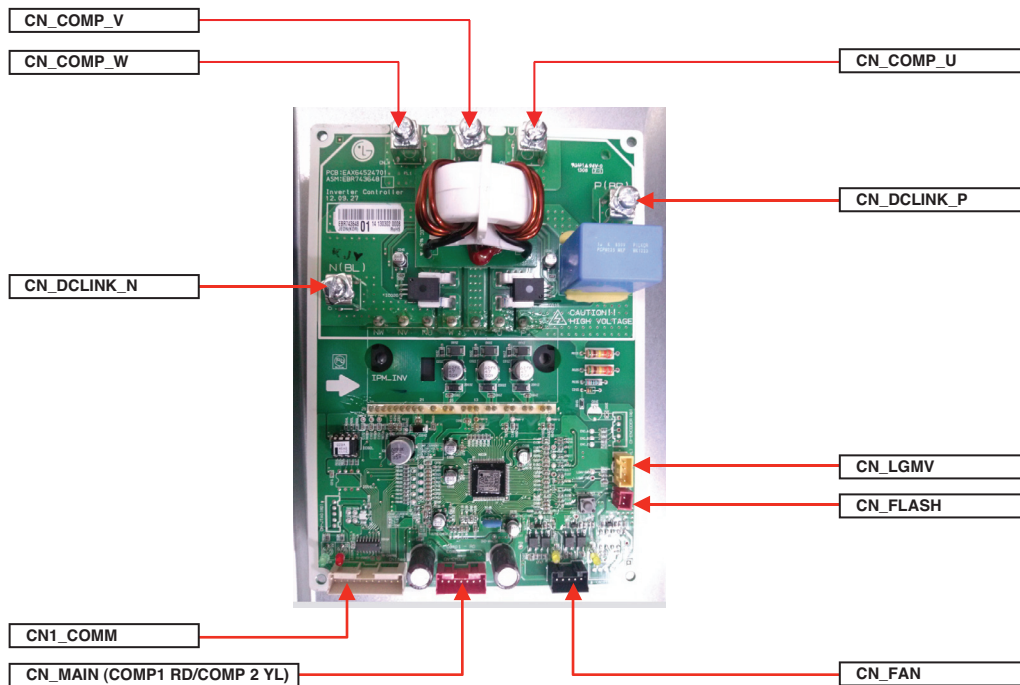
n Converter PCB (8,18,20HP)



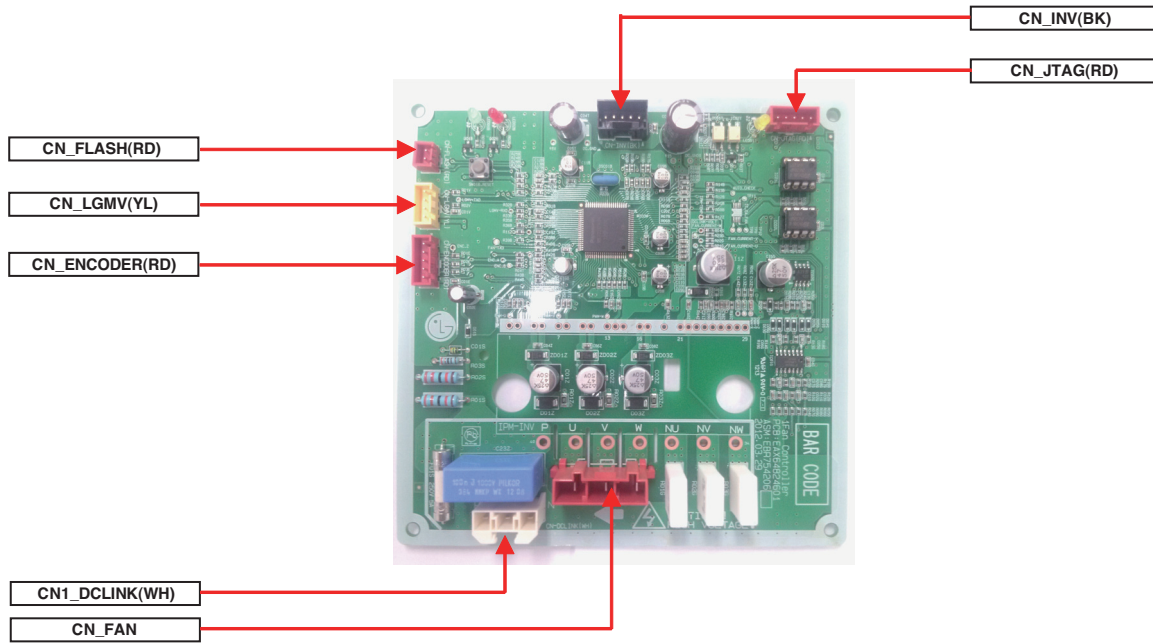
n Inverter PCB (10~16HP)



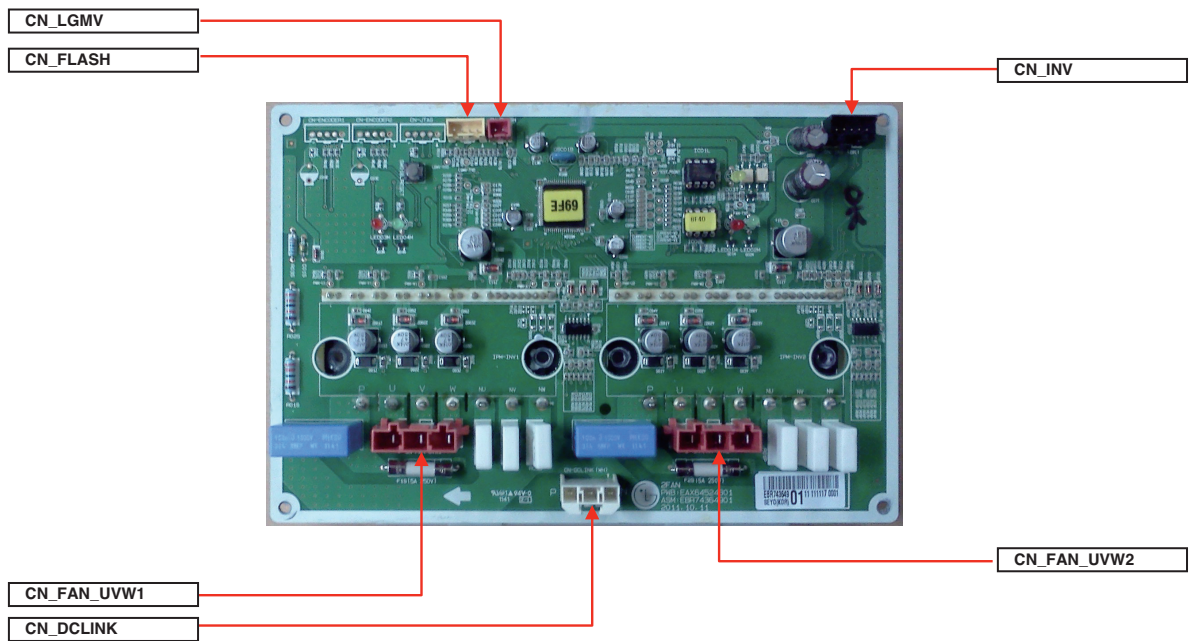
n Inverter PCB (8,18,20HP)



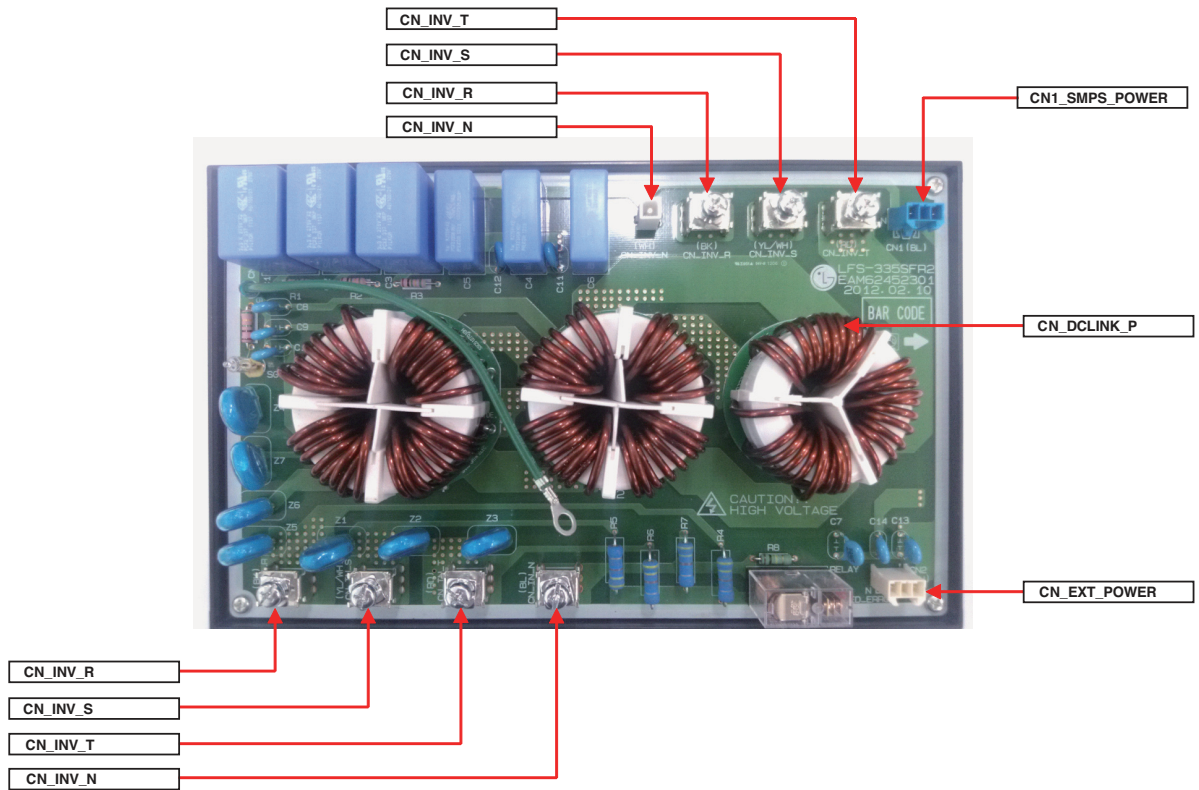
n 1 FAN PCB (8~12HP)



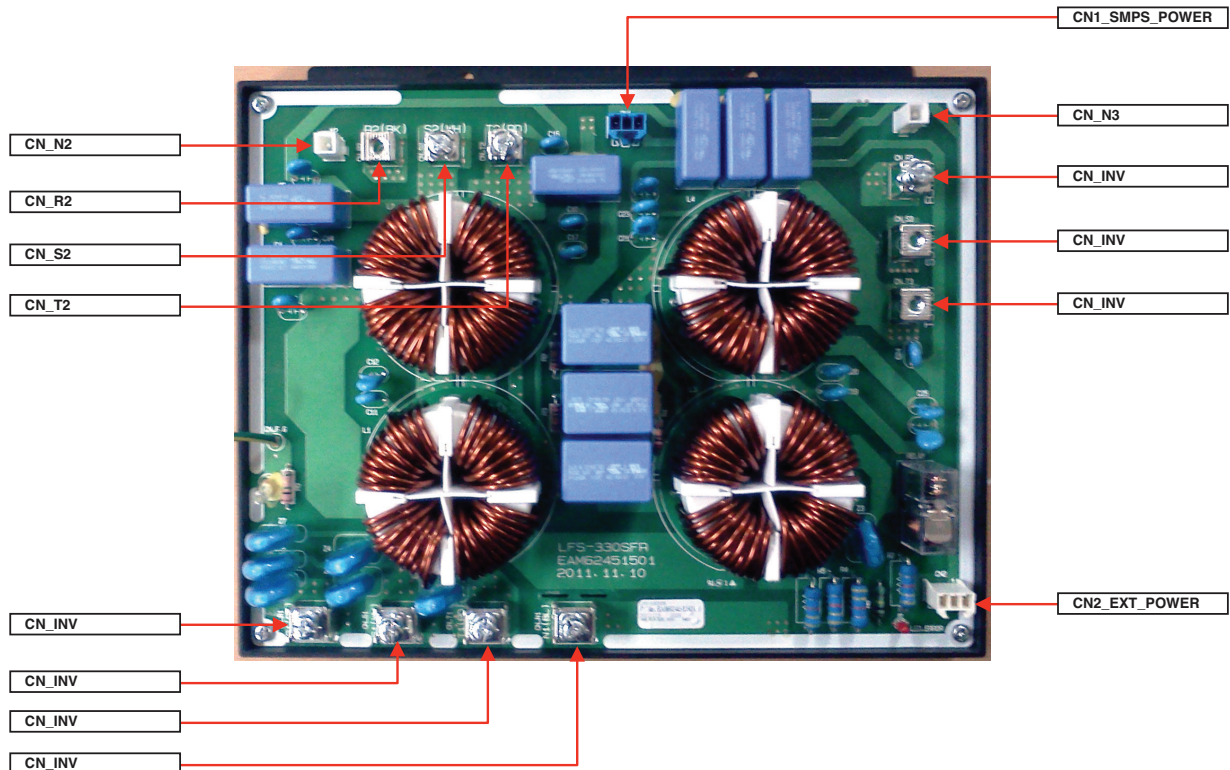
n 2 FAN PCB (14~20HP)



n Noise filter (8~16HP)



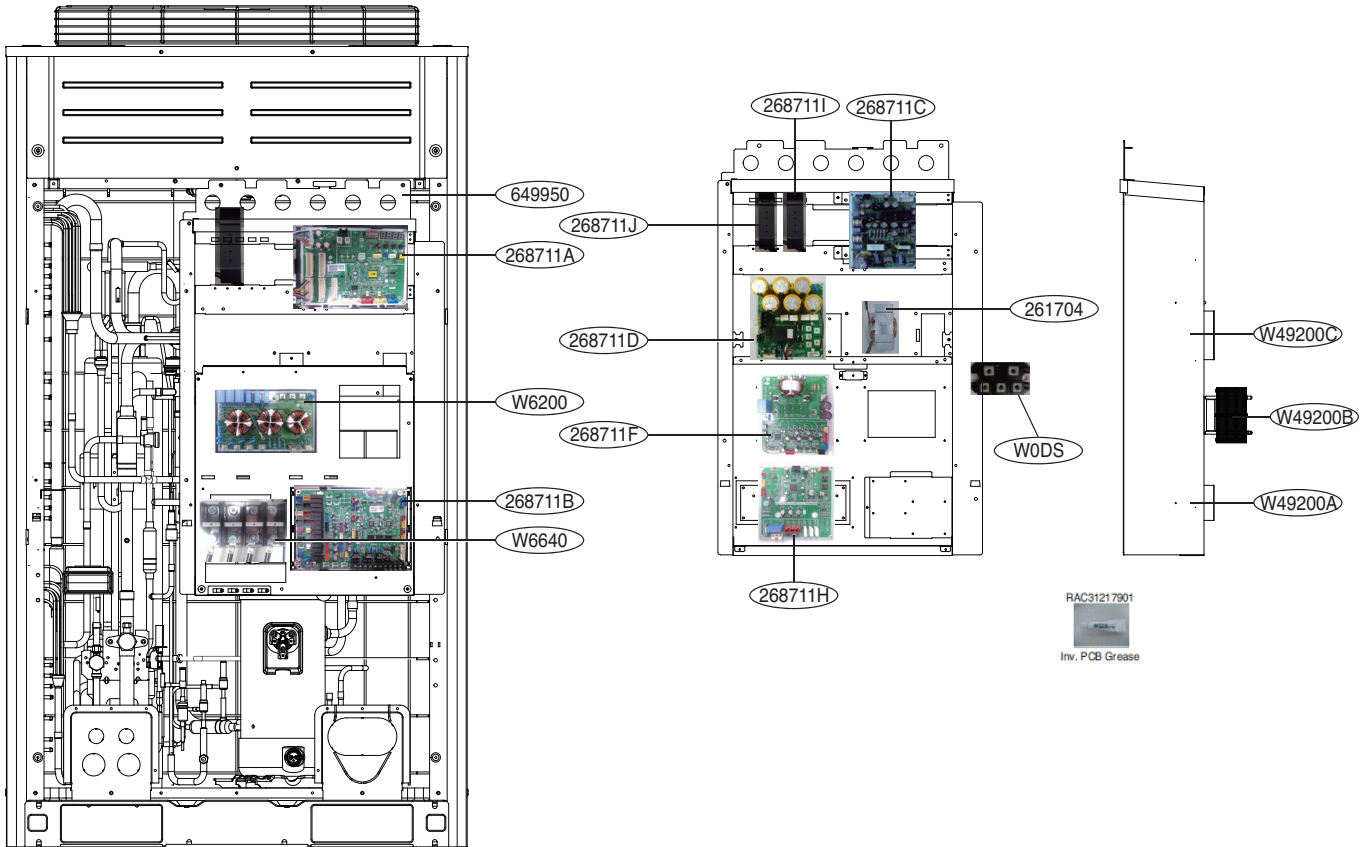
n Noise filter (18,20HP)



# 6. Exploded View

## Outdoor Unit

### 6.1.1 8~12 HP (UX2 1 Comp)

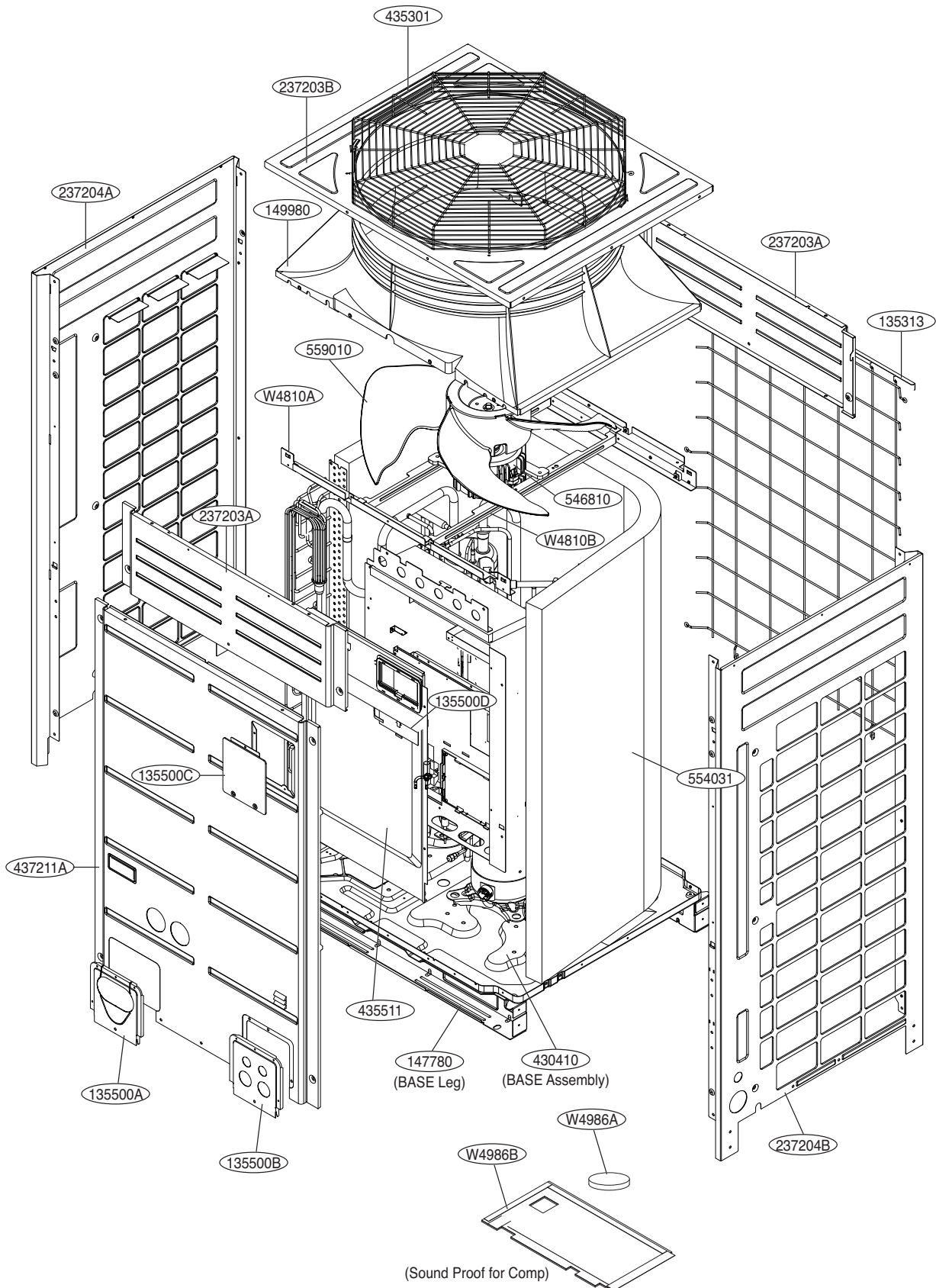


Compressor lead wire



W6631A

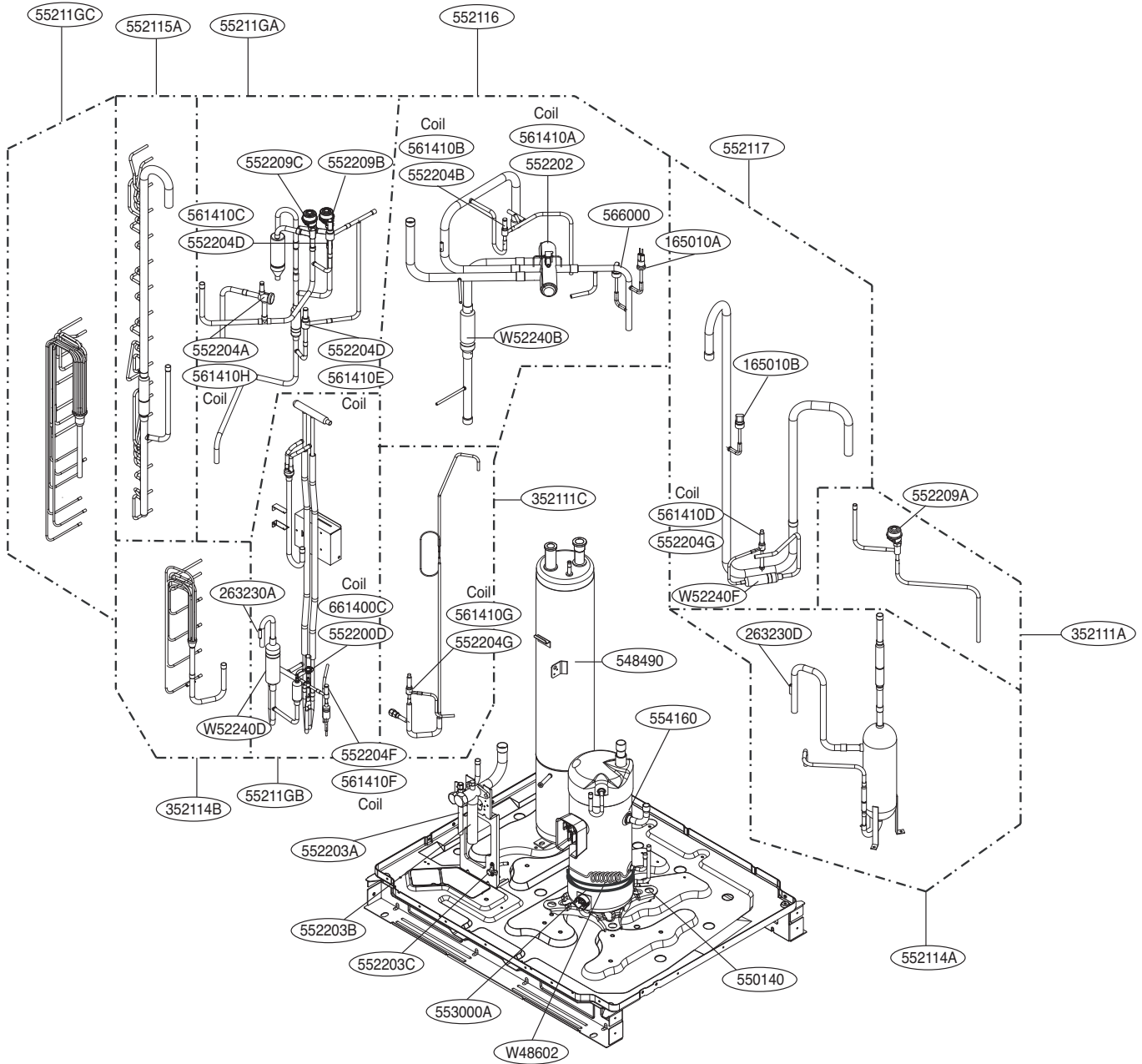
(UX2 1 Comp)



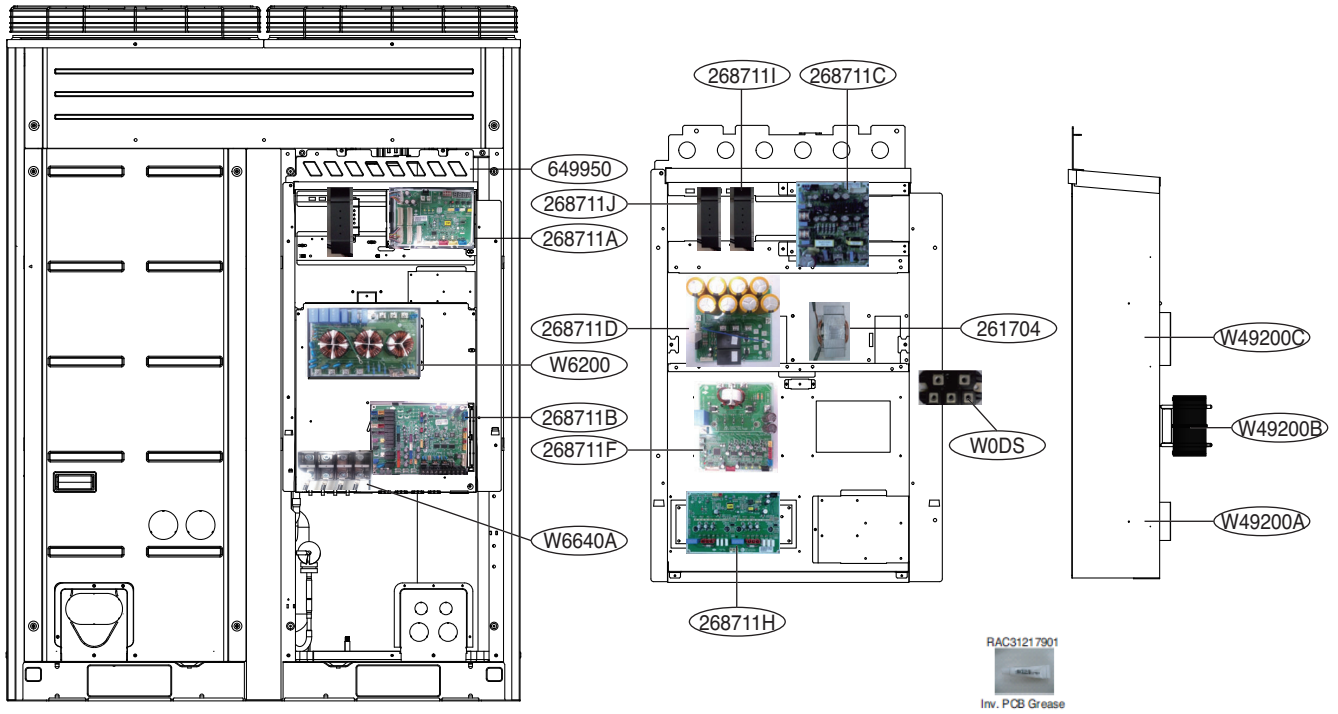


Exploded view

(UX2 1 Comp)



### 6.1.2 14,16 HP (UX3 1 Comp)



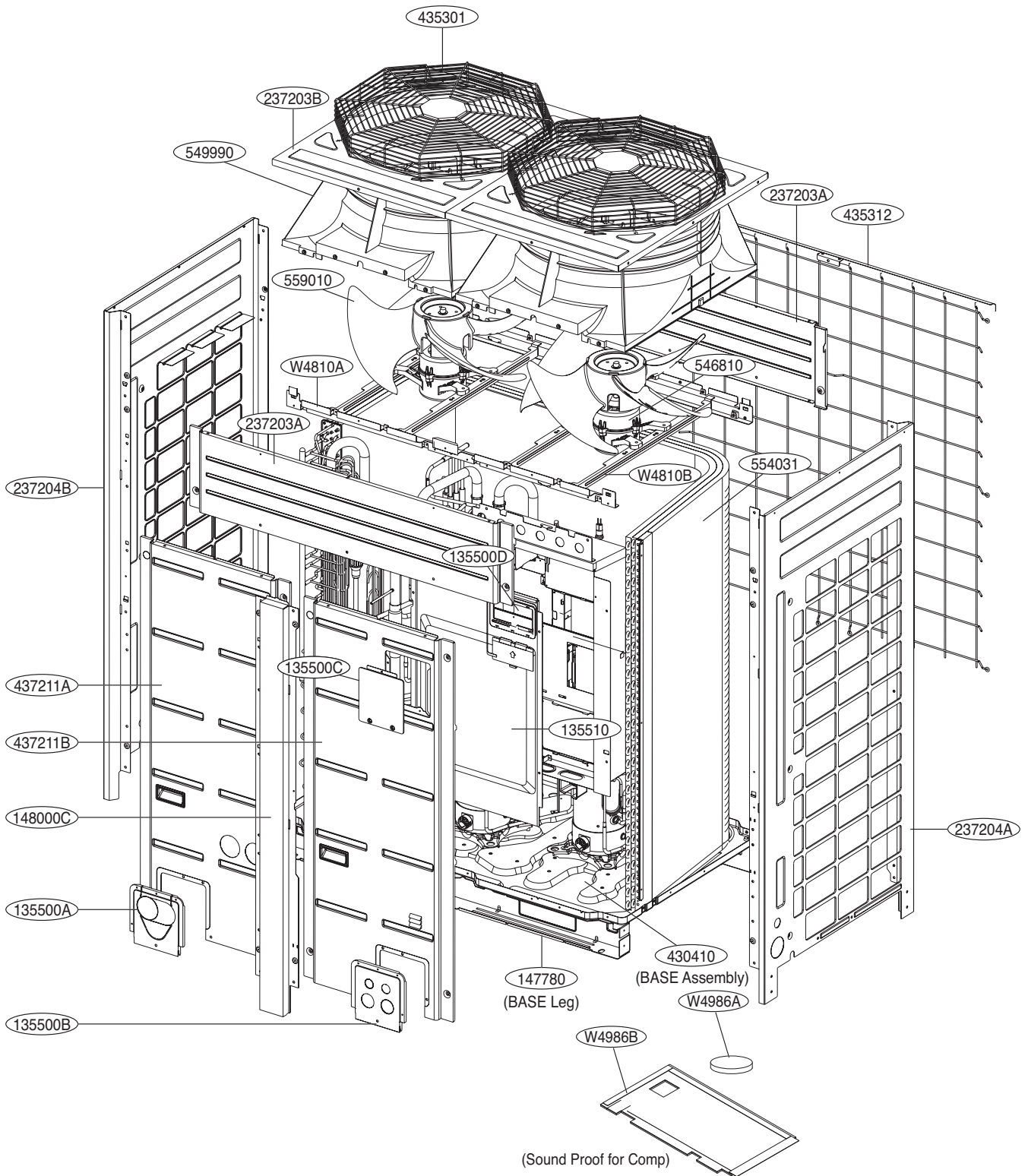
Compressor lead wire



W6631A

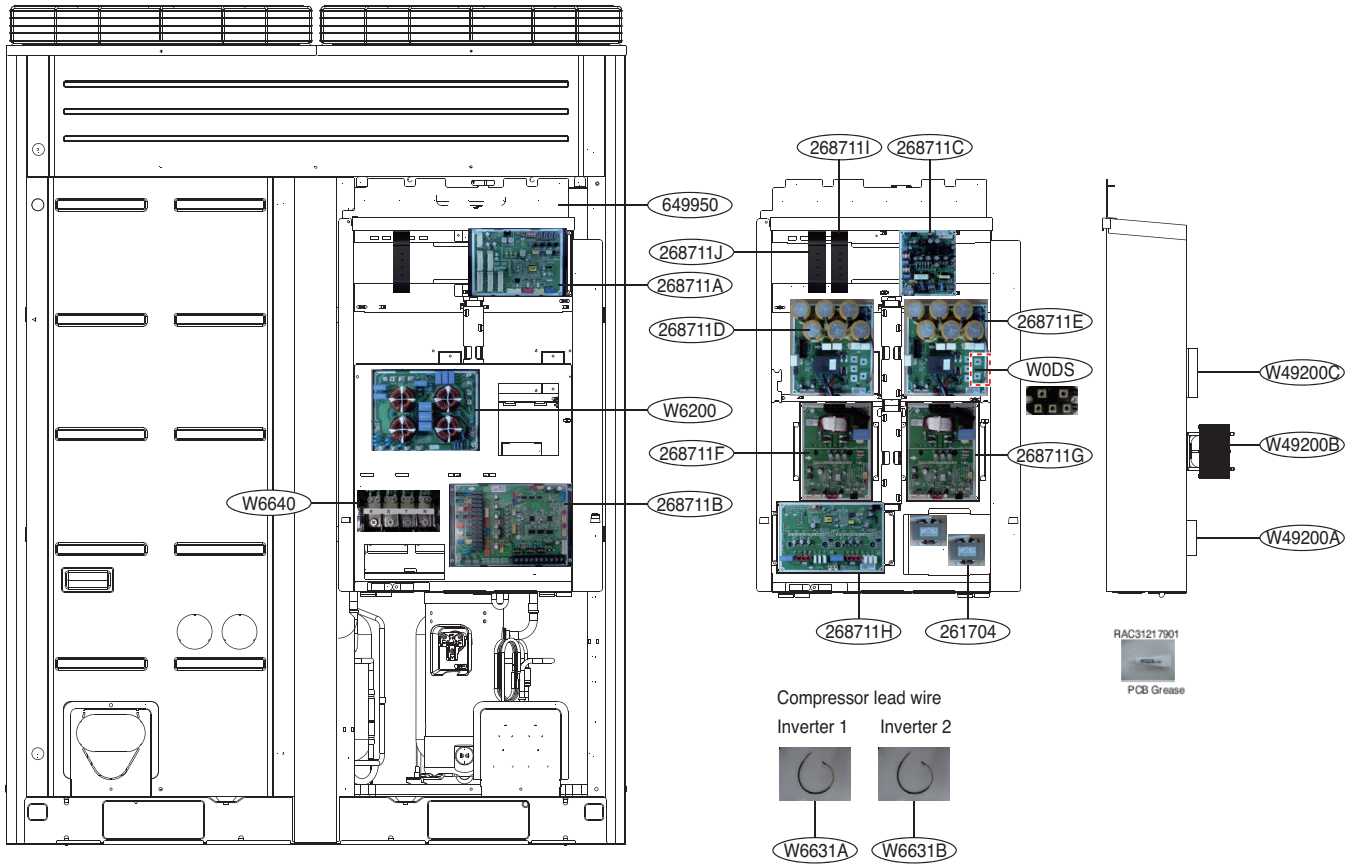
Exploded view

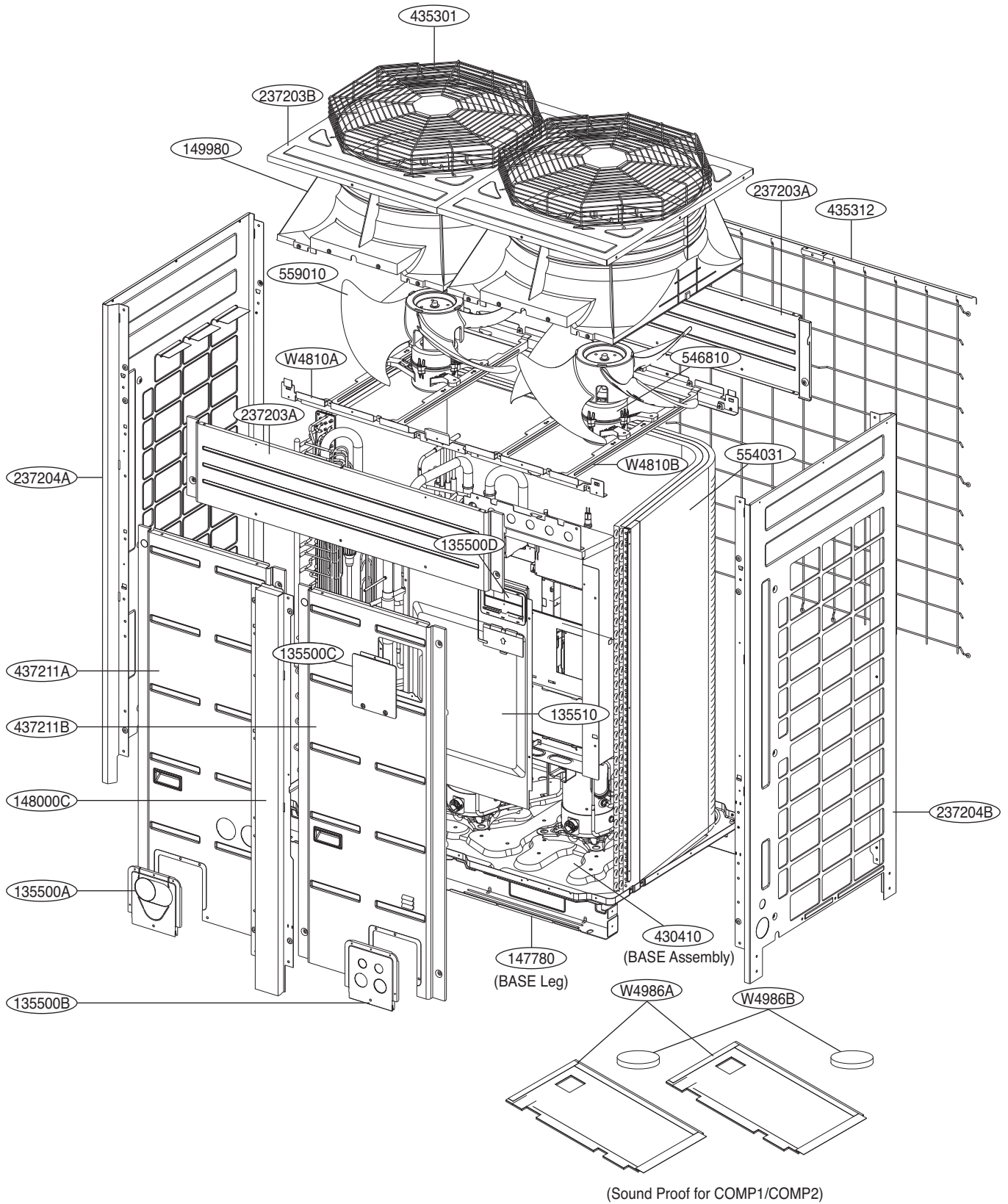
(UX3 1 Comp)



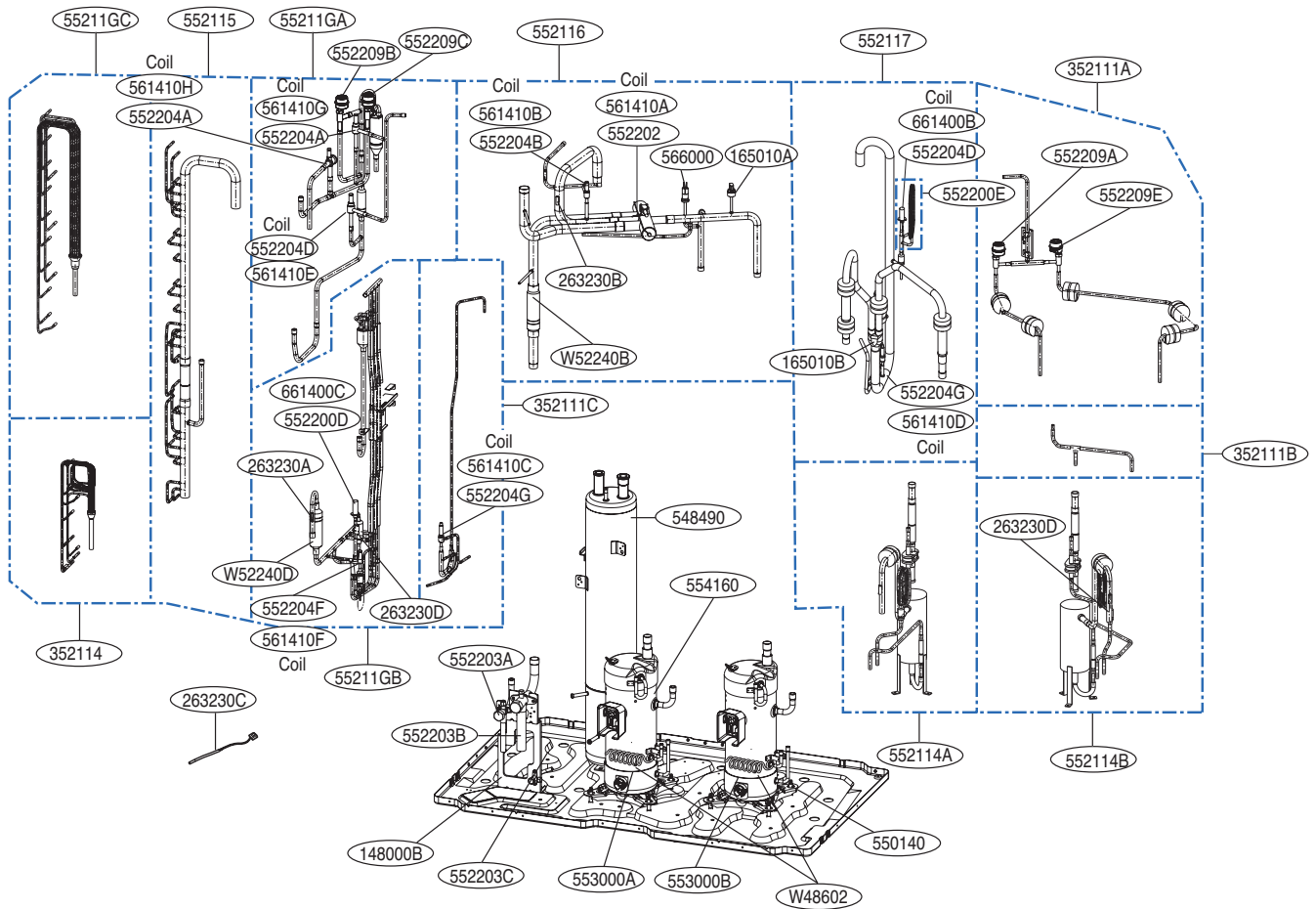


### 6.1.3 18,20 HP (UX3 2 Comp)





Exploded view



Part	L/No	Sensor location	Housing color
Temp. Sensor 1	263230A	Sub Cool Out + HEX2(Upper Temp. Sensor) + Liquid Pipe	yellow
Temp. Sensor 2	263230B	Suction Pipe + HEX1(Temp. Sensor) + Inv.1 Discharge	purple
Temp. Sensor 3	263230C	Air	green
Temp. Sensor 4	263230D	HEX3(Low Temp. Sensor) + Inv.2 Discharge + Sub Cool In	black



P/NO : MFL67369001

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