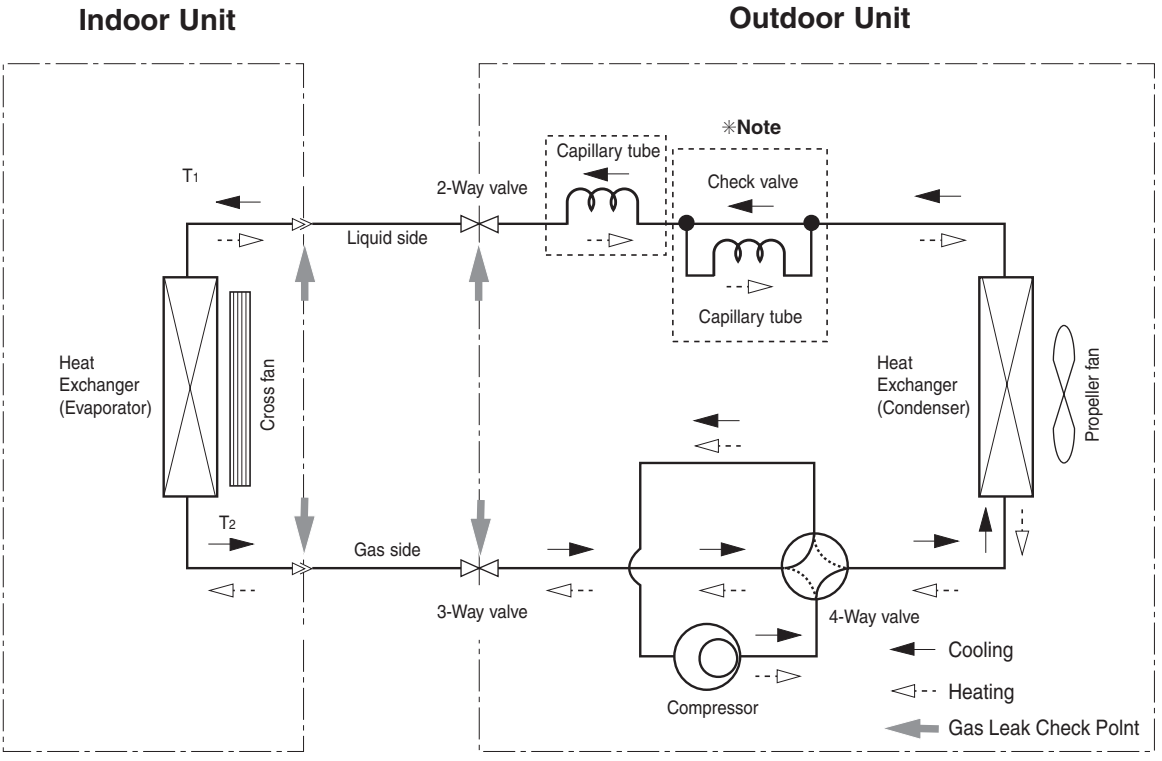
4. Refrigerating Cycle Diagram

4-1 Refrigerating Cycle Diagram



4-2 Refrigerant Cycle Characteristic

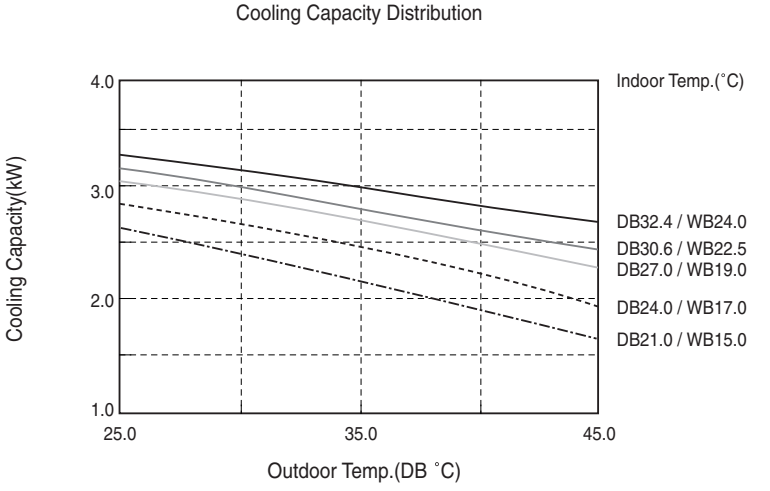
4-2-1 Capacity Distributions

Capacity Distributions according to indoor and outdoor temperature variation.

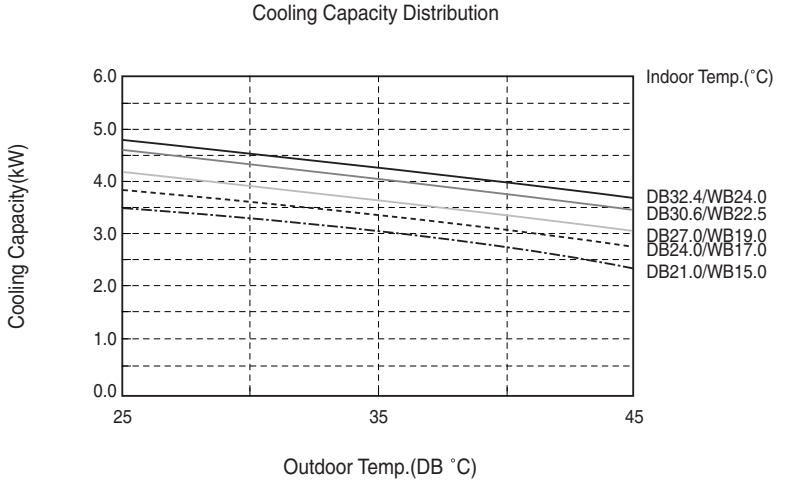
■ COOLING MODE

- Indoor Temp. Variation : 21.0˚C ~ 32.4˚C
- Outdoor Temp. Variation : 25.0˚C ~ 45.0˚C

■ **AS09HPBN**



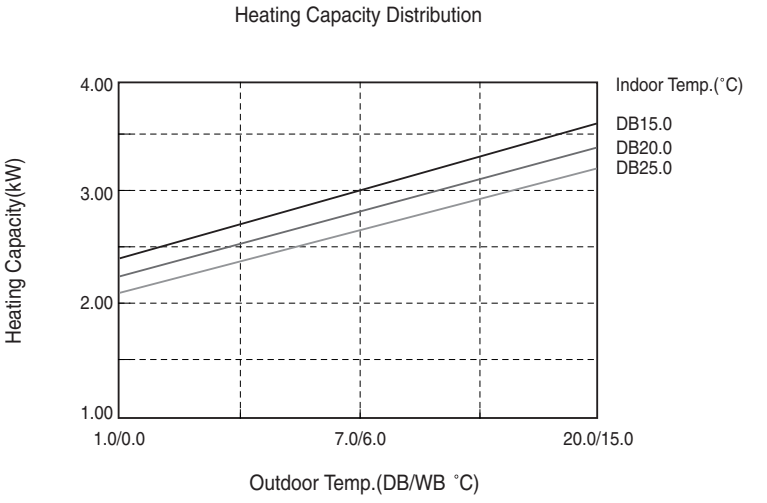
■ **AS12HPBN**



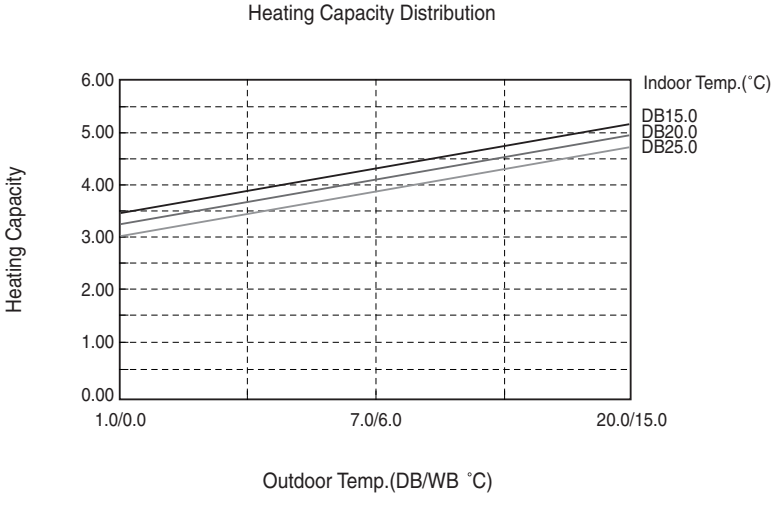
■ HEATING MODE

- Indoor Temp. Variation : 15.0˚C ~ 25.0˚C
- Outdoor Temp. Variation : 1.0˚C ~ 20.0˚C

■ AS09HPBN



■ AS12HPBN



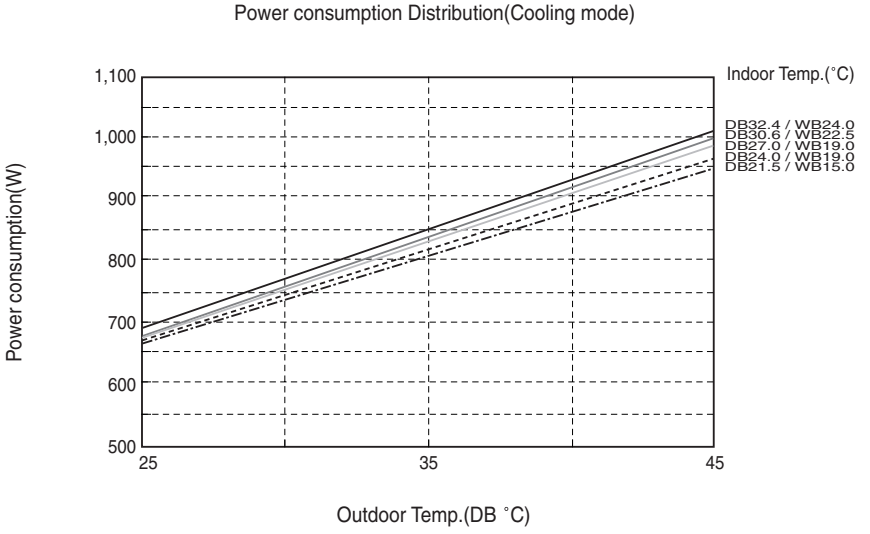
4-2-2 Power Consumption Distributions

Power Consumption Distributions according to indoor and outdoor temperature variation.

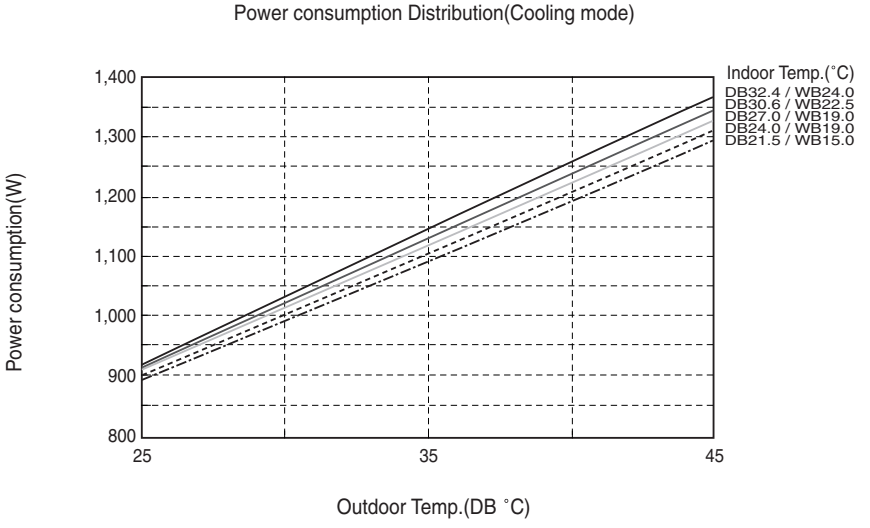
■ COOLING MODE

- Indoor Temp. Variation : 21.0˚C ~ 32.4˚C
- Outdoor Temp. Variation : 25.0˚C ~ 45.0˚C

■ AS09HPBN



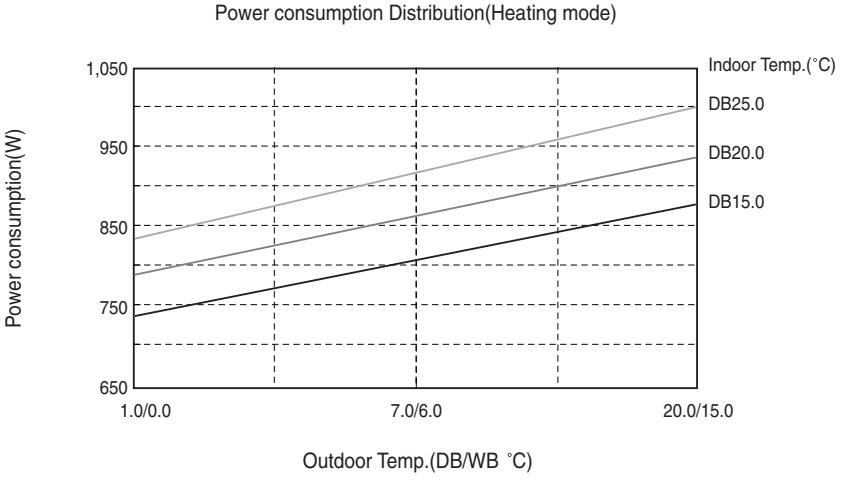
■ AS12HPBN



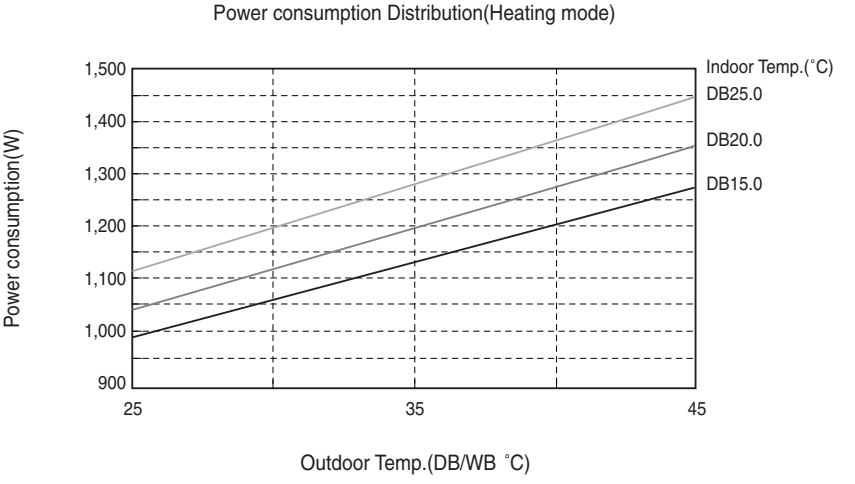
■ HEATING MODE

- Indoor Temp. Variation : 15.0˚C ~ 25.0˚C
- Outdoor Temp. Variation : 1.0˚C ~ 20.0˚C

■ AS09HPBN



■ AS12HPBN

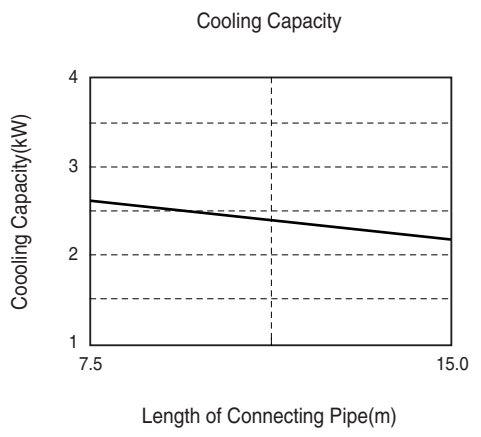


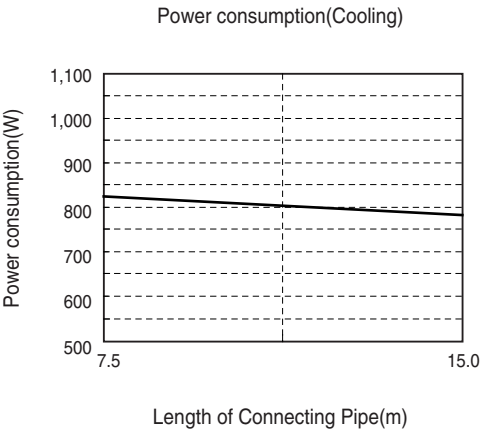
4-2-3 Capacity and Power Consumption Distributions

Capacity and power Consumption distributions according to the length of connecting Pipe between indoor unit and outdoor unit.

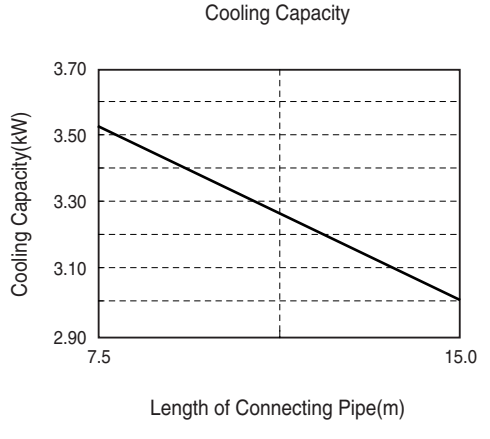
■ COOLING MODE

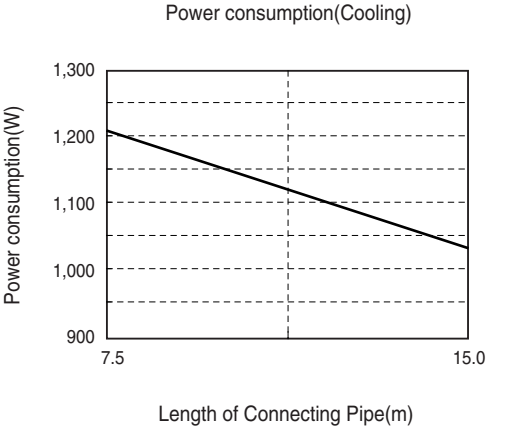
■ AS09HPBN





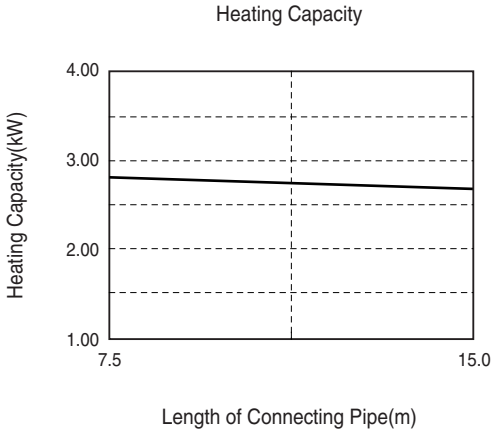
■ AS12HPBN

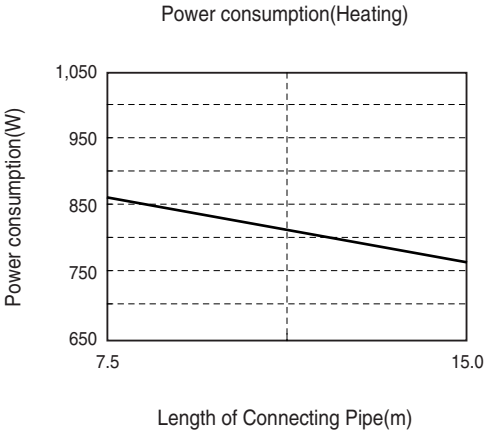




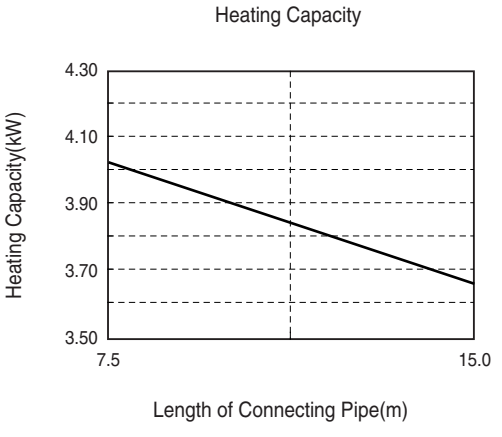
■ HEATING MODE

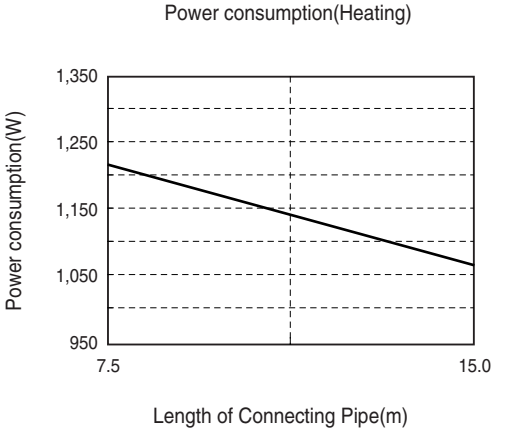
■ AS09HPBN





■ AS12HPBN



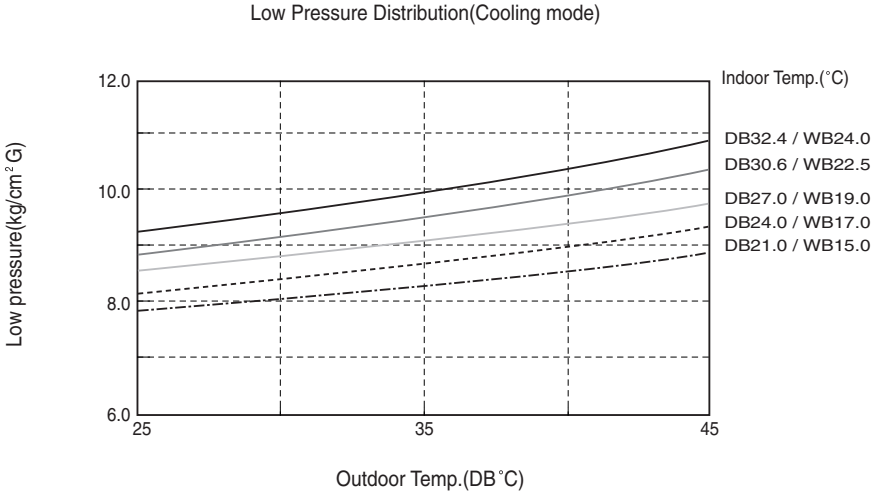


4-2-4 Low Pressure Distributions

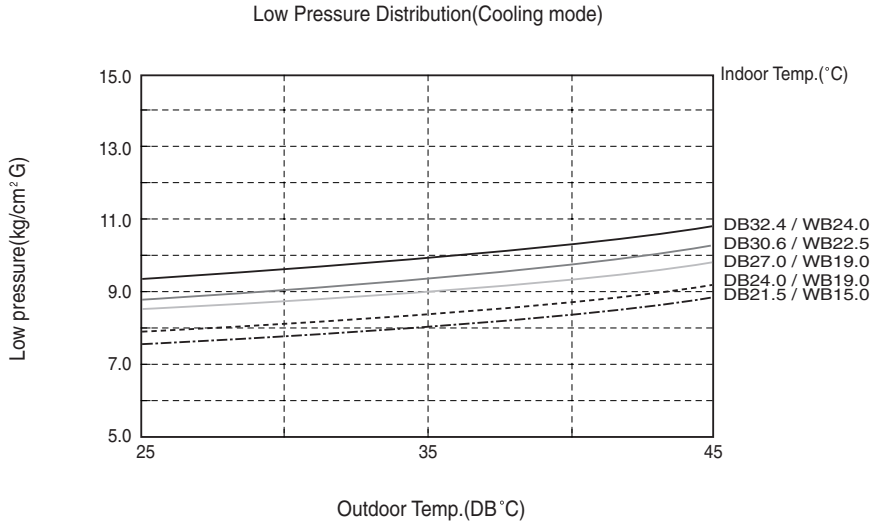
■ COOLING MODE

- Indoor Temp. Variation : 21.0˚C ~ 32.4˚C
- Outdoor Temp. Variation : 25.0˚C ~ 45.0˚C

■ AS09HPBN

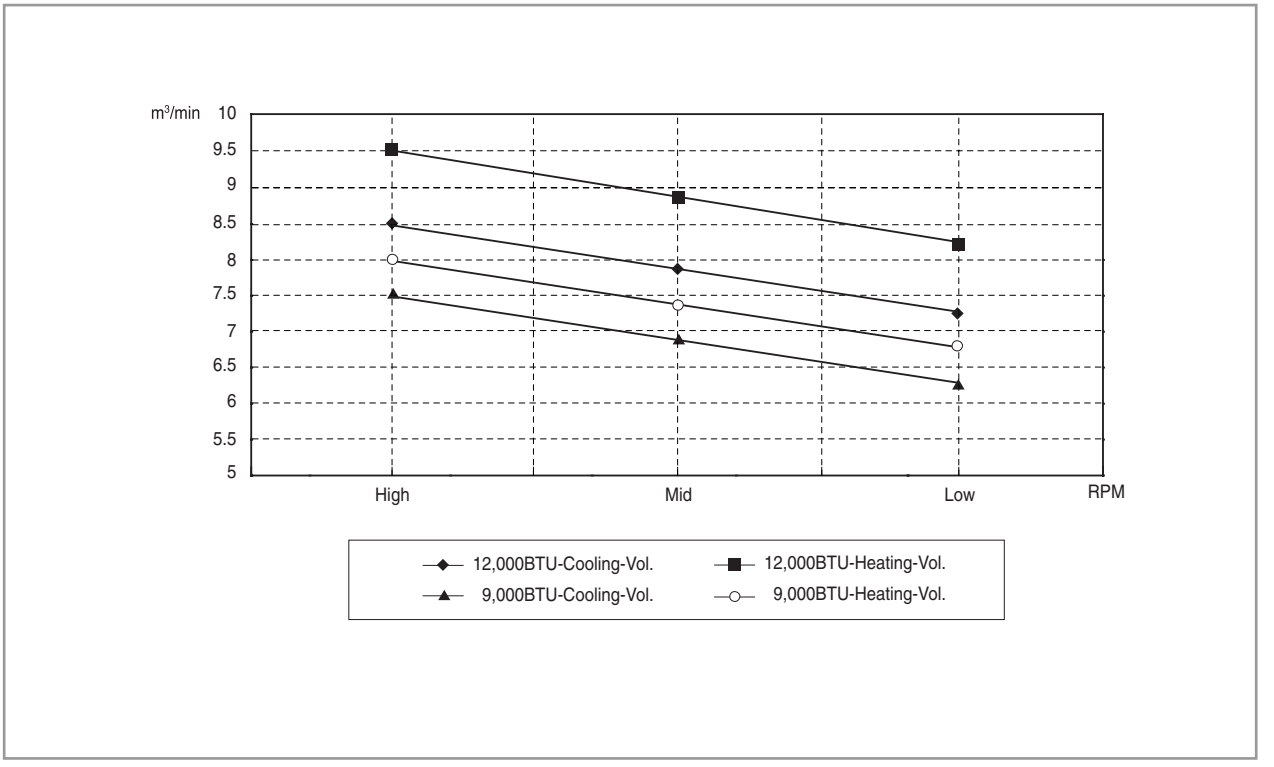


■ AS12HPBN



4-2-5 Air Volume according to the RPM variation(High/Mid/Low)

■ Indoor Unit

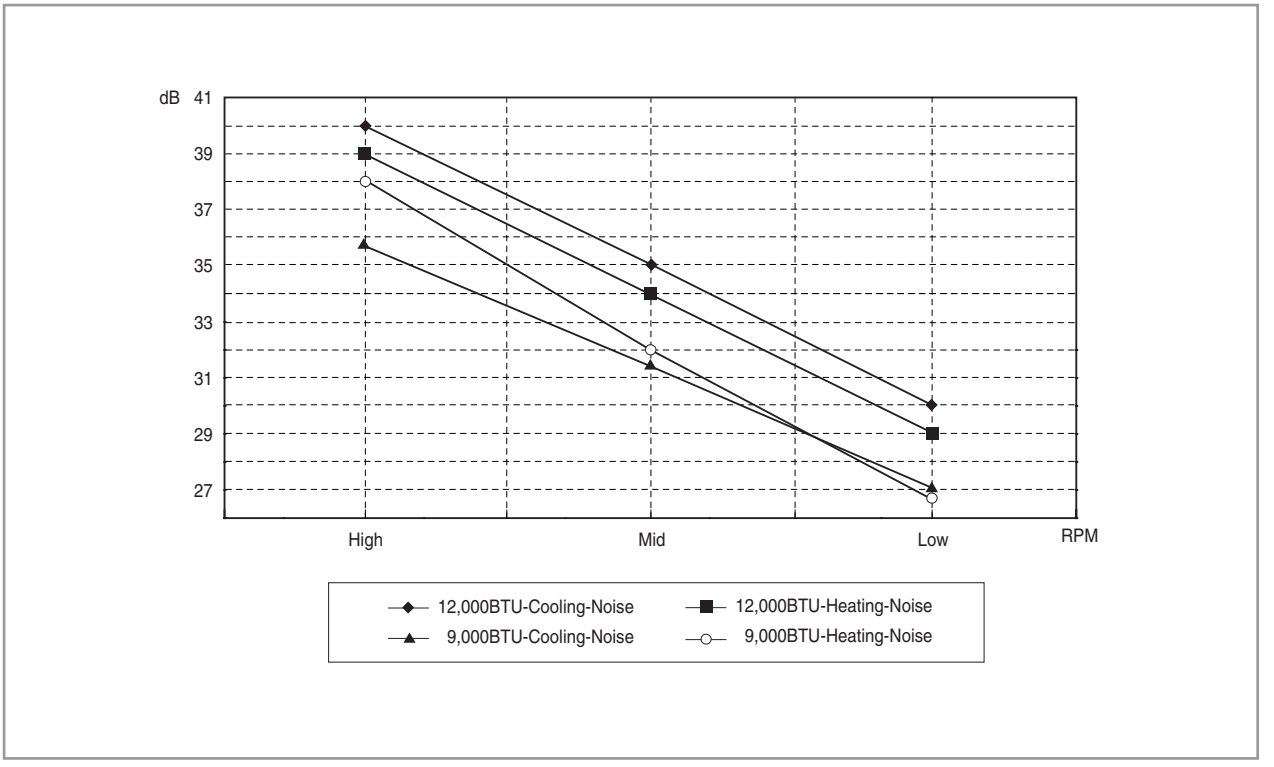


■ Outdoor Unit

The air volume is 25m³/min regardless of model.

4-2-6 Noise Level according to the RPM variation(High/Mid/Low)

■ Indoor Unit



■ Outdoor Unit

Section	Operation	Noise(dB)	Remark
AS09HPBN	Cooling	51	
	Heating	51	
AS12HPBN	Cooling	53	
	Heating	53	

4-3 Cautions Of using R410A

■ HFCs

1. When installing or removing or servicing an air conditioner, do not allow air or moisture to remain in the refrigeration cycle.
2. When evacuating an air conditioner, always use the vacuum pump to sufficiently evacuate an air conditioner.
3. You must use the specified lubricant(Polyol ester oil), valve and dryer.

■ Lubricants

1. Synthetic Oils : POE, PVE, PAG, AB
2. POE is made from Acid and Alcohol
3. Hydrolysis causes Metallic Soap