

LG AIR CONDITIONERS

# PRODUCT DATA

**Ceiling Concealed Duct (50Hz, R410A)**




**Model:**

**AB-H366GSA0[B36AH SG0]  
AB-H426GSA0[B42AH SG0]  
AB-H246HTA0[B24AHV SH0]  
AB-H306GTA0[B30AHV SG0]  
AB-H366GTA0[B36AHV SG0]**

**5CSB0-02A**

**Replaces 5CSB0-01A**

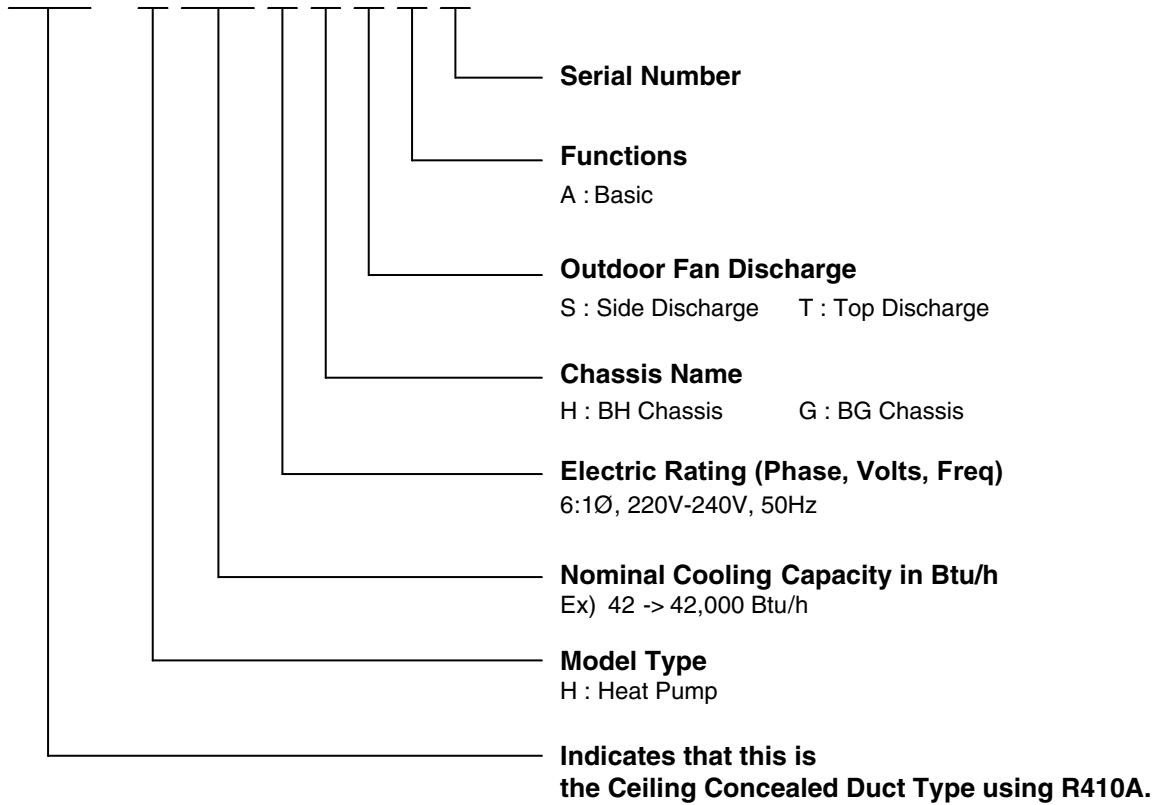
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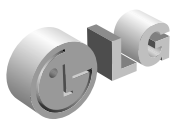
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# 1. Model Number Nomenclature

**A B - H 4 2 6 G S A 0**





## 2. Features & Benefits



### ■ Easy Installation

- Compact & light design
- *E-tuning* (Linear E.S.P Control)
- High head drain pump(700mm, Accessory)

### ■ Comfort & Reliability

- Low noise design
- 2-Thermistor control(Main body & Remote control)
- Zero standby power consumption

### ■ Convenience

- Tele control(Accessory)
- LCD wired remote control
- Group control
- Zone control(Accessory)
- Central control(Accessory)
- Weekly program

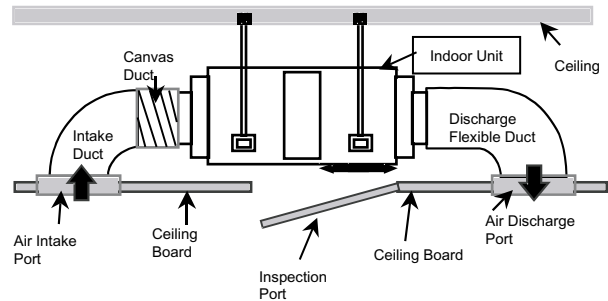
### ■ Cleanness

- Plasma air purifying system(Accessory)
- Hygienic and easy to clean filter

### **Easy Installation**

Flexible Duct is easy to install, regardless of room size or heater position.

It can be installed even in a limited space and saves construction cost with slim thickness



### **Innovative Design of Fan and Housing System**

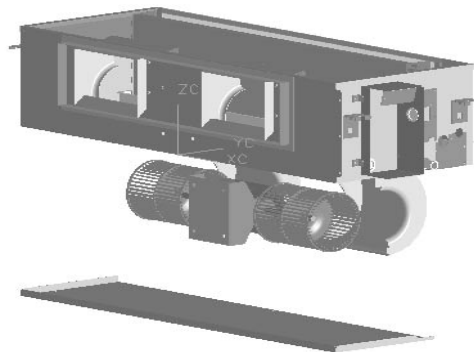
Low Noise ! Easy Serviceability!

Plastic Fan and Housing Assembly

- Designed for low noise
- Designed to reduce weight
- Designed for easy service



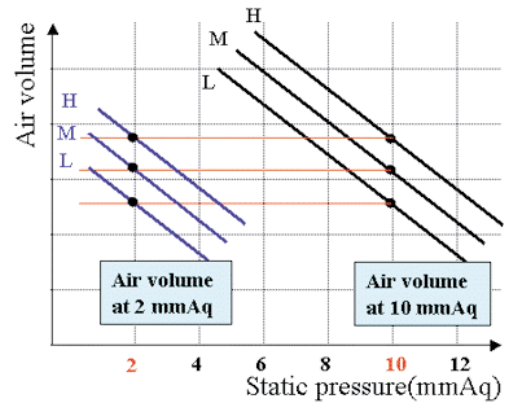
This product guarantees lower sound level and gives lesser service expenses.





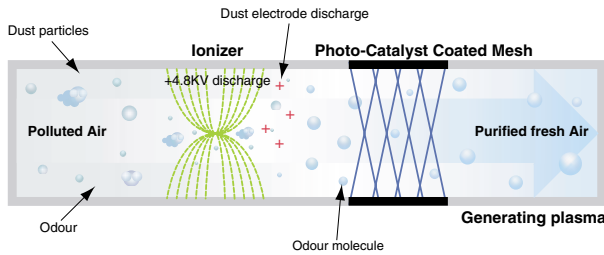
### LG's High Technology provide Easy and Low cost Design of Duct work

Generally, when External Static Pressure increases air volume decreases. But by controlling the phase of motor while installing the product E.S.P. is controlled from 8~10 mmAq linearly. E.S.P. control provides required constant air volume irrespective of ESP change. Desired ESP can also be set through LCD wired remote control. Setting of the desired ESP gives required combination of ESP and airflow.



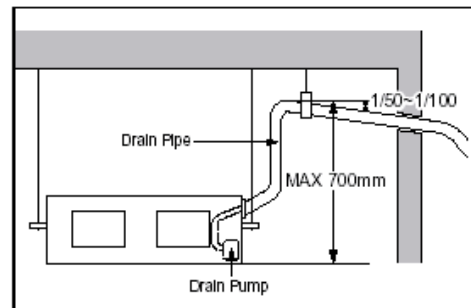
### Plasma Air Purifying Kit (Accessory)

The PLASMA Air Purifying Function not only removes microscopic contaminants and dust, but also removes house mites, pollen, and pet fur helps to prevent allergic diseases like asthma.



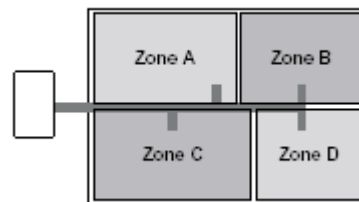
### High Head Drain Pump(Accessory:700mm)

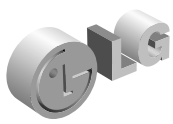
In some of the places natural drainage is not possible. For such places drain pump is very useful. It removes condensed water from the unit.



### Zone Control(Accessory)

It controls the temperature of each zone. Opening or closing of the damper is controlled by sensing the temperature of each zone. In the cooling mode, if the temperature of a particular zone is lower than set temperature then the damper is closed. On the other hand if the temperature of a particular zone is higher than the set temperature, damper is opened to provide cooling to the zone and vice versa in the heating mode.





### 3. List of Functions

Function	Ceiling Concealed Duct	
	AB-H366GSA0[B36AH SG0]	AB-H426GSA0[B42AH SG0]
Air Discharge outlet	-	-
Airflow Direction control (left & right)	-	-
Airflow Direction control (up & down)	-	-
Airflow Steps(Fan / Cool /Heat)	3/3/3	3/3/3
Auto Changeover	○	○
Auto Operation	○	○
Auto Restart Operation	○	○
Auto Swing	-	-
Central Control	Accessory	Accessory
CHAOS wind (Auto wind)	-	-
Child Lock Function	○	○
Cooling & Fan Operation(Cooling Only)	-	-
Cooling, Heating & Fan Operation(Heat Pump)	○	○
Defrost / Deicing	○	○
Deodorizing Filter	-	-
Drain Pump	Accessory	Accessory
E.S.P. Control	○	○
Electric Heater	-	-
Energy Saving Gold Fin(Outdoor Unit)	Optional	Optional
Environment Friendly Refrigerant	○	○
Fire Alarm Function	-	-
Forced Operation	○	○
Group Control	○	○
High Ceiling Operation	-	-
Hot Start	○	○
Jet Cool	-	-
Low Ambient Control	Optional	Optional
Plasma Air Purifier	Accessory	Accessory
Prefilter(Washable / Anti-fungus)	○	○
Self Diagnosis	○	○
Sleep Mode	-	-
Soft Dry Operation	○	○
Swirl Swing	-	-
Space Control	-	-
Tele Control	Accessory	Accessory
Temperature Control	○	○
Test Function	○	○
Time Delay Safety Function	○	○
Timer (weekly)	○	○
Timer (24 hr On/Off)	○	○
Two Thermistor Control	○	○
Wired LCD Remote Control	○	○
Wireless Remote Control	Accessory	Accessory
Zero Standby Power	○	○
Zone Control	Accessory	Accessory

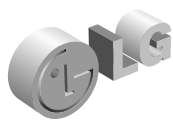
Notes :

○ : Basic

Optional : Factory-Installed

Accessory : Field-Installed

- : Not available on this system



Function	Ceiling Concealed Duct		
	AB-H246HTA0[B24AHV SH0]	AB-H306GTA0[B30AHV SG0]	AB-H366GTA0[B36AHV SG0]
Air Discharge outlet	-	-	-
Airflow Direction control (left & right)	-	-	-
Airflow Direction control (up & down)	-	-	-
Airflow Steps(Fan / Cool /Heat)	3/3/3	3/3/3	3/3/3
Auto Changeover	O	O	O
Auto Operation	O	O	O
Auto Restart Operation	O	O	O
Auto Swing	-	-	-
Central Control	Accessory	Accessory	Accessory
CHAOS wind (Auto wind)	-	-	-
Child Lock Function	O	O	O
Cooling & Fan Operation	O	O	O
Coolling, Heating & Fan Operation	-	-	-
Defrost / Deicing	O	O	O
Deodorizing Filter	-	-	-
Drain Pump	Accessory	Accessory	Accessory
E.S.P. Control	O	O	O
Electric Heater	-	-	-
Energy Saving Gold Fin	O	O	O
Environment Friendly Refrigerant	O	O	O
Fire Alarm Function	-	-	-
Forced Operation	O	O	O
Group Control	O	O	O
High Ceiling Operation	-	-	-
Hot Start	O	O	O
Jet Cool	-	-	-
Low Ambient Control	Optional	Optional	Optional
Plasma Air Purifier	Accessory	Accessory	Accessory
Prefilter(Washable / Anti-fungus)	O	O	O
Restart Delay (3-minutes)	O	O	O
Self Diagnosis	O	O	O
Sleep Mode	-	-	-
Soft Dry Operation	O	O	O
Space Control	-	-	-
Swirl Swing	-	-	-
Tele Control	Accessory	Accessory	Accessory
Temperature Control	O	O	O
Test Function	O	O	O
Time Delay Safety Function	O	O	O
Timer (weekly)	O	O	O
Timer (24 hr On/Off)	O	O	O
Two Thermistor Control	O	O	O
Wired LCD Remote Controller	O	O	O
Wireless Remote Controller	Accessory	Accessory	Accessory
Zero Standby Power	O	O	O
Zone Control	Accessory	Accessory	Accessory

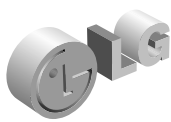
Notes :

O : Basic

Optional : Factory-Installed

Accessory : Field-Installed

- : Not available on this system



# 4. Specifications

Item		Unit	AB-H366GSA0[B36AH SG0]	AB-H426GSA0[B42AH SG0]	
General	Cooling Capacity	kcal/h(W)	9072(10550)	10457(12162)	
		Btu/h	36,000	41,500	
	Heating Capacity	kcal/h(W)	9702(11300)	11087(12895)	
		Btu/h	38,500	44,000	
	Input	Cooling	W	3,900	4,600
		Heating	W	3,600	4,500
	Running Current	Cooling	A	17.5	21.0
		Heating	A	16.0	20.0
	Starting Current	Cooling	A	68.0	125.0
		Heating	A	65.0	125.0
	Power Supply		∅ V, Hz	1,220-240,50	1,220-240,50
	Power Factor		%	97.5	97
	Electric Heater	(Optional)	KW	-	-
	E.E.R	Cooling	kcal/hW(W/W)	2.33(2.71)	2.27(2.65)
			Btu/hW	9.23	9.02
	C.O.P	Heating	W/W(kcal/hW)	3.15(2.71)	2.87(2.46)
			Btu/hW	10.69	9.78
	Setting Temperature Range	Cool	°C	18~30	18~30
		Heat	°C	16~30	16~30
	Dehumidification Rate		l/h	3.3	3.5
External Static Pressure		mm Aq	8	8	
Refrigerant Control Type			Capillary Tube	Capillary Tube	
Refrigerant charge		g(oz),type	2400(84.7),R410A	3500(123.43),R410A	
Indoor	Indoor Fan motor	Output	W	272	
		Type		condenser inducted	
	Model		IC-13450LG13A		
	No. of Poles		4		
	Input	W	323		
	Running Current	A	1.42		
	Capacitor	µF/Vac	6/370		
	Indoor Fan	Type		Sirocco Fan	
		No. Used / Diameter	EA/ (mm)	2/∅177	
		Motor Step		3	
	Air Circulation	Indoor(H/M/L)	CMM(CFM)	32/29/26.5(1130/1024/936)	32/29/26.5(1130/1024/936)
	Noise Level (SoundPress,1m)	Indoor(H/M/L)	dB(A)±3	42/40/38	42/40/38
	Temperature Controller			Thermistor	Thermistor
	Indoor Coil	Tube Size (OD)	inch(mm)	0.275(7.0)	0.275(7.0)
		Fins per inch		21	21
		No of Rows & Column		3R12C	3R12C
	Dimensions (W*H*D)	Indoor	inch(mm)	46.4*11.7 *17.71(1180*298*450)	46.4*11.7 *17.71(1180*298*450)
	Net Weight	indoor	kg(lbs)	38(83.8)	38(83.8)
		Locked Rotor Amp.	A	43/43	62/43
	Outdoor	Compressor	Type		Rotary
Quantity				2	
Model			GJ222PAC	GP290PAD/GJ222PAB	
Maker			LG	LG/LG	
Capacity		kcal/h(Btu/h)	4687(18600)*2	6250(24800)/4685(18600)	
Motor Type			PSC	PSC	
Motor Input		W	1867*2	2150/1560	
Oil Type			FVC68D	FVC68D/FVC68D	
Oil Charge		cc	700*2	1130/500	
PTCR		Ω	-	-	
O.L.P Type(model name)			Internal	Internal	
Outdoor Coil		Tube Size (OD)	inch(mm)	0.275(7)	0.375(9.52)
		Fins per inch		18	18
		No of Rows & Column		2R48C	2R44C
Outdoor Fan motor		Output	W	47.2	129
		Model		OBM-3018P2	OBM-4006P2
Input		W	107.5	151	
Running Current		A	0.48	0.63	
No. of Poles			4	6	
Capacitor		µF/Vac	2/400	6/370	
Outdoor Fan	Type		Propeller	Propeller	
	No. Used / Diameter	EA/ mm	2/16.5(420)	2/18.1(460)	
	Discharge	Side/top	Side Discharge	Side Discharge	
Air Circulation	Outdoor	CMM(CFM)	30(1060)*2	53(1872) *2	
Noise Level (SoundPress,1m)	Outdoor	dB(A)±3	58	62	
SVC Valve	Liquid	inch(mm)	1/4(6.35)	3/8(9.52)	
	Gas	inch(mm)	5/8(15.88)	5/8(19.05)	
Dimensions (W*H*D)	Outdoor	inch(mm)	34.3*41.7*12.6(870*1060*320)	35.4*45.8*14.5(900*1165*370)	
Net Weight	Outdoor	kg(lbs)	75(165.3)	90(198.4)	
Other	Power Supply Cable	No.* mm <sup>2</sup>	3*5.5	3*5.5	
	Connecting Cable	No.* mm <sup>2</sup>	5*0.75	5*0.75	
	Connecting Tube (∅ Socket Flare)	Liquid Side	inch(mm)	1/4(6.35)	3/8(9.52)
		Gas Side	inch(mm)	5/8(15.88)	3/4(19.05)
		Length, std	m	7.5	7.5
		Max length/Elevation	m	50/30	50/30
	Drain Hose	Inner diameter(∅)	mm	22.6	22.6
		Outer diameter(∅)	mm	25.4	25.4
	Packing Dimension (W*H*D)	Indoor	inch(mm)	56.5*14.8*23.0(1435*375*585)	56.5*14.8*23.0(1435*375*585)
		Outdoor	inch(mm)	41.1*44.9*17.3(1045*1140*440)	41.7*48.0*18.3(1060*1220*465)
Stuffing Quantity	With S/Parts		30/64	27/55	
	Without S/Parts		34/70	27/55	

**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  
 - Interconnecting Piping Length 7.5m  
 - Level Difference of Zero.

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  
 - Interconnecting Piping Length 7.5 m  
 - Level Difference of Zero.

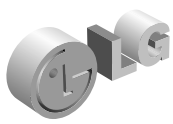
2. Capacities are Net Capacities.  
 3. Due to our policy of innovation some specifications may be changed without notification.





Item		Unit	AB-H246HTA0[B24AHV SHO]	AB-H306GTA0[B30AHV SGO]	AB-H366GTA0[B36AHV SGO]	
General	Cooling Capacity	kcal/h(W)	5,795(6,740)	8063(9378)	8568(9964)	
		Btu/h	23,000	32,000	34000	
	Heating Capacity	kcal/h(W)	6,551(7,619)	9449(10990)	9828(11430)	
		Btu/h	26,000	37,500	39000	
	Input	Cooling	W	2,500	3,300	3450
		Heating	W	2,700	3,400	3550
	Running Current	Cooling	A	11.0	15.1	15.5
		Heating	A	12.0	16.0	16
	Starting Current	Cooling	A	48.0	125.0	125
		Heating	A	46.0	125.0	125
	Power Supply	Q.V.Hz		1,220-240,50	1,220-240,50	1,220-240,50
	Power Factor	%		-	-	-
	Electric Heater	( Optional )	KW	-	-	-
	E.E.R	Cooling	kcal/hrW(W/W)	2.32(2.70)	2.44(2.84)	2.48(2.89)
			Btu/hW	9.21	9.69	9.9
	C.O.P	Heating	kcal/hrW(W/W)	2.42(2.82)	2.78(3.23)	2.77(3.22)
			Btu/hW	9.62	11.02	10.99
	Setting Temperature Range	Cool	°C	18-30	18-30	18-30
		Heat	°C	16-30	16-30	16-30
	Dehumidification Rate		l/h	2.64	3.2	3.3
External Static Pressure		mm Aq	6	8	8	
Refrigerant Control Type			Capillary Tube	Capillary Tube	Capillary Tube	
Refrigerant charge		g(oz).type	2930(103.4) , R410a	2600(91.7),R410A	2600(91.7),R410A	
Indoor	Indoor Fan motor	Output	118	272	272	
		Type	condenser inducted	condenser inducted	condenser inducted	
	Model	IC-13450LG13C	IC-13450LG13A	IC-13450LG13A		
	No. of Poles	4	4	4		
	Input	W	180	323	323	
	Running Current	A	0.92	1.42	1.42	
	Capacitor	µF/Vac	6/370	6/370	6/370	
	Indoor Fan	Type		Sirocco Fan	Sirocco Fan	Sirocco Fan
		No. Used / Diameter	EA/ (mm)	2/Ø177	2/Ø177	2/Ø177
	Indoor Fan RPM	Cooling(H/M/L)		1127/1037/937	1384(High)	1384(High)
		Heating(H/M/L)		1127/1037/937	1384(High)	1384(High)
	Air Circulation	Indoor(H/M/L)	CMM(CFM)	18/16.5/14(636/583/494)	32/29/26.5(1130/1024/936)	32/29/26.5(1130/1024/936)
	Noise Level (SoundPress,1m)	Indoor(H/M/L)	dB(A)±3	37/35/33	42/40/38	42/40/38
	Temperature Controller			Thermistor	Thermistor	Thermistor
	Indoor Coil	Tube Size (OD)	inch(mm)	0.275(7.0)	0.275(7.0)	0.275(7.0)
		Fins per inch		21	21	21
	No of Rows & Column			3R 10C	3R 12C	3R 12C
	Dimensions (W*H*D)	Indoor	inch(mm)	34.6/10.2/17.7(880*260*450)	46.4*11.7 *17.7(1180*298*450)	46.4*11.7 *17.7(1180*298*450)
	Net Weight	indoor	kg(lbs)	34(74.9)	38(83.8)	38(83.8)
	Outdoor	Compressor	Locked Rotor Amp.	A	62	88/96
Type				Rotary	Rotary	Rotary
Quantity			1	1	1	
Model			GP290PAC	NN40VAAMT	NN40VAAMT	
maker			LG	SIAM	SIAM	
Capacity		kcal/hr(Btu/h)	6,225(24,700)/6,275(24,900)	8770(34802)/8860(35158)	8770(34802)/8860(35158)	
Motor Type			PSC	PSC	PSC	
Motor Input		W	2,470/2,541	3430/3530	3430/3530	
Oil Type			FVC68D	MEL 56	MEL 56	
Oil Charge		CC	1130±10	1300	1300	
PTCR			-	-	-	
O.L.P Type(model name)				Internal	Internal	
Outdoor Coil		Tube Size (OD)	inch(mm)	0.275(7.0)	0.275(7)	0.275(7)
		Fins per inch		18	18	18
No of Rows & Column				1R(2R) 30C	2R34C	2R34C
Outdoor Fan motor		Output	W	90	189	189
		Model		IC-14654 LG97C	IC-13670LG39D	IC-13670LG39D
Input		W	168	280	280	
Running Current		A	0.74	1.28	1.28	
No. of Poles			6	6	6	
Capacitor	µF/Vac	6.0/370	6/370	6/370		
Outdoor Fan	Type		Propeller	Propeller	Propeller	
	No. Used / Diameter	EA/ inch(mm)	1/16.5(420)	1/20.7(526)	1/20.7(526)	
Discharge	Side / Top		Top Discharge	Top Discharge	Top Discharge	
Speed	rpm		900	930	930	
Air Circulation	Outdoor	CMM(CFM)	55(1,940)	92(3245)	92(3245)	
Noise Level (SoundPress,1m)	Outdoor	dB(A)±3	60	68	68	
SVC Valve	Liquid	inch(mm)	1/4(6.35)	1/4(6.35)	1/4(6.35)	
	Gas	inch(mm)	1/2(12.7)	5/8(15.88)	5/8(15.88)	
Dimensions (W*H*D)	Outdoor	inch(mm)	24.6/27.7/22.7(626*703*576)	28*32.6*27(712*828*687)	28*32.6*27(712*828*687)	
Net Weight	Outdoor	kg(lbs)	60(132.3)	75(165.3)	75(165.3)	
Other	Power Supply Cable	No.* mm <sup>2</sup>	3*5.5	3*5.5	3*5.5	
	Connecting Cable	No.* mm <sup>2</sup>	5*1.25	5*1.25	5*1.25	
	Connecting Tube (Ø. Socket Flare)	Liquid Side	inch(mm)	1/4(6.35)	1/4(6.35)	1/4(6.35)
		Gas Side	inch(mm)	1/2(12.7)	5/8(15.88)	5/8(15.88)
		Length, std	m	7.5	7.5	7.5
	Drain Hose	Max length/Elevation	m	50/30	50/30	50/30
		In diameter	mm	22.6	22.6	22.6
	Out diameter	mm	25.4	25.4	25.4	
	Packing Dimension (W*H*D)	Indoor	inch(mm)	44.7*13.4*22.2(1135*340*565)	56.5*14.8*23.0(1435*375*585)	56.5*14.8*23.0(1435*375*585)
		Outdoor	inch(mm)	27.9*29.3*26.0(710*745*660)	31.1*35.0*30.1(790*890*765)	31.1*35.0*30.1(790*890*765)
Stuffing Quantity	With S/Parts		20/40ft	45/96	30/66	
	Without S/Parts		20/40ft	41/86	27/58	

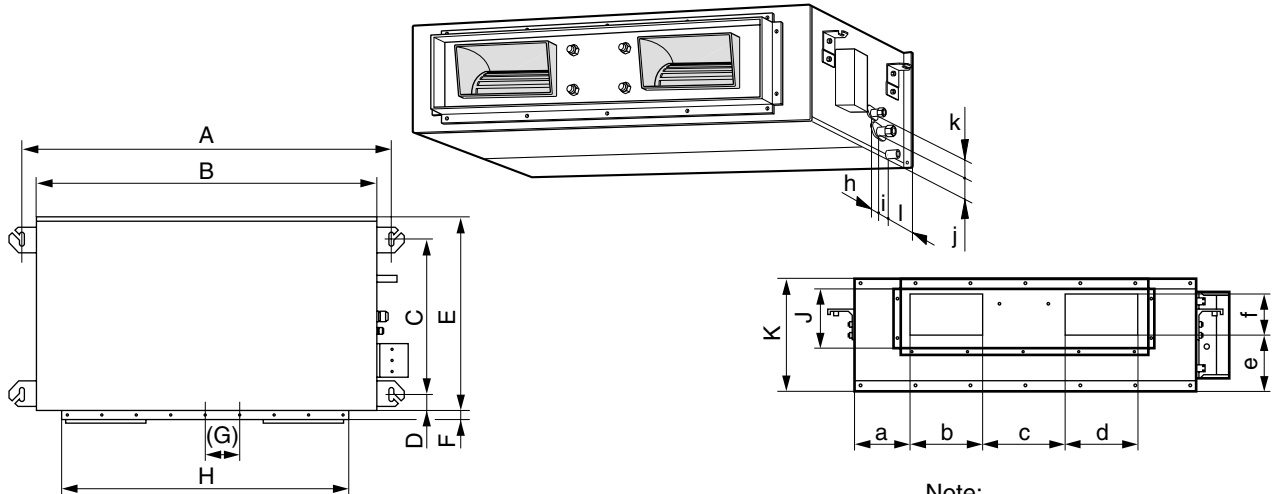
**Notes:** 1. Capacities are based on the following conditions:  
 Cooling: - Indoor Temperature 27°C(80.6°F) DB /19 °C(66.2°F) WB Heating: - Indoor Temperature 20°C(68°F) DB / 15°C(59°F) WB  
 - Outdoor Temperature 35 °C(95°F) DB /24 °C(75.2°F) WB - Outdoor Temperature 7°C(44.6°F) DB / 6°C(42.8°F) WB  
 - Interconnecting Piping Length 7.5m - Interconnecting Piping Length 7.5 m  
 - Level Difference of Zero. - Level Difference of Zero.  
 2. Capacities are Net Capacities.  
 3. Due to our policy of innovation some specifications may be changed without notification.



# 5. Dimensional Drawings

## 5.1 Indoor Unit

AB-H36(42)6GSA0[B36AH SG0, B42AH SG0], AB-H30(36)6GTA0[B30AHV SG0, B36AHV SG0], AB-H246HTA0[B24AHV SH0]



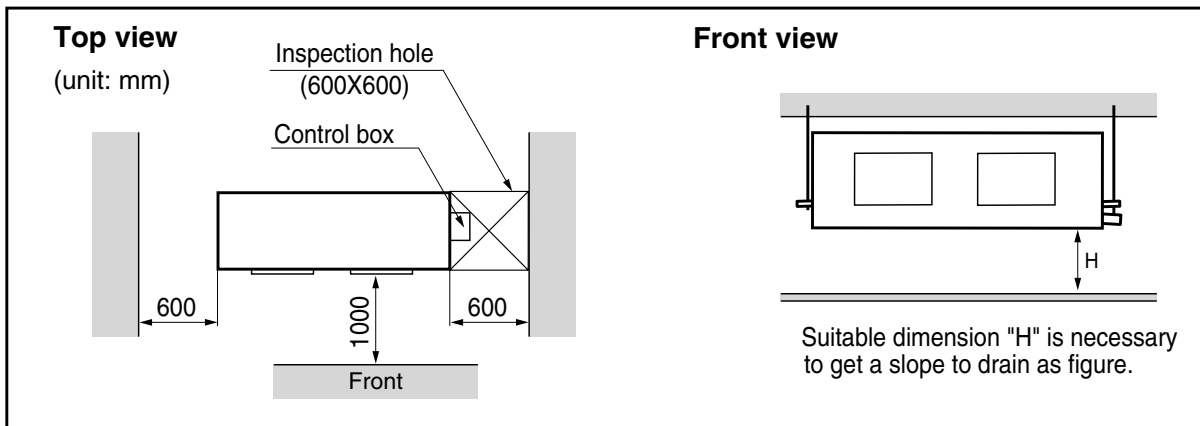
Note:

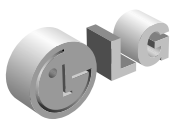
1. Pipe Specification(mm)

Model	Liquid	Gas
24k	Ø6.35	Ø12.7
30k	Ø6.35	Ø15.88
36k	Ø6.35	Ø15.88
42k	Ø9.52	Ø19.05

(Unit: mm)

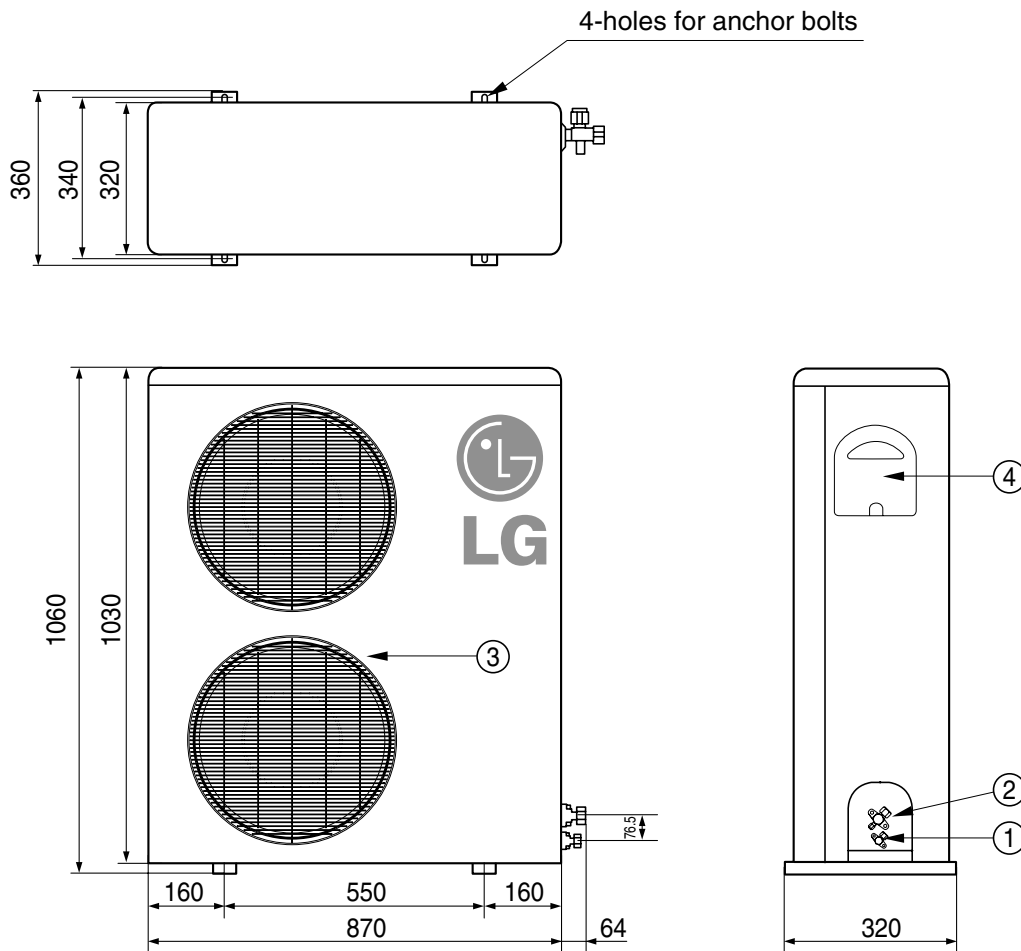
Capacity	A	B	C	D	E	F	(G)	H	J	K	a	b	c	d	e	f	h	i	j	k	l
AB-H246HTA0[B24AHV SH0]	932	880	355	45.5	450	30	87	750	163	260	61.5	243	212.3	243	110	130	52	66	81	30	158.5
AB-H306GTA0[B30AHV SG0] AB-H366GTA0[B36AHV SG0] AB-H366GSA0[B36AH SG0] AB-H426GSA0[B42AH SG0]	1232	1180	355	45.5	450	30	87	830	186	298	229.5	243	232	243	116	160	53	59	81	19	158.5





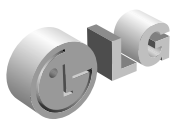
## 5.2 Outdoor Unit

### AB-H366GSA0[B36AH SG0]

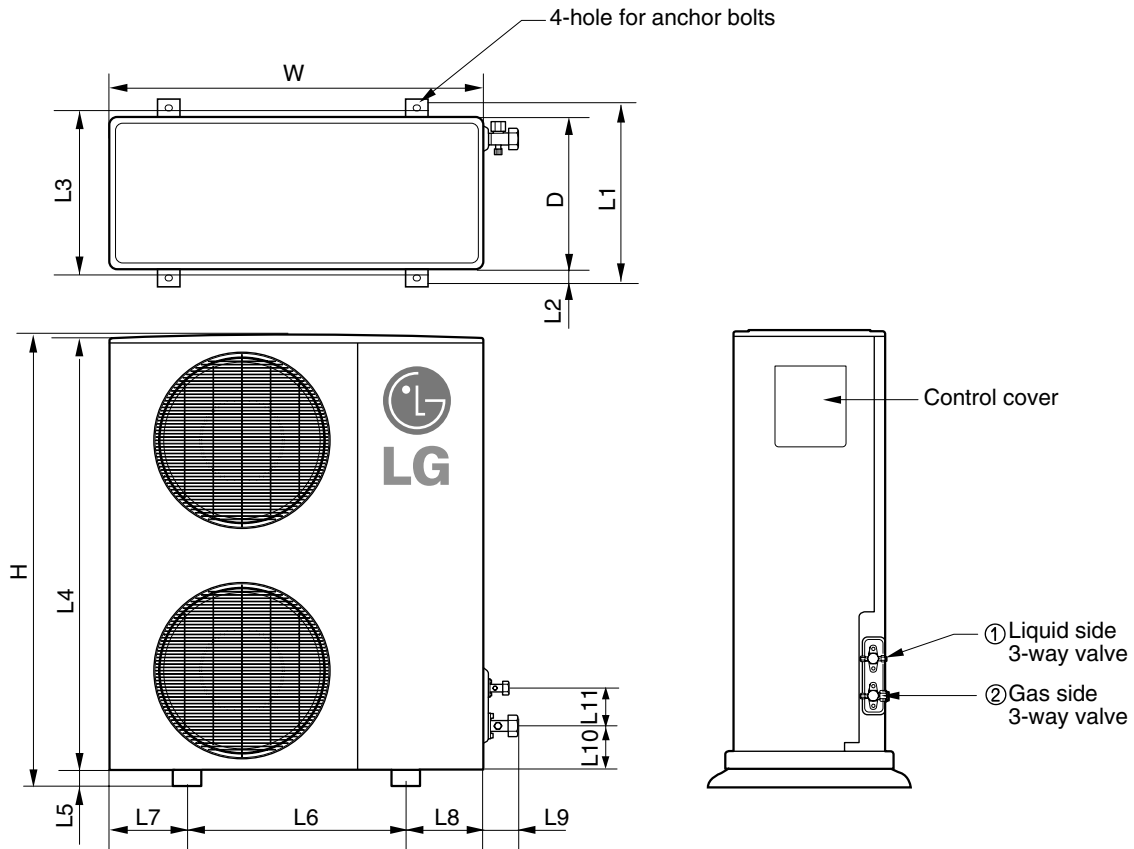


(Unit: mm)

Number	Name	Description
1	Liquid side service valve(mm)	Ø6.35
2	Gas side service valve(mm)	Ø15.88
3	Air discharge grill	
4	Control Cover	



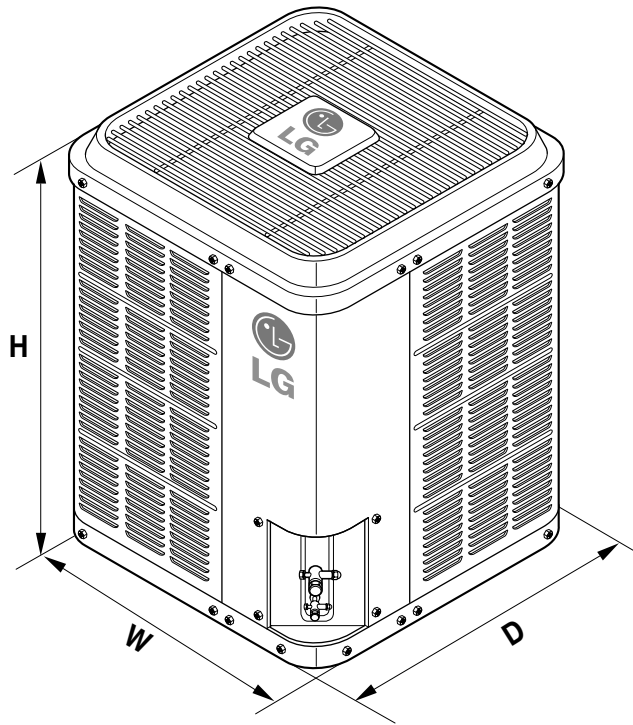
**AB-H426GSA0[B42AH SG0]**



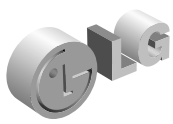
Model		AB-H426GSA0[B42AH SG0]
Dimensions		
W	mm	900
H	mm	1,165
D	mm	370
L1	mm	460
L2	mm	45
L3	mm	410
L4	mm	1,135
L5	mm	30
L6	mm	550
L7	mm	175
L8	mm	175
L9	mm	112
L10	mm	120
L11	mm	83
①	mm	Ø9.52
②	mm	Ø19.05



**AB-H246HTA0[B24AHV SH0], AB-H30(36)6GTA0[B30AHV SG0, B36AHV SG0]**



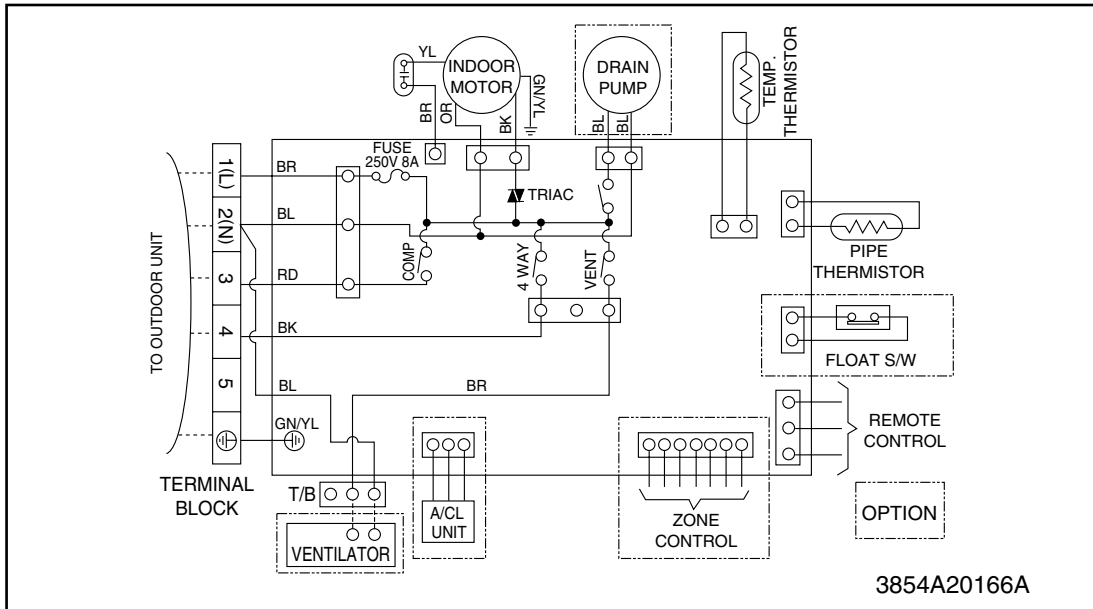
MODEL	24k	30k/36k
W(mm)	626	712
H(mm)	703	823
D(mm)	576	687



# 6. Wiring Diagrams

## 6.1 Indoor Unit

Model No.: AB-H30(36)6GTA0[B30AHV SG0, B36AHV SG0], AB-H36(42)6GSA0[B36AH SG0, B42AH SG0]

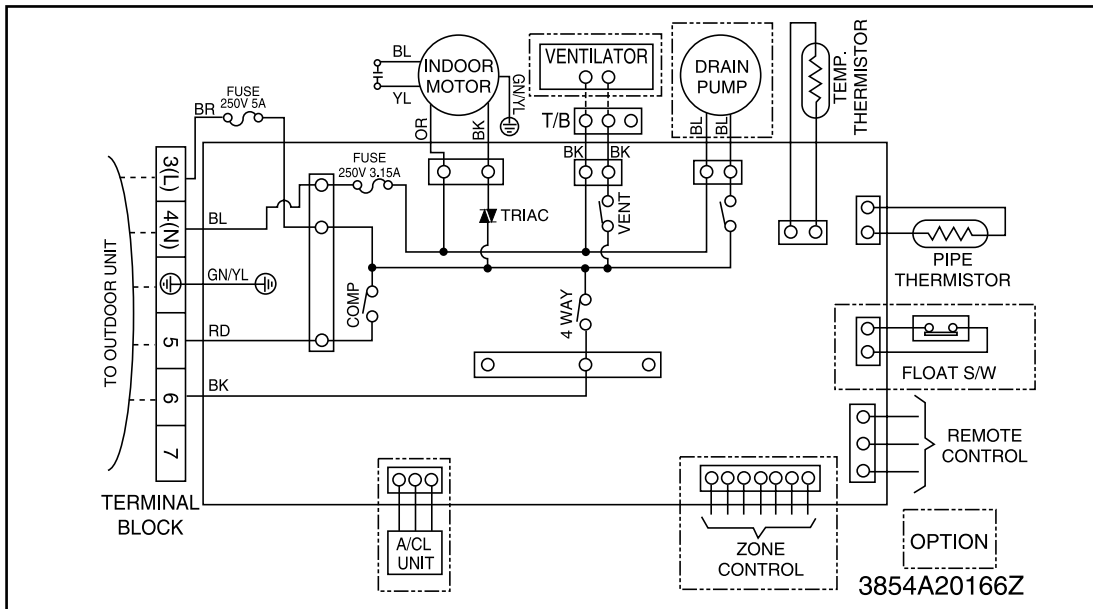


3854A20166A

Notes:

BK	BLACK	OR	ORANGE	YL	YELLOW
BR	BROWN	RD	RED	BL	BLUE
WH	WHITE	GN/YL	GREEN/YELLOW	[---]	OPTIONAL PART

Model No.: AB-H246HTA0[B24AHV SH0]



3854A20166Z

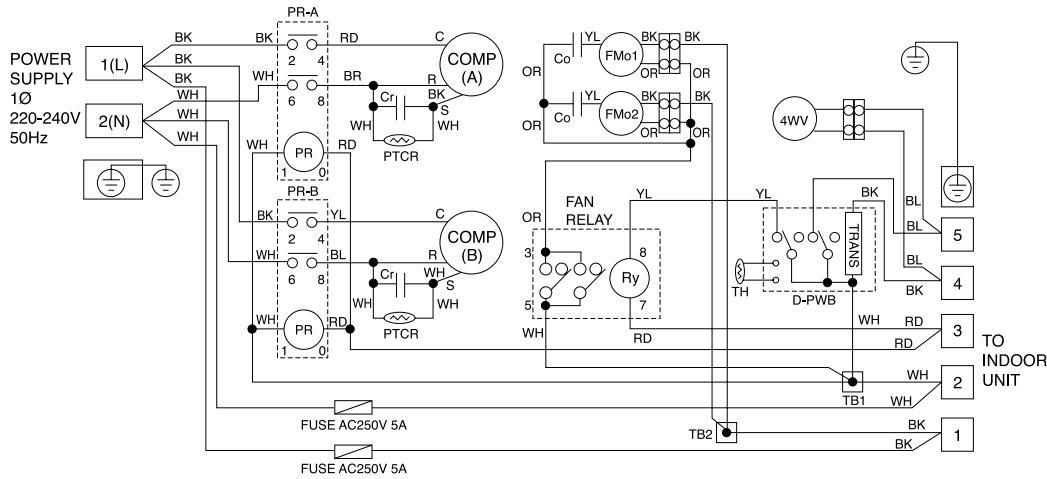
Notes:

BK	BLACK	OR	ORANGE	YL	YELLOW
BR	BROWN	RD	RED	BL	BLUE
WH	WHITE	GN/YL	GREEN/YELLOW	[---]	OPTIONAL PART



### 6.2 Outdoor Unit

#### AB-H366GSA0[B36AH SG0]

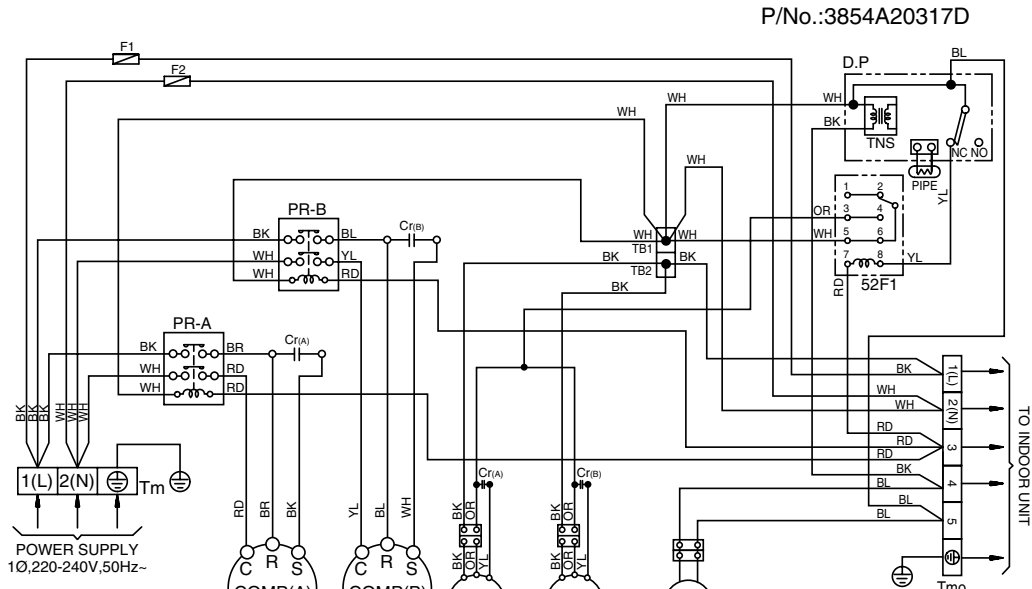


**NOTE**  
 PR POWER RELAY  
 4WV 4WAY VALVE SOLENOID  
 COMP COMPRESSOR  
 FMo1,2 FAN MOTOR 1,2  
 D-PWB DEICER PWB  
 Ry FAN RELAY COIL

**NOTE**  
 BR : BROWN  
 BK : BLACK  
 RD : RED  
 BL : BLUE  
 OR : ORANGE  
 YL : YELLOW

P/NO:3854A20317F

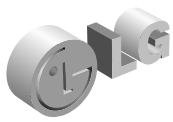
#### AB-H426GSA0[B42AH SG0]



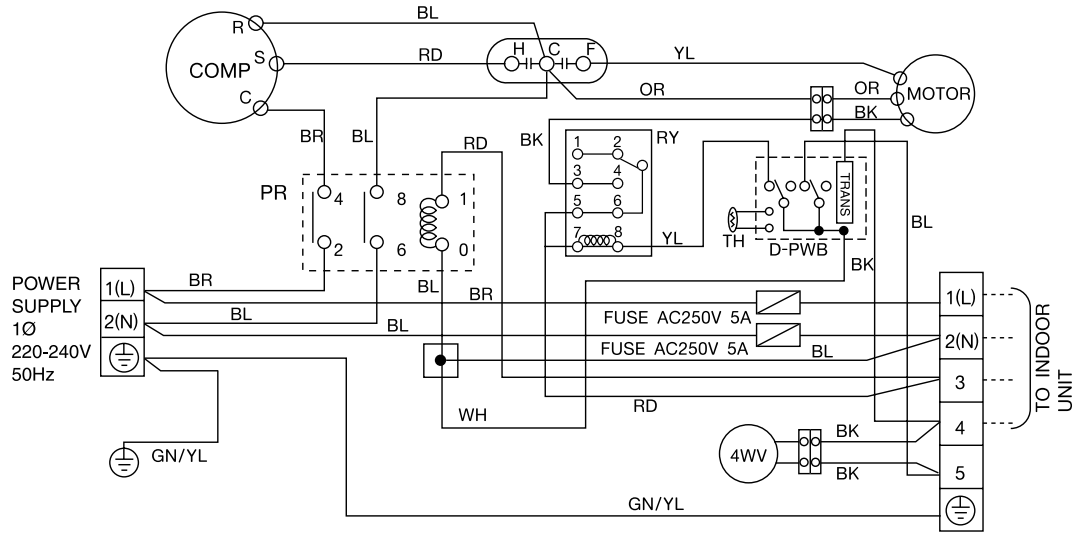
P/No.:3854A20317D

**NOTE**  
 BL : BLUE RD : RED  
 BK : BLACK WH : WHITE  
 BR : BROWN YL : YELLOW  
 OR : ORANGE GN/YL : GREEN/YELLOW

49C	INTERNAL O.L.P FOR COMP.	PIPE	PIPE SENSOR	PR	POWER RELAY	F1,2	FUSE(250V, 5A)
FMo	OUTDOOR FAN MOTOR	4WV	4-WAY VALVE COIL	Tm	MAIN TERMINAL BLOCK	D.P	DEICER PCB
49FMo	INTERNAL T.P FOR FMo	Cr	CAPACITOR	Tmo	TERMINAL BLOCK FOR CONNECTING	52C	RELAY FOR COMP



**AB-H246HTA0[B24AHV SH0], AB-H30(36)6GTA0[B30AHV SG0, B36AHV SG0]**



**NOTE**

PR	POWER RELAY
4WV	4WAY VALVE SOLENOID
COMP	COMPRESSOR
D-PWB	DEICER PWB
Ry	FAN RELAY COIL

**NOTE**

BR	BROWN
BK	BLACK
RD	RED
BL	BLUE
OR	ORANGE
YL	YELLOW

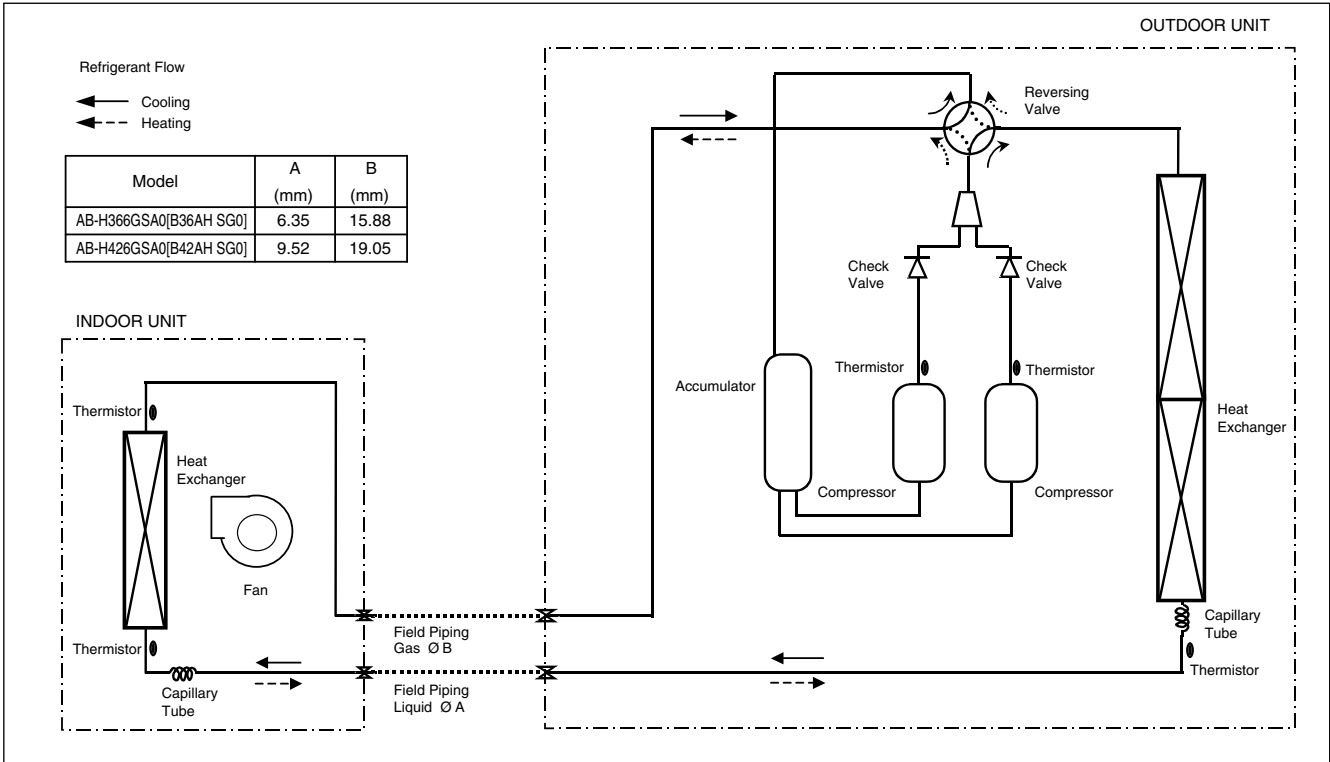
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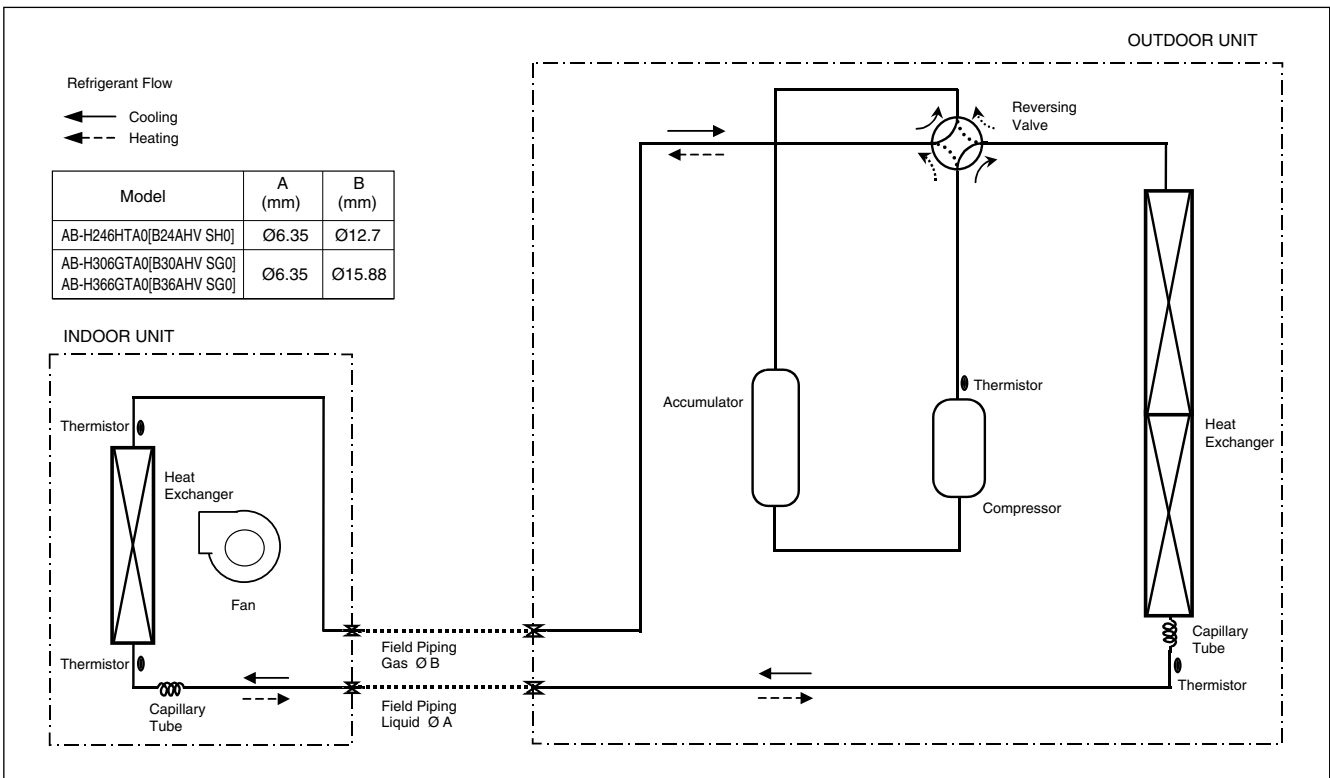


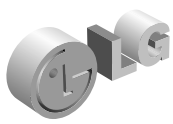
# 7. Piping Diagrams

Model No.: AB-H36(42)6GSA0[B36AH SG0, B42AH SG0]



Model No.: AB-H246HTA0[B24AHV SH0], AB-H30(36)6GTA0[B30AHV SG0, B36AHV SG0]





## 8. Performance Data

### • Cooling Capacity

<b>Model</b>	<b>AB-H366GSA0[B36AH SG0]</b>
AFR	32

Indoor Air Temperature		Outdoor Air Temperature : °CDB																	
		20			25			32			35			40			43		
°CWB	°CDB	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14.0	20.0	8.6	6.8	2.6	8.4	6.7	3.0	8.0	6.6	3.5	7.7	6.4	3.7	7.5	6.3	4.0	7.3	6.2	4.1
16.0	22.0	10.0	7.7	2.6	9.8	7.6	3.1	9.3	7.4	3.6	9.0	7.3	3.8	8.7	7.1	4.0	8.5	7.0	4.2
18.0	25.0	11.1	8.4	2.6	10.9	8.3	3.1	10.4	8.1	3.6	10.1	7.9	3.8	9.7	7.7	4.1	9.5	7.6	4.2
19.0	27.0	11.7	8.7	2.7	11.4	8.6	3.2	10.9	8.3	3.7	10.6	8.1	3.9	10.2	7.9	4.1	9.9	7.8	4.3
22.0	30.0	12.8	9.2	2.7	12.5	9.1	3.2	11.9	8.8	3.7	11.6	8.6	4.0	11.1	8.3	4.2	10.9	8.2	4.3
24.0	32.0	13.3	9.4	2.8	13.0	9.2	3.3	12.4	8.9	3.8	12.0	8.7	4.0	11.6	8.4	4.3	11.3	8.3	4.4

<b>Model</b>	<b>AB-H426GSA0[B42AH SG0]</b>
AFR	32

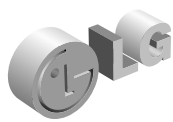
Indoor Air Temperature		Outdoor Air Temperature : °CDB																	
		20			25			32			35			40			43		
°CWB	°CDB	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14.0	20.0	9.9	7.8	3.0	9.7	7.8	3.6	9.2	7.6	4.2	8.9	7.4	4.4	8.6	7.2	4.7	8.4	7.1	4.8
16.0	22.0	11.5	8.9	3.1	11.3	8.8	3.6	10.7	8.6	4.2	10.4	8.4	4.5	10.0	8.2	4.7	9.8	8.1	4.9
18.0	25.0	12.8	9.7	3.1	12.6	9.6	3.7	12.0	9.3	4.3	11.6	9.1	4.5	11.2	8.8	4.8	10.9	8.7	5.0
19.0	27.0	13.4	10.0	3.2	13.2	9.9	3.7	12.5	9.6	4.4	12.2	9.4	4.6	11.7	9.1	4.9	11.4	9.0	5.1
22.0	30.0	14.8	10.6	3.2	14.4	10.5	3.8	13.8	10.1	4.4	13.3	9.9	4.7	12.9	9.6	5.0	12.6	9.4	5.1
24.0	32.0	15.3	10.8	3.2	15.0	10.6	3.8	14.3	10.3	4.5	13.9	10.0	4.7	13.3	9.7	5.0	13.0	9.6	5.2

### • Symbol

AFR : Air flow rate	[m <sup>3</sup> /min]
DB : Dry bulb temperature	[°C]
WB : Wet bulb temperature	[°C]
TC : Total capacity	[kW]
SHC : Sensible capacity	[kW]
PI : Power Input	[kW]
(Comp.+ indoor fan motor+outdoor fan motor)	

### • Notes

- All capacities are net, evaporator fan motor heat is deducted.
- Indicates nominal capacity.
- Direct interpolation is permissible. Do not extrapolate
- Capacities are based on the following conditions:
  - Interconnecting Piping Length 7.5m
  - Level Difference of Zero.



• Cooling Capacity

<b>Model</b>	<b>AB-H246HTA0[B24AHV SH0]</b>
<b>AFR</b>	18

Indoor Air Temperature		Outdoor Air Temperature : °CDB																	
		20			25			32			35			40			43		
°CWB	°CDB	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14	20	5.5	4.0	1.6	5.4	4.0	1.9	5.1	3.9	2.3	4.9	3.8	2.4	4.8	3.7	2.5	4.7	3.6	2.6
16	22	6.4	4.5	1.7	6.2	4.5	2.0	5.9	4.4	2.3	5.8	4.3	2.4	5.6	4.2	2.6	5.4	4.1	2.7
18	25	7.1	4.9	1.7	7.0	4.9	2.0	6.6	4.7	2.3	6.4	4.6	2.5	6.2	4.5	2.6	6.1	4.4	2.7
19	27	7.4	5.1	1.7	7.3	5.0	2.0	6.9	4.9	2.4	6.7	4.8	2.5	6.5	4.7	2.7	6.3	4.6	2.7
22	30	8.2	5.4	1.7	8.0	5.3	2.1	7.6	5.2	2.4	7.4	5.0	2.5	7.1	4.9	2.7	7.0	4.8	2.8
24	32	8.5	5.5	1.8	8.3	5.4	2.1	7.9	5.2	2.4	7.7	5.1	2.6	7.4	5.0	2.7	7.2	4.9	2.8

<b>Model</b>	<b>AB-H306GTA0[B30AHV SG0]</b>
<b>AFR</b>	32

Indoor Air Temperature		Outdoor Air Temperature : °CDB																	
		20			25			32			35			40			43		
°CWB	°CDB	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14	20	7.6	6.1	2.2	7.4	6.1	2.6	7.1	5.9	3.0	6.9	5.8	3.1	6.6	5.6	3.3	6.5	5.6	3.5
16	22	8.9	6.9	2.2	8.7	6.9	2.6	8.3	6.7	3.0	8.0	6.5	3.2	7.7	6.4	3.4	7.6	6.3	3.5
18	25	9.9	7.6	2.2	9.7	7.5	2.6	9.2	7.2	3.1	9.0	7.1	3.2	8.6	6.9	3.5	8.4	6.8	3.6
19	27	10.4	7.8	2.3	10.1	7.7	2.7	9.7	7.5	3.1	9.4	7.3	3.3	9.0	7.1	3.5	8.8	7.0	3.6
22	30	11.4	8.3	2.3	11.1	8.2	2.7	10.6	7.9	3.2	10.3	7.7	3.3	9.9	7.5	3.6	9.7	7.4	3.7
24	32	11.8	8.4	2.3	11.6	8.3	2.8	11.0	8.0	3.2	10.7	7.8	3.4	10.3	7.6	3.6	10.0	7.5	3.7

<b>Model</b>	<b>AB-H366GTA0[B36AHV SG0]</b>
<b>AFR</b>	32

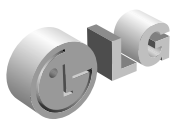
Indoor Air Temperature		Outdoor Air Temperature : °CDB																	
		20			25			32			35			40			43		
°CWB	°CDB	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14	20	8.1	6.5	2.3	7.9	6.5	2.7	7.5	6.3	3.1	7.3	6.2	3.3	7.0	6.0	3.5	6.9	5.9	3.6
16	22	9.4	7.4	2.3	9.2	7.3	2.7	8.8	7.1	3.2	8.5	7.0	3.3	8.2	6.8	3.6	8.0	6.7	3.7
18	25	10.5	8.1	2.3	10.3	8.0	2.8	9.8	7.7	3.2	9.5	7.5	3.4	9.2	7.4	3.6	9.0	7.2	3.7
19	27	11.0	8.3	2.4	10.8	8.2	2.8	10.3	8.0	3.3	10.0	7.8	3.5	9.6	7.6	3.7	9.4	7.5	3.8
22	30	12.1	8.8	2.4	11.8	8.7	2.8	11.3	8.4	3.3	10.9	8.2	3.5	10.5	8.0	3.7	10.3	7.9	3.8
24	32	12.5	9.0	2.4	12.3	8.9	2.9	11.7	8.5	3.4	11.3	8.3	3.5	10.9	8.1	3.8	10.7	8.0	3.9

• Symbol

- AFR : Air flow rate [m³/min]
- DB : Dry bulb temperature [°C]
- WB : Wet bulb temperature [°C]
- TC : Total capacity [kW]
- SHC : Sensible capacity [kW]
- PI : Power Input [kW]  
(Comp.+ indoor fan motor+outdoor fan motor)

• Notes

1. All capacities are net, evaporator fan motor heat is deducted.
2.  Indicates nominal capacity.
3. Direct interpolation is permissible. Do not extrapolate
4. Capacities are based on the following conditions:
  - Interconnecting Piping Length 7.5m
  - Level Difference of Zero.



• Heating Capacity

<b>Model</b>	<b>AB-H366GSA0[B36AH SG0]</b>
AFR	32

Indoor Air Temperature	Outdoor Air Temperature : °CWB											
	-10		-5		0		6		10		15	
°CDB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16.0	7.6	2.6	9.0	2.9	10.4	3.1	12.1	3.4	13.1	3.6	14.4	3.8
18.0	7.4	2.7	8.7	3.0	10.1	3.2	11.7	3.5	12.7	3.7	14.0	3.9
20.0	7.2	2.8	8.4	3.1	9.8	3.3	11.3	3.6	12.3	3.8	13.6	4.1
22.0	6.9	2.9	8.1	3.2	9.4	3.4	10.9	3.7	11.8	3.9	13.1	4.2
24.0	6.7	3.0	7.8	3.3	9.1	3.5	10.6	3.8	11.4	4.0	12.6	4.3

<b>Model</b>	<b>AB-H426GSA0[B42AH SG0]</b>
AFR	32

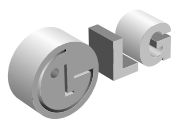
Indoor Air Temperature	Outdoor Air Temperature : °CWB											
	-10		-5		0		6		10		15	
°CDB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16.0	8.7	3.3	10.3	3.6	11.9	3.9	13.8	4.2	14.9	4.4	16.5	4.8
18.0	8.4	3.4	9.9	3.7	11.5	4.0	13.4	4.4	14.5	4.6	16.0	4.9
20.0	8.2	3.5	9.6	3.8	11.1	4.2	12.9	4.5	14.0	4.7	15.5	5.1
22.0	7.9	3.6	9.3	4.0	10.7	4.3	12.5	4.6	13.5	4.9	14.9	5.2
24.0	7.6	3.7	9.0	4.1	10.4	4.4	12.1	4.8	13.1	5.0	14.4	5.4

• Symbol

- AFR : Air flow rate [m<sup>3</sup>/min]
- DB : Dry bulb temperature [°C]
- WB : Wet bulb temperature [°C]
- TC : Total capacity [kW]
- SHC : Sensible capacity [kW]
- PI : Power Input [kW]  
(Comp.+ indoor fan motor+outdoor fan motor)

• Notes

1. All capacities are net, evaporator fan motor heat is deducted.
2.  Indicates nominal capacity.
3. Direct interpolation is permissible. Do not extrapolate
4. Capacities are based on the following conditions:
  - Interconnecting Piping Length 7.5m
  - Level Difference of Zero.



• Heating Capacity

<b>Model</b>	<b>AB-H246HTA0[B24AHV SH0]</b>
AFR	18

Indoor Air Temperature	Outdoor Air Temperature : °CWB											
	-10		-5		0		6		10		15	
°CDB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16	5.1	2.0	6.1	2.2	7.0	2.3	8.2	2.5	8.8	2.7	9.7	2.9
18	5.0	2.0	5.9	2.2	6.8	2.4	7.9	2.6	8.5	2.8	9.4	3.0
20	4.8	2.1	5.7	2.3	6.6	2.5	7.6	2.7	8.3	2.8	9.2	3.0
22	4.7	2.2	5.5	2.4	6.3	2.6	7.4	2.8	8.0	2.9	8.8	3.1
24	4.5	2.2	5.3	2.4	6.1	2.7	7.1	2.9	7.7	3.0	8.5	3.2

<b>Model</b>	<b>AB-H306GTA0[B30AHV SG0]</b>
AFR	32

Indoor Air Temperature	Outdoor Air Temperature : °CWB											
	-10		-5		0		6		10		15	
°CDB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16	7.4	2.5	8.7	2.7	10.1	3.0	11.8	3.2	12.7	3.4	14.1	3.6
18	7.2	2.6	8.5	2.8	9.8	3.1	11.4	3.3	12.3	3.5	13.6	3.7
20	7.0	2.6	8.2	2.9	9.5	3.2	11.0	3.4	12.0	3.6	13.2	3.8
22	6.7	2.7	7.9	3.0	9.2	3.3	10.7	3.5	11.5	3.7	12.7	4.0
24	6.5	2.8	7.6	3.1	8.8	3.4	10.3	3.6	11.1	3.8	12.3	4.1

<b>Model</b>	<b>AB-H366GTA0[B36AHV SG0]</b>
AFR	32

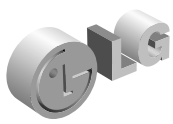
Indoor Air Temperature	Outdoor Air Temperature : °CWB											
	-10		-5		0		6		10		15	
°CDB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
16	7.7	2.6	9.1	2.8	10.5	3.1	12.2	3.3	13.2	3.5	14.6	3.8
18	7.5	2.7	8.8	2.9	10.2	3.2	11.8	3.4	12.8	3.6	14.2	3.9
20	7.3	2.8	8.5	3.0	9.9	3.3	11.4	3.6	12.4	3.7	13.7	4.0
22	7.0	2.9	8.2	3.1	9.5	3.4	11.1	3.7	12.0	3.9	13.2	4.1
24	6.7	2.9	8.0	3.2	9.2	3.5	10.7	3.8	11.6	4.0	12.8	4.3

• Symbol

AFR : Air flow rate	[m <sup>3</sup> /min]
DB : Dry bulb temperature	[°C]
WB : Wet bulb temperature	[°C]
TC : Total capacity	[kW]
SHC : Sensible capacity	[kW]
PI : Power Input	[kW]
(Comp.+ indoor fan motor+outdoor fan motor)	

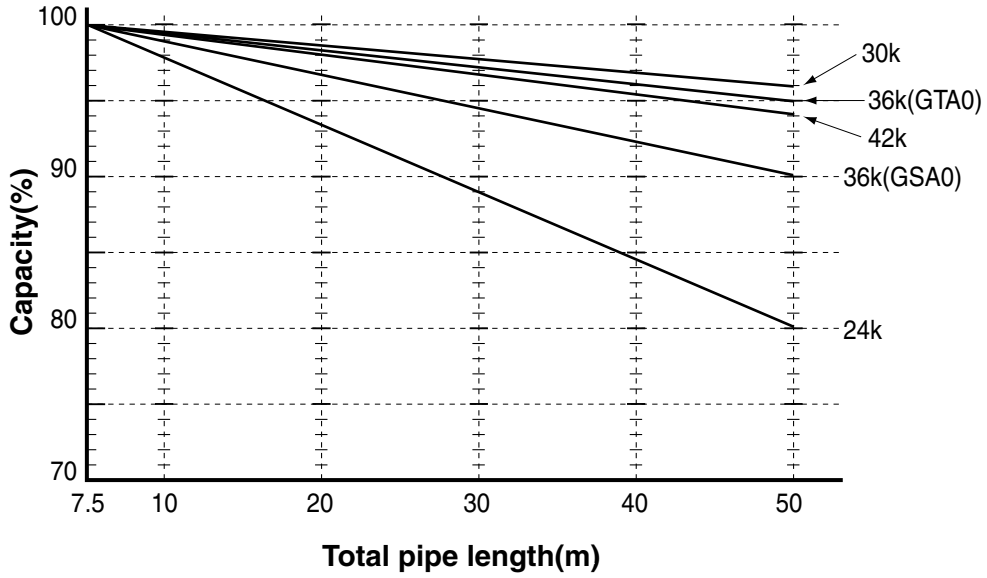
• Notes

1. All capacities are net, evaporator fan motor heat is deducted.
2.  Indicates nominal capacity.
3. Direct interpolation is permissible. Do not extrapolate
4. Capacities are based on the following conditions:
  - Interconnecting Piping Length 7.5m
  - Level Difference of Zero.

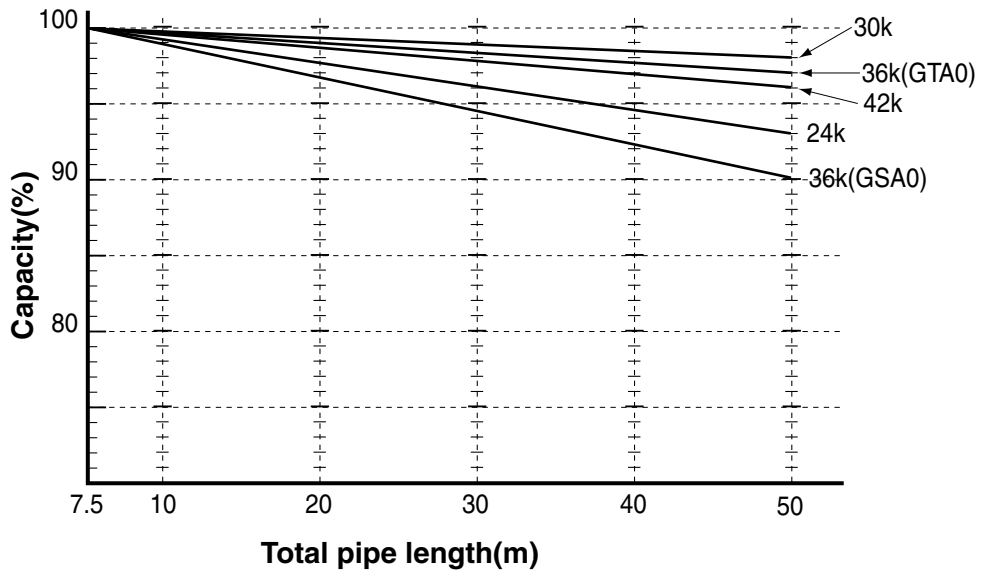


# 9. The Coefficient of Capacity Change

## Cooling



## Heating



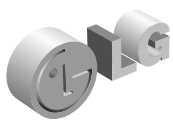
**Notes:**

- \* Equivalent pipe length = Actual pipe length + number of bend x 0.3
- \* Refer to the specification for the maximum pipe length of each model.



# 10. Operation Limit

Item	Limit
Inlet air temperature (Cooling)	<p>Outdoor air temperature °C D.B.(°F)</p> <p>43(109.4)</p> <p>21(69.8)</p> <p>Standard operation</p> <p>15(59) 32(89.6)</p> <p>Indoor air temperature °C W.B.(°F)</p>
Inlet air temperature (Heating)	<p>Outdoor air temperature °C W.B.(°F)</p> <p>15.5(59.9)</p> <p>-5(23)</p> <p>Standard operation</p> <p>15(59) 27(80.6)</p> <p>Indoor air temperature °C D.B.(°F)</p>
Power source voltage	Rating $\pm 10\%$
Voltage at starting	Min. 85% of rating



## 11. E.S.P. Setting for EZ Tuning

(E.S.P. Control) provide required constant air volume irrespective of E.S.P. charge.

(1) Open the rear cover of the wired remote-controller to set the mode.

(2) Select one of three selectable modes as follows.

### ■ Without Zone System

1. Position V-H, F-H:
  - This position sets the maximum E.S.P. as a default set.
2. Position V-L:
  - This position sets the minimum E.S.P. as a default set.

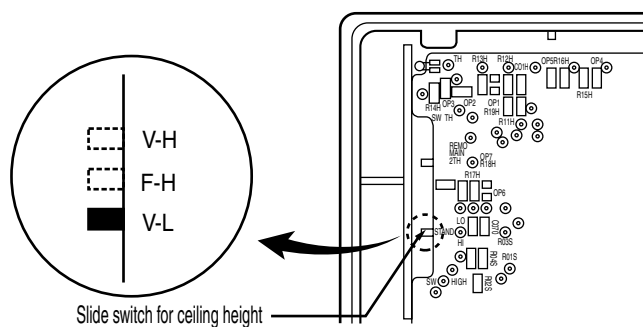
### ■ With Zone System

1. Position V-H:
  - Maximum E.S.P. setting & Fan speed is varied according to the state of dampers by micom.
2. Position F-H:
  - Maximum E.S.P. setting & Fan speed doesn't vary according to the opening & Closing of dampers.
3. Position V-L:
  - Minimum E.S.P. setting & Fan speed is varied according to the state of dampers by micom.

\*Maximum: 36/42k - 8mmAq

Minimum: All-0mmAq

(3) Move the slide switch to set position.

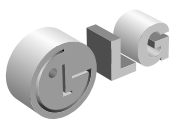


(4) Close the rear cover and check if it works normally.

### CAUTION

- Select the position after checking duct work and E.S.P. of the unit.
- Manufactured in the position F-H.





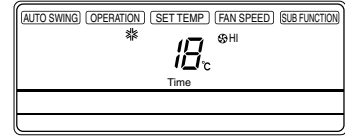
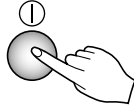
## How to Set E.S.P?

### Procedure of RPM change:

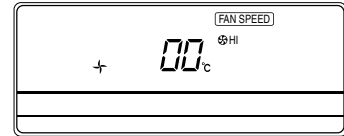
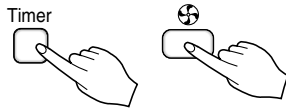
Ex) External Static pressure is 6mmAq for Model Name "AB-H366GSA0[B36AH SG0]".

- To protect the unit, compressor is designed to be off during E.S.P. setting.

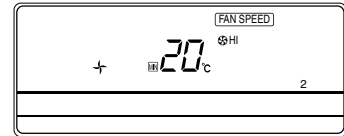
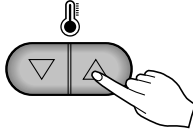
- 1** Push the "On/Off" button.  
The unit will start.



- 2** Push the "Timer" and "Wind" button simultaneously for more than 3 seconds.



- 3** Push the "Up" or "Down" button for E.S.P adjustment.  
And, adjust the number which you want. (In this example, the number is "220".  
Refer to the table 11-1 on the next page.)

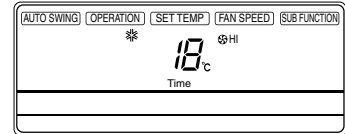
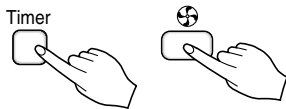


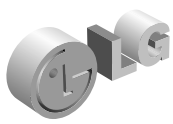
**Note:** The range of selection is from 1~254. Since, the display is two Digit only.  
If the range selection is above 100 then the third digit will appear in the screen as shown.

- 4** Shift the fan speed mode by pressing the fan speed button.  
And then, Adjust numbers of next steps by repeating the stage 3.  
(In this example, the numbers are "235" and "243" respectively.)



- 5** Push the "Timer" and "Wind" button simultaneously for more than 3 seconds.  
Then, Wind Data is memorized by the EEPROM of the main PCB.



**Table 11-1**

Static Pressure(mmAq)			0	2	4	6	8
Model Name	Step	CMM(CFM)	Setting Value				
AB-H366GSA0 [B36AH SG0]	High	32(1130)	230	230	225	220	150
AB-H426GSA0 [B42AH SG0]	Mid	29(1024)	240	238	237	235	230
AB-H306GTA0 [B30AHV SG0]							
AB-H366GTA0 [B36AHV SG0]	Low	26.5(936)	245	245	243	243	240
AB-H246HTA0 [B24AHV SH0]	High	18(636)	220	205	190	50	1
	Mid	16.5(583)	235	230	220	200	100
	Low	14(494)	250	240	235	230	210

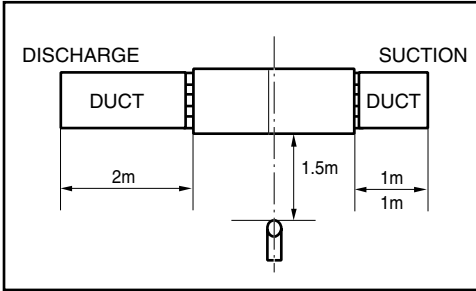
**Note:** 1. To get the desired Airflow & E.S.P combination from the table set the matching value from the table. Value other than that in table will not give the combinations of airflow & ESP which are mentioned in the table.

2. Table 11-1 is based at 230V. According to the fluctuation of voltage, air flow rate varies.



# 12. Sound Levels

## Overall



**Notes:**

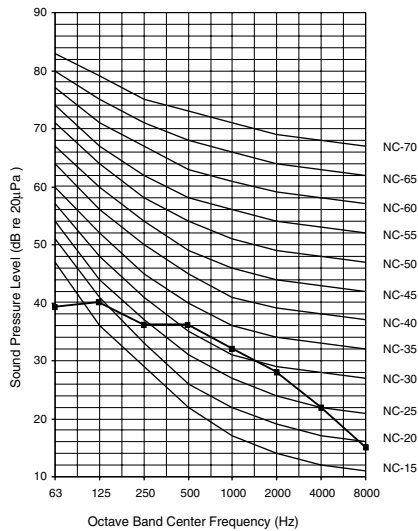
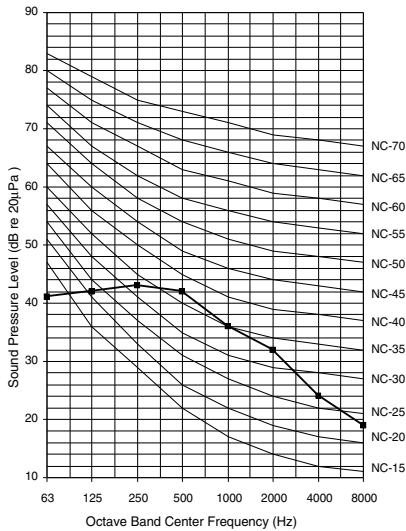
- Data is valid at nominal operation condition
- Reference acoustic pressure  $O_{dB} = 20\mu Pa$
- Sound level will vary depending on a range of factors such as the construction (acoustic absorption coefficient) of particular room in which the equipment is installed.
- The operating conditions are assumed to be standard (KS conditions)

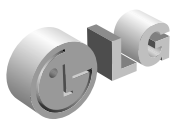
Model	Sound Levels(dBA)		
	H	M	L
AB-H246HTA0[B24AHV SH0]	37	35	33
AB-H306GTA0[B30AHV SG0]	42	40	38
AB-H366GTA0[B36AHV SG0]			
AB-H366GSA0[B36AH SG0]			
AB-H426GSA0[B42AH SG0]			

## Sound Pressure Level

**AB-H30(36)6GTA0**  
**[B30AHV SG0, B36AHV SG0]**  
**AB-H36(42)6GSA0**  
**[B36AH SG0, B42AH SG0]**

**AB-H246HTA0[B24AHV SH0]**



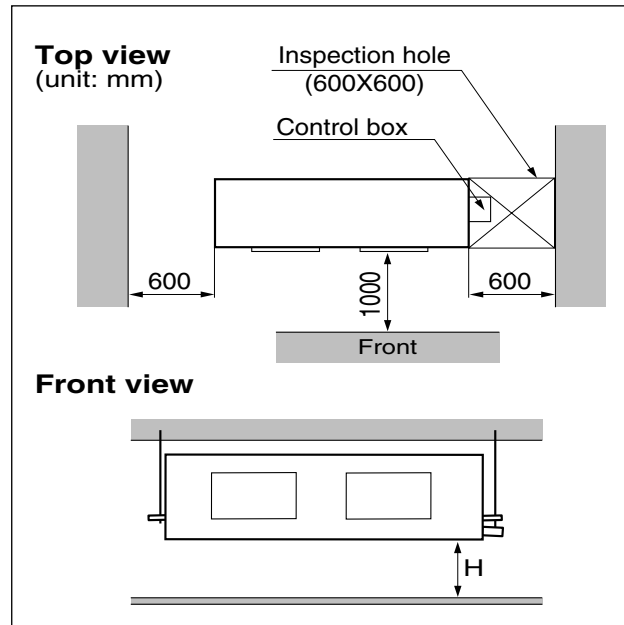


## 13. Installation

### 13.1 Selection of the best location

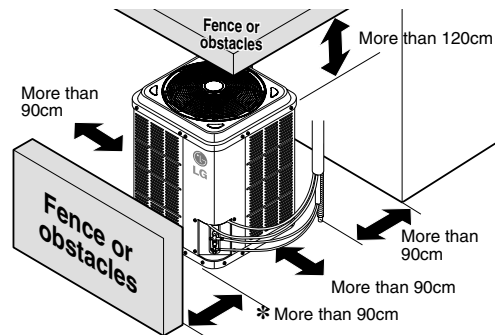
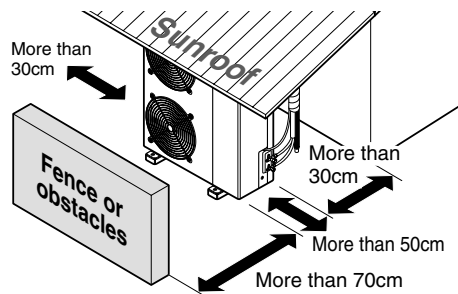
#### 1) Indoor Unit

- The place shall easily bear a load exceeding four times the indoor unit's weight.
- The place shall be able to inspect the unit as the figure.
- The place where the unit shall be leveled.
- The place shall allow easy water drainage. (Suitable dimension "H" is necessary to get a slope to drain as figure.)
- The place shall easily connect with the outdoor unit.
- The place where the unit is not affected by an electrical noise.
- The place where air circulation in the room will be good.
- There should not be any heat source or steam near the unit.



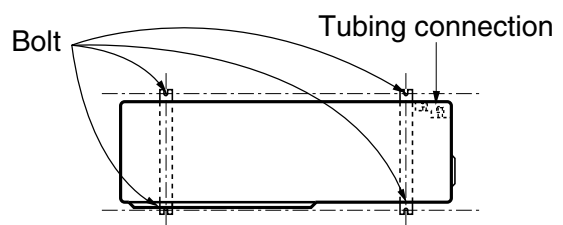
#### 2) Outdoor Unit

- If is built over the unit to prevent direct sunlight or rain exposure, make sure that heat radiation from the condenser is not restricted.
  - Do not place animals and plants in the path of the warm air.
  - Take the air conditioner weight into account and select a place where noise and vibration are minimum.
  - Select a place so that the warm air and noise from the air conditioner do not disturb neighbors.
- Rooftop Installations : If the outdoor unit is installed on a roof structure, be sure to level the unit. Ensure the roof structure and anchoring method are adequate for the unit location. Consult local codes regarding rooftop mounting.



### 13.2 Settlement of outdoor unit

- Anchor the outdoor unit with a bolt and nut ( $\phi 10\text{mm}$ ) tightly and horizontally on a concrete or rigid mount.
- When installing on the wall, roof or rooftop, anchor the mounting base securely with a nail or wire assuming the influence of wind and earthquake.
- In the case when the vibration of the unit is conveyed to the hose, secure the unit with an anti-vibration rubber.





## 13.3 Indoor unit installation

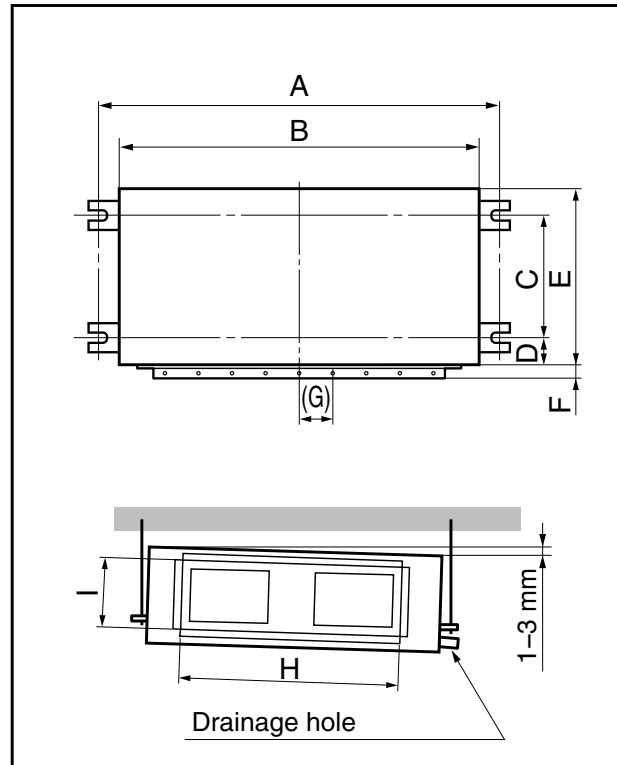
### ■ Installation of Unit

Install the unit above the ceiling correctly.

#### CASE 1

##### POSITION OF SUSPENSION BOLT

- Apply a joint-canvas between the unit and duct to absorb unnecessary vibration.
- Apply a filter Accessory at air return hole.

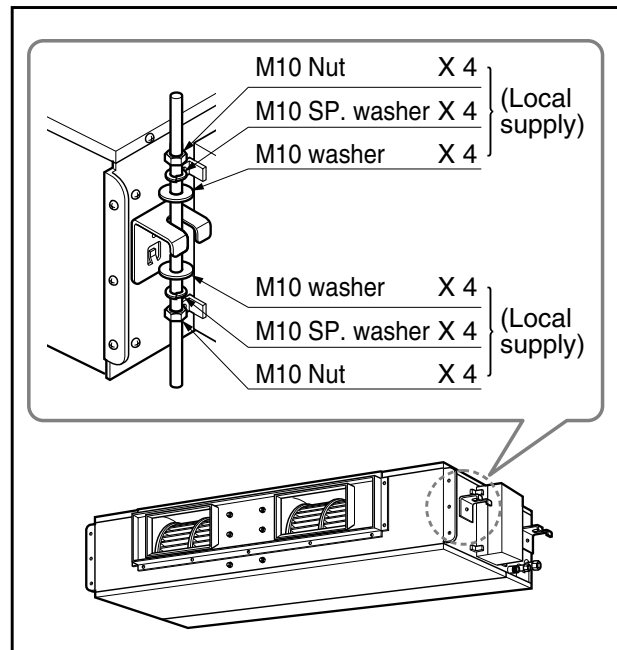


- Refer to dimensional drawings.
- Install the unit leaning to a drainage hole side as a figure for easy water drainage.

#### CASE 2

##### POSITION OF CONSOLE BOLT

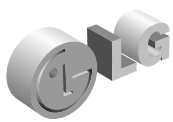
- A place where the unit will be leveled and that can support the weight of the unit.
- A place where the unit can withstand its vibration.
- A place where service can be easily performed.



### NOTE:

• Thoroughly study the following installation locations:

1. In such places as restaurants and kitchens, considerable amount of oil steam and flour adhere to the fan, the fin of the heat exchanger, resulting in heat exchange reduction, spraying, dispersing of water drops, etc.  
In these cases, take the following actions:
  - Make sure that the ventilation fan for smoke-collecting hood on a cooking table has sufficient capacity so that it draws oily steam which should not flow into the suction of the air conditioner.
  - Make enough distance from a cooking room to install the air conditioner in such a place where it may not suck in oil steam.
2. Avoid installing air conditioner in such circumstances where cutting oil mist or iron powder is in suspension in factories, etc.
3. Avoid places where inflammable gas is generated, flows in, is stored or vented.
4. Avoid places where sulfurous acid gas or corrosive gas is generated.
5. Avoid places near high frequency generators.



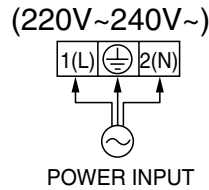
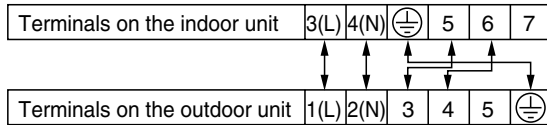
## 13.4 Wiring Connection

### 1) Connecting cables

- Connect the wires to the terminals on the control board individually according to the outdoor unit connection.
  - Ensure that the color of the wires of outdoor unit and the terminal No. are the same as those of indoor unit respectively

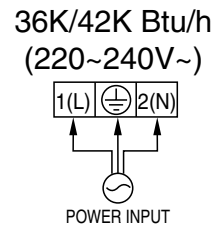
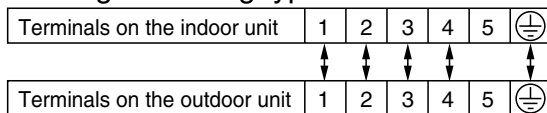
#### ■ 24k Btu

##### • Cooling & Heating type



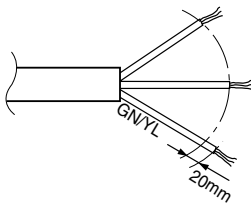
#### ■ 30k/36k/42k Btu

##### • Cooling & Heating type



### CAUTION

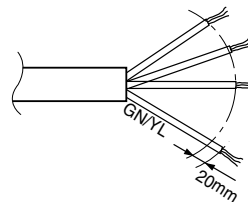
The power cord connected to the outdoor unit should be complied with the following specifications (Rubber insulation, type H05RN-F approved by HAR or SAA).



#### NORMAL CROSS-SECTIONAL AREA

Capacity	1Phase
24k Btu/h	5.5mm <sup>2</sup>
30k/36k/42k Btu/h	8.5mm <sup>2</sup>

The connecting cable connected to the indoor and outdoor unit should be complied with the following specifications (Rubber insulation, type H05RN-F approved by HAR or SAA).



NORMAL  
CROSS-SECTIONAL  
AREA 1.25mm<sup>2</sup> 24k/30k/36k/42k Btu/h

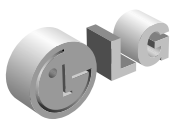
If the supply cord is damaged, it must be replaced by a special cord or assembly available from the manufacturer of its service agent.

### 2) Clamping of cables

- 1) Arrange 2 power cables on the control panel.
- 2) First, fasten the steel clamp with a screw to the inner boss of control panel.
- 3) For the cooling model, fix the other side of the clamp with a screw strongly.  
For the heat pump model, put the 0.75mm<sup>2</sup> cable(thinner cable) on the clamp and tighten it with a plastic clamp to the other boss of the control panel.
- 4) In Australia, the length of power supply cord measured from the entry of the power supply cord to the middle of live pin on the power plug should be over 1.8m.

### ⚠ WARNING

Make sure that the screws of the terminal are free from looseness.



## ELECTRICAL WIRING

Perform the electrical wiring work according to the electrical wiring connection.

- All wiring must comply with local requirements.
- Select a power source that is capable of supplying the current required by the air conditioner.
- Use a recognized circuit breaker between the power source and the unit. A disconnection device to adequately disconnect all supply lines must be fitted.
- Capacity of circuit breaker

Capacity	1 Phase
24k Btu/h	35A
30k Btu/h	50A
36k(GTA0)Btu/h	50A
36k(GSA0)Btu/h	35A
42k Btu/h	40A

### WIRING CONNECTION

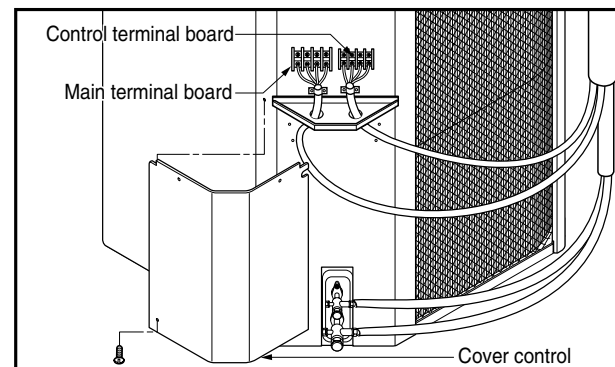
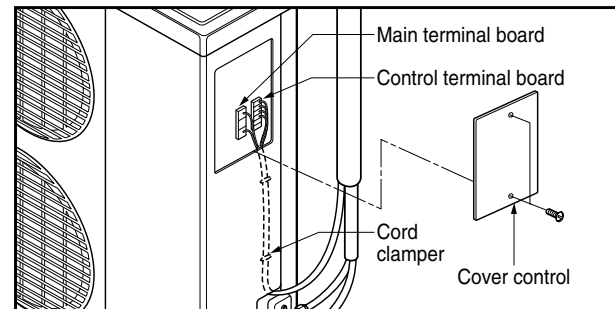
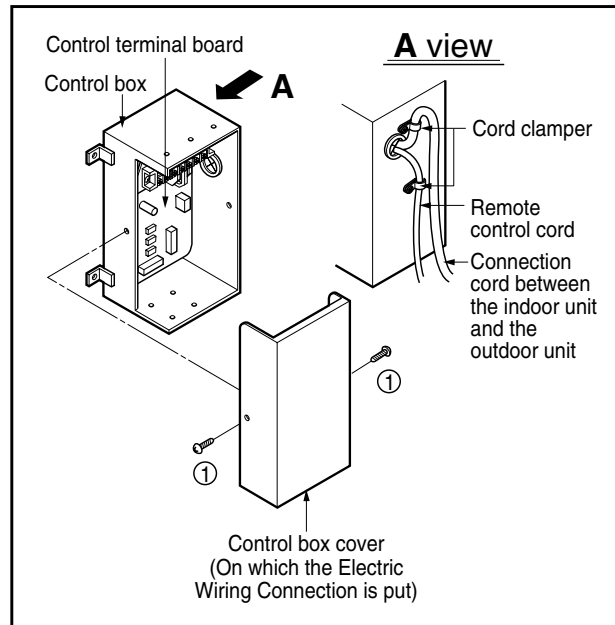
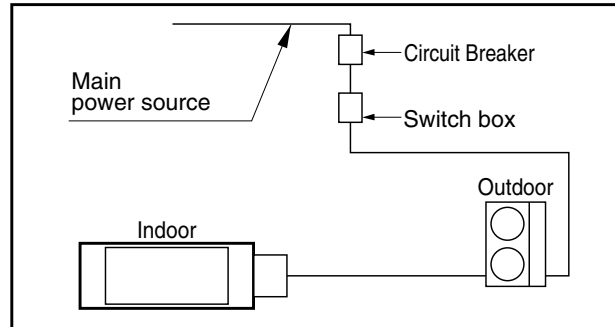
#### INDOOR UNIT

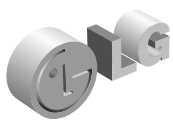
- Remove the control box cover for electrical connection between the indoor and outdoor unit. (Remove crews ①.)
- Use the cord clamper to fix the cord.

#### OUTDOOR UNIT

- Remove the control cover for wiring connection.
- Use the cord clamper to fix the cord.
- Earthing work  
Connect the cable of diameter 1.6mm<sup>2</sup> or more to the earthing terminal provided in the control box and do earthing.

※ **Please check !!**





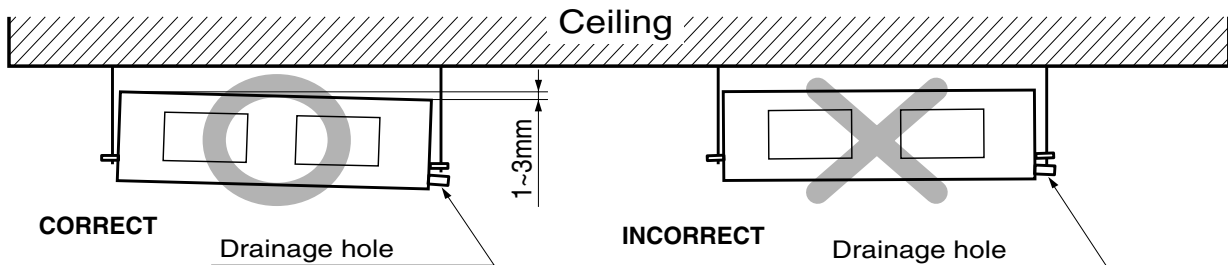
## 13.5 Indoor Unit Drain Piping

### CAUTION

1. **Install declination** of the indoor unit is very **important for the drain** of the duct type air conditioner.
2. Minimum thickness of the insulation for the connecting pipe shall be 5mm.

#### Front of view

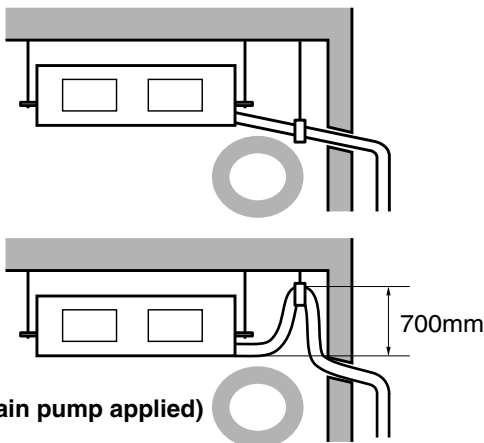
- The unit must be horizontal or declined to the drain hose connected when finished installation.



### CAUTION FOR GRADIENT OF UNIT AND DRAIN PIPING

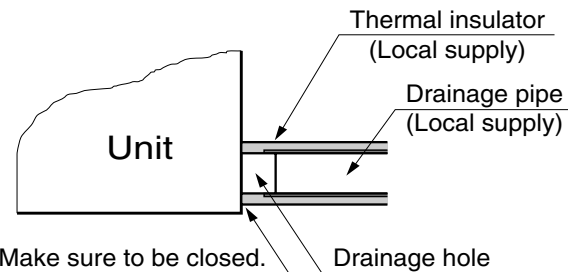
Lay the drain hose with a downware inclination so water will drain out.

- Always lay the drain with downward inclination (1/50 to 1/100). Prevent any upward flow or reverse flow in any part.
- 5mm or thicker formed thermal insulator shall always be provided for the drain pipe.

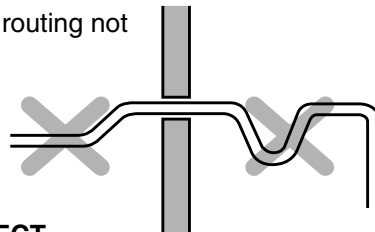


**CORRECT**

- Install the P-Trap (or U-Trap) to prevent a water leakage caused by the blocking of intake air filter.

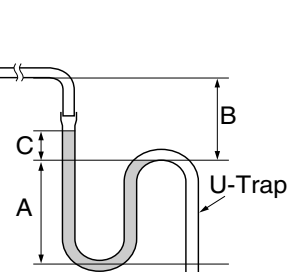


- Upward routing not allowed

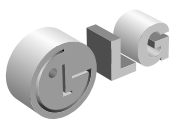


#### INCORRECT Applied U-Trap Dimension

- $A \geq 70\text{mm}$
- $B \geq 2C$
- $C \geq 2 \times \text{SP}$
- SP = External Pressure (mmAq)
- Ex) External Pressure = 10mmAq
- $A \geq 70\text{mm}$
- $B \geq 40\text{mm}$
- $C \geq 20\text{mm}$


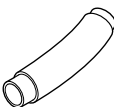
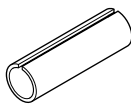

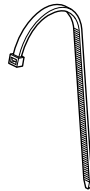







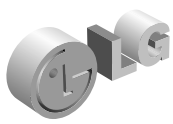
# 14. Accessories

## Standard Accessories

Name	Clamp metal	Drain hose	Insulation for fitting	Clamp	Screws for duct flanges	(Other)
Quantity	1 EA	1 EA	1 set	6 EA	1 set	<ul style="list-style-type: none"> <li>• Owner's manual</li> <li>• Installation manual</li> <li>• Washers(8 pcs.)</li> </ul>
Shape			 for gas pipe   for liquid pipe			

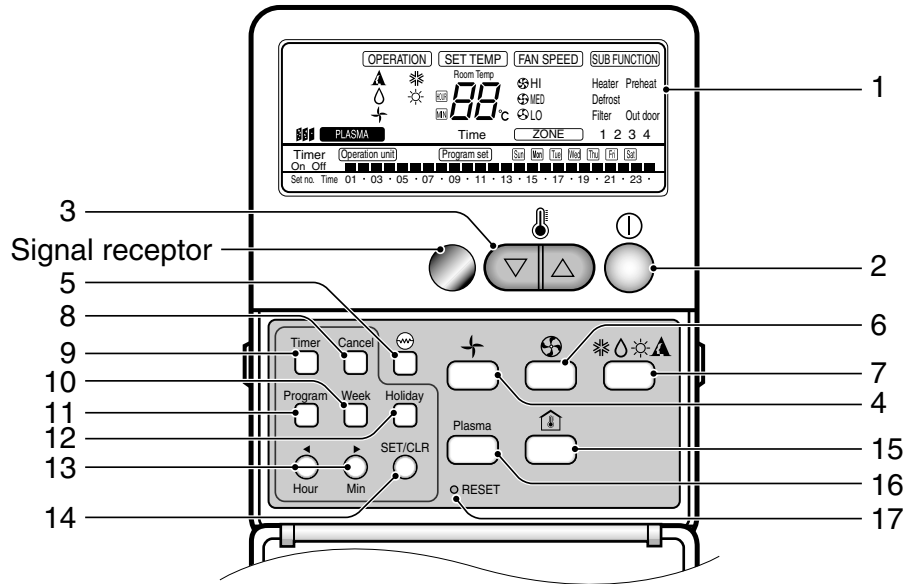
## Optional Accessories(For Unit)

No.	Item	Type	Model No.	Component Parts
1	Wireless remote control	With air purifying function	AHWRHS AHWRHD(LCD)	<ul style="list-style-type: none"> <li>• Wireless remote control : 1EA</li> <li>• Holder : 1EA</li> <li>• Battery : 2EA</li> <li>• Screw : 2EA</li> </ul>
2	Plasma air purifying filter	-	ABPAGH	<ul style="list-style-type: none"> <li>• Plasm air purifier kit: 1EA</li> <li>• Wired remote control: 1EA</li> </ul>
3	Zone Control	-	ABZCA	<ul style="list-style-type: none"> <li>• Factory supplied-zone control PCB</li> <li>• Purchased locally-damper, Damper moter, thermostat</li> </ul>
4	Drain Pump	-	ABDPG	<ul style="list-style-type: none"> <li>• Drain Pump Assembly: 1EA</li> </ul>
5	Central Control	Simple	PQCSA101S0	<ul style="list-style-type: none"> <li>• Simple central controller</li> <li>• Manual</li> </ul>
		Deluxe	PQCSW501A0 PQCSW502A0	<ul style="list-style-type: none"> <li>• Deluxe central controller</li> <li>• Manual</li> </ul>
		PC Based	PQCSS501A0 PQCSS502A0	<ul style="list-style-type: none"> <li>• Program CD</li> <li>• Hard lock key, Manual</li> </ul>
6	Gateway	PI485	PSNFP14A0	<ul style="list-style-type: none"> <li>• PCB &amp; Wire assembly</li> <li>• Installation manual (For all central control)</li> </ul>
		CNU	PQNFG00A0	<ul style="list-style-type: none"> <li>• PCB &amp; Wire assembly (For Deluxe, PC Based central control)</li> </ul>



# 15. Function of Remote Control

## 15.1 Wired LCD Remote Control



### 1 Operation display

Displays the operation conditions.

### 2 On/Off Button

Operation starts when this button is pressed, and stops when the button is pressed again.

### 3 Set Temperature Button

Used to set the temperature when the desired temperature is obtained.

### 4 FAN Operation Button

Used to circulate room air without cooling or heating.

### 5 Electric Heater Button (optional:48/60kBE Chassis Model only)

Used to switch on/off the electric heater.

### 6 Fan Speed Button

Used to set desired fan speed.

### 7 Operation Mode Selection Button

Used to select the operation mode.

- Auto Operation Mode.
- Cooling Operation Mode.
- Soft Dry Operation Mode.
- Heating Operation Mode.(except cooling model)

### 8 Timer Cancel Button

Used to cancel the timer.

### 9 Timer Set Button

Used to set the timer when the desired time is obtained.

### 10 Week Button

Used to set the day of the week.

### 11 Program Button

Used to set the weekly timer.

### 12 Holiday Button

Used to set the holiday of the week.

### 13 Time Set Button

Used to set the time of the day and change the time in the weekly timer Function.

### 14 Set and Clear Button

Used to set and clear the weekly timer.

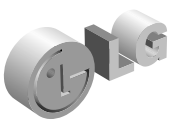
### 15 Room Temperature Checking Button

Used to check the room temperature.

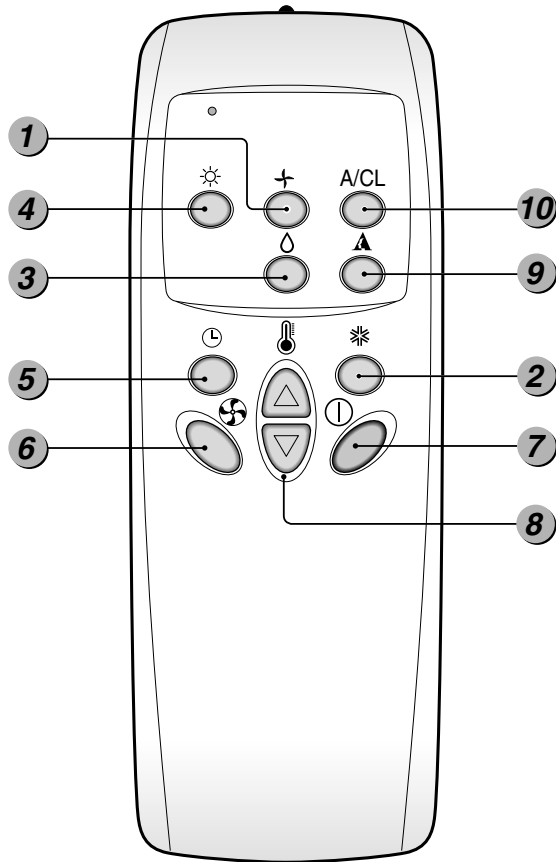
### 16 Plasma Air Clean Button(optional)

### 17 Reset Button

Used to set the current time and clear the setting time.



## 15.2 Wireless Remote Control(Accessory)



- 1 FAN Operation Button**  
Used to circulate room air without cooling or heating.
- 2 Cooling Operation Button**
- 3 Soft Dry Operation Button**  
Used to dehumidify without overcooling.
- 4 Heating Operation Button**  
(Heat pump model only)
- 5 Timer Set Button**  
Used to set the timer when the desired time is obtained.  
Then the wired remote controller is set up to 24 hours by an hour but the wireless remote controller is set up to 7 hours by an hour. Therefore, if you want to set over 7 hours, use the wired remote controller.
- 6 Fan Speed Button**  
Used to set the desired fan speed.
- 7 On/Off Button**  
Operation starts when this button is pressed, and stops when the button is pressed again.
- 8 Set Temperature Button**  
Used to set the temperature when the desired temperature is obtained
- 9 Auto Operation Button**
- 10 Plasma Air Clean Button(Optional)**



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#### Approvals:

EN ISO 9001  
BS EN ISO 9001  
ANSI/ASQC Q9001  
KS A 9001

**P/No.: 3828A20429F**

For continual product development, LG reserves the right to change specifications without notice.  
Top Discharge model does not have above approvals.  
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