

Models:

AWM 07G/GR  
AWM 09G/GR  
AWM 10G/GR  
AWM 15G/GR  
AWM 20G/GR  
AWM 25G/GR  
AWM 301/301R

A5WM 07G/GR  
A5WM 09G/GR  
A5WM 10G/GR  
A5WM 15G/GR  
A5WM 20G/GR  
A5WM 25G/GR  
A5WM 311/301R

**ACSON**<sup>®</sup>  
**International**



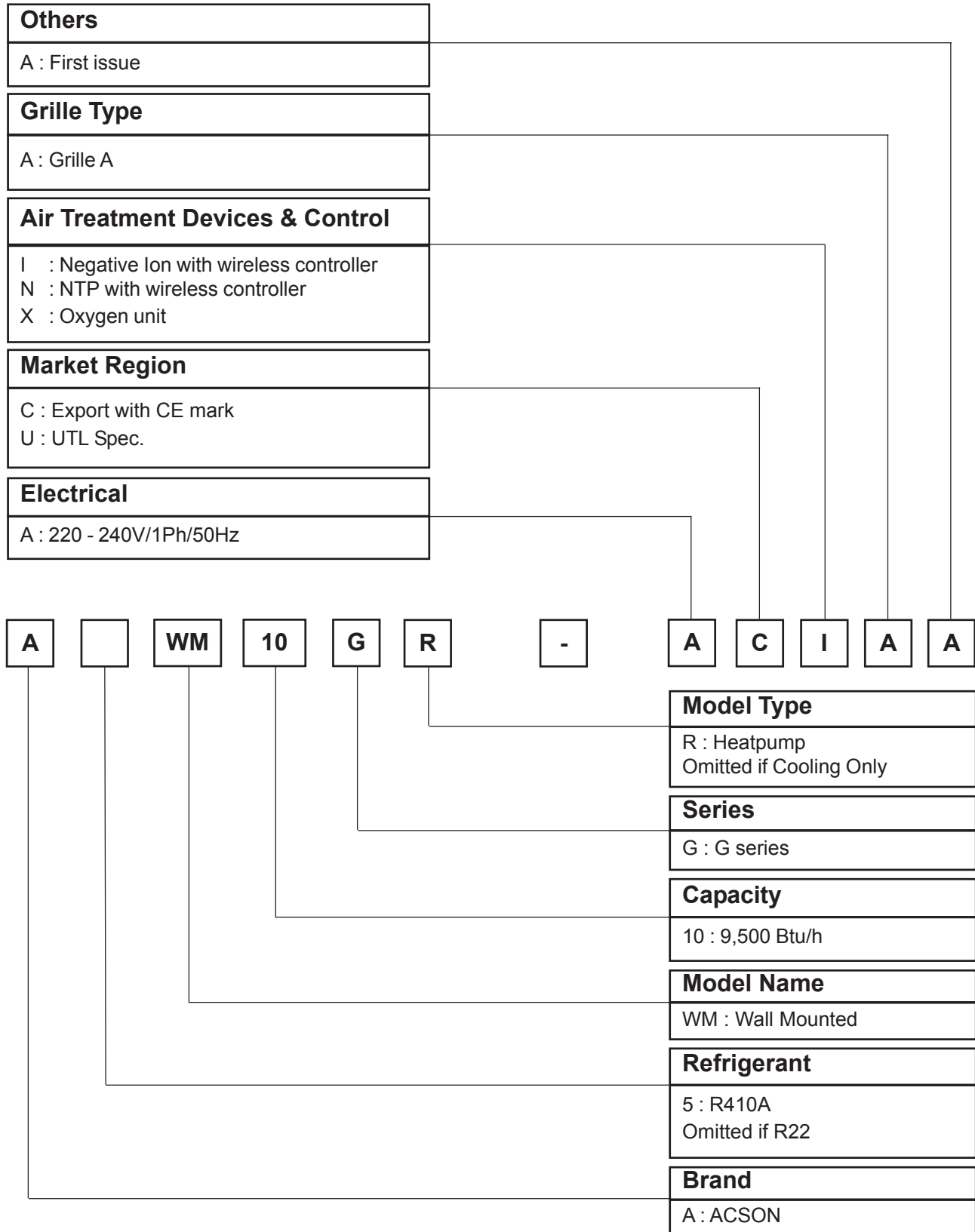
## Wall Mounted Split Systems

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# 1. NOMENCLATURE

## Indoor



## Outdoor

<b>Others</b>	
A : First issue	
<b>Specification Variation</b>	
O : Standard Unit B : With Contactor G : Low Ambient Kit H : High Ambient Kit	I : Gold Fins L : Long Piping Unit S : With H/L Pressure Switch X : Oxygen Unit
<b>Compressor</b>	
P : Matsushita Rotary M : Mitsubishi Rotary	T : Toshiba Rotary S : Samsung Rotary
<b>Market Region</b>	
C : Export with CE marking E : Export without marking U : ETL Spec.	
<b>Electrical</b>	
A : 220 - 240V/1Ph/50Hz	

A	5	LC	10	C	R	-	A	C	P	O	A
---	---	----	----	---	---	---	---	---	---	---	---

<b>Model Type</b>	
R : Heatpump Omitted if Cooling Only	
<b>Series</b>	
C : C series	
<b>Capacity</b>	
10 : 9,500 Btu/h	
<b>Model Name</b>	
LC : Single Split Condensing Unit	
<b>Refrigerant</b>	
5 : R410A Omitted if R22 Model	
<b>Brand</b>	
A : ACSON	



## Product Line Up

### INDOOR UNIT AWM-G SERIES PRODUCT LINE UP

			CLASSIFICATIONS													
AWM		Nomenclature	Handset		PCB			Air Purification						Marking	Grille	Orifice Kit
			G12	G12 (W/O Turbo mode)	L2.0	D2.0	U1.5	Ionizer Filter	Saranet Filter	Negative Ion	Nano Technology Air Filtration	O2 Therapy	Non-Thermal Plasma (NTP)	CE	A	
Cooling Model	07G	ACIAD	X		X					X	X			X	X	
	09G	ACIAC	X		X					X	X			X	X	
	10G	ACIAC	X		X					X	X			X	X	
	15G	ACIAC	X		X					X	X			X	X	
	20G	ACIAC	X		X					X	X			X	X	
	25G	ACIAC	X		X					X	X			X	X	
	30F	AFDB		X		X		X	X					X		X
Heatpump Model	07GR	ACIAC	X		X					X	X			X	X	
	09GR	ACIAC	X		X					X	X			X	X	
	10GR	ACIAC	X		X					X	X			X	X	
	15GR	ACIAC	X		X					X	X			X	X	
	20GR	ACIAC	X		X					X	X			X	X	
	25GR	ACIAC	X		X					X	X			X	X	
	30FR	AFCA		X			X	X	X					X		

INDOOR UNIT  
A5WM-G SERIES PRODUCT LINE UP

A5WM			Nomenclature		CLASSIFICATIONS										
					Handset		PCB		Air Purification					Marking	Grille
		G12	G12 (W/O Turbo mode)	L2.0	D2.0	Ionizer Filter	Saranet Filter	Negative Ion	Nano Technology Air Filtration	Non-Thermal Plasma (NTP)	CE	B			
Cooling Model	07G	ACIAC	X		X				X	X		X	X		
	09G	ACIAC	X		X				X	X		X	X		
	10G	ACIAC	X		X				X	X		X	X		
	15G	ACIAC	X		X				X	X		X	X		
	20G	ACIAC	X		X				X	X		X	X		
	25G	ACIAC	X		X				X	X		X	X		
	311	AFCA	X			X	X	X				X	X		
Heatpump Model	07GR	ACIAC	X		X				X	X		X	X		
	09GR	ACIAC	X		X				X	X		X	X		
	10GR	ACIAC	X		X				X	X		X	X		
	15GR	ACIAC	X		X				X	X		X	X		
	20GR	ACIAC	X		X				X	X		X	X		
	25GR	ACIAC	X		X				X	X		X	X		
	301R	AFCA	X			X	X	X				X	X		

OUTDOOR UNIT  
ALC PRODUCT LINE UP

		CLASSIFICATIONS												
ALC	Nomenclature	Refrigerant Ctrl + Fin				Safety Devices		Compressor	Marking			Market		
		Cap. Tube	7mm Coil	3/8" Coil	Gold Fin	W/O Contactor	Contactor	Rotary Comp.	W/O Marking	CE Marking	ETL	Thai	HK	Singapore
Cooling Model	07C	ACPOE	X	X		X		X	X					
		ACPIE	X	X	X	X		X	X					
	09C	ACPOD	X	X				X		X				
		ACPID	X	X	X			X		X				
	10C	ACPOB	X	X				X		X				
		ACPIB	X	X	X			X		X				
	15C	ACPOD	X	X				X		X				
		ACPID	X	X	X			X		X				
		ATPOD	X	X			X	X		X		X		
	18C	ACPOD	X	X				X		X				
		ACPID	X	X	X			X		X				
		ACPBD	X	X			X	X		X			X	X
	20C	ACPOD	X	X				X		X				
		ACPID	X	X	X			X		X				
		ACPBD	X	X			X	X		X			X	X
		ATPOD	X	X				X		X		X		
	25C	ACPBD	X	X			X	X		X				
		ACPOD	X	X				X		X				
		ACPID	X	X	X			X		X				
Heatpump Model	18CR	ACPOD	X	X				X		X				
		ACPID	X	X	X			X		X				
		ACPBD	X	X			X	X		X			X	X
	20CR	ACPOD	X	X				X		X				
		ACPID	X	X	X			X		X				
		ACPBD	X	X			X	X		X			X	X
	25CR	ACPBD	X	X			X	X		X				
		ACPOD	X	X				X		X				
		ACPID	X	X	X			X		X				

OUTDOOR UNIT  
A5LC PRODUCT LINE UP

			CLASSIFICATIONS							
A5LC		Nomenclature	Refrigerant Ctrl + Fin		Safety Devices			Compressor	Marking	Others
			Cap. Tube	Gold Fin	Contactor	HP	LP	Mat. Rotary	CE Marking	Drain Elbow
Cooling Model	07C	ACPOE	X					X	X	
	10C	ACPOB	X					X	X	
	15C	ACPOC	X					X	X	
	20C	ACPOC	X					X	X	
	25C	ACPOC	X					X	X	
	28C	ACPOA	X					X	X	
Heatpump Model	07CR	ACPOE	X					X	X	X
	10CR	ACPOB	X					X	X	X
	15CR	ACPOC	X					X	X	X
	20CR	ACPOC	X					X	X	X
	25CR	ACPOC	X					X	X	X
	28CR	ACPOA	X					X	X	X

## 2. FEATURES

- **EASY INSTALLATION**

- The wall mounted fan coil unit is easily installed because of its compact size, slimness and light weight.
- Slim and short outdoor unit can be easily installed even in a narrow balcony and passageway and yet have a stable profile.

- **SPACE SAVING**

- No space is required on either floor or ceiling. This newly developed super slim design for wall mounting maximizes floor space usage and enhances ceiling appearance where ceilings are low.

- **QUIET OPERATION**

- Cooling comfort is improved by whisper-quiet operation which is achieved by a tangential fan.

- **EXCELLENT AIR DISTRIBUTION**

- Air discharge direction can be adjusted in four directions, manually or automatically by using LCD remote control.
- The new double louver design with automatic air swing function fully optimizes the room comfort by distributing the air evenly to the room.
- The unique skew fan design with larger diameter creates better air flow to the operating environment.

- **FACILITATED MAINTENANCE ENSURED**

- The new design of air discharge housing whereby the fan blower can be easily accessed by just loosening two screws on the unit to provide a flexible, faster and easier way to clean up the fan blower and ionizer.
- Maintenance is easy for electrical components, piping and wiring as these are all easily accessible by merely removing front plastic panel.

- **WIRELESS REMOTE CONTROL**

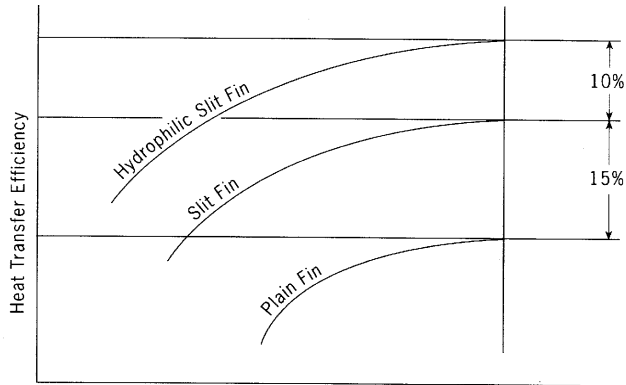
- The compact LCD transmitter is able to operate the air conditioner unit within the distance of 9 meters.
- Fan motor speed can be set at low/medium/high or automatic.
- Sleep mode auto control will gradually increase or decrease the setting temperature to provide a comfortable surrounding for sleeping.
- Air flow direction can be controlled automatically.
- Room temperature is controlled by electronic thermostat.
- The real time timer allows the air conditioner to be switched On and Off automatically based on user settings.
- Turbo mode function is available to enable the required set temperature to be achieved in a short time.
- Ionizer or non-thermal plasma is available to create better air quality.
- Personalized Setting allows user to preset and store 2 groups of personal settings (including timer setting) in the handset.
- Auto random restart is a function whereby when there is power failure occurred during operation, the unit will automatically restart as the last setting condition once the power is resumed.

- **MOISTURE REMOVAL**

- Dry mode with super low indoor fan speed can achieve more effective moisture removal.
- If the room temperature is lower than the set temperature (Cooling mode only), the compressor will cut out and force on after 9 minutes to remove moisture effectively.

- **HIGH EFFICIENCY HEAT EXCHANGER**

- The compact design of the 3-fold structure heat exchanger provides a large surface area for better and efficient heat exchange.
- The unique Hydrophilic slit fin has greatly improved the air flow and the contact surfaces with the air thus to boost the cooling capacity.



- **ROTARY COMPRESSOR**

- The ever popular rotary compressor is more energy efficient and has a higher output to weight ratio.

- **SELF DIAGNOSIS**

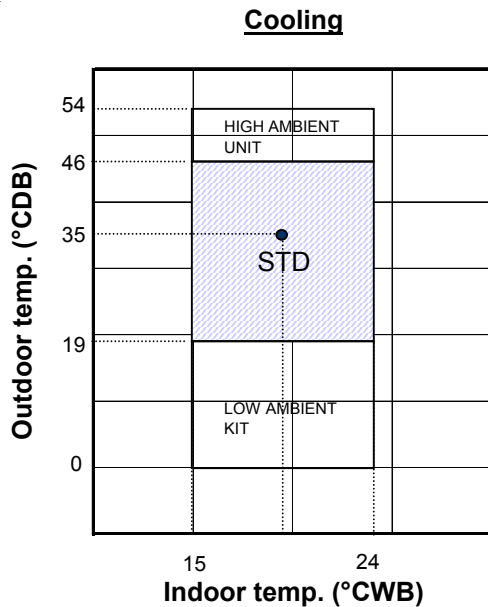
- This function is able to detect and to diagnose any faults occurring in the system by blinking of the LED lights.
- Simplify and ease for troubleshooting.

### 3. APPLICATION INFORMATION

#### Operating Range

Ensure the operating temperature is in allowable range.

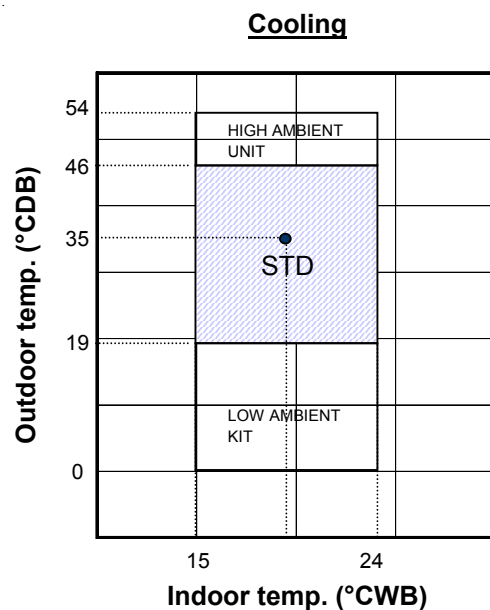
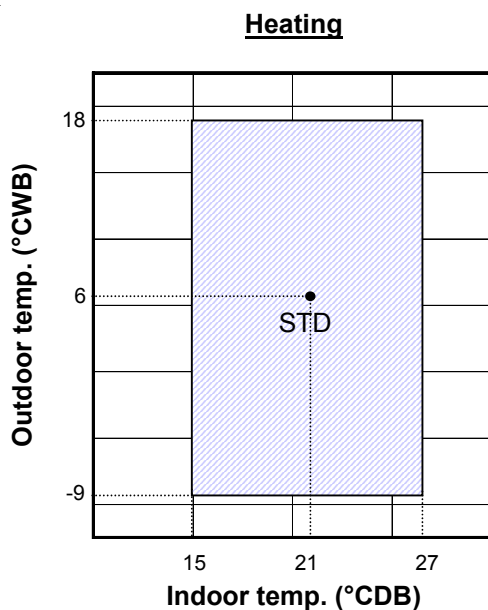
#### Cooling only



#### **Caution :**

The use of your air conditioner outside the range of working temperature and humidity can result in serious failure.

#### Heatpump

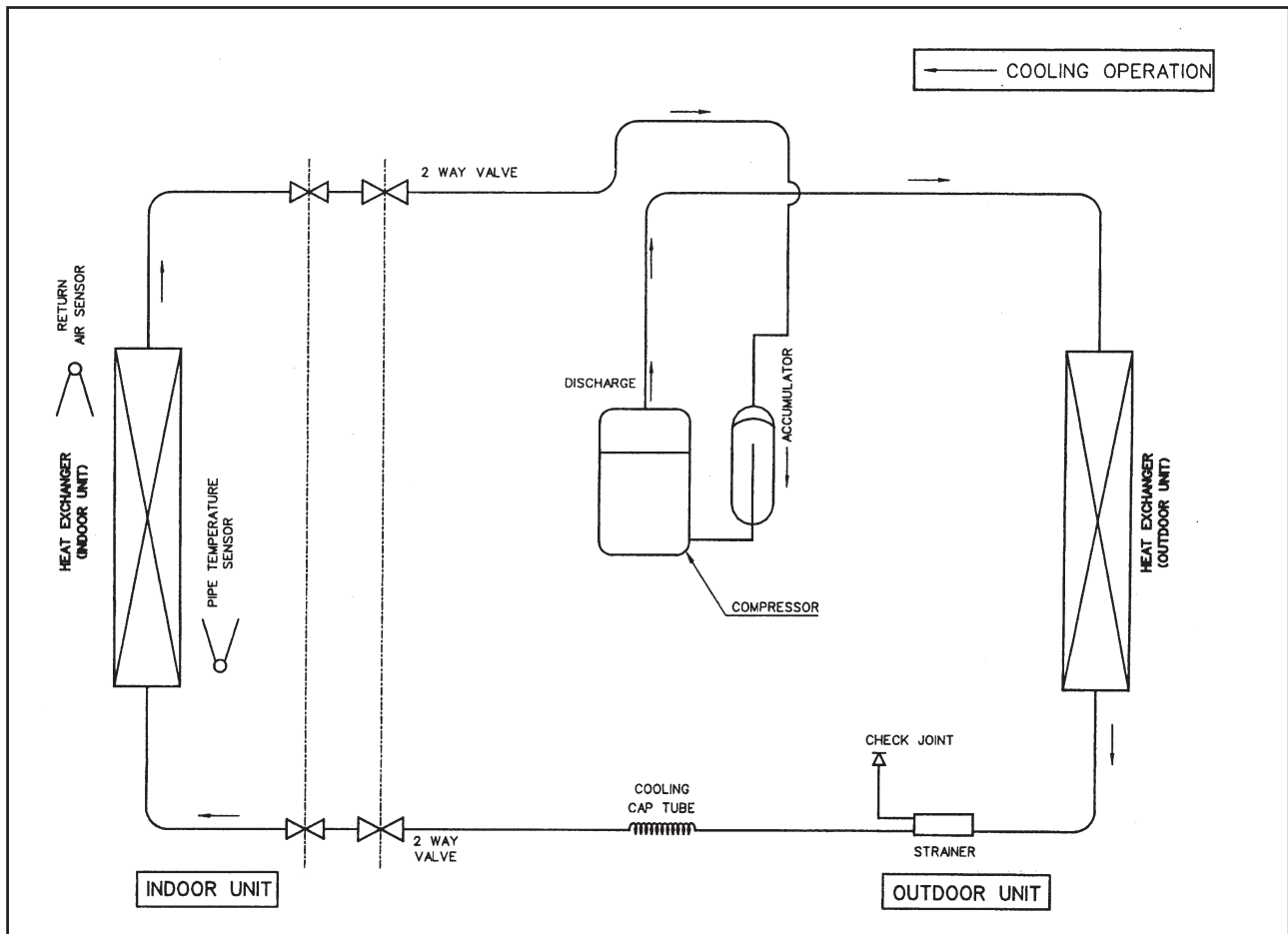


## Refrigerant Circuit Diagram

### Cooling Only Models

**MODEL :** AWM 07G - ALC 07C  
AWM 09G - ALC 09C  
AWM 10G - ALC 10C  
AWM 15G - ALC 15C

**A5WM 07G - A5LC 07C  
A5WM 09G - A5LC 10C  
A5WM 10G - A5LC 10C  
A5WM 15G - A5LC 15C**

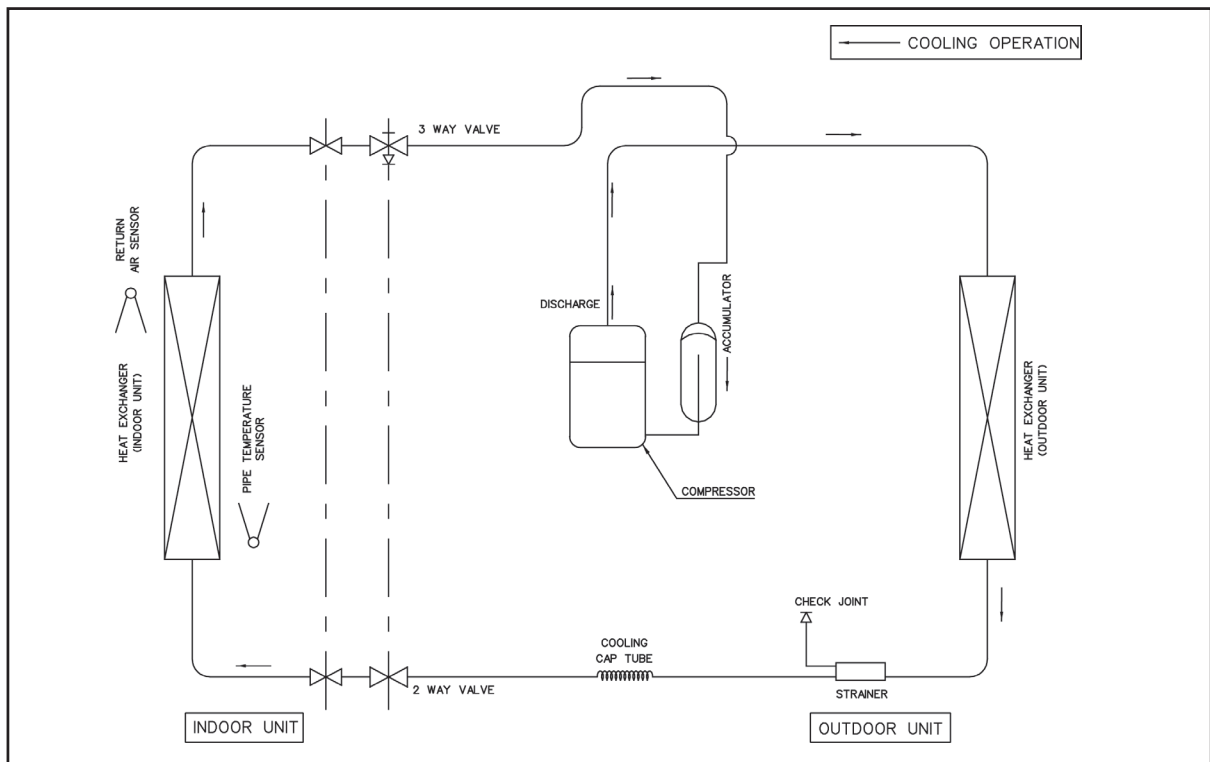




## Cooling Only Models

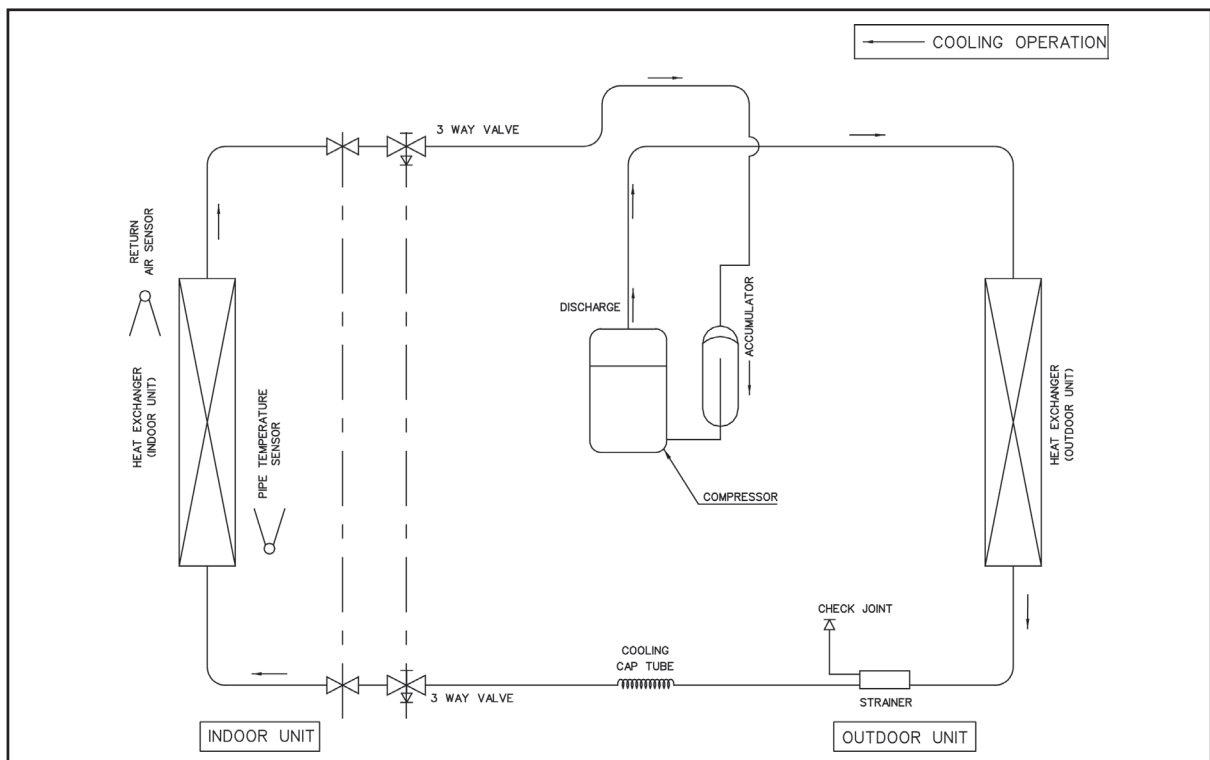
**MODEL : AWM 20G - ALC 18C**  
**AWM 20G - ALC 20C**

**A5WM 20G - A5LC 20C**  
**A5WM 25G - A5LC 25C**



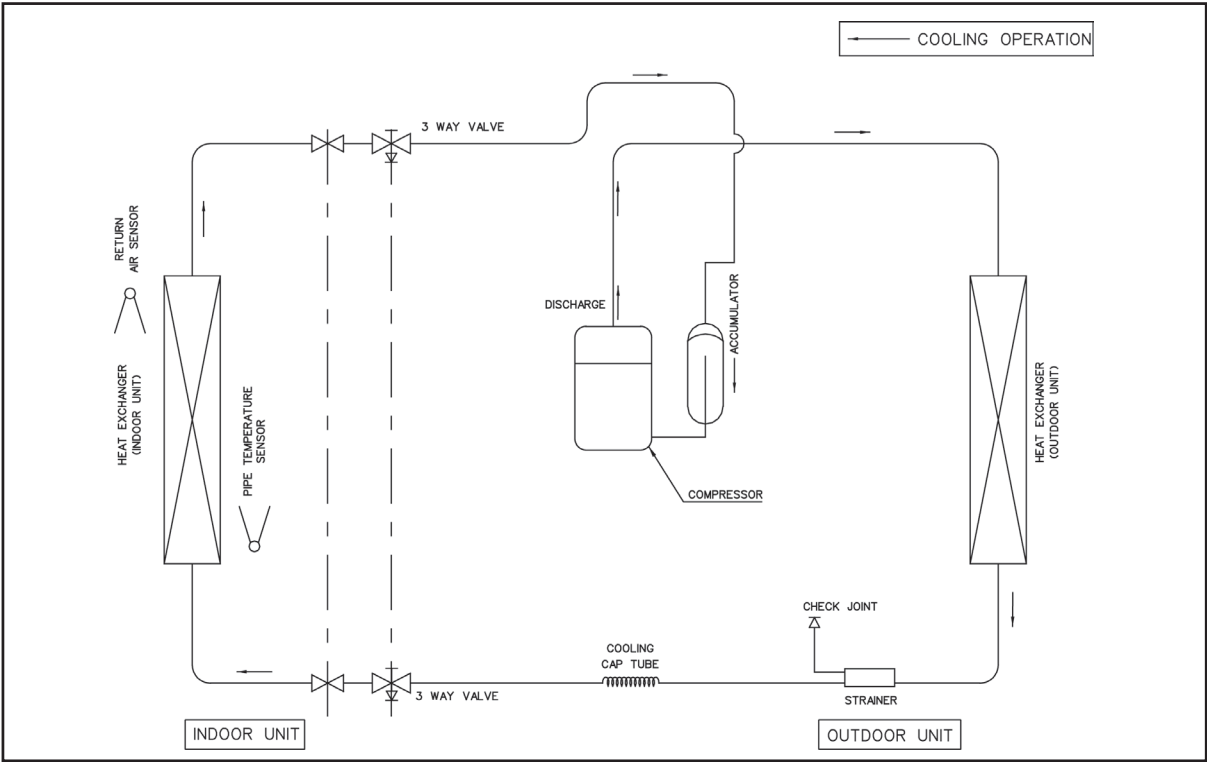
**MODEL : AWM 25G - ALC 25C**

**A5WM 31F - A5LC 28C**



Cooling Only Models

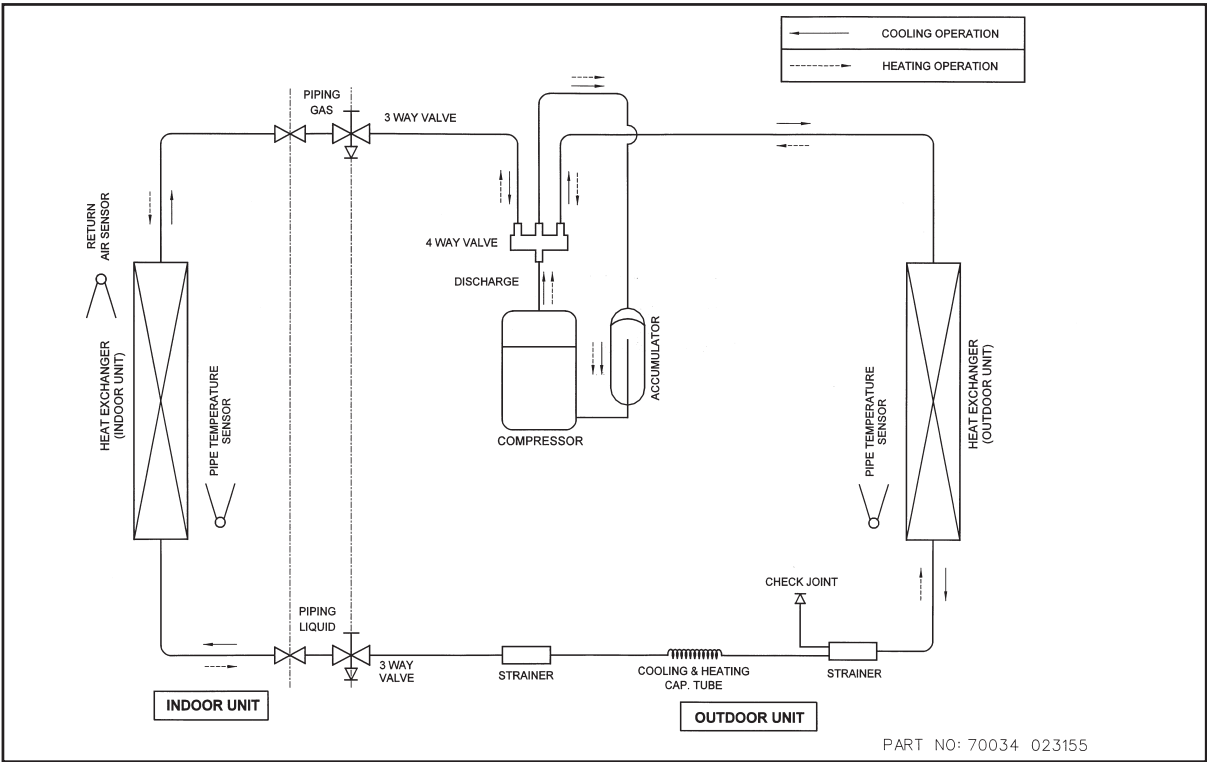
MODEL : AWM 30F - ALC 28C



Heatpump Models

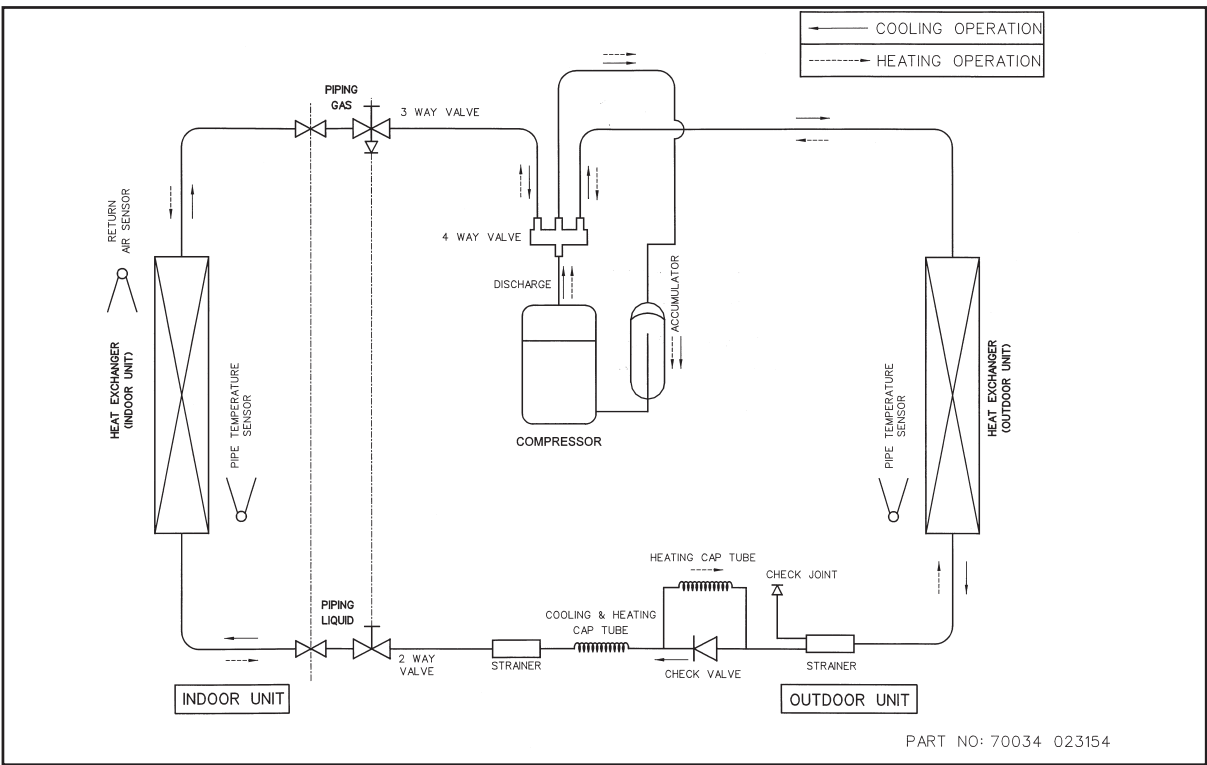
MODEL : AWM 09GR - ALC 09CR

A5WM 07GR - A5LC 07CR



MODEL : AWM 10GR - ALC 10CR  
A5WM 09GR - A5LC 10CR

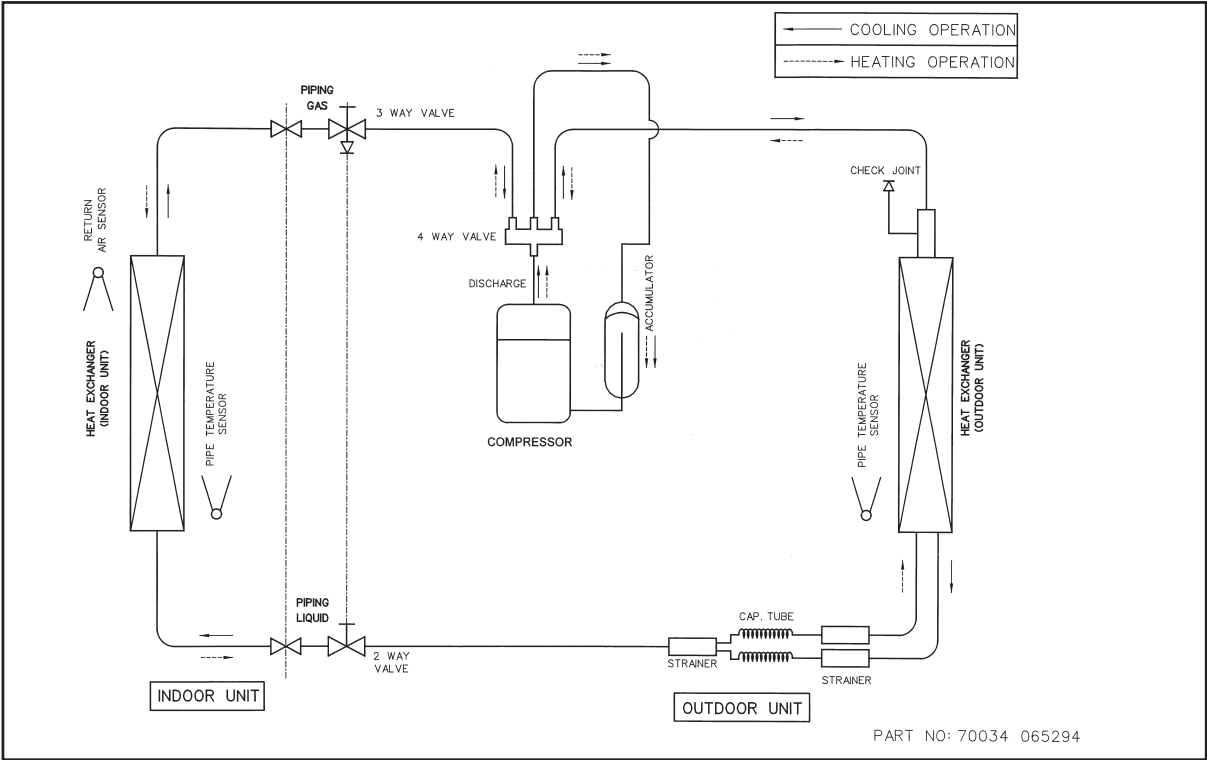
A5WM 10GR - A5LC 10CR



Heatpump Models

MODEL : AWM 15GR - ALC 15CR

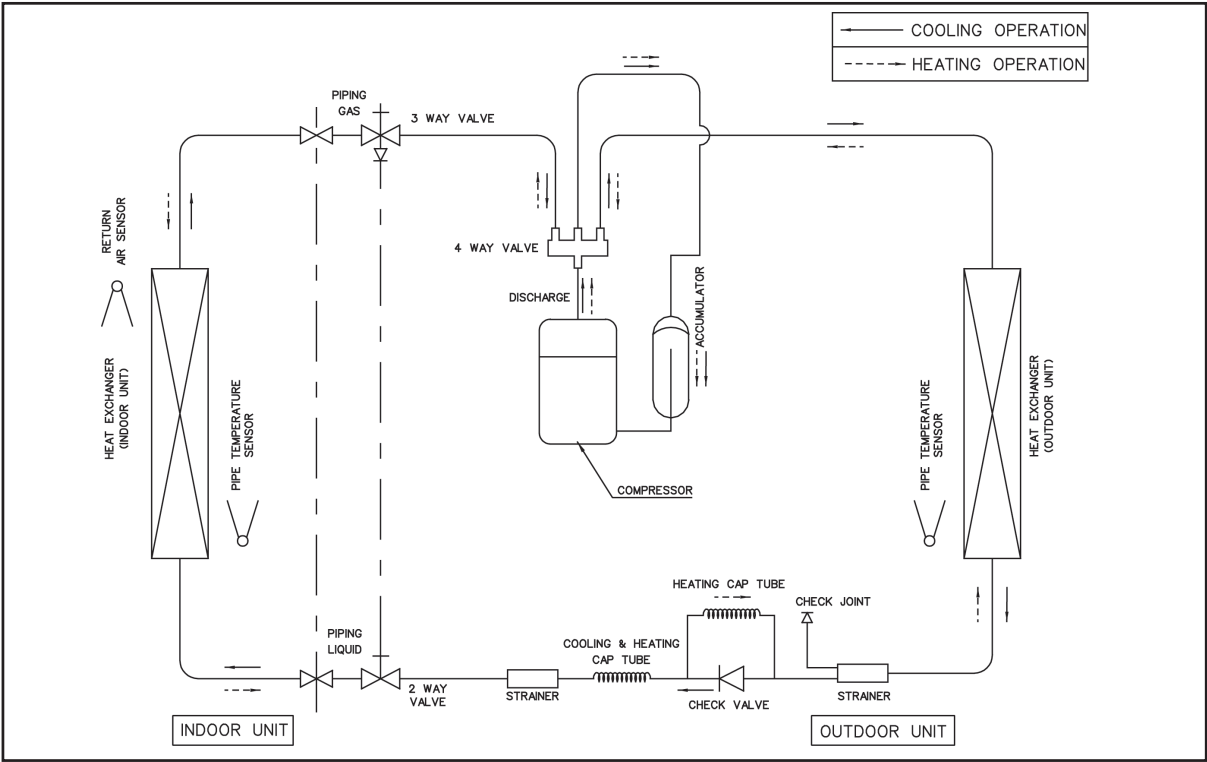
A5WM 15GR - A5LC 15CR



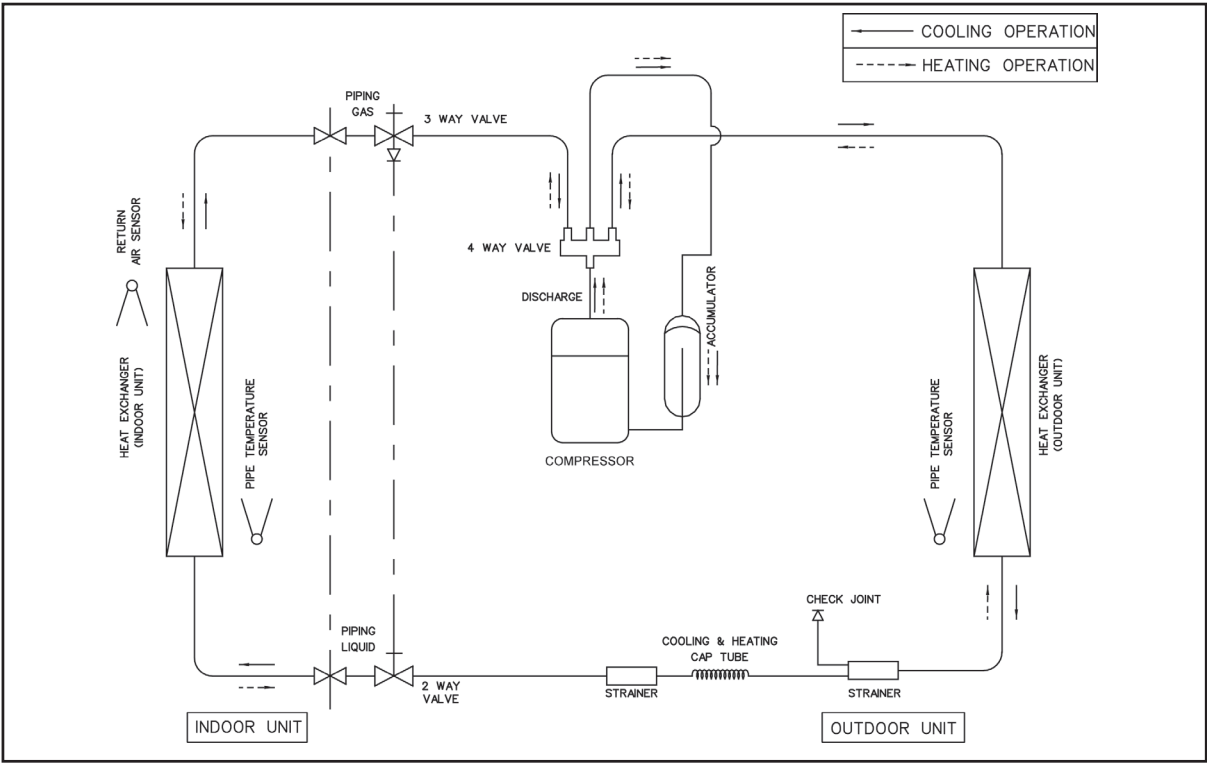
Heatpump Models

MODEL : AWM 20GR - ALC 20CR

A5WM 20GR - A5LC 20CR  
A5WM 25GR - A5LC 25CR



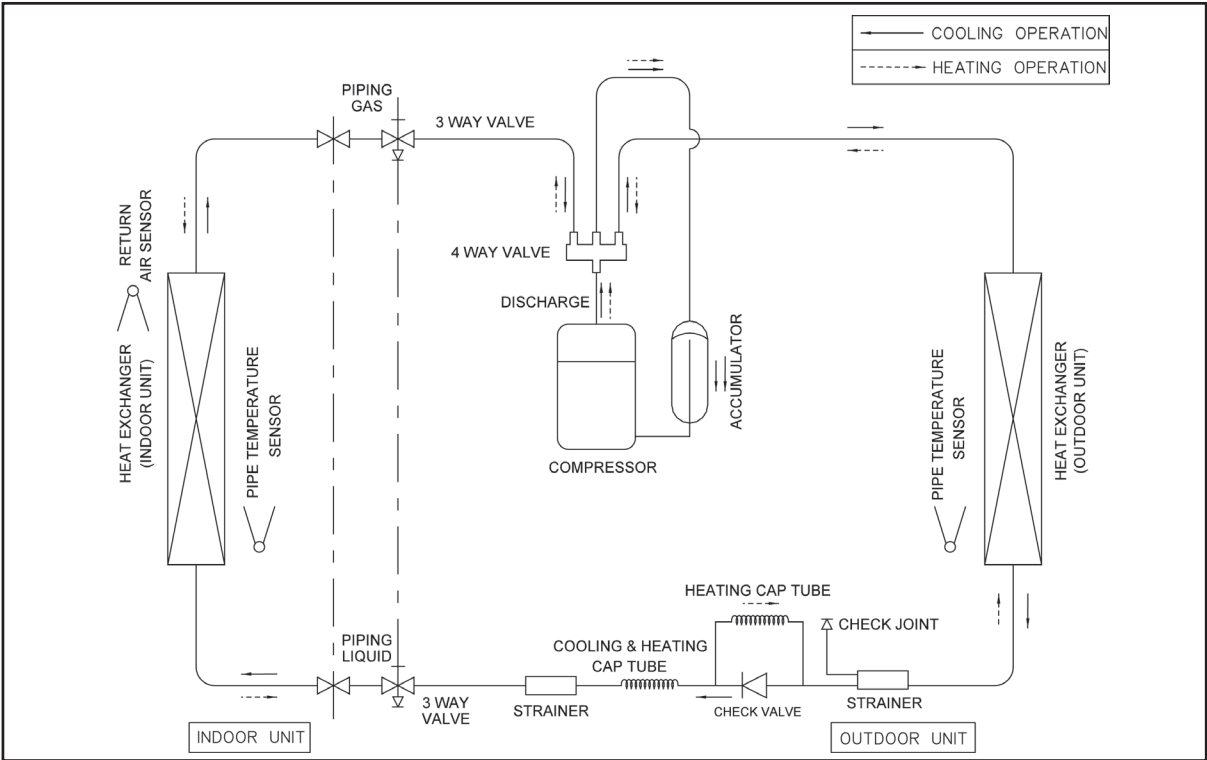
MODEL : AWM 25GR - ALC 25CR



Heatpump Models

MODEL : AWM 30FR - ALC 28CR

A5WM 30FR - A5LC 28CR



## Controllers

### G12 Remote Controller

#### Temperature Setting

- To set the desired room temperature, press the button to increase or decrease the set temperature.
- The temperature setting range is from 16°C to 30°C
- Press both buttons simultaneously to toggle the temperature setting between °C and °F

#### On/Off Button

- Press Once to start the air conditioner
- Press again to stop the unit

#### ON Timer Setting

- Press the SET button will activate the on timer function.
- Set the desired on time by pressing the SET button continuously.
- Press the CLR button to cancel the off timer setting

#### Fan Speed Selection

- Press the button until the desired fan speed is achieved.

#### Turbo Mode

- Press the TURBO button to achieve the required set temperature in a short time.

#### Automatic Air Awing

- Press the SWING button to activate the automatic air swing function.
- To distribute the air to a specific direction, press the SWING button and wait until the louver move to the desired direction and press the button once again.

#### Ionizer

- Press the button to activate the negative Ion function, which will refresh the indoor air effectively.

#### Personalised Setting

- Press and hold the button for 3s to initiate personalized setting.
- Set the individual setting e.g. MODE, SET TEMP or FAN SPEED and leave for 4s to save
- 2 groups of settings are allowed to stored in the handset

#### OFF Timer Setting

- Press the SET button will activate the off timer function.
- Set the desired off time by pressing the SET button continuously.
- Press the CLR button to cancel the off timer setting

#### Clock Time Setting

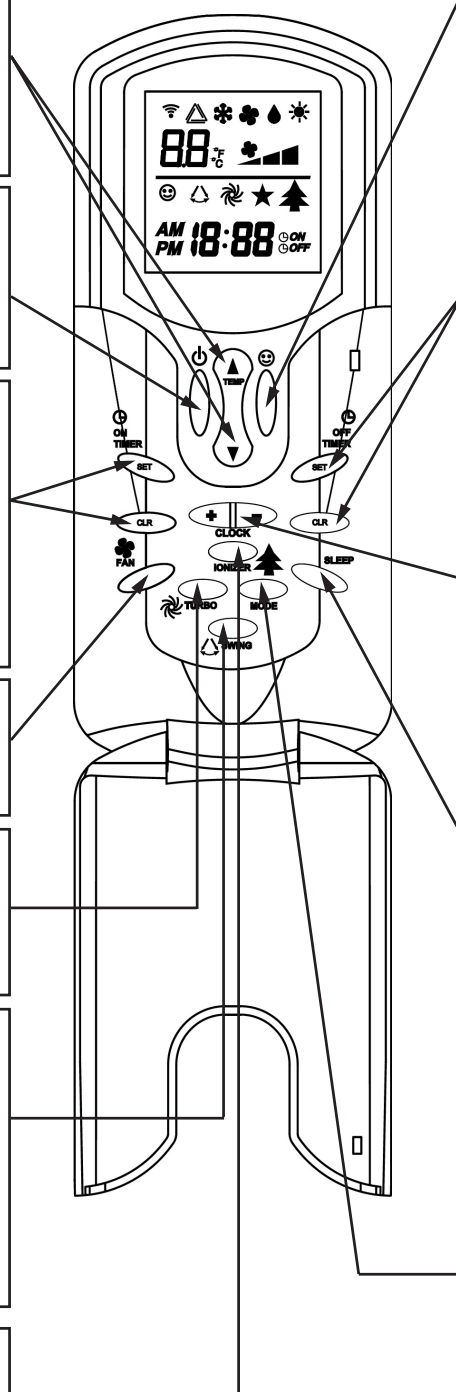
- Press button + or - to increase or decrease the clock time.

#### Sleep Mode

- Press the button to activate sleep mode. This function is available under COOL, HEAT & AUTO mode.
- When it is activated in COOL mode, the set temperature will be increased 0.5°C after 30mins, 1°C after 1 hour and 2°C after 2 hours.
- When it is activated in HEAT mode, the set temperature will be decreased 1°C after 30mins, 2°C after 1 hour and 3°C after 2 hours.

#### Operating Mode

- Press the MODE button to select the type of operating mode.
- For Cooling only unit, the available modes are: COOL, DRY & FAN.
- For Heatpump unit, the available modes are: AUTO, COOL, DRY, FAN & HEAT.



## Indicator Lights

### AWM / A5WM - G SERIES

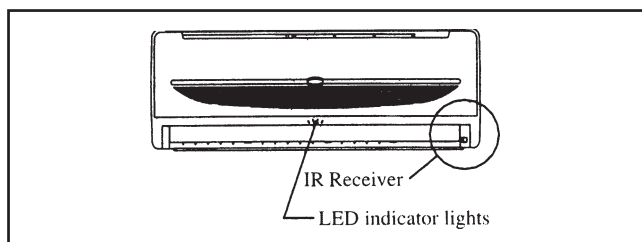
#### IR signal receiver

When there is infrared remote control operating signal, the signal receiver on indoor unit will make a (beep) for signal acceptance confirmation.

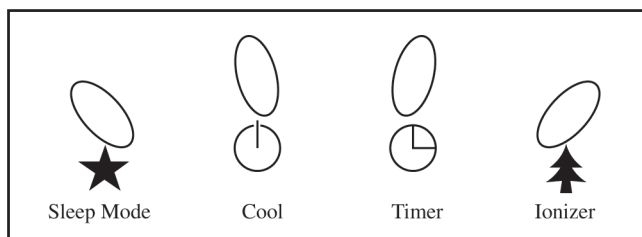
#### Cooling unit / Heatpump unit

The table below shows the LED indicator light for air conditioner unit under normal operation and fault condition. The LED indicator lights are located at the middle of the air conditioner unit.





The heat pump unit is equipped with an "auto" mode, whereby the unit will provide reasonable room temperature by switching the unit automatically to either "cool" mode or "heat" mode, according to the temperature setting set by the user.



#### LED Indicator Lights for Cooling Unit / Heatpump Unit



### LED Indicator Lights : Normal Operation And Faulty Indication Table

	 COOL/HEAT (GREEN/RED)			Normal Operation / Fault Indication	Action
○/●	○ Green		○/●	Cool mode	-
○/●	○ Red		○/●	Heat mode	-
○/●	○ Red		○/●	Auto mode in Heating operation	-
○/●	○ Green		○/●	Auto mode in Cooling operation	-
	○	○		Timer on	-
○	○			Sleep mode on	-
	○		○	Ionizer on	-
	○		○/●	Fan mode on	-
	○		○/●	Dry mode on	-
	● (1 time)			Room air sensor contact Loose / Short	Call your dealer
	● (3 times)			Outdoor coil sensor open	Call your dealer
●	●			Indoor coil sensor open	Call your dealer
		● (1 time)		Compressor overload / Indoor coil sensor short / Outdoor coil sensor short	Call your dealer
	● (Red)			Defrost operation	-
		● (3 times)		Gas leak	Call your dealer
		● (5 times)		Outdoor coil sensor exist (MS mode)	Call your dealer
		● (6 times)		Hardware error (tact switch pin short)	Call your dealer

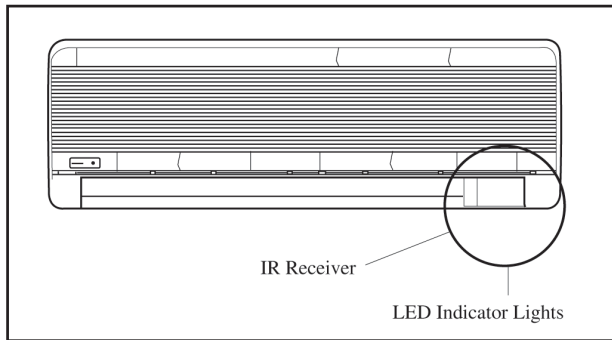
○ - ON

○/● - ON or OFF

● - Blinking



## AWM 30F / 30FR , A5WM 31F / 30FR



### LED Indicator Lights For Cooling Unit



Power ON



Timer



















Dry mode




Sleep mode

### LED Indicator Lights : Normal Operation And Fault Conditions For Cooling Unit





 Power	 Dry	 Timer	 Sleep	Operation / Fault Indication	Action
				Timer on	-
				Sleep mode on	-
				Dry mode on	-
 Continuously				Frost prevention	Clean the filter and switch to high fan
 once every 2 sec.				Room air sensor contact loose / short	Call your dealer
 twice every 2 sec.				Indoor coil sensor contact loose / short	Call your dealer
 3 times every 2 sec.				Sensor contact problem, compressor overload protection trip or gas leak	Call your dealer

 - ON






 - ON or OFF

 - Blinking

## LED Indicator Lights For Heatpump Unit

			
Cooling mode	Dry mode	Heat/Fan mode (red/green)	Sleep mode

## LED Indicator Lights : Normal Operation And Fault Conditions For Cooling Unit

					Normal Operation / Fault Indication	Action
Cool	Dry	Fan	Heat	Sleep		
○				○/●	Cooling mode	-
	○				Dry mode	-
		○			Fan mode	-
			○	○/●	Heat mode	-
◐			○	○/●	Auto mode in heating operation	-
○			◐	○/●	Auto mode in cooling operation	-
			◐		Defrost operation	-
◐					Compressor overload protection	Call your dealer
				◐	Indoor coil sensor contact loose/short	Call your dealer
	◐				Outdoor coil sensor contact loose/short	Call your dealer
		◐			Room air sensor contact loose/short	Call your dealer
◐	◐				If the system is in cool mode or heat mode (with the sleep function off), the sensor may have a contact problem, compressor overload protection trip or gas leak.	

○ - ON

○/● - ON or OFF

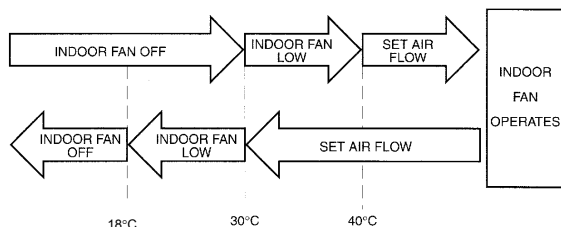
◐ - Blinking

## Controller Specifications

### (A) 3 HOT SYSTEM (HEATING CYCLE)

#### a) Hot start

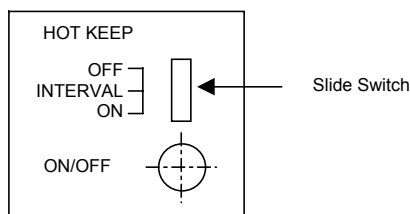
At the beginning of heating operation (cold start, after defrosting or thermostat resumes operation) the indoor fan operation is controlled in accordance with the temperature of the indoor heat exchanger to send warm air from the start.



#### b) Hot keep (Apply to MWM030FR)

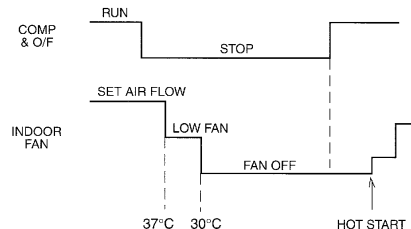
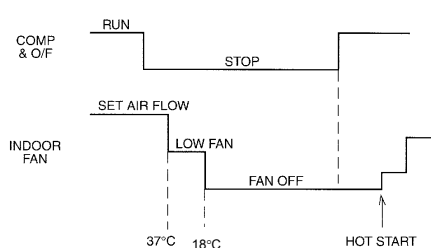
After thermostat cut out, the indoor fan operation is controlled in accordance with the indoor heat exchanger temperature to utilize the extra heat and preserve indoor comfort.

The indoor fan can be switched to ON, OFF, INTERVAL by setting the slide switch shown in the diagram. This slide switch is located at the front frame cover.

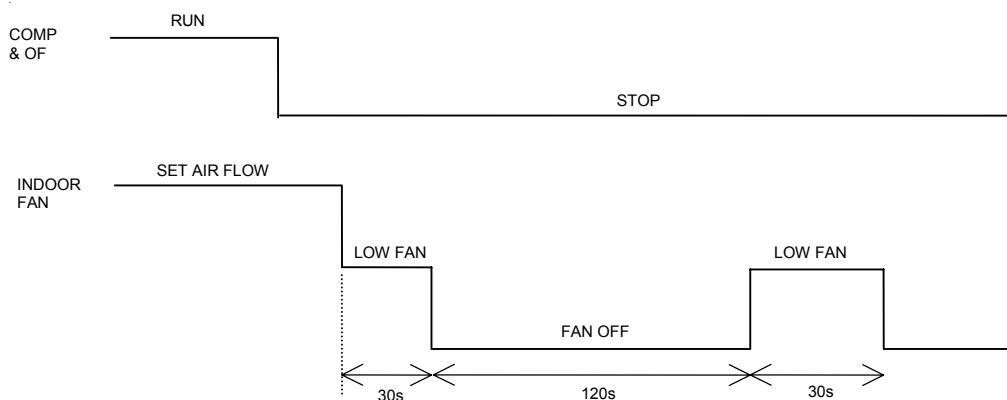


Note 1 : Fan ON (default)

Note 2: Fan OFF



Note 3 : Interval



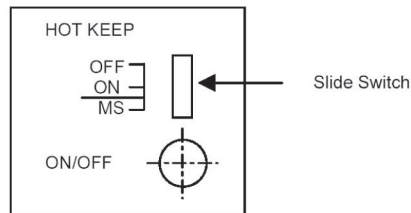
### Hot Keep (Apply to AWM-GR)

After thermostat cut out, the indoor fan operation is controlled in accordance with the indoor heat exchanger temperature to utilize the extra heat and preserve indoor comfort.

The indoor fan can be switched to ON, OFF by setting the slide switch shown in the diagram. This slide switch is located at the front frame cover.

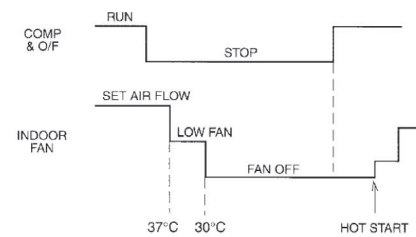
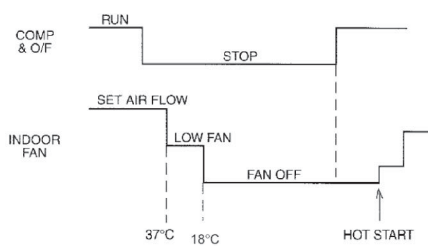
### Multisplit Model Selection

The indoor unit can be changed to multisplit model by just selecting MS through the slide switch.



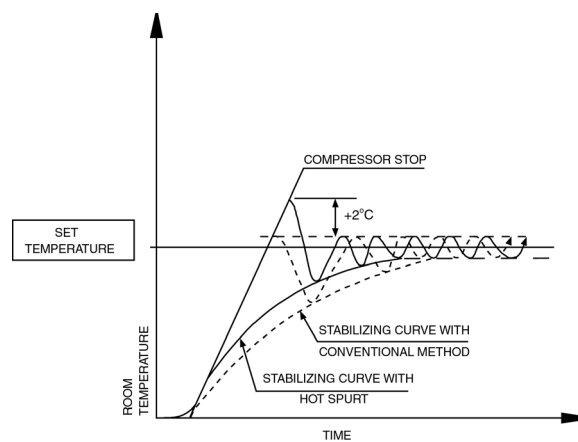
Note 1 : Fan ON (default)

Note 2: Fan OFF



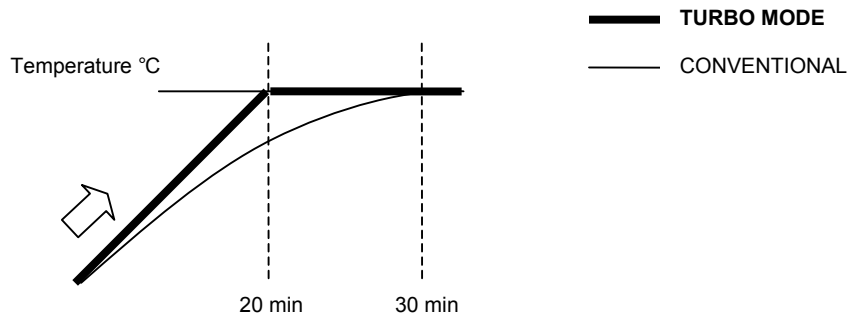
### c) Hot spurt

During cold start, the set temperature of controller is increased by 2°C to stabilize the room temperature quickly.



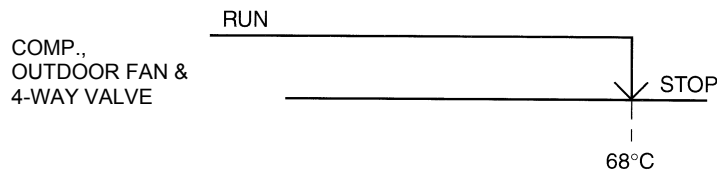
### (B) TURBO MODE (APPLY TO AWM-GR)

TURBO function is available in COOL, HEAT and DRY modes only. When TURBO function is set, working temperature for cooling cycle is decreased by 2°C, working temperature for heating cycle is increased by 2°C. The indoor fan will force to HIGH fan. After 20 minutes, this function will clear automatically, no more offset temperature for set temperature and indoor fan will restore. Cold start will be overridden when TURBO function is activated. If TURBO and SLEEP are activated at the same time, the SLEEP mode timer will be reset, it will resume after TURBO function is cleared.



### (C) OVERLOAD PREVENTION IN HEATING OPERATION

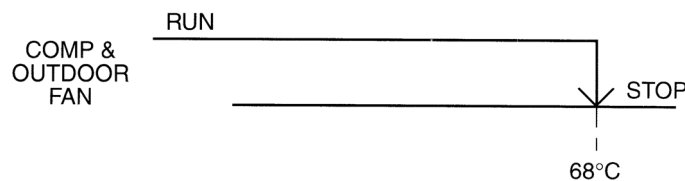
During heating operation, if the room temperature and outdoor temperature are high, or when the indoor air filter is choked, the condensing pressure will increase rapidly. To prevent the burn out of compressor, the M. C. controller will stop the operation of the air conditioner under this condition.



- For manual reset type, the ON / OFF button must be pressed to reset the system.

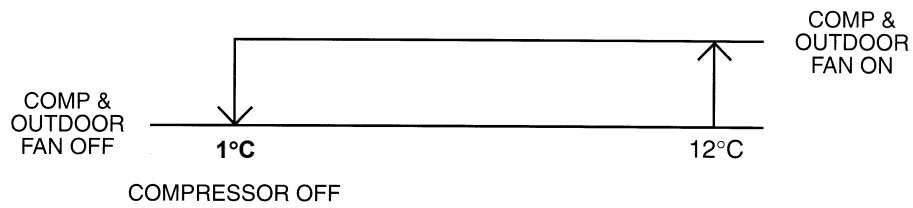
### (D) OVERLOAD PROTECTION IN COOLING OPERATION

When outdoor and indoor air temperature raise beyond the operation limit, or when the outdoor coil choked with dirt, the M.C. controller detects abnormal increase in condensing temperature. It will stop the operation to prevent compressor burn out.



### (E) FROST PREVENTION AND FILTER CHECK

In order to prevent the freezing of indoor coil, the controller will operate as follow.

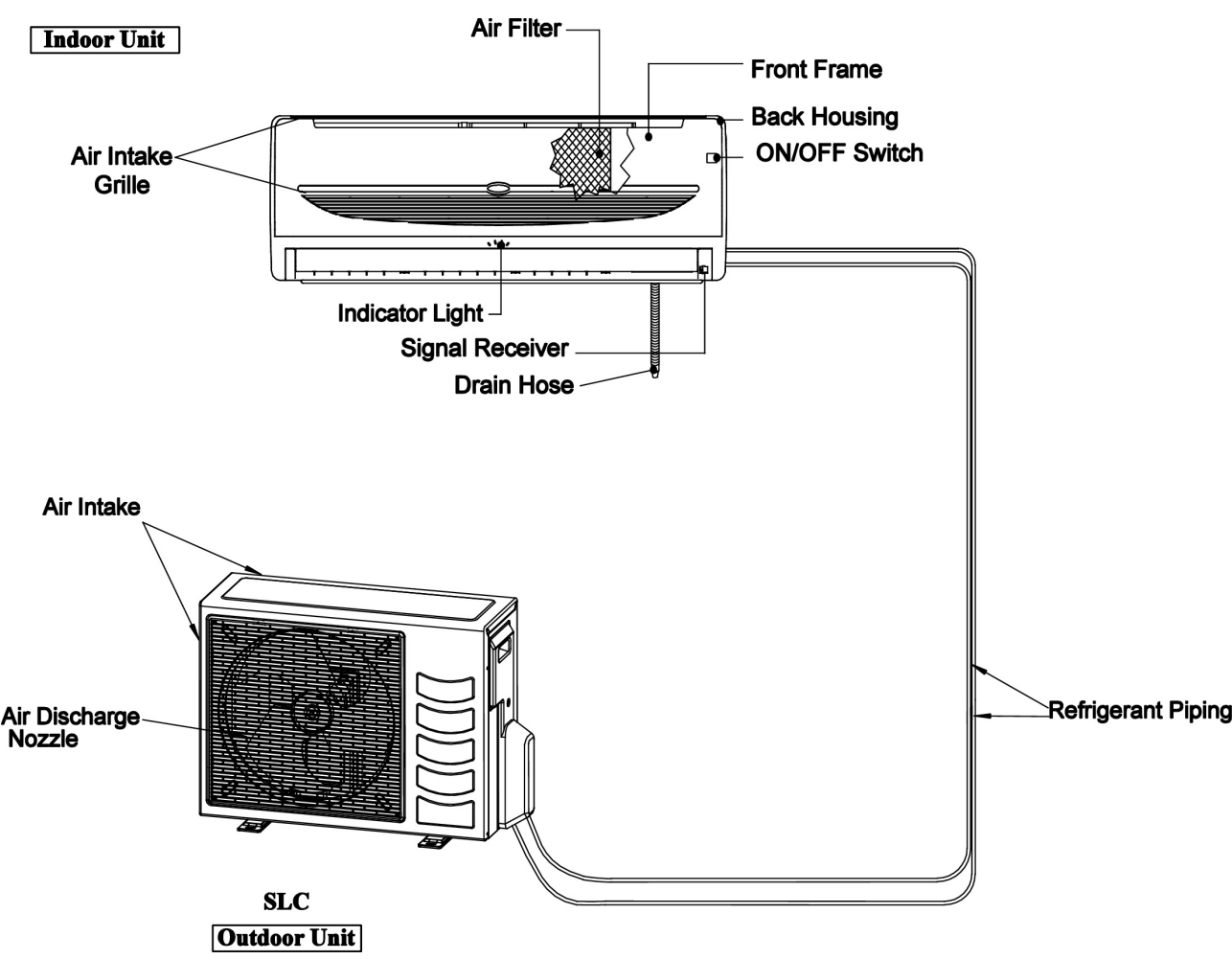


### (F) AUTO RANDOM RESTART

When power resumed, the unit will automatically restart and operate at the previous setting as before power failure occurred.

Installation

Installation Diagram



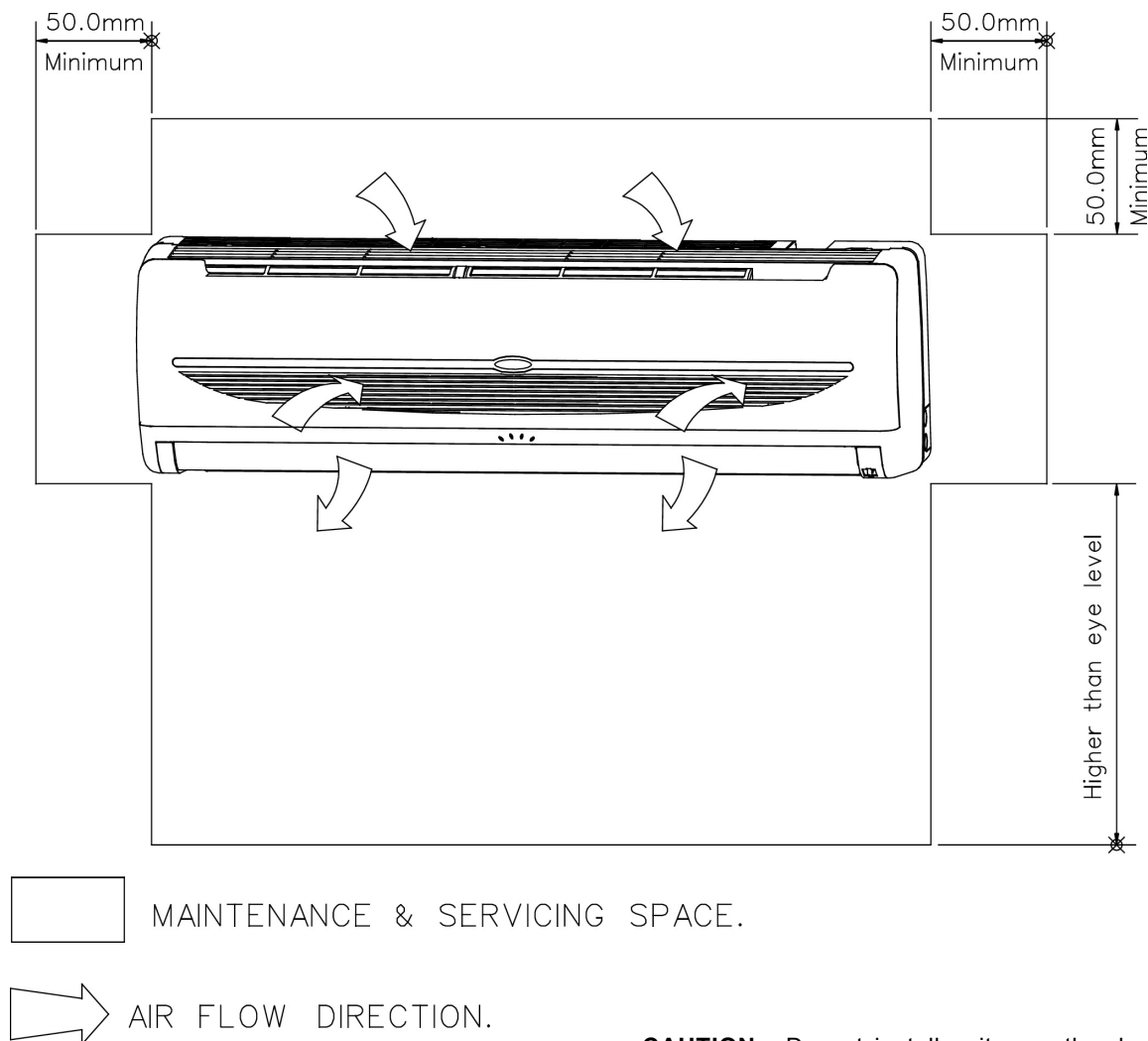
**CAUTION:** Before installing the unit, ensure that the power supply matches the power requirement of the air conditioner.

## 1) SELECTION OF LOCATION AND SPACE

### (A) INDOOR UNIT

Install the fan coil (indoor) unit at a location with the following requirements

- Location is suitable for wiring, piping and drainage.
- No obstruction of air flow into and out of unit where cooler air can be evenly distributed. (See fig. 1)
- Ensure that air discharge is not short circuited with air intake.
- Ensure that wall is sufficiently strong, rigid, flat, perpendicular and vibration free.
- Where air filter cassette can be slid in or out easily.
- Where there is no danger of flammable gases.
- Where there is no direct sunlight on unit.
- Also to take into consideration a place for the installation of the Wireless LCD Remote Controller.



**CAUTION :** Do not install unit near the door way because excessive fresh air may cause panel condensation on the unit.

Fig. 1



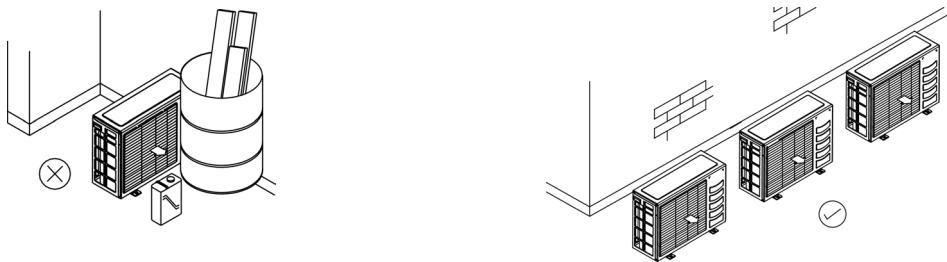
## (B) OUTDOOR UNIT

As condensing temperature rises, evaporating temperature rises and cooling capacity drops. In order to achieve maximum cooling capacity, the location selected for outdoor unit should fulfill the following requirements :

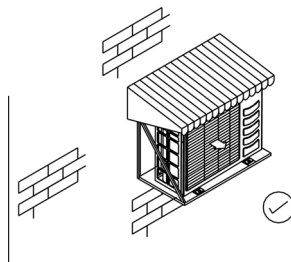
- Install the condensing (outdoor) unit in a way such that hot air distributed by the outdoor condensing unit cannot be drawn in again (as in the case of short circuit of hot discharge air). Allow sufficient space for maintenance around the unit.



- Ensure that there is no obstruction of air flow into or out of the unit. Remove obstacles which block air intake or discharge.



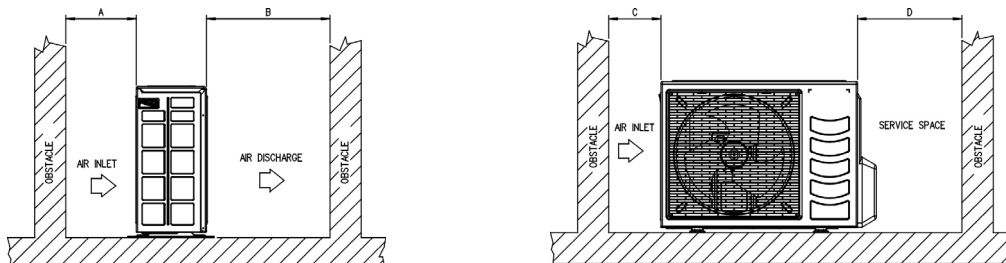
- The location must be well ventilated, so that the unit can draw in and distribute plenty of air thus lowering the condensing temperature.
- A place capable of bearing the weight of the outdoor unit and isolating noise and vibration.
- A place protected from direct sunlight. Otherwise use an awning for protection, if necessary.



- The location must not be susceptible to dust or oil mist.

## INSTALLATION CLEARANCE

- Outdoor units must be installed such that there is no short circuit of the hot discharge air or obstruction to smooth air flow. Select the coolest possible place where intake air should not be hotter than the outside temperature (max. 45°C)

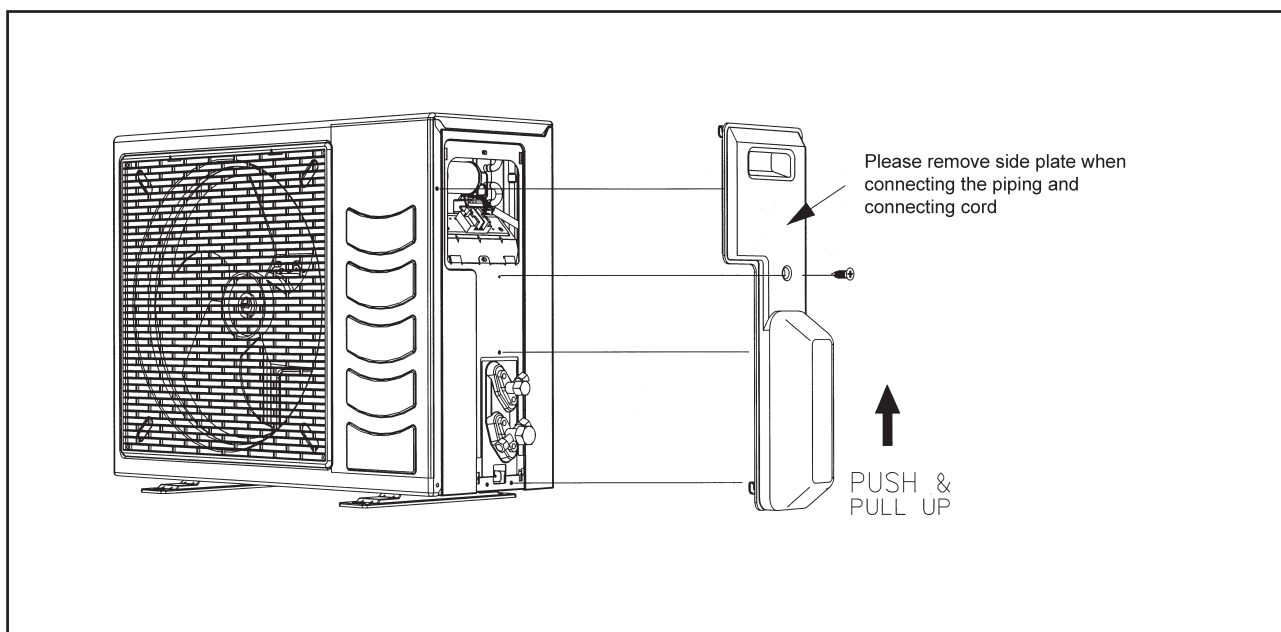
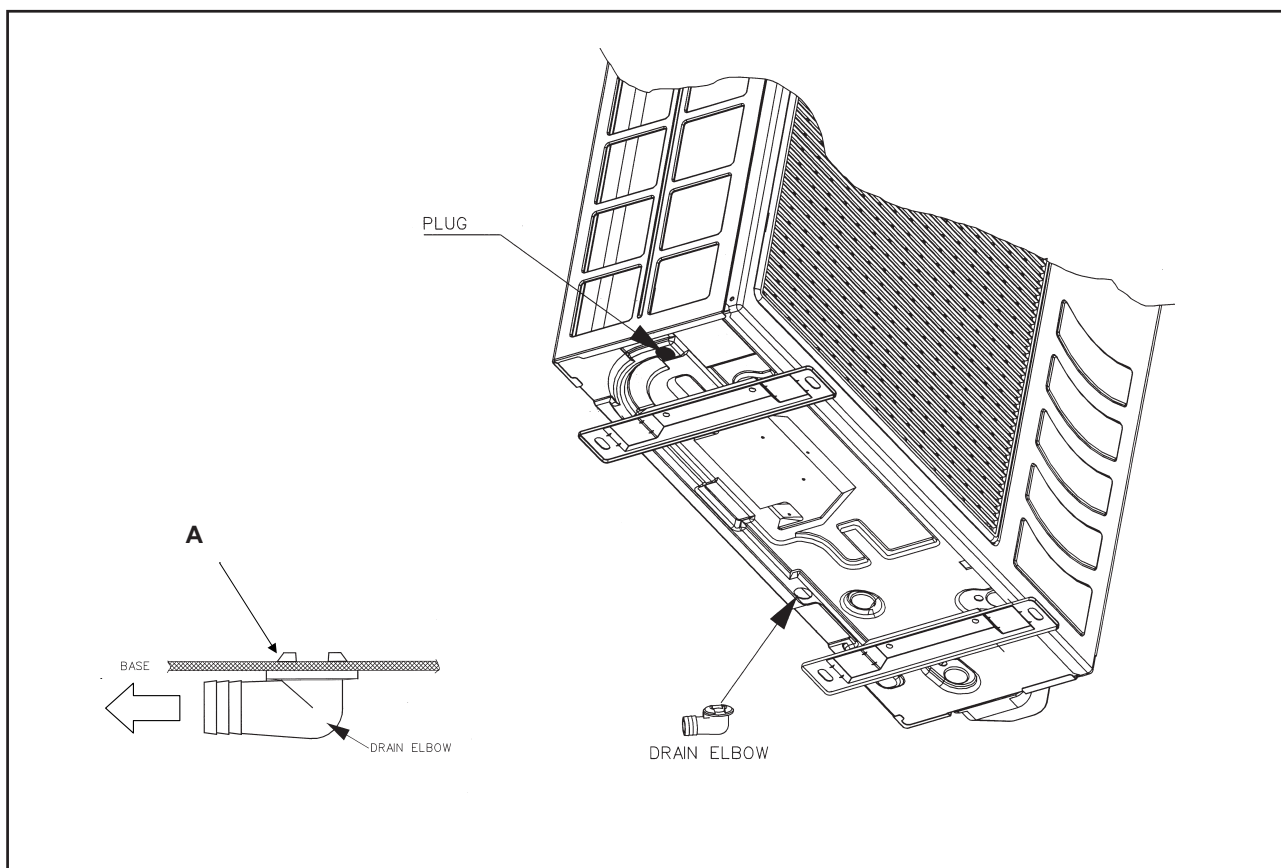


ALL MODELS	A	B	C	D
Minimum Distance	300 mm	1000 mm	300 mm	500 mm

**CAUTION :** If the condensing unit is operated in an atmosphere containing oils(including machine oils), salt(coastal area), sulphide gas(near hot spring, oil refinery plant), such substances may lead to failure of the unit.

## CONDENSED WATER DISPOSAL OF OUTDOOR UNIT (HEATPUMP UNIT ONLY)

- There are 2 holes on the base of outdoor unit for condensed water to flow out. Insert the drain elbow to one of the holes.
- To install the drain elbow, first insert one portion of the hook to the base (portion A), then pull the drain elbow in the direction shown by the arrow while inserting the other portion to the base. After installation, check to ensure that the drain elbow clings to base firmly.
- If the unit is installed in a snowy and chilly area, condensed water may freeze in the base. In such case, please remove plug at the bottom of unit to smooth the drainage.



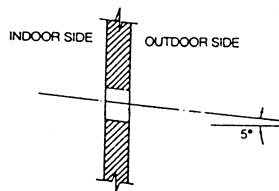
## 2) DRILLING HOLES AND MOUNTING INSTALLATION PLATE

### CAUTION:

- i) Please check the unit weight for each model. Always ensure that the wall is sufficiently strong to withstand the weight. If not, it is necessary to reinforce the wall with plate, beams or pillars.
- ii) The unit cannot be directly fixed onto the wall or the likes. In all cases, the installation plate provided **MUST** be used.

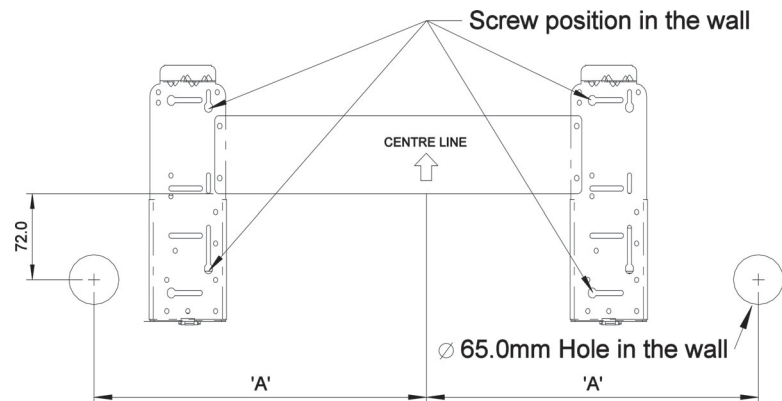
- Paste the installation plan provided on the desired location on the wall and mark the holes location accordingly.
- Ensure that the minimum maintenance and servicing space at the top, left and right side of the unit is reserved.
- Ensure also the levelness of the installation plate.
- Drill the screw mounting holes (minimum 4 screws are required).
- Drill the pipe hole at the location as per plan. (This is only applicable for rear piping outlet installation).

Note: The hole should be drilled slightly lower at outdoor side as per figure below:--

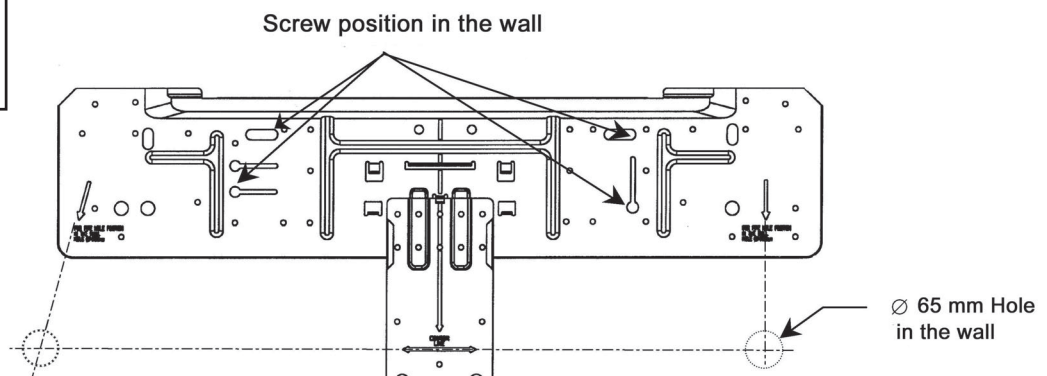


- Fix the installation plate firmly to wall, without tilting to left or right. Use a plumb line, if available.

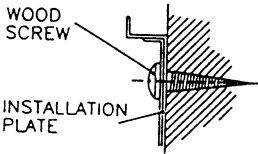
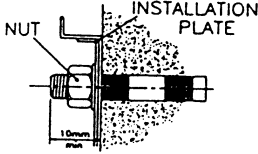
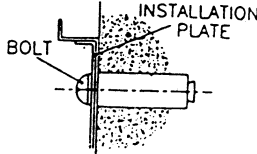
MODEL	DIMENSION 'A'
AWM 07/09 G/GR	350.0 mm
A5WM 07/09 G/GR	
AWM 10/15 G/GR	400.0 mm
A5WM 10/15 G/GR	



MODEL
AWM 20 / 25 G/GR
A5WM 20 / 25 G/GR
AWM 30F / 30FR
A5WM 31F / 30FR

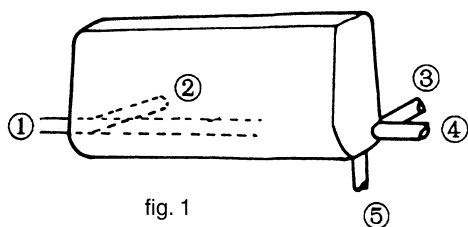


- Fixing method:-

WOODEN FRAME WALL	REINFORCED CONCRETE BUILDING	
	NUT ANCHOR	BOLT ANCHOR
 <p>WOOD SCREW INSTALLATION PLATE</p>	 <p>NUT INSTALLATION PLATE 10mm gap</p>	 <p>BOLT INSTALLATION PLATE</p>

### 3) INDOOR UNIT PREPARATION

- The refrigerant piping can be routed to the unit in 5 direction, by using the cut outs in the unit casing. (See fig. 1)



- Carefully bend the pipes to the required position to align with the hole. For right hand and rear side draw out, hold the bottom of the piping and fix direction before shaping it to the desired position (See fig. 2). The condensation drain hose should be taped to the pipes with vinyl tape. The electrical cable can also be taped to the pipes.

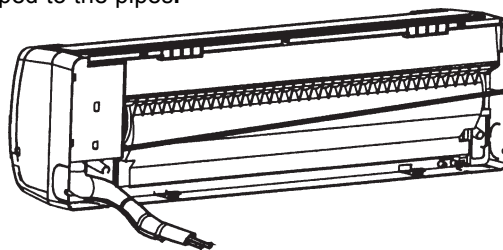
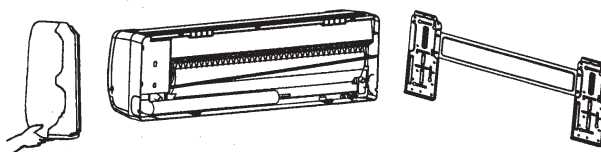


fig. 2

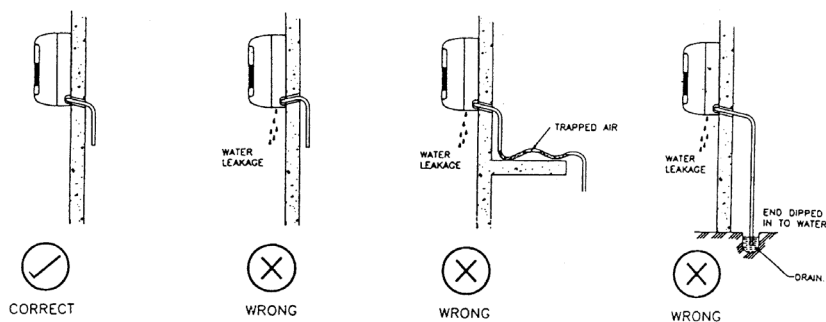
### 4) MOUNTING INDOOR UNIT

Hook the indoor unit onto the upper portion of installation plate. (Engage the 2 hooks of rear top of the indoor unit with the upper edge of the installation plate). Ensure the hooks are properly seated on the installation plate by moving in left and right.



### 5) WATER DRAINAGE PIPING

The indoor drain pipe must be downward gradient for smooth drainage. Avoid situation as shown in figure below.



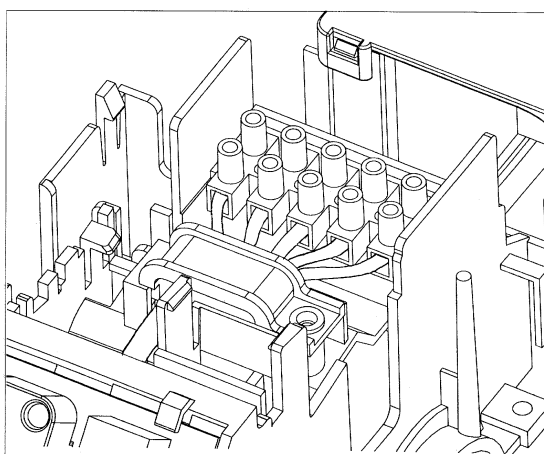
## 6) WIRING

### ELECTRICAL CONNECTION

- Wiring regulation on wire diameters differ from country to country. Please refer to your LOCAL ELECTRICAL CODES for field wiring rules. Be sure that installation comply with such rules and regulations.

### GENERAL PRECAUTIONS

- Ensure that the rated voltage of the unit corresponds to the name plate before carrying out proper wiring according to the wiring diagram.
- Provide a power outlet to be used exclusively for each unit. A power supply disconnect and a circuit breaker for over current protection should be provided in the exclusive line.
- The unit must be GROUNDED to prevent possible hazards due to insulation failures.
- All wiring must be firmly connected.
- All wiring must not touch the hot refrigerant piping, compressor or any moving parts of fan motors.
- The field wires from the indoor unit must be clamped on the wire clamp as per shown in the figure.



## 7) REFRIGERANT PIPING

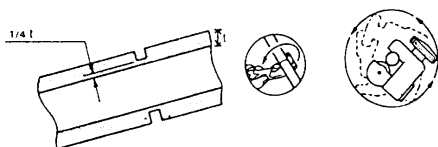
### MAXIMUM PIPE LENGTH AND MAXIMUM NUMBER OF BENDS

Always choose the shortest path for refrigerant piping and follow the recommendations as tabulated below:

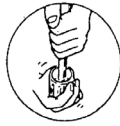
Model \ Data	AWM/A5WM 07G/GR	AWM 09G/GR	AWM/A5WM 10G/GR	AWM/A5WM 15G/GR	AWM/A5WM 20G/GR	AWM/A5WM 25G/GR	A5WM 311/301R AWM 301/R
Max. Length, L (m)	12	12	12	12	15	15	35
Max. Elevation, H (m)	5	5	5	5	8	8	15
Max. No. of Bends	10	10	10	10	10	10	10

### FLARE CONNECTION

- Cut the pipe stages by stages, advancing the blade of pipe cutter slowly.

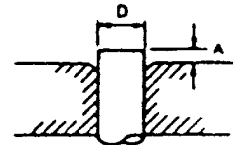


- Remove burr with the burr remover. Hold the flaring end down to prevent burrs from dropping inside pipe.



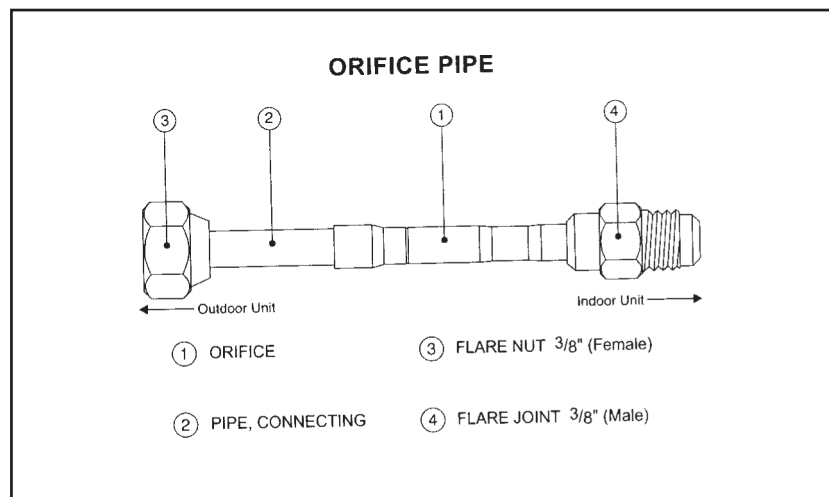
- The exact length of pipe protruding from the face of the flare die is determined by the flaring tool. The table shows the use of an imperial die and rigid die.

PIPE Ø, D (mm)	A(mm)	
	IMPERIAL DIE	RIGID DIE
6.35 (1/4")	1.3	0.7
9.52 (3/8")	1.6	1
12.7 (1/2")	1.9	1.3
15.88 (5/8")	2.2	1.7

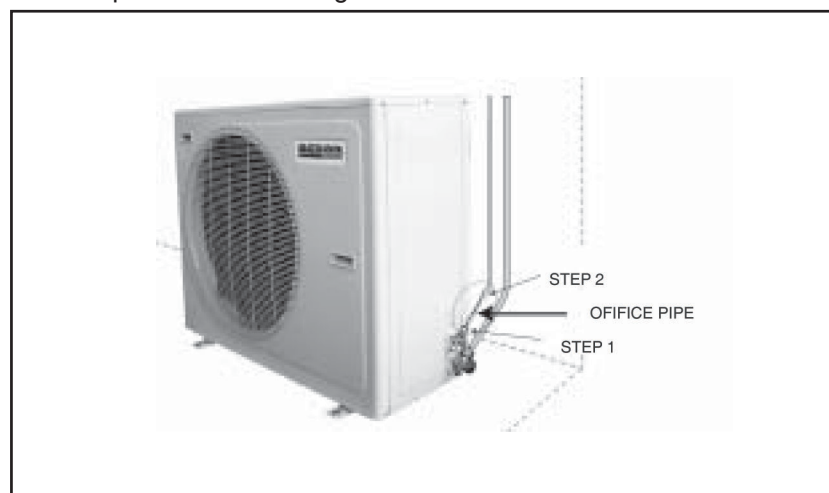


Fix the pipe firmly on the flare die. Match the centers of both the flare die and the flaring punch, and tighten flaring punch fully.

## 8) INSTALLATION OF SEPARATE ORIFICE KIT AT OUTDOOR



### i) Outdoor Unit Installation Space Is Wide Enough

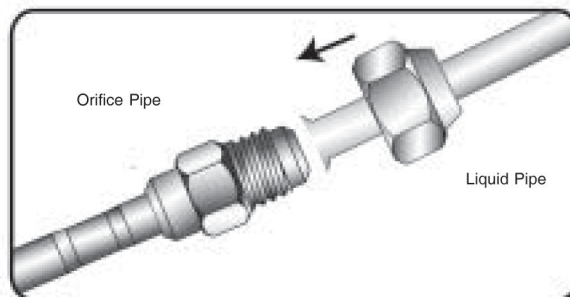


Steps :

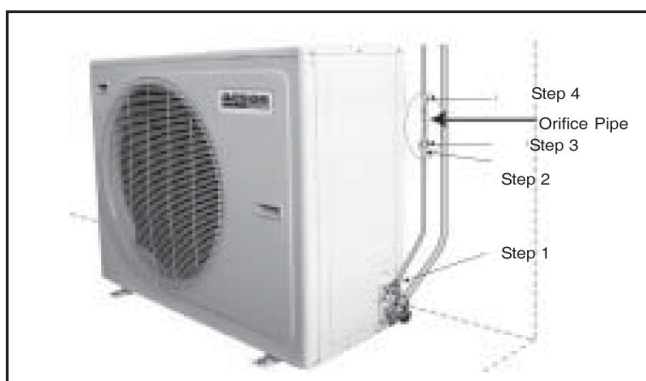
a) Directly connect the “Female” nut of orifice pipe to the liquid pipe.



b) Flare the liquid pipe and connect it to the “Male” joint of the orifice pipe.



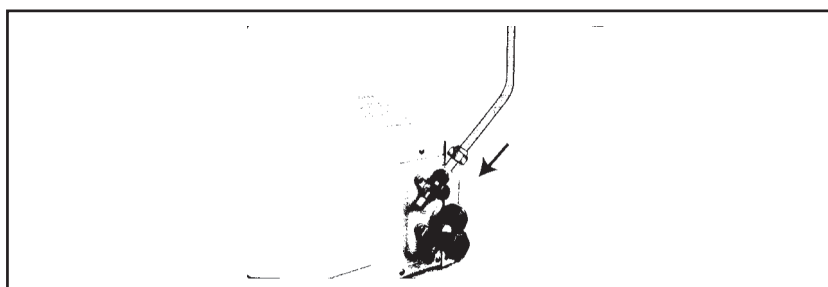
ii) Outdoor Installation Space Is Limited



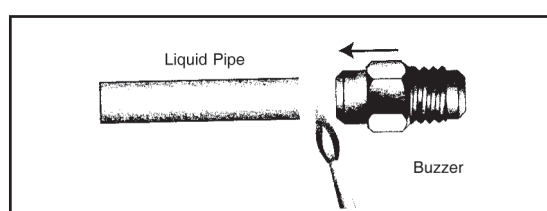
If the orifice pipe can not be connected directly to the liquid valve due to limitation space, it can be connected between the liquid pipes.

Steps :

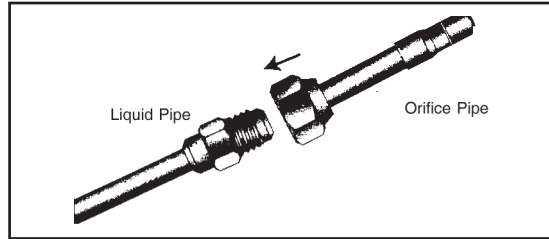
a) Flare the liquid pipe and connect it to the liquid valve.



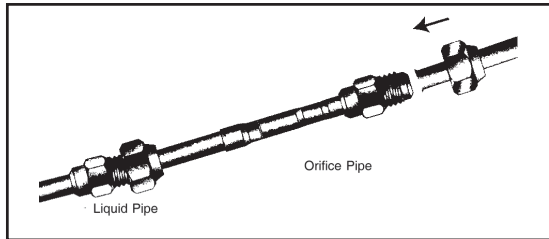
b) Braze an addition “Male” joint to the liquid pipe.



c) Connect the “Female” nut of the orifice pipe to the “Male” joint.

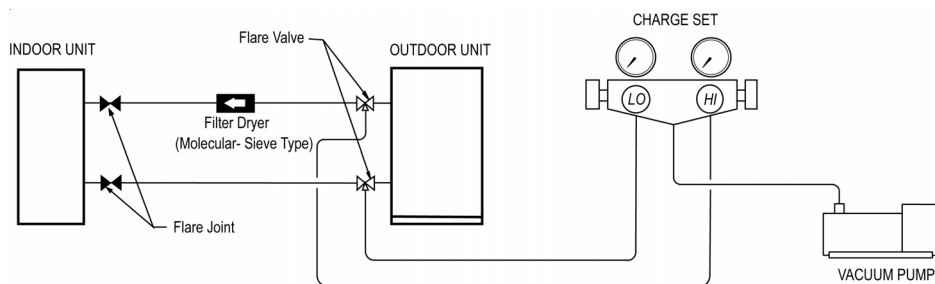


d) Flare another liquid pipe and connect it to the “Male” joint of the orifice pipe.



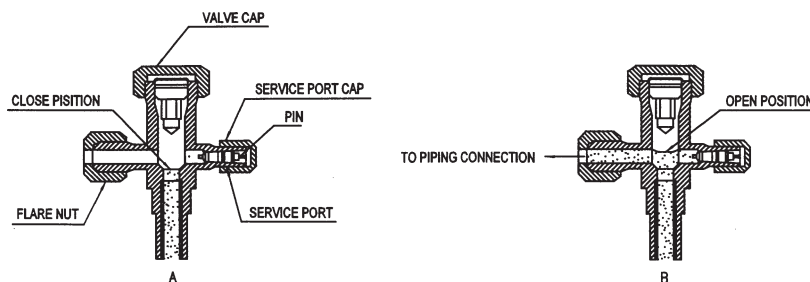
## 9) VACUUMING AND CHARGING

- The precharged outdoor unit does not need any vacuuming or charging. However once it is connected, the connecting pipe line and the indoor need to be vacuumed before releasing the R22/R407C/R410A from the outdoor unit.
  - 1) Open the service port core cap.
  - 2) Connect pressure gauge to the service port.
  - 3) Connect the line to vacuum pump. Open the charging manifold valve and turn the pump on. Vacuum to  $-0.1$  MPa ( $-760$ mmHg) or lower. (Evacuation time varies by the pump but averagely in 1 hour).



Note : R407C – Fix filter dryer  
 R22 - Nil  
 R410A - Nil

4) After evacuation, unscrew the spindle (diagram B) for the gas to run to indoor unit.





5) Decision by low side pressure. Turn compressor on for 10 or 15 min.

Model	Standard Condition		Heavy Load Condition	
	Indoor 27°C / Outdoor 35°C		Indoor 32°C / Outdoor 43°C	
	kg/cm <sup>2</sup>	psig	kg/cm <sup>2</sup>	psig
AWM 07G	5.2 ~ 5.7	74.3 ~ 81.0	5.7 ~ 6.2	81.9 ~ 89.1
AWM 09G	4.7 ~ 5.5	66.6 ~ 78.6	5.0 ~ 5.8	71.2 ~ 83.1
AWM 10G	4.9 ~ 5.7	70.6 ~ 81.8	5.4 ~ 6.1	76.5 ~ 86.6
AWM 15G	4.7 ~ 5.2	67.6 ~ 74.7	5.2 ~ 5.6	74.0 ~ 80.4
AWM 20G	4.6 ~ 4.8	66 ~ 69	4.9 ~ 5.2	70 ~ 74
AWM 25G	4.1 ~ 4.7	59 ~ 67	4.7 ~ 5.1	67 ~ 73
AWM 301	4.0 ~ 4.8	56.9 ~ 68.3	4.5 ~ 5.0	64.0 ~ 71.1
AWM 07GR	5.2 ~ 5.8	74.8 ~ 82.3	5.6 ~ 6.1	79.3 ~ 87.7
AWM 09GR	4.8 ~ 5.7	68.9 ~ 81.4	5.2 ~ 5.9	73.7 ~ 84.8
AWM 10GR	4.9 ~ 5.9	70.5 ~ 83.7	5.4 ~ 6.3	76.5 ~ 90.7
AWM 15GR	4.9 ~ 6.3	69.4 ~ 89.3	5.0 ~ 6.6	71.7 ~ 93.8
AWM 20GR	4.6 ~ 5.0	66 ~ 72	4.9 ~ 5.4	70 ~ 77
AWM 25GR	4.2 ~ 4.8	60 ~ 68	4.7 ~ 5.1	67 ~ 73
AWM 301R	4.0 ~ 4.8	56.9 ~ 68.3	4.5 ~ 5.0	64.0 ~ 71.1
A5WM 07G	9.6 ~ 10.0	137.5 ~ 143.2	10.4 ~ 10.7	148.4 ~ 153.1
A5WM 09G/10G	9.4 ~ 9.9	134.9 ~ 141.8	10.2 ~ 10.6	145.4 ~ 152.1
A5WM 15G	8.9 ~ 9.3	127.3 ~ 132.3	9.3 ~ 9.7	133.1 ~ 138.1
A5WM 20G	8.5 ~ 8.8	121 ~ 125	9.3 ~ 9.6	133 ~ 137
A5WM 25G	8.0 ~ 8.3	114 ~ 118	9.0 ~ 9.2	128 ~ 132
A5WM 311	8.0 ~ 8.6	114 ~ 122	8.7 ~ 9.4	124 ~ 133
A5WM 07GR	9.6 ~ 9.9	136.6 ~ 141.0	10.8 ~ 11.1	154.1 ~ 159.1
A5WM 09GR/10GR	9.4 ~ 9.9	134.4 ~ 141.9	9.9 ~ 10.5	141.4 ~ 149.7
A5WM 15GR	9.0 ~ 9.4	128.0 ~ 134.2	9.4 ~ 9.9	134.6 ~ 142.0
A5WM 20GR	8.3 ~ 8.8	119 ~ 125	8.8 ~ 9.2	125 ~ 132
A5WM 25GR	7.7 ~ 8.3	110 ~ 118	8.4 ~ 9.0	120 ~ 129
A5WM 301R	8.0 ~ 8.6	114 ~ 122	8.7 ~ 9.4	124 ~ 133

Within the value refrigerant cycle normal.

Lower than value refrigerant cycle has some leaks check, amend and top up is necessary.

Extremely low (≒ zero) needs evacuation and charge.

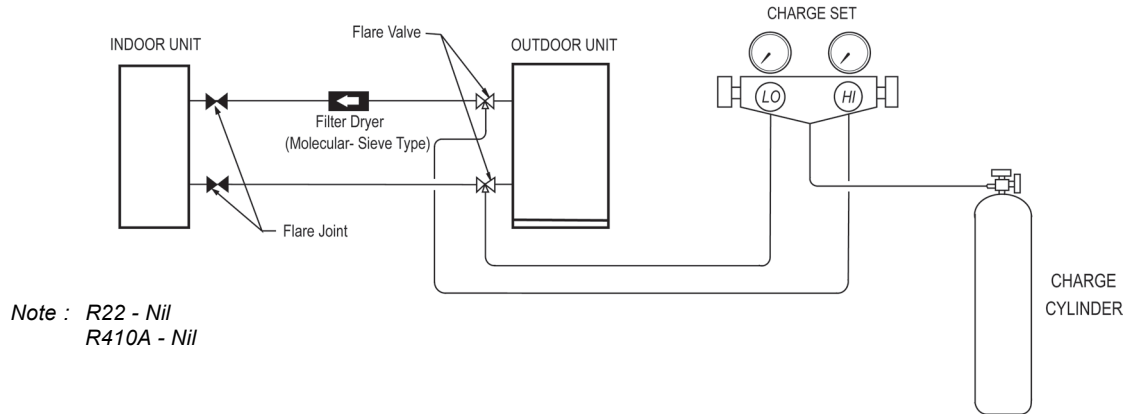
## Additional Charge

- The refrigerant gas is charged in the outdoor unit and, if the piping length is 7.6m, additional charge of the refrigerant after vacuuming is not necessary.
- When the piping length is more than 7.6m, please use the table below :

Additional charge in gram.

	10m	12m	15m	25m	35m
<b>R22 MODELS</b>					
AWM 07G / 09G / 10G / 15G	35	65	-	-	-
AWM 20G	35	65	110	-	-
AWM 25G	90	165	280	-	-
AWM 301	90	165	280	650	1030
AWM 07GR / 09GR / 10GR / 15GR	50	90	-	-	-
AWM 20GR	60	110	185	-	-
AWM 25GR	120	220	370	-	-
AWM 301R	120	220	370	870	1370
<b>R410A MODELS</b>					
A5WM 07G / 09G / 10G / 15G	35	60	-	-	-
A5WM 20G	35	60	100	-	-
A5WM 25G	80	150	255	-	-
A5WM 311	80	150	255	600	950
A5WM 07GR / 09GR / 10GR / 15GR	45	80	-	-	-
A5WM 20GR	55	100	165	-	-
A5WM 25GR	110	200	335	-	-
A5WM 301R	110	200	335	790	1250

Diagram shows typical charging method.



### CAUTION FOR R410A

Avoid prolong exposure of an opened compressor, or the internal part of refrigerant piping to moist air. The POE oil in the compressor and piping can absorb moisture from air.

## 10) FINAL CHECKING

- Ensure that steps 1 to 8 are closely followed.
- Ensure the following, in particular :-
  - 1) The unit is mounted solidly and rigidly in position.
  - 2) Piping and connections are leak proof after charging.
  - 3) Proper wiring has been done.
- Trial run
  - 1) Conduct a trial run after water drainage test and gas leakage test.
  - 2) Watch out for the following :-
    - a) Is the electric plug firmly inserted into the socket?
    - b) Is there any abnormal sound from unit?
    - c) Is there any abnormal vibrations with regard to unit itself or pipings?
    - d) Is there smooth drainage of water?
- Check that :
  - 1) Condenser fan is running, with warm air blowing off the condensing unit.
  - 2) Evaporator blower is running and discharging cool air.
  - 3) Suction (Low side) pressure as per recommended.
  - 4) The remote controller incorporate a 3 minute delay in their circuit. Thus, it requires about 3 minutes upon cut off before the outdoor condensing unit can start up.

## **SPECIAL PRECAUTIONS WHEN DEALING WITH REFRIGERANT R410A UNIT**

### **1) WHAT IS NEW REFRIGERANT R410A?**

R410A is a new HFC refrigerant which does not damage the ozone layer. The working pressure of this new refrigerant is 1.6 times higher than conventional refrigerant (R22), thus proper installation / servicing is essential.

### **2) COMPONENTS**

Mixture weight composition R32(50%) and R125(50%)

### **3) CHARACTERISTIC**

- R410A liquid and vapor components have different compositions when the fluid evaporates or condenses. Hence, when leak occurs and only vapor leaks out, the composition of the refrigerant mixture left in the system will change and subsequently affect the system performance. **DO NOT** add new refrigerant to leaked system. It is recommended that the system should be evacuated thoroughly before recharging with R410A.
- When refrigerant R410A is used, the composition will differ depending on whether it is in gaseous or liquid phase. Hence when charging R410A, ensure that only liquid is being withdrawn from the cylinder or can. This is to make certain that only original composition of R410A is being charged into the system.
- POE oil is used as lubricant for R410A compressor, which is different from the mineral oil used for R22 compressor. Extra precaution must be taken not to expose the R410A system too long to moist air.

### **4) CHECK LIST BEFORE INSTALLATION/SERVICING**

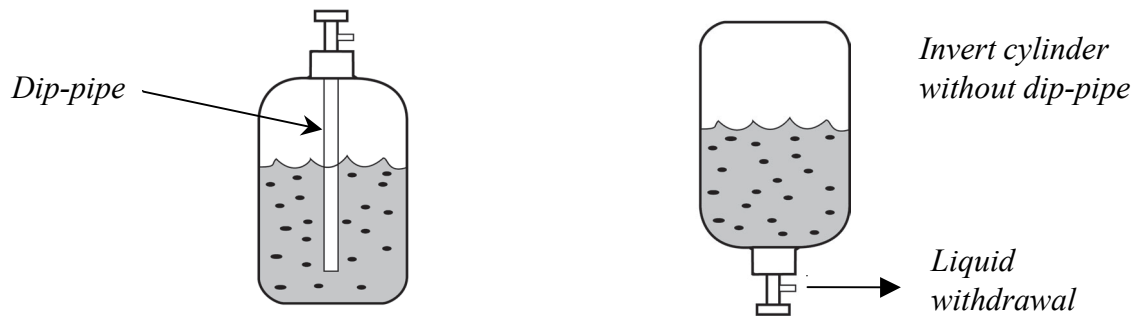
- Tubing  
Refrigerant R410A is more easily affected by dust or moisture compared with R22, make sure to temporarily cover the ends of the tubing prior to installation
- Compressor oil  
No additional charge of compressor oil is permitted.
- Refrigerant  
No other refrigerant other than R410A
- Tools (size of service port is different from R22 system)  
Tools specifically for R410A only (must not be used for R22 or other refrigerant)
  - i) Manifold gauge and charging hose
  - ii) Gas leak detector
  - iii) Refrigerant cylinder/charging cylinder
  - iv) Vacuum pump c/w adapter
  - v) Flare tools
  - vi) Refrigerant recovery machine

### **5) HANDLING AND INSTALLATION GUIDELINES**

Like R22 system, the handling and installation of R410A system are closely similar. All precautionary measures; such as ensuring no moisture, no dirt or chips in the system, clean brazing using nitrogen, and thorough leak check and vacuuming are equally important requirements. However, due to its hydroscopic POE oil, additional precautions must be taken to ensure optimum and trouble free system operation.

- a) During installation or servicing, avoid prolong exposure of the internal part of the refrigerant system to moist air. Residual POE oil in the piping and components can absorb moisture from the air.
- b) Ensure that the compressor is not exposed to open air for more than the recommended time specified by its manufacturer (typically less than 10 minutes). Remove the seal plugs only when the compressor is about to be brazed.
- c) The system should be thoroughly vacuumed to 1.0 Pa ( 700mmHg) or lower. This vacuuming level is more stringent than R22 system so as to ensure no incompressible gas and moisture in the system.

- d) When charging R410A, ensure that only liquid is being withdrawn from the cylinder or can. This is to ensure that only the original composition of R410A is being delivered into the system. The liquid composition can be different from the vapor composition.



- f) Normally, the R410A cylinder or can is being equipped with a dip pipe for liquid withdrawal. However, if the dip pipe is not available, invert the cylinder or can so as to withdraw liquid from the valve at the bottom.

## 4. SOUND DATA

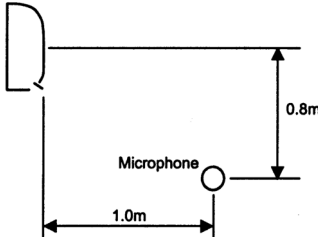
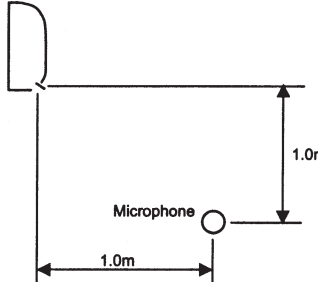
### Sound Pressure Level (Measured In Anechoic Room)

#### WALL MOUNTED FAN COIL UNIT

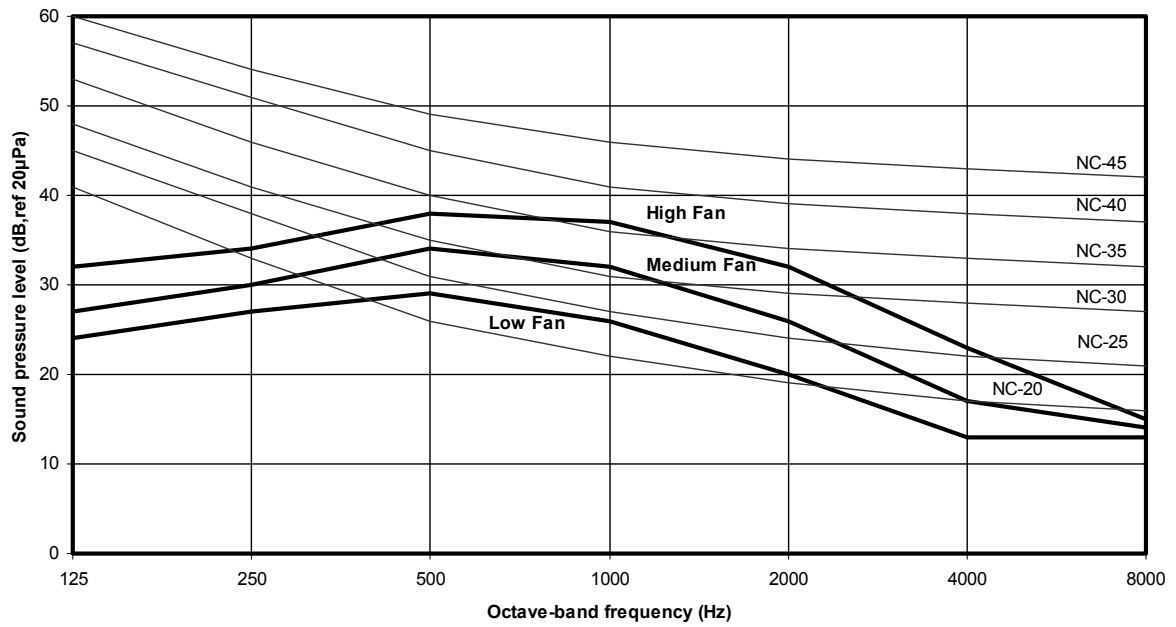
Model	Speed	1/1 Octave Sound Pressure Level (dB, ref 20μPa)							Overall (dBA)	Noise Criteria
	(RPM)	125 Hz	250 Hz	500 Hz	1k Hz	2k Hz	4k Hz	8k Hz		
AWM 07G/GR AWM 09G/GR A5WM 07G/GR A5WM 09G/GR	HIGH	32	34	38	37	32	23	15	40	36
	MEDIUM	27	30	34	32	26	17	14	35	31
	LOW	24	27	29	26	20	13	13	29	24
AWM 10G/GR A5WM 10G/GR	HIGH	28	34	37	36	31	22	13	39	35
	MEDIUM	27	30	33	31	25	17	12	34	30
	LOW	24	26	28	25	19	12	11	28	23
AWM 15G/GR A5WM 15G/GR	HIGH	30	35	39	38	33	25	15	42	37
	MEDIUM	28	31	34	33	26	18	13	36	32
	LOW	24	26	28	26	20	13	12	29	24
AWM 20G/GR A5WM 20G/GR	HIGH	37	44	42	37	34	25	15	43	37
	MEDIUM	34	40	39	34	30	21	14	40	34
	LOW	30	35	35	30	26	18	13	35	30
AWM 25G/GR A5WM 25G/GR	HIGH	41	48	47	43	40	32	23	49	43
	MEDIUM	39	44	43	39	35	28	20	44	38
	LOW	37	41	40	36	32	25	19	42	35
AWM 311/301R A5WM 311/301R	HIGH	42	46	45	44	41	35	28	49	43
	MEDIUM	40	45	44	43	35	33	27	47	42
	LOW	37	43	43	40	35	30	26	45	39

Microphone position - A5WM/AWM-G/GR : 1m in front and 0.8m below the vertical centre line of the unit. (JIS C 9612)

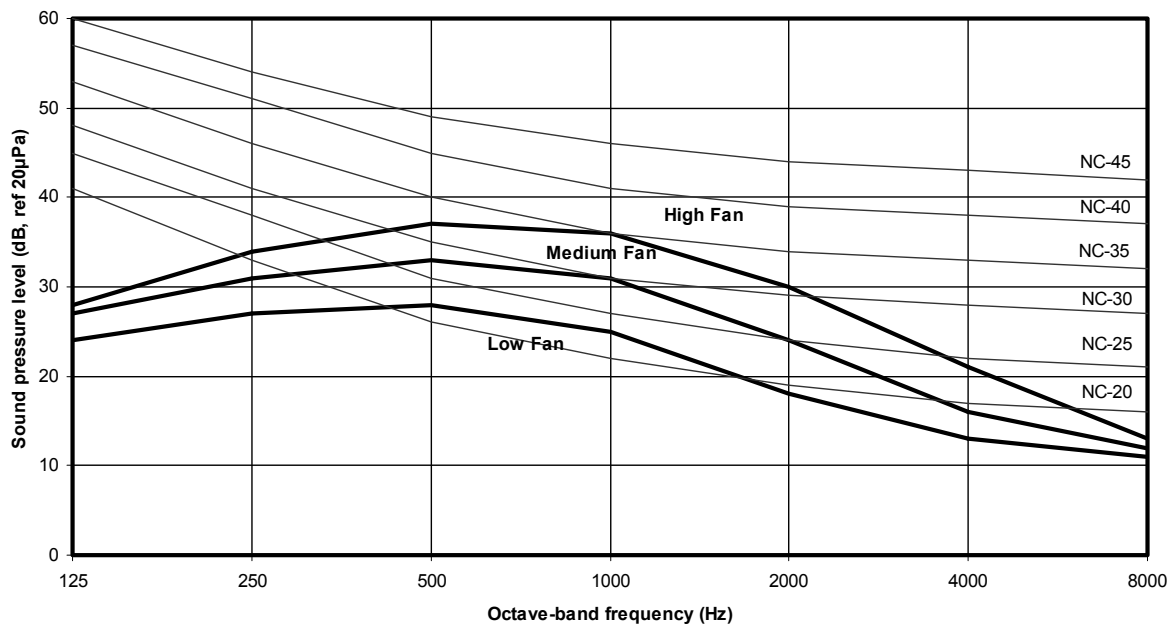
- A5WM/AWM 30F/FR : 1m in front and 1m below the vertical centre line of the unit. (JIS B 8615)

Model	Measuring location
<b>AWM 07G/GR</b> <b>AWM 09G/GR</b> <b>AWM 10G/GR</b> <b>AWM 15G/GR</b>  <b>A5WM 07G/GR</b> <b>A5WM 09G/GR</b> <b>A5WM 10G/GR</b> <b>A5WM 15G/GR</b>	 <p>Standard : JIS C 9612</p>
<b>AWM 311/301R</b> <b>A5WM 311/301R</b>	 <p>Standard : JIS B 8615</p>

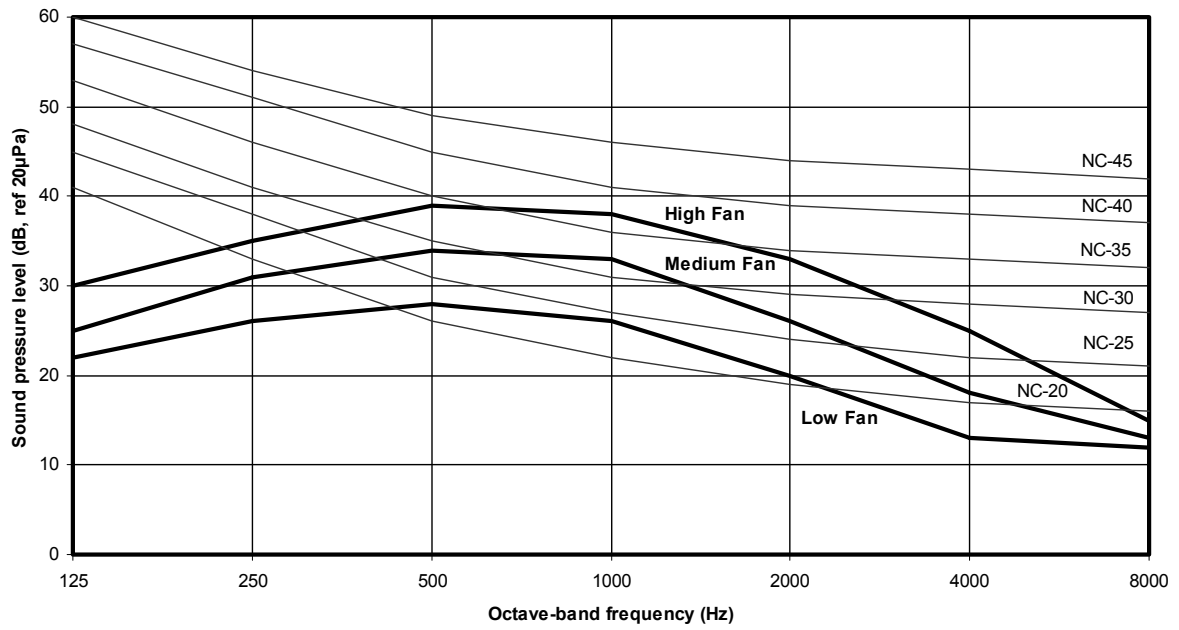
**AWM 07G, 09 G/GR , A5WM 07 / 09 G/GR  
NC CURVES**



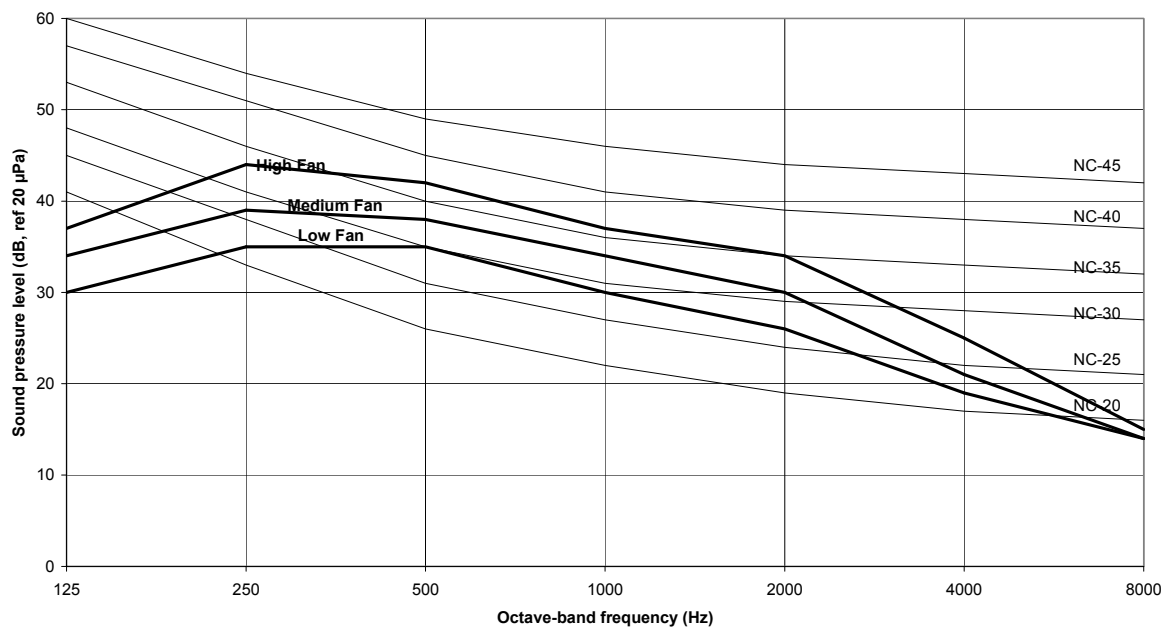
**AWM 10 G/GR , A5WM 10 G/GR  
NC CURVES**



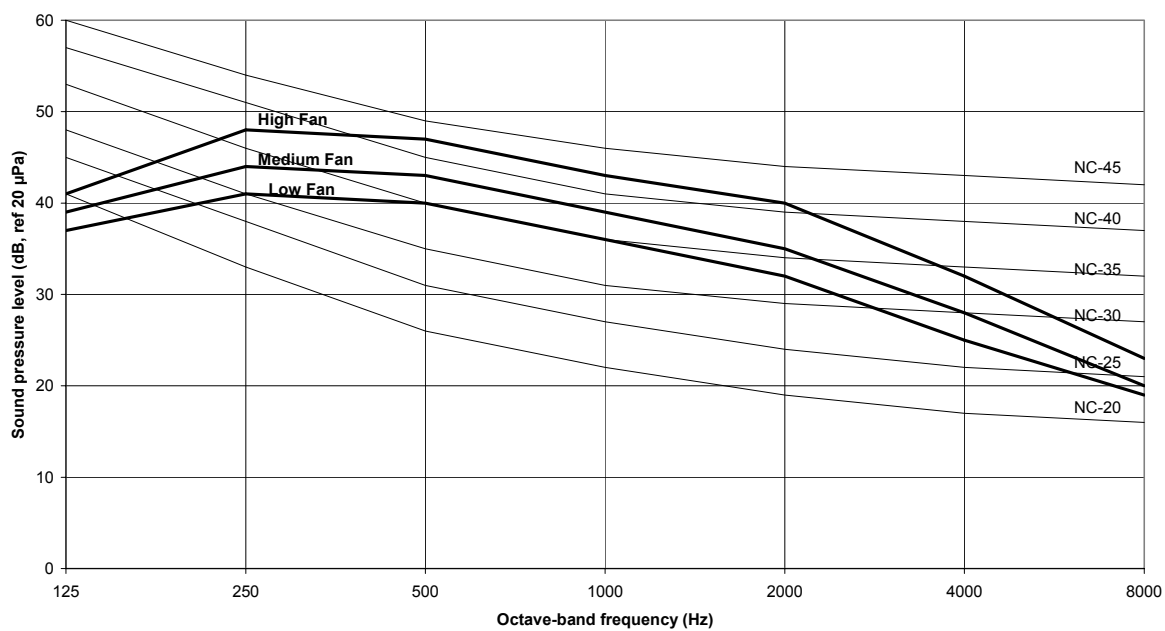
### AWM 15 G/GR , A5WM 15 G/GR NC CURVES



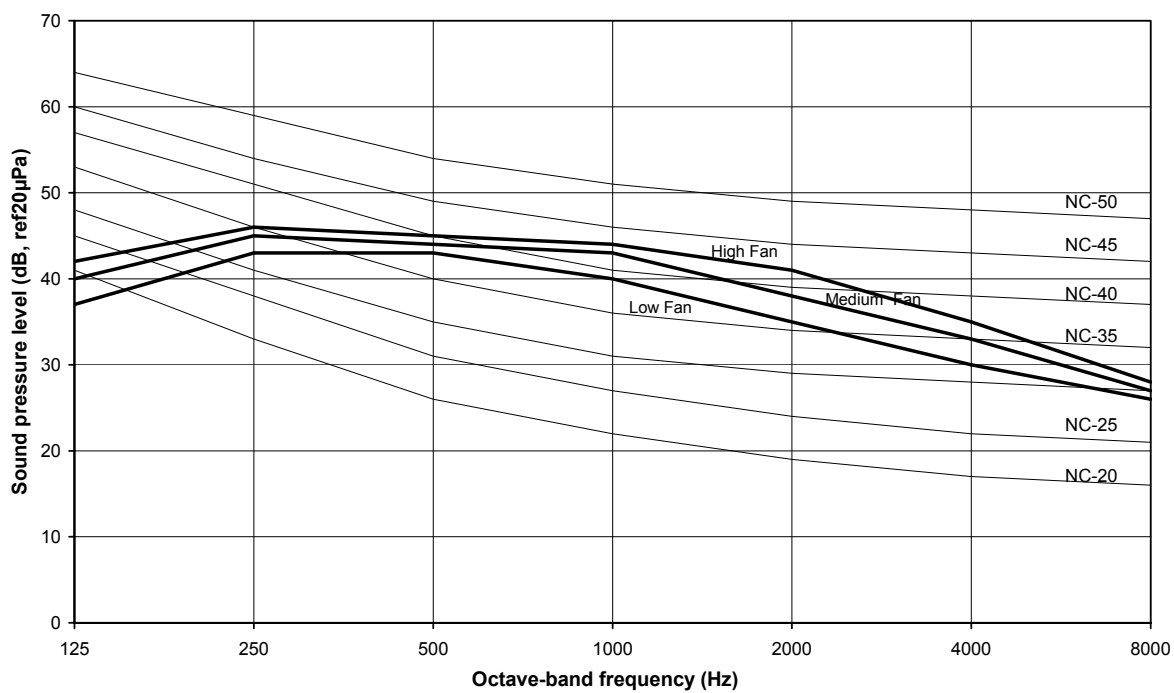
### AWM 20 G/GR , A5WM 20 G/GR NC CURVES



### AWM 25 G/GR , A5WM 25 G/GR NC CURVES



### AWM 311/301R , A5WM 311/301R NC CURVES





## 5. ENGINEERING AND PHYSICAL DATA

### General Data - Cooling Only (R22)

MODEL		INDOOR UNIT		AWM 07G		AWM 09G		
		OUTDOOR UNIT		ALC 07C		ALC 09C		
NOMINAL CAPACITY			Btu/h	7000		9000		
			W	2050		2640		
NOMINAL TOTAL INPUT POWER			W	590		919		
NOMINAL RUNNING CURRENT			A	2.7		4.1		
POWER SOURCE			V/Ph/Hz	220-240/1/50				
EER			W/W	3.47		2.87		
REFRIGERANT TYPE				R22				
REFRIGERANT CONTROL (EXPANSION DEVICE)				OUTDOOR CAP. TUBE				
INDOOR UNIT	CONTROL	AIR DISCHARGE		DOUBLE LOUVER (UP & DOWN) & GRILLE (LEFT & RIGHT)				
		OPERATION		LCD REMOTE CONTROL				
	AIR FLOW	HIGH	l/s / cfm	118 / 250		130 / 275		
		MEDIUM	l/s / cfm	104 / 220		106 / 225		
		LOW	l/s / cfm	85 / 180		83 / 175		
	SOUND PRESSURE LEVEL (H/M/L)		dBA	38 / 33 / 28		40 / 35 / 29		
	UNIT DIMENSION	HEIGHT	mm/in	260 / 10.2				
		WIDTH	mm/in	799 / 31.5				
		DEPTH	mm/in	198 / 7.8				
	PACKING DIMENSION	HEIGHT	mm/in	337 / 13.3		337 / 13.3		
		WIDTH	mm/in	857 / 33.7		857 / 33.7		
		DEPTH	mm/in	270 / 10.6		270 / 10.6		
	UNIT WEIGHT		kg/lb	8.5 / 18.74		10/22.05		
	CONDENSATE DRAIN SIZE		mm/in	16 / 0.63				
OUTDOOR UNIT	AIR FLOW		l/s / cfm	321 / 680		307 / 650		
	SOUND PRESSURE LEVEL		dBA	45				
	UNIT DIMENSION	HEIGHT	mm/in	495/19.5				
		WIDTH	mm/in	600/23.6				
		DEPTH	mm/in	245/9.7				
	PACKING DIMENSION	HEIGHT	mm/in	575/22.6				
		WIDTH	mm/in	715/28.1				
		DEPTH	mm/in	330/13.0				
	UNIT WEIGHT		kg/lb	28/61.73				
	PIPE CONNECTION	TYPE		FLARE VALVE				
		SIZE	LIQUID	mm/in	6.35 / 1/4			
			GAS	mm/in	9.52 / 3/8			
	REFRIGERANT CHARGE		kg/lb	0.5/ 1.1		0.525/ 1.156		

1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.

2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO 5151.

3) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW:  
COOLING - 27°C DB / 19°C WB INDOOR AND 35°C DB / 24°C WB OUTDOOR

4) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS B 8615 STANDARD. POSITION OF THE MEASUREMENT POINT IS 1m IN FRONT AND 1m BELOW THE UNIT.

## General Data - Cooling Only (R22)

MODEL		INDOOR UNIT		AWM 10G		AWM 15G	
		OUTDOOR UNIT		ALC 10C		ALC 15C	
NOMINAL CAPACITY			Btu/h	9500		12000	
			W	2780		3520	
NOMINAL TOTAL INPUT POWER			W	860		1100	
NOMINAL RUNNING CURRENT			A	3.8		5.4	
POWER SOURCE			V/Ph/Hz	220-240/1/50			
EER			W/W	3.23		3.2	
REFRIGERANT TYPE				R22			
REFRIGERANT CONTROL (EXPANSION DEVICE)				OUTDOOR CAP. TUBE			
INDOOR UNIT	CONTROL	AIR DISCHARGE		DOUBLE LOUVER (UP & DOWN) & GRILLE (LEFT & RIGHT)			
		OPERATION		LCD REMOTE CONTROL			
	AIR FLOW	HIGH	l/s / cfm	142 / 300		163 / 345	
		MEDIUM	l/s / cfm	118 / 250		135 / 285	
		LOW	l/s / cfm	94 / 200		104 / 220	
	SOUND PRESSURE LEVEL (H/M/L)		dBA	39 / 34 / 28		42 / 36 / 29	
	UNIT DIMENSION	HEIGHT	mm/in	260 / 10.2			
		WIDTH	mm/in	899 / 35.4			
		DEPTH	mm/in	198 / 7.8			
	PACKING DIMENSION	HEIGHT	mm/in	337 / 13.3			
		WIDTH	mm/in	957 / 37.7			
		DEPTH	mm/in	270 / 10.6			
	UNIT WEIGHT		kg/lb	12/26.46			
	CONDENSATE DRAIN SIZE		mm/in	16 / 0.63			
OUTDOOR UNIT	AIR FLOW		l/s / cfm	396 / 840		453 / 960	
	SOUND PRESSURE LEVEL		dBA	46		49	
	UNIT DIMENSION	HEIGHT	mm/in	540/21.3			
		WIDTH	mm/in	700/27.6			
		DEPTH	mm/in	250/9.8			
	PACKING DIMENSION	HEIGHT	mm/in	620/24.4			
		WIDTH	mm/in	810/31.9			
		DEPTH	mm/in	330/13.0			
	UNIT WEIGHT		kg/lb	32/70.55			
	PIPE CONNECTION	TYPE		FLARE VALVE			
		SIZE	LIQUID	mm/in	6.35 / 1/4		
GAS			mm/in	9.52 / 3/8		12.70 / 1/2	
REFRIGERANT CHARGE		kg/lb	0.63/ 1.393		0.6/ 1.327		

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3) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :  
COOLING - 27°C DB / 19°C WB INDOOR AND 35°C DB / 24°C WB OUTDOOR

4) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS B 8615 STANDARD. POSITION OF THE MEASUREMENT POINT IS 1m IN FRONT AND 1m BELOW THE UNIT.

## General Data - Cooling Only (R22)

MODEL		INDOOR UNIT		AWM 20G		AWM 20G			
		OUTDOOR UNIT		ALC 18C		ALC 20C			
NOMINAL CAPACITY			Btu/h	18000		19000			
			W	5280		5570			
NOMINAL TOTAL INPUT POWER			W	1,810		1,807			
NOMINAL RUNNING CURRENT			A	8.1		8.0			
POWER SOURCE			V/Ph/Hz	220-240/1/50					
EER			W/W	2.92		3.08			
REFRIGERANT TYPE				R22					
REFRIGERANT CONTROL (EXPANSION DEVICE)				OUTDOOR CAP. TUBE					
INDOOR UNIT	CONTROL		AIR DISCHARGE		DOUBLE LOUVER (UP & DOWN) & GRILLE (LEFT & RIGHT)				
			OPERATION		LCD REMOTE CONTROL				
	AIR FLOW		HIGH	l/s / cfm	231 / 490				
			MEDIUM	l/s / cfm	193 / 410				
			LOW	l/s / cfm	160 / 340				
	SOUND PRESSURE LEVEL (H/M/L)			dBA	43 / 40 / 35				
	UNIT DIMENSION		HEIGHT	mm/in	304 / 12.0				
			WIDTH	mm/in	1062 / 41.8				
			DEPTH	mm/in	222 / 8.7				
	PACKING DIMENSION		HEIGHT	mm/in	378 / 14.9				
			WIDTH	mm/in	1130 / 44.5				
			DEPTH	mm/in	292 / 11.5				
	UNIT WEIGHT			kg/lb	16 / 35.27				
	CONDENSATE DRAIN SIZE			mm/in	20 / 0.79				
OUTDOOR UNIT	AIR FLOW			l/s / cfm	632 / 1340		614 / 1300		
	SOUND PRESSURE LEVEL			dBA	51		52		
	UNIT DIMENSION		HEIGHT	mm/in	651 / 25.6				
			WIDTH	mm/in	855 / 33.7				
			DEPTH	mm/in	328 / 12.9				
	PACKING DIMENSION		HEIGHT	mm/in	710 / 28.0				
			WIDTH	mm/in	990 / 39.0				
			DEPTH	mm/in	415 / 16.3				
	UNIT WEIGHT			kg/lb	58 / 127.9		59 / 130.1		
	PIPE CONNECTION		TYPE		FLARE VALVE				
			SIZE	LIQUID	mm/in	6.35 / 1/4			
				GAS	mm/in	15.88 / 5/8			
REFRIGERANT CHARGE			kg/lb	0.85 / 1.88		1.35 / 2.99			

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2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO 5151.

3) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :  
COOLING - 27°C DB / 19°C WB INDOOR AND 35°C DB / 24°C WB OUTDOOR

4) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS B 8615 STANDARD. POSITION OF THE MEASUREMENT POINT IS 1m IN FRONT AND 1m BELOW THE UNIT.

## General Data - Cooling Only (R22)

MODEL		INDOOR UNIT		AWM 25G		AWM 311			
		OUTDOOR UNIT		ALC 25C		ALC 28C			
NOMINAL CAPACITY			Btu/h	23,500		27000			
			W	6,890		7913			
NOMINAL TOTAL INPUT POWER			W	2,530		2732			
NOMINAL RUNNING CURRENT			A	11.3		13.1			
POWER SOURCE			V/Ph/Hz	220-240 /1/50					
EER			W/W	2.72		2.89			
REFRIGERANT TYPE				R22					
REFRIGERANT CONTROL (EXPANSION DEVICE)				OUTDOOR CAP. TUBE					
INDOOR UNIT	CONTROL	AIR DISCHARGE		DOUBLE LOUVER (UP & DOWN) & GRILLE (LEFT & RIGHT)		AUTO LOUVER (UP & DOWN) & GRILLE (LEFT & RIGHT)			
		OPERATION		LCD REMOTE CONTROL					
	AIR FLOW		HIGH	l/s / cfm	297 / 630		316 / 670		
			MEDIUM	l/s / cfm	231 / 490		297 / 630		
			LOW	l/s / cfm	208 / 440		236 / 500		
	SOUND PRESSURE LEVEL (H/M/L)			dBA	49 / 44 / 42		49 / 47 / 45		
	UNIT DIMENSION		HEIGHT	mm/in	304 / 12.0		360 / 14.2		
			WIDTH	mm/in	1062 / 41.8		1200 / 47.2		
			DEPTH	mm/in	222 / 8.7		200 / 7.9		
	PACKING DIMENSION		HEIGHT	mm/in	378 / 14.9		420 / 16.5		
			WIDTH	mm/in	1130 / 44.5		1267 / 49.9		
			DEPTH	mm/in	292 / 11.5		260 / 10.2		
	UNIT WEIGHT			kg/lb	16 / 35.27		17 / 37.48		
	CONDENSATE DRAIN SIZE			mm/in	20 / 0.79				
OUTDOOR UNIT	AIR FLOW		l/s / cfm	755 / 1600		632 / 1340			
	SOUND PRESSURE LEVEL		dBA	52		54			
	UNIT DIMENSION		HEIGHT	mm/in	750 / 29.5				
			WIDTH	mm/in	855 / 33.7				
			DEPTH	mm/in	328 / 12.9				
	PACKING DIMENSION		HEIGHT	mm/in	810 / 31.9				
			WIDTH	mm/in	990 / 39.0				
			DEPTH	mm/in	415 / 16.3				
	UNIT WEIGHT			kg/lb	62 / 136.7		68 / 149.9		
	PIPE CONNECTION		TYPE		FLARE VALVE				
			SIZE	LIQUID	mm/in	9.52 / 3/8			
				GAS	mm/in	15.88 / 5/8			
REFRIGERANT CHARGE			kg/lb	1.5 / 3.3		2.1 / 4.63			

1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.

2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO 5151.

3) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :

COOLING - 27°C DB / 19°C WB INDOOR AND 35°C DB / 24°C WB OUTDOOR

4) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS B 8615 STANDARD. POSITION OF THE MEASUREMENT POINT IS 1m IN FRONT AND 1m BELOW THE UNIT.

## General Data - Heatpump Only (R22)

MODEL		INDOOR UNIT		AWM 09GR		
		OUTDOOR UNIT		ALC 09CR		
NOMINAL COOLING CAPACITY			Btu/h	9000		
			W	2640		
NOMINAL HEATING CAPACITY			Btu/h	9000		
			W	2640		
NOMINAL TOTAL INPUT POWER (COOLING)			W	910		
NOMINAL TOTAL INPUT POWER (HEATING)			W	750		
NOMINAL RUNNING CURRENT (COOLING)			A	4.0		
NOMINAL RUNNING CURRENT (HEATING)			A	3.4		
POWER SOURCE			V/Ph/Hz	220-240/1/50		
EER			W/W	2.9		
COP			W/W	3.52		
REFRIGERANT TYPE				R22		
REFRIGERANT CONTROL (EXPANSION DEVICE)				OUTDOOR CAP. TUBE		
INDOOR UNIT	CONTROL	AIR DISCHARGE		DOUBLE LOUVER (UP & DOWN) & GRILLE (LEFT & RIGHT)		
		OPERATION		LCD REMOTE CONTROL		
	AIR FLOW	HIGH	l/s / cfm	130 / 275		
		MEDIUM	l/s / cfm	106 / 225		
		LOW	l/s / cfm	83 / 175		
	SOUND PRESSURE LEVEL (H/M/L)		dBA	40 / 35 / 29		
	UNIT DIMENSION	HEIGHT	mm/in	260 / 10.2		
		WIDTH	mm/in	799 / 31.5		
		DEPTH	mm/in	198 / 7.8		
	PACKING DIMENSION	HEIGHT	mm/in	337 / 13.3		
		WIDTH	mm/in	857 / 33.7		
		DEPTH	mm/in	270 / 10.6		
	UNIT WEIGHT		kg/lb	10/22.05		
	CONDENSATE DRAIN SIZE		mm/in	16 / 0.63		
OUTDOOR UNIT	AIR FLOW		l/s / cfm	307 / 650		
	SOUND PRESSURE LEVEL		dBA	45		
	UNIT DIMENSION	HEIGHT	mm/in	495/19.5		
		WIDTH	mm/in	600/23.6		
		DEPTH	mm/in	245/9.7		
	PACKING DIMENSION	HEIGHT	mm/in	575/22.6		
		WIDTH	mm/in	715/28.1		
		DEPTH	mm/in	330/13.0		
	UNIT WEIGHT		kg/lb	28/61.73		
	PIPE CONNECTION	TYPE		FLARE VALVE		
		SIZE	LIQUID	mm/in	6.35 / 1/4	
			GAS	mm/in	9.52 / 3/8	
	REFRIGERANT CHARGE			kg/lb	0.75/1.65	

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2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO 5151.

3) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :

a) COOLING - 27°C DB / 19°C WB INDOOR AND 35°C DB / 24°C WB OUTDOOR

b) HEATING - 20°C DB INDOOR AND 7°C DB / 6°C WB OUTDOOR

4) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS B 8615 STANDARD. POSITION OF THE MEASUREMENT POINT IS 1m IN FRONT AND 1m BELOW THE UNIT.

## General Data - Heatpump (R22)

MODEL		INDOOR UNIT		AWM 10GR		AWM 15GR			
		OUTDOOR UNIT		ALC 10CR		ALC 15CR			
NOMINAL COOLING CAPACITY			Btu/h	9500		12000			
			W	2780		3520			
NOMINAL HEATING CAPACITY			Btu/h	9500		12000			
			W	2780		3520			
NOMINAL TOTAL INPUT POWER (COOLING)			W	837		1100			
NOMINAL TOTAL INPUT POWER (HEATING)			W	757		980			
NOMINAL RUNNING CURRENT (COOLING)			A	3.8		5.0			
NOMINAL RUNNING CURRENT (HEATING)			A	3.4		4.5			
POWER SOURCE			V/Ph/Hz	220-240/1/50					
EER			W/W	3.32		3.2			
COP			W/W	3.67		3.59			
REFRIGERANT TYPE				R22					
REFRIGERANT CONTROL (EXPANSION DEVICE)				OUTDOOR CAP. TUBE					
INDOOR UNIT	CONTROL	AIR DISCHARGE		DOUBLE LOUVER (UP & DOWN) & GRILLE (LEFT & RIGHT)					
		OPERATION		LCD REMOTE CONTROL					
	AIR FLOW		HIGH	l/s / cfm	142 / 300		163 / 345		
			MEDIUM	l/s / cfm	118 / 250		135 / 285		
			LOW	l/s / cfm	94 / 200		104 / 220		
	SOUND PRESSURE LEVEL (H/M/L)			dBA	39 / 34 / 28		42 / 36 / 29		
	UNIT DIMENSION		HEIGHT	mm/in	260 / 10.2				
			WIDTH	mm/in	899 / 35.4				
			DEPTH	mm/in	198 / 7.8				
	PACKING DIMENSION		HEIGHT	mm/in	337 / 13.3				
			WIDTH	mm/in	957 / 37.7				
			DEPTH	mm/in	270 / 10.6				
	UNIT WEIGHT			kg/lb	12/26.46				
	CONDENSATE DRAIN SIZE			mm/in	16 / 0.63				
OUTDOOR UNIT	AIR FLOW			l/s / cfm	396 / 840		453 / 960		
	SOUND PRESSURE LEVEL			dBA	46		49		
	UNIT DIMENSION		HEIGHT	mm/in	540/21.3				
			WIDTH	mm/in	700/27.6				
			DEPTH	mm/in	250/9.8				
	PACKING DIMENSION		HEIGHT	mm/in	620/24.4				
			WIDTH	mm/in	810/31.9				
			DEPTH	mm/in	330/13.0				
	UNIT WEIGHT			kg/lb	32/70.55				
	PIPE CONNECTION		TYPE		FLARE VALVE				
			SIZE	LIQUID	mm/in	6.35 / 1/4			
				GAS	mm/in	9.52 / 3/8		12.70 / 1/2	
	REFRIGERANT CHARGE			kg/lb	0.88/1.94		0.8/1.76		

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2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO 5151.

3) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :

a) COOLING - 27°C DB / 19°C WB INDOOR AND 35°C DB / 24°C WB OUTDOOR

b) HEATING - 20°C DB INDOOR AND 7°C DB / 6°C WB OUTDOOR

4) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS B 8615 STANDARD. POSITION OF THE MEASUREMENT POINT IS 1m IN FRONT AND 1m BELOW THE UNIT.

## General Data - Heatpump (R22)

MODEL		INDOOR UNIT		AWM 20GR		AWM 20GR		
		OUTDOOR UNIT		ALC 18CR		ALC 20CR		
NOMINAL COOLING CAPACITY			Btu/h	18000		19000		
			W	5280		5570		
NOMINAL HEATING CAPACITY			Btu/h	18400		19500		
			W	5390		5720		
NOMINAL TOTAL INPUT POWER (COOLING)			W	1,820		1,807		
NOMINAL TOTAL INPUT POWER (HEATING)			W	1,660		1,757		
NOMINAL RUNNING CURRENT (COOLING)			A	8.1		8.0		
NOMINAL RUNNING CURRENT (HEATING)			A	7.4		7.8		
POWER SOURCE			V/Ph/Hz	220-240/1/50				
EER			W/W	2.9		3.08		
COP			W/W	3.25		3.26		
REFRIGERANT TYPE				R22				
REFRIGERANT CONTROL (EXPANSION DEVICE)				OUTDOOR CAP. TUBE				
INDOOR UNIT	CONTROL	AIR DISCHARGE		DOUBLE LOUVER (UP & DOWN) & GRILLE (LEFT & RIGHT)				
		OPERATION		LCD REMOTE CONTROL				
	AIR FLOW		HIGH	l/s / cfm	231 / 490			
			MEDIUM	l/s / cfm	193 / 410			
			LOW	l/s / cfm	160 / 340			
	SOUND PRESSURE LEVEL (H/M/L)		dBA	43 / 40 / 35				
	UNIT DIMENSION		HEIGHT	mm/in	304 / 12.0			
			WIDTH	mm/in	1062 / 41.8			
			DEPTH	mm/in	222 / 8.7			
	PACKING DIMENSION		HEIGHT	mm/in	378 / 14.9			
			WIDTH	mm/in	1130 / 44.5			
			DEPTH	mm/in	292 / 11.5			
	UNIT WEIGHT		kg/lb	16 / 35.27				
	CONDENSATE DRAIN SIZE		mm/in	20 / 0.79				
OUTDOOR UNIT	AIR FLOW		l/s / cfm	632 / 1340		614 / 1300		
	SOUND PRESSURE LEVEL		dBA	51		52		
	UNIT DIMENSION		HEIGHT	mm/in	651 / 25.6			
			WIDTH	mm/in	855 / 33.7			
			DEPTH	mm/in	328 / 12.9			
	PACKING DIMENSION		HEIGHT	mm/in	710 / 28.0			
			WIDTH	mm/in	990 / 39.0			
			DEPTH	mm/in	415 / 16.3			
	UNIT WEIGHT		kg/lb	58 / 127.9		59 / 130.1		
	PIPE CONNECTION		TYPE		FLARE VALVE			
			SIZE	LIQUID	mm/in	6.35 / 1/4		
				GAS	mm/in	15.88 / 5/8		
	REFRIGERANT CHARGE		kg/lb	0.85 / 1.88		1.35 / 2.99		

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3) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :

a) COOLING - 27°C DB / 19°C WB INDOOR AND 35°C DB / 24°C WB OUTDOOR

b) HEATING - 20°C DB INDOOR AND 7°C DB / 6°C WB OUTDOOR

4) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS B 8615 STANDARD. POSITION OF THE MEASUREMENT POINT IS 1m IN FRONT AND 1m BELOW THE UNIT.

## General Data - Heatpump (R22)

MODEL		INDOOR UNIT		AWM 25GR		AWM 301R			
		OUTDOOR UNIT		ALC 25CR		ALC 28CR			
NOMINAL COOLING CAPACITY			Btu/h	23,500		27000			
			W	6,890		7913			
NOMINAL HEATING CAPACITY			Btu/h	24,000		27000			
			W	7,030		7913			
NOMINAL TOTAL INPUT POWER (COOLING)			W	2,530		2778			
NOMINAL TOTAL INPUT POWER (HEATING)			W	2,450		2818			
NOMINAL RUNNING CURRENT (COOLING)			A	11.3		13.2			
NOMINAL RUNNING CURRENT (HEATING)			A	11.1		13.3			
POWER SOURCE			V/Ph/Hz	220-240/1/50					
EER			W/W	2.72		2.85			
COP			W/W	2.87		2.81			
REFRIGERANT TYPE				R22					
REFRIGERANT CONTROL (EXPANSION DEVICE)				OUTDOOR CAP. TUBE					
INDOOR UNIT	CONTROL		AIR DISCHARGE		DOUBLE LOUVER (UP & DOWN) & GRILLE (LEFT & RIGHT)				
			OPERATION		LCD REMOTE CONTROL				
	AIR FLOW		HIGH	l/s / cfm	297 / 630		316 / 670		
			MEDIUM	l/s / cfm	231 / 490		297 / 630		
			LOW	l/s / cfm	208 / 440		236 / 500		
	SOUND PRESSURE LEVEL (H/M/L)			dBA	49 / 44 / 42		49 / 47 / 45		
	UNIT DIMENSION		HEIGHT	mm/in	304 / 12.0		360 / 14.2		
			WIDTH	mm/in	1062 / 41.8		1200 / 47.2		
			DEPTH	mm/in	222 / 8.7		200 / 7.9		
	PACKING DIMENSION		HEIGHT	mm/in	378 / 14.9		420 / 16.5		
			WIDTH	mm/in	1130 / 44.5		1267 / 49.9		
			DEPTH	mm/in	292 / 11.5		260 / 10.2		
	UNIT WEIGHT			kg/lb	16 / 35.27		17 / 37.48		
	CONDENSATE DRAIN SIZE			mm/in	20 / 0.79				
OUTDOOR UNIT	AIR FLOW			l/s / cfm	755 / 1600		632 / 1340		
	SOUND PRESSURE LEVEL			dBA	52		54		
	UNIT DIMENSION		HEIGHT	mm/in	750 / 29.5				
			WIDTH	mm/in	855 / 33.7				
			DEPTH	mm/in	328 / 12.9				
	PACKING DIMENSION		HEIGHT	mm/in	810 / 31.9				
			WIDTH	mm/in	990 / 39.0				
			DEPTH	mm/in	415 / 16.3				
	UNIT WEIGHT			kg/lb	62 / 136.7		68 / 149.9		
	PIPE CONNECTION		TYPE		FLARE VALVE		FLARE VALVE		
			SIZE	LIQUID	mm/in	9.52 / 3/8			
				GAS	mm/in	15.88 / 5/8			
	REFRIGERANT CHARGE			kg/lb	1.5 / 3.3		2.1 / 4.63		

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3) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :

a) COOLING - 27°C DB / 19°C WB INDOOR AND 35°C DB / 24°C WB OUTDOOR

b) HEATING - 20°C DB INDOOR AND 7°C DB / 6°C WB OUTDOOR

4) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS B 8615 STANDARD. POSITION OF THE MEASUREMENT POINT IS 1m IN FRONT AND 1m BELOW THE UNIT.



## General Data - Cooling Only (R410A)

MODEL		INDOOR UNIT		A5WM 07G		A5WM 09G			
		OUTDOOR UNIT		A5LC 07C		A5LC 09C			
NOMINAL CAPACITY			Btu/h	7500		9000			
			W	2200		2640			
NOMINAL TOTAL INPUT POWER			W	620		865			
NOMINAL RUNNING CURRENT			A	2.9		3.9			
POWER SOURCE			V/Ph/Hz	220-240/1/50					
EER			W/W	3.54		3.05			
REFRIGERANT TYPE				R410A					
REFRIGERANT CONTROL (EXPANSION DEVICE)				OUTDOOR CAP. TUBE					
INDOOR UNIT	CONTROL		AIR DISCHARGE		DOUBLE LOUVER (UP & DOWN) & GRILLE (LEFT & RIGHT)				
			OPERATION		LCD REMOTE CONTROL				
	AIR FLOW		HIGH	l/s / cfm	130 / 275				
			MEDIUM	l/s / cfm	106 / 225				
			LOW	l/s / cfm	83 / 175				
	SOUND PRESSURE LEVEL (H/M/L)			dBA	40 / 35 / 29				
	UNIT DIMENSION		HEIGHT	mm/in	260 / 10.2				
			WIDTH	mm/in	799 / 31.5				
			DEPTH	mm/in	198 / 7.8				
	PACKING DIMENSION		HEIGHT	mm/in	337 / 13.3				
			WIDTH	mm/in	857 / 33.7				
			DEPTH	mm/in	270 / 10.6				
	UNIT WEIGHT			kg/lb	10/22.05				
	CONDENSATE DRAIN SIZE			mm/in	16 / 0.63				
OUTDOOR UNIT	AIR FLOW			l/s / cfm	307 / 650		396 / 840		
	SOUND PRESSURE LEVEL			dBA	44		46		
	UNIT DIMENSION		HEIGHT	mm/in	495/19.5		540/21.3		
			WIDTH	mm/in	600/23.6		700/27.6		
			DEPTH	mm/in	245/9.7		250/9.8		
	PACKING DIMENSION		HEIGHT	mm/in	575/22.6		620/24.4		
			WIDTH	mm/in	715/28.1		810/31.9		
			DEPTH	mm/in	330/13.0		330/13.0		
	UNIT WEIGHT			kg/lb	26/57.32		33/72.75		
	PIPE CONNECTION		TYPE		FLARE VALVE				
			SIZE	LIQUID	mm/in	6.35 / 1/4			
				GAS	mm/in	9.52 / 3/8			
REFRIGERANT CHARGE			kg/lb	0.6/1.32		0.69/1.52			

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2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO 5151.

3) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :

COOLING - 27°C DB / 19°C WB INDOOR AND 35°C DB / 24°C WB OUTDOOR

4) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS B 8615 STANDARD. POSITION OF THE MEASUREMENT POINT IS 1m IN FRONT AND 1m BELOW THE UNIT.

## General Data - Cooling Only (R410A)

MODEL		INDOOR UNIT		A5WM 10G		A5WM 15G		
		OUTDOOR UNIT		A5LC 10C		A5LC 15C		
NOMINAL CAPACITY			Btu/h	9500		12000		
			W	2780		3520		
NOMINAL TOTAL INPUT POWER			W	867		1230		
NOMINAL RUNNING CURRENT			A	3.9		5.5		
POWER SOURCE			V/Ph/Hz	220-240/1/50				
EER			W/W	3.21		2.86		
REFRIGERANT TYPE				R410A				
REFRIGERANT CONTROL (EXPANSION DEVICE)				OUTDOOR CAP. TUBE				
INDOOR UNIT	CONTROL	AIR DISCHARGE		DOUBLE LOUVER (UP & DOWN) & GRILLE (LEFT & RIGHT)				
		OPERATION		LCD REMOTE CONTROL				
	AIR FLOW		HIGH	l/s / cfm	142 / 300		163 / 345	
			MEDIUM	l/s / cfm	118 / 250		135 / 285	
			LOW	l/s / cfm	94 / 200		104 / 220	
	SOUND PRESSURE LEVEL (H/M/L)			dBA	39 / 34 / 28		42 / 36 / 29	
	UNIT DIMENSION		HEIGHT	mm/in	260 / 10.2			
			WIDTH	mm/in	899 / 35.4			
			DEPTH	mm/in	198 / 7.8			
	PACKING DIMENSION		HEIGHT	mm/in	337 / 13.3			
			WIDTH	mm/in	957 / 37.7			
			DEPTH	mm/in	270 / 10.6			
	UNIT WEIGHT			kg/lb	12/26.46			
	CONDENSATE DRAIN SIZE			mm/in	16 / 0.63			
OUTDOOR UNIT	AIR FLOW			l/s / cfm	396 / 840		453 / 960	
	SOUND PRESSURE LEVEL			dBA	46		49	
	UNIT DIMENSION		HEIGHT	mm/in	540/21.3			
			WIDTH	mm/in	700/27.6			
			DEPTH	mm/in	250/9.8			
	PACKING DIMENSION		HEIGHT	mm/in	620/24.4			
			WIDTH	mm/in	810/31.9			
			DEPTH	mm/in	330/13.0			
	UNIT WEIGHT			kg/lb	33/72.75			
	PIPE CONNECTION		TYPE		FLARE VALVE			
			SIZE	LIQUID	mm/in	6.35 / 1/4		
GAS				mm/in	9.52 / 3/8		12.70 / 1/2	
REFRIGERANT CHARGE			kg/lb	0.69/1.52		0.8/1.76		

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2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO 5151.

3) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :

COOLING - 27°C DB / 19°C WB INDOOR AND 35°C DB / 24°C WB OUTDOOR

4) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS B 8615 STANDARD. POSITION OF THE MEASUREMENT POINT IS 1m IN FRONT AND 1m BELOW THE UNIT.

## General Data - Cooling Only (R410A)

MODEL		INDOOR UNIT		A5WM 20G		A5WM 25G		
		OUTDOOR UNIT		A5LC 20C		A5LC 25C		
NOMINAL CAPACITY - 1Ø / <3Ø>			Btu/h	18000 / <18000>		21000 / <22500>		
			W	5280 / <5280>		6155 / <6590>		
NOMINAL TOTAL INPUT POWER - 1Ø / <3Ø>			W	1652 / <1663>		1915 / <2195>		
NOMINAL RUNNING CURRENT - 1Ø / <3Ø>			A	7.3 / <3.2>		8.4 / <4.2>		
POWER SOURCE			V/Ph/Hz	220-240/ 1/ 50 / <380-415/ 3/ 50>				
EER - 1Ø / <3Ø>			W/W	3.2 / <3.17>		3.21 / <3>		
REFRIGERANT TYPE				R410A				
REFRIGERANT CONTROL (EXPANSION DEVICE)				OUTDOOR CAP. TUBE				
INDOOR UNIT	CONTROL	AIR DISCHARGE		DOUBLE LOUVER (UP & DOWN) & GRILLE (LEFT & RIGHT)				
		OPERATION		LCD REMOTE CONTROL				
	AIR FLOW	HIGH	l/s / cfm	231 / 490		397 / 630		
		MEDIUM	l/s / cfm	193 / 410		231 / 490		
		LOW	l/s / cfm	160 / 340		208 / 440		
	SOUND PRESSURE LEVEL (H/M/L)		dBA	43 / 40 / 35		49 / 44 / 42		
	UNIT DIMENSION	HEIGHT	mm/in	304 / 12.0				
		WIDTH	mm/in	1062 / 41.8				
		DEPTH	mm/in	222 / 8.7				
	PACKING DIMENSION	HEIGHT	mm/in	378 / 14.9				
		WIDTH	mm/in	1130 / 44.5				
		DEPTH	mm/in	292 / 11.5				
	UNIT WEIGHT		kg/lb	16 / 35.27				
	CONDENSATE DRAIN SIZE		mm/in	20 / 0.79				
OUTDOOR UNIT	AIR FLOW		l/s / cfm	614 / 1300		689 / 1460		
	SOUND PRESSURE LEVEL		dBA	52				
	UNIT DIMENSION	HEIGHT	mm/in	651 / 25.6		750 / 29.5		
		WIDTH	mm/in	855 / 33.7		855 / 33.7		
		DEPTH	mm/in	328 / 12.9		328 / 12.9		
	PACKING DIMENSION	HEIGHT	mm/in	710 / 28.0		810 / 31.9		
		WIDTH	mm/in	990 / 39.0		990 / 39.0		
		DEPTH	mm/in	415 / 16.3		415 / 16.3		
	UNIT WEIGHT		kg/lb	59 / 130.1		62 / 136.7		
	PIPE CONNECTION	TYPE		FLARE VALVE				
		SIZE	LIQUID	mm/in	6.35 / 1/4			
			GAS	mm/in	12.70 / 1/2		15.88 / 5/8	
REFRIGERANT CHARGE			kg/lb	1.375 / 3.03		1.54 / 3.4		

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3) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW:  
COOLING - 27°C DB / 19°C WB INDOOR AND 35°C DB / 24°C WB OUTDOOR

4) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS B 8615 STANDARD. POSITION OF THE MEASUREMENT POINT IS 1m IN FRONT AND 1m BELOW THE UNIT.

## General Data - Cooling Only (R410A)

MODEL		INDOOR UNIT		A5WM 311	
		OUTDOOR UNIT		A5LC 28C	
NOMINAL CAPACITY - 1Ø / <3Ø>			Btu/h	26000 / <26000>	
			W	7620 / <7620>	
NOMINAL TOTAL INPUT POWER - 1Ø / <3Ø>			W	2560 / <2631>	
NOMINAL RUNNING CURRENT - 1Ø / <3Ø>			A	12.2 / <4.6>	
POWER SOURCE			V/Ph/Hz	220-240/ 1/ 50 / <380-415/ 3/ 50>	
EER - 1Ø / <3Ø>			W/W	2.98 / <2.89>	
REFRIGERANT TYPE				R410A	
REFRIGERANT CONTROL (EXPANSION DEVICE)				OUTDOOR CAP. TUBE	
INDOOR UNIT	CONTROL	AIR DISCHARGE		AUTO LOUVER (UP & DOWN) & GRILLE (LEFT & RIGHT)	
		OPERATION		LCD REMOTE CONTROL	
	AIR FLOW	HIGH	l/s / cfm	316 / 670	
		MEDIUM	l/s / cfm	297 / 630	
		LOW	l/s / cfm	236 / 500	
	SOUND PRESSURE LEVEL (H/M/L)		dBA	49 / 47 / 45	
	UNIT DIMENSION	HEIGHT	mm/in	360 / 14.2	
		WIDTH	mm/in	1200 / 47.2	
		DEPTH	mm/in	200 / 7.9	
	PACKING DIMENSION	HEIGHT	mm/in	420 / 16.5	
		WIDTH	mm/in	1267 / 49.9	
		DEPTH	mm/in	260 / 10.2	
	UNIT WEIGHT		kg/lb	17 / 37.48	
	CONDENSATE DRAIN SIZE		mm/in	20 / 0.79	
OUTDOOR UNIT	AIR FLOW		l/s / cfm	632 / 1340	
	SOUND PRESSURE LEVEL		dBA	54	
	UNIT DIMENSION	HEIGHT	mm/in	750 / 29.5	
		WIDTH	mm/in	855 / 33.7	
		DEPTH	mm/in	328 / 12.9	
	PACKING DIMENSION	HEIGHT	mm/in	810 / 31.9	
		WIDTH	mm/in	990 / 39.0	
		DEPTH	mm/in	415 / 16.3	
	UNIT WEIGHT		kg/lb	68 / 149.9	
	PIPE CONNECTION	TYPE		FLARE VALVE	
		SIZE	LIQUID	mm/in	9.52 / 3/8
			GAS	mm/in	15.88 / 5/8
	REFRIGERANT CHARGE		kg/lb	1.75 / 3.86	

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2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO 5151.

3) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :

COOLING - 27°C DB / 19°C WB INDOOR AND 35°C DB / 24°C WB OUTDOOR

4) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS B 8615 STANDARD. POSITION OF THE MEASUREMENT POINT IS 1m IN FRONT AND 1m BELOW THE UNIT.

## General Data - Heatpump (R410A)

MODEL		INDOOR UNIT			A5WM 07GR	A5WM 09GR	
		OUTDOOR UNIT			A5LC 07CR	A5LC 09CR	
NOMINAL COOLING CAPACITY				Btu/h	7500	9000	
				W	2200	2640	
NOMINAL HEATING CAPACITY				Btu/h	7500	9000	
				W	2200	2640	
NOMINAL TOTAL INPUT POWER (COOLING)				W	680	860	
NOMINAL TOTAL INPUT POWER (HEATING)				W	550	745	
NOMINAL RUNNING CURRENT (COOLING)				A	3.1	3.9	
NOMINAL RUNNING CURRENT (HEATING)				A	2.6	3.4	
POWER SOURCE				V/Ph/Hz	220-240/1/50		
EER				W/W	3.24	3.07	
COP				W/W	4	3.54	
REFRIGERANT TYPE					R410A		
REFRIGERANT CONTROL (EXPANSION DEVICE)					OUTDOOR CAP. TUBE		
INDOOR UNIT	CONTROL		AIR DISCHARGE			DOUBLE LOUVER (UP & DOWN) & GRILLE (LEFT & RIGHT)	
			OPERATION			LCD REMOTE CONTROL	
	AIR FLOW		HIGH	l/s / cfm	130 / 275		
			MEDIUM	l/s / cfm	106 / 225		
			LOW	l/s / cfm	83 / 175		
	SOUND PRESSURE LEVEL (H/M/L)			dBA	40 / 35 / 29		
	UNIT DIMENSION		HEIGHT	mm/in	260 / 10.2		
			WIDTH	mm/in	799 / 31.5		
			DEPTH	mm/in	198 / 7.8		
	PACKING DIMENSION		HEIGHT	mm/in	337 / 13.3		
			WIDTH	mm/in	857 / 33.7		
			DEPTH	mm/in	270 / 10.6		
	UNIT WEIGHT			kg/lb	10/22.05		
	CONDENSATE DRAIN SIZE			mm/in	16 / 0.63		
OUTDOOR UNIT	AIR FLOW			l/s / cfm	307 / 650	396 / 840	
	SOUND PRESSURE LEVEL			dBA	44	46	
	UNIT DIMENSION		HEIGHT	mm/in	495/19.5	540/21.3	
			WIDTH	mm/in	600/23.6	700/27.6	
			DEPTH	mm/in	245/9.7	250/9.8	
	PACKING DIMENSION		HEIGHT	mm/in	575/22.6	620/24.4	
			WIDTH	mm/in	715/28.1	810/31.9	
			DEPTH	mm/in	330/13.0	330/13.0	
	UNIT WEIGHT			kg/lb	26/57.32	33/72.75	
	PIPE CONNECTION		TYPE			FLARE VALVE	
			SIZE	LIQUID	mm/in	6.35 / 1/4	
				GAS	mm/in	9.52 / 3/8	
	REFRIGERANT CHARGE				kg/lb	0.8/1.76	0.73/1.61

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2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO 5151.

3) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :

a) COOLING - 27°C DB / 19°C WB INDOOR AND 35°C DB / 24°C WB OUTDOOR

b) HEATING - 20°C DB INDOOR AND 7°C DB / 6°C WB OUTDOOR

4) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS B 8615 STANDARD. POSITION OF THE MEASUREMENT POINT IS 1m IN FRONT AND 1m BELOW THE UNIT.

## General Data - Heatpump (R410A)

MODEL		INDOOR UNIT			A5WM 10GR		A5WM 15GR		
		OUTDOOR UNIT			A5LC 10CR		A5LC 15CR		
NOMINAL COOLING CAPACITY				Btu/h	9500		12000		
				W	2780		3520		
NOMINAL HEATING CAPACITY				Btu/h	9500		12000		
				W	2780		3520		
NOMINAL TOTAL INPUT POWER (COOLING)				W	867		1230		
NOMINAL TOTAL INPUT POWER (HEATING)				W	747		1080		
NOMINAL RUNNING CURRENT (COOLING)				A	3.9		5.4		
NOMINAL RUNNING CURRENT (HEATING)				A	3.4		4.9		
POWER SOURCE				V/Ph/Hz	220-240/1/50				
EER				W/W	3.21		2.86		
COP				W/W	3.72		3.26		
REFRIGERANT TYPE					R410A				
REFRIGERANT CONTROL (EXPANSION DEVICE)					OUTDOOR CAP. TUBE				
INDOOR UNIT	CONTROL		AIR DISCHARGE			DOUBLE LOUVER (UP & DOWN) & GRILLE (LEFT & RIGHT)			
			OPERATION			LCD REMOTE CONTROL			
	AIR FLOW		HIGH	l/s / cfm	142 / 300		163 / 345		
			MEDIUM	l/s / cfm	118 / 250		135 / 285		
			LOW	l/s / cfm	94 / 200		104 / 220		
	SOUND PRESSURE LEVEL (H/M/L)			dBA	39 / 34 / 28		42 / 36 / 29		
	UNIT DIMENSION		HEIGHT	mm/in	260 / 10.2				
			WIDTH	mm/in	899 / 35.4				
			DEPTH	mm/in	198 / 7.8				
	PACKING DIMENSION		HEIGHT	mm/in	337 / 13.3				
			WIDTH	mm/in	957 / 37.7				
			DEPTH	mm/in	270 / 10.6				
	UNIT WEIGHT			kg/lb	12/26.46				
	CONDENSATE DRAIN SIZE			mm/in	16 / 0.63				
OUTDOOR UNIT	AIR FLOW			l/s / cfm	396 / 840		453 / 960		
	SOUND PRESSURE LEVEL			dBA	46		49		
	UNIT DIMENSION		HEIGHT	mm/in	540/21.3				
			WIDTH	mm/in	700/27.6				
			DEPTH	mm/in	250/9.8				
	PACKING DIMENSION		HEIGHT	mm/in	620/24.4				
			WIDTH	mm/in	810/31.9				
			DEPTH	mm/in	330/13.0				
	UNIT WEIGHT			kg/lb	32/70.55				
	PIPE CONNECTION		TYPE			FLARE VALVE			
			SIZE	LIQUID	mm/in	6.35 / 1/4			
				GAS	mm/in	9.52 / 3/8		12.70 / 1/2	
	REFRIGERANT CHARGE			kg/lb	0.73/1.61		0.825/ 1.82		

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2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO 5151.

3) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :

a) COOLING - 27°C DB / 19°C WB INDOOR AND 35°C DB / 24°C WB OUTDOOR

b) HEATING - 20°C DB INDOOR AND 7°C DB / 6°C WB OUTDOOR

4) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS B 8615 STANDARD. POSITION OF THE MEASUREMENT POINT IS 1m IN FRONT AND 1m BELOW THE UNIT.

## General Data - Heatpump (R410A)

MODEL		INDOOR UNIT		A5WM 20GR		A5WM 25GR			
		OUTDOOR UNIT		A5LC 20CR		A5LC 25CR			
NOMINAL COOLING CAPACITY - 1Ø / <3Ø>			Btu/h	17850 / <18000>		20350 / <22500>			
			W	5230 / <5280>		5960 / <6590>			
NOMINAL HEATING CAPACITY - 1Ø / <3Ø>			Btu/h	18000 / <18500>		22000 / <23000>			
			W	5280 / <5420>		6450 / <6740>			
NOMINAL TOTAL INPUT POWER (COOLING) - 1Ø / <3Ø>			W	1630 / <1663>		1860 / <2195>			
NOMINAL TOTAL INPUT POWER (HEATING) - 1Ø / <3Ø>			W	1546 / <1630>		1870 / <2106>			
NOMINAL RUNNING CURRENT (COOLING) - 1Ø / <3Ø>			A	7.2 / <3.2>		8.4 / <4.2>			
NOMINAL RUNNING CURRENT (HEATING) - 1Ø / <3Ø>			A	6.8 / <3.1>		8.4 / <4.2>			
POWER SOURCE			V/Ph/Hz	220-240/ 1/ 50 / <380-415/ 3/ 50>					
EER - 1Ø / <3Ø>			W/W	3.21 / <3.17>		3.2 / <3>			
COP - 1Ø / <3Ø>			W/W	3.41 / <3.33>		3.45 / <3.2>			
REFRIGERANT TYPE				R410A					
REFRIGERANT CONTROL (EXPANSION DEVICE)				OUTDOOR CAP. TUBE					
INDOOR UNIT	CONTROL		AIR DISCHARGE		DOUBLE LOUVER (UP & DOWN) & GRILLE (LEFT & RIGHT)				
			OPERATION		LCD REMOTE CONTROL				
	AIR FLOW		HIGH	l/s / cfm	231 / 490		397 / 630		
			MEDIUM	l/s / cfm	193 / 410		231 / 490		
			LOW	l/s / cfm	160 / 340		208 / 440		
	SOUND PRESSURE LEVEL (H/M/L)			dBA	43 / 40 / 35		49 / 44 / 42		
	UNIT DIMENSION		HEIGHT	mm/in	304 / 12.0				
			WIDTH	mm/in	1062 / 41.8				
			DEPTH	mm/in	222 / 8.7				
	PACKING DIMENSION		HEIGHT	mm/in	378 / 14.9				
			WIDTH	mm/in	1130 / 44.5				
			DEPTH	mm/in	292 / 11.5				
	UNIT WEIGHT			kg/lb	16 / 35.27				
	CONDENSATE DRAIN SIZE			mm/in	20 / 0.79				
OUTDOOR UNIT	AIR FLOW		l/s / cfm	614 / 1300		689 / 1460			
	SOUND PRESSURE LEVEL		dBA	52					
	UNIT DIMENSION		HEIGHT	mm/in	651 / 25.6		750 / 29.5		
			WIDTH	mm/in	855 / 33.7		855 / 33.7		
			DEPTH	mm/in	328 / 12.9		328 / 12.9		
	PACKING DIMENSION		HEIGHT	mm/in	710 / 28.0		810 / 31.9		
			WIDTH	mm/in	990 / 39.0		990 / 39.0		
			DEPTH	mm/in	415 / 16.3		415 / 16.3		
	UNIT WEIGHT			kg/lb	59 / 130.1		62 / 136.7		
	PIPE CONNECTION		TYPE		FLARE VALVE				
			SIZE	LIQUID	mm/in	6.35 / 1/4			
				GAS	mm/in	12.70 / 1/2		15.88 / 5/8	
	REFRIGERANT CHARGE			kg/lb	1.375 / 3.03		1.54 / 3.40		

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a) COOLING - 27°C DB / 19°C WB INDOOR AND 35°C DB / 24°C WB OUTDOOR

b) HEATING - 20°C DB INDOOR AND 7°C DB / 6°C WB OUTDOOR

4) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS B 8615 STANDARD. POSITION OF THE MEASUREMENT POINT IS 1m IN FRONT AND 1m BELOW THE UNIT.

## General Data - Heatpump (R410A)

MODEL		INDOOR UNIT		A5WM 311		
		OUTDOOR UNIT		A5LC 28CR		
NOMINAL COOLING CAPACITY - 1Ø / <3Ø>			Btu/h	26000 / <26000>		
			W	7620 / <7620>		
NOMINAL HEATING CAPACITY - 1Ø / <3Ø>			Btu/h	26000 / <26000>		
			W	7620 / <7620>		
NOMINAL TOTAL INPUT POWER (COOLING) - 1Ø / <3Ø>			W	2560 / <2631>		
NOMINAL TOTAL INPUT POWER (HEATING) - 1Ø / <3Ø>			W	2442 / <2294>		
NOMINAL RUNNING CURRENT (COOLING) - 1Ø / <3Ø>			A	12.2 / <4.6>		
NOMINAL RUNNING CURRENT (HEATING) - 1Ø / <3Ø>			A	11.6 / <4.2>		
POWER SOURCE			V/Ph/Hz	220-240/ 1/ 50 / <380-415/ 3/ 50>		
EER - 1Ø / <3Ø>			W/W	2.98 / <2.89>		
COP - 1Ø / <3Ø>			W/W	3.12 / <3.32>		
REFRIGERANT TYPE				R410A		
REFRIGERANT CONTROL (EXPANSION DEVICE)				OUTDOOR CAP. TUBE		
INDOOR UNIT	CONTROL	AIR DISCHARGE		AUTO LOUVER (UP & DOWN) & GRILLE (LEFT & RIGHT)		
		OPERATION		LCD REMOTE CONTROL		
	AIR FLOW	HIGH	l/s / cfm	316 / 670		
		MEDIUM	l/s / cfm	297 / 630		
		LOW	l/s / cfm	236 / 500		
	SOUND PRESSURE LEVEL (H/M/L)		dBA	49 / 47 / 45		
	UNIT DIMENSION	HEIGHT	mm/in	360 / 14.2		
		WIDTH	mm/in	1200 / 47.2		
		DEPTH	mm/in	200 / 7.9		
	PACKING DIMENSION	HEIGHT	mm/in	420 / 16.5		
		WIDTH	mm/in	1267 / 49.9		
		DEPTH	mm/in	260 / 10.2		
	UNIT WEIGHT		kg/lb	17 / 37.48		
	CONDENSATE DRAIN SIZE		mm/in	20 / 0.79		
OUTDOOR UNIT	AIR FLOW		l/s / cfm	632 / 1340		
	SOUND PRESSURE LEVEL		dBA	54		
	UNIT DIMENSION	HEIGHT	mm/in	750 / 29.5		
		WIDTH	mm/in	855 / 33.7		
		DEPTH	mm/in	328 / 12.9		
	PACKING DIMENSION	HEIGHT	mm/in	810 / 31.9		
		WIDTH	mm/in	990 / 39.0		
		DEPTH	mm/in	415 / 16.3		
	UNIT WEIGHT		kg/lb	68 / 149.9		
	PIPE CONNECTION	TYPE		FLARE VALVE		
		SIZE	LIQUID	mm/in	9.52 / 3/8	
			GAS	mm/in	15.88 / 5/8	
	REFRIGERANT CHARGE		kg/lb	1.75 / 3.86		

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a) COOLING - 27°C DB / 19°C WB INDOOR AND 35°C DB / 24°C WB OUTDOOR

b) HEATING - 20°C DB INDOOR AND 7°C DB / 6°C WB OUTDOOR

4) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS B 8615 STANDARD. POSITION OF THE MEASUREMENT POINT IS 1m IN FRONT AND 1m BELOW THE UNIT.



## Components Data - Cooling Only (R22)

MODEL	INDOOR UNIT			AWM 07G	AWM 09G
	OUTDOOR UNIT			ALC 07C	ALC 09C
INDOOR FAN	TYPE			CROSS FLOW FAN	
	QUANTITY			1	
	MATERIAL			ACRYLO NITRILE STYRENE	
	DRIVE			DIRECT	
	DIAMETER		mm/in	97/3.8	
	LENGTH		mm/in	617.5/24.3	
INDOOR FAN MOTOR	TYPE			INDUCTION	
	QUANTITY			1	
	INDEX OF PROTECTION (IP)			IP24	
OUTDOOR FAN	TYPE			PROPELLER	
	QUANTITY			1	
	MATERIAL			GLASS REINFORCED ACRYL STYRENE RESIN	
	DRIVE			DIRECT	
	DIAMETER		mm/in	356/14	
OUTDOOR FAN MOTOR	TYPE			INDUCTION	
	QUANTITY			1	
	INDEX OF PROTECTION (IP)			IP54	
COMPRESSOR	TYPE			ROTARY HERMETIC	
	OIL TYPE			ATMOS M60 or SUNISO 4GDID	
	OIL AMOUNT		cm <sup>3</sup> / fl.oz.	320/11.3	
INDOOR COIL	TUBE	MATERIAL		SEAMLESS INNER GROOVE COPPER TUBE	
		DIAMETER	mm/in	7.0 / 0.276	
		THICKNESS	mm/in	0.28 / 0.011	
	FIN	MATERIAL		ALUMINIUM (HYDROPHILIC SLIT FIN TYPE)	
		THICKNESS	mm/in	0.11 / 0.0043	
		FACE AREA	m <sup>2</sup> /ft <sup>2</sup>	0.201 / 2.161	
		ROW		2	
		FIN PER INCH		18	
OUTDOOR COIL	TUBE	MATERIAL		SEAMLESS INNER GROOVE COPPER TUBE	
		DIAMETER	mm/in	7.0 / 0.276	
		THICKNESS	mm/in	0.28 / 0.011	
	FIN	MATERIAL		RAISE LANCE	
		THICKNESS	mm/in	0.11/0.004	
		FACE AREA	m <sup>2</sup> /ft <sup>2</sup>	0.31/3.40	
		ROW		1	
		FIN PER INCH		18	
AIR QUALITY	FILTER	TYPE		NANO FILTER	
		QUANTITY		pc	2
		SIZE	LENGTH	mm/in	304/11.9
			WIDTH	mm/in	298/11.7
			THICKNESS	mm/in	1.5/0.06
	NEGATIVE IONIZER			YES	
CASING	INDOOR UNIT	MATERIAL		HIGH IMPACT POLYSTYRENE	
		COLOUR		LIGHT GREY	
	OUTDOOR UNIT	MATERIAL		GALVANISED MILD STEEL	
		COLOUR		LIGHT GREY	

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## Components Data - Cooling Only (R22)

MODEL	INDOOR UNIT			AWM 10G		AWM 15G	
	OUTDOOR UNIT			ALC 10C		ALC 15C	
INDOOR FAN	TYPE			CROSS FLOW FAN			
	QUANTITY			1			
	MATERIAL			ACRYLO NITRILE STYRENE			
	DRIVE			DIRECT			
	DIAMETER		mm/in	97/3.8			
	LENGTH		mm/in	717.5/28.2			
INDOOR FAN MOTOR	TYPE			INDUCTION			
	QUANTITY			1			
	INDEX OF PROTECTION (IP)			IP24			
OUTDOOR FAN	TYPE			PROPELLER			
	QUANTITY			1			
	MATERIAL			GLASS REINFORCED ACRYL STYRENE RESIN			
	DRIVE			DIRECT			
	DIAMETER		mm/in	404/16			
OUTDOOR FAN MOTOR	TYPE			INDUCTION			
	QUANTITY			1			
	INDEX OF PROTECTION (IP)			IP54			
COMPRESSOR	TYPE			ROTARY HERMETIC			
	OIL TYPE			ATMOS M60 or SUNISO 4GDID			
	OIL AMOUNT		cm <sup>3</sup> / fl.oz.	320 / 11.3		350 / 11.8	
INDOOR COIL	TUBE	MATERIAL		SEAMLESS INNER GROOVE COPPER TUBE			
		DIAMETER	mm/in	7.0 / 0.276			
		THICKNESS	mm/in	0.28 / 0.011			
	FIN	MATERIAL		ALUMINIUM (HYDROPHILIC SLIT FIN TYPE)			
		THICKNESS	mm/in	0.11 / 0.0043			
		FACE AREA	m <sup>2</sup> /ft <sup>2</sup>	0.234 / 2.516			
		ROW		2			
		FIN PER INCH		18			
OUTDOOR COIL	TUBE	MATERIAL		SEAMLESS INNER GROOVE COPPER TUBE			
		DIAMETER	mm/in	7.0 / 0.276			
		THICKNESS	mm/in	0.28 / 0.011			
	FIN	MATERIAL		CORRUGATED		RASE LANCE	
		THICKNESS	mm/in	0.11/0.004			
		FACE AREA	m <sup>2</sup> /ft <sup>2</sup>	0.36/3.94			
		ROW		1			
		FIN PER INCH		18			
AIR QUALITY	FILTER	TYPE		NANO FILTER			
		QUANTITY	pc	2			
		SIZE	LENGTH	mm/in	304/11.9		
			WIDTH	mm/in	348/13.7		
			THICKNESS	mm/in	1.5/0.06		
	NEGATIVE IONIZER			YES			
CASING	INDOOR UNIT	MATERIAL		HIGH IMPACT POLYSTYRENE			
		COLOUR		LIGHT GREY			
	OUTDOOR UNIT	MATERIAL		GALVANISED MILD STEEL			
		COLOUR		LIGHT GREY			

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## Components Data - Cooling Only (R22)

MODEL	INDOOR UNIT			AWM 20G		AWM 20G	
	OUTDOOR UNIT			ALC 18C		ALC 20C	
INDOOR FAN	TYPE			CROSS FLOW FAN			
	QUANTITY			1			
	MATERIAL			ACRYLO NITRILE STYRENE			
	DRIVE			DIRECT			
	DIAMETER		mm/in	108/4.25			
	LENGTH		mm/in	810/31.9			
INDOOR FAN MOTOR	TYPE			INDUCTION			
	QUANTITY			1			
	INDEX OF PROTECTION (IP)			IP20			
OUTDOOR FAN	TYPE			PROPELLER			
	QUANTITY			1			
	MATERIAL			GLASS REINFORCED ACRYL STYRENE RESIN			
	DRIVE			DIRECT			
	DIAMETER		mm/in	457.2/18			
OUTDOOR FAN MOTOR	TYPE			INDUCTION			
	QUANTITY			1			
	INDEX OF PROTECTION (IP)			IP54			
COMPRESSOR	TYPE			ROTARY HERMETIC			
	OIL TYPE			ATMOS NM56M or SUNISO 4GDID			
	OIL AMOUNT		cm <sup>3</sup> / fl.oz.	600 / 21.1		1000 / 35.2	
INDOOR COIL	TUBE	MATERIAL		SEAMLESS INNER GROOVE COPPER TUBE			
		DIAMETER	mm/in	7.0 / 0.276			
		THICKNESS	mm/in	0.28 / 0.011			
	FIN	MATERIAL		ALUMINIUM (HYDROPHILIC SLIT FIN TYPE)			
		THICKNESS	mm/in	0.11 / 0.0043			
		FACE AREA	m <sup>2</sup> /ft <sup>2</sup>	0.269 / 2.900			
		ROW		2			
		FIN PER INCH		18			
OUTDOOR COIL	TUBE	MATERIAL		SEAMLESS INNER GROOVE COPPER TUBE			
		DIAMETER	mm/in	7.0 / 0.276			
		THICKNESS	mm/in	0.28 / 0.011			
	FIN	MATERIAL		ALUMINIUM (RAISE LANCE FIN)			
		THICKNESS	mm/in	0.11 / 0.0043			
		FACE AREA	m <sup>2</sup> /ft <sup>2</sup>	0.52 / 5.59			
		ROW		1		2	
		FIN PER INCH		20		18	
AIR QUALITY	FILTER	TYPE		NANO FILTER			
		QUANTITY	pc	2			
		SIZE	LENGTH	mm/in	351/13.8		
			WIDTH	mm/in	386/15.2		
			THICKNESS	mm/in	1.5/0.06		
	NEGATIVE IONIZER			YES			
CASING	INDOOR UNIT	MATERIAL		HIGH IMPACT POLYSTYRENE			
		COLOUR		LIGHT GREY			
	OUTDOOR UNIT	MATERIAL		GALVANISED MILD STEEL			
		COLOUR		LIGHT GREY			

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## Components Data - Cooling Only (R22)

MODEL	INDOOR UNIT			AWM 25G	AWM 311	
	OUTDOOR UNIT			ALC 25C	ALC 28C	
INDOOR FAN	TYPE			CROSS FLOW FAN	ANTI FUNGUS CROSS FLOW FAN	
	QUANTITY			1		
	MATERIAL			ACRYLO NITRILE STYRENE		
	DRIVE			DIRECT		
	DIAMETER	mm/in		108/4.25	106 / 4.17	
	LENGTH	mm/in		810/31.9	950 / 37.4	
INDOOR FAN MOTOR	TYPE			INDUCTION	INDUCTION	
	QUANTITY			1		
	INDEX OF PROTECTION (IP)			IP20	IP24	
OUTDOOR FAN	TYPE			PROPELLER		
	QUANTITY			1		
	MATERIAL			GLASS REINFORCED ACRYL STYRENE RESIN		
	DRIVE			DIRECT		
	DIAMETER	mm/in		457.2/18		
OUTDOOR FAN MOTOR	TYPE			INDUCTION		
	QUANTITY			1		
	INDEX OF PROTECTION (IP)			IP54		
COMPRESSOR	TYPE			ROTARY HERMETIC		
	OIL TYPE			ATMOS NM56M or SUNISO 4GDID		
	OIL AMOUNT		cm <sup>3</sup> / fl.oz.	700 / 24.6	1130 / 39.8	
INDOOR COIL	TUBE	MATERIAL		SEAMLESS INNER GROOVE COPPER TUBE		
		DIAMETER	mm/in	7.0 / 0.276	9.52 / 0.375	
		THICKNESS	mm/in	0.28 / 0.011	0.35 / 0.013	
	FIN	MATERIAL		ALUMINIUM (HYDROPHILIC SLIT FIN TYPE)		
		THICKNESS	mm/in	0.11 / 0.0043		
		FACE AREA	m <sup>2</sup> /ft <sup>2</sup>	0.269 / 2.900	0.291 / 3.130	
		ROW		2		
		FIN PER INCH		18	16	
OUTDOOR COIL	TUBE	MATERIAL		SEAMLESS INNER GROOVE COPPER TUBE		
		DIAMETER	mm/in	7.0 / 0.276	9.52 / 3/8	
		THICKNESS	mm/in	0.28 / 0.011	0.33 / 0.013	
	FIN	MATERIAL		RAISE LANCE	ALUMINIUM (SLIT FIN)	
		THICKNESS	mm/in	0.127 / 0.005		
		FACE AREA	m <sup>2</sup> /ft <sup>2</sup>	0.61 / 6.52		
		ROW		2		
		FIN PER INCH		18		
AIR QUALITY	FILTER	TYPE		NANO FILTER	SARANET + IONIZER	
		QUANTITY		2	3 X 3	
		SIZE	LENGTH	mm/in	351/13.8	330/13.0
			WIDTH	mm/in	386/15.2	317/12.4
			THICKNESS	mm/in	1.5/0.06	1.8/0.07
	NEGATIVE IONIZER			YES	NO	
CASING	INDOOR UNIT	MATERIAL		HIGH IMPACT POLYSTYRENE	ABS	
		COLOUR		LIGHT GREY		
	OUTDOOR UNIT	MATERIAL		GALVANISED MILD STEEL		
		COLOUR		LIGHT GREY		

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## Components Data - Heatpump (R22)

MODEL	INDOOR UNIT			AWM 09GR		
	OUTDOOR UNIT			ALC 09CR		
INDOOR FAN	TYPE			ANTI FUNGUS SKEW FAN		
	QUANTITY			1		
	MATERIAL			ACRYLO NITRILE STYRENE		
	DRIVE			DIRECT		
	DIAMETER		mm/in	97/3.8		
	LENGTH		mm/in	617.5/24.3		
INDOOR FAN MOTOR	TYPE			INDUCTION		
	QUANTITY			1		
	INDEX OF PROTECTION (IP)			IP24		
OUTDOOR FAN	TYPE			PROPELLER		
	QUANTITY			1		
	MATERIAL			GLASS REINFORCED ACRYL STYRENE RESIN		
	DRIVE			DIRECT		
	DIAMETER		mm/in	356/14		
OUTDOOR FAN MOTOR	TYPE			INDUCTION		
	QUANTITY			1		
	INDEX OF PROTECTION (IP)			IP54		
COMPRESSOR	TYPE			ROTARY HERMETIC		
	OIL TYPE			ATMOS M60 or SUNISO 4GDID		
	OIL AMOUNT		cm <sup>3</sup> / fl.oz.	320/11.3		
INDOOR COIL	TUBE	MATERIAL		SEAMLESS INNER GROOVE COPPER TUBE		
		DIAMETER	mm/in	7.0 / 0.276		
		THICKNESS	mm/in	0.28 / 0.011		
	FIN	MATERIAL		ALUMINIUM (HYDROPHILIC SLIT FIN TYPE)		
		THICKNESS	mm/in	0.11 / 0.0043		
		FACE AREA	m <sup>2</sup> /ft <sup>2</sup>	0.201 / 2.161		
		ROW		2		
		FIN PER INCH		18		
OUTDOOR COIL	TUBE	MATERIAL		SEAMLESS INNER GROOVE COPPER TUBE		
		DIAMETER	mm/in	9.52 / 3/8		
		THICKNESS	mm/in	0.33 / 0.013		
	FIN	MATERIAL		ALUMINIUM (SLIT FIN)		
		THICKNESS	mm/in	0.11/0.004		
		FACE AREA	m <sup>2</sup> /ft <sup>2</sup>	0.31/3.40		
		ROW		1		
		FIN PER INCH		18		
AIR QUALITY	FILTER	TYPE		NANO FILTER		
		QUANTITY		pc	2	
		SIZE	LENGTH	mm/in	304/11.9	
			WIDTH	mm/in	298/11.7	
			THICKNESS	mm/in	1.5/0.06	
	NEGATIVE IONIZER			YES		
CASING	INDOOR UNIT	MATERIAL		HIGH IMPACT POLYSTYRENE		
		COLOUR		LIGHT GREY		
	OUTDOOR UNIT	MATERIAL		GALVANISED MILD STEEL		
		COLOUR		LIGHT GREY		

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## Components Data - Heatpump (R22)

MODEL	INDOOR UNIT			AWM 10GR		AWM 15GR	
	OUTDOOR UNIT			ALC 10CR		ALC 15CR	
INDOOR FAN	TYPE			ANTI FUNGUS SKEW FAN			
	QUANTITY			1			
	MATERIAL			ACRYLO NITRILE STYRENE			
	DRIVE			DIRECT			
	DIAMETER		mm/in	97/3.8			
	LENGTH		mm/in	717.5/28.2			
INDOOR FAN MOTOR	TYPE			INDUCTION			
	QUANTITY			1			
	INDEX OF PROTECTION (IP)			IP24			
OUTDOOR FAN	TYPE			PROPELLER			
	QUANTITY			1			
	MATERIAL			GLASS REINFORCED ACRYL STYRENE RESIN			
	DRIVE			DIRECT			
	DIAMETER		mm/in	404/16			
OUTDOOR FAN MOTOR	TYPE			INDUCTION			
	QUANTITY			1			
	INDEX OF PROTECTION (IP)			IP54			
COMPRESSOR	TYPE			ROTARY HERMETIC			
	OIL TYPE			ATMOS M60 or SUNISO 4GDID			
	OIL AMOUNT		cm <sup>3</sup> / fl.oz.	320 / 11.3		350 / 11.8	
INDOOR COIL	TUBE	MATERIAL		SEAMLESS INNER GROOVE COPPER TUBE			
		DIAMETER	mm/in	7.0 / 0.276			
		THICKNESS	mm/in	0.28 / 0.011			
	FIN	MATERIAL		ALUMINIUM (HYDROPHILIC SLIT FIN TYPE)			
		THICKNESS	mm/in	0.11 / 0.0043			
		FACE AREA	m <sup>2</sup> /ft <sup>2</sup>	0.234 / 2.516			
		ROW		2			
		FIN PER INCH		18			
OUTDOOR COIL	TUBE	MATERIAL		SEAMLESS INNER GROOVE COPPER TUBE			
		DIAMETER	mm/in	9.52 / 3/8			
		THICKNESS	mm/in	0.33 / 0.013			
	FIN	MATERIAL		ALUMINIUM (SLIT FIN)			
		THICKNESS	mm/in	0.11/0.004			
		FACE AREA	m <sup>2</sup> /ft <sup>2</sup>	0.36/3.94			
		ROW		1			
		FIN PER INCH		18			
AIR QUALITY	FILTER	TYPE		NANO FILTER			
		QUANTITY	pc	2			
		SIZE	LENGTH	mm/in	304/11.9		
			WIDTH	mm/in	348/13.7		
			THICKNESS	mm/in	1.5/0.06		
	NEGATIVE IONIZER			YES			
	CASING	INDOOR UNIT	MATERIAL		HIGH IMPACT POLYSTYRENE		
COLOUR			LIGHT GREY				
OUTDOOR UNIT		MATERIAL		GALVANISED MILD STEEL			
		COLOUR		LIGHT GREY			

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## Components Data - Heatpump (R22)

MODEL	INDOOR UNIT			AWM 20GR		AWM 20GR	
	OUTDOOR UNIT			ALC 18CR		ALC 20CR	
INDOOR FAN	TYPE			CROSS FLOW FAN			
	QUANTITY			1			
	MATERIAL			ACRYLO NITRILE STYRENE			
	DRIVE			DIRECT			
	DIAMETER		mm/in	108/4.25			
	LENGTH		mm/in	810/31.9			
INDOOR FAN MOTOR	TYPE			INDUCTION			
	QUANTITY			1			
	INDEX OF PROTECTION (IP)			IP20			
OUTDOOR FAN	TYPE			PROPELLER			
	QUANTITY			1			
	MATERIAL			GLASS REINFORCED ACRYL STYRENE RESIN			
	DRIVE			DIRECT			
	DIAMETER		mm/in	457.2/18			
OUTDOOR FAN MOTOR	TYPE			INDUCTION			
	QUANTITY			1			
	INDEX OF PROTECTION (IP)			IP54			
COMPRESSOR	TYPE			ROTARY HERMETIC			
	OIL TYPE			ATMOS NM56M or SUNISO 4GDID			
	OIL AMOUNT		cm <sup>3</sup> / fl.oz.	600 / 21.1		1000 / 35.2	
INDOOR COIL	TUBE	MATERIAL		SEAMLESS INNER GROOVE COPPER TUBE			
		DIAMETER	mm/in	7.0 / 0.276			
		THICKNESS	mm/in	0.28 / 0.011			
	FIN	MATERIAL		ALUMINIUM (HYDROPHILIC SLIT FIN TYPE)			
		THICKNESS	mm/in	0.11 / 0.0043			
		FACE AREA	m <sup>2</sup> /ft <sup>2</sup>	0.269 / 2.900			
		ROW		2			
		FIN PER INCH		18			
OUTDOOR COIL	TUBE	MATERIAL		SEAMLESS INNER GROOVE COPPER TUBE			
		DIAMETER	mm/in	7.0 / 0.276			
		THICKNESS	mm/in	0.28 / 0.011			
	FIN	MATERIAL		ALUMINIUM (RAISE LANCE FIN)			
		THICKNESS	mm/in	0.11 / 0.0043			
		FACE AREA	m <sup>2</sup> /ft <sup>2</sup>	0.52 / 5.59			
		ROW		1		2	
		FIN PER INCH		20		18	
AIR QUALITY	FILTER	TYPE		NANO FILTER			
		QUANTITY	pc	2			
		SIZE	LENGTH	mm/in	351/13.8		
			WIDTH	mm/in	386/15.2		
			THICKNESS	mm/in	1.5/0.06		
	NEGATIVE IONIZER			YES			
CASING	INDOOR UNIT	MATERIAL		HIGH IMPACT POLYSTYRENE			
		COLOUR		LIGHT GREY			
	OUTDOOR UNIT	MATERIAL		GALVANISED MILD STEEL			
		COLOUR		LIGHT GREY			

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## Components Data - Heatpump (R22)

MODEL	INDOOR UNIT			AWM 25GR		AWM 311R		
	OUTDOOR UNIT			ALC 25CR		ALC 28CR		
INDOOR FAN	TYPE			CROSS FLOW FAN		ANTI FUNGUS CROSS FLOW FAN		
	QUANTITY			1				
	MATERIAL			ACRYLO NITRILE STYRENE				
	DRIVE			DIRECT				
	DIAMETER		mm/in	108/4.25		106 / 4.17		
	LENGTH		mm/in	810/31.9		950 / 37.4		
INDOOR FAN MOTOR	TYPE			INDUCTION				
	QUANTITY			1				
	INDEX OF PROTECTION (IP)			IP20		IP24		
OUTDOOR FAN	TYPE			PROPELLER				
	QUANTITY			1				
	MATERIAL			GLASS REINFORCED ACRYL STYRENE RESIN				
	DRIVE			DIRECT				
	DIAMETER		mm/in	457.2/18				
OUTDOOR FAN MOTOR	TYPE			INDUCTION				
	QUANTITY			1				
	INDEX OF PROTECTION (IP)			IP54				
COMPRESSOR	TYPE			ROTARY HERMETIC				
	OIL TYPE			ATMOS NM56M or SUNISO 4GDID		ATMOS M60 or SUNISO 4GDID		
	OIL AMOUNT		cm <sup>3</sup> / fl.oz.	700 / 24.6		1130 / 39.8		
INDOOR COIL	TUBE	MATERIAL		SEAMLESS INNER GROOVE COPPER TUBE				
		DIAMETER	mm/in	7.0 / 0.276		9.52 / 0.375		
		THICKNESS	mm/in	0.28 / 0.011		0.35 / 0.013		
	FIN	MATERIAL		ALUMINIUM (HYDROPHILIC SLIT FIN TYPE)				
		THICKNESS	mm/in	0.11 / 0.0043				
		FACE AREA	m <sup>2</sup> /ft <sup>2</sup>	0.269 / 2.900		0.291 / 3.130		
		ROW		2		2		
		FIN PER INCH		18		16		
OUTDOOR COIL	TUBE	MATERIAL		SEAMLESS INNER GROOVE COPPER TUBE				
		DIAMETER	mm/in	7 / 0.275		9.52 / 3/8		
		THICKNESS	mm/in	0.28 / 0.011		0.33 / 0.013		
	FIN	MATERIAL		ALUMINIUM (RAISE LANCE)		ALUMINIUM (SLIT FIN)		
		THICKNESS	mm/in	0.11 / 0.0043		0.11/0.004		
		FACE AREA	m <sup>2</sup> /ft <sup>2</sup>	0.61 / 6.52				
		ROW		2				
		FIN PER INCH		18				
AIR QUALITY	FILTER	TYPE		NANO FILTER		SARANET + IONIZER		
		QUANTITY	pc	2		3 X 3		
		SIZE	LENGTH	mm/in	351/13.8		330/13.0	
			WIDTH	mm/in	386/15.2		317/12.4	
			THICKNESS	mm/in	1.5/0.06		1.8/0.07	
	NEGATIVE IONIZER			YES		NO		
CASING	INDOOR UNIT	MATERIAL		HIGH IMPACT POLYSTYRENE		ABS		
		COLOUR		LIGHT GREY				
	OUTDOOR UNIT	MATERIAL		GALVANISED MILD STEEL				
		COLOUR		LIGHT GREY				

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## Components Data - Cooling Only (R410A)

MODEL	INDOOR UNIT			A5WM 07G		A5WM 09G		
	OUTDOOR UNIT			A5LC 07C		A5LC 10C		
INDOOR FAN	TYPE			ANTI FUNGUS SKEW FAN				
	QUANTITY			1				
	MATERIAL			ACRYLO NITRILE STYRENE				
	DRIVE			DIRECT				
	DIAMETER		mm/in	97/3.8				
	LENGTH		mm/in	617.5/24.3				
INDOOR FAN MOTOR	TYPE			INDUCTION				
	QUANTITY			1				
	INDEX OF PROTECTION (IP)			IP24				
OUTDOOR FAN	TYPE			PROPELLER				
	QUANTITY			1				
	MATERIAL			GLASS REINFORCED ACRYL STYRENE RESIN				
	DRIVE			DIRECT				
	DIAMETER		mm/in	356/14				
OUTDOOR FAN MOTOR	TYPE			INDUCTION				
	QUANTITY			1				
	INDEX OF PROTECTION (IP)			IP54				
COMPRESSOR	TYPE			ROTARY HERMETIC				
	OIL TYPE			RB68A or Freol Alpha68M				
	OIL AMOUNT		cm <sup>3</sup> / fl.oz.	300 / 10.5		350 / 12.3		
INDOOR COIL	TUBE	MATERIAL		SEAMLESS INNER GROOVE COPPER TUBE				
		DIAMETER		mm/in	7.0 / 0.276			
		THICKNESS		mm/in	0.28 / 0.011			
	FIN	MATERIAL		ALUMINIUM (HYDROPHILIC SLIT FIN TYPE)				
		THICKNESS		mm/in	0.11 / 0.0043			
		FACE AREA		m <sup>2</sup> /ft <sup>2</sup>	0.201 / 2.161			
		ROW		2				
		FIN PER INCH		18				
OUTDOOR COIL	TUBE	MATERIAL		SEAMLESS INNER GROOVE COPPER TUBE				
		DIAMETER		mm/in	9.52 / 3/8			
		THICKNESS		mm/in	0.33 / 0.013			
	FIN	MATERIAL		ALUMINIUM (SLIT FIN)				
		THICKNESS		mm/in	0.11/0.004			
		FACE AREA		m <sup>2</sup> /ft <sup>2</sup>	0.31/3.40		0.36/3.94	
		ROW		1				
		FIN PER INCH		18				
AIR QUALITY	FILTER	TYPE		NANO FILTER				
		QUANTITY		pc	2			
		SIZE	LENGTH	mm/in	304/11.9			
			WIDTH	mm/in	298/11.7			
			THICKNESS	mm/in	1.5/0.06			
	NEGATIVE IONIZER			YES				
CASING	INDOOR UNIT		MATERIAL		HIPS			
			COLOUR		IVORY			
	OUTDOOR UNIT		MATERIAL		GALVANISED MILD STEEL			
			COLOUR		LIGHT GREY			

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## Components Data - Cooling Only (R410A)

MODEL	INDOOR UNIT			A5WM 10G		A5WM 15G	
	OUTDOOR UNIT			A5LC 10C		A5LC 15C	
INDOOR FAN	TYPE			ANTI FUNGUS SKEW FAN			
	QUANTITY			1			
	MATERIAL			ACRYLO NITRILE STYRENE			
	DRIVE			DIRECT			
	DIAMETER		mm/in	97/3.8			
	LENGTH		mm/in	717.5/28.2			
INDOOR FAN MOTOR	TYPE			INDUCTION			
	QUANTITY			1			
	INDEX OF PROTECTION (IP)			IP24			
OUTDOOR FAN	TYPE			PROPELLER			
	QUANTITY			1			
	MATERIAL			GLASS REINFORCED ACRYL STYRENE RESIN			
	DRIVE			DIRECT			
	DIAMETER		mm/in	404/16			
OUTDOOR FAN MOTOR	TYPE			INDUCTION			
	QUANTITY			1			
	INDEX OF PROTECTION (IP)			IP24			
COMPRESSOR	TYPE			ROTARY HERMETIC			
	OIL TYPE			RB68A or Freol Alpha68M			
	OIL AMOUNT		cm <sup>3</sup> / fl.oz.	350 / 12.3		430 / 15.1	
INDOOR COIL	TUBE	MATERIAL		SEAMLESS INNER GROOVE COPPER TUBE			
		DIAMETER		mm/in	7.0 / 0.276		
		THICKNESS		mm/in	0.28 / 0.011		
	FIN	MATERIAL		ALUMINIUM (HYDROPHILIC SLIT FIN TYPE)			
		THICKNESS		mm/in	0.11 / 0.0043		
		FACE AREA		m <sup>2</sup> /ft <sup>2</sup>	0.234 / 2.516		
		ROW		2			
		FIN PER INCH		18			
OUTDOOR COIL	TUBE	MATERIAL		SEAMLESS INNER GROOVE COPPER TUBE			
		DIAMETER		mm/in	9.52 / 3/8		
		THICKNESS		mm/in	0.33 / 0.013		
	FIN	MATERIAL		ALUMINIUM (SLIT FIN)			
		THICKNESS		mm/in	0.11/0.004		
		FACE AREA		m <sup>2</sup> /ft <sup>2</sup>	0.36/3.94		
		ROW		1			
		FIN PER INCH		18			
AIR QUALITY	FILTER	TYPE		NANO FILTER			
		QUANTITY		pc	2		
		SIZE	LENGTH	mm/in	304/11.9		
			WIDTH	mm/in	348/13.7		
			THICKNESS	mm/in	1.5/0.06		
	NEGATIVE IONIZER			YES			
CASING	INDOOR UNIT	MATERIAL		HIPS			
		COLOUR		IVORY			
	OUTDOOR UNIT	MATERIAL		GALVANISED MILD STEEL			
		COLOUR		LIGHT GREY			

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## Components Data - Cooling Only (R410A)

MODEL	INDOOR UNIT			A5WM 20G		A5WM 25G		
	OUTDOOR UNIT			A5LC 20C		A5LC 25C		
INDOOR FAN	TYPE			ANTI FUNGUS SKEW FAN				
	QUANTITY			1				
	MATERIAL			ACRYLO NITRILE STYRENE				
	DRIVE			DIRECT				
	DIAMETER		mm/in	108/4.25				
	LENGTH		mm/in	810/31.9				
INDOOR FAN MOTOR	TYPE			INDUCTION				
	QUANTITY			1				
	INDEX OF PROTECTION (IP)			IP20				
OUTDOOR FAN	TYPE			PROPELLER				
	QUANTITY			1				
	MATERIAL			GLASS REINFORCED ACRYL STYRENE RESIN				
	DRIVE			DIRECT				
	DIAMETER		mm/in	457.2/18				
OUTDOOR FAN MOTOR	TYPE			INDUCTION				
	QUANTITY			1				
	INDEX OF PROTECTION (IP)			IP54				
COMPRESSOR	TYPE			ROTARY HERMETIC				
	OIL TYPE			RB68A or Freol Alpha68M				
	OIL AMOUNT		cm <sup>3</sup> / fl.oz.	670 / 23.5		1130 / 39.7		
INDOOR COIL	TUBE	MATERIAL		SEAMLESS INNER GROOVE COPPER TUBE				
		DIAMETER		mm/in	7.0 / 0.276			
		THICKNESS		mm/in	0.28 / 0.011			
	FIN	MATERIAL		ALUMINIUM (HYDROPHILIC SLIT FIN TYPE)				
		THICKNESS		mm/in	0.11 / 0.0043			
		FACE AREA		m <sup>2</sup> /ft <sup>2</sup>	0.269 / 2.900			
		ROW		2				
		FIN PER INCH		18				
OUTDOOR COIL	TUBE	MATERIAL		SEAMLESS INNER GROOVE COPPER TUBE				
		DIAMETER		mm/in	7.0 / 0.276			
		THICKNESS		mm/in	0.28 / 0.011			
	FIN	MATERIAL		ALUMINIUM (CORR. FIN)				
		THICKNESS		mm/in	0.127 / 0.005			
		FACE AREA		m <sup>2</sup> /ft <sup>2</sup>	0.51 / 5.47		0.62 / 6.64	
		ROW		2				
		FIN PER INCH		18				
AIR QUALITY	FILTER	TYPE		NANO FILTER				
		QUANTITY		pc	2			
		SIZE	LENGTH	mm/in	351/13.8			
			WIDTH	mm/in	386/15.2			
			THICKNESS	mm/in	1.5/0.06			
	NEGATIVE IONIZER			YES				
CASING	INDOOR UNIT		MATERIAL		HIPS			
			COLOUR		IVORY			
	OUTDOOR UNIT		MATERIAL		GALVANISED MILD STEEL			
			COLOUR		LIGHT GREY			

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## Components Data - Cooling Only (R410A)

MODEL	INDOOR UNIT			A5WM 311	
	OUTDOOR UNIT			A5LC 28C	
INDOOR FAN	TYPE			ANTI FUNGUS CROSS FLOW FAN	
	QUANTITY			1	
	MATERIAL			ACRYLO NITRILE STYRENE	
	DRIVE			DIRECT	
	DIAMETER		mm/in	106 / 4.17	
	LENGTH		mm/in	950 / 37.4	
INDOOR FAN MOTOR	TYPE			INDUCTION	
	QUANTITY			1	
	INDEX OF PROTECTION (IP)			IP24	
OUTDOOR FAN	TYPE			PROPELLER	
	QUANTITY			1	
	MATERIAL			GLASS REINFORCED ACRYL STYRENE RESIN	
	DRIVE			DIRECT	
	DIAMETER		mm/in	457.2/18	
OUTDOOR FAN MOTOR	TYPE			INDUCTION	
	QUANTITY			1	
	INDEX OF PROTECTION (IP)			IP54	
COMPRESSOR	TYPE			ROTARY HERMETIC	
	OIL TYPE			RB68A or Freol Alpha68M	
	OIL AMOUNT		cm <sup>3</sup> / fl.oz.	1130 / 39.7	
INDOOR COIL	TUBE	MATERIAL		SEAMLESS INNER GROOVE COPPER TUBE	
		DIAMETER	mm/in	7.0 / 0.276	
		THICKNESS	mm/in	0.28 / 0.011	
	FIN	MATERIAL		ALUMINIUM (HYDROPHILIC SLIT FIN TYPE)	
		THICKNESS	mm/in	0.11 / 0.0043	
		FACE AREA	m <sup>2</sup> /ft <sup>2</sup>	0.30 / 3.23	
		ROW		2	
		FIN PER INCH		18	
OUTDOOR COIL	TUBE	MATERIAL		SEAMLESS INNER GROOVE COPPER TUBE	
		DIAMETER	mm/in	7.0 / 0.276	
		THICKNESS	mm/in	0.28 / 0.011	
	FIN	MATERIAL		ALUMINIUM (CORR. FIN)	
		THICKNESS	mm/in	0.11/0.004	
		FACE AREA	m <sup>2</sup> /ft <sup>2</sup>	0.62 / 6.63	
		ROW		2	
		FIN PER INCH		18	
AIR QUALITY	FILTER	TYPE		SARANET + IONIZER	
		QUANTITY	pc	3 X 3	
		SIZE	LENGTH	mm/in	330/13.0
			WIDTH	mm/in	317/12.4
			THICKNESS	mm/in	1.8/0.07
	NEGATIVE IONIZER			NO	
CASING	INDOOR UNIT	MATERIAL		HIPS	
		COLOUR		IVORY	
	OUTDOOR UNIT	MATERIAL		GALVANISED MILD STEEL	
		COLOUR		LIGHT GREY	

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## Components Data - Heatpump (R410A)

MODEL	INDOOR UNIT			A5WM 07GR		A5WM 09GR		
	OUTDOOR UNIT			A5LC 07CR		A5LC 10CR		
INDOOR FAN	TYPE			ANTI FUNGUS SKEW FAN		CROSS FLOW FAN		
	QUANTITY			1				
	MATERIAL			ACRYLO NITRILE STYRENE				
	DRIVE			DIRECT				
	DIAMETER		mm/in	97/3.8				
	LENGTH		mm/in	617.5/24.3				
INDOOR FAN MOTOR	TYPE			INDUCTION				
	QUANTITY			1				
	INDEX OF PROTECTION (IP)			IP24				
OUTDOOR FAN	TYPE			PROPELLER				
	QUANTITY			1				
	MATERIAL			GLASS REINFORCED ACRYL STYRENE RESIN				
	DRIVE			DIRECT				
	DIAMETER		mm/in	356/14				
OUTDOOR FAN MOTOR	TYPE			INDUCTION				
	QUANTITY			1				
	INDEX OF PROTECTION (IP)			IP54				
COMPRESSOR	TYPE			ROTARY HERMETIC				
	OIL TYPE			RB68A or Freol Alpha68M				
	OIL AMOUNT		cm <sup>3</sup> / fl.oz.	300 / 10.5		350 / 12.3		
INDOOR COIL	TUBE	MATERIAL		SEAMLESS INNER GROOVE COPPER TUBE				
		DIAMETER		mm/in	7.0 / 0.276			
		THICKNESS		mm/in	0.28 / 0.011			
	FIN	MATERIAL		ALUMINIUM (HYDROPHILIC SLIT FIN TYPE)				
		THICKNESS		mm/in	0.11 / 0.0043			
		FACE AREA		m <sup>2</sup> /ft <sup>2</sup>	0.201 / 2.161			
		ROW		2				
		FIN PER INCH		18				
OUTDOOR COIL	TUBE	MATERIAL		SEAMLESS INNER GROOVE COPPER TUBE				
		DIAMETER		mm/in	9.52 / 3/8		7.0 / 0.276	
		THICKNESS		mm/in	0.33 / 0.013		0.28 / 0.011	
	FIN	MATERIAL		ALUMINIUM (SLIT FIN)		RAISE LANCE		
		THICKNESS		mm/in	0.11/0.004		0.1/ 0.004	
		FACE AREA		m <sup>2</sup> /ft <sup>2</sup>	0.31/3.40		0.193/ 2.112	
		ROW		1				
		FIN PER INCH		18				
AIR QUALITY	FILTER	TYPE		NANO FILTER				
		QUANTITY		pc	2			
		SIZE	LENGTH	mm/in	304/11.9			
			WIDTH	mm/in	298/11.7			
			THICKNESS	mm/in	1.5/0.06			
	NEGATIVE IONIZER			YES				
CASING	INDOOR UNIT		MATERIAL		HIPS			
			COLOUR		IVORY			
	OUTDOOR UNIT		MATERIAL		GALVANISED MILD STEEL			
			COLOUR		LIGHT GREY			

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## Components Data - Heatpump (R410A)

MODEL	INDOOR UNIT			A5WM 10GR		A5WM 15GR		
	OUTDOOR UNIT			A5LC 10CR		A5LC 15CR		
INDOOR FAN	TYPE			ANTI FUNGUS SKEW FAN		CROSS FLOW FAN		
	QUANTITY			1				
	MATERIAL			ACRYLO NITRILE STYRENE				
	DRIVE			DIRECT				
	DIAMETER		mm/in	97/3.8				
	LENGTH		mm/in	717.5/28.2				
INDOOR FAN MOTOR	TYPE			INDUCTION				
	QUANTITY			1				
	INDEX OF PROTECTION (IP)			IP24				
OUTDOOR FAN	TYPE			PROPELLER				
	QUANTITY			1				
	MATERIAL			GLASS REINFORCED ACRYL STYRENE RESIN				
	DRIVE			DIRECT				
	DIAMETER		mm/in	404/16				
OUTDOOR FAN MOTOR	TYPE			INDUCTION				
	QUANTITY			1				
	INDEX OF PROTECTION (IP)			IP54				
COMPRESSOR	TYPE			ROTARY HERMETIC				
	OIL TYPE			RB68A or Freol Alpha68M				
	OIL AMOUNT		cm <sup>3</sup> / fl.oz.	350 / 12.3		430 / 15.1		
INDOOR COIL	TUBE	MATERIAL		SEAMLESS INNER GROOVE COPPER TUBE				
		DIAMETER		mm/in	7.0 / 0.276			
		THICKNESS		mm/in	0.28 / 0.011			
	FIN	MATERIAL		ALUMINIUM (HYDROPHILIC SLIT FIN TYPE)				
		THICKNESS		mm/in	0.11 / 0.0043			
		FACE AREA		m <sup>2</sup> /ft <sup>2</sup>	0.234 / 2.516			
		ROW		2				
		FIN PER INCH		18				
OUTDOOR COIL	TUBE	MATERIAL		SEAMLESS INNER GROOVE COPPER TUBE				
		DIAMETER		mm/in	7.0 / 0.276		9.52 / 3/8	
		THICKNESS		mm/in	0.28 / 0.011		0.33 / 0.013	
	FIN	MATERIAL		RAISE LANCE		ALUMINIUM (SLIT FIN)		
		THICKNESS		mm/in	0.1/ 0.004		0.11/0.004	
		FACE AREA		m <sup>2</sup> /ft <sup>2</sup>	0.36/3.94			
		ROW		1				
		FIN PER INCH		18				
AIR QUALITY	FILTER	TYPE		NANO FILTER				
		QUANTITY		pc	2			
		SIZE	LENGTH	mm/in	304/11.9			
			WIDTH	mm/in	348/13.7			
			THICKNESS	mm/in	1.5/0.06			
	NEGATIVE IONIZER			YES				
CASING	INDOOR UNIT		MATERIAL		HIPS			
			COLOUR		IVORY			
	OUTDOOR UNIT		MATERIAL		GALVANISED MILD STEEL			
			COLOUR		LIGHT GREY			

1) ALL SPECIFICATION ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE

## Components Data - Heatpump (R410A)

MODEL	INDOOR UNIT			A5WM 20GR		AWM 25GR		
	OUTDOOR UNIT			A5LC 20CR		ALC 25CR		
INDOOR FAN	TYPE			CROSS FLOW FAN				
	QUANTITY			1				
	MATERIAL			ACRYLO NITRILE STYRENE				
	DRIVE			DIRECT				
	DIAMETER		mm/in	108/4.25				
	LENGTH		mm/in	810/31.9				
INDOOR FAN MOTOR	TYPE			INDUCTION				
	QUANTITY			1				
	INDEX OF PROTECTION (IP)			IP20				
OUTDOOR FAN	TYPE			PROPELLER				
	QUANTITY			1				
	MATERIAL			GLASS REINFORCED ACRYL STYRENE RESIN				
	DRIVE			DIRECT				
	DIAMETER		mm/in	457.2/18				
OUTDOOR FAN MOTOR	TYPE			INDUCTION				
	QUANTITY			1				
	INDEX OF PROTECTION (IP)			IP54				
COMPRESSOR	TYPE			ROTARY HERMETIC				
	OIL TYPE			RB68A or Freol Alpha68M				
	OIL AMOUNT		cm <sup>3</sup> / fl.oz.	670 / 23.5		1130 / 39.7		
INDOOR COIL	TUBE	MATERIAL		SEAMLESS INNER GROOVE COPPER TUBE				
		DIAMETER		mm/in	7.0 / 0.276			
		THICKNESS		mm/in	0.28 / 0.011			
	FIN	MATERIAL		ALUMINIUM (HYDROPHILIC SLIT FIN TYPE)				
		THICKNESS		mm/in	0.11 / 0.0043			
		FACE AREA		m <sup>2</sup> /ft <sup>2</sup>	0.269 / 2.900			
		ROW		2				
		FIN PER INCH		18				
OUTDOOR COIL	TUBE	MATERIAL		SEAMLESS INNER GROOVE COPPER TUBE				
		DIAMETER		mm/in	7.0 / 0.276			
		THICKNESS		mm/in	0.28 / 0.011			
	FIN	MATERIAL		RAISE LANCE				
		THICKNESS		mm/in	0.1 / 0.004			
		FACE AREA		m <sup>2</sup> /ft <sup>2</sup>	0.51 / 5.47		0.62 / 6.64	
		ROW		2				
		FIN PER INCH		18				
AIR QUALITY	FILTER	TYPE		NANO FILTER				
		QUANTITY		pc	2			
		SIZE	LENGTH	mm/in	351/13.8			
			WIDTH	mm/in	386/15.2			
			THICKNESS	mm/in	1.5/0.06			
	NEGATIVE IONIZER			YES				
CASING	INDOOR UNIT	MATERIAL		HIPS				
		COLOUR		IVORY				
	OUTDOOR UNIT	MATERIAL		GALVANISED MILD STEEL				
		COLOUR		LIGHT GREY				

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## Components Data - Heatpump (R410A)

MODEL	INDOOR UNIT			A5WM 311R
	OUTDOOR UNIT			A5LC 28CR
INDOOR FAN	TYPE			ANTI FUNGUS CROSS FLOW FAN
	QUANTITY			1
	MATERIAL			ACRYLO NITRILE STYRENE
	DRIVE			DIRECT
	DIAMETER		mm/in	106 / 4.17
	LENGTH		mm/in	950 / 37.4
INDOOR FAN MOTOR	TYPE			INDUCTION
	QUANTITY			1
	INDEX OF PROTECTION (IP)			IP24
OUTDOOR FAN	TYPE			PROPELLER
	QUANTITY			1
	MATERIAL			GLASS REINFORCED ACRYL STYRENE RESIN
	DRIVE			DIRECT
	DIAMETER		mm/in	457.2/18
OUTDOOR FAN MOTOR	TYPE			INDUCTION
	QUANTITY			1
	INDEX OF PROTECTION (IP)			IP54
COMPRESSOR	TYPE			ROTARY HERMETIC
	OIL TYPE			RB68A or Freol Alpha68M
	OIL AMOUNT		cm <sup>3</sup> / fl.oz.	1130 / 39.7
INDOOR COIL	TUBE	MATERIAL		SEAMLESS INNER GROOVE COPPER TUBE
		DIAMETER	mm/in	7.0 / 0.276
		THICKNESS	mm/in	0.28 / 0.011
	FIN	MATERIAL		ALUMINIUM (HYDROPHILIC SLIT FIN TYPE)
		THICKNESS	mm/in	0.11 / 0.0043
		FACE AREA	m <sup>2</sup> /ft <sup>2</sup>	0.30 / 3.23
		ROW		2
		FIN PER INCH		18
OUTDOOR COIL	TUBE	MATERIAL		SEAMLESS INNER GROOVE COPPER TUBE
		DIAMETER	mm/in	7.0 / 0.276
		THICKNESS	mm/in	0.28 / 0.011
	FIN	MATERIAL		ALUMINIUM (CORR. FIN)
		THICKNESS	mm/in	0.11/0.004
		FACE AREA	m <sup>2</sup> /ft <sup>2</sup>	0.62 / 6.63
		ROW		2
		FIN PER INCH		18
AIR QUALITY	FILTER	TYPE		SARANET + IONIZER
		QUANTITY		pc
		SIZE	LENGTH	mm/in
			WIDTH	mm/in
			THICKNESS	mm/in
	NEGATIVE IONIZER			NO
CASING	INDOOR UNIT	MATERIAL		HIPS
		COLOUR		IVORY
	OUTDOOR UNIT	MATERIAL		GALVANISED MILD STEEL
		COLOUR		LIGHT GREY

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## 6. PERFORMANCE DATA

*Interpolation and Extrapolation* method can be used to get the total capacity, TC and sensible capacity, SC at those temperatures which are not stated out in the table.

### Example:

**Model:** AWM 10G / ALC 10C

**Indoor Condition:** 23°C DB, 15°C WB

**Outdoor Condition:** 37°C DB

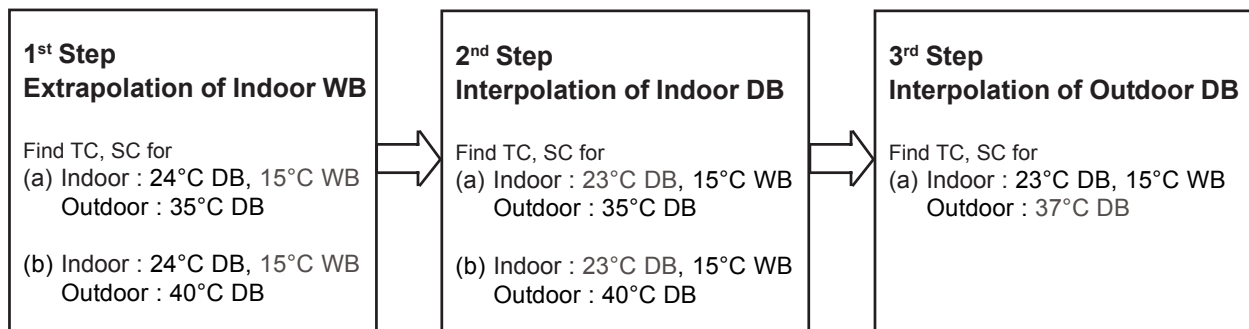
### Solution:

#### Overall

Based on the Performance table of AWM 10G / ALC 10C

1. Refer to the Indoor DB column,
  - **23°C** is located between 20°C and 24°C (Thus, Interpolation need to be applied)
2. Refer to the Indoor WB column,
  - **15°C** only available in the case of Indoor DB = 20°C. (Thus, Extrapolation between 16°C WB and 17°C WB during 24°C indoor DB is required)
3. Refer to the Outdoor DB column,
  - **37°C** is located between 35°C and 40°C. (Thus, Interpolation need to be applied)

Please follow the steps below in order to get the required capacity.



**Details:****1<sup>st</sup> Step:**

To obtain the Total capacity and Sensible capacity for

**(a) Indoor Condition: 24°C DB, 15°C WB**

**Outdoor Condition: 35°C DB**

Indoor DB ° C	Indoor WB ° C	Outdoor DB ° C			
			35		
			TC (kW)	SC (kW)	
24	15	-----	$x_1$	$y_1$	
	16		2.623	1.892	
	17		2.687	1.794	

Total capacity, TC

$\Rightarrow x_1 = 2.558\text{kW}$  (Same as Total capacity at 20°C Indoor DB / 15°C Indoor WB & 35°C Outdoor WB)\*

Sensible capacity, SC

Extrapolation Method:

$$\Rightarrow \frac{17^\circ\text{C} - 15^\circ\text{C}}{17^\circ\text{C} - 16^\circ\text{C}} = \frac{1.794\text{kW} - y_1}{1.794\text{kW} - 1.892\text{kW}}$$

$$\Rightarrow y_1 = 1.990\text{kW}$$

**(b) Indoor Condition: 24°C DB, 15°C WB**

**Outdoor Condition: 40°C DB**

Indoor DB ° C	Indoor WB ° C	Outdoor DB ° C			
			40		
			TC (kW)	SC (kW)	
24	15	-----	$x_2$	$y_2$	
	16		2.429	1.728	
	17		2.502	1.653	

Total capacity, TC

$\Rightarrow x_2 = 2.355\text{kW}$  (Same as Total capacity at 20°C Indoor DB / 15°C Indoor WB & 40°C Outdoor WB)\*

Sensible capacity, SC

Extrapolation Method:

$$\Rightarrow \frac{17^\circ\text{C} - 15^\circ\text{C}}{17^\circ\text{C} - 16^\circ\text{C}} = \frac{1.653\text{kW} - y_2}{1.653\text{kW} - 1.728\text{kW}}$$

$$\Rightarrow y_2 = 1.802\text{kW}$$

\* This is due to 2 different conditions with same WB temperature, will have the same level of enthalpy. For more details, please refer to psychrometrics chart

**2<sup>nd</sup> Step:**

To obtain the Total capacity and Sensible capacity for

**(a) Indoor Condition:** 23°C DB, 15°C WB

**Outdoor Condition:** 35°C DB

Indoor DB ° C	Indoor WB ° C	Outdoor DB ° C			
			35		
			TC (kW)	SC (kW)	
20	15		2.558	1.403	
23	15	-----	$x_3$	$y_3$	
24	15		2.558	1.990	

Total capacity, TC

$\Rightarrow x_3 = 2.558\text{kW}$  (Same as Total capacity at 20°C Indoor DB / 15°C Indoor WB & 35°C Outdoor WB)\*

Sensible capacity, SC

Interpolation Method:

$$\Rightarrow \frac{24^\circ\text{C} - 20^\circ\text{C}}{24^\circ\text{C} - 23^\circ\text{C}} = \frac{1.990\text{kW} - 1.403\text{kW}}{1.990\text{kW} - y_3}$$

$$\Rightarrow y_3 = 1.844\text{kW}$$

**(b) Indoor Condition:** 23°C DB, 15°C WB

**Outdoor Condition:** 40°C DB

Indoor DB ° C	Indoor WB ° C	Outdoor DB ° C			
			40		
			TC (kW)	SC (kW)	
20	15		2.355	1.215	
23	15	-----	$x_4$	$y_4$	
24	15		2.355	1.802	

Total capacity, TC

$\Rightarrow x_4 = 2.355\text{kW}$  (Same as Total capacity at 20°C Indoor DB / 15°C Indoor WB & 40°C Outdoor WB)\*

Sensible capacity, SC

Interpolation Method:

$$\Rightarrow \frac{24^\circ\text{C} - 20^\circ\text{C}}{24^\circ\text{C} - 23^\circ\text{C}} = \frac{1.802\text{kW} - 1.215\text{kW}}{1.802\text{kW} - y_4}$$

$$\Rightarrow y_4 = 1.655\text{kW}$$

\* This is due to 2 different conditions with same WB temperature will have the same level of enthalpy. For more details, please refer to psychrometrics chart

**3<sup>rd</sup> Step:**

To obtain the Total capacity and Sensible capacity for

**(a) Indoor Condition:** 23°C DB, 15°C WB

**Outdoor Condition:** 37°C DB

Indoor DB ° C	Indoor WB ° C	Outdoor DB ° C					
			35		37		40
			TC (kW)	SC (kW)	TC (kW)	SC (kW)	TC (kW) SC (kW)
<b>23</b>	<b>15</b>	- - - - -	2.558	1.844	x	y	2.355 1.655

Total capacity, TC

Interpolation Method:

$$\Rightarrow \frac{40^{\circ}\text{C} - 35^{\circ}\text{C}}{40^{\circ}\text{C} - 37^{\circ}\text{C}} = \frac{2.355\text{kW} - 2.558\text{kW}}{2.355\text{kW} - x}$$

$$\Rightarrow x = 2.477\text{kW}$$

Sensible capacity, SC

Interpolation Method:

$$\Rightarrow \frac{40^{\circ}\text{C} - 35^{\circ}\text{C}}{40^{\circ}\text{C} - 37^{\circ}\text{C}} = \frac{1.655\text{kW} - 1.844\text{kW}}{1.655\text{kW} - y}$$

$$\Rightarrow y = 1.768\text{kW}$$

## R22 Models (Cooling Only)

### MODEL : AWM 07G / ALC 07C

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	2.418	1.484	2.249	1.335	2.080	1.186	1.910	1.037	1.741	0.889	1.538	0.710
	16	2.453	1.349	2.286	1.221	2.119	1.094	1.952	0.966	1.785	0.839	1.585	0.686
24	16	2.453	1.799	2.286	1.671	2.119	1.544	1.952	1.416	1.785	1.288	1.585	1.135
	17	2.488	1.664	2.323	1.558	2.159	1.451	1.994	1.345	1.829	1.239	1.632	1.111
	18	2.523	1.529	2.360	1.444	2.198	1.359	2.036	1.274	1.873	1.189	1.679	1.087
	19	2.557	1.394	2.397	1.331	2.237	1.267	2.077	1.203	1.917	1.139	1.725	1.062
	20	2.593	1.259	2.437	1.210	2.281	1.162	2.126	1.113	1.970	1.064	1.783	1.006
28	18	2.523	1.979	2.360	1.894	2.198	1.809	2.036	1.724	1.873	1.638	1.679	1.536
	19	2.557	1.844	2.397	1.780	2.237	1.716	2.077	1.652	1.917	1.589	1.725	1.512
	20	2.593	1.709	2.437	1.660	2.281	1.611	2.126	1.563	1.970	1.514	1.783	1.456
	21	2.628	1.573	2.478	1.535	2.328	1.498	2.179	1.460	2.029	1.423	1.849	1.378
	22	2.663	1.437	2.519	1.411	2.375	1.384	2.231	1.358	2.087	1.332	1.915	1.300
	23	2.699	1.301	2.560	1.286	2.422	1.271	2.284	1.256	2.146	1.241	1.980	1.223
	24	2.734	1.165	2.602	1.161	2.469	1.157	2.337	1.154	2.205	1.150	2.046	1.145
30	20	2.593	1.934	2.437	1.885	2.281	1.836	2.126	1.788	1.970	1.739	1.783	1.680
	21	2.628	1.798	2.478	1.760	2.328	1.723	2.179	1.685	2.029	1.648	1.849	1.603
	22	2.663	1.662	2.519	1.636	2.375	1.609	2.231	1.583	2.087	1.557	1.915	1.525
	23	2.699	1.526	2.560	1.511	2.422	1.496	2.284	1.481	2.146	1.466	1.980	1.448
	24	2.734	1.390	2.602	1.386	2.469	1.382	2.337	1.379	2.205	1.375	2.046	1.370

### MODEL : AWM 09G / ALC 09C

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	3.034	1.916	2.829	1.742	2.623	1.568	2.418	1.393	2.213	1.219	1.966	1.010
	16	3.114	1.748	2.903	1.597	2.692	1.445	2.480	1.294	2.269	1.142	2.016	0.961
24	16	3.114	2.257	2.903	2.105	2.692	1.954	2.480	1.802	2.269	1.651	2.016	1.469
	17	3.194	2.088	2.977	1.960	2.760	1.831	2.543	1.703	2.326	1.574	2.065	1.420
	18	3.274	1.920	3.051	1.815	2.828	1.709	2.605	1.603	2.382	1.497	2.115	1.371
	19	3.354	1.752	3.125	1.669	2.896	1.586	2.668	1.504	2.439	1.421	2.164	1.321
	20	3.435	1.583	3.205	1.519	2.976	1.454	2.747	1.389	2.517	1.324	2.242	1.246
28	18	3.274	2.429	3.051	2.323	2.828	2.217	2.605	2.112	2.382	2.006	2.115	1.879
	19	3.354	2.261	3.125	2.178	2.896	2.095	2.668	2.012	2.439	1.929	2.164	1.830
	20	3.435	2.092	3.205	2.027	2.976	1.962	2.747	1.897	2.517	1.833	2.242	1.755
	21	3.516	1.923	3.289	1.873	3.063	1.823	2.837	1.773	2.611	1.723	2.339	1.663
	22	3.597	1.754	3.374	1.719	3.150	1.683	2.927	1.648	2.704	1.613	2.436	1.571
	23	3.678	1.585	3.458	1.564	3.238	1.544	3.018	1.524	2.798	1.503	2.533	1.479
	24	3.759	1.416	3.542	1.410	3.325	1.404	3.108	1.399	2.891	1.393	2.631	1.387
30	20	3.435	2.346	3.205	2.281	2.976	2.216	2.747	2.152	2.517	2.087	2.242	2.009
	21	3.516	2.177	3.289	2.127	3.063	2.077	2.837	2.027	2.611	1.977	2.339	1.917
	22	3.597	2.008	3.374	1.973	3.150	1.938	2.927	1.902	2.704	1.867	2.436	1.825
	23	3.678	1.839	3.458	1.819	3.238	1.798	3.018	1.778	2.798	1.757	2.533	1.733
	24	3.759	1.670	3.542	1.664	3.325	1.659	3.108	1.653	2.891	1.648	2.631	1.641

## R22 Models (Cooling only)

### MODEL : AWM 10G / ALC 10C

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	3.169	1.968	2.966	1.780	2.762	1.592	2.558	1.403	2.355	1.215	2.111	0.989
	16	3.206	1.800	3.012	1.635	2.817	1.470	2.623	1.306	2.429	1.141	2.195	0.943
24	16	3.206	2.386	3.012	2.222	2.817	2.057	2.623	1.892	2.429	1.728	2.195	1.530
	17	3.243	2.218	3.058	2.077	2.872	1.936	2.687	1.794	2.502	1.653	2.280	1.484
	18	3.280	2.049	3.104	1.932	2.928	1.814	2.752	1.697	2.576	1.579	2.364	1.438
	19	3.317	1.881	3.150	1.787	2.983	1.693	2.816	1.599	2.649	1.505	2.449	1.392
	20	3.353	1.711	3.193	1.635	3.033	1.559	2.873	1.483	2.713	1.407	2.521	1.315
28	18	3.280	2.636	3.104	2.518	2.928	2.401	2.752	2.283	2.576	2.166	2.364	2.025
	19	3.317	2.467	3.150	2.373	2.983	2.279	2.816	2.186	2.649	2.092	2.449	1.979
	20	3.353	2.298	3.193	2.222	3.033	2.146	2.873	2.070	2.713	1.993	2.521	1.902
	21	3.389	2.128	3.235	2.066	3.080	2.004	2.925	1.942	2.771	1.879	2.585	1.805
	22	3.426	1.959	3.276	1.910	3.127	1.862	2.978	1.814	2.828	1.765	2.649	1.707
	23	3.462	1.789	3.318	1.754	3.174	1.720	3.030	1.686	2.886	1.651	2.713	1.610
	24	3.499	1.619	3.360	1.599	3.221	1.578	3.082	1.558	2.943	1.537	2.776	1.513
30	20	3.353	2.591	3.193	2.515	3.033	2.439	2.873	2.363	2.713	2.287	2.521	2.195
	21	3.389	2.422	3.235	2.359	3.080	2.297	2.925	2.235	2.771	2.173	2.585	2.098
	22	3.426	2.252	3.276	2.204	3.127	2.155	2.978	2.107	2.828	2.059	2.649	2.001
	23	3.462	2.082	3.318	2.048	3.174	2.013	3.030	1.979	2.886	1.945	2.713	1.903
	24	3.499	1.912	3.360	1.892	3.221	1.872	3.082	1.851	2.943	1.831	2.776	1.806

### MODEL : AWM 15G / ALC 15C

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	4.051	2.628	3.785	2.373	3.519	2.118	3.253	1.863	2.987	1.608	2.668	1.302
	16	4.086	2.387	3.834	2.156	3.582	1.925	3.330	1.694	3.078	1.464	2.776	1.186
24	16	4.086	3.056	3.834	2.825	3.582	2.594	3.330	2.363	3.078	2.133	2.776	1.855
	17	4.120	2.815	3.882	2.608	3.645	2.402	3.407	2.195	3.169	1.988	2.884	1.740
	18	4.155	2.574	3.931	2.392	3.707	2.209	3.484	2.026	3.260	1.843	2.991	1.624
	19	4.189	2.333	3.980	2.175	3.770	2.016	3.560	1.858	3.351	1.699	3.099	1.509
	20	4.223	2.093	4.025	1.961	3.826	1.830	3.627	1.699	3.428	1.568	3.190	1.410
28	18	4.155	3.243	3.931	3.061	3.707	2.878	3.484	2.695	3.260	2.513	2.991	2.293
	19	4.189	3.002	3.980	2.844	3.770	2.685	3.560	2.527	3.351	2.368	3.099	2.178
	20	4.223	2.762	4.025	2.631	3.826	2.499	3.627	2.368	3.428	2.237	3.190	2.079
	21	4.257	2.521	4.067	2.420	3.877	2.318	3.687	2.216	3.498	2.115	3.270	1.993
	22	4.291	2.281	4.110	2.209	3.929	2.137	3.748	2.065	3.567	1.993	3.349	1.906
	23	4.325	2.041	4.153	1.998	3.980	1.956	3.808	1.913	3.636	1.871	3.429	1.819
	24	4.359	1.801	4.195	1.788	4.032	1.775	3.868	1.761	3.705	1.748	3.508	1.733
30	20	4.223	3.096	4.025	2.965	3.826	2.834	3.627	2.703	3.428	2.571	3.190	2.414
	21	4.257	2.856	4.067	2.754	3.877	2.653	3.687	2.551	3.498	2.449	3.270	2.327
	22	4.291	2.616	4.110	2.544	3.929	2.471	3.748	2.399	3.567	2.327	3.349	2.241
	23	4.325	2.375	4.153	2.333	3.980	2.290	3.808	2.248	3.636	2.205	3.429	2.154
	24	4.359	2.135	4.195	2.122	4.032	2.109	3.868	2.096	3.705	2.083	3.508	2.067

## R22 Models (Cooling only)

### MODEL : AWM 20G / ALC 18C

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	5.954	3.645	5.566	3.311	5.179	2.977	4.791	2.642	4.404	2.308	3.939	1.907
	16	6.132	3.309	5.730	3.009	5.329	2.709	4.927	2.409	4.525	2.109	4.043	1.749
24	16	6.132	4.352	5.730	4.052	5.329	3.752	4.927	3.451	4.525	3.151	4.043	2.791
	17	6.310	4.016	5.894	3.750	5.478	3.484	5.062	3.218	4.646	2.952	4.147	2.633
	18	6.488	3.680	6.058	3.448	5.628	3.216	5.198	2.985	4.767	2.753	4.251	2.475
	19	6.667	3.344	6.222	3.147	5.778	2.949	5.333	2.751	4.888	2.554	4.355	2.317
	20	6.846	3.008	6.397	2.846	5.947	2.684	5.498	2.521	5.049	2.359	4.510	2.164
28	18	6.488	4.723	6.058	4.491	5.628	4.259	5.198	4.027	4.767	3.795	4.251	3.517
	19	6.667	4.387	6.222	4.189	5.778	3.991	5.333	3.794	4.888	3.596	4.355	3.359
	20	6.846	4.051	6.397	3.889	5.947	3.726	5.498	3.564	5.049	3.401	4.510	3.206
	21	7.026	3.715	6.578	3.589	6.131	3.462	5.683	3.336	5.235	3.209	4.698	3.058
	22	7.206	3.380	6.760	3.289	6.314	3.199	5.868	3.108	5.422	3.017	4.886	2.909
	23	7.386	3.044	6.942	2.989	6.497	2.935	6.053	2.880	5.608	2.826	5.075	2.760
	24	7.567	2.708	7.124	2.689	6.681	2.671	6.238	2.652	5.795	2.634	5.263	2.611
30	20	6.846	4.572	6.397	4.410	5.947	4.247	5.498	4.085	5.049	3.923	4.510	3.728
	21	7.026	4.236	6.578	4.110	6.131	3.984	5.683	3.857	5.235	3.731	4.698	3.579
	22	7.206	3.901	6.760	3.810	6.314	3.720	5.868	3.629	5.422	3.539	4.886	3.430
	23	7.386	3.565	6.942	3.511	6.497	3.456	6.053	3.401	5.608	3.347	5.075	3.281
	24	7.567	3.229	7.124	3.211	6.681	3.192	6.238	3.174	5.795	3.155	5.263	3.133

### MODEL : AWM 20G / ALC 20C

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	5.778	3.640	5.473	3.396	5.169	3.153	4.864	2.909	4.559	2.666	4.194	2.373
	16	6.026	3.334	5.701	3.125	5.376	2.917	5.051	2.709	4.726	2.501	4.336	2.251
24	16	6.026	4.248	5.701	4.040	5.376	3.832	5.051	3.624	4.726	3.416	4.336	3.166
	17	6.274	3.942	5.929	3.770	5.583	3.597	5.238	3.424	4.892	3.252	4.478	3.044
	18	6.523	3.636	6.157	3.499	5.791	3.362	5.425	3.224	5.059	3.087	4.620	2.922
	19	6.771	3.330	6.384	3.228	5.998	3.126	5.612	3.025	5.225	2.923	4.762	2.800
	20	7.019	3.023	6.614	2.947	6.210	2.870	5.805	2.794	5.400	2.718	4.915	2.626
28	18	6.523	4.551	6.157	4.414	5.791	4.276	5.425	4.139	5.059	4.002	4.620	3.837
	19	6.771	4.245	6.384	4.143	5.998	4.041	5.612	3.939	5.225	3.837	4.762	3.715
	20	7.019	3.938	6.614	3.861	6.210	3.785	5.805	3.709	5.400	3.633	4.915	3.541
	21	7.268	3.630	6.846	3.572	6.424	3.515	6.003	3.458	5.581	3.401	5.075	3.332
	22	7.516	3.321	7.077	3.283	6.639	3.245	6.200	3.207	5.761	3.169	5.235	3.123
	23	7.765	3.013	7.309	2.994	6.853	2.975	6.398	2.956	5.942	2.937	5.395	2.914
	24	8.013	2.705	7.541	2.705	7.068	2.705	6.595	2.705	6.123	2.705	5.556	2.705
30	20	7.019	4.395	6.614	4.319	6.210	4.242	5.805	4.166	5.400	4.090	4.915	3.998
	21	7.268	4.087	6.846	4.030	6.424	3.973	6.003	3.915	5.581	3.858	5.075	3.789
	22	7.516	3.779	7.077	3.741	6.639	3.703	6.200	3.664	5.761	3.626	5.235	3.581
	23	7.765	3.471	7.309	3.452	6.853	3.433	6.398	3.414	5.942	3.394	5.395	3.372
	24	8.013	3.163	7.541	3.163	7.068	3.163	6.595	3.163	6.123	3.163	5.556	3.163

## R22 Models (Cooling only)

### MODEL : AWM 25G / ALC 25C

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	7.657	5.145	7.196	4.692	6.735	4.238	6.275	3.785	5.814	3.331	5.261	2.787
	16	7.728	4.693	7.300	4.280	6.873	3.867	6.446	3.454	6.019	3.042	5.507	2.546
24	16	7.728	5.852	7.300	5.439	6.873	5.026	6.446	4.614	6.019	4.201	5.507	3.705
	17	7.798	5.400	7.405	5.028	7.011	4.656	6.618	4.283	6.224	3.911	5.752	3.464
	18	7.869	4.948	7.509	4.617	7.149	4.285	6.789	3.953	6.430	3.621	5.998	3.223
	19	7.940	4.496	7.613	4.205	7.287	3.914	6.961	3.623	6.635	3.332	6.243	2.982
	20	8.008	4.045	7.701	3.803	7.394	3.560	7.086	3.318	6.779	3.075	6.410	2.784
28	18	7.869	6.107	7.509	5.776	7.149	5.444	6.789	5.112	6.430	4.781	5.998	4.383
	19	7.940	5.655	7.613	5.364	7.287	5.073	6.961	4.782	6.635	4.491	6.243	4.142
	20	8.008	5.205	7.701	4.962	7.394	4.720	7.086	4.477	6.779	4.235	6.410	3.944
	21	8.076	4.754	7.778	4.566	7.479	4.377	7.181	4.189	6.883	4.000	6.525	3.774
	22	8.144	4.304	7.855	4.169	7.565	4.035	7.276	3.900	6.986	3.766	6.639	3.604
	23	8.212	3.854	7.931	3.773	7.651	3.693	7.370	3.612	7.090	3.532	6.754	3.435
	24	8.279	3.403	8.008	3.377	7.737	3.350	7.465	3.324	7.194	3.297	6.868	3.265
30	20	8.008	5.784	7.701	5.542	7.394	5.299	7.086	5.057	6.779	4.814	6.410	4.523
	21	8.076	5.334	7.778	5.145	7.479	4.957	7.181	4.768	6.883	4.580	6.525	4.354
	22	8.144	4.883	7.855	4.749	7.565	4.614	7.276	4.480	6.986	4.345	6.639	4.184
	23	8.212	4.433	7.931	4.353	7.651	4.272	7.370	4.192	7.090	4.111	6.754	4.015
	24	8.279	3.983	8.008	3.956	7.737	3.930	7.465	3.903	7.194	3.877	6.868	3.845

### MODEL : AWM 311 / ALC 28C

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	7.657	5.145	7.196	4.692	6.735	4.238	6.275	3.785	5.814	3.331	5.261	2.787
	16	7.728	4.693	7.300	4.280	6.873	3.867	6.446	3.454	6.019	3.042	5.507	2.546
24	16	7.728	5.852	7.300	5.439	6.873	5.026	6.446	4.614	6.019	4.201	5.507	3.705
	17	7.798	5.400	7.405	5.028	7.011	4.656	6.618	4.283	6.224	3.911	5.752	3.464
	18	7.869	4.948	7.509	4.617	7.149	4.285	6.789	3.953	6.430	3.621	5.998	3.223
	19	7.940	4.496	7.613	4.205	7.287	3.914	6.961	3.623	6.635	3.332	6.243	2.982
	20	8.008	4.045	7.701	3.803	7.394	3.560	7.086	3.318	6.779	3.075	6.410	2.784
28	18	7.869	6.107	7.509	5.776	7.149	5.444	6.789	5.112	6.430	4.781	5.998	4.383
	19	7.940	5.655	7.613	5.364	7.287	5.073	6.961	4.782	6.635	4.491	6.243	4.142
	20	8.008	5.205	7.701	4.962	7.394	4.720	7.086	4.477	6.779	4.235	6.410	3.944
	21	8.076	4.754	7.778	4.566	7.479	4.377	7.181	4.189	6.883	4.000	6.525	3.774
	22	8.144	4.304	7.855	4.169	7.565	4.035	7.276	3.900	6.986	3.766	6.639	3.604
	23	8.212	3.854	7.931	3.773	7.651	3.693	7.370	3.612	7.090	3.532	6.754	3.435
	24	8.279	3.403	8.008	3.377	7.737	3.350	7.465	3.324	7.194	3.297	6.868	3.265
30	20	8.008	5.784	7.701	5.542	7.394	5.299	7.086	5.057	6.779	4.814	6.410	4.523
	21	8.076	5.334	7.778	5.145	7.479	4.957	7.181	4.768	6.883	4.580	6.525	4.354
	22	8.144	4.883	7.855	4.749	7.565	4.614	7.276	4.480	6.986	4.345	6.639	4.184
	23	8.212	4.433	7.931	4.353	7.651	4.272	7.370	4.192	7.090	4.111	6.754	4.015
	24	8.279	3.983	8.008	3.956	7.737	3.930	7.465	3.903	7.194	3.877	6.868	3.845



## R22 Models (Heatpump)

MODEL : AWM 09GR / ALC 09CR

### COOLING MODE

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	3.163	2.063	2.934	1.852	2.705	1.641	2.476	1.430	2.247	1.219	1.972	0.966
	16	3.205	1.896	2.978	1.704	2.752	1.513	2.525	1.322	2.299	1.130	2.027	0.901
24	16	3.205	2.420	2.978	2.228	2.752	2.037	2.525	1.846	2.299	1.654	2.027	1.425
	17	3.246	2.252	3.022	2.081	2.798	1.909	2.574	1.737	2.351	1.565	2.082	1.359
	18	3.287	2.085	3.066	1.933	2.845	1.781	2.624	1.629	2.402	1.476	2.137	1.294
	19	3.329	1.918	3.110	1.785	2.891	1.653	2.673	1.520	2.454	1.388	2.192	1.228
	20	3.370	1.750	3.158	1.637	2.947	1.524	2.735	1.410	2.523	1.297	2.268	1.161
	18	3.287	2.609	3.066	2.457	2.845	2.305	2.624	2.153	2.402	2.001	2.137	1.818
28	19	3.329	2.442	3.110	2.309	2.891	2.177	2.673	2.044	2.454	1.912	2.192	1.752
	20	3.370	2.274	3.158	2.161	2.947	2.048	2.735	1.934	2.523	1.821	2.268	1.685
	21	3.413	2.107	3.210	2.012	3.007	1.918	2.805	1.823	2.602	1.729	2.359	1.615
	22	3.455	1.939	3.261	1.864	3.068	1.788	2.875	1.713	2.681	1.637	2.449	1.546
	23	3.497	1.772	3.313	1.715	3.129	1.658	2.945	1.602	2.761	1.545	2.540	1.477
	24	3.539	1.605	3.364	1.567	3.190	1.529	3.015	1.491	2.840	1.453	2.631	1.408
30	20	3.370	2.536	3.158	2.423	2.947	2.310	2.735	2.196	2.523	2.083	2.268	1.947
	21	3.413	2.369	3.210	2.274	3.007	2.180	2.805	2.085	2.602	1.991	2.359	1.877
	22	3.455	2.201	3.261	2.126	3.068	2.050	2.875	1.975	2.681	1.899	2.449	1.808
	23	3.497	2.034	3.313	1.977	3.129	1.921	2.945	1.864	2.761	1.807	2.540	1.739
	24	3.539	1.867	3.364	1.829	3.190	1.791	3.015	1.753	2.840	1.715	2.631	1.670

### HEATING MODE

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	1.181	1.181	1.471	1.471	1.568	1.568	2.630	2.630	3.210	3.210	3.500	3.500	3.790	3.790
17	1.154	1.154	1.442	1.442	1.538	1.538	2.591	2.591	3.123	3.123	3.402	3.402	3.682	3.682
19	1.126	1.126	1.413	1.413	1.508	1.508	2.552	2.552	3.035	3.035	3.305	3.305	3.574	3.574
21	1.098	1.098	1.383	1.383	1.479	1.479	2.512	2.512	2.948	2.948	3.207	3.207	3.466	3.466
23	1.094	1.094	1.360	1.360	1.449	1.449	2.416	2.416	2.860	2.860	3.110	3.110	3.359	3.359
25	1.090	1.090	1.337	1.337	1.419	1.419	2.320	2.320	2.773	2.773	3.012	3.012	3.251	3.251
27	1.086	1.086	1.314	1.314	1.389	1.389	2.224	2.224	2.686	2.686	2.914	2.914	3.143	3.143
FROST REGION														

## R22 Models (Heatpump)

MODEL : AWM 10GR / ALC 10CR

### COOLING MODE

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	3.169	1.968	2.966	1.780	2.762	1.592	2.558	1.403	2.355	1.215	2.111	0.989
	16	3.206	1.800	3.012	1.635	2.817	1.470	2.623	1.306	2.429	1.141	2.195	0.943
24	16	3.206	2.386	3.012	2.222	2.817	2.057	2.623	1.892	2.429	1.728	2.195	1.530
	17	3.243	2.218	3.058	2.077	2.872	1.936	2.687	1.794	2.502	1.653	2.280	1.484
	18	3.280	2.049	3.104	1.932	2.928	1.814	2.752	1.697	2.576	1.579	2.364	1.438
	19	3.317	1.881	3.150	1.787	2.983	1.693	2.816	1.599	2.649	1.505	2.449	1.392
	20	3.353	1.711	3.193	1.635	3.033	1.559	2.873	1.483	2.713	1.407	2.521	1.315
28	18	3.280	2.636	3.104	2.518	2.928	2.401	2.752	2.283	2.576	2.166	2.364	2.025
	19	3.317	2.467	3.150	2.373	2.983	2.279	2.816	2.186	2.649	2.092	2.449	1.979
	20	3.353	2.298	3.193	2.222	3.033	2.146	2.873	2.070	2.713	1.993	2.521	1.902
	21	3.389	2.128	3.235	2.066	3.080	2.004	2.925	1.942	2.771	1.879	2.585	1.805
	22	3.426	1.959	3.276	1.910	3.127	1.862	2.978	1.814	2.828	1.765	2.649	1.707
	23	3.462	1.789	3.318	1.754	3.174	1.720	3.030	1.686	2.886	1.651	2.713	1.610
30	24	3.499	1.619	3.360	1.599	3.221	1.578	3.082	1.558	2.943	1.537	2.776	1.513
	20	3.353	2.591	3.193	2.515	3.033	2.439	2.873	2.363	2.713	2.287	2.521	2.195
	21	3.389	2.422	3.235	2.359	3.080	2.297	2.925	2.235	2.771	2.173	2.585	2.098
	22	3.426	2.252	3.276	2.204	3.127	2.155	2.978	2.107	2.828	2.059	2.649	2.001
	23	3.462	2.082	3.318	2.048	3.174	2.013	3.030	1.979	2.886	1.945	2.713	1.903
30	24	3.499	1.912	3.360	1.892	3.221	1.872	3.082	1.851	2.943	1.831	2.776	1.806

### HEATING MODE

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	1.274	1.274	1.577	1.577	1.678	1.678	2.789	2.789	3.395	3.395	3.698	3.698	4.001	4.001
17	1.246	1.246	1.546	1.546	1.646	1.646	2.743	2.743	3.302	3.302	3.595	3.595	3.887	3.887
19	1.219	1.219	1.516	1.516	1.615	1.615	2.697	2.697	3.210	3.210	3.492	3.492	3.773	3.773
21	1.191	1.191	1.485	1.485	1.583	1.583	2.652	2.652	3.118	3.118	3.388	3.388	3.659	3.659
23	1.184	1.184	1.460	1.460	1.551	1.551	2.554	2.554	3.025	3.025	3.285	3.285	3.546	3.546
25	1.178	1.178	1.434	1.434	1.520	1.520	2.457	2.457	2.933	2.933	3.182	3.182	3.432	3.432
27	1.172	1.172	1.409	1.409	1.488	1.488	2.359	2.359	2.841	2.841	3.079	3.079	3.318	3.318
FROST REGION														

## R22 Models (Heatpump)

MODEL : AWM 15GR / ALC 15CR

### COOLING MODE

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	3.852	2.383	3.608	2.179	3.365	1.974	3.121	1.769	2.877	1.564	2.584	1.318
	16	4.062	2.259	3.784	2.056	3.506	1.852	3.228	1.648	2.950	1.445	2.616	1.201
24	16	4.062	2.917	3.784	2.713	3.506	2.510	3.228	2.306	2.950	2.103	2.616	1.858
	17	4.271	2.793	3.959	2.590	3.647	2.388	3.335	2.186	3.022	1.983	2.647	1.741
	18	4.481	2.668	4.134	2.467	3.788	2.266	3.441	2.065	3.095	1.864	2.679	1.623
	19	4.691	2.544	4.310	2.344	3.929	2.145	3.548	1.945	3.168	1.745	2.711	1.505
	20	4.902	2.421	4.503	2.227	4.103	2.034	3.704	1.841	3.305	1.648	2.826	1.416
	21	5.115	2.295	4.707	2.101	4.300	1.919	3.893	1.736	3.485	1.553	2.996	1.234
28	18	4.481	3.326	4.134	3.125	3.788	2.924	3.441	2.723	3.095	2.522	2.679	2.281
	19	4.691	3.202	4.310	3.002	3.929	2.803	3.548	2.603	3.168	2.403	2.711	2.163
	20	4.902	3.078	4.503	2.885	4.103	2.692	3.704	2.499	3.305	2.306	2.826	2.074
	21	5.115	2.955	4.707	2.773	4.300	2.590	3.893	2.407	3.485	2.224	2.996	2.005
	22	5.328	2.832	4.912	2.660	4.497	2.487	4.081	2.315	3.666	2.142	3.167	1.935
	23	5.540	2.709	5.117	2.547	4.693	2.385	4.270	2.222	3.846	2.060	3.338	1.866
30	24	5.753	2.586	5.321	2.434	4.890	2.282	4.458	2.130	4.026	1.978	3.508	1.796
	20	4.902	3.407	4.503	3.214	4.103	3.021	3.704	2.828	3.305	2.635	2.826	2.403
	21	5.115	3.284	4.707	3.101	4.300	2.919	3.893	2.736	3.485	2.553	2.996	2.334
	22	5.328	3.161	4.912	2.989	4.497	2.816	4.081	2.644	3.666	2.471	3.167	2.264
	23	5.540	3.038	5.117	2.876	4.693	2.714	4.270	2.551	3.846	2.389	3.338	2.195
	24	5.753	2.915	5.321	2.763	4.890	2.611	4.458	2.459	4.026	2.307	3.508	2.125

### HEATING MODE

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	1.533	1.533	1.925	1.925	2.055	2.055	3.489	3.489	4.271	4.271	4.662	4.662	5.053	5.053
17	1.494	1.494	1.885	1.885	2.016	2.016	3.442	3.442	4.154	4.154	4.531	4.531	4.909	4.909
19	1.454	1.454	1.846	1.846	1.976	1.976	3.396	3.396	4.038	4.038	4.401	4.401	4.765	4.765
21	1.414	1.414	1.806	1.806	1.937	1.937	3.350	3.350	3.921	3.921	4.271	4.271	4.621	4.621
23	1.413	1.413	1.776	1.776	1.898	1.898	3.215	3.215	3.805	3.805	4.141	4.141	4.478	4.478
25	1.411	1.411	1.746	1.746	1.858	1.858	3.081	3.081	3.688	3.688	4.011	4.011	4.334	4.334
27	1.409	1.409	1.717	1.717	1.819	1.819	2.946	2.946	3.572	3.572	3.881	3.881	4.190	4.190
FROST REGION														

## R22 Models (Heatpump)

MODEL : AWM 20GR / ALC 18CR

### COOLING MODE

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	5.954	3.645	5.566	3.311	5.179	2.977	4.791	2.642	4.404	2.308	3.939	1.907
	16	6.132	3.309	5.730	3.009	5.329	2.709	4.927	2.409	4.525	2.109	4.043	1.749
24	16	6.132	4.352	5.730	4.052	5.329	3.752	4.927	3.451	4.525	3.151	4.043	2.791
	17	6.310	4.016	5.894	3.750	5.478	3.484	5.062	3.218	4.646	2.952	4.147	2.633
	18	6.488	3.680	6.058	3.448	5.628	3.216	5.198	2.985	4.767	2.753	4.251	2.475
	19	6.667	3.344	6.222	3.147	5.778	2.949	5.333	2.751	4.888	2.554	4.355	2.317
	20	6.846	3.008	6.397	2.846	5.947	2.684	5.498	2.521	5.049	2.359	4.510	2.164
	21	7.026	2.672	6.567	2.540	6.117	2.416	5.668	2.190	5.219	2.032	4.171	1.907
28	18	6.488	4.723	6.058	4.491	5.628	4.259	5.198	4.027	4.767	3.795	4.251	3.517
	19	6.667	4.387	6.222	4.189	5.778	3.991	5.333	3.794	4.888	3.596	4.355	3.359
	20	6.846	4.051	6.397	3.889	5.947	3.726	5.498	3.564	5.049	3.401	4.510	3.206
	21	7.026	3.715	6.578	3.589	6.131	3.462	5.683	3.336	5.235	3.209	4.698	3.058
	22	7.206	3.380	6.760	3.289	6.314	3.199	5.868	3.108	5.422	3.017	4.886	2.909
	23	7.386	3.044	6.942	2.989	6.497	2.935	6.053	2.880	5.608	2.826	5.075	2.760
30	24	7.567	2.708	7.124	2.689	6.681	2.671	6.238	2.652	5.795	2.634	5.263	2.611
	20	6.846	4.572	6.397	4.410	5.947	4.247	5.498	4.085	5.049	3.923	4.510	3.728
	21	7.026	4.236	6.578	4.110	6.131	3.984	5.683	3.857	5.235	3.731	4.698	3.579
	22	7.206	3.901	6.760	3.810	6.314	3.720	5.868	3.629	5.422	3.539	4.886	3.430
	23	7.386	3.565	6.942	3.511	6.497	3.456	6.053	3.401	5.608	3.347	5.075	3.281
	24	7.567	3.229	7.124	3.211	6.681	3.192	6.238	3.174	5.795	3.155	5.263	3.133

### HEATING MODE

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	2.593	2.593	3.146	3.146	3.330	3.330	5.359	5.359	6.465	6.465	7.018	7.018	7.572	7.572
17	2.552	2.552	3.090	3.090	3.269	3.269	5.285	5.285	6.290	6.290	6.823	6.823	7.356	7.356
19	2.512	2.512	3.034	3.034	3.208	3.208	5.210	5.210	6.115	6.115	6.628	6.628	7.141	7.141
21	2.471	2.471	2.978	2.978	3.147	3.147	5.136	5.136	5.940	5.940	6.433	6.433	6.926	6.926
23	2.443	2.443	2.925	2.925	3.085	3.085	4.937	4.937	5.765	5.765	6.238	6.238	6.710	6.710
25	2.415	2.415	2.872	2.872	3.024	3.024	4.738	4.738	5.590	5.590	6.042	6.042	6.495	6.495
27	2.387	2.387	2.819	2.819	2.963	2.963	4.540	4.540	5.415	5.415	5.847	5.847	6.280	6.280
	FROST REGION													

## R22 Models (Heatpump)

MODEL : AWM 20GR / ALC 20CR

### COOLING MODE

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	5.778	3.640	5.473	3.396	5.169	3.153	4.864	2.909	4.559	2.666	4.194	2.373
	16	6.026	3.334	5.701	3.125	5.376	2.917	5.051	2.709	4.726	2.501	4.336	2.251
24	16	6.026	4.248	5.701	4.040	5.376	3.832	5.051	3.624	4.726	3.416	4.336	3.166
	17	6.274	3.942	5.929	3.770	5.583	3.597	5.238	3.424	4.892	3.252	4.478	3.044
	18	6.523	3.636	6.157	3.499	5.791	3.362	5.425	3.224	5.059	3.087	4.620	2.922
	19	6.771	3.330	6.384	3.228	5.998	3.126	5.612	3.025	5.225	2.923	4.762	2.800
	20	7.019	3.023	6.614	2.947	6.210	2.870	5.805	2.794	5.400	2.718	4.915	2.626
	21	7.268	2.716	6.846	2.670	6.424	2.620	6.003	2.576	5.581	2.481	5.156	2.332
28	18	6.523	4.551	6.157	4.414	5.791	4.276	5.425	4.139	5.059	4.002	4.620	3.837
	19	6.771	4.245	6.384	4.143	5.998	4.041	5.612	3.939	5.225	3.837	4.762	3.715
	20	7.019	3.938	6.614	3.861	6.210	3.785	5.805	3.709	5.400	3.633	4.915	3.541
	21	7.268	3.630	6.846	3.572	6.424	3.515	6.003	3.458	5.581	3.401	5.075	3.332
	22	7.516	3.321	7.077	3.283	6.639	3.245	6.200	3.207	5.761	3.169	5.235	3.123
	23	7.765	3.013	7.309	2.994	6.853	2.975	6.398	2.956	5.942	2.937	5.395	2.914
30	24	8.013	2.705	7.541	2.705	7.068	2.705	6.595	2.705	6.123	2.705	5.556	2.705
	20	7.019	4.395	6.614	4.319	6.210	4.242	5.805	4.166	5.400	4.090	4.915	3.998
	21	7.268	4.087	6.846	4.030	6.424	3.973	6.003	3.915	5.581	3.858	5.075	3.789
	22	7.516	3.779	7.077	3.741	6.639	3.703	6.200	3.664	5.761	3.626	5.235	3.581
	23	7.765	3.471	7.309	3.452	6.853	3.433	6.398	3.414	5.942	3.394	5.395	3.372
	24	8.013	3.163	7.541	3.163	7.068	3.163	6.595	3.163	6.123	3.163	5.556	3.163

### HEATING MODE

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	2.506	2.506	3.124	3.124	3.330	3.330	5.597	5.597	6.834	6.834	7.452	7.452	8.071	8.071
17	2.446	2.446	3.062	3.062	3.267	3.267	5.546	5.546	6.648	6.648	7.245	7.245	7.841	7.841
19	2.386	2.386	2.999	2.999	3.204	3.204	5.494	5.494	6.462	6.462	7.037	7.037	7.612	7.612
21	2.326	2.326	2.937	2.937	3.140	3.140	5.443	5.443	6.276	6.276	6.829	6.829	7.382	7.382
23	2.319	2.319	2.887	2.887	3.077	3.077	5.204	5.204	6.089	6.089	6.621	6.621	7.153	7.153
25	2.311	2.311	2.838	2.838	3.014	3.014	4.965	4.965	5.903	5.903	6.413	6.413	6.923	6.923
27	2.304	2.304	2.789	2.789	2.951	2.951	4.726	4.726	5.717	5.717	6.205	6.205	6.694	6.694
FROST REGION														

## R22 Models (Heatpump)

MODEL : AWM 25GR / ALC 25CR

### COOLING MODE

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	7.657	5.145	7.196	4.692	6.735	4.238	6.275	3.785	5.814	3.331	5.261	2.787
	16	7.728	4.693	7.300	4.280	6.873	3.867	6.446	3.454	6.019	3.042	5.507	2.546
24	16	7.728	5.852	7.300	5.439	6.873	5.026	6.446	4.614	6.019	4.201	5.507	3.705
	17	7.798	5.400	7.405	5.028	7.011	4.656	6.618	4.283	6.224	3.911	5.752	3.464
	18	7.869	4.948	7.509	4.617	7.149	4.285	6.789	3.953	6.430	3.621	5.998	3.223
	19	7.940	4.496	7.613	4.205	7.287	3.914	6.961	3.623	6.635	3.332	6.243	2.982
	20	8.008	4.045	7.701	3.803	7.394	3.560	7.086	3.318	6.779	3.075	6.410	2.784
	18	7.869	6.107	7.509	5.776	7.149	5.444	6.789	5.112	6.430	4.781	5.998	4.383
28	19	7.940	5.655	7.613	5.364	7.287	5.073	6.961	4.782	6.635	4.491	6.243	4.142
	20	8.008	5.205	7.701	4.962	7.394	4.720	7.086	4.477	6.779	4.235	6.410	3.944
	21	8.076	4.754	7.778	4.566	7.479	4.377	7.181	4.189	6.883	4.000	6.525	3.774
	22	8.144	4.304	7.855	4.169	7.565	4.035	7.276	3.900	6.986	3.766	6.639	3.604
	23	8.212	3.854	7.931	3.773	7.651	3.693	7.370	3.612	7.090	3.532	6.754	3.435
	24	8.279	3.403	8.008	3.377	7.737	3.350	7.465	3.324	7.194	3.297	6.868	3.265
30	20	8.008	5.784	7.701	5.542	7.394	5.299	7.086	5.057	6.779	4.814	6.410	4.523
	21	8.076	5.334	7.778	5.145	7.479	4.957	7.181	4.768	6.883	4.580	6.525	4.354
	22	8.144	4.883	7.855	4.749	7.565	4.614	7.276	4.480	6.986	4.345	6.639	4.184
	23	8.212	4.433	7.931	4.353	7.651	4.272	7.370	4.192	7.090	4.111	6.754	4.015
	24	8.279	3.983	8.008	3.956	7.737	3.930	7.465	3.903	7.194	3.877	6.868	3.845

### HEATING MODE

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	3.204	3.204	3.940	3.940	4.185	4.185	6.883	6.883	8.355	8.355	9.091	9.091	9.827	9.827
17	3.141	3.141	3.865	3.865	4.107	4.107	6.822	6.822	8.128	8.128	8.838	8.838	9.547	9.547
19	3.078	3.078	3.791	3.791	4.028	4.028	6.760	6.760	7.901	7.901	8.585	8.585	9.268	9.268
21	3.015	3.015	3.716	3.716	3.950	3.950	6.699	6.699	7.674	7.674	8.331	8.331	8.989	8.989
23	2.992	2.992	3.652	3.652	3.872	3.872	6.406	6.406	7.447	7.447	8.078	8.078	8.709	8.709
25	2.970	2.970	3.588	3.588	3.794	3.794	6.112	6.112	7.220	7.220	7.825	7.825	8.430	8.430
27	2.947	2.947	3.523	3.523	3.715	3.715	5.819	5.819	6.993	6.993	7.572	7.572	8.150	8.150
FROST REGION														

## R22 Models (Heatpump)

MODEL : AWM 311R / ALC 28CR

### COOLING MODE

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	8.187	5.330	7.772	4.967	7.356	4.604	6.941	4.241	6.525	3.877	6.026	3.441
	16	8.441	4.894	8.027	4.579	7.614	4.265	7.200	3.951	6.786	3.637	6.289	3.260
24	16	8.441	6.144	8.027	5.830	7.614	5.516	7.200	5.202	6.786	4.888	6.289	4.511
	17	8.695	5.707	8.283	5.442	7.871	5.177	7.459	4.912	7.047	4.647	6.552	4.329
	18	8.949	5.271	8.539	5.055	8.128	4.839	7.718	4.623	7.307	4.407	6.815	4.147
	19	9.203	4.834	8.795	4.667	8.386	4.500	7.977	4.333	7.568	4.166	7.078	3.966
	20	9.456	4.395	9.037	4.266	8.617	4.136	8.198	4.007	7.779	3.877	7.276	3.722
28	18	8.949	6.521	8.539	6.305	8.128	6.089	7.718	5.873	7.307	5.657	6.815	5.398
	19	9.203	6.084	8.795	5.918	8.386	5.751	7.977	5.584	7.568	5.417	7.078	5.217
	20	9.456	5.646	9.037	5.517	8.617	5.387	8.198	5.257	7.779	5.128	7.276	4.972
	21	9.708	5.207	9.270	5.107	8.832	5.007	8.394	4.907	7.956	4.806	7.430	4.686
	22	9.959	4.768	9.503	4.697	9.046	4.626	8.590	4.556	8.133	4.485	7.585	4.400
	23	10.211	4.328	9.736	4.287	9.261	4.246	8.785	4.205	8.310	4.164	7.740	4.114
30	24	10.462	3.889	9.969	3.877	9.475	3.866	8.981	3.854	8.487	3.842	7.895	3.828
	20	9.456	6.272	9.037	6.142	8.617	6.012	8.198	5.883	7.779	5.753	7.276	5.598
	21	9.708	5.832	9.270	5.732	8.832	5.632	8.394	5.532	7.956	5.432	7.430	5.312
	22	9.959	5.393	9.503	5.322	9.046	5.252	8.590	5.181	8.133	5.110	7.585	5.026
	23	10.211	4.954	9.736	4.913	9.261	4.871	8.785	4.830	8.310	4.789	7.740	4.739
	24	10.462	4.515	9.969	4.503	9.475	4.491	8.981	4.479	8.487	4.468	7.895	4.453

### HEATING MODE

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	3.527	3.527	4.422	4.422	4.720	4.720	8.000	8.000	9.790	9.790	10.684	10.684	11.579	11.579
17	3.437	3.437	4.332	4.332	4.630	4.630	7.939	7.939	9.523	9.523	10.386	10.386	11.250	11.250
19	3.347	3.347	4.241	4.241	4.540	4.540	7.877	7.877	9.256	9.256	10.088	10.088	10.920	10.920
21	3.256	3.256	4.151	4.151	4.449	4.449	7.816	7.816	8.989	8.989	9.790	9.790	10.591	10.591
23	3.252	3.252	4.082	4.082	4.359	4.359	7.461	7.461	8.722	8.722	9.492	9.492	10.262	10.262
25	3.247	3.247	4.014	4.014	4.269	4.269	7.105	7.105	8.455	8.455	9.194	9.194	9.932	9.932
27	3.242	3.242	3.945	3.945	4.179	4.179	6.750	6.750	8.188	8.188	8.896	8.896	9.603	9.603
FROST REGION														

## R410A Models (Cooling only)

### MODEL : A5WM 07G / A5LC 07C

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	2.541	1.631	2.345	1.434	2.152	1.241	1.959	1.048	1.766	0.854	1.535	0.623
	16	2.588	1.515	2.402	1.335	2.217	1.157	2.033	0.979	1.849	0.801	1.627	0.588
24	16	2.588	2.038	2.402	1.858	2.217	1.680	2.033	1.502	1.849	1.325	1.627	1.111
	17	2.635	1.922	2.459	1.759	2.283	1.597	2.107	1.434	1.931	1.271	1.720	1.076
	18	2.680	1.804	2.513	1.657	2.346	1.511	2.179	1.364	2.012	1.217	1.812	1.041
	19	2.722	1.686	2.547	1.558	2.372	1.430	2.197	1.302	2.064	1.168	1.904	1.006
	20	2.768	1.563	2.610	1.424	2.451	1.284	2.293	1.145	2.135	1.006	1.944	0.839
28	18	2.680	2.327	2.513	2.181	2.346	2.034	2.179	1.887	2.012	1.740	1.812	1.564
	19	2.722	2.210	2.547	2.082	2.372	1.954	2.197	1.826	2.064	1.691	1.904	1.529
	20	2.768	2.086	2.610	1.947	2.451	1.808	2.293	1.668	2.135	1.529	1.944	1.362
	21	2.812	1.963	2.652	1.816	2.493	1.668	2.334	1.520	2.175	1.372	1.984	1.195
	22	2.855	1.840	2.695	1.684	2.535	1.528	2.376	1.371	2.216	1.215	2.024	1.028
	23	2.898	1.717	2.738	1.553	2.577	1.388	2.417	1.223	2.257	1.058	2.064	0.860
30	24	2.941	1.594	2.780	1.421	2.619	1.248	2.458	1.074	2.297	0.901	2.104	0.693
	20	2.768	2.348	2.610	2.209	2.451	2.069	2.293	1.930	2.135	1.791	1.944	1.624
	21	2.812	2.225	2.652	2.077	2.493	1.929	2.334	1.782	2.175	1.634	1.984	1.456
	22	2.855	2.102	2.695	1.946	2.535	1.789	2.376	1.633	2.216	1.477	2.024	1.289
	23	2.898	1.979	2.738	1.814	2.577	1.649	2.417	1.485	2.257	1.320	2.064	1.122
	24	2.941	1.856	2.780	1.683	2.619	1.509	2.458	1.336	2.297	1.163	2.104	0.955

### MODEL : A5WM 09G / A5LC 10C

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	2.720	1.771	2.556	1.606	2.406	1.457	2.257	1.307	2.108	1.158	1.929	0.978
	16	2.816	1.656	2.654	1.511	2.499	1.374	2.344	1.236	2.189	1.099	2.003	0.934
24	16	2.816	2.202	2.654	2.057	2.499	1.920	2.344	1.782	2.189	1.645	2.003	1.480
	17	2.912	2.087	2.752	1.962	2.591	1.837	2.431	1.711	2.270	1.586	2.078	1.436
	18	3.001	1.964	2.837	1.854	2.674	1.744	2.511	1.634	2.348	1.524	2.152	1.392
	19	3.092	1.835	2.940	1.706	2.789	1.577	2.637	1.449	2.451	1.403	2.227	1.348
	20	3.177	1.713	3.003	1.603	2.829	1.492	2.656	1.381	2.482	1.271	2.274	1.138
28	18	3.001	2.510	2.837	2.400	2.674	2.290	2.511	2.180	2.348	2.070	2.152	1.938
	19	3.092	2.381	2.940	2.252	2.789	2.123	2.637	1.995	2.451	1.949	2.227	1.894
	20	3.177	2.259	3.003	2.148	2.829	2.038	2.656	1.927	2.482	1.817	2.274	1.684
	21	3.264	2.130	3.083	2.004	2.901	1.878	2.720	1.751	2.538	1.625	2.320	1.474
	22	3.352	2.002	3.162	1.860	2.973	1.718	2.784	1.576	2.594	1.434	2.367	1.263
	23	3.439	1.873	3.242	1.715	3.045	1.558	2.848	1.400	2.650	1.242	2.414	1.053
30	24	3.527	1.744	3.322	1.571	3.117	1.398	2.912	1.224	2.707	1.051	2.461	0.843
	20	3.177	2.532	3.003	2.421	2.829	2.311	2.656	2.200	2.482	2.089	2.274	1.957
	21	3.264	2.403	3.083	2.277	2.901	2.151	2.720	2.024	2.538	1.898	2.320	1.747
	22	3.352	2.275	3.162	2.133	2.973	1.991	2.784	1.849	2.594	1.707	2.367	1.536
	23	3.439	2.146	3.242	1.988	3.045	1.831	2.848	1.673	2.650	1.515	2.414	1.326
	24	3.527	2.017	3.322	1.844	3.117	1.671	2.912	1.497	2.707	1.324	2.461	1.116



## R410A Models (Cooling only)

### MODEL : A5WM 10G / A5LC 10C

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	3.028	1.998	2.824	1.793	2.631	1.600	2.439	1.407	2.247	1.215	2.016	0.983
	16	3.110	1.857	2.909	1.675	2.714	1.500	2.519	1.324	2.325	1.148	2.091	0.937
24	16	3.110	2.450	2.909	2.268	2.714	2.093	2.519	1.917	2.325	1.741	2.091	1.530
	17	3.192	2.309	2.995	2.151	2.797	1.992	2.600	1.833	2.402	1.675	2.165	1.484
	18	3.268	2.163	3.070	2.024	2.873	1.884	2.675	1.745	2.477	1.606	2.240	1.439
	19	3.347	2.008	3.159	1.844	2.971	1.680	2.783	1.517	2.570	1.460	2.314	1.393
	20	3.420	1.864	3.217	1.731	3.013	1.598	2.810	1.465	2.607	1.332	2.363	1.173
28	18	3.268	2.756	3.070	2.617	2.873	2.477	2.675	2.338	2.477	2.199	2.240	2.032
	19	3.347	2.601	3.159	2.437	2.971	2.273	2.783	2.110	2.570	2.053	2.314	1.986
	20	3.420	2.457	3.217	2.324	3.013	2.191	2.810	2.058	2.607	1.925	2.363	1.766
	21	3.495	2.304	3.287	2.158	3.078	2.012	2.870	1.867	2.662	1.721	2.412	1.546
	22	3.570	2.151	3.357	1.992	3.143	1.834	2.930	1.675	2.716	1.517	2.460	1.326
	23	3.646	1.998	3.427	1.827	3.208	1.655	2.990	1.484	2.771	1.312	2.509	1.107
30	24	3.721	1.845	3.497	1.661	3.273	1.477	3.050	1.292	2.826	1.108	2.557	0.887
	20	3.420	2.753	3.217	2.620	3.013	2.488	2.810	2.355	2.607	2.222	2.363	2.063
	21	3.495	2.600	3.287	2.455	3.078	2.309	2.870	2.163	2.662	2.018	2.412	1.843
	22	3.570	2.448	3.357	2.289	3.143	2.130	2.930	1.972	2.716	1.813	2.460	1.623
	23	3.646	2.295	3.427	2.123	3.208	1.952	2.990	1.780	2.771	1.609	2.509	1.403
	24	3.721	2.142	3.497	1.958	3.273	1.773	3.050	1.589	2.826	1.405	2.557	1.183

### MODEL : A5WM 15G / A5LC 15C

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	3.525	2.306	3.328	2.109	3.156	1.936	2.983	1.764	2.811	1.591	2.604	1.384
	16	3.668	2.159	3.482	1.989	3.308	1.831	3.134	1.673	2.960	1.515	2.751	1.325
24	16	3.668	2.856	3.482	2.686	3.308	2.528	3.134	2.370	2.960	2.212	2.751	2.022
	17	3.810	2.709	3.635	2.566	3.460	2.422	3.285	2.279	3.109	2.135	2.899	1.963
	18	3.941	2.551	3.769	2.427	3.597	2.302	3.425	2.178	3.253	2.053	3.047	1.904
	19	4.069	2.381	3.885	2.215	3.701	2.049	3.517	1.883	3.370	1.866	3.195	1.845
	20	4.200	2.226	4.020	2.099	3.839	1.971	3.659	1.843	3.478	1.715	3.262	1.561
28	18	3.941	3.248	3.769	3.123	3.597	2.999	3.425	2.874	3.253	2.750	3.047	2.601
	19	4.069	3.078	3.885	2.912	3.701	2.746	3.517	2.580	3.370	2.563	3.195	2.541
	20	4.200	2.923	4.020	2.795	3.839	2.668	3.659	2.540	3.478	2.412	3.262	2.258
	21	4.329	2.757	4.136	2.606	3.944	2.456	3.752	2.306	3.559	2.156	3.329	1.975
	22	4.457	2.590	4.253	2.418	4.049	2.245	3.845	2.072	3.641	1.899	3.396	1.692
	23	4.585	2.424	4.369	2.229	4.153	2.034	3.938	1.838	3.722	1.643	3.463	1.409
30	24	4.713	2.257	4.486	2.040	4.258	1.822	4.031	1.605	3.803	1.387	3.530	1.126
	20	4.200	3.272	4.020	3.144	3.839	3.016	3.659	2.888	3.478	2.760	3.262	2.607
	21	4.329	3.105	4.136	2.955	3.944	2.805	3.752	2.654	3.559	2.504	3.329	2.324
	22	4.457	2.939	4.253	2.766	4.049	2.593	3.845	2.421	3.641	2.248	3.396	2.041
	23	4.585	2.772	4.369	2.577	4.153	2.382	3.938	2.187	3.722	1.992	3.463	1.757
	24	4.713	2.606	4.486	2.388	4.258	2.171	4.031	1.953	3.803	1.735	3.530	1.474

## R410A Models (Cooling only)

### MODEL : A5WM 20G / A5LC 20C

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	5.147	3.507	4.918	3.236	4.654	3.002	4.390	2.769	4.126	2.535	3.809	2.255
	16	5.349	3.308	5.102	3.073	4.838	2.858	4.574	2.642	4.310	2.427	3.992	2.168
24	16	5.349	4.197	5.102	3.963	4.838	3.747	4.574	3.532	4.310	3.316	3.992	3.057
	17	5.551	3.997	5.287	3.800	5.022	3.602	4.758	3.405	4.493	3.208	4.176	2.971
	18	5.769	3.780	5.498	3.608	5.227	3.435	4.956	3.263	4.685	3.091	4.360	2.884
	19	5.994	3.549	5.755	3.330	5.515	3.112	5.276	2.894	4.943	2.850	4.543	2.798
	20	6.201	3.333	5.901	3.151	5.600	2.968	5.300	2.785	4.999	2.603	4.639	2.383
28	18	5.769	4.669	5.498	4.497	5.227	4.325	4.956	4.152	4.685	3.980	4.360	3.774
	19	5.994	4.438	5.755	4.220	5.515	4.001	5.276	3.783	4.943	3.739	4.543	3.687
	20	6.201	4.223	5.901	4.040	5.600	3.857	5.300	3.675	4.999	3.492	4.639	3.273
	21	6.416	3.993	6.093	3.775	5.769	3.557	5.446	3.338	5.122	3.120	4.734	2.858
	22	6.631	3.764	6.284	3.510	5.938	3.256	5.592	3.002	5.245	2.748	4.829	2.444
	23	6.845	3.534	6.476	3.245	6.107	2.956	5.737	2.666	5.368	2.377	4.925	2.029
30	24	7.060	3.305	6.668	2.980	6.276	2.655	5.883	2.330	5.491	2.005	5.020	1.615
	20	6.201	4.667	5.901	4.485	5.600	4.302	5.300	4.119	4.999	3.936	4.639	3.717
	21	6.416	4.438	6.093	4.220	5.769	4.001	5.446	3.783	5.122	3.565	4.734	3.303
	22	6.631	4.209	6.284	3.955	5.938	3.701	5.592	3.447	5.245	3.193	4.829	2.888
	23	6.845	3.979	6.476	3.690	6.107	3.400	5.737	3.111	5.368	2.821	4.925	2.474
	24	7.060	3.750	6.668	3.425	6.276	3.100	5.883	2.775	5.491	2.450	5.020	2.060

### MODEL : A5WM 25G / A5LC 25C

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	6.276	4.244	5.917	3.885	5.599	3.567	5.282	3.250	4.964	2.932	4.583	2.551
	16	6.510	3.997	6.156	3.682	5.822	3.388	5.489	3.094	5.156	2.800	4.756	2.447
24	16	6.510	5.158	6.156	4.843	5.822	4.549	5.489	4.255	5.156	3.961	4.756	3.608
	17	6.743	4.911	6.394	4.640	6.045	4.370	5.696	4.099	5.347	3.828	4.928	3.504
	18	6.958	4.644	6.601	4.405	6.244	4.166	5.887	3.926	5.530	3.687	5.101	3.399
	19	7.177	4.367	6.835	4.102	6.494	3.837	6.153	3.572	5.753	3.446	5.274	3.295
	20	7.384	4.097	7.000	3.847	6.615	3.597	6.231	3.347	5.846	3.097	5.385	2.797
28	18	6.958	5.805	6.601	5.566	6.244	5.327	5.887	5.087	5.530	4.848	5.101	4.561
	19	7.177	5.528	6.835	5.263	6.494	4.998	6.153	4.733	5.753	4.607	5.274	4.456
	20	7.384	5.258	7.000	5.008	6.615	4.758	6.231	4.508	5.846	4.258	5.385	3.958
	21	7.596	4.977	7.192	4.685	6.788	4.393	6.384	4.102	5.980	3.810	5.495	3.460
	22	7.808	4.696	7.385	4.362	6.961	4.029	6.538	3.695	6.114	3.362	5.606	2.962
	23	8.020	4.415	7.577	4.040	7.134	3.664	6.691	3.289	6.248	2.914	5.717	2.463
30	24	8.232	4.134	7.770	3.717	7.307	3.300	6.845	2.883	6.383	2.466	5.828	1.965
	20	7.384	5.839	7.000	5.589	6.615	5.339	6.231	5.089	5.846	4.839	5.385	4.539
	21	7.596	5.558	7.192	5.266	6.788	4.974	6.384	4.682	5.980	4.391	5.495	4.040
	22	7.808	5.277	7.385	4.943	6.961	4.609	6.538	4.276	6.114	3.942	5.606	3.542
	23	8.020	4.996	7.577	4.620	7.134	4.245	6.691	3.870	6.248	3.494	5.717	3.044
	24	8.232	4.715	7.770	4.297	7.307	3.880	6.845	3.463	6.383	3.046	5.828	2.546

## R410A Models (Cooling only)

### MODEL : A5WM 311 / A5LC 28C

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	7.648	4.989	7.255	4.595	6.798	4.252	6.341	3.908	5.884	3.565	5.336	3.153
	16	7.911	4.701	7.503	4.359	7.062	4.043	6.621	3.727	6.180	3.411	5.650	3.032
24	16	7.911	5.947	7.503	5.606	7.062	5.290	6.621	4.974	6.180	4.658	5.650	4.278
	17	8.175	5.659	7.750	5.370	7.325	5.081	6.900	4.793	6.475	4.504	5.965	4.157
	18	8.469	5.347	8.048	5.095	7.627	4.843	7.206	4.591	6.785	4.338	6.280	4.036
	19	8.770	5.014	8.387	4.696	8.004	4.378	7.621	4.060	7.155	3.994	6.595	3.915
	20	9.050	4.705	8.605	4.442	8.159	4.178	7.714	3.915	7.268	3.651	6.734	3.335
28	18	8.469	6.593	8.048	6.341	7.627	6.089	7.206	5.837	6.785	5.585	6.280	5.282
	19	8.770	6.261	8.387	5.942	8.004	5.624	7.621	5.306	7.155	5.240	6.595	5.161
	20	9.050	5.952	8.605	5.688	8.159	5.425	7.714	5.161	7.268	4.898	6.734	4.581
	21	9.337	5.623	8.863	5.311	8.389	4.999	7.915	4.687	7.441	4.375	6.872	4.001
	22	9.625	5.294	9.122	4.934	8.619	4.574	8.116	4.213	7.614	3.853	7.011	3.421
	23	9.912	4.965	9.381	4.556	8.849	4.148	8.318	3.740	7.787	3.331	7.149	2.841
	24	10.199	4.635	9.639	4.179	9.079	3.722	8.519	3.266	7.959	2.809	7.288	2.261
30	20	9.050	6.575	8.605	6.312	8.159	6.048	7.714	5.784	7.268	5.521	6.734	5.204
	21	9.337	6.246	8.863	5.934	8.389	5.622	7.915	5.311	7.441	4.999	6.872	4.624
	22	9.625	5.917	9.122	5.557	8.619	5.197	8.116	4.837	7.614	4.477	7.011	4.044
	23	9.912	5.588	9.381	5.179	8.849	4.771	8.318	4.363	7.787	3.954	7.149	3.464
	24	10.199	5.259	9.639	4.802	9.079	4.346	8.519	3.889	7.959	3.432	7.288	2.884

## R410A Models (Heatpump)

MODEL : A5WM 07GR / A5LC 07CR

### COOLING MODE

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	2.247	1.520	2.115	1.388	1.997	1.269	1.878	1.151	1.760	1.032	1.618	0.890
	16	2.329	1.431	2.195	1.314	2.067	1.204	1.940	1.094	1.813	0.985	1.660	0.853
24	16	2.329	1.849	2.195	1.732	2.067	1.622	1.940	1.513	1.813	1.403	1.660	1.271
	17	2.410	1.759	2.274	1.658	2.138	1.557	2.002	1.456	1.866	1.356	1.703	1.234
	18	2.486	1.663	2.343	1.574	2.201	1.484	2.058	1.395	1.916	1.305	1.745	1.197
	19	2.566	1.564	2.443	1.468	2.320	1.372	2.197	1.277	2.011	1.224	1.787	1.161
	20	2.636	1.466	2.480	1.374	2.324	1.281	2.168	1.188	2.012	1.096	1.825	0.984
	21	2.711	1.368	2.548	1.276	2.385	1.179	2.221	1.089	2.058	1.007	1.862	0.886
28	18	2.486	2.082	2.343	1.992	2.201	1.903	2.058	1.813	1.916	1.723	1.745	1.616
	19	2.566	1.982	2.443	1.886	2.320	1.791	2.197	1.695	2.011	1.642	1.787	1.579
	20	2.636	1.885	2.480	1.792	2.324	1.699	2.168	1.607	2.012	1.514	1.825	1.403
	21	2.711	1.784	2.548	1.676	2.385	1.569	2.221	1.462	2.058	1.355	1.862	1.226
	22	2.786	1.682	2.616	1.561	2.445	1.439	2.275	1.318	2.104	1.196	1.900	1.050
	23	2.861	1.581	2.683	1.445	2.506	1.309	2.328	1.173	2.151	1.037	1.937	0.874
30	24	2.936	1.480	2.751	1.330	2.566	1.179	2.382	1.029	2.197	0.878	1.975	0.697
	20	2.636	2.094	2.480	2.001	2.324	1.908	2.168	1.816	2.012	1.723	1.825	1.612
	21	2.711	1.993	2.548	1.886	2.385	1.778	2.221	1.671	2.058	1.564	1.862	1.435
	22	2.786	1.892	2.616	1.770	2.445	1.648	2.275	1.527	2.104	1.405	1.900	1.259
	23	2.861	1.790	2.683	1.654	2.506	1.518	2.328	1.382	2.151	1.246	1.937	1.083
	24	2.936	1.689	2.751	1.539	2.566	1.388	2.382	1.238	2.197	1.087	1.975	0.906

### HEATING MODE

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	1.329	1.329	1.504	1.504	1.562	1.562	2.205	2.205	2.555	2.555	2.730	2.730	2.905	2.905
17	1.294	1.294	1.418	1.418	1.522	1.522	2.202	2.202	2.494	2.494	2.665	2.665	2.836	2.836
19	1.259	1.259	1.332	1.332	1.483	1.483	2.199	2.199	2.432	2.432	2.600	2.600	2.767	2.767
21	1.224	1.224	1.287	1.287	1.443	1.443	2.153	2.153	2.371	2.371	2.535	2.535	2.698	2.698
23	1.189	1.189	1.282	1.282	1.403	1.403	2.063	2.063	2.309	2.309	2.469	2.469	2.629	2.629
25	1.155	1.155	1.277	1.277	1.363	1.363	1.972	1.972	2.248	2.248	2.404	2.404	2.560	2.560
27	1.120	1.120	1.272	1.272	1.323	1.323	1.882	1.882	2.186	2.186	2.339	2.339	2.491	2.491
	FROST REGION													

## R410A Models (Heatpump)

MODEL : A5WM 09GR / A5LC 10CR

### COOLING MODE

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	2.779	1.868	2.617	1.706	2.474	1.562	2.330	1.419	2.187	1.275	2.014	1.102
	16	2.868	1.747	2.707	1.607	2.555	1.476	2.403	1.345	2.250	1.214	2.067	1.056
24	16	2.868	2.271	2.707	2.131	2.555	2.000	2.403	1.869	2.250	1.738	2.067	1.580
	17	2.958	2.151	2.797	2.032	2.636	1.914	2.475	1.795	2.314	1.676	2.121	1.534
	18	3.039	2.022	2.873	1.919	2.706	1.817	2.540	1.714	2.373	1.611	2.174	1.488
	19	3.123	1.882	2.961	1.743	2.799	1.604	2.637	1.465	2.451	1.455	2.227	1.442
	20	3.202	1.757	3.023	1.655	2.845	1.552	2.666	1.449	2.488	1.346	2.274	1.223
	21	3.283	1.628	3.104	1.526	2.926	1.423	2.747	1.318	2.569	1.218	2.356	1.094
28	18	3.039	2.546	2.873	2.443	2.706	2.341	2.540	2.238	2.373	2.135	2.174	2.012
	19	3.123	2.406	2.961	2.267	2.799	2.128	2.637	1.989	2.451	1.979	2.227	1.966
	20	3.202	2.281	3.023	2.179	2.845	2.076	2.666	1.973	2.488	1.870	2.274	1.747
	21	3.283	2.146	3.098	2.027	2.913	1.908	2.728	1.789	2.542	1.670	2.320	1.527
	22	3.364	2.011	3.173	1.876	2.981	1.740	2.789	1.605	2.597	1.470	2.367	1.308
	23	3.446	1.875	3.247	1.724	3.049	1.573	2.850	1.421	2.652	1.270	2.414	1.088
30	24	3.527	1.740	3.322	1.572	3.117	1.405	2.912	1.237	2.707	1.070	2.461	0.869
	20	3.202	2.543	3.023	2.441	2.845	2.338	2.666	2.235	2.488	2.132	2.274	2.009
	21	3.283	2.408	3.098	2.289	2.913	2.170	2.728	2.051	2.542	1.932	2.320	1.789
	22	3.364	2.273	3.173	2.138	2.981	2.002	2.789	1.867	2.597	1.732	2.367	1.570
	23	3.446	2.137	3.247	1.986	3.049	1.835	2.850	1.683	2.652	1.532	2.414	1.350
	24	3.527	2.002	3.322	1.834	3.117	1.667	2.912	1.499	2.707	1.332	2.461	1.131

### HEATING MODE

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	1.595	1.595	1.805	1.805	1.875	1.875	2.646	2.646	3.066	3.066	3.276	3.276	3.486	3.486
17	1.553	1.553	1.786	1.786	1.831	1.831	2.642	2.642	3.015	3.015	3.224	3.224	3.433	3.433
19	1.511	1.511	1.768	1.768	1.788	1.788	2.639	2.639	2.964	2.964	3.172	3.172	3.379	3.379
21	1.469	1.469	1.728	1.728	1.744	1.744	2.597	2.597	2.913	2.913	3.120	3.120	3.326	3.326
23	1.427	1.427	1.667	1.667	1.701	1.701	2.517	2.517	2.862	2.862	3.067	3.067	3.272	3.272
25	1.386	1.386	1.607	1.607	1.657	1.657	2.436	2.436	2.811	2.811	3.015	3.015	3.219	3.219
27	1.344	1.344	1.546	1.546	1.614	1.614	2.356	2.356	2.761	2.761	2.963	2.963	3.165	3.165
FROST REGION														

## R410A Models (Heatpump)

MODEL : A5WM 10GR / A5LC 10CR

### COOLING MODE

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	3.107	2.083	2.884	1.859	2.669	1.644	2.455	1.429	2.241	1.214	1.983	0.956
	16	3.179	1.934	2.958	1.734	2.742	1.538	2.527	1.342	2.311	1.146	2.052	0.911
24	16	3.179	2.524	2.958	2.324	2.742	2.128	2.527	1.932	2.311	1.736	2.052	1.501
	17	3.250	2.376	3.033	2.199	2.815	2.022	2.598	1.845	2.381	1.668	2.120	1.456
	18	3.318	2.224	3.100	2.067	2.883	1.911	2.666	1.754	2.449	1.598	2.188	1.411
	19	3.388	2.064	3.187	1.891	2.985	1.718	2.783	1.546	2.543	1.464	2.256	1.365
	20	3.452	1.912	3.231	1.765	3.010	1.619	2.789	1.472	2.568	1.325	2.303	1.149
	21	3.519	1.760	3.294	1.617	3.069	1.470	2.845	1.320	2.620	1.172	2.351	1.000
28	18	3.318	2.813	3.100	2.657	2.883	2.501	2.666	2.344	2.449	2.188	2.188	2.000
	19	3.388	2.653	3.187	2.481	2.985	2.308	2.783	2.135	2.543	2.053	2.256	1.955
	20	3.452	2.502	3.231	2.355	3.010	2.208	2.789	2.062	2.568	1.915	2.303	1.739
	21	3.519	2.343	3.294	2.185	3.069	2.028	2.845	1.870	2.620	1.712	2.351	1.523
	22	3.585	2.184	3.357	2.016	3.129	1.847	2.900	1.678	2.672	1.509	2.398	1.307
	23	3.652	2.025	3.420	1.846	3.188	1.666	2.956	1.486	2.724	1.306	2.445	1.090
30	24	3.718	1.867	3.483	1.676	3.247	1.485	3.011	1.294	2.776	1.103	2.493	0.874
	20	3.452	2.797	3.231	2.650	3.010	2.503	2.789	2.357	2.568	2.210	2.303	2.034
	21	3.519	2.638	3.294	2.480	3.069	2.322	2.845	2.165	2.620	2.007	2.351	1.818
	22	3.585	2.479	3.357	2.310	3.129	2.142	2.900	1.973	2.672	1.804	2.398	1.601
	23	3.652	2.320	3.420	2.141	3.188	1.961	2.956	1.781	2.724	1.601	2.445	1.385
30	24	3.718	2.162	3.483	1.971	3.247	1.780	3.011	1.589	2.776	1.398	2.493	1.169

### HEATING MODE

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	1.683	1.683	1.905	1.905	1.979	1.979	2.793	2.793	3.236	3.236	3.458	3.458	3.680	3.680
17	1.639	1.639	1.870	1.870	1.932	1.932	2.789	2.789	3.175	3.175	3.394	3.394	3.614	3.614
19	1.595	1.595	1.835	1.835	1.884	1.884	2.786	2.786	3.114	3.114	3.331	3.331	3.548	3.548
21	1.551	1.551	1.790	1.790	1.837	1.837	2.737	2.737	3.052	3.052	3.267	3.267	3.481	3.481
23	1.507	1.507	1.735	1.735	1.789	1.789	2.643	2.643	2.991	2.991	3.203	3.203	3.415	3.415
25	1.463	1.463	1.680	1.680	1.742	1.742	2.548	2.548	2.930	2.930	3.139	3.139	3.349	3.349
27	1.418	1.418	1.626	1.626	1.695	1.695	2.454	2.454	2.868	2.868	3.075	3.075	3.283	3.283
	FROST REGION													

## R410A Models (Heatpump)

MODEL : A5WM 15GR / A5LC 15CR

### COOLING MODE

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	3.618	2.383	3.422	2.162	3.193	1.960	2.965	1.757	2.736	1.555	2.461	1.312
	16	3.728	2.236	3.525	2.040	3.305	1.853	3.085	1.667	2.865	1.480	2.601	1.256
24	16	3.728	2.892	3.525	2.697	3.305	2.510	3.085	2.323	2.865	2.137	2.601	1.913
	17	3.839	2.745	3.627	2.575	3.416	2.404	3.205	2.233	2.994	2.062	2.740	1.857
	18	3.965	2.590	3.756	2.438	3.547	2.287	3.339	2.135	3.130	1.983	2.879	1.801
	19	4.093	2.429	3.901	2.268	3.709	2.107	3.517	1.947	3.291	1.855	3.019	1.745
	20	4.214	2.271	3.996	2.118	3.778	1.966	3.561	1.813	3.343	1.661	3.082	1.478
28	18	3.965	3.247	3.756	3.095	3.547	2.943	3.339	2.792	3.130	2.640	2.879	2.458
	19	4.093	3.085	3.901	2.925	3.709	2.764	3.517	2.603	3.291	2.512	3.019	2.402
	20	4.214	2.928	3.996	2.775	3.778	2.622	3.561	2.470	3.343	2.317	3.082	2.134
	21	4.337	2.764	4.108	2.592	3.878	2.419	3.649	2.246	3.420	2.074	3.146	1.867
	22	4.460	2.601	4.219	2.408	3.979	2.215	3.738	2.023	3.498	1.830	3.209	1.599
	23	4.583	2.437	4.331	2.225	4.079	2.012	3.827	1.799	3.575	1.587	3.272	1.331
30	24	4.706	2.274	4.442	2.041	4.179	1.809	3.915	1.576	3.652	1.343	3.336	1.064
	20	4.214	3.256	3.996	3.103	3.778	2.951	3.561	2.798	3.343	2.646	3.082	2.463
	21	4.337	3.092	4.108	2.920	3.878	2.747	3.649	2.575	3.420	2.402	3.146	2.195
	22	4.460	2.929	4.219	2.736	3.979	2.544	3.738	2.351	3.498	2.159	3.209	1.927
	23	4.583	2.766	4.331	2.553	4.079	2.340	3.827	2.128	3.575	1.915	3.272	1.660
	24	4.706	2.602	4.442	2.370	4.179	2.137	3.915	1.904	3.652	1.671	3.336	1.392

### HEATING MODE

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	2.126	2.126	2.406	2.406	2.500	2.500	3.528	3.528	4.088	4.088	4.368	4.368	4.649	4.649
17	2.070	2.070	2.288	2.288	2.440	2.440	3.523	3.523	4.013	4.013	4.290	4.290	4.568	4.568
19	2.015	2.015	2.169	2.169	2.381	2.381	3.519	3.519	3.937	3.937	4.212	4.212	4.486	4.486
21	1.959	1.959	2.102	2.102	2.321	2.321	3.459	3.459	3.862	3.862	4.133	4.133	4.405	4.405
23	1.903	1.903	2.087	2.087	2.262	2.262	3.342	3.342	3.786	3.786	4.055	4.055	4.324	4.324
25	1.847	1.847	2.071	2.071	2.202	2.202	3.225	3.225	3.711	3.711	3.977	3.977	4.243	4.243
27	1.792	1.792	2.055	2.055	2.143	2.143	3.108	3.108	3.635	3.635	3.898	3.898	4.162	4.162
FROST REGION														

## R410A Models (Heatpump)

MODEL : A5WM 20GR / A5LC 20CR

### COOLING MODE

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	5.147	3.507	4.918	3.236	4.654	3.002	4.390	2.769	4.126	2.535	3.809	2.255
	16	5.349	3.308	5.102	3.073	4.838	2.858	4.574	2.642	4.310	2.427	3.992	2.168
24	16	5.349	4.197	5.102	3.963	4.838	3.747	4.574	3.532	4.310	3.316	3.992	3.057
	17	5.551	3.997	5.287	3.800	5.022	3.602	4.758	3.405	4.493	3.208	4.176	2.971
	18	5.769	3.780	5.498	3.608	5.227	3.435	4.956	3.263	4.685	3.091	4.360	2.884
	19	5.994	3.549	5.755	3.330	5.515	3.112	5.276	2.894	4.943	2.850	4.543	2.798
	20	6.201	3.333	5.901	3.151	5.600	2.968	5.300	2.785	4.999	2.603	4.639	2.383
	21	6.416	3.116	6.093	2.944	5.769	2.757	5.446	2.592	5.122	2.392	4.734	2.168
28	18	5.769	4.669	5.498	4.497	5.227	4.325	4.956	4.152	4.685	3.980	4.360	3.774
	19	5.994	4.438	5.755	4.220	5.515	4.001	5.276	3.783	4.943	3.739	4.543	3.687
	20	6.201	4.223	5.901	4.040	5.600	3.857	5.300	3.675	4.999	3.492	4.639	3.273
	21	6.416	3.993	6.093	3.775	5.769	3.557	5.446	3.338	5.122	3.120	4.734	2.858
	22	6.631	3.764	6.284	3.510	5.938	3.256	5.592	3.002	5.245	2.748	4.829	2.444
	23	6.845	3.534	6.476	3.245	6.107	2.956	5.737	2.666	5.368	2.377	4.925	2.029
30	24	7.060	3.305	6.668	2.980	6.276	2.655	5.883	2.330	5.491	2.005	5.020	1.615
	20	6.201	4.667	5.901	4.485	5.600	4.302	5.300	4.119	4.999	3.936	4.639	3.717
	21	6.416	4.438	6.093	4.220	5.769	4.001	5.446	3.783	5.122	3.565	4.734	3.303
	22	6.631	4.209	6.284	3.955	5.938	3.701	5.592	3.447	5.245	3.193	4.829	2.888
	23	6.845	3.979	6.476	3.690	6.107	3.400	5.737	3.111	5.368	2.821	4.925	2.474
	24	7.060	3.750	6.668	3.425	6.276	3.100	5.883	2.775	5.491	2.450	5.020	2.060

### HEATING MODE

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	3.189	3.189	3.610	3.610	3.750	3.750	5.291	5.291	6.132	6.132	6.553	6.553	6.973	6.973
17	3.106	3.106	3.514	3.514	3.677	3.677	5.285	5.285	6.106	6.106	6.535	6.535	6.964	6.964
19	3.022	3.022	3.418	3.418	3.605	3.605	5.279	5.279	6.080	6.080	6.517	6.517	6.954	6.954
21	2.938	2.938	3.340	3.340	3.532	3.532	5.241	5.241	6.055	6.055	6.500	6.500	6.945	6.945
23	2.855	2.855	3.279	3.279	3.459	3.459	5.173	5.173	6.029	6.029	6.482	6.482	6.935	6.935
25	2.771	2.771	3.218	3.218	3.387	3.387	5.105	5.105	6.003	6.003	6.464	6.464	6.926	6.926
27	2.688	2.688	3.157	3.157	3.314	3.314	5.037	5.037	5.977	5.977	6.447	6.447	6.917	6.917
FROST REGION														



## R410A Models (Heatpump)

MODEL : A5WM 25GR / A5LC 25CR

### COOLING MODE

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	6.276	4.244	5.917	3.885	5.599	3.567	5.282	3.250	4.964	2.932	4.583	2.551
	16	6.510	3.997	6.156	3.682	5.822	3.388	5.489	3.094	5.156	2.800	4.756	2.447
24	16	6.510	5.158	6.156	4.843	5.822	4.549	5.489	4.255	5.156	3.961	4.756	3.608
	17	6.743	4.911	6.394	4.640	6.045	4.370	5.696	4.099	5.347	3.828	4.928	3.504
	18	6.958	4.644	6.601	4.405	6.244	4.166	5.887	3.926	5.530	3.687	5.101	3.399
	19	7.177	4.367	6.835	4.102	6.494	3.837	6.153	3.572	5.753	3.446	5.274	3.295
	20	7.384	4.097	7.000	3.847	6.615	3.597	6.231	3.347	5.846	3.097	5.385	2.797
	21	7.596	3.828	7.212	3.578	6.827	3.327	6.448	3.127	6.069	2.847	5.606	2.597
28	18	6.958	5.805	6.601	5.566	6.244	5.327	5.887	5.087	5.530	4.848	5.101	4.561
	19	7.177	5.528	6.835	5.263	6.494	4.998	6.153	4.733	5.753	4.607	5.274	4.456
	20	7.384	5.258	7.000	5.008	6.615	4.758	6.231	4.508	5.846	4.258	5.385	3.958
	21	7.596	4.977	7.192	4.685	6.788	4.393	6.384	4.102	5.980	3.810	5.495	3.460
	22	7.808	4.696	7.385	4.362	6.961	4.029	6.538	3.695	6.114	3.362	5.606	2.962
	23	8.020	4.415	7.577	4.040	7.134	3.664	6.691	3.289	6.248	2.914	5.717	2.463
30	24	8.232	4.134	7.770	3.717	7.307	3.300	6.845	2.883	6.383	2.466	5.828	1.965
	20	7.384	5.839	7.000	5.589	6.615	5.339	6.231	5.089	5.846	4.839	5.385	4.539
	21	7.596	5.558	7.192	5.266	6.788	4.974	6.384	4.682	5.980	4.391	5.495	4.040
	22	7.808	5.277	7.385	4.943	6.961	4.609	6.538	4.276	6.114	3.942	5.606	3.542
	23	8.020	4.996	7.577	4.620	7.134	4.245	6.691	3.870	6.248	3.494	5.717	3.044
	24	8.232	4.715	7.770	4.297	7.307	3.880	6.845	3.463	6.383	3.046	5.828	2.546

### HEATING MODE

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	3.898	3.898	4.412	4.412	4.583	4.583	6.467	6.467	7.495	7.495	8.009	8.009	8.523	8.523
17	3.796	3.796	4.288	4.288	4.495	4.495	6.459	6.459	7.469	7.469	7.994	7.994	8.519	8.519
19	3.694	3.694	4.165	4.165	4.408	4.408	6.452	6.452	7.443	7.443	7.979	7.979	8.515	8.515
21	3.591	3.591	4.069	4.069	4.320	4.320	6.410	6.410	7.418	7.418	7.964	7.964	8.511	8.511
23	3.489	3.489	4.001	4.001	4.233	4.233	6.334	6.334	7.392	7.392	7.950	7.950	8.507	8.507
25	3.387	3.387	3.932	3.932	4.145	4.145	6.258	6.258	7.366	7.366	7.935	7.935	8.503	8.503
27	3.285	3.285	3.864	3.864	4.057	4.057	6.182	6.182	7.341	7.341	7.920	7.920	8.499	8.499
FROST REGION														

## R410A Models (Heatpump)

MODEL : A5WM 311R / A5LC 28CR

### COOLING MODE

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	7.648	4.989	7.255	4.595	6.798	4.252	6.341	3.908	5.884	3.565	5.336	3.153
	16	7.911	4.701	7.503	4.359	7.062	4.043	6.621	3.727	6.180	3.411	5.650	3.032
24	16	7.911	5.947	7.503	5.606	7.062	5.290	6.621	4.974	6.180	4.658	5.650	4.278
	17	8.175	5.659	7.750	5.370	7.325	5.081	6.900	4.793	6.475	4.504	5.965	4.157
	18	8.469	5.347	8.048	5.095	7.627	4.843	7.206	4.591	6.785	4.338	6.280	4.036
	19	8.770	5.014	8.387	4.696	8.004	4.378	7.621	4.060	7.155	3.994	6.595	3.915
	20	9.050	4.705	8.605	4.442	8.159	4.178	7.714	3.915	7.268	3.651	6.734	3.335
	21	9.337	4.400	8.863	4.179	8.409	3.922	7.964	3.660	7.518	3.396	6.280	3.054
28	18	8.469	6.593	8.048	6.341	7.627	6.089	7.206	5.837	6.785	5.585	6.280	5.282
	19	8.770	6.261	8.387	5.942	8.004	5.624	7.621	5.306	7.155	5.240	6.595	5.161
	20	9.050	5.952	8.605	5.688	8.159	5.425	7.714	5.161	7.268	4.898	6.734	4.581
	21	9.337	5.623	8.863	5.311	8.389	4.999	7.915	4.687	7.441	4.375	6.872	4.001
	22	9.625	5.294	9.122	4.934	8.619	4.574	8.116	4.213	7.614	3.853	7.011	3.421
	23	9.912	4.965	9.381	4.556	8.849	4.148	8.318	3.740	7.787	3.331	7.149	2.841
30	24	10.199	4.635	9.639	4.179	9.079	3.722	8.519	3.266	7.959	2.809	7.288	2.261
	20	9.050	6.575	8.605	6.312	8.159	6.048	7.714	5.784	7.268	5.521	6.734	5.204
	21	9.337	6.246	8.863	5.934	8.389	5.622	7.915	5.311	7.441	4.999	6.872	4.624
	22	9.625	5.917	9.122	5.557	8.619	5.197	8.116	4.837	7.614	4.477	7.011	4.044
	23	9.912	5.588	9.381	5.179	8.849	4.771	8.318	4.363	7.787	3.954	7.149	3.464
	24	10.199	5.259	9.639	4.802	9.079	4.346	8.519	3.889	7.959	3.432	7.288	2.884

### HEATING MODE

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	4.607	4.607	5.214	5.214	5.416	5.416	7.643	7.643	8.858	8.858	9.465	9.465	10.072	10.072
17	4.486	4.486	5.121	5.121	5.289	5.289	7.634	7.634	8.703	8.703	9.305	9.305	9.908	9.908
19	4.365	4.365	5.029	5.029	5.162	5.162	7.625	7.625	8.548	8.548	9.146	9.146	9.743	9.743
21	4.244	4.244	4.908	4.908	5.035	5.035	7.499	7.499	8.393	8.393	8.986	8.986	9.579	9.579
23	4.124	4.124	4.759	4.759	4.907	4.907	7.257	7.257	8.239	8.239	8.827	8.827	9.414	9.414
25	4.003	4.003	4.609	4.609	4.780	4.780	7.015	7.015	8.084	8.084	8.667	8.667	9.250	9.250
27	3.882	3.882	4.460	4.460	4.653	4.653	6.773	6.773	7.929	7.929	8.507	8.507	9.086	9.086
FROST REGION														

## R410A Models (Cooling only)

### MODEL : A5WM 20G / A5LC 20C (3 PHASE)

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	5.206	3.550	4.976	3.280	4.711	3.049	4.447	2.818	4.182	2.587	3.864	2.310
	16	5.402	3.346	5.156	3.114	4.892	2.902	4.628	2.689	4.365	2.477	4.049	2.222
24	16	5.402	4.235	5.156	4.003	4.892	3.791	4.628	3.579	4.365	3.366	4.049	3.112
	17	5.597	4.031	5.335	3.838	5.073	3.644	4.810	3.450	4.548	3.256	4.233	3.024
	18	5.809	3.810	5.541	3.642	5.274	3.474	5.006	3.306	4.739	3.138	4.417	2.936
	19	6.025	3.571	5.775	3.345	5.526	3.120	5.276	2.894	4.970	2.873	4.602	2.848
	20	6.229	3.353	5.935	3.175	5.640	2.997	5.346	2.819	5.052	2.641	4.699	2.428
28	18	5.809	4.699	5.541	4.531	5.274	4.363	5.006	4.195	4.739	4.027	4.417	3.825
	19	6.025	4.460	5.775	4.235	5.526	4.009	5.276	3.783	4.970	3.762	4.602	3.737
	20	6.229	4.243	5.935	4.065	5.640	3.887	5.346	3.709	5.052	3.531	4.699	3.317
	21	6.437	4.008	6.121	3.795	5.806	3.581	5.490	3.367	5.174	3.153	4.795	2.897
	22	6.646	3.774	6.308	3.525	5.971	3.275	5.634	3.025	5.297	2.776	4.892	2.476
	23	6.854	3.540	6.495	3.255	6.136	2.969	5.778	2.684	5.419	2.398	4.988	2.056
	24	7.062	3.306	6.682	2.985	6.302	2.663	5.922	2.342	5.541	2.021	5.085	1.635
30	20	6.229	4.687	5.935	4.509	5.640	4.331	5.346	4.153	5.052	3.975	4.699	3.762
	21	6.437	4.453	6.121	4.239	5.806	4.025	5.490	3.812	5.174	3.598	4.795	3.341
	22	6.646	4.219	6.308	3.969	5.971	3.720	5.634	3.470	5.297	3.220	4.892	2.921
	23	6.854	3.985	6.495	3.699	6.136	3.414	5.778	3.128	5.419	2.843	4.988	2.500
	24	7.062	3.750	6.682	3.429	6.302	3.108	5.922	2.787	5.541	2.465	5.085	2.080

### MODEL : A5WM 25G/ A5LC 25C (3 PHASE)

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	6.762	4.377	6.391	3.963	5.957	3.582	5.523	3.202	5.089	2.821	4.568	2.365
	16	6.971	4.123	6.585	3.751	6.168	3.397	5.751	3.042	5.333	2.687	4.832	2.261
24	16	6.971	5.382	6.585	5.010	6.168	4.655	5.751	4.301	5.333	3.946	4.832	3.520
	17	7.180	5.128	6.779	4.799	6.379	4.470	5.978	4.140	5.577	3.811	5.097	3.416
	18	7.418	4.859	7.023	4.562	6.627	4.264	6.231	3.967	5.836	3.669	5.361	3.312
	19	7.663	4.591	7.306	4.332	6.949	4.074	6.592	3.816	6.153	3.539	5.626	3.208
	20	7.889	4.305	7.476	3.999	7.064	3.692	6.651	3.386	6.239	3.079	5.744	2.712
28	18	7.418	6.118	7.023	5.820	6.627	5.523	6.231	5.225	5.836	4.928	5.361	4.571
	19	7.663	5.850	7.306	5.591	6.949	5.333	6.592	5.074	6.153	4.798	5.626	4.467
	20	7.889	5.564	7.476	5.258	7.064	4.951	6.651	4.645	6.239	4.338	5.744	3.971
	21	8.121	5.280	7.687	4.933	7.252	4.586	6.818	4.238	6.383	3.891	5.862	3.474
	22	8.354	4.996	7.898	4.608	7.441	4.220	6.984	3.831	6.528	3.443	5.980	2.977
	23	8.587	4.712	8.108	4.283	7.630	3.854	7.151	3.425	6.672	2.996	6.098	2.481
	24	8.819	4.428	8.319	3.958	7.818	3.488	7.318	3.018	6.817	2.548	6.216	1.984
30	20	7.889	6.194	7.476	5.887	7.064	5.581	6.651	5.274	6.239	4.968	5.744	4.600
	21	8.121	5.910	7.687	5.562	7.252	5.215	6.818	4.868	6.383	4.520	5.862	4.103
	22	8.354	5.626	7.898	5.238	7.441	4.849	6.984	4.461	6.528	4.073	5.980	3.607
	23	8.587	5.342	8.108	4.913	7.630	4.483	7.151	4.054	6.672	3.625	6.098	3.110
	24	8.819	5.058	8.319	4.588	7.818	4.118	7.318	3.648	6.817	3.178	6.216	2.613

## R410A Models (Cooling only)

### MODEL : A5WM 311 / A5LC 28C (3 PHASE)

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	7.648	4.989	7.255	4.595	6.798	4.252	6.341	3.908	5.884	3.565	5.336	3.153
	16	7.911	4.701	7.503	4.359	7.062	4.043	6.621	3.727	6.180	3.411	5.650	3.032
24	16	7.911	5.947	7.503	5.606	7.062	5.290	6.621	4.974	6.180	4.658	5.650	4.278
	17	8.175	5.659	7.750	5.370	7.325	5.081	6.900	4.793	6.475	4.504	5.965	4.157
	18	8.469	5.347	8.048	5.095	7.627	4.843	7.206	4.591	6.785	4.338	6.280	4.036
	19	8.770	5.014	8.387	4.696	8.004	4.378	7.621	4.060	7.155	3.994	6.595	3.915
	20	9.050	4.705	8.605	4.442	8.159	4.178	7.714	3.915	7.268	3.651	6.734	3.335
28	18	8.469	6.593	8.048	6.341	7.627	6.089	7.206	5.837	6.785	5.585	6.280	5.282
	19	8.770	6.261	8.387	5.942	8.004	5.624	7.621	5.306	7.155	5.240	6.595	5.161
	20	9.050	5.952	8.605	5.688	8.159	5.425	7.714	5.161	7.268	4.898	6.734	4.581
	21	9.337	5.623	8.863	5.311	8.389	4.999	7.915	4.687	7.441	4.375	6.872	4.001
	22	9.625	5.294	9.122	4.934	8.619	4.574	8.116	4.213	7.614	3.853	7.011	3.421
	23	9.912	4.965	9.381	4.556	8.849	4.148	8.318	3.740	7.787	3.331	7.149	2.841
	24	10.199	4.635	9.639	4.179	9.079	3.722	8.519	3.266	7.959	2.809	7.288	2.261
30	20	9.050	6.575	8.605	6.312	8.159	6.048	7.714	5.784	7.268	5.521	6.734	5.204
	21	9.337	6.246	8.863	5.934	8.389	5.622	7.915	5.311	7.441	4.999	6.872	4.624
	22	9.625	5.917	9.122	5.557	8.619	5.197	8.116	4.837	7.614	4.477	7.011	4.044
	23	9.912	5.588	9.381	5.179	8.849	4.771	8.318	4.363	7.787	3.954	7.149	3.464
	24	10.199	5.259	9.639	4.802	9.079	4.346	8.519	3.889	7.959	3.432	7.288	2.884

## R410A Models (Heatpump)

**MODEL : A5WM 20GR / A5LC 20CR (3 PHASE)**

### COOLING MODE

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	5.206	3.550	4.976	3.280	4.711	3.049	4.447	2.818	4.182	2.587	3.864	2.310
	16	5.402	3.346	5.156	3.114	4.892	2.902	4.628	2.689	4.365	2.477	4.049	2.222
24	16	5.402	4.235	5.156	4.003	4.892	3.791	4.628	3.579	4.365	3.366	4.049	3.112
	17	5.597	4.031	5.335	3.838	5.073	3.644	4.810	3.450	4.548	3.256	4.233	3.024
	18	5.809	3.810	5.541	3.642	5.274	3.474	5.006	3.306	4.739	3.138	4.417	2.936
	19	6.025	3.571	5.775	3.345	5.526	3.120	5.276	2.894	4.970	2.873	4.602	2.848
	20	6.229	3.353	5.935	3.175	5.640	2.997	5.346	2.819	5.052	2.641	4.699	2.428
	21	6.437	3.129	6.121	2.949	5.806	2.769	5.490	2.597	5.174	2.419	4.795	2.200
28	18	5.809	4.699	5.541	4.531	5.274	4.363	5.006	4.195	4.739	4.027	4.417	3.825
	19	6.025	4.460	5.775	4.235	5.526	4.009	5.276	3.783	4.970	3.762	4.602	3.737
	20	6.229	4.243	5.935	4.065	5.640	3.887	5.346	3.709	5.052	3.531	4.699	3.317
	21	6.437	4.008	6.121	3.795	5.806	3.581	5.490	3.367	5.174	3.153	4.795	2.897
	22	6.646	3.774	6.308	3.525	5.971	3.275	5.634	3.025	5.297	2.776	4.892	2.476
	23	6.854	3.540	6.495	3.255	6.136	2.969	5.778	2.684	5.419	2.398	4.988	2.056
30	24	7.062	3.306	6.682	2.985	6.302	2.663	5.922	2.342	5.541	2.021	5.085	1.635
	20	6.229	4.687	5.935	4.509	5.640	4.331	5.346	4.153	5.052	3.975	4.699	3.762
	21	6.437	4.453	6.121	4.239	5.806	4.025	5.490	3.812	5.174	3.598	4.795	3.341
	22	6.646	4.219	6.308	3.969	5.971	3.720	5.634	3.470	5.297	3.220	4.892	2.921
	23	6.854	3.985	6.495	3.699	6.136	3.414	5.778	3.128	5.419	2.843	4.988	2.500

### HEATING MODE

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	3.278	3.278	3.710	3.710	3.854	3.854	5.438	5.438	6.302	6.302	6.735	6.735	7.167	7.167
17	3.192	3.192	3.598	3.598	3.776	3.776	5.432	5.432	6.259	6.259	6.697	6.697	7.135	7.135
19	3.106	3.106	3.485	3.485	3.698	3.698	5.425	5.425	6.215	6.215	6.659	6.659	7.103	7.103
21	3.020	3.020	3.401	3.401	3.620	3.620	5.376	5.376	6.171	6.171	6.621	6.621	7.071	7.071
23	2.934	2.934	3.344	3.344	3.542	3.542	5.285	5.285	6.127	6.127	6.583	6.583	7.039	7.039
25	2.848	2.848	3.287	3.287	3.464	3.464	5.194	5.194	6.083	6.083	6.545	6.545	7.007	7.007
27	2.762	2.762	3.230	3.230	3.386	3.386	5.103	5.103	6.039	6.039	6.507	6.507	6.975	6.975
FROST REGION														

## R410A Models (Heatpump)

**MODEL : A5WM 25GR / A5LC 25CR (3 PHASE)**

### COOLING MODE

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	6.762	4.377	6.391	3.963	5.957	3.582	5.523	3.202	5.089	2.821	4.568	2.365
	16	6.971	4.123	6.585	3.751	6.168	3.397	5.751	3.042	5.333	2.687	4.832	2.261
24	16	6.971	5.382	6.585	5.010	6.168	4.655	5.751	4.301	5.333	3.946	4.832	3.520
	17	7.180	5.128	6.779	4.799	6.379	4.470	5.978	4.140	5.577	3.811	5.097	3.416
	18	7.418	4.859	7.023	4.562	6.627	4.264	6.231	3.967	5.836	3.669	5.361	3.312
	19	7.663	4.591	7.306	4.332	6.949	4.074	6.592	3.816	6.153	3.539	5.626	3.208
	20	7.889	4.305	7.476	3.999	7.064	3.692	6.651	3.386	6.239	3.079	5.744	2.712
28	18	7.418	6.118	7.023	5.820	6.627	5.523	6.231	5.225	5.836	4.928	5.361	4.571
	19	7.663	5.850	7.306	5.591	6.949	5.333	6.592	5.074	6.153	4.798	5.626	4.467
	20	7.889	5.564	7.476	5.258	7.064	4.951	6.651	4.645	6.239	4.338	5.744	3.971
	21	8.121	5.280	7.687	4.933	7.252	4.586	6.818	4.238	6.383	3.891	5.862	3.474
	22	8.354	4.996	7.898	4.608	7.441	4.220	6.984	3.831	6.528	3.443	5.980	2.977
	23	8.587	4.712	8.108	4.283	7.630	3.854	7.151	3.425	6.672	2.996	6.098	2.481
30	24	8.819	4.428	8.319	3.958	7.818	3.488	7.318	3.018	6.817	2.548	6.216	1.984
	20	7.889	6.194	7.476	5.887	7.064	5.581	6.651	5.274	6.239	4.968	5.744	4.600
	21	8.121	5.910	7.687	5.562	7.252	5.215	6.818	4.868	6.383	4.520	5.862	4.103
	22	8.354	5.626	7.898	5.238	7.441	4.849	6.984	4.461	6.528	4.073	5.980	3.607
	23	8.587	5.342	8.108	4.913	7.630	4.483	7.151	4.054	6.672	3.625	6.098	3.110
	24	8.819	5.058	8.319	4.588	7.818	4.118	7.318	3.648	6.817	3.178	6.216	2.613

### HEATING MODE

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	4.075	4.075	4.612	4.612	4.791	4.791	6.761	6.761	7.835	7.835	8.373	8.373	8.910	8.910
17	3.968	3.968	4.514	4.514	4.685	4.685	6.753	6.753	7.732	7.732	8.270	8.270	8.807	8.807
19	3.861	3.861	4.416	4.416	4.579	4.579	6.745	6.745	7.628	7.628	8.167	8.167	8.705	8.705
21	3.755	3.755	4.311	4.311	4.473	4.473	6.654	6.654	7.525	7.525	8.063	8.063	8.602	8.602
23	3.648	3.648	4.199	4.199	4.367	4.367	6.481	6.481	7.421	7.421	7.960	7.960	8.499	8.499
25	3.541	3.541	4.086	4.086	4.260	4.260	6.308	6.308	7.318	7.318	7.857	7.857	8.397	8.397
27	3.434	3.434	3.974	3.974	4.154	4.154	6.134	6.134	7.214	7.214	7.754	7.754	8.294	8.294
	FROST REGION													

## R410A Models (Heatpump)

**MODEL : A5WM 311R / A5LC 28CR (3 PHASE)**

### COOLING MODE

ID DB°C	ID WB°C	Outdoor DB°C											
		20		25		30		35		40		46	
		TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
20	15	7.648	4.989	7.255	4.595	6.798	4.252	6.341	3.908	5.884	3.565	5.336	3.153
	16	7.911	4.701	7.503	4.359	7.062	4.043	6.621	3.727	6.180	3.411	5.650	3.032
24	16	7.911	5.947	7.503	5.606	7.062	5.290	6.621	4.974	6.180	4.658	5.650	4.278
	17	8.175	5.659	7.750	5.370	7.325	5.081	6.900	4.793	6.475	4.504	5.965	4.157
	18	8.469	5.347	8.048	5.095	7.627	4.843	7.206	4.591	6.785	4.338	6.280	4.036
	19	8.770	5.014	8.387	4.696	8.004	4.378	7.621	4.060	7.155	3.994	6.595	3.915
	20	9.050	4.705	8.605	4.442	8.159	4.178	7.714	3.915	7.268	3.651	6.734	3.335
	21	9.337	4.400	8.863	4.179	8.438	3.922	7.983	3.666	7.536	3.396	6.280	3.055
28	18	8.469	6.593	8.048	6.341	7.627	6.089	7.206	5.837	6.785	5.585	6.280	5.282
	19	8.770	6.261	8.387	5.942	8.004	5.624	7.621	5.306	7.155	5.240	6.595	5.161
	20	9.050	5.952	8.605	5.688	8.159	5.425	7.714	5.161	7.268	4.898	6.734	4.581
	21	9.337	5.623	8.863	5.311	8.389	4.999	7.915	4.687	7.441	4.375	6.872	4.001
	22	9.625	5.294	9.122	4.934	8.619	4.574	8.116	4.213	7.614	3.853	7.011	3.421
	23	9.912	4.965	9.381	4.556	8.849	4.148	8.318	3.740	7.787	3.331	7.149	2.841
30	24	10.199	4.635	9.639	4.179	9.079	3.722	8.519	3.266	7.959	2.809	7.288	2.261
	20	9.050	6.575	8.605	6.312	8.159	6.048	7.714	5.784	7.268	5.521	6.734	5.204
	21	9.337	6.246	8.863	5.934	8.389	5.622	7.915	5.311	7.441	4.999	6.872	4.624
	22	9.625	5.917	9.122	5.557	8.619	5.197	8.116	4.837	7.614	4.477	7.011	4.044
	23	9.912	5.588	9.381	5.179	8.849	4.771	8.318	4.363	7.787	3.954	7.149	3.464
30	24	10.199	5.259	9.639	4.802	9.079	4.346	8.519	3.889	7.959	3.432	7.288	2.884

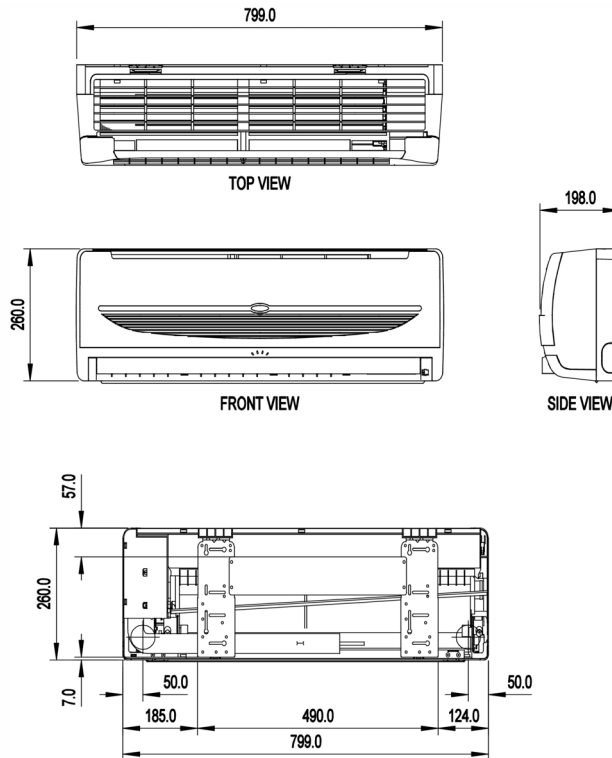
### HEATING MODE

ID DB°C	Outdoor WB°C													
	-9		-6		-5		6		12		15		18	
	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)	TC(kW)	SC(kW)
15	4.607	4.607	5.214	5.214	5.416	5.416	7.643	7.643	8.858	8.858	9.465	9.465	10.072	10.072
17	4.486	4.486	5.121	5.121	5.289	5.289	7.634	7.634	8.703	8.703	9.305	9.305	9.908	9.908
19	4.365	4.365	5.029	5.029	5.162	5.162	7.625	7.625	8.548	8.548	9.146	9.146	9.743	9.743
21	4.244	4.244	4.908	4.908	5.035	5.035	7.499	7.499	8.393	8.393	8.986	8.986	9.579	9.579
23	4.124	4.124	4.759	4.759	4.907	4.907	7.257	7.257	8.239	8.239	8.827	8.827	9.414	9.414
25	4.003	4.003	4.609	4.609	4.780	4.780	7.015	7.015	8.084	8.084	8.667	8.667	9.250	9.250
27	3.882	3.882	4.460	4.460	4.653	4.653	6.773	6.773	7.929	7.929	8.507	8.507	9.086	9.086
	FROST REGION													

## 7. DIMENSIONAL DATA

### INDOOR UNIT

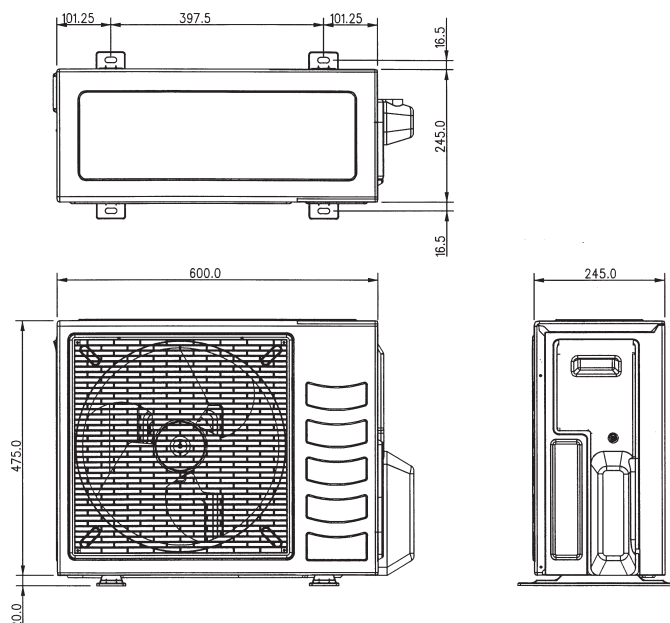
MODEL : AWM 07G / 07GR / 09G / 09GR  
A5WM 07G / 07GR / 09G / 09GR



Note : Dimension in mm

### OUTDOOR UNIT

MODEL : ALC 09C / 09CR  
A5LC 07C / 07CR

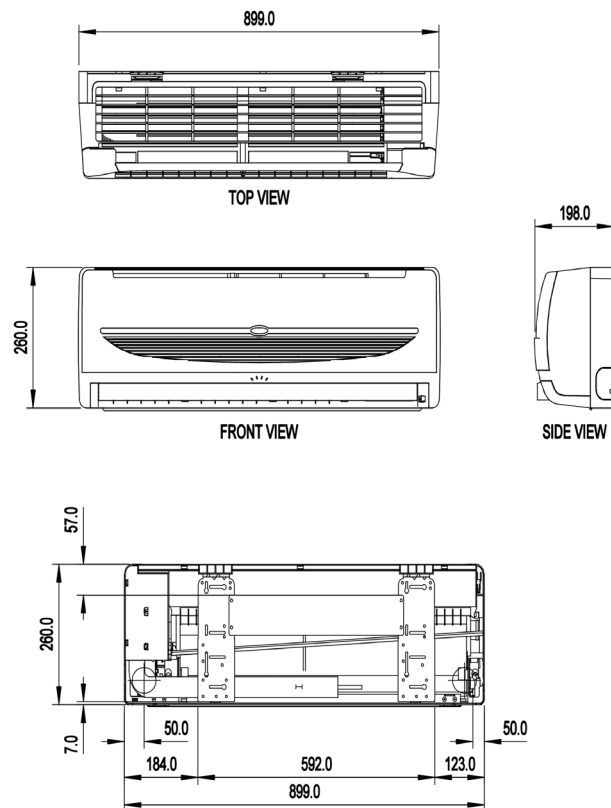


Note : Dimension in mm



## INDOOR UNIT

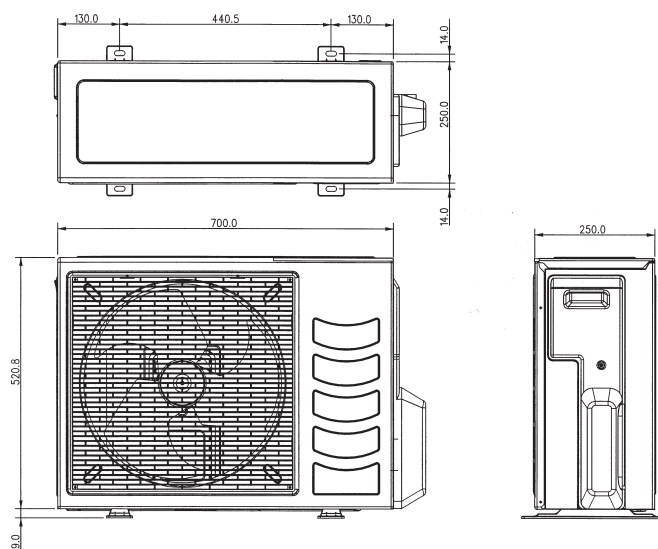
**MODEL : AWM 10G / 10GR / 15G / 15GR  
A5WM 10G / 10GR / 15G / 15GR**



Note : Dimension in mm

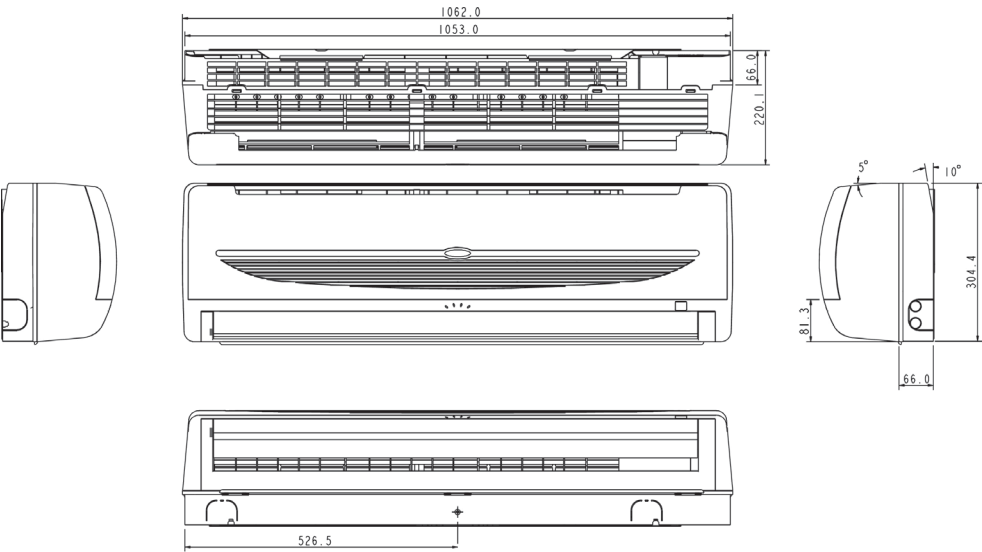
## OUTDOOR UNIT

**MODEL : ALC 10C / 10CR / 15C / 15CR  
A5LC 10C / 10CR / 15C / 15CR**



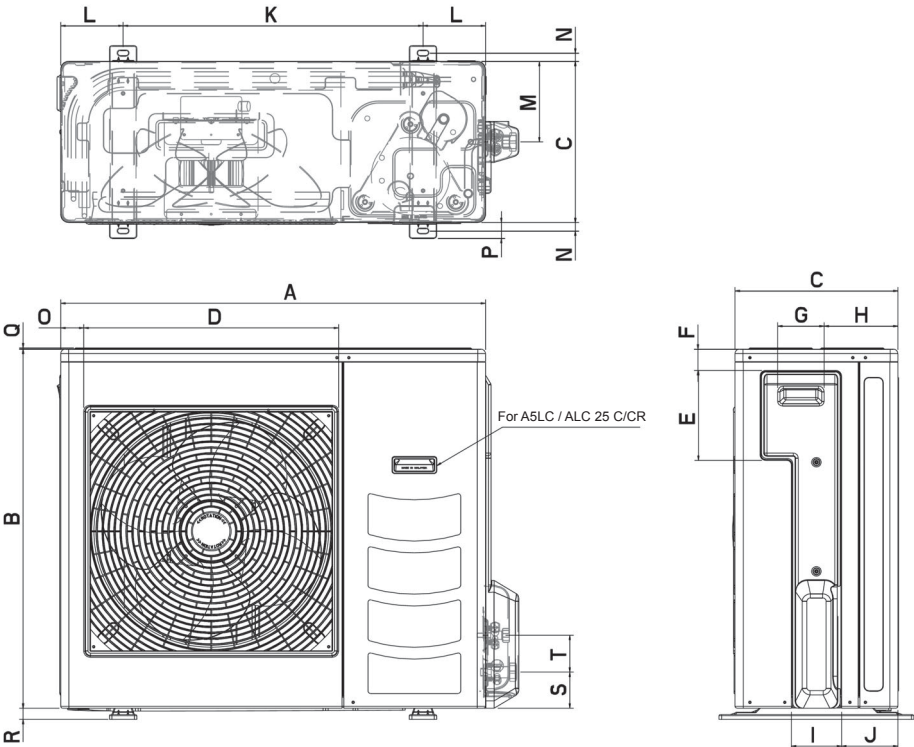
Note : Dimension in mm

**INDOOR UNIT**  
**MODEL : AWM 20G / 20GR / 25G / 25GR**  
**A5WM 20G / 20GR / 25G / 25GR**



Note : Dimension in mm

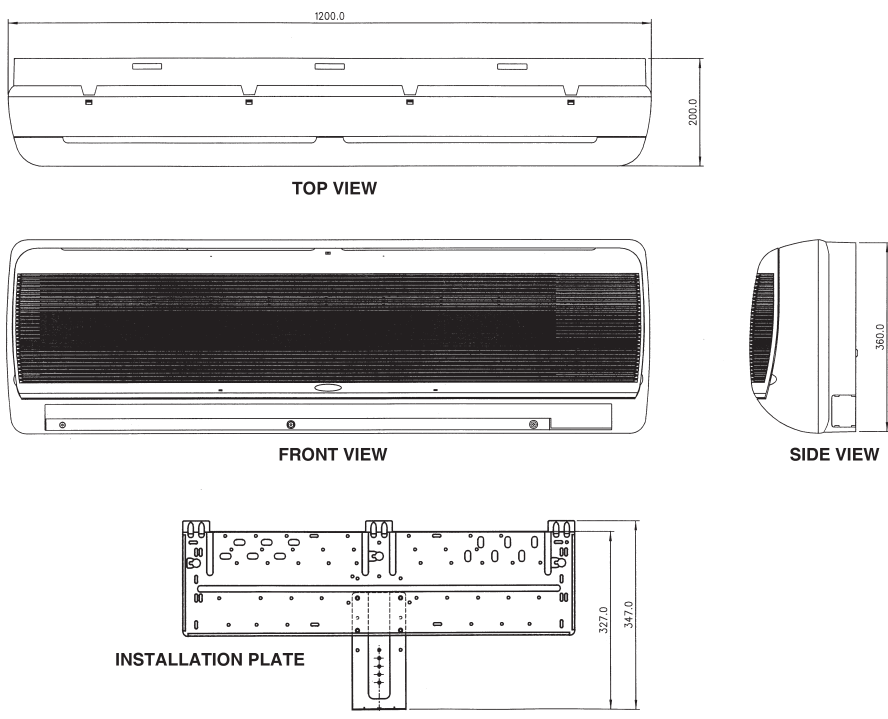
**OUTDOOR UNIT**  
**MODEL : ALC 18C / 20C / 20CR / 25C / 25CR**  
**A5LC 20C / 20CR / 25C / 25CR**



Note : Dimension in mm

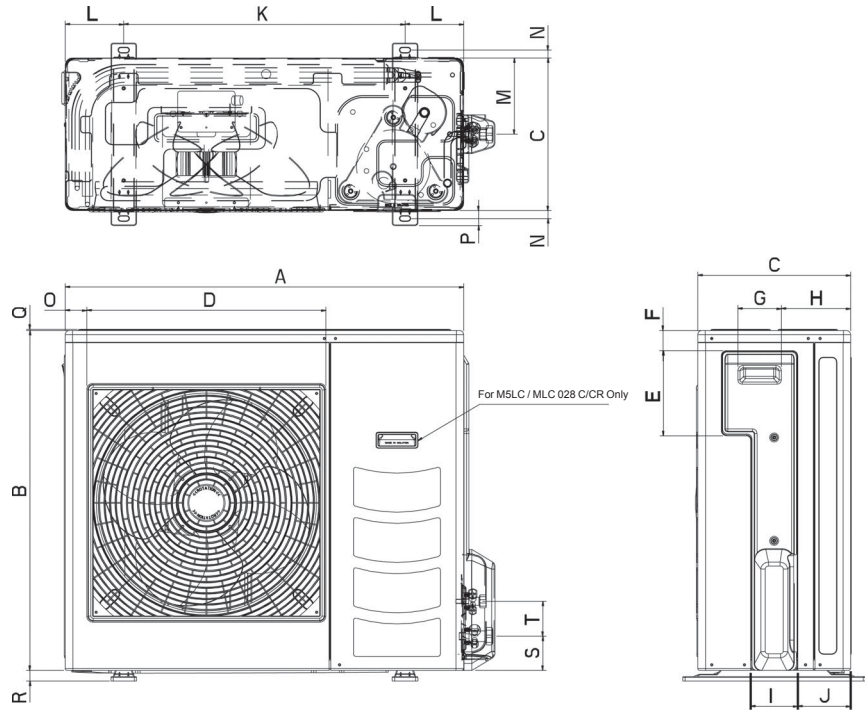
MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
ALC 18C/20C/20CR A5LC 20C/20CR	855	628	328	508	181	44	93	149	101	113	603	126	164	17	49	32	3	23	73	75
ALC 25C/25CR A5LC 25C/25CR	855	730	328	513	182	44	93	149	101	113	603	126	164	17	47	32	3	23	73	75

**INDOOR UNIT**  
**MODEL : A5WM 311 / 301R**



Note : Dimension in mm

**OUTDOOR UNIT**  
**MODEL : A5LC 28C / 28CR**



Note : Dimension in mm

MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
ALC 28C/28CR A5LC 28C/28CR	855	730	328	513	182	44	93	149	101	113	603	126	164	17	47	32	3	23	73	75

## 8. ELECTRICAL DATA

MODEL	INDOOR UNIT		AWM 07G	AWM 09G
	OUTDOOR UNIT		ALC 07C	ALC 09C
INDOOR MOTOR	INSULATION GRADE		E	E
	POWER SOURCE	V/Ph/Hz	220-240/1/50	220-240/1/50
	RATED INPUT POWER	W	23	24
	RATED RUNNING CURRENT	A	0.11	0.11
	MOTOR OUTPUT	W	8	8
	POLES		4	4
OUTDOOR MOTOR	INSULATION GRADE		B	B
	POWER SOURCE	V/Ph/Hz	220-240/1/50	220-240/1/50
	RATED INPUT POWER	W	41	45
	RATED RUNNING CURRENT	A	0.19	0.2
	MOTOR OUTPUT	W	20	20
	POLES		6	6
COMPRESSOR	INSULATION GRADE		E	E
	POWER SOURCE	V/Ph/Hz	220-240/1/50	220-240/1/50
	CAPACITOR	mF	20	30
	RATED INPUT POWER	W	526	850
	RATED RUNNING CURRENT	A	2.45	3.8
	LOCKED ROTOR AMP.	A	11.3	18

1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.

2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO 5151.

MODEL	INDOOR UNIT		AWM 10G	AWM 15G
	OUTDOOR UNIT		ALC 10C	ALC 15C
INDOOR MOTOR	INSULATION GRADE		E	
	POWER SOURCE	V/Ph/Hz	220-240/1/50	
	RATED INPUT POWER	W	26	29
	RATED RUNNING CURRENT	A	0.11	0.13
	MOTOR OUTPUT	W	9	13
	POLES		4	
OUTDOOR MOTOR	INSULATION GRADE		B	
	POWER SOURCE	V/Ph/Hz	220-240/1/50	
	RATED INPUT POWER	W	52	59
	RATED RUNNING CURRENT	A	0.23	0.26
	MOTOR OUTPUT	W	35	35
	POLES		6	
COMPRESSOR	INSULATION GRADE		E	
	POWER SOURCE	V/Ph/Hz	220-240/1/50	
	CAPACITOR	mF	30	30
	RATED INPUT POWER	W	783	1112
	RATED RUNNING CURRENT	A	3.5	5
	LOCKED ROTOR AMP.	A	19	21

1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.

2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO 5151.

MODEL	INDOOR UNIT		AWM 20G	AWM 20G
	OUTDOOR UNIT		ALC 18C	ALC 20C
INDOOR MOTOR	INSULATION GRADE		B	
	POWER SOURCE	V/Ph/Hz	220-240/1/50	
	RATED INPUT POWER	W	47	
	RATED RUNNING CURRENT	A	0.22	
	MOTOR OUTPUT	W	20	
	POLES		4	
OUTDOOR MOTOR	INSULATION GRADE		B	
	POWER SOURCE	V/Ph/Hz	220-240/1/50	
	RATED INPUT POWER	W	120	120
	RATED RUNNING CURRENT	A	0.53	0.53
	MOTOR OUTPUT	W	64	64
	POLES		6	
COMPRESSOR	INSULATION GRADE		E	
	POWER SOURCE	V/Ph/Hz	220-240/1/50	
	CAPACITOR	mF	60	60
	RATED INPUT POWER	W	1643	1640
	RATED RUNNING CURRENT	A	7.37	7.2
	LOCKED ROTOR AMP.	A	32	32

1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.

2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO 5151.

MODEL	INDOOR UNIT		AWM 25G	AWM 311
	OUTDOOR UNIT		ALC 25C	ALC 28C
INDOOR MOTOR	INSULATION GRADE		B	
	POWER SOURCE	V/Ph/Hz	220-240/1/50	
	RATED INPUT POWER	W	66	71
	RATED RUNNING CURRENT	A	0.29	0.30
	MOTOR OUTPUT	W	25	40
	POLES		4	
OUTDOOR MOTOR	INSULATION GRADE		B	
	POWER SOURCE	V/Ph/Hz	220-240/1/50	
	RATED INPUT POWER	W	124	142
	RATED RUNNING CURRENT	A	0.54	0.62
	MOTOR OUTPUT	W	75	75
	POLES		6	
COMPRESSOR	INSULATION GRADE		E	
	POWER SOURCE	V/Ph/Hz	220-240/1/50	
	CAPACITOR	mF	50	50
	RATED INPUT POWER	W	2340	2519
	RATED RUNNING CURRENT	A	10.5	12.2
	LOCKED ROTOR AMP.	A	54	66

1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.

2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO 5151.

MODEL	INDOOR UNIT		AWM 09GR	
	OUTDOOR UNIT		ALC 09CR	
INDOOR MOTOR	INSULATION GRADE		E	
	POWER SOURCE	V/Ph/Hz	220-240/1/50	
	RATED INPUT POWER	W	24	
	RATED RUNNING CURRENT	A	0.11	
	MOTOR OUTPUT	W	8	
	POLES		4	
OUTDOOR MOTOR	INSULATION GRADE		B	
	POWER SOURCE	V/Ph/Hz	220-240/1/50	
	RATED INPUT POWER	W	40	
	RATED RUNNING CURRENT	A	0.18	
	MOTOR OUTPUT	W	20	
	POLES		6	
COMPRESSOR	INSULATION GRADE		E	
	POWER SOURCE	V/Ph/Hz	220-240/1/50	
	CAPACITOR	mF	25	
	RATED INPUT POWER (COOLING)	W	846	
	RATED INPUT POWER (HEATING)	W	686	
	RATED RUNNING CURRENT (COOLING)	A	3.7	
	RATED RUNNING CURRENT (HEATING)	A	3.1	
	LOCKED ROTOR AMP.	A	18	

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MODEL	INDOOR UNIT		AWM 10GR	
	OUTDOOR UNIT		ALC 10CR	
INDOOR MOTOR	INSULATION GRADE		E	
	POWER SOURCE	V/Ph/Hz	220-240/1/50	
	RATED INPUT POWER	W	26	29
	RATED RUNNING CURRENT	A	0.11	0.13
	MOTOR OUTPUT	W	9	13
	POLES		4	
OUTDOOR MOTOR	INSULATION GRADE		B	
	POWER SOURCE	V/Ph/Hz	220-240/1/50	
	RATED INPUT POWER	W	52	59
	RATED RUNNING CURRENT	A	0.23	0.26
	MOTOR OUTPUT	W	35	35
	POLES		6	6
COMPRESSOR	INSULATION GRADE		E	
	POWER SOURCE	V/Ph/Hz	220-240/1/50	
	CAPACITOR	mF	30	35
	RATED INPUT POWER (COOLING)	W	759	1012
	RATED INPUT POWER (HEATING)	W	679	892
	RATED RUNNING CURRENT (COOLING)	A	3.4	4.7
	RATED RUNNING CURRENT (HEATING)	A	3.0	4.1
	LOCKED ROTOR AMP.	A	19	24

1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.

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MODEL	INDOOR UNIT		AWM 20GR	AWM 20GR
	OUTDOOR UNIT		ALC 18CR	ALC 20CR
INDOOR MOTOR	INSULATION GRADE		B	
	POWER SOURCE	V/Ph/Hz	220-240/1/50	
	RATED INPUT POWER	W	47	
	RATED RUNNING CURRENT	A	0.22	
	MOTOR OUTPUT	W	20	
	POLES		4	
OUTDOOR MOTOR	INSULATION GRADE		B	
	POWER SOURCE	V/Ph/Hz	220-240/1/50	
	RATED INPUT POWER	W	120	120
	RATED RUNNING CURRENT	A	0.53	0.53
	MOTOR OUTPUT	W	64	75
	POLES		6	
COMPRESSOR	INSULATION GRADE		E	
	POWER SOURCE	V/Ph/Hz	220-240/1/50	
	CAPACITOR	mF	60	60
	RATED INPUT POWER (COOLING)	W	1653	1640
	RATED INPUT POWER (HEATING)	W	1493	1590
	RATED RUNNING CURRENT (COOLING)	A	7.4	7.2
	RATED RUNNING CURRENT (HEATING)	A	6.7	7
	LOCKED ROTOR AMP.	A	32	

1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.

2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO 5151.

MODEL	INDOOR UNIT		AWM 25GR	AWM 311R
	OUTDOOR UNIT		ALC 25CR	ALC 28CR
INDOOR MOTOR	INSULATION GRADE		B	B
	POWER SOURCE	V/Ph/Hz	220-240/1/50	
	RATED INPUT POWER	W	66	71
	RATED RUNNING CURRENT	A	0.29	0.30
	MOTOR OUTPUT	W	25	
	POLES		4	
OUTDOOR MOTOR	INSULATION GRADE		B	
	POWER SOURCE	V/Ph/Hz	220-240/1/50	
	RATED INPUT POWER	W	124	142
	RATED RUNNING CURRENT	A	0.54	0.62
	MOTOR OUTPUT	W	75	
	POLES		6	
COMPRESSOR	INSULATION GRADE			E
	POWER SOURCE	V/Ph/Hz	220-240/1/50	
	CAPACITOR	mF	50	50
	RATED INPUT POWER (COOLING)	W	2340	2570
	RATED INPUT POWER (HEATING)	W	2260	2610
	RATED RUNNING CURRENT (COOLING)	A	10.49	12.3
	RATED RUNNING CURRENT (HEATING)	A	10.24	12.4
	LOCKED ROTOR AMP.	A	54	66

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MODEL	INDOOR UNIT		A5WM 07G	A5WM 09G
	OUTDOOR UNIT		A5LC 07C	A5LC 10C
INDOOR MOTOR	INSULATION GRADE		E	
	POWER SOURCE	V/Ph/Hz	220-240/1/50	
	RATED INPUT POWER	W	24	
	RATED RUNNING CURRENT	A	0.11	
	MOTOR OUTPUT	W	8	
	POLES		4	
OUTDOOR MOTOR	INSULATION GRADE		B	
	POWER SOURCE	V/Ph/Hz	220-240/1/50	
	RATED INPUT POWER	W	40	52
	RATED RUNNING CURRENT	A	0.18	0.23
	MOTOR OUTPUT	W	20	35
	POLES		6	
COMPRESSOR	INSULATION GRADE		E	E
	POWER SOURCE	V/Ph/Hz	220-240/1/50	
	CAPACITOR	mF	15	25
	RATED INPUT POWER	W	556	789
	RATED RUNNING CURRENT	A	2.6	3.6
	LOCKED ROTOR AMP.	A	12	19

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MODEL	INDOOR UNIT		A5WM 10G	A5WM 15G
	OUTDOOR UNIT		A5LC 10C	A5LC 15C
INDOOR MOTOR	INSULATION GRADE		E	
	POWER SOURCE	V/Ph/Hz	220-240/1/50	
	RATED INPUT POWER	W	26	29
	RATED RUNNING CURRENT	A	0.11	0.13
	MOTOR OUTPUT	W	9	13
	POLES		4	4
OUTDOOR MOTOR	INSULATION GRADE		B	
	POWER SOURCE	V/Ph/Hz	220-240/1/50	
	RATED INPUT POWER	W	52	59
	RATED RUNNING CURRENT	A	0.23	0.26
	MOTOR OUTPUT	W	35	35
	POLES		6	6
COMPRESSOR	INSULATION GRADE		E	
	POWER SOURCE	V/Ph/Hz	220-240/1/50	
	CAPACITOR	mF	25	30
	RATED INPUT POWER	W	789	1142
	RATED RUNNING CURRENT	A	3.6	5.1
	LOCKED ROTOR AMP.	A	19	24

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MODEL	INDOOR UNIT		A5WM 20G	A5WM 25G
	OUTDOOR UNIT		A5LC 20C	A5LC 25C
INDOOR MOTOR	INSULATION GRADE		B	
	POWER SOURCE	V/Ph/Hz	220-240/1/50	
	RATED INPUT POWER	W	47	66
	RATED RUNNING CURRENT	A	0.22	0.29
	MOTOR OUTPUT	W	20	25
	POLES		4	
OUTDOOR MOTOR	INSULATION GRADE		B	
	POWER SOURCE	V/Ph/Hz	220-240/1/50	
	RATED INPUT POWER	W	120	132
	RATED RUNNING CURRENT	A	0.53	0.58
	MOTOR OUTPUT	W	64	75
	POLES		6	
COMPRESSOR	INSULATION GRADE		E	
	POWER SOURCE	V/Ph/Hz	220 - 240 / 1 / 50 / <380 - 415 / 3 / 50>	
	CAPACITOR	mF	45 / -	45 / -
	RATED INPUT POWER	W	1485 / <1496>	1717 / <1997>
	RATED RUNNING CURRENT	A	6.5 / <3.0>	7.5 / <3.9>
	LOCKED ROTOR AMP.	A	27 / <19>	32 / <26>

1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.

2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO 5151.

MODEL	INDOOR UNIT		A5WM 311
	OUTDOOR UNIT		A5LC 28C
INDOOR MOTOR	INSULATION GRADE		B
	POWER SOURCE	V/Ph/Hz	220-240/1/50
	RATED INPUT POWER	W	71
	RATED RUNNING CURRENT	A	0.30
	MOTOR OUTPUT	W	IP24
	POLES		4
OUTDOOR MOTOR	INSULATION GRADE		B
	POWER SOURCE	V/Ph/Hz	220-240/1/50
	RATED INPUT POWER	W	142
	RATED RUNNING CURRENT	A	0.62
	MOTOR OUTPUT	W	75
	POLES		6
COMPRESSOR	INSULATION GRADE		E
	POWER SOURCE	V/Ph/Hz	220 - 240 / 1 / 50 / <380 - 415 / 3 / 50>
	CAPACITOR	mF	45 / -
	RATED INPUT POWER	W	2360 / <2423>
	RATED RUNNING CURRENT	A	11.27 / <4.29>
	LOCKED ROTOR AMP.	A	63 / <26>

1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.

2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO 5151.

MODEL	INDOOR UNIT		A5WM 07GR	A5WM 09GR
	OUTDOOR UNIT		A5LC 07CR	A5LC 10CR
INDOOR MOTOR	INSULATION GRADE		E	
	POWER SOURCE	V/Ph/Hz	220-240/1/50	
	RATED INPUT POWER	W	24	
	RATED RUNNING CURRENT	A	0.11	
	MOTOR OUTPUT	W	8	
	POLES		4	
OUTDOOR MOTOR	INSULATION GRADE		B	
	POWER SOURCE	V/Ph/Hz	220-240/1/50	
	RATED INPUT POWER	W	40	52
	RATED RUNNING CURRENT	A	0.18	0.23
	MOTOR OUTPUT	W	20	
	POLES		6	
COMPRESSOR	INSULATION GRADE		E	E
	POWER SOURCE	V/Ph/Hz	220-240/1/50	
	CAPACITOR	mF	15	25
	RATED INPUT POWER (COOLING)	W	616	784
	RATED INPUT POWER (HEATING)	W	486	669
	RATED RUNNING CURRENT (COOLING)	A	2.8	3.6
	RATED RUNNING CURRENT (HEATING)	A	2.4	3.1
	LOCKED ROTOR AMP.	A	12	19

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MODEL	INDOOR UNIT		A5WM 10GR	A5WM 15GR
	OUTDOOR UNIT		A5LC 10CR	A5LC 15CR
INDOOR MOTOR	INSULATION GRADE		E	
	POWER SOURCE	V/Ph/Hz	220-240/1/50	
	RATED INPUT POWER	W	26	29
	RATED RUNNING CURRENT	A	0.11	0.13
	MOTOR OUTPUT	W	9	13
	POLES		4	
OUTDOOR MOTOR	INSULATION GRADE		B	
	POWER SOURCE	V/Ph/Hz	220-240/1/50	
	RATED INPUT POWER	W	52	59
	RATED RUNNING CURRENT	A	0.23	0.26
	MOTOR OUTPUT	W	35	35
	POLES		6	
COMPRESSOR	INSULATION GRADE		E	
	POWER SOURCE	V/Ph/Hz	220-240/1/50	
	CAPACITOR	mF	25	35
	RATED INPUT POWER (COOLING)	W	789	1142
	RATED INPUT POWER (HEATING)	W	669	992
	RATED RUNNING CURRENT (COOLING)	A	4	5.23
	RATED RUNNING CURRENT (HEATING)	A	3	4.59
	LOCKED ROTOR AMP.	A	19	24

1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.

2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO 5151.

MODEL	INDOOR UNIT		A5WM 20GR	A5WM 25GR
	OUTDOOR UNIT		A5LC 20CR	A5LC 25CR
INDOOR MOTOR	INSULATION GRADE		B	
	POWER SOURCE	V/Ph/Hz	220-240/1/50	
	RATED INPUT POWER	W	47	66
	RATED RUNNING CURRENT	A	0.22	0.29
	MOTOR OUTPUT	W	20	25
	POLES		4	
OUTDOOR MOTOR	INSULATION GRADE		B	
	POWER SOURCE	V/Ph/Hz	220-240/1/50	
	RATED INPUT POWER	W	120	132
	RATED RUNNING CURRENT	A	0.53	0.58
	MOTOR OUTPUT	W	64	75
	POLES		6	
COMPRESSOR	INSULATION GRADE		E	
	POWER SOURCE	V/Ph/Hz	220 - 240 / 1 / 50 / <380 - 415 / 3 / 50>	
	CAPACITOR	mF	45 / -	50 / -
	RATED INPUT POWER (COOLING)	W	1463 / <1496>	1662 / <1997>
	RATED INPUT POWER (HEATING)	W	1379 / <1463>	1672 / <1908>
	RATED RUNNING CURRENT (COOLING)	A	6.4 / <3.0>	7.5 / <3.9>
	RATED RUNNING CURRENT (HEATING)	A	6.1 / <2.9>	7.5 / <3.7>
	LOCKED ROTOR AMP.	A	27 / <19>	26 / <26>

1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.

2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO 5151.

MODEL	INDOOR UNIT		A5WM 301R
	OUTDOOR UNIT		A5LC 28CR
INDOOR MOTOR	INSULATION GRADE		B
	POWER SOURCE	V/Ph/Hz	220-240/1/50
	RATED INPUT POWER	W	71
	RATED RUNNING CURRENT	A	0.30
	MOTOR OUTPUT	W	IP24
	POLES		4
OUTDOOR MOTOR	INSULATION GRADE		B
	POWER SOURCE	V/Ph/Hz	220-240/1/50
	RATED INPUT POWER	W	142
	RATED RUNNING CURRENT	A	0.62
	MOTOR OUTPUT	W	75
	POLES		6
COMPRESSOR	INSULATION GRADE		E
	POWER SOURCE	V/Ph/Hz	220 - 240 / 1 / 50 / <380 - 415 / 3 / 50>
	CAPACITOR	mF	45 / -
	RATED INPUT POWER (COOLING)	W	2360 / <2423>
	RATED INPUT POWER (HEATING)	W	2242 / 2086>
	RATED RUNNING CURRENT (COOLING)	A	11.27 / 4.29>
	RATED RUNNING CURRENT (HEATING)	A	10.7 / <3.86>
	LOCKED ROTOR AMP.	A	63 / <26>

1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.

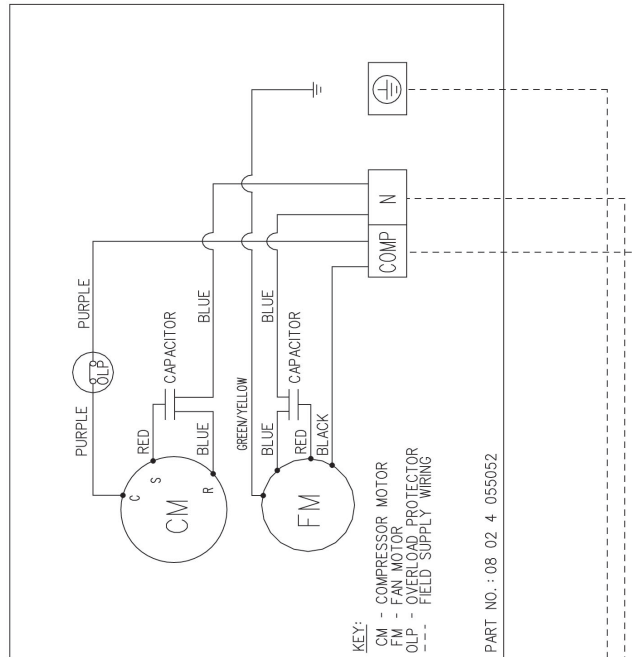
2) ALL UNITS ARE BEING TESTED AND COMPLY TO ISO 5151.

## 9. WIRING DIAGRAMS

### COOLING ONLY MODELS

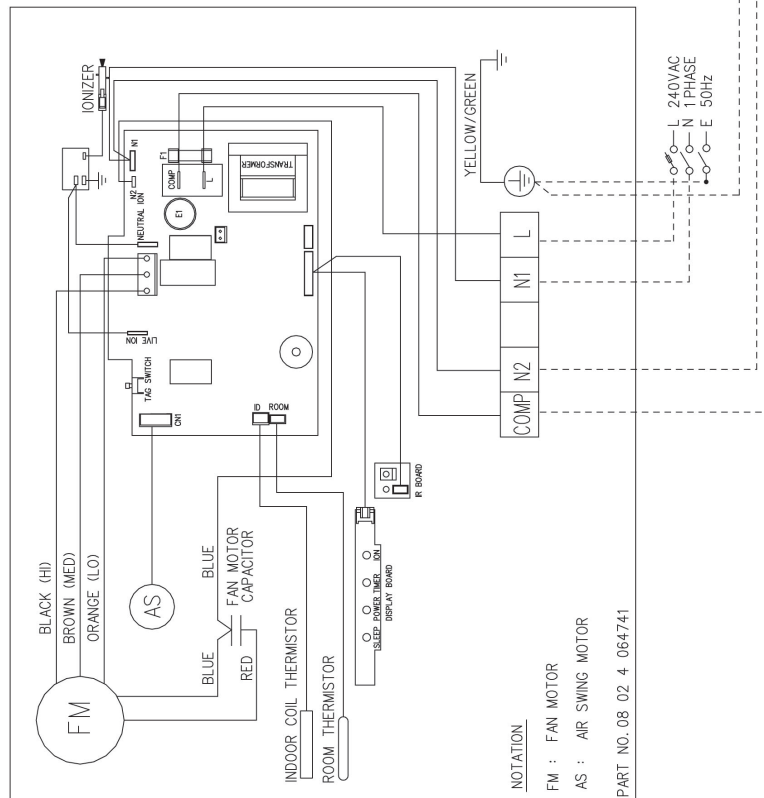
#### OUTDOOR UNIT

MODEL : ALC 09C / 010C , A5LC 07C / 10C / 15C



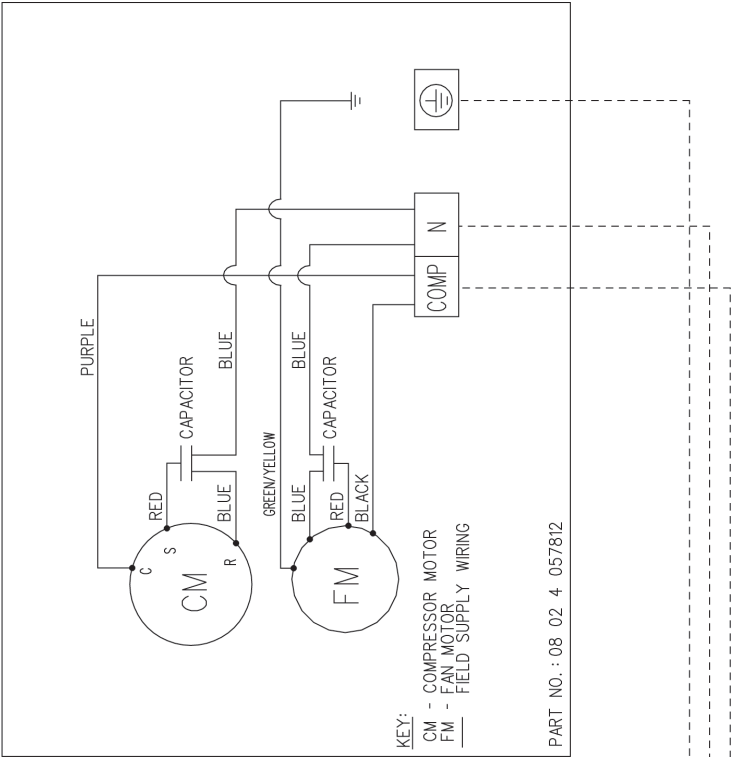
#### INDOOR UNIT

MODEL : AWM 09G / 10G , A5WM 07G / 09G / 10G / 15G (WITH IONIZER)

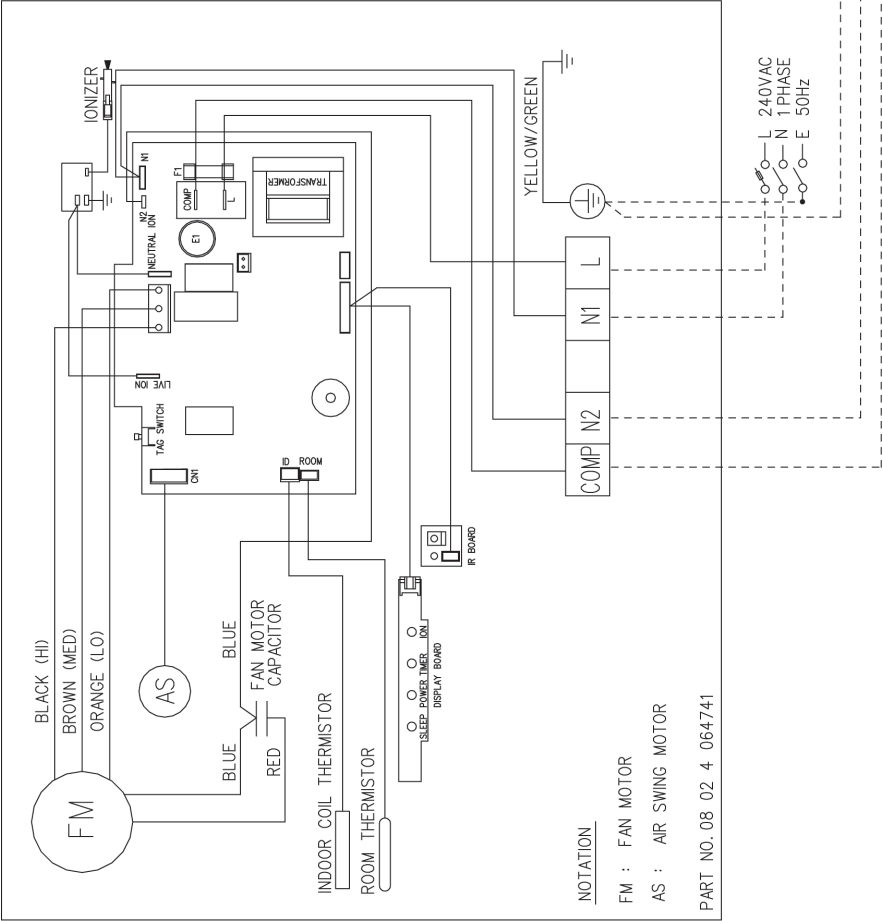


COOLING ONLY MODELS

OUTDOOR UNIT  
MODEL : ALC 15C



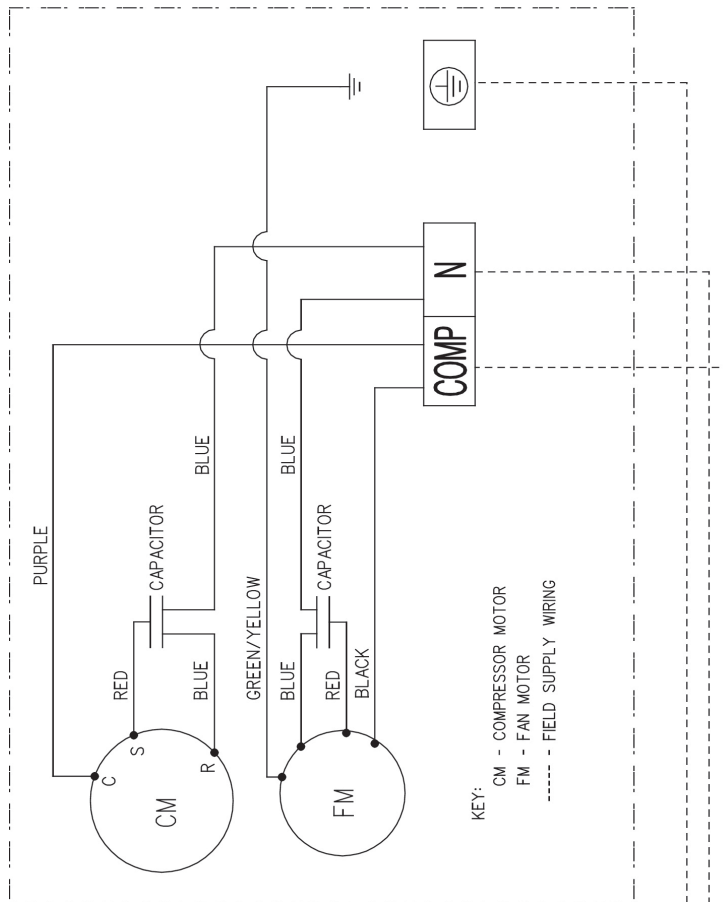
INDOOR UNIT  
MODEL : AWM 15G (WITH IONIZER)



## COOLING ONLY MODELS

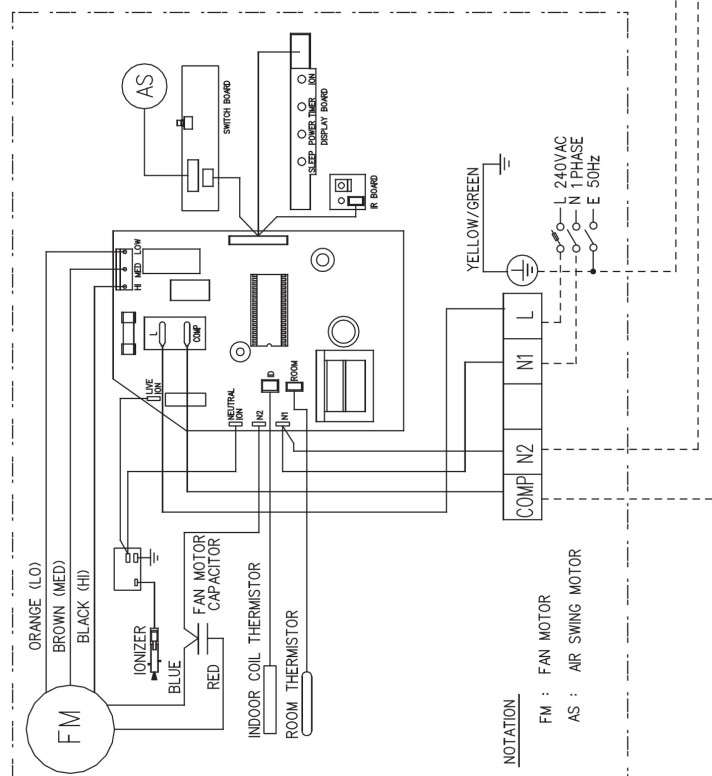
### OUTDOOR UNIT

MODEL : ALC / A5LC 20C / 25C



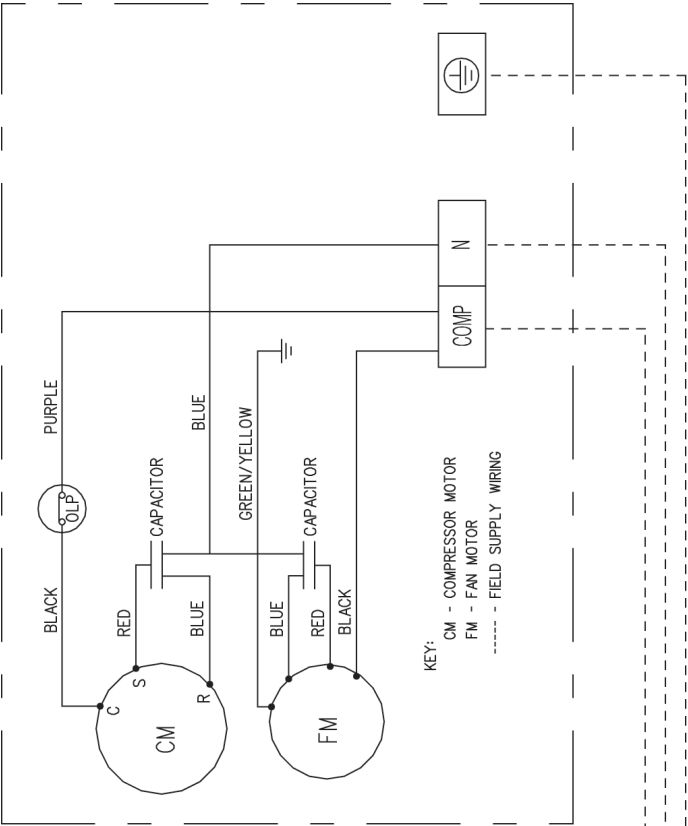
### INDOOR UNIT

MODEL : AWM / A5WM 20G / 25G (WITH IONIZER)

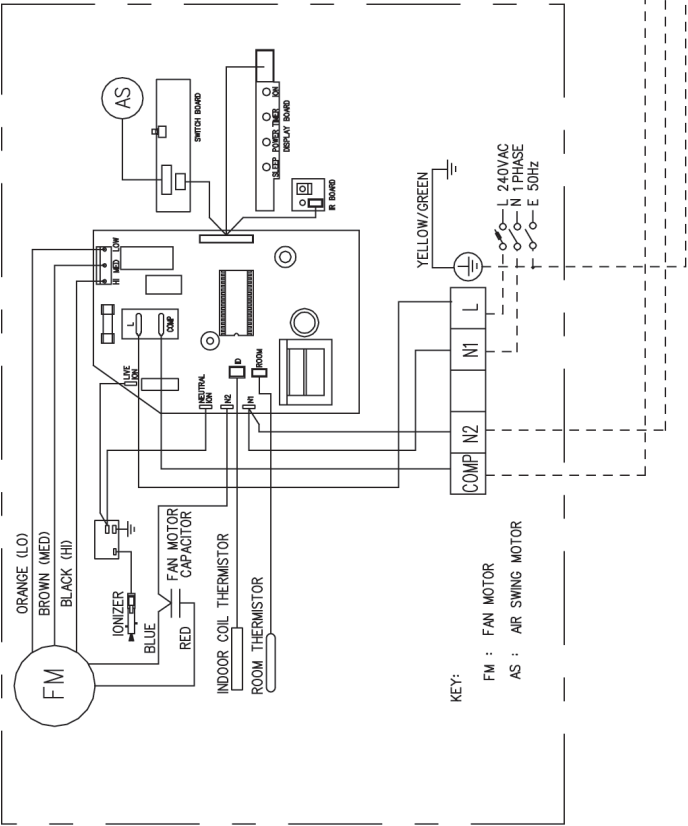


COOLING ONLY MODELS

OUTDOOR UNIT  
MODEL : ALC 18C

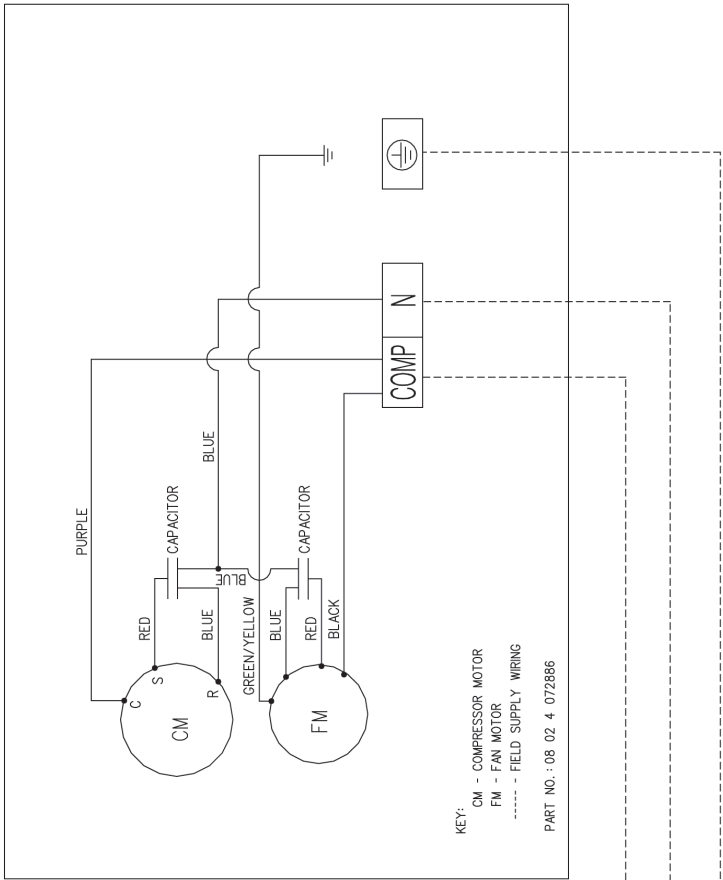


INDOOR UNIT  
MODEL : AWM 20G (WITH IONIZER)

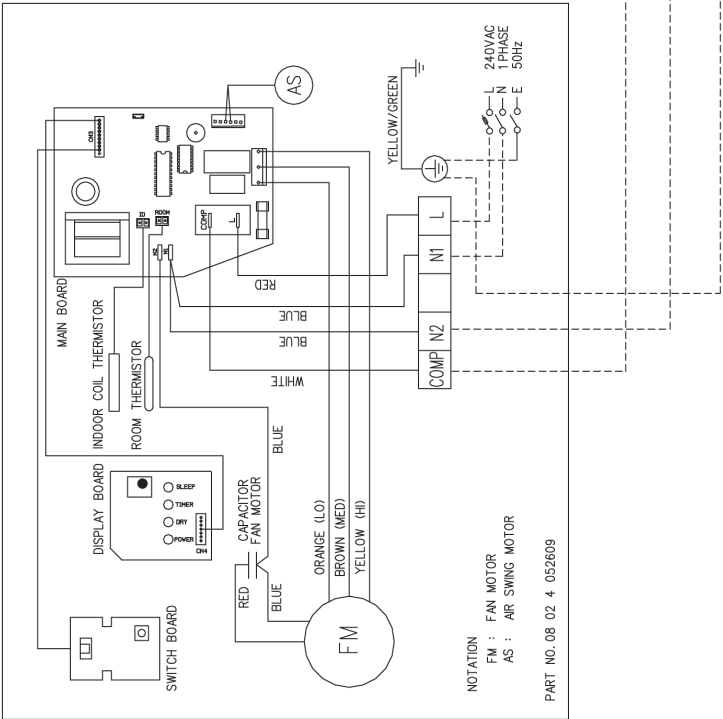


COOLING ONLY MODELS

OUTDOOR UNIT  
MODEL : ALC 28C, A5LC 28C



INDOOR UNIT  
MODEL : AWM 311, A5WM 311



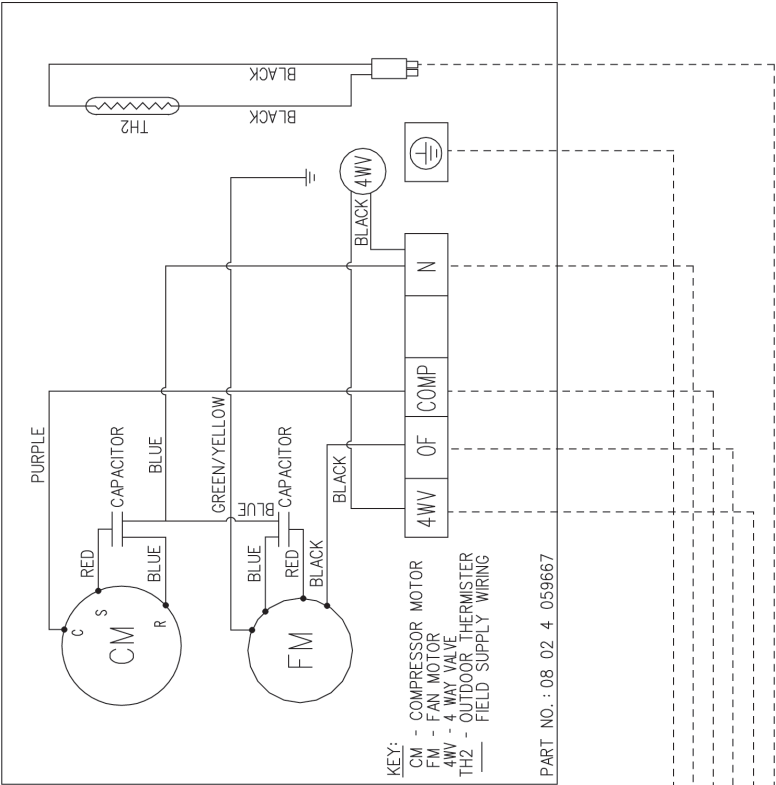


**MODEL : ALC 09CR / 10CR , A5LC 07CR / 10CR / 15CR**

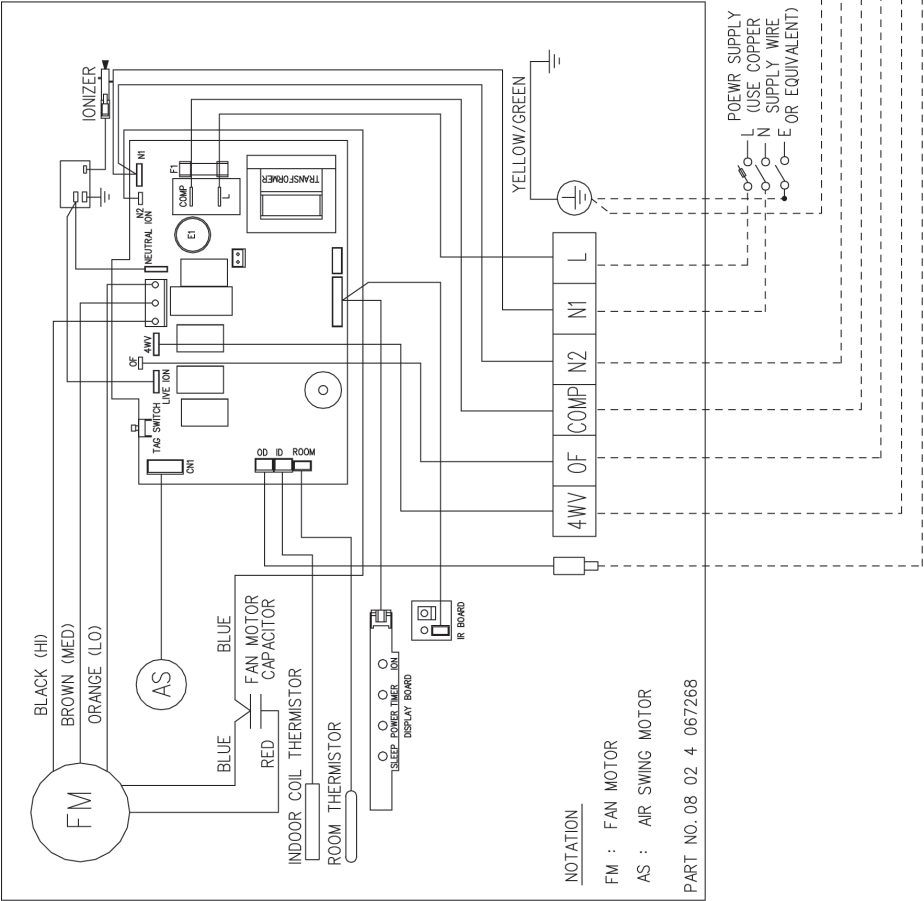


HEATPUMP MODELS

OUTDOOR UNIT  
MODEL : ALC 15CR



INDOOR UNIT  
MODEL : AWM 15GR (WITH IONIZER)



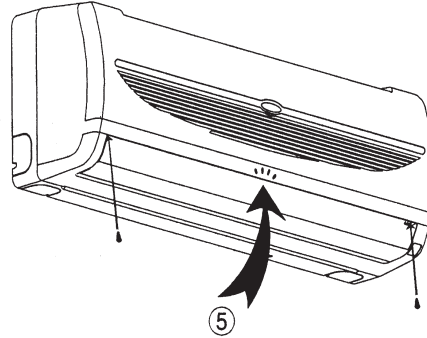
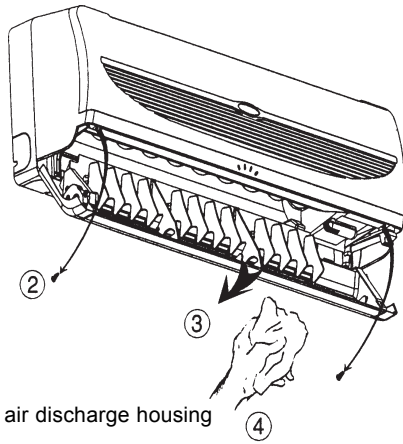
**MODEL : ALC / A5LC 20CR / 25CR**



**MODEL : ALC 28CR, A5LC 28CR**



## 10. SERVICING AND MAINTENANCE



- ① Off the unit
- ② Unscrew the air discharge housing
- ③ Flip open the air discharge housing
- ④ Clean the blower
- ⑤ Close the air discharge housing and tighten it with screw

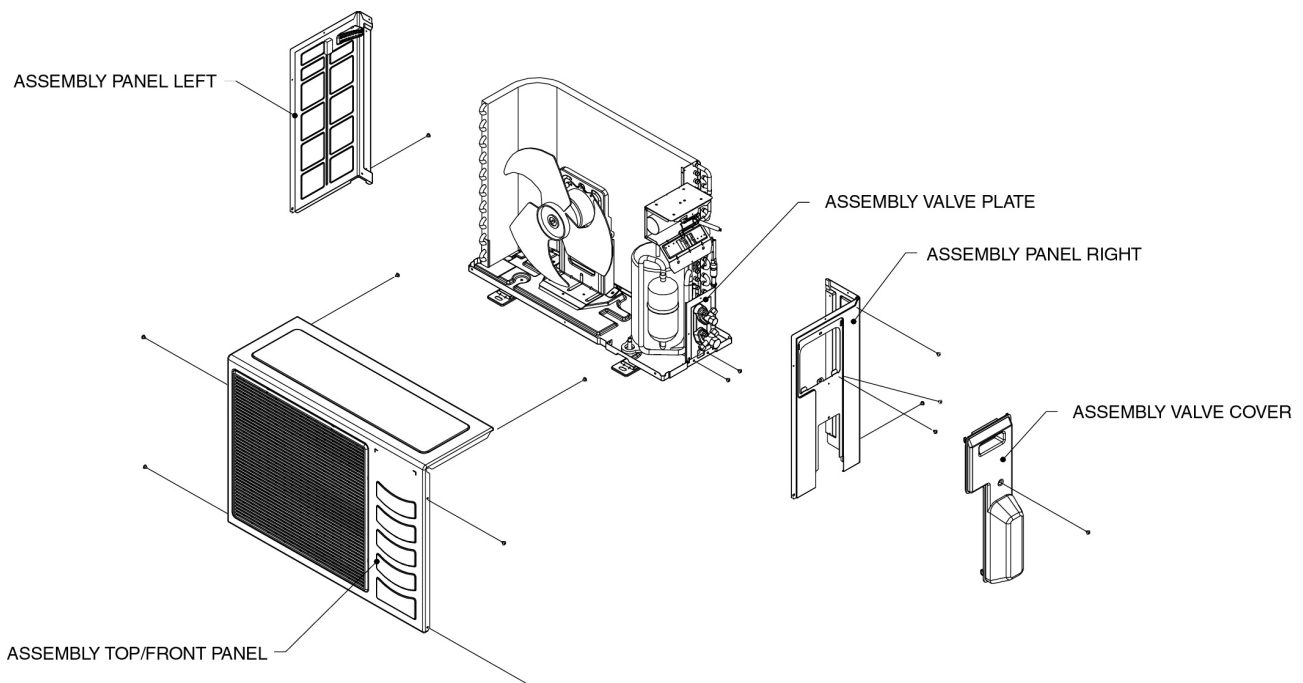
The unit is designed to give a long life operation with minimum maintenance required. However, it should be regularly checked and the following items should be given due attention.

Components	Maintenance Procedure	Recommended Schedule
Indoor Air Filter	<ol style="list-style-type: none"> <li>Remove any dust adhering on the filter by using a vacuum cleaner or wash in lukewarm water (below 40°C/104°F) with a neutral cleaning detergent.</li> <li>Rinse the filter well and dry before placing it back onto the unit.</li> <li>Do not use gasoline, volatile substances or chemicals to clean the filter.</li> </ol>	At least once every 2 weeks. More frequently if necessary.
Indoor Unit	<ol style="list-style-type: none"> <li>Clean any dirt or dust on the grille or panel by wiping it with a soft cloth soaked in lukewarm water (below 40°C/104°F) and a neutral detergent solution.</li> <li>Do not use gasoline, volatile substances or chemicals to clean the indoor unit.</li> </ol>	At least once every 2 weeks. More frequently if necessary
Condensate Drain Pan and Pipe	<ol style="list-style-type: none"> <li>Check and clean.</li> </ol>	Every 3 months.
Indoor Fan	<ol style="list-style-type: none"> <li>Check for unusual noise.</li> </ol>	As necessary.
Indoor/Outdoor Coil	<ol style="list-style-type: none"> <li>Check and remove dirt which are clogged between fins.</li> <li>Check and remove obstacles which hinder air flow in and out of indoor/outdoor unit.</li> </ol>	Every month. Every month.
Electrical	<ol style="list-style-type: none"> <li>Check voltage, current and wiring.</li> <li>Check faulty contacts caused by loose connections, foreign matters, etc.</li> </ol>	Every 2 months. Every 2 months.
Compressor	<ol style="list-style-type: none"> <li>No maintenance needed if refrigerant circuit remains sealed. However, check for refrigerant leak at joints and fittings.</li> </ol>	Every 6 months.
Compressor Lubrication	<ol style="list-style-type: none"> <li>Oil is factory charged. Not necessary to add oil if circuit remains sealed.</li> </ol>	No maintenance required.
Fan Motors Lubrication	<ol style="list-style-type: none"> <li>All motors pre-lubricated and sealed at factory.</li> </ol>	No maintenance required.

## PRE START UP MAINTENANCE (AFTER EXTENDED SHUTDOWN)

- Inspect thoroughly and clean indoor and outdoor units.
- Clean or replace air filters.
- Clean condensate drain line.
- Clean clogged indoor and outdoor coils.
- Check fan imbalance before operation.
- Tighten all wiring connections and panels.
- Check for refrigerant leakage.

The design of the ALC outdoor series allows servicing to be carried out readily and easily. The removal of the top/front and back panel make almost every part accessible.



Under normal circumstances, these outdoor units only require a check and cleaning of air intake coil surface once quarterly. However, if a unit is installed in areas subjected to much oil mist and dust, the coils must be regularly cleaned by qualified Air Conditioner Service Technicians to ensure sufficient heat exchange and proper operation. Otherwise, the systems life span may be shortened.

### CAUTION!

Do not charge OXYGEN, ACETYLENE OR OTHER FLAMMABLE and poisonous gases into the unit when performing a leakage test or an airtight test. These gases could cause severe explosion and damage if exposed to high temperature and pressure.

It is recommended that only nitrogen or refrigerant be charged when performing the leakage or airtight test.

## 11. TROUBLESHOOTING

When a malfunction of the air conditioner unit is detected, immediately switch off the main power supply before proceeding with the following troubleshooting procedures.

The following are common fault conditions and simple troubleshooting tips. If any other fault conditions which are not listed occur, contact your nearest local dealer. DO NOT attempt to troubleshoot the unit by yourself.

No	Fault conditions	Possible causes / corrective actions
1	The air conditioner unit will not resume after power failure.	<ul style="list-style-type: none"> <li>The auto restart function is not functioning. Please turn on the unit with the wireless / wired controller.</li> </ul>
2	The compressor does not operate 3 minutes after the air conditioner unit is started.	<ul style="list-style-type: none"> <li>Protection against frequent starting.</li> <li>Wait for 3 or 4 minutes for the compressor to start operating by it self.</li> </ul>
3	The airflow is too slow or room cannot be cooled sufficiently.	<ul style="list-style-type: none"> <li>The air filter is dirty.</li> <li>The doors and windows are opened.</li> <li>The air suction and discharge of both indoor and outdoor units are clogged or blocked.</li> <li>The regulated temperature or temperature setting is not low enough.</li> </ul>
4	Discharge airflow has bad odor.	<ul style="list-style-type: none"> <li>Cigarettes, smoke particles, perfume and others, which might have adhered onto the coil, may cause odor.</li> <li>Contact your nearest dealer.</li> </ul>
5	Condensation on the front air grille of the indoor unit.	<ul style="list-style-type: none"> <li>This is caused by air humidity after an extended period of operation.</li> <li>The set temperature is too low. Increase the temperature setting and operate the unit at high fan speed.</li> </ul>
6	Water flowing out from the air conditioner.	<ul style="list-style-type: none"> <li>Switch off the unit and contact your nearest dealer. This might be due to tilted installation.</li> </ul>
7	Hissing airflow sound from the air conditioner unit during operation.	<ul style="list-style-type: none"> <li>Liquid refrigerant flowing into the evaporator coil.</li> </ul>
8	The wireless controller display is dim.	<ul style="list-style-type: none"> <li>The batteries are discharged.</li> <li>The batteries are not correctly inserted.</li> <li>The assembly is not good.</li> </ul>
9	Compressor operates continuously.	<ul style="list-style-type: none"> <li>Dirty air filter. Clean the air filter.</li> <li>Temperature setting too low (cooling). Use higher temperature setting.</li> <li>Temperature setting too high (heating), Use lower temperature setting.</li> </ul>
10	No cool air comes out during cooling cycle, or no hot air comes out during heating cycle.	<ul style="list-style-type: none"> <li>Temperature setting too high (cooling). Use lower temperature setting.</li> <li>Temperature setting too low (heating). Use higher temperature setting.</li> </ul>
11	On heating cycle, warm air does not come out.	<ul style="list-style-type: none"> <li>Unit is in defrost mode. Heating operation will resume after defrost cycle ends.</li> </ul>

## Diagnostic Guidelines

By means of pressure reading:

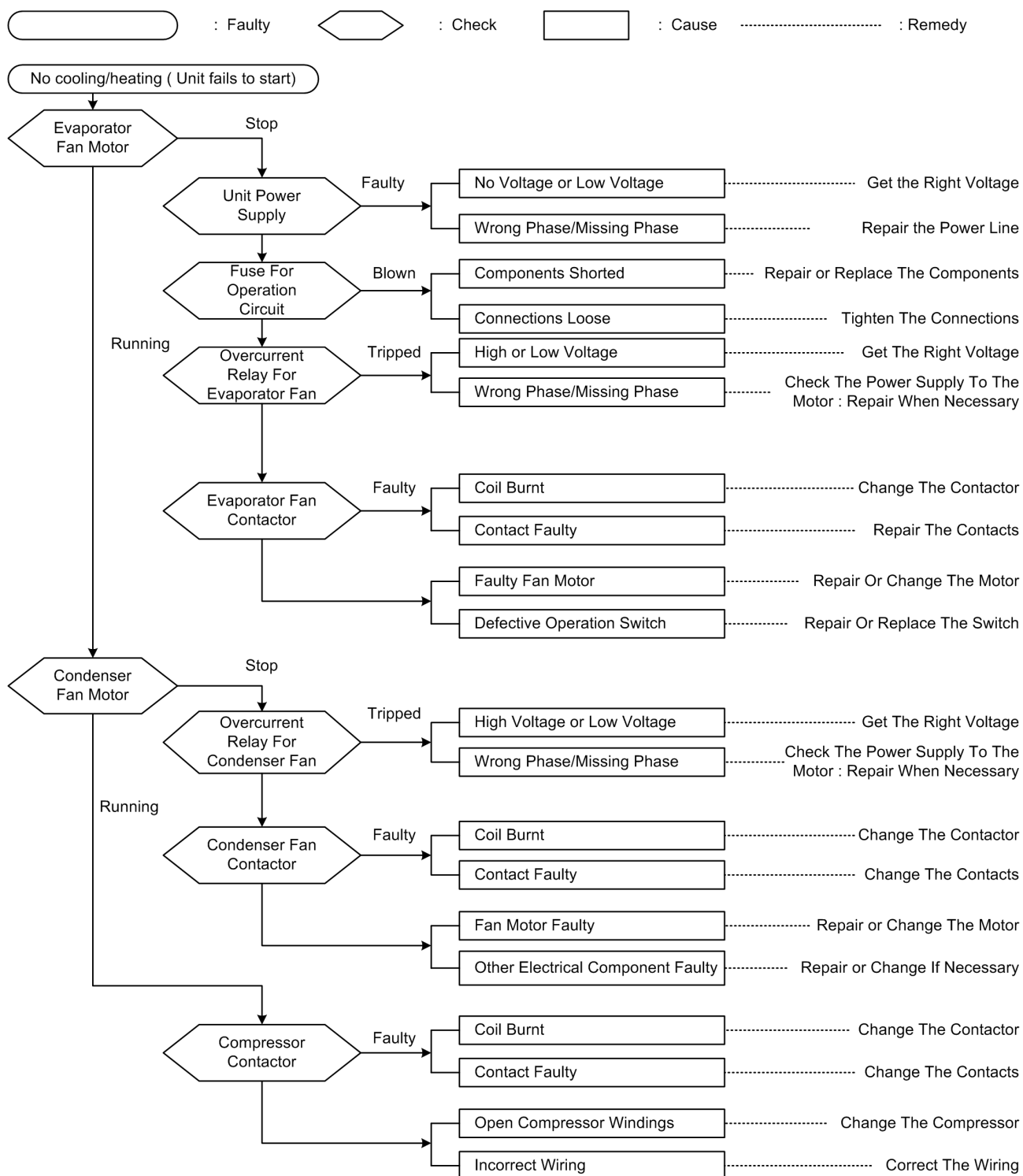
Circuit \ Data	Pressure					Probable cause
	Too low	A little low	Normal	A little high	Too high	
High side Low side					• •	1. Overcharged with refrigerant. 2. Non-condensable gases in refrigerant circuit (e.g. air) 3. Obstructed air-intake / discharge. 4. Hot air short circuiting in outdoor unit.
High side Low side	•				•	1. Poor compression / no compression (compressor defective) 2. Reversing valve leaking.
High side Low side	•	•				1. Undercharged with refrigerant. 2. Refrigerant leakage. 3. Air filter clogged / dirty (indoor unit). 4. Indoor fan locked / seized. 5. Defective defrost control, outdoor coil freeze up (heating). 6. Outdoor fan locked / seized (heating).
High side Low side				•	•	1. Outdoor fan blocked (cooling). 2. Outdoor coil dirty (cooling). 3. Indoor fan locked / seized (heating). 4. Indoor air filter clogged / dirty (heating). 5. Non-condensable gases in refrigerant circuit (e.g. air)
High side Low side				•	•	1. Air intake temperature of indoor unit too high.



## By means of diagnostic flow chart:

Generally, there are two kinds of problems, i.e. starting failure and insufficient cooling/heating. "Starting failure" is caused by electrical defect while improper application or defects in refrigerant circuit causes "Insufficient cooling / heating".

### i) Diagnosis of Electric Circuit

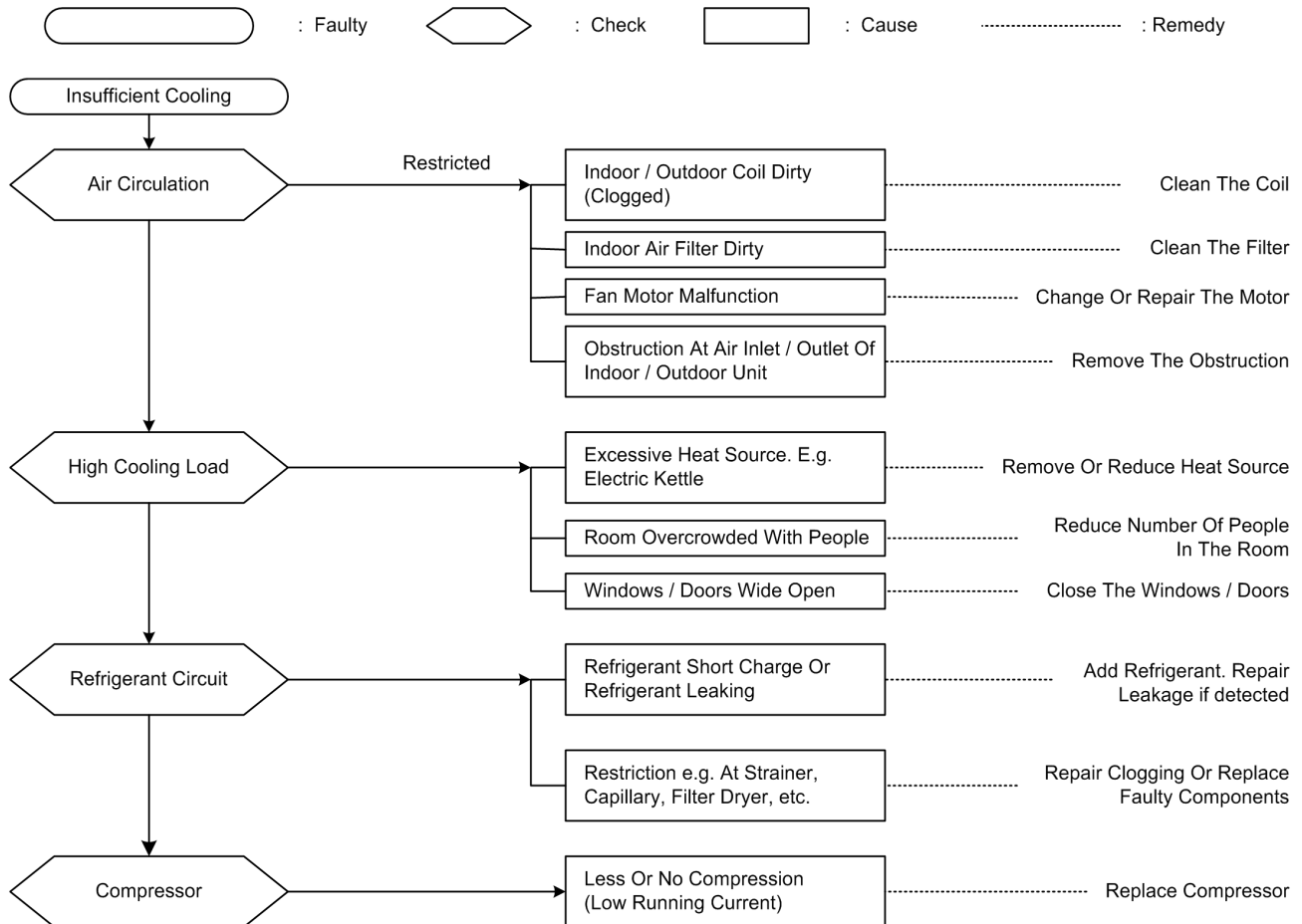


The most common causes of air conditioner failure to "start" are :

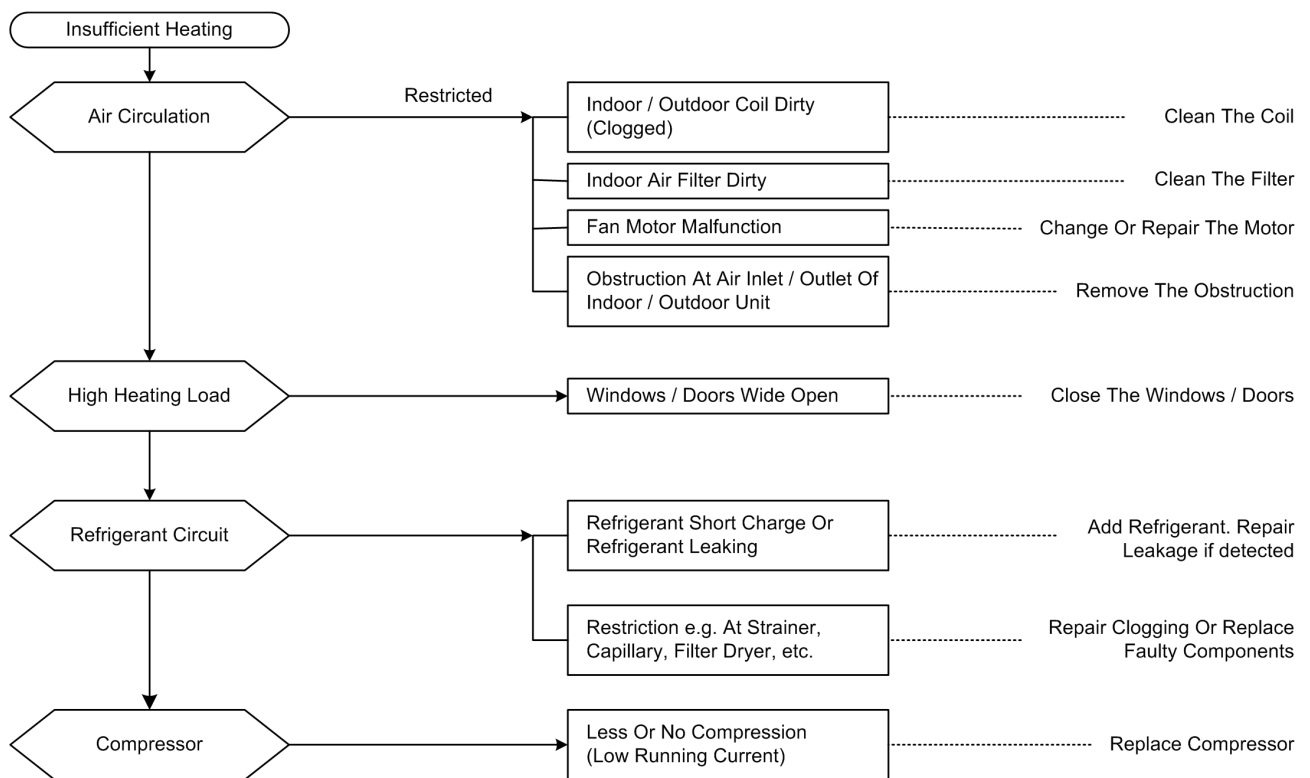
- a) Voltage not within  $\pm 10\%$  of rated voltage.
- b) Power supply interrupted.
- c) Improper control settings.
- d) Air conditioner is disconnected from main power source.
- e) Fuse blown or circuit breaker off.

## ii ) Diagnosis of Refrigerant Circuit / Application

There might be some causes where the unit starts running but does not perform satisfactorily, i.e. insufficient cooling. Judgement could be made by measuring temperature difference of indoor unit's intake and discharge air as well as running current.



Satisfactory operation with temperature difference of air intake & discharge of indoor unit  
 8°C to 13°C. \*  
 ( \* value is for reference only )

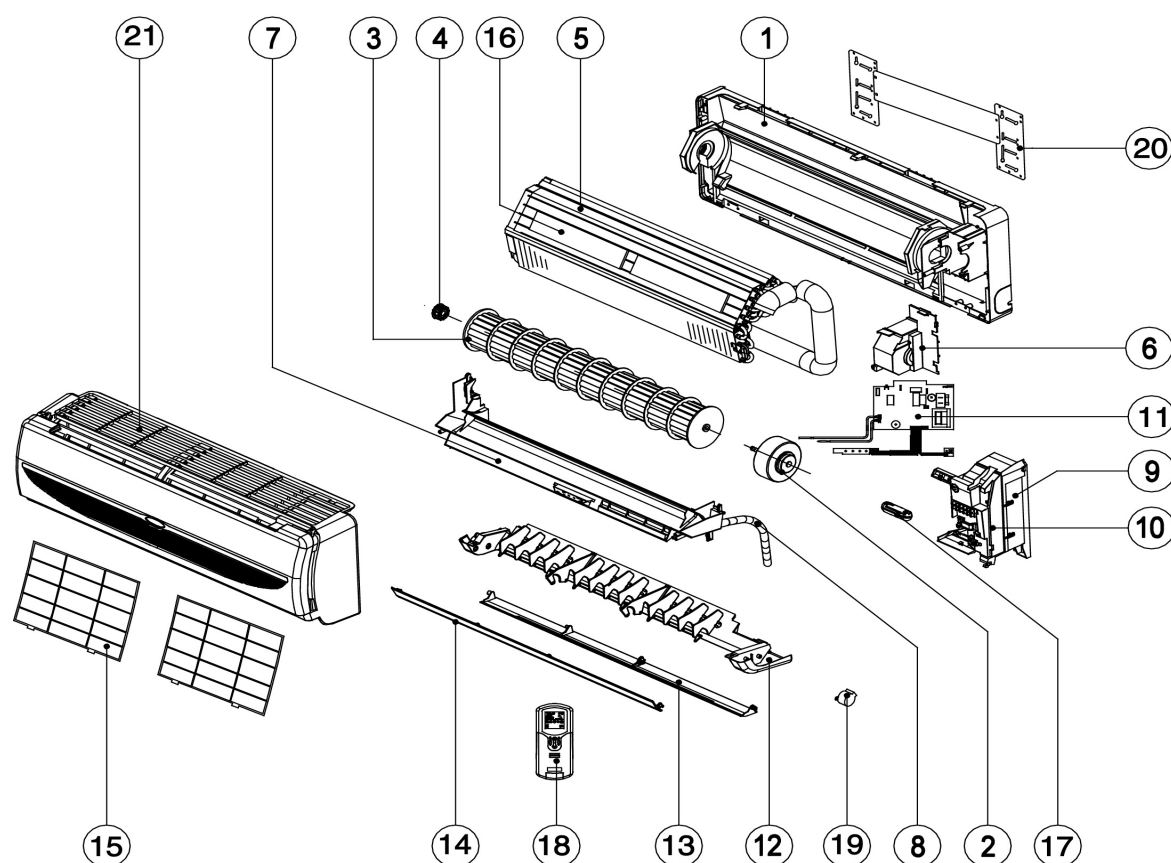


Satisfactory operation with temperature difference of air intake & discharge of indoor unit  
 14°C to 20°C. \*  
 ( \* value is for reference only )

## 12. EXPLODED VIEW AND PARTS LIST

### INDOOR UNIT

MODEL: A5WM / AWM 07G / 07GR / 09G / 09GR / 10G / 10GR / 15G / 15GR



## A5WM / AWM 07G / 09G / 10G / 15G

No	Descriptions	Part No
1	Assy., Chassis	
	A5WM / AWM 07/09G	R50124064147
	A5WM / AWM 10/15G	R50124064151
2	Fan, Motor	
	A5WM / AWM 07/09G	R03034064425
	A5WM / AWM 10/15G	R03034064426
3	Cross Flow Fan	
	A5WM / AWM 07/09G	R03029019462
	A5WM / AWM 10/15G	R03029019461
4	Fan, Bush	R11014029514
5	Assy., Coil	
	A5WM / AWM 07/09G	R50024063765
	A5WM / AWM 10/15G	R50024064225
6	Piping, Clamp	R12014060544
7	Assy., Drain Pan	
	A5WM / AWM 07/09G	R50124064148
	A5WM / AWM 10/15G	R50124064152
8	Drain Hose	R10024018204
9	Assy., Control Box	R50044085731
10	Assy., Control Box Cover	R50124064666
11	L2 Control Module	
	A5WM / AWM 07/09G	R04084064635
	A5WM / AWM 10/15G	R04084064635

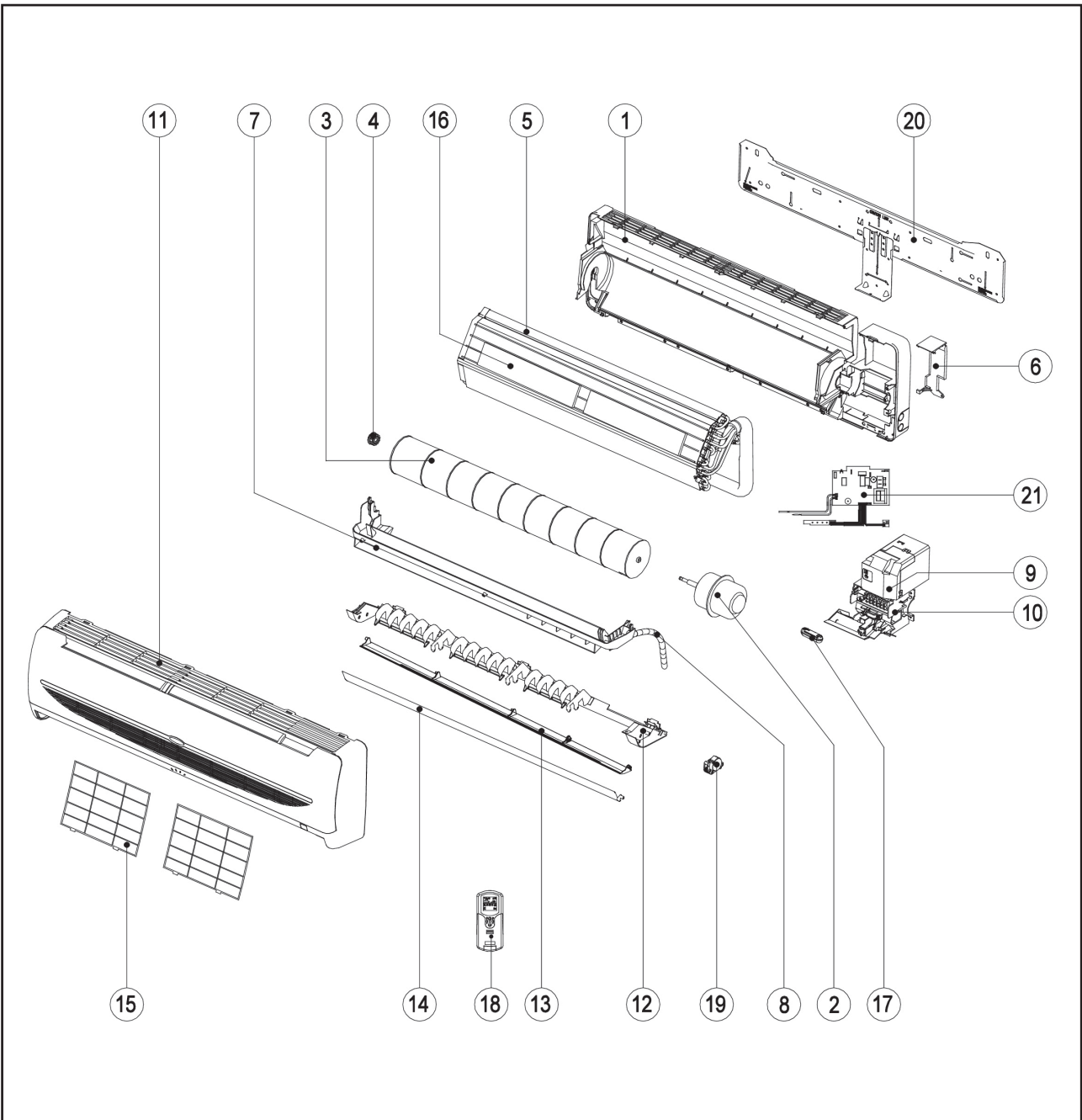
No	Descriptions	Part No
12	Air Discharge Housing	
	A5WM / AWM 07/09G	R50124062325
	A5WM / AWM 10/15G	R50124062326
13	Lower Louver	
	A5WM / AWM 07/09G	R12014060538
	A5WM / AWM 10/15G	R12014061364
14	Upper Louver	
	A5WM / AWM 07/09G	R12014060537
	A5WM / AWM 10/15G	R12014061363
15	Saranet Air Filter	
	A5WM / AWM 07/09G	R12014062320
	A5WM / AWM 10/15G	R12014062321
16	Assy., Front Cover	
	A5WM / AWM 07/09G	R50124084805
	A5WM / AWM 10/15G	R50124064675
17	Assy., Negative Ionizer	R04239019730
18	G12 handset	R04084065327
19	Air Swing Motor	R03039021375
20	Assy, Mounting Plate	
	A5WM / AWM 07/09G	R50014061333
	A5WM / AWM 10/15G	R50014062324

## A5WM / AWM 07GR / 09GR / 10GR / 15GR

No	Descriptions	Part No
1	Assy., Chassis	
	A5WM / AWM 07/09GR	R50124064147
	A5WM / AWM 10/15GR	R50124064151
2	Fan, Motor	
	A5WM / AWM 07/09GR	R03034064425
	A5WM / AWM 10/15GR	R03034064426
3	Cross Flow Fan	
	A5WM / AWM 07/09GR	R03029019462
	A5WM / AWM 10/15GR	R03029019461
4	Fan, Bush	R11014029514
5	Assy., Coil	
	A5WM / AWM 07/09GR	R50024063765
	A5WM / AWM 10GR	R50024064225
	A5WM / AWM 15GR	R50024066054
6	Piping, Clamp	R12014060544
7	Assy., Drain Pan	
	A5WM / AWM 07/09GR	R50124064148
	A5WM / AWM 10/15GR	R50124064152
8	Drain Hose	R10024018204
9	Assy., Control Box	R50044085737
10	Assy., Control Box Cover	R50124074570
11	L2 Control Module	R04084067263

No	Descriptions	Part No
12	Air Discharge Housing	
	A5WM / AWM 07/09GR	R50124062325
	A5WM / AWM 10/15GR	R50124062326
13	Lower Louver	
	A5WM / AWM 07/09GR	R12014060538
	A5WM / AWM 10/15GR	R12014061364
14	Upper Louver	
	A5WM / AWM 07/09GR	R12014060537
	A5WM / AWM 10/15GR	R12014061363
15	Saranet Air Filter	
	A5WM / AWM 07/09GR	R12014062320
	A5WM / AWM 10/15GR	R12014062321
16	Assy., Front Cover	
	A5WM / AWM 07/09GR	R50124084806
	A5WM / AWM 10/15GR	R50124064675
17	Assy., Negative Ionizer	R04239019730
18	G12 handset	R04084067315
19	Air Swing Motor	R03039021375
20	Assy, Mounting Plate	
	A5WM / AWM 07/09GR	R50014061333
	A5WM / AWM 10/15GR	R50014062324

**MODEL: A5WM / AWM 20G / 20GR / 25G / 25GR**



**Model : A5WM / AWM 20G / 25G**

No	Descriptions	Part No
1	Assy., Chassis	R50124068170
2	Fan, Motor	
	AWM 20G	R03034074205
	AWM 25G	R03034074204
3	Cross Flow Fan	R03029209158
4	Fan, Bush	R11014023775
5	Assy., Coil	
	AWM 20G	R50024072203
	AWM 25G	R50024072204
	A5WM 20G	R50024074031
	A5WM 25G	R50024074032
6	Piping, Clamp	R12014071297
7	Assy., Drain Pan	R50124068171

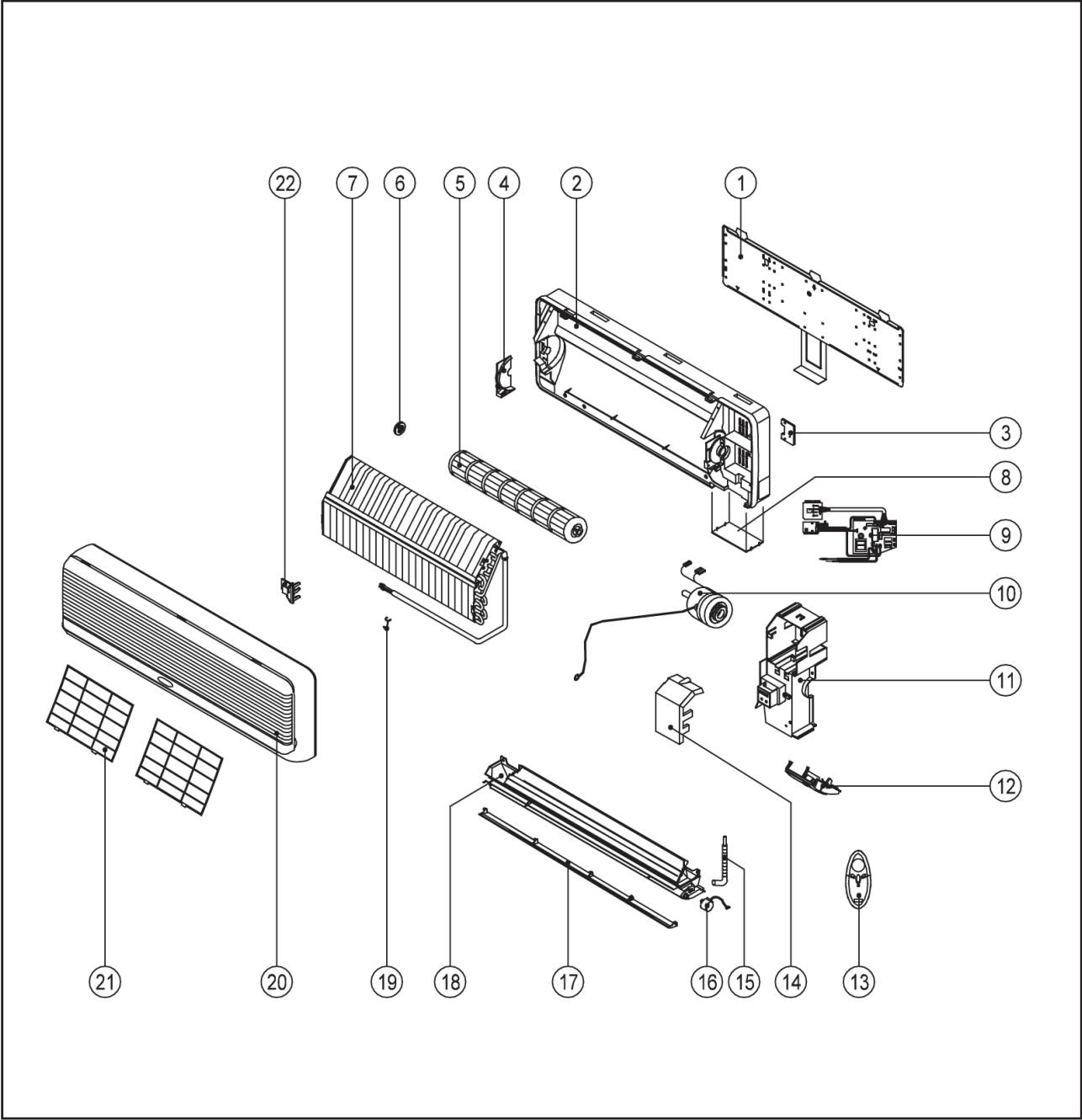
No	Descriptions	Part No
8	Drain Hose	R10024015319
9	Assy., Control Box	R50044071955
10	Assy., Control Box Cover	R50124071418
11	Assy., Front Cover	R50124071425
12	Air Discharge Housing	R50124071426
13	Lower Louver	R12014066821
14	Upper Louver	R12014066820
15	Saranet Air Filter	R12014066832
16	L2 Control Module	R04084071971
17	Assy., Negative Ionizer	R04239022932
18	G12 handset	R04084065327
19	Air Swing Motor	R03039022933
20	Assy, Mounting Plate	R50014036133

**Model : A5WM / AWM 20GR / 25GR**

No	Descriptions	Part No
1	Assy., Chassis	R50124068170
2	Fan, Motor	
	AWM 20GR	R03034074205
	AWM 25GR	R03034074204
3	Cross Flow Fan	R03029209158
4	Fan, Bush	R11014023775
5	Assy., Coil	
	AWM 20GR	R50024072203
	AWM 25GR	R50024072204
	A5WM 20GR	R50024074031
	A5WM 25GR	R50024074032
6	Piping, Clamp	R12014071297
7	Assy., Drain Pan	R50124068171

No	Descriptions	Part No
8	Drain Hose	R10024015319
9	Assy., Control Box	R50044071960
10	Assy., Control Box Cover	R50124071419
11	Assy., Front Cover	R50124071425
12	Air Discharge Housing	R50124071426
13	Lower Louver	R12014066821
14	Upper Louver	R12014066820
15	Saranet Air Filter	R12014066832
16	L2 Control Module	R04084071973
17	Assy., Negative Ionizer	R04239022932
18	G12 handset	R04084067315
19	Air Swing Motor	R03039022933
20	Assy, Mounting Plate	R50014036133

**MODEL: AWM 30F / 30FR, A5WM 31F / 30FR**





**MODEL : A5WM 311 / AWM 311**

No	Descriptions	Part No
1	ASSY, INSTALLATION BRACKET	R50014050721
2	ASSY. CHASSIS	R50124050703
3	PIPING CLAMP	R07014024546
4	FAN BUSH BRACKET	R12014050709
5	CROSS FLOW FAN	R03029013842
6	FAN BUSH	R11019013841
7	ASSY., INDOOR COIL	
	AWM 311	R50024050710
	A5WM 311	R50024084359
8	SERVICE PANEL	R12014050685
9	CONTROL MODULE	R04084090222
10	FAN MOTOR	R03034052105

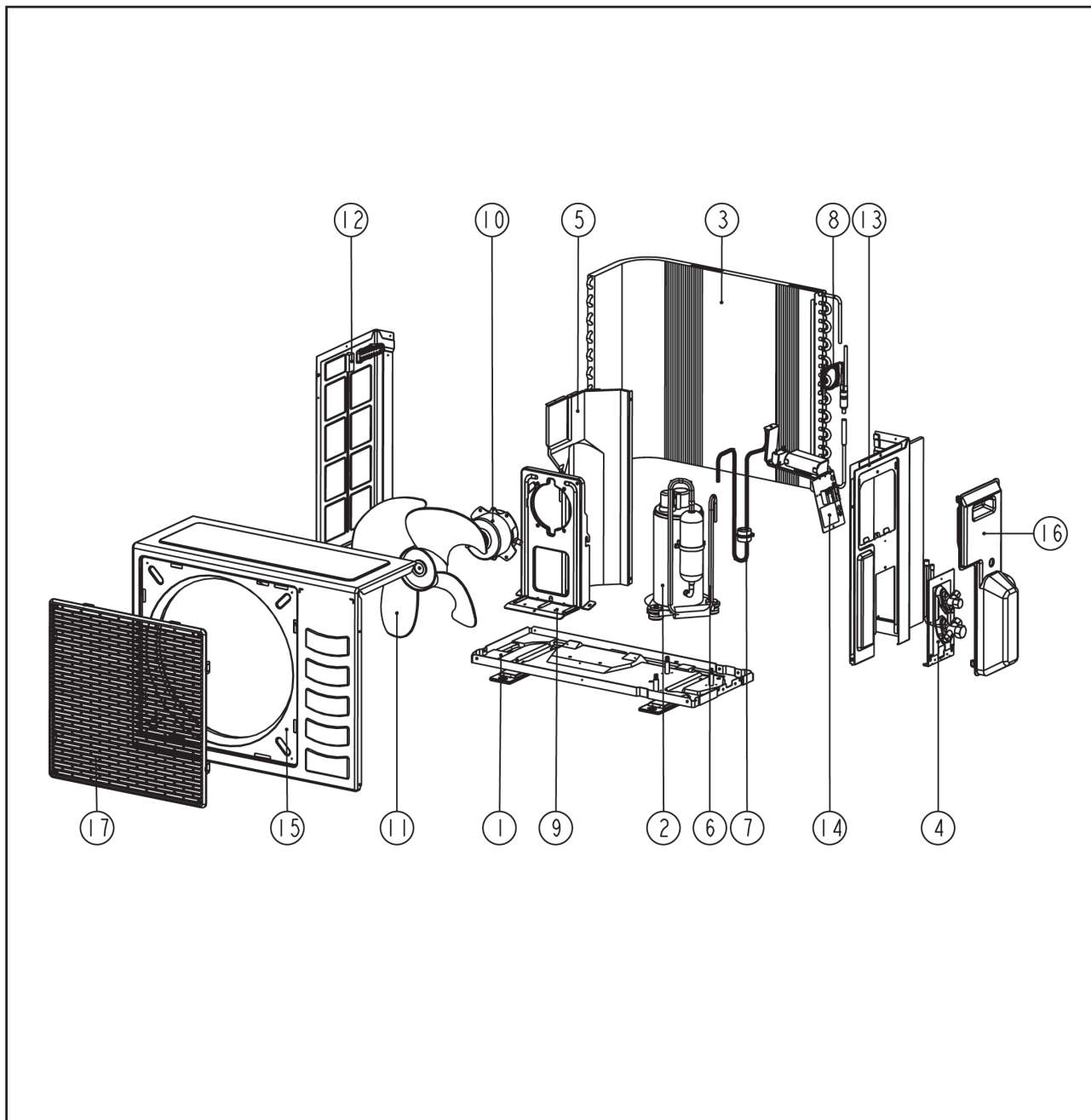
No	Descriptions	Part No
11	ASSY, CONTROL BOX	R50044090264
12	LED LIGHT BRACKET	R12014050679
13	G12 HANDSET	R04084065328
14	CONTROL BOX COVER	R12014050681
15	ASSY. DRAIN HOSE	R10024015319
16	AIR SWING MOTOR	R03039007088
17	AIR LOUVER	R12014050717
18	ASSY. AIR DISCHARGE HOUSING	R50124050712
19	COIL SENSOR CLIP	R07054021183
20	ASSY. FRONT COVER	R50124050723
21	SARANET FILTER	R12014050726
22	THERMISTOR HOLDER	R12014016707

**MODEL : A5WM 301R / AWM 301R**

No	Descriptions	Part No
1	ASSY, INSTALLATION BRACKET	R50014050721
2	ASSY. CHASSIS	R50124050703
3	PIPING CLAMP	R07014024546
4	FAN BUSH BRACKET	R12014050709
5	CROSS FLOW FAN	R03029013842
6	FAN BUSH	R11019013841
7	ASSY., INDOOR COIL	
	AWM 311R	R50024050710
	A5WM 311R	R50024084359
8	SERVICE PANEL	R12014050685
9	U1.5 CONTROL MODULE	R04084090162
10	FAN MOTOR	R03034052105

No	Descriptions	Part No
11	ASSY, CONTROL BOX	R50044090014
12	LED LIGHT BRACKET	R12014050679
13	G12 HANDSET	R04084073477
14	CONTROL BOX COVER	R12014050681
15	ASSY. DRAIN HOSE	R10024015319
16	AIR SWING MOTOR	R03039007088
17	AIR LOUVER	R12014050717
18	ASSY. AIR DISCHARGE HOUSING	R50124050712
19	COIL SENSOR CLIP	R07054021183
20	ASSY. FRONT COVER	R50124050723
21	SARANET FILTER	R12014050726
22	THERMISTOR HOLDER	R12014016707

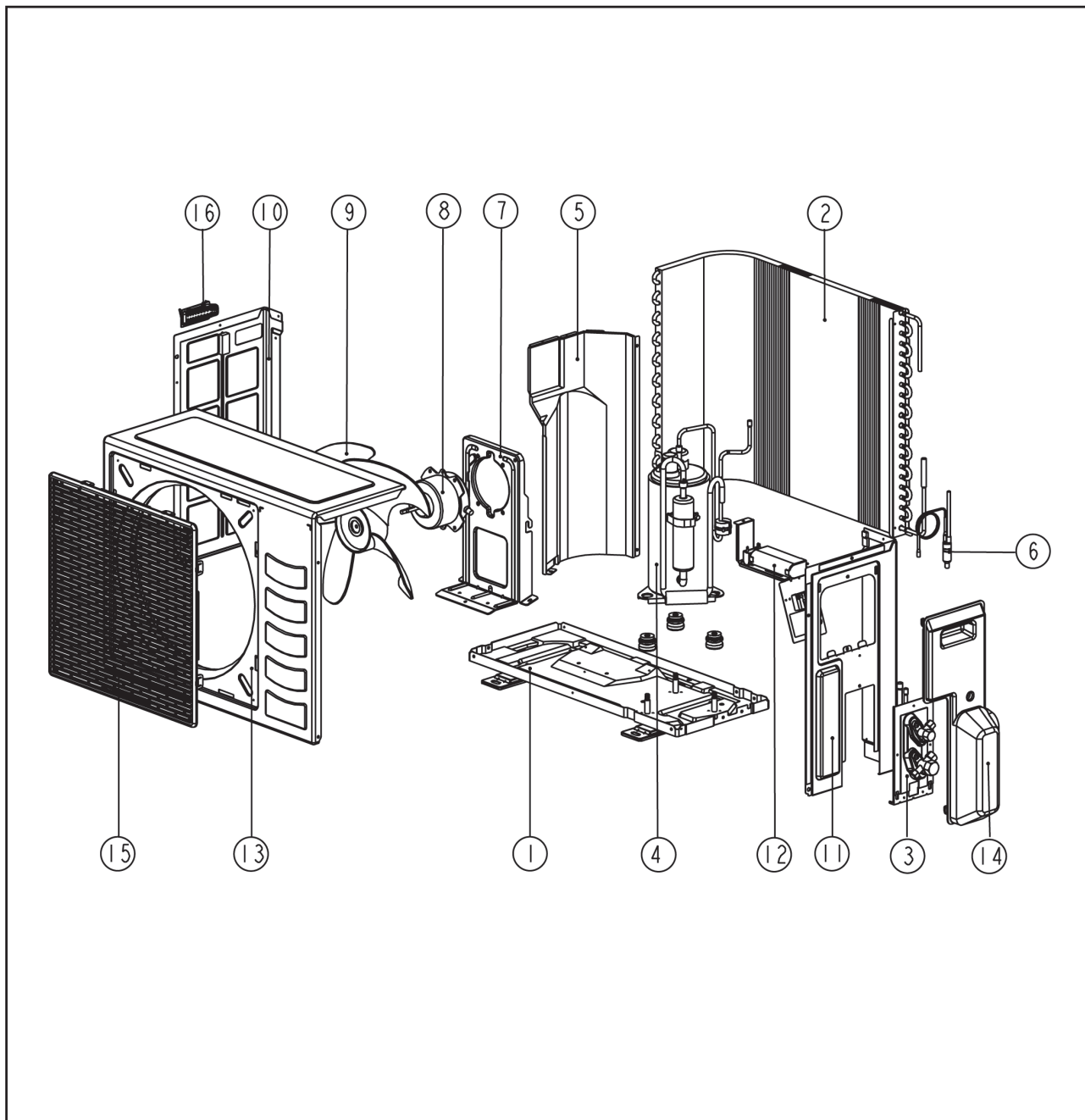
## Model : ALC 07C



No	Descriptions	Part No
1	ASSY,PAN BASE SL07C	R50014057372
2	COMPRESSOR, 2RS122D5BC02 Matsushita	R04019029041
3	ASSY., OUTDOOR COIL - (5)SL09C 7MM RL	R50024087206
4	VALVE,BRACKET	R01014051164
5	ASSY, PARTITION SL07C/09C(R)	R50064084355
6	ASSY SUCTION TUBE	R50024091725
7	ASSY DISCHARGE TUBE	R50024091724
8	ASSY., CAP. TUBE - SL07C	R50024091764
9	BRACKET,FAN MOTOR	R01014052516
10	MOTOR, MSL 09C-502-WL WELLING	R03039028206
11	FAN PROPELLER SL09C Ø355.0 x 115mm	R03019020744

No	Descriptions	Part No
12	PANEL,LEFT	R01014052510
13	PANEL,RIGHT (SL07/09C/CR)(639.4FL)	R01014084434
14	ASSY,CONTROL PANEL SL07C	R50044092695
15	PANEL,TOP/FRONT	R01014052512
16	ASSY,VALVE COVER	R50124055172
17	ASSY,FRONT GRILLE	R50124056905
<b>Parts not showed in diagram</b>		
	Fan CAPACITOR 2.0MFD	R04029007797
	CAPACITOR, CMPSR 2uF/450 (TAB187)Shizuki	R04029026755
	CAPACITOR, CMPSR 20uF/450VAC Shizuki	R04029026772
	Assy, 2 way flare valve 1/4"	R50054054950
	Assy, 3 way flare valve 3/8"	R50054054951

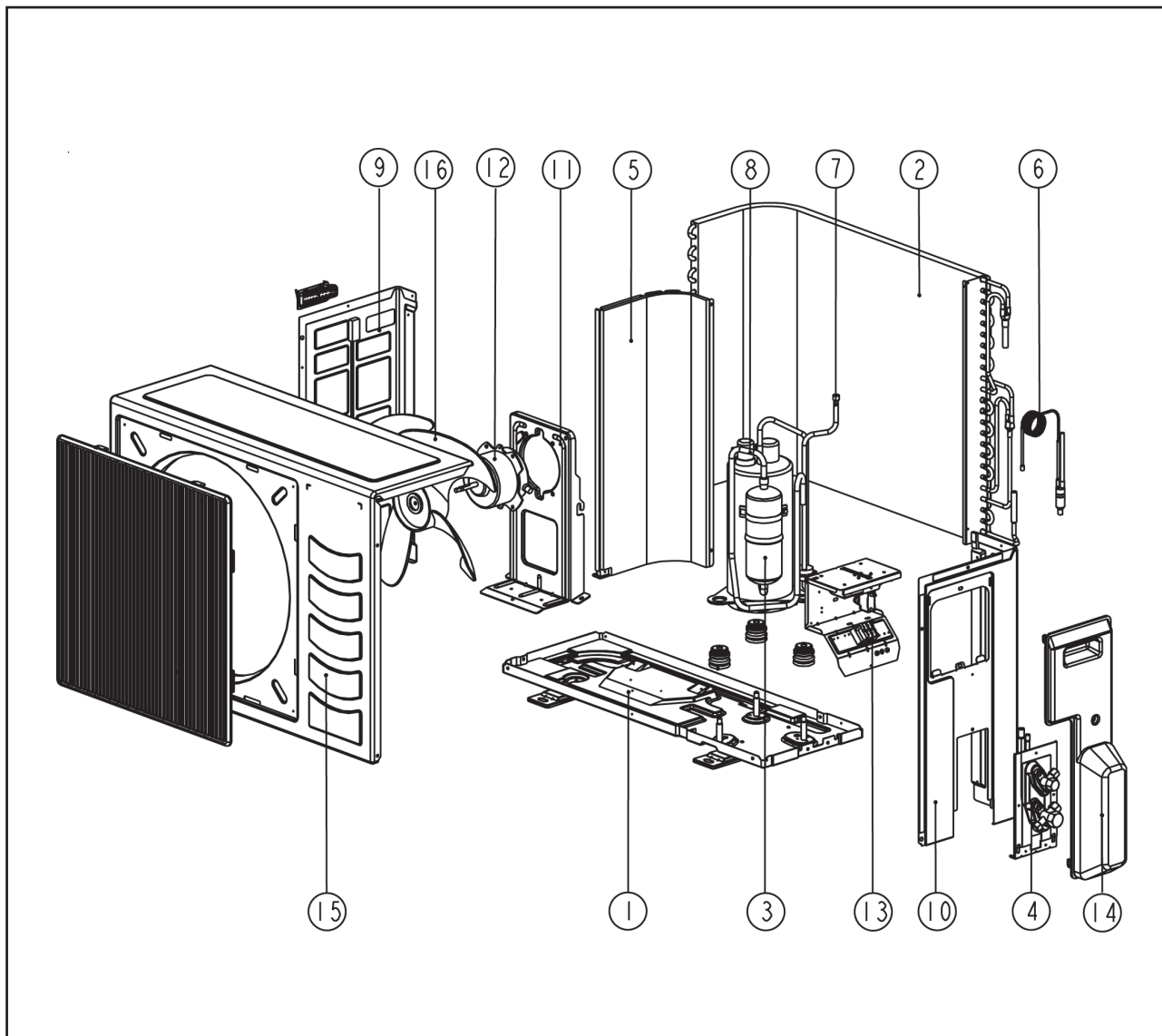
# Model : ALC 09C



No	Descriptions	Part No
1	ASSY,PAN BASE SL07C	R50014057372
2	ASSY., OUTDOOR COIL - (5)SL09C 7MM RL	R50024087206
3	VALVE BRACKET	R01014051164
4	COMPRESSOR, 2PS156D3CB02 MATSUSHITA	R04019027628
5	ASSY, PARTITION SL07C/09C(R)	R50064084355
5	ASSY,CAPILLARY TUBE (SL09C-7.0MM COIL)	R50024079624
6	ASSY,CAPILLARY TUBE (SL09C-2PS156D COMP)	R50024087403
7	BRACKET,FAN MOTOR	R01014052516
8	MOTOR, MSL 09C-502-WL WELLING	R03039028206
9	FAN PROPELLER SL09C	R03019020744

No	Descriptions	Part No
10	PANEL,LEFT	R01014052510
11	PANEL,RIGHT (SL07/09C/CR)(639.4FL)	R01014084434
12	ASSY,CONTROL PANEL SL09C	R50044089886
13	PANEL,TOP/FRONT	R01014052512
14	ASSY,VALVE COVER	R50124055172
15	ASSY,FRONT GRILLE	R50124056905
16	PLASTIC,HANDLE SL07C/09C/10C/15C/CR	R12014057948
<b>Parts not showed in diagram</b>		
	Comp. CAPACITOR, F 30.0μF 440VAC	R04024012931
	Fan CAPACITOR 2.0MFD	R04029007797
	Assy, 2 way flare valve 1/4"	R50054054950
	Assy, 3 way flare valve 3/8"	R50054054951

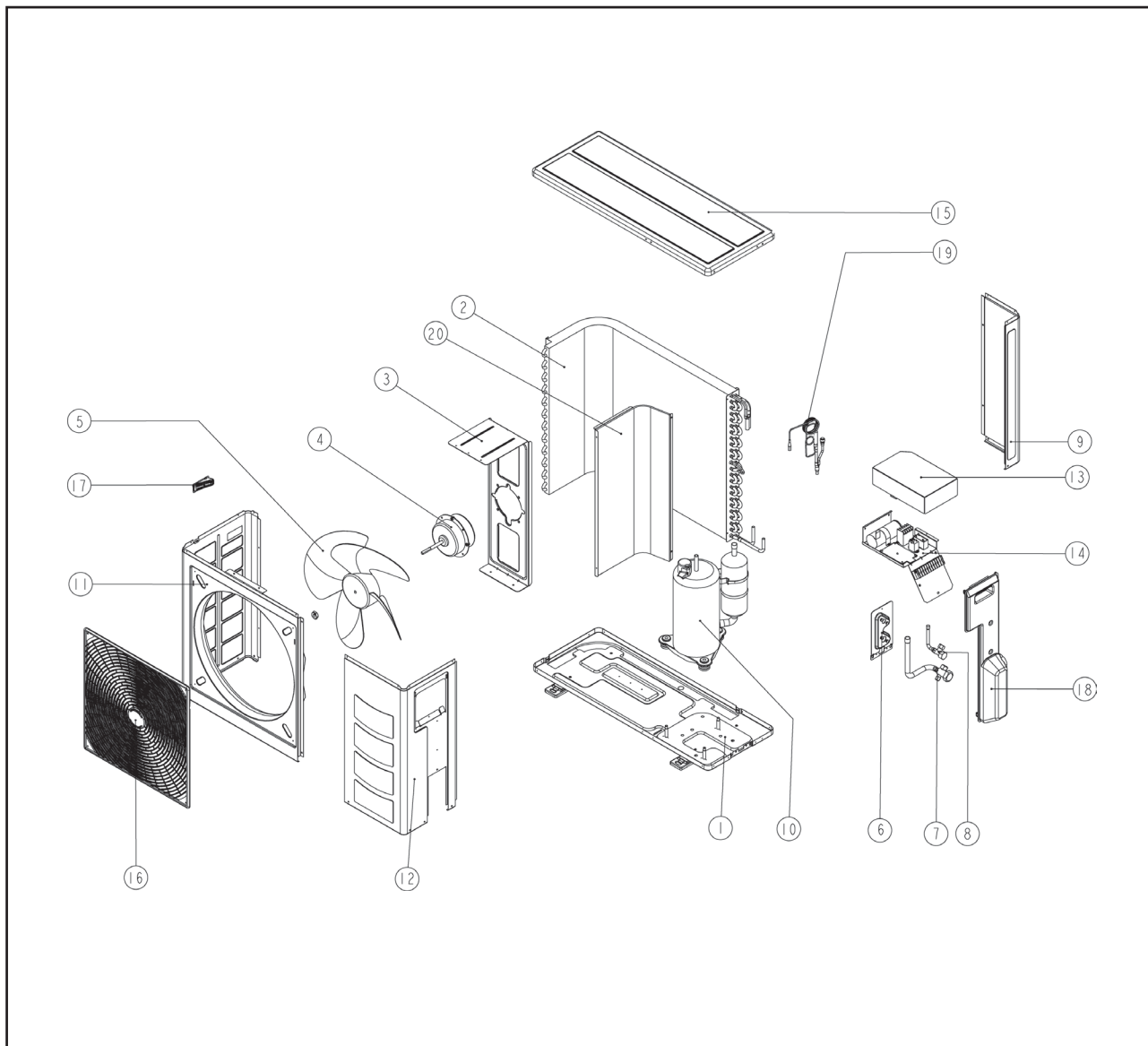
## Model : ALC 10 / 15C



No	Descriptions	Part No
1	ASSY,PAN BASE SL10/15C	R50014051158
2	ASSY,OUTDOOR COIL SL15C/CR	R50024087838
3	COMPRESSOR, 2PS206D2AF02 MATSUSHITA	R04019027709
4	VALVE BRACKET Assy, 2 way flare valve 1/4"	R01014051164 R50054054950
5	PARTITION	R01014051165
6	ASSY,CAPILLARY TUBE (SL15C) 2PS206D2AF02	R50024087757
7	ASSY.,TUBE DISCHARGE SL15C(2PS206D2AF02)	R50024087928
8	ASSY,SUCTION TUBE (SL15C) (2PS206D2AF02)	R50024087761
9	PANEL,LEFT	R01014051166
10	PANEL,RIGHT	R01014051167
11	BRACKET,FAN MOTOR	R01014051162
12	MOTOR, MSL15C-501 24W B.OCEAN	R03039015323
13	ASSY,CONTROL PANEL SL09C/10C/5SL15C	R50044086056

No	Descriptions	Part No
14	ASSY,VALVE COVER	R50124051173
15	PANEL,TOP/FRONT	R01014051171
	ASSY,FRONT GRILLE (SL10C/15C)	R50124056700
16	FAN PROPELLER, DIA401.0 OZ42000 SHUNDE	R03019015339
<b>Parts not showed in diagram</b>		
	CAPACITOR, CMPSR 35uF/450VAC Shizuki	R04029026776
	CAPACITOR, CMPSR 30uF/450VAC Shizuki	R04029026775
	CAPACITOR, CMPSR 2uF/450 (TAB187)Shizuki	R04029026755
	ASSY, O2 THERAPY	R50044070393
	ASSY, PARTITION O2	R50064070384
	AIR FILTER, OXYGEN ENRICHMENT MEMBRANE	R03089020671
	PUMP, O2 ENRICHMT VACUM DAL- 12S-04 ULVAC	R04139020673
	CAPACITOR, E 0.9uF 480V +10-5% 50/60Hz	R04029020674

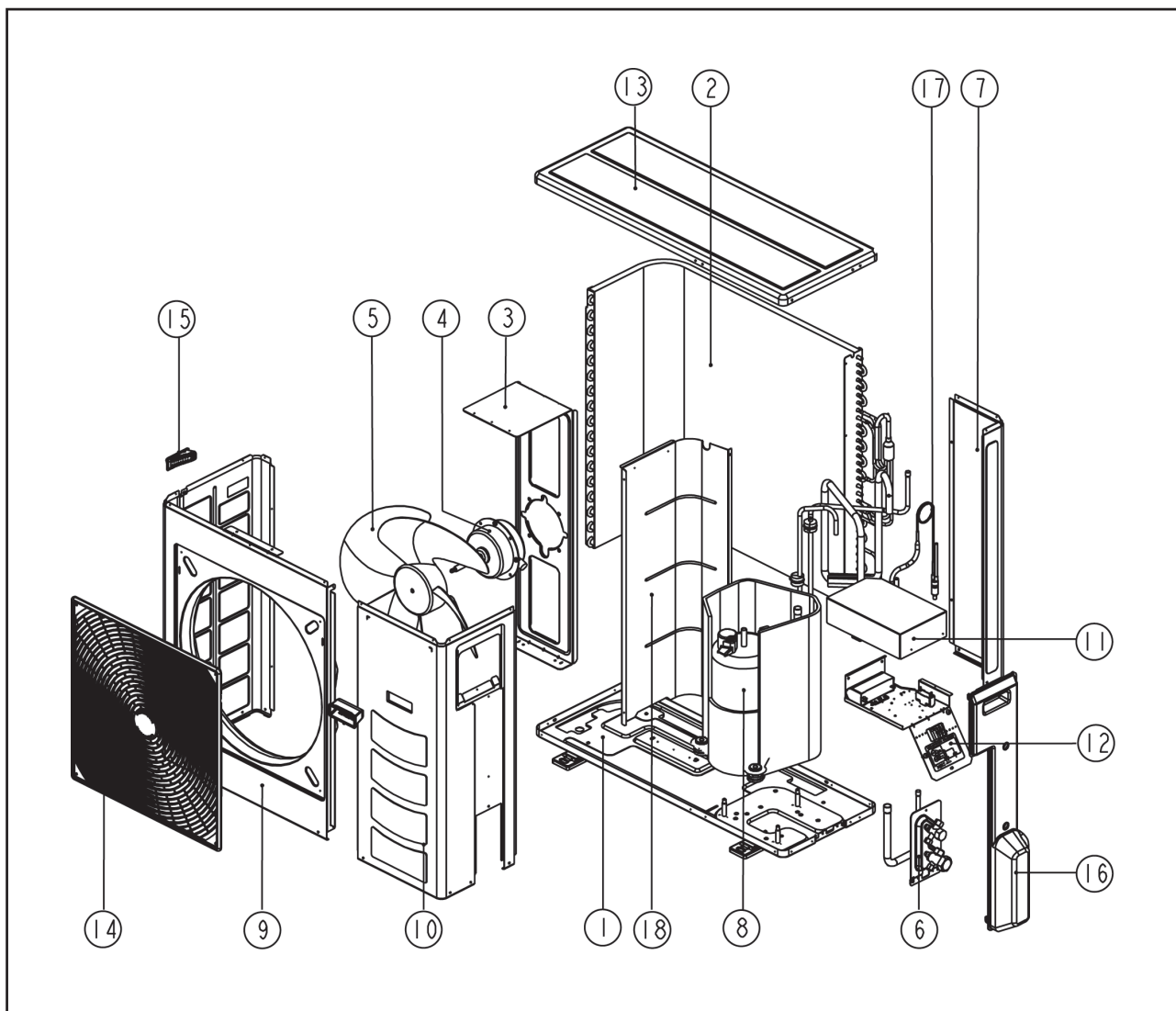
## Model : ALC 18 / 20C



No	Descriptions	Part No
1	ASSY,PAN BASE (5SL20C/CR)	R50014078281
2	ASSY,OUTDOOR COIL 7mm coil	
	MLC 018C	R50024089940
2	MLC 020C	R50024084570
3	BRACKET MOTOR (SL20C/CR)	R01014070601
4	MOTOR, YDK64-6C/MSL25C-501-WL	R03039024539
5	FAN PROPELLER, ¥460 0Z40700 SUNWILL CHINA	R03019023393
6	ASSY VALVE BRACKET (SL20C/CR)-R22	R50014072861
7	PANEL RIGHT BACK (SL20C/CR)	R01014070599
8	COMPRESSOR, 2KS324D5AA04 Matsushita	R04019027266
9	PANEL FRONT/LEFT (SL20C/CR)	R01014070597
10	PANEL SERVICE (SL20C/CR)	R01014070598
11	PANEL TERMINAL COVER (SL20C/25C/28C/CR)	R01014070838
12	ASSY CONTROL PANEL (SL20C/25C)	R50044086133

No	Descriptions	Part No
13	PANEL TOP (SL20C/25C/28C/CR)	R01014070596
14	ASSY FRONT GRILLE (SL20C/25C/28C/CR)	R50124072880
15	PLASTIC,HANDLE SL07C/09C/10C/15C/CR	R12014057948
16	ASSY VALVE COVER (SL20C/CR)	R50124072885
17	ASSY. CAP TUBE DIET COMP	
	MLC 018C	R50024089926
	MLC 020C	R50024087066
18	PARTITION (SL20C/CR)	R01014070603
<b>Parts not showed in diagram</b>		
	ASSY FLARE VALVE 3 WAY(5/8")SL20C/25C/28	R50054072863
	ASSY,VALVE 2 WAY(1/4")JA28493-1MA HANGJI	R50059022156
	CAPACITOR, CMPSR 60uF/450V Shizuki	R04029026782
	BACK GRILLE WITH PAINT (SL18C/20C/CR)	R50019026515

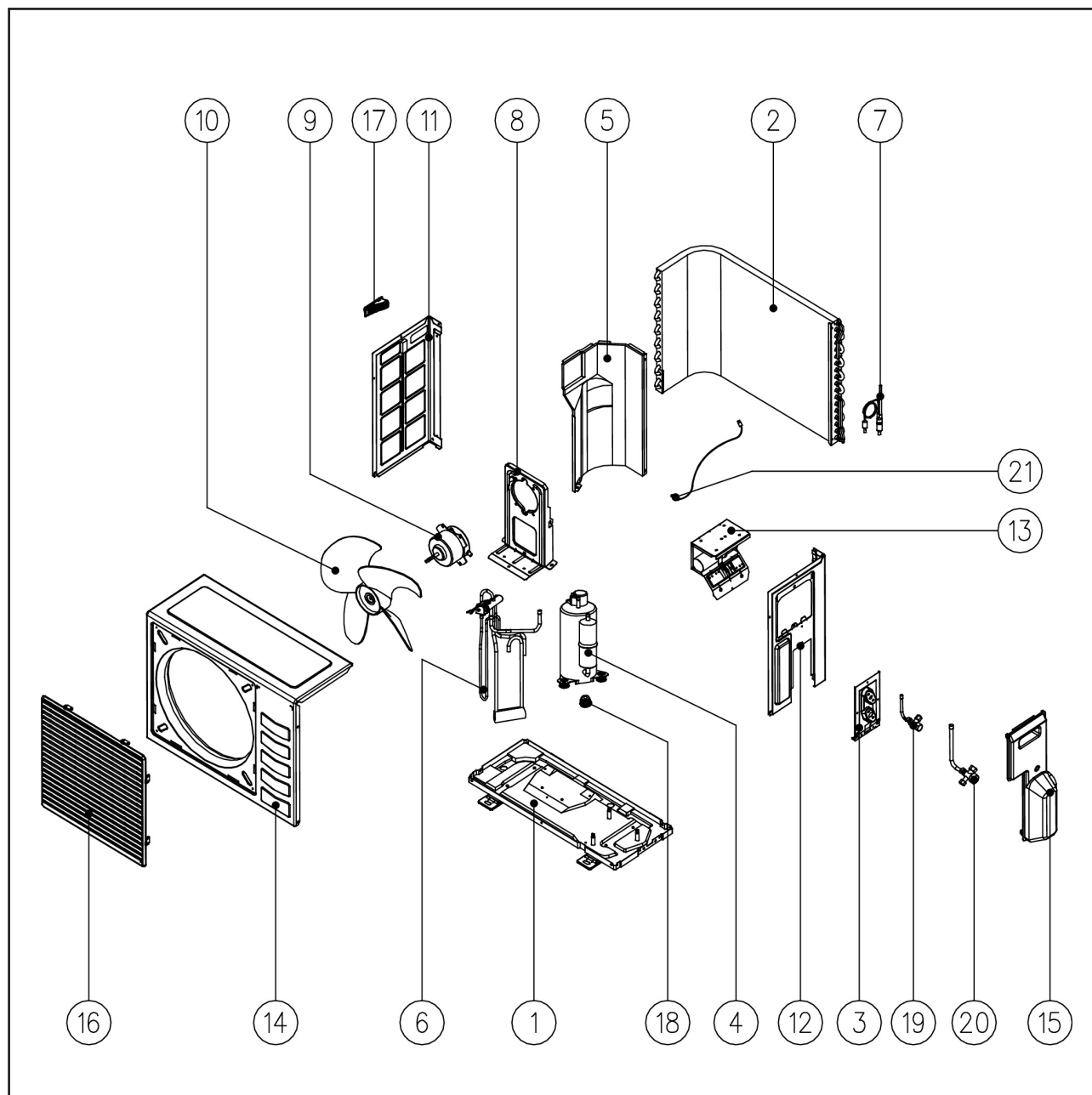
## Model : ALC 25C



No	Descriptions	Part No
1	ASSY,PAN BASE (5SL20C/CR)	R50014078281
2	ASSY. OUTDOOR COIL (SL25C) 7MM COIL DIET	R50024089206
3	BRACKET MOTOR (SL25C/28C/CR)	R01014070948
4	MOTOR, MSL25C-502-WL WELLING	R03039028207
5	FAN PROPELLER, ¥460 0Z40700 SUNWILL CHINA	R03019023393
6	ASSY VALVE BRACKET (SL25C/28C/CR)R22	R50014073890
7	PANEL RIGHT BACK (SL25C/28C/CR)	R01014070950
8	COMPRESSOR, ASSY 48B180JV2JH SAMSUNG	R50049022614
8	COMPRESSOR, 2JS438D3AA04 MATSUSHITA	R04019027570
9	PANEL FRONT / LEFT	R01014070947
10	PANEL SERVICE (SL25C/28C/CR)	R01014070949
11	PANEL TERMINAL COVER (SL20C/25C/28C/CR)	R01014070838
12	ASSY CONTROL PANEL (5SL20C)	R50044086076

No	Descriptions	Part No
13	PANEL TOP (SL20C/25C/28C/CR)	R01014070596
14	ASSY FRONT GRILLE (SL20C/25C/28C/CR)	R50124072880
15	PLASTIC,HANDLE SL07C/09C/10C/15C/CR	R12014057948
16	ASSY VALVE COVER (SL25C/28C/CR)	R50124073905
17	ASSY. CAP TUBE SL25C/CR (7MM COIL) DIET	R50024090095
18	PARTITION (SL25C/28C/CR)	R01014070951
<b>Parts not showed in diagram</b>		
	ASSY FLARE VALVE 3 WAY(5/8")SL20C/25C/28	R50054072863
	ASSY, 3 WAYS VALVE (3/8") 90.0mmL HANGJI	R50059022577
	FELT, COMPRESSOR (SL20/25C COMP)	R06074084746
	BACK GRILLE WITH PAINT (SL25C/28C/CR)	R50019026514
	CAPACITOR, CMPSR 50uF/450VAC Shizuki	R04029026779

## Model: ALC 09CR

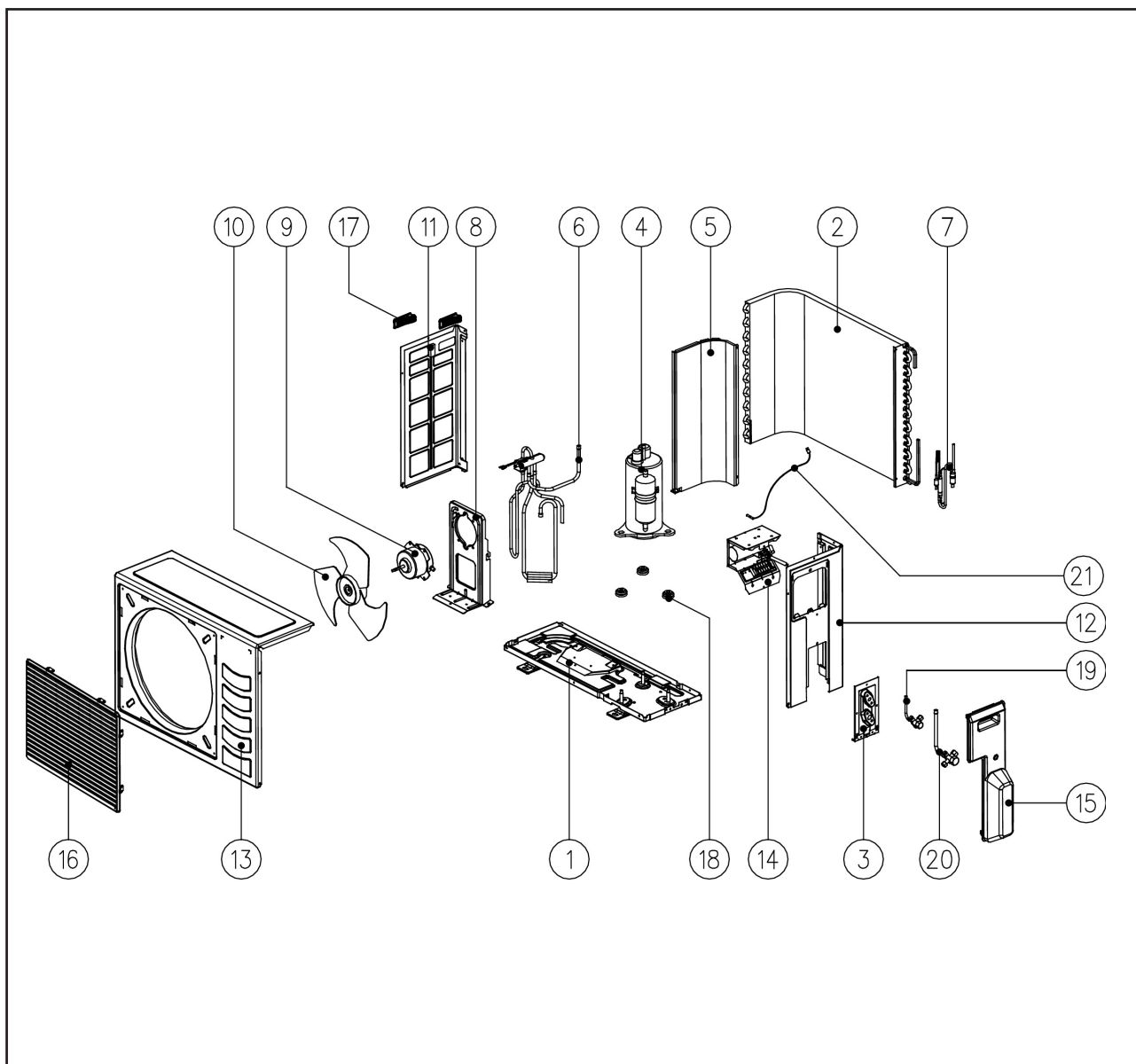


No	Descriptions	Part No
1	Assy., Base Pan	R50014057372
2	Assy., Condenser Coil	R50024064204
3	Valve Bracket	R01014051164
4	Compressor	
	ALC 09CR	R50049016211
5	Assy., Partition	R50064065275
6	Assy., 4 Way Valve	
	ALC 09CR	R50024065011
7	Assy., Cap Tube	
	ALC 09CR	R50024065046
8	Bracket, Fan Motor	R01014052516
9	Fan Motor	R03039015324

No	Descriptions	Part No
10	Fan Blade	R03019004131
11	Left Panel	R01014052510
12	Right Panel	R01014052509
13	Assy. Control Panel	R50044059032
14	Assy., Front Panel	R01014052512
15	Assy., Valve Cover	R50124055172
16	Assy., Front Grille	R50124056905
17	Plastic, Handle	R12014057948
18	Rubber Grommet	R11059016218
19	Assy., Flare Valve 2 Ways 1/4"	R50054054950
20	Assy., Flare Valve 3 Ways 3/8"	R50054054951
21	Sensor, Outdoor Defrost	R50134039416



## Model: ALC 10CR / 15CR

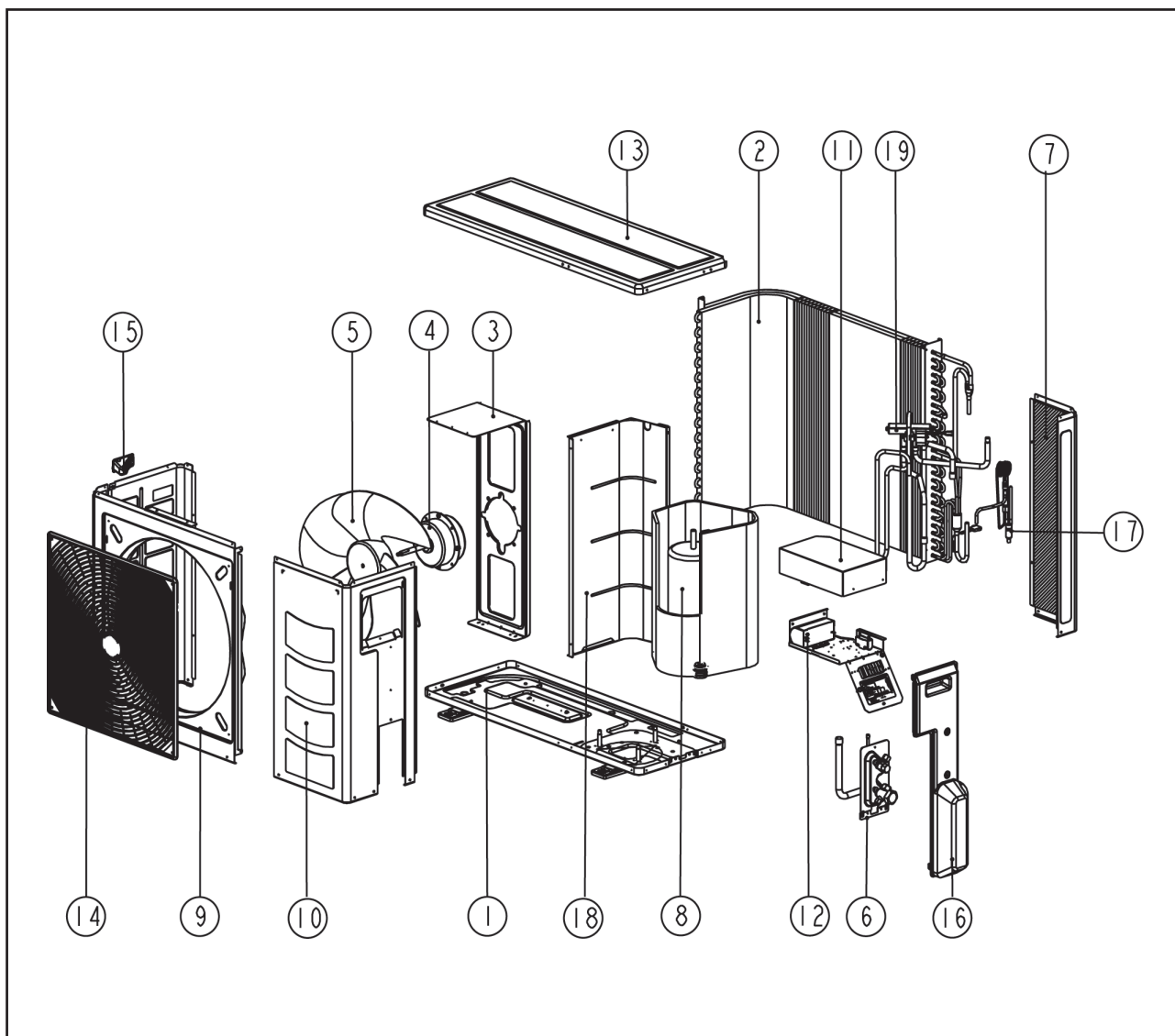


No	Descriptions	Part No
1	Assy., Base Pan	R50014051158
2	Assy., Condenser Coil	
	ALC 10CR	R50024065601
	ALC 15CR	R50024060071
3	Valve Bracket	R01014051164
4	Compressor	
	ALC 10CR	R04019019550
	ALC 15CR	R04019019125
5	Assy., Partition	R01014051165
6	Assy., 4 Way Valve	R05019004157
7	Assy., Cap Tube	
	ALC 10CR	R50024065311
	ALC 15CR	R50024064508
8	Bracket, Fan Motor	R01014051162
9	Fan Motor	
	ALC 10CR	R03039016104
	ALC 15CR	R03039015323
10	Fan Blade	R03019015339

No	Descriptions	Part No
11	Left Panel	R01014051166
12	Right Panel	R01014051167
13	Assy., Front Panel	R01014051171
14	Assy. Control Panel	
	ALC 10CR	R50044059033
	ALC 15CR	R50044059034
15	Assy., Valve Cover	R50124051173
16	Assy., Front Grille	R50124056700
17	Plastic, Handle	R12014057948
18	Rubber Grommet	
	ALC 10CR	R11059000271
	ALC 15CR	R11054000272
19	Assy., Flare Valve 2 Ways 1/4"	R50051054950
20	Assy., Flare Valve 3 Ways 3/8"	
	ALC 10CR	R50054054951
	Assy., Flare Valve 3 Ways 1/2"	
	ALC 15CR	R50054064042
21	Sensor, Outdoor Defrost	R50134039416



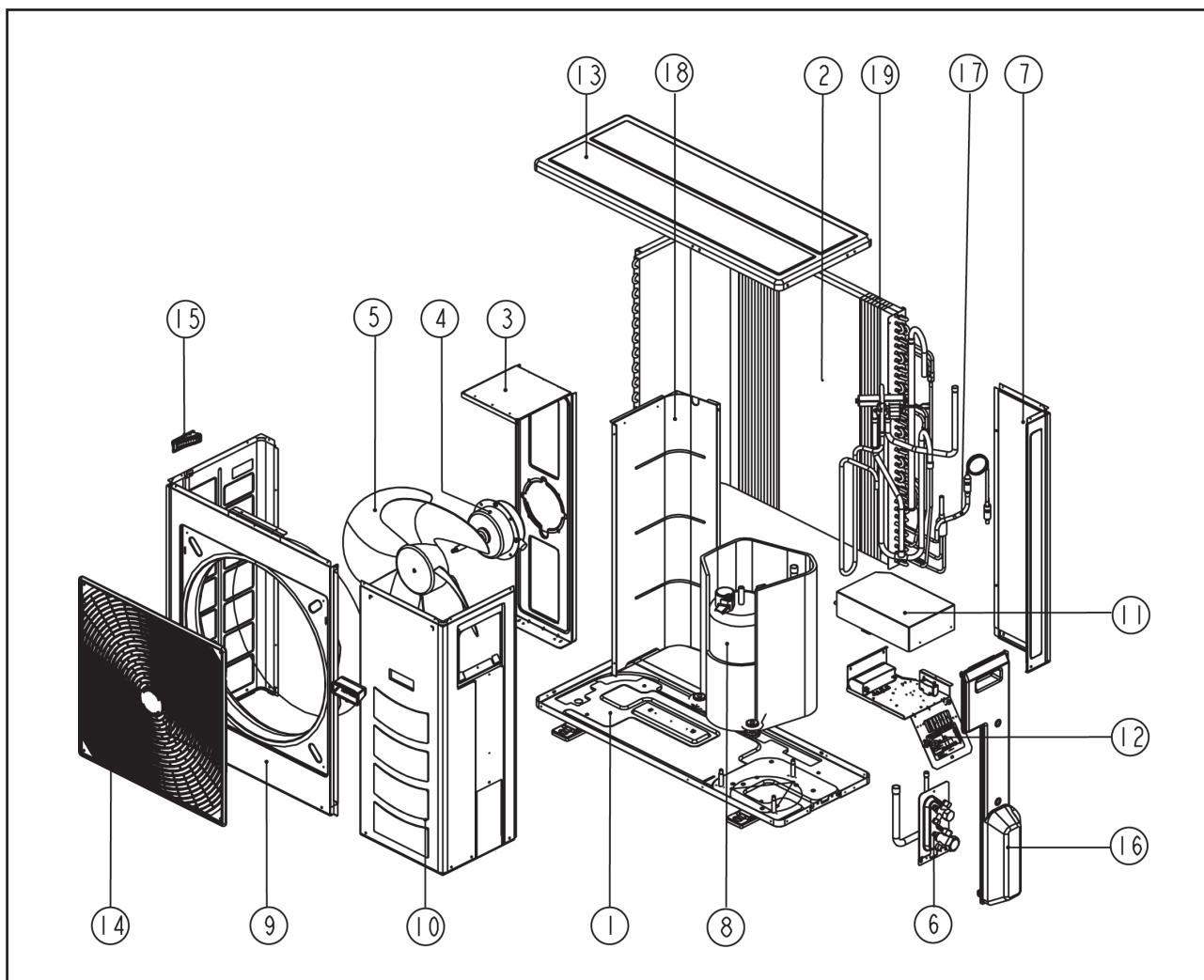
## Model: ALC 18CR / 20CR



No	Descriptions	Part No
1	ASSY,PAN BASE (5SL20C/CR)	R50014078281
2	ASSY,OUTDOOR COIL 7mm coil	
	ALC 18CR	R50024090296
	ALC 20CR	R50024075143
3	BRACKET MOTOR (SL20C/CR)	R01014070601
4	MOTOR, YDK64-6C/MSL25C-501-WL	R03039024539
5	FAN PROPELLER, ¥460 0Z40700 SUNWILL CHINA	R03019023393
6	ASSY VALVE BRACKET (SL20C/CR)-R22	R50014072861
7	PANEL RIGHT BACK (SL20C/CR)	R01014070599
8	COMPRESSOR, 2KS324D5AA04 Matsushita	R04019027266
9	PANEL FRONT/LEFT (SL20C/CR)	R01014070597
10	PANEL SERVICE (SL20C/CR)	R01014070598
11	PANEL TERMINAL COVER (SL20C/25C/28C/CR)	R01014070838
12	ASSY. CONTROL PANEL (SL20CR/25CR)	R50044086143

No	Descriptions	Part No
13	PANEL TOP (SL20C/25C/28C/CR)	R01014070596
14	ASSY FRONT GRILLE (SL20C/25C/28C/CR)	R50124072880
15	PLASTIC,HANDLE SL07C/09C/10C/15C/CR	R12014057948
16	ASSY VALVE COVER (SL20C/CR)	R50124072885
	ASSY. CAP TUBE DIET COMP	
17	ALC 18CR	R50024089931
	ALC 20CR	R50024087058
18	PARTITION (SL20C/CR)	R01014070603
<b>Parts not showed in diagram</b>		
	ASSY FLARE VALVE 3 WAY(5/8")SL20C/25C/28	R50054072863
	ASSY,VALVE 2 WAY(1/4")JA28493-1MA HANGJI	R50059022156
	CAPACITOR, CMPSR 60uF/450V Shizuki	R04029026782
	BACK GRILLE WITH PAINT (SL18C/20C/CR)	R50019026515

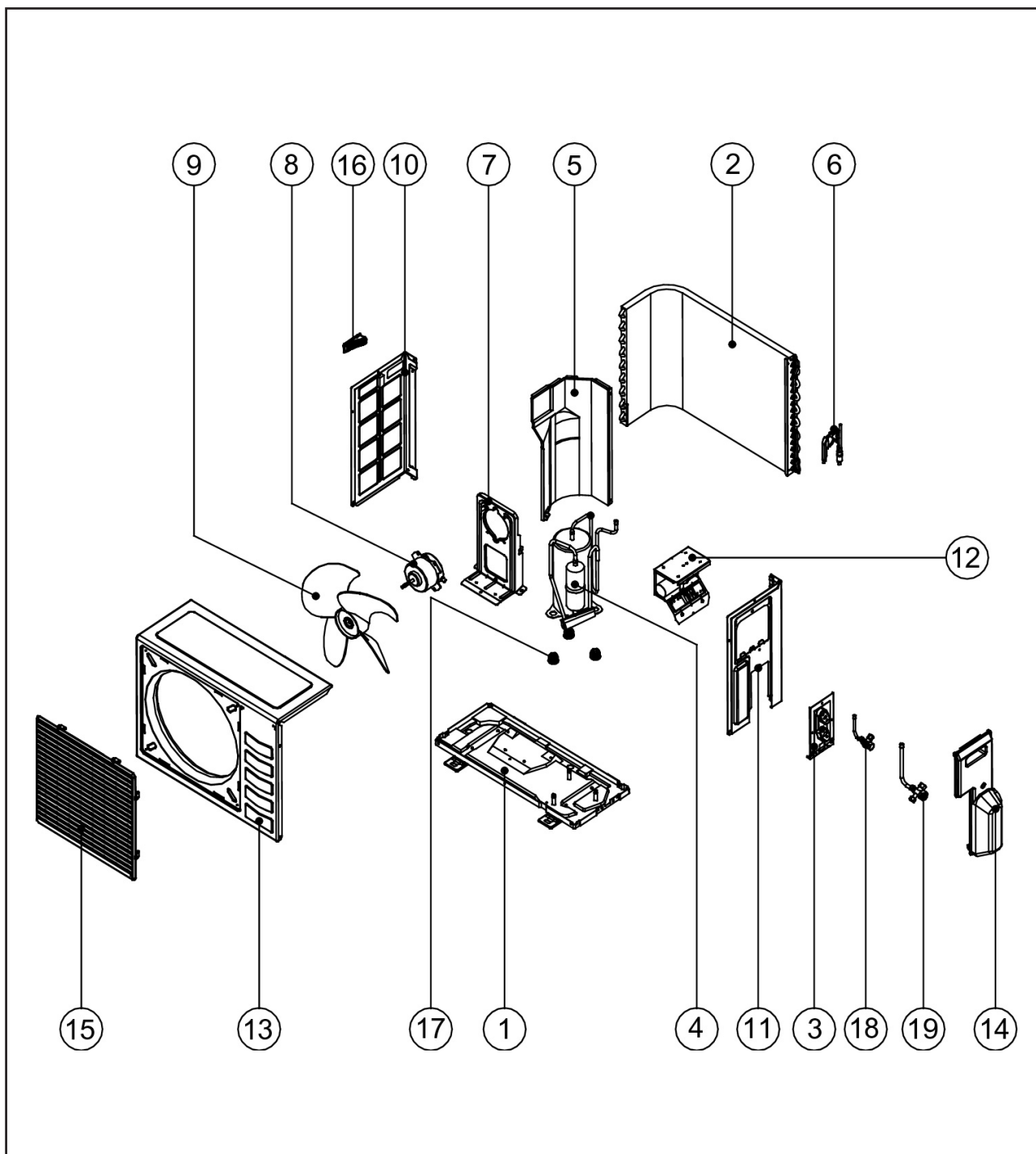
## Model: ALC 25CR



No	Descriptions	Part No
1	ASSY,PAN BASE (5SL20C/CR)	R50014078281
2	ASSY. OUTDOOR COIL(SL25CR)2 ROW 7MM COIL	R50024088731
3	BRACKET MOTOR (SL25C/28C/CR)	R01014070948
4	MOTOR, MSL25C-502-WL WELLING	R03039028207
5	FAN PROPELLER, ¥460 0Z40700 SUNWILL CHINA	R03019023393
6	ASSY VALVE BRACKET (SL25C/28C/CR)R22	R50014073890
7	PANEL RIGHT BACK (SL25C/28C/CR)	R01014070950
8	COMPRESSOR, ASSY 48B180JV2JH SAMSUNG	R50049022614
8	COMPRESSOR, 2JS438D3AA04 MATSUSHITA	R04019027570
9	PANEL FRONT / LEFT	R01014070947
10	PANEL SERVICE (SL25C/28C/CR)	R01014070949
11	PANEL TERMINAL COVER (SL20C/25C/28C/CR)	R01014070838
12	ASSY. CONTROL PANEL (5SL20CR)	R50044086136

No	Descriptions	Part No
13	PANEL TOP (SL20C/25C/28C/CR)	R01014070596
14	ASSY FRONT GRILLE (SL20C/25C/28C/CR)	R50124072880
15	PLASTIC,HANDLE SL07C/09C/10C/15C/CR	R12014057948
16	ASSY VALVE COVER (SL25C/28C/CR)	R50124073905
17	ASSY. CAP TUBE SL25C/CR (7MM COIL)	R50024088789
18	PARTITION (SL25C/28C/CR)	R01014070951
<b>Parts not showed in diagram</b>		
	ASSY FLARE VALVE 3 WAY(5/8")SL20C/25C/28	R50054072863
	ASSY, 3 WAYS VALVE (3/8") 90.0mmL HANGJI	R50059022577
	FELT, COMPRESSOR (SL20/25C COMP)	R06074084746
	BACK GRILLE WITH PAINT (SL25C/28C/CR)	R50019026514
	CAPACITOR, CMPSR 50uF/450VAC Shizuki	R04029026779

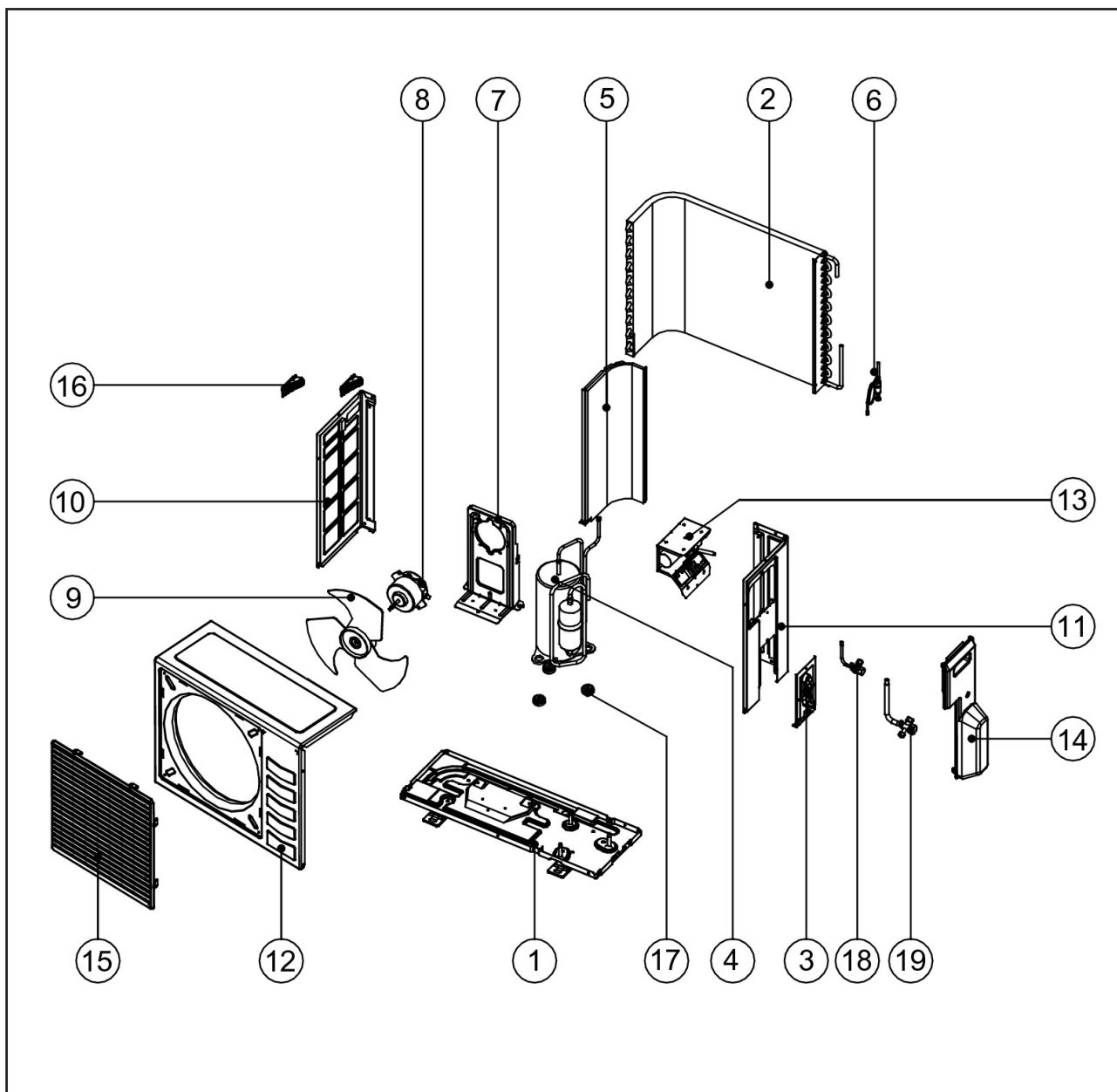
**OUTDOOR UNIT**  
**MODEL: A5LC 07C**



No	Descriptions	Part No
1	Assy., Base Pan	R50014057372
2	Assy., Condenser Coil	R50024064720
3	Valve Bracket	R01014051164
4	Compressor	R04019019592
5	Assy., Partition	R50064065275
6	Assy., Cap Tube	R50024064527
7	Bracket, Fan Motor	R01014052516
8	Fan Motor	R03039015324
9	Fan Blade	R03019004131

No	Descriptions	Part No
10	Left Panel	R01014052510
11	Right Panel	R01014052509
12	Assy. Control Panel	R50044054806
13	Assy., Front Panel	R01014052512
14	Assy., Valve Cover	R50124055172
15	Assy., Front Grille	R50124056905
16	Plastic, Handle	R12014057948
17	Rubber Grommet	R11059011558
18	Assy., Flare Valve 2 Ways 1/4"	R50059019453
19	Assy., Flare Valve 3 Ways 3/8"	R50059019454

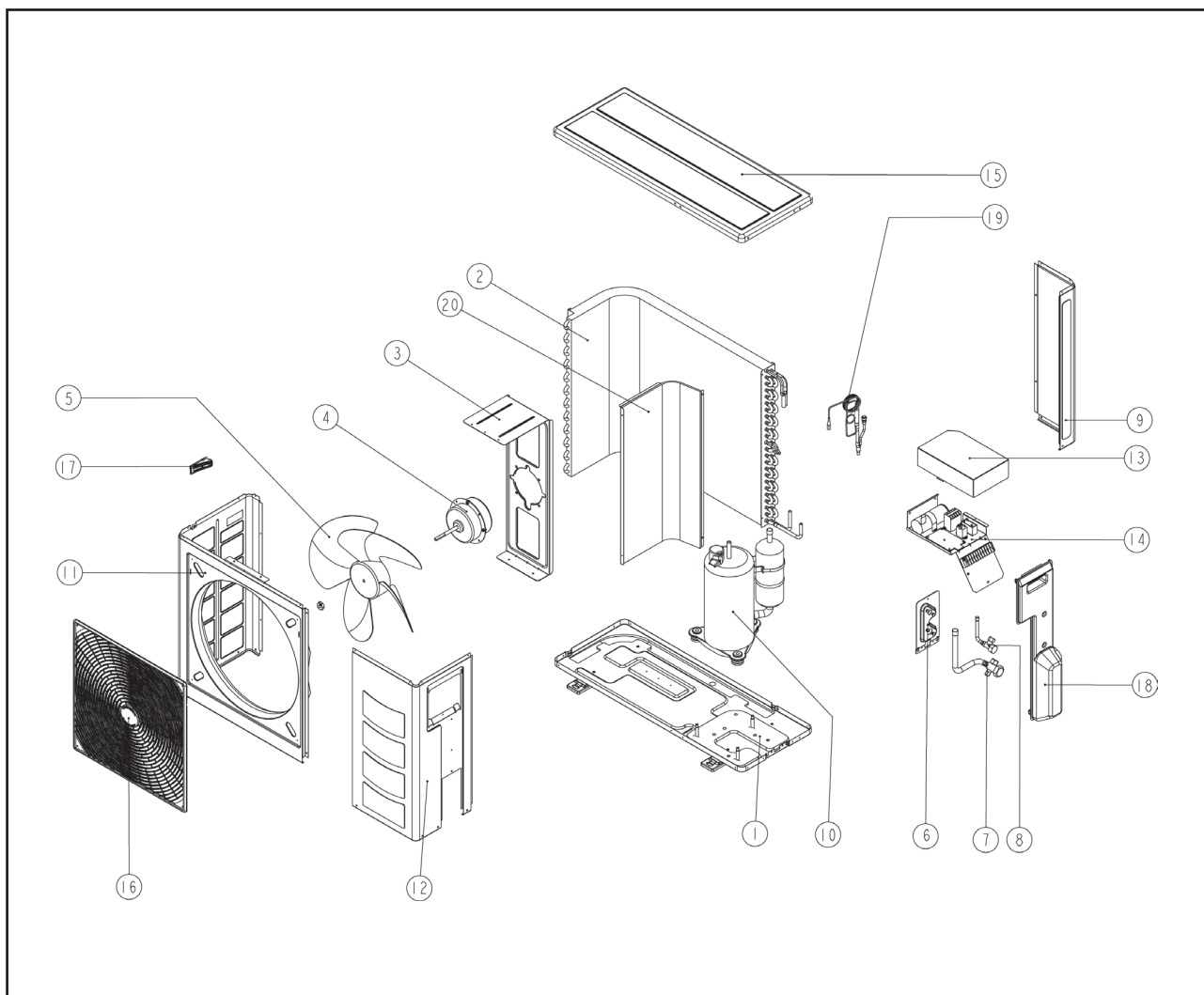
## Model: A5LC 10C / 15C



No	Descriptions	Part No
1	Assy., Base Pan	R50014051158
2	Assy., Condenser Coil	R50024064721
3	Valve Bracket	R01014051164
4	Compressor	
	A5LC 10C	R04019019590
	A5LC 15C	R04019019594
5	Assy., Partition	R50064055063
6	Assy., Cap Tube	
	A5LC 10C	R50024056101
	A5LC 15C	R50024054807
7	Bracket, Fan Motor	R01014051162
8	Fan Motor	
	A5LC 10C	R03039016104
	A5LC 15C	R03039015323
9	Fan Blade	R03019015339
10	Left Panel	R01014051166

No	Descriptions	Part No
11	Right Panel	R01014051167
12	Assy., Front Panel	R01014051171
13	Assy. Control Panel	
	A5LC 10C	R50044058195
	A5LC 15C	R50044057994
14	Assy., Valve Cover	R50124051173
15	Assy., Front Grille	R50124056700
16	Plastic, Handle	R12014057948
17	Rubber Grommet	
	A5LC 10C	R11054000272
	A5LC 15C	R11054000271
18	Assy., Flare Vlave 2 Ways 1/4"	R50059019453
19	Assy., Flare Valve 3 Ways 3/8"	
	A5LC 10C	R50059019454
	Assy., Flare Valve 3 Ways 1/2"	
	A5LC 15C	R50054019452

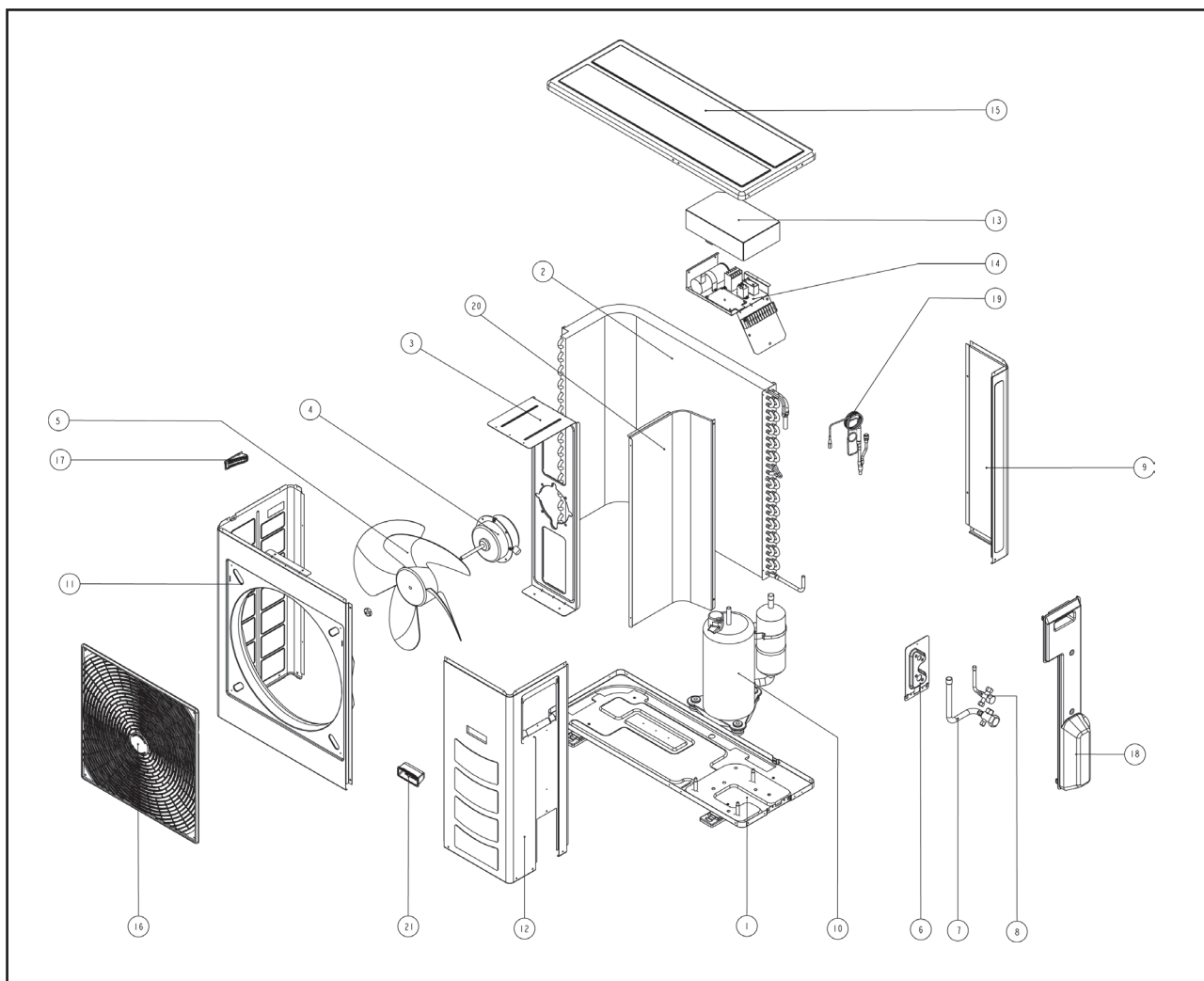
## MODEL: A5LC 20C



No	Descriptions	Part No
1	Assy. Base Pan	
	ALC 18C	R50014077978
	A5LC/ALC 20C	R50014013884
2	Assy. Outdoor Coil	
	ALC 18C	R50024077968
	ALC 20C	R50024070651
	A5LC 20C	R50024079078
3	Motor Bracket	R01014070601
4	Fan Motor	
	ALC 18C	R03039024539
	A5LC/ALC 20C	R03039023391
5	Fan Blade	R03019023393
6	Valve Bracket	R50014072861
7	Assy. Flare Valve 3 Ways 5/8"	
	ALC 18C/20C	R50054072863
	Assy. Flare Valve 3 Ways 1/2"	
	A5LC 20C	R50059023335
8	Assy. Flare Valve 2 Ways 1/4"	
	ALC 18C/20C	R50059022156
9	Assy. Flare Valve 2 Ways 1/4"	
	A5LC 20C	R50059023334
	Back Panel, Right	R01014070599

No	Descriptions	Part No
10	Compressor	
	ALC 18C	R50049022614
	ALC 20C	R04019018334
	A5LC 20C	R04019021361
11	Front Panel, Left	R01014070597
12	Service Panel	R01014070598
13	Terminal Cover Panel	R01014070838
14	Assy. Control Panel	
	ALC 18C	R50044077990
	ALC 20C	R50044073902
	A5LC 20C	R50044072876
15	Top Panel	R01014070596
16	Assy. Front Grille	R50124072880
17	Plastic Handle	R12014057948
18	Assy. Valve Cover	R50124072885
19	Assy. Cap Tube	
	ALC 18C	R50024077976
	ALC 20C	R50024077257
	A5LC 20C	R50024079156
20	Partition	R01014070603

## MODEL: A5LC 25 / 28C

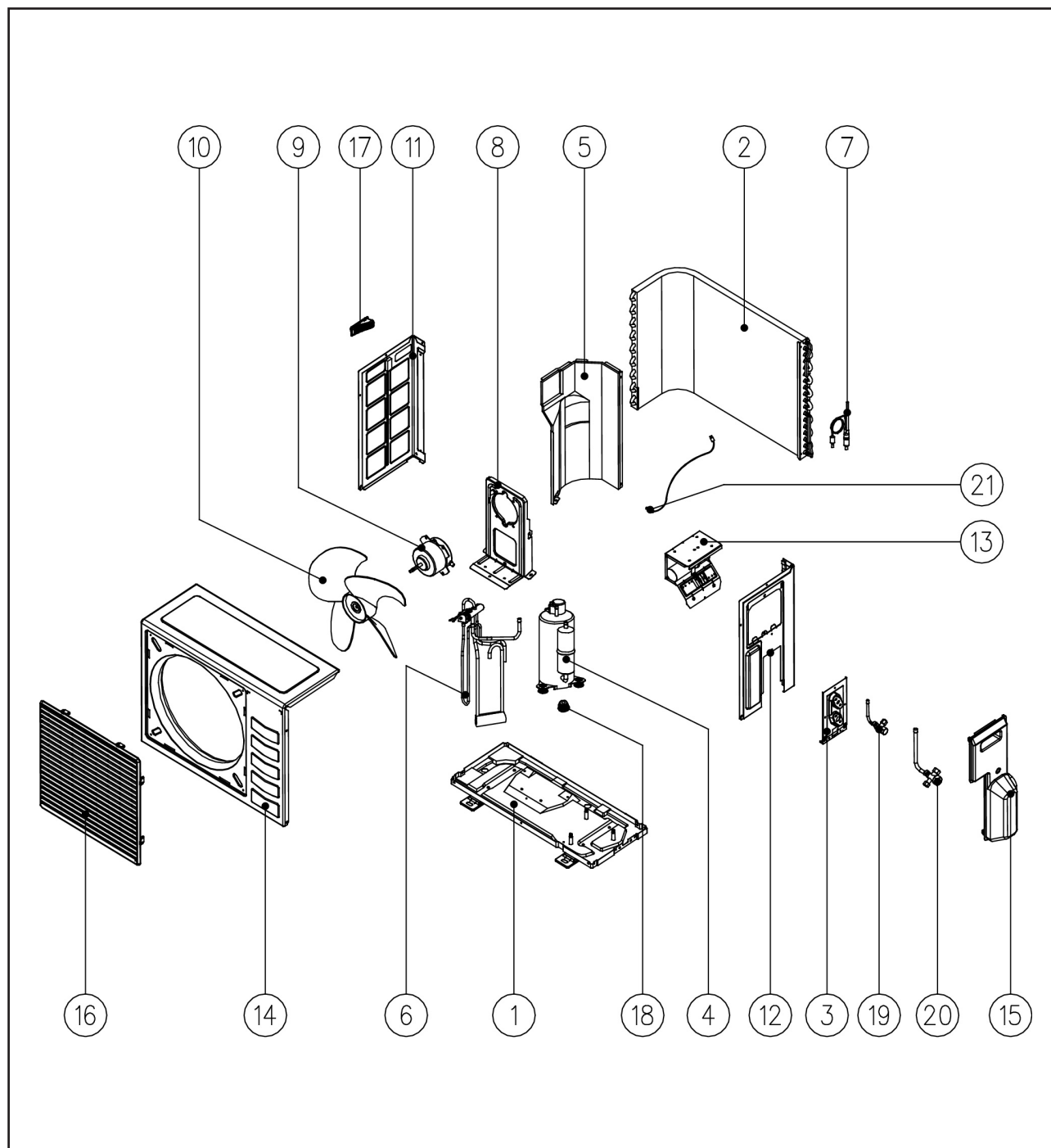


No	Descriptions	Part No
1	Assy. Base Pan	R50014073884
2	Assy. Outdoor Coil	
	ALC 25C/28C	R50024070959
	A5LC 25C/28C	R50024079238
3	Motor Bracket	R01014070948
4	Fan Motor	
	A5LC/ALC 25C	R03039023391
	A5LC/ALC 28C	R03039024538
5	Fan Blade	R03019023393
6	Valve Bracket	R50014073890
7	Assy. Flare Valve 3 Ways 5/8"	
	ALC 25C/28C	R50054072863
	A5LC 25C/28C	R50059023336
8	Assy. Flare Valve 2 Ways 3/8"	
	ALC 25C/28C	R50059022577
	A5LC 25C	R50059023334
	Assy. Flare Valve 3 Ways 3/8"	
	A5LC 28C	R50059024820
9	Back Panel, Right	R01014070950
10	Compressor	
	ALC 25C	R04019019032
	ALC 28C	R04019012828
	A5LC 25C/28C	R04019020449

No	Descriptions	Part No
11	Front Panel, Left	R01014070947
12	Service Panel	R01014070949
13	Terminal Cover Panel	R01014070838
14	Assy. Control Panel	
	A5LC/ALC 25C	R50044073902
	ALC 28C	R50044080172
	A5LC 28C	R50044080648
15	Top Panel	R01014070596
16	Assy. Front Grille	R50124072880
17	Plastic Handle, Side	R12014057948
18	Assy. Valve Cover	R50124073905
19	Assy. Cap Tube	
	ALC 25C	R50024073895
	A5LC 25C	R50024078311
	A5LC 28C	R50024079593
20	Partition	R01014070951
21	Plastic Handle, Front	R12014070955



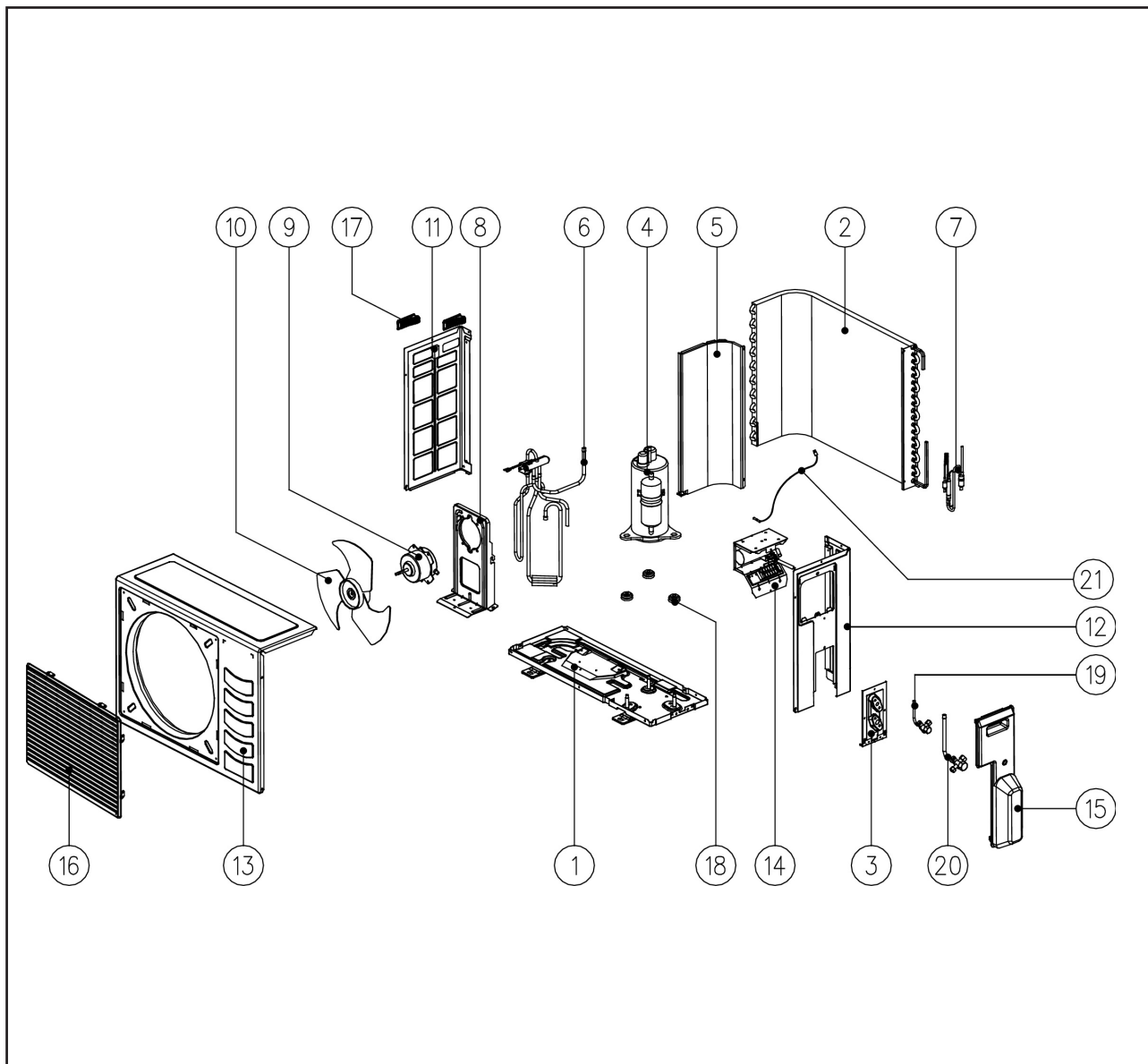
## MODEL: A5LC 07CR



No	Descriptions	Part No
1	Assy., Base Pan	R50014057372
2	Assy., Condenser Coil	R50024064720
3	Valve Bracket	R01014051164
4	Compressor	R04019019592
5	Assy., Partition	R50064065275
6	Assy., 4 Way Valve	R50024066259
7	Assy., Cap Tube	R50024066452
8	Bracket, Fan Motor	R01014052516
9	Fan Motor	R03039015324
10	Fan Blade	R03019004131
11	Left Panel	R01014052510

No	Descriptions	Part No
12	Right Panel	R01014052509
13	Assy. Control Panel	R50044059032
14	Assy., Front Panel	R01014052512
15	Assy., Valve Cover	R50124055172
16	Assy., Front Grille	R50124056905
17	Plastic, Handle	R12014057948
18	Rubber Grommet	R11059011558
19	Assy., Flare Valve 2 Ways 1/4"	R50059019453
20	Assy., Flare Valve 3 Ways 3/8"	R50059019454
21	Sensor, Outdoor Defrost	R50134039416

## Model: A5LC 10CR / 15CR

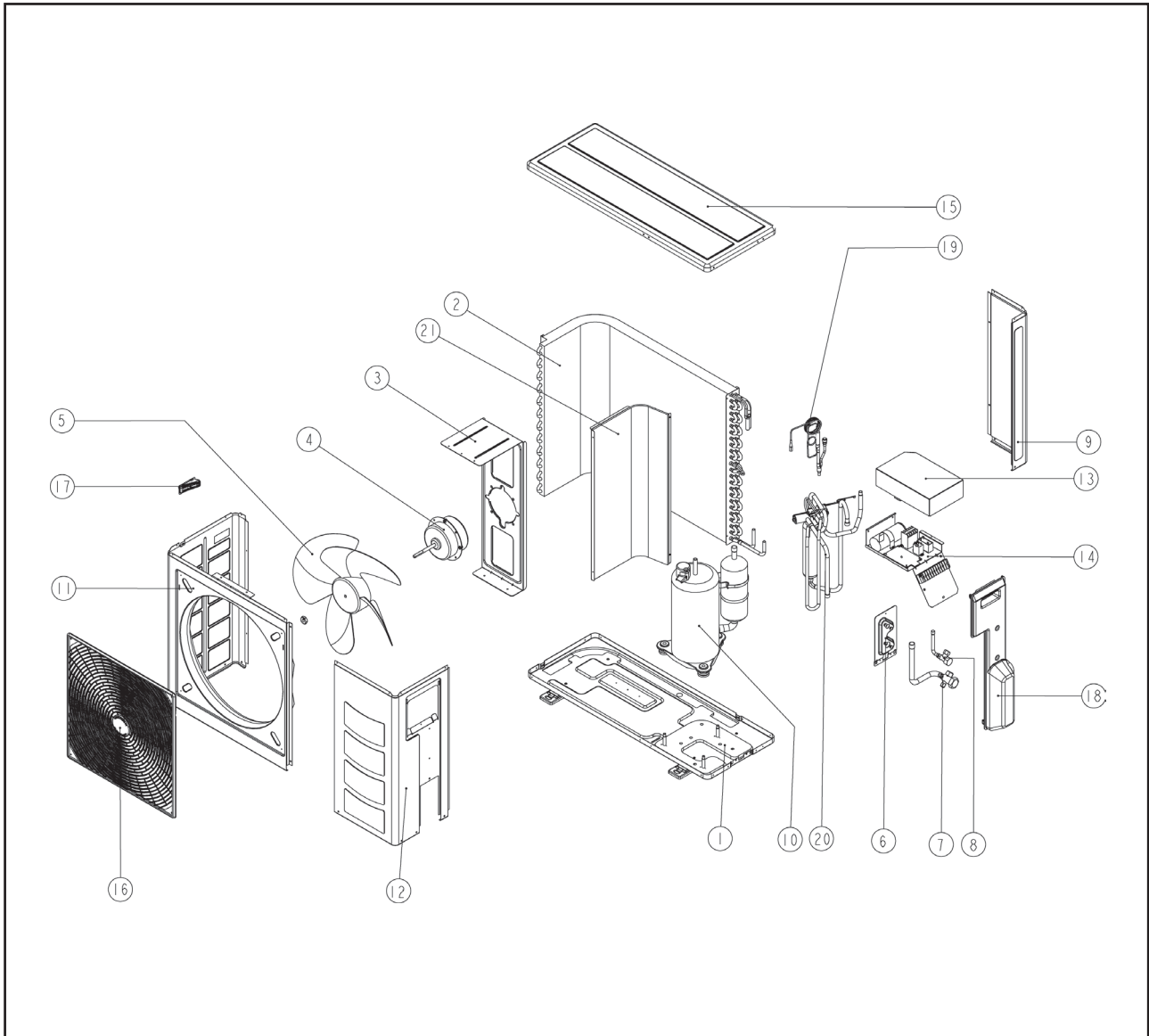


No	Descriptions	Part No
1	Assy., Base Pan	R50014051158
2	Assy., Condenser Coil	
	A5LC 10CR	R50024064721
	A5LC 15CR	R50024066517
3	Valve Bracket	R01014051164
4	Compressor	
	A5LC 10CR	R04019019590
	A5LC 15CR	R04019019594
5	Assy., Partition	R01014051165
6	Assy., 4 Way Valve	R50024066173
7	Assy., Cap Tube	
	A5LC 10CR	R50024066256
	A5LC 15CR	R50024066493
8	Bracket, Fan Motor	R01014051162
9	Fan Motor	
	A5LC 10CR	R03039016104
	A5LC 15CR	R03039015323
10	Fan Blade	R03019015339

No	Descriptions	Part No
11	Left Panel	R01014051166
12	Right Panel	R01014051167
13	Assy., Front Panel	R01014051171
14	Assy. Control Panel	
	A5LC 10CR	R50044059033
	A5LC 15CR	R50044059034
15	Assy., Valve Cover	R50124051173
16	Assy., Front Grille	R50124056700
17	Plastic, Handle	R12014057948
18	Rubber Grommet	
	A5LC 10CR	R11054000272
	A5LC 15CR	R11054000271
19	Assy., Flare Valve 2 Ways 1/4"	R50059019453
20	Assy., Flare Valve 3 Ways 3/8"	
	A5LC 10CR	R50059019454
	Assy., Flare Valve 3 Ways 1/2"	
	A5LC 15CR	R50054019452
21	Sensor, Outdoor Defrost	R50134039416



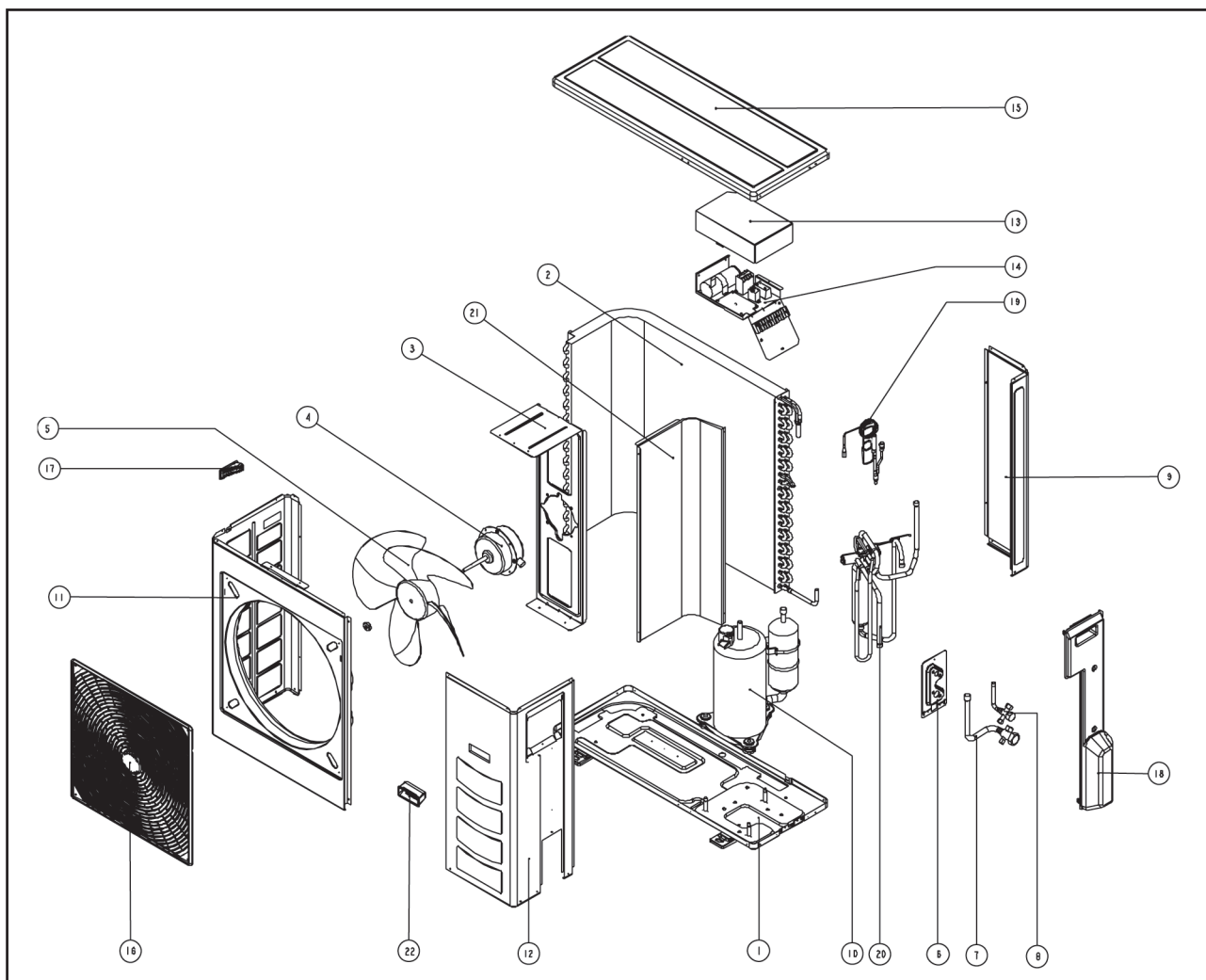
## MODEL: A5LC 20CR



No	Descriptions	Part No
1	Assy. Base Pan	R50014073884
2	Assy. Outdoor Coil	
	ALC 20CR	R50024077089
	A5LC 20CR	R50024075143
3	Motor Bracket	R01014070601
4	Fan Motor	R03039023391
5	Fan Blade	R03019023393
6	Valve Bracket	R50014072861
7	Assy. Flare Valve 3 Ways 5/8"	
	ALC 20CR	R50054072863
	Assy. Flare Valve 3 Ways 1/2"	
	A5LC 20CR	R50059023335
8	Assy. Flare Valve 2 Ways 1/4"	
	ALC 20CR	R50059022156
	A5LC 20CR	R50059023334
9	Back Panel, Right	R01014070599
10	Compressor	
	ALC 20CR	R04019018334
	A5LC 20CR	R04019021361

No	Descriptions	Part No
11	Front Panel, Left	R01014070597
12	Service Panel	R01014070598
13	Terminal Cover Panel	R01014070838
14	Assy. Control Panel	
	ALC 20CR	R50044077198
	A5LC 20CR	R50044077200
15	Top Panel	R01014070596
16	Assy. Front Grille	R50124072880
17	Plastic Handle	R12014057948
18	Assy. Valve Cover	R50124072885
19	Assy. Cap Tube	
	ALC 20CR	R50024076304
	A5LC 20CR	R50024078285
20	Assy. 4 Way Valve	
	ALC 20CR	R05019004158
	A5LC 20CR	R05019016937
21	Partition	R01014070603

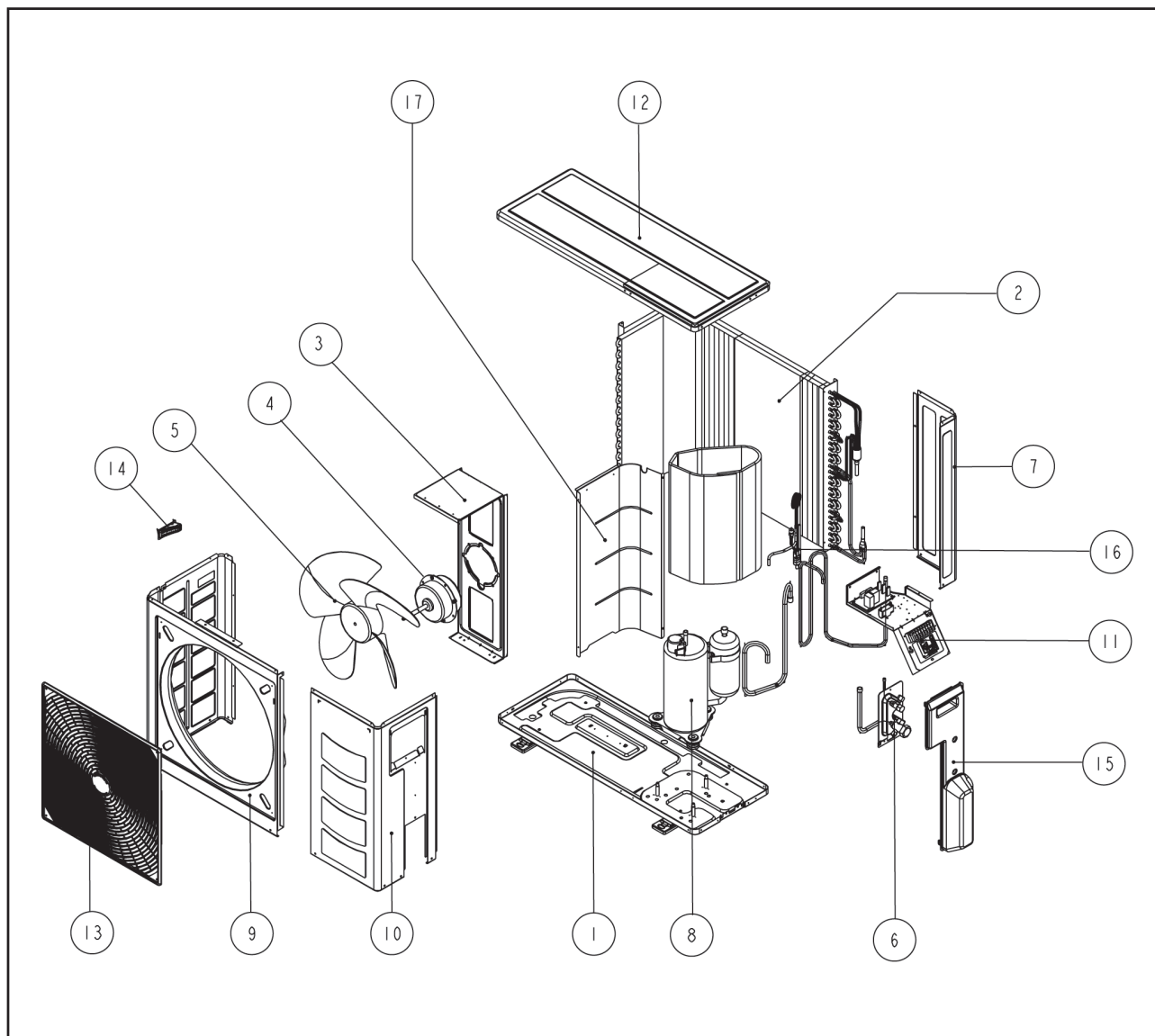
## MODEL: A5LC 25CR / 28CR



No	Descriptions	Part No
1	Assy. Base Pan	R50014073884
2	Assy. Outdoor Coil	
	ALC 25CR/28CR	R50024077092
	A5LC 25CR/28CR	R50024075147
3	Motor Bracket	R01014070948
4	Fan Motor	
	A5LC/ALC 25CR	R03039023391
	A5LC/ALC 28CR	R03039024538
5	Fan Blade	R03019023393
6	Valve Bracket	R50014073890
7	Assy. Flare Valve 3 Ways 5/8"	
	ALC 25CR/28CR	R50054072863
	A5LC 25CR/28CR	R50059023336
8	Assy. Flare Valve 2 Ways 3/8"	
	ALC 25CR/28CR	R50059022577
	A5LC 25CR	R50059023334
	Assy. Flare Valve 3 Ways 3/8"	
	A5LC 28CR	R50059024820
9	Back Panel, Right	R01014070950
10	Compressor	
	ALC 25CR	R04019019032
	ALC 28CR	R04019012828
	A5LC 25CR/28CR	R04019020449

No	Descriptions	Part No
11	Front Panel, Left	R01014070947
12	Service Panel	R01014070949
13	Terminal Cover Panel	R01014070838
14	Assy. Control Panel	
	A5LC/ALC 25CR	R50044077198
	ALC 28CR	R50044080649
	A5LC 28CR	R50044080650
15	Top Panel	R01014070596
16	Assy. Front Grille	R50124072880
17	Plastic Handle, Side	R12014057948
18	Assy. Valve Cover	R50124073905
19	Assy. Cap Tube	
	ALC 25CR	R50024077286
	ALC 28CR	R50024080186
	A5LC 25CR	R50024078311
	A5LC 28CR	R50024080312
20	Assy. 4 Way Valve	
	ALC 25CR/28CR	R05019004158
	A5LC 25CR/28CR	R05019016937
21	Partition	R01014070951
22	Plastic Handle, Front	R12014070955

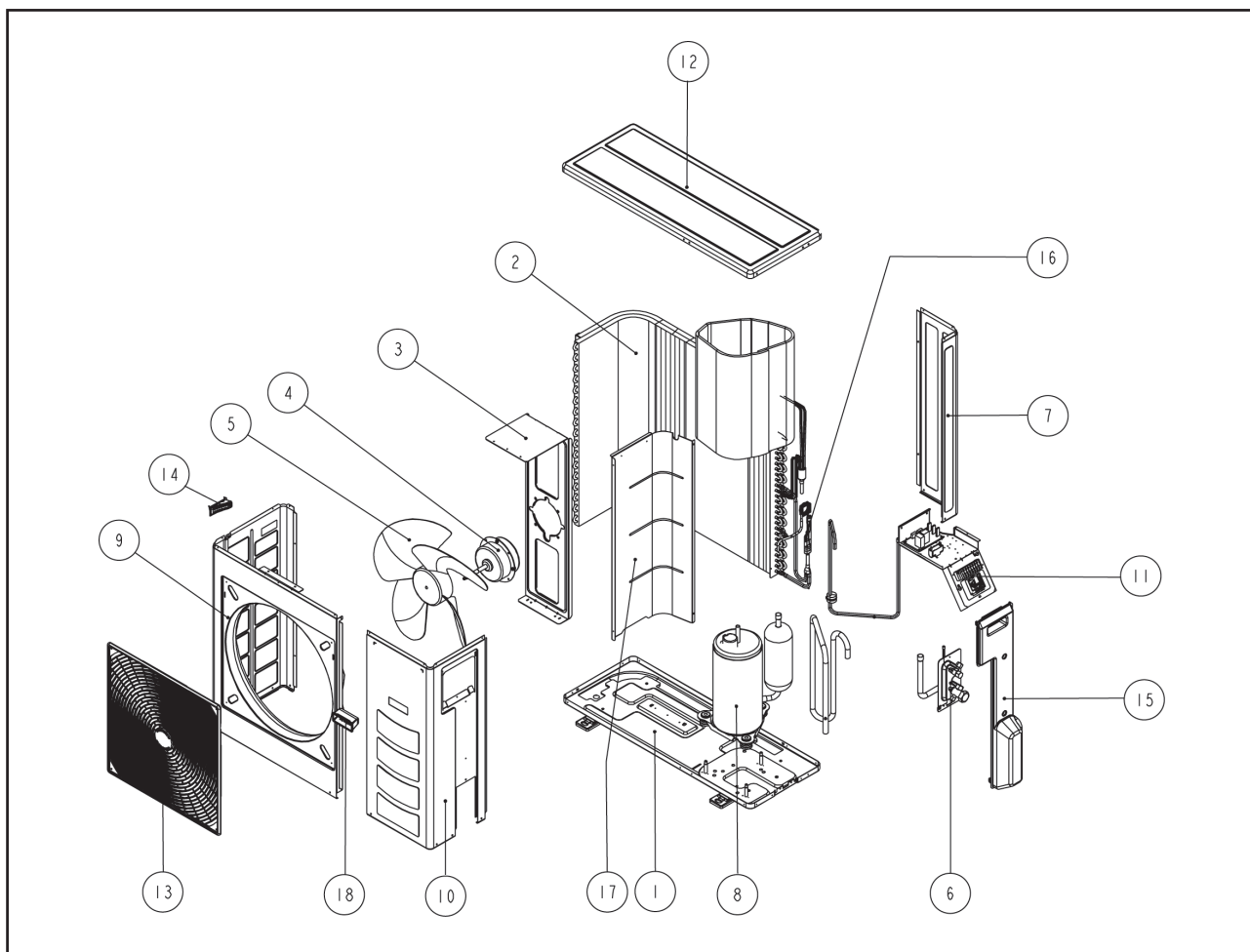
## Model : A5LC 20C (3 PHASE)



No	Descriptions	Part No
1	ASSY,PAN BASE (5SL20C/CR)	R50014078281
2	ASSY,OUTDOOR COIL (5SL20C)2RX28THX18FPI	R50024079078
3	BRACKET MOTOR (SL20C/CR)	R01014070601
4	MOTOR, MSL20C/25C-501 64W WELLING CHINA	R03039023391
5	FAN PROPELLER, ¥460 0Z40700 SUNWILL CHIN	R03019023393
6	ASSY,VALVE BRACKET (5SL20C/CR)	R50014078280
7	PANEL RIGHT BACK (SL20C/CR)	R01014070599
8	COMPRESSOR, 5KS205PAB01 MATSUSHITA	R04019029246
9	PANEL FRONT/LEFT (SL20C/CR)	R01014070597
10	PANEL SERVICE (SL20C/CR)	R01014070598
11	ASSY CONTROL PANEL (5SL20C 3PH)	R50044092272
12	PANEL TOP (SL20C/25C/28C/CR)	R01014070596
13	ASSY FRONT GRILLE (SL20C/25C/28C/CR)	R50124072880

No	Descriptions	Part No
14	PLASTIC,HANDLE SL07C/09C/10C/15C/CR	R12014057948
15	ASSY VALVE COVER (SL20C/CR)	R50124072885
16	ASSY,CAPILLARY TUBE (5SL20C)	R50024081921
17	PARTITION (SL20C/CR)	R01014070603
<b>Parts Not In The Diagram</b>		
	ASSY,VALVE 3-WAY(1/2")JB48420-1MA(R410A)	R50059023335
	ASSY,VALVE 2-WAY(1/4")JA28493-2MA(R410A)	R50059023334
	PANEL TERMINAL COVER (SL20C/25C/28C/CR)	R01014070838
	CAPACITOR, CMPSR 3.5uF/450V(TAB250)Shizu	R04029026759
	CAPACITOR, CMPSR 50uF/450VAC Shizuki	R04029026779
	CLAMP, CAPACITOR 126.0mm	R07054028872
	ASSY TERMINAL PANEL (SL20C/25C/28C/CR)	R50014072877
	PHASE PROTECTOR, PP1.03 NO SENSOR EXPORT	R04089018834

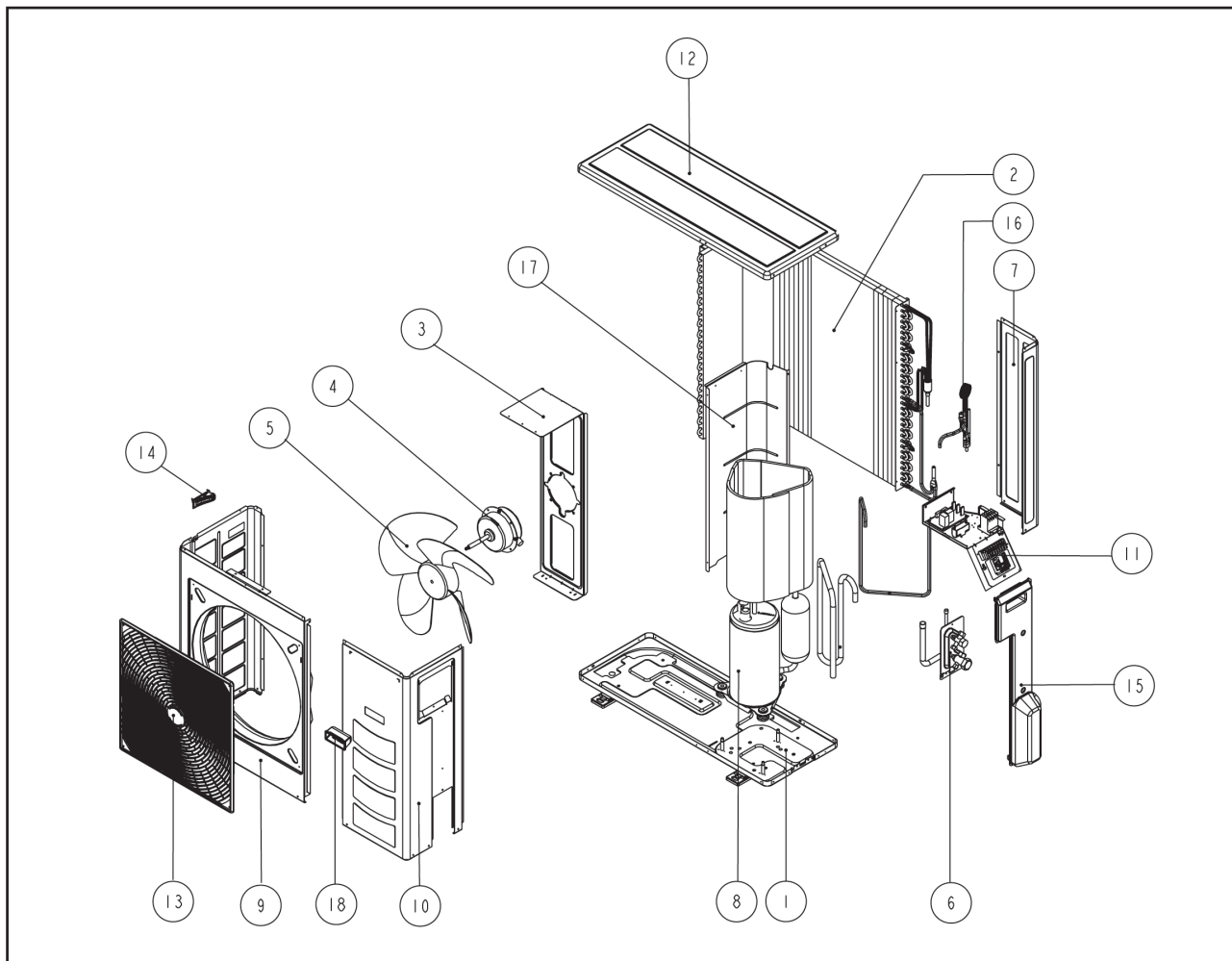
## Model : A5LC 25C (3 PHASE)



No	Descriptions	Part No
1	ASSY PAN BASE (SL20/25/28C(R))	R50014073884
2	ASSY,OUTDOOR COIL (5SL25C)2RX34THX18FPI	R50024079238
3	BRACKET MOTOR (SL25C/28C/CR)	R01014070948
4	MOTOR, MSL20C/25C-501 64W WELLING CHINA	R03039023391
5	FAN PROPELLER, ¥460 0Z40700 SUNWILL CHIN	R03019023393
6	ASSY,VALVE BRACKET (5SL25C/25CR)	R50014078321
7	PANEL RIGHT BACK (SL25C/28C/CR)	R01014070950
8	COMPRESSOR, 5JS270PAB01 MATSUSHITA	R04019029248
9	PANEL FRONT / LEFT	R01014070947
10	PANEL SERVICE (SL25C/28C/CR)	R01014070949
11	ASSY CONTROL PANEL (5SL25C 3PH)	R50044092273
12	PANEL TOP (SL20C/25C/28C/CR)	R01014070596
13	ASSY FRONT GRILLE (SL20C/25C/28C/CR)	R50124072880
14	PLASTIC,HANDLE SL07C/09C/10C/15C/CR	R12014057948

No	Descriptions	Part No
15	ASSY VALVE COVER (SL25C/28C/CR)	R50124073905
16	ASSY,CAPILLARY TUBE (5SL25C-3PHASE)	R50024092169
17	PARTITION (SL25C/28C/CR)	R01014070951
18	PLASTIC HANDLE FRONT (SL25C/28C/CR)	R12014070955
<b>Parts Not In The Diagram</b>		
	ASSY,VALVE 3 WAY(5/8")JB58264-2MA-R410	R50059023336
	ASSY,VALVE 2-WAY(1/4")JA28493-2MA(R410A)	R50059023334
	PANEL TERMINAL COVER (SL20C/25C/28C/CR)	R01014070838
	CAPACITOR, CMPSR 3.5uF/450V(TAB250)Shizu	R04029026759
	CAPACITOR, CMPSR 45uF/450VAC Shizuki	R04029026778
	CLAMP, CAPACITOR 126.0mm	R07054028872
	ASSY TERMINAL PANEL (SL20C/25C/28C/CR)	R50014072877
	PHASE PROTECTOR, PP1.03 NO SENSOR EXPORT	R04089018834

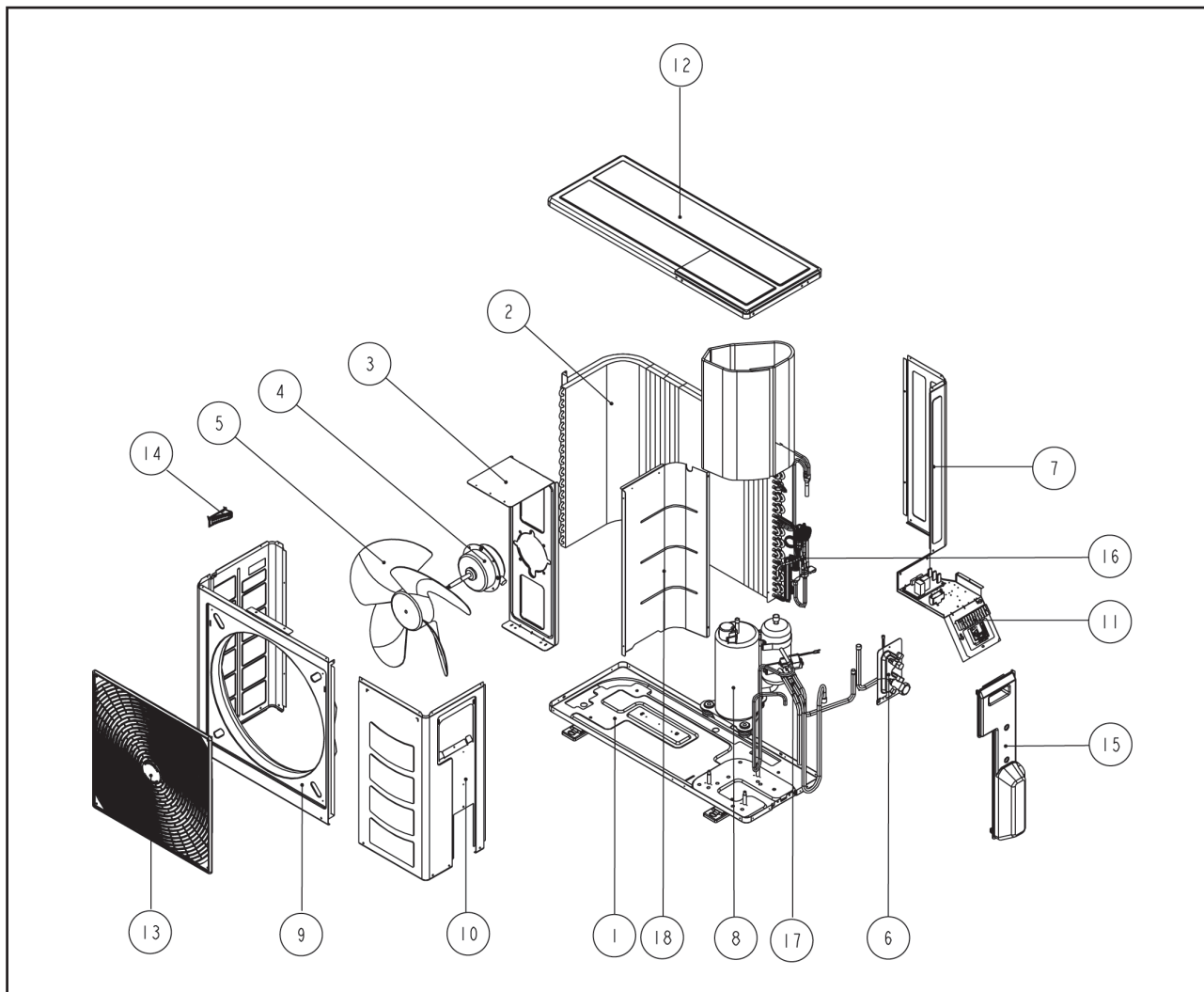
## Model : A5LC 28C (3 PHASE)



No	Descriptions	Part No
1	ASSY PAN BASE (SL20/25/28C(R))	R50014073884
2	ASSY,OUTDOOR COIL (5SL25C)2RX34THX18FPI	R50024079238
3	BRACKET MOTOR (SL25C/28C/CR)	R01014070948
4	MOTOR, YDK75-6S/MSL28C-501-WL	R03039024538
5	FAN PROPELLER, ¥460 0Z40700 SUNWILL CHIN	R03019023393
6	ASSY,VALVE BRACKET (5SL28C/CR)	R50014080371
7	PANEL RIGHT BACK (SL25C/28C/CR)	R01014070950
8	COMPRESSOR, 5JS315PAB01 MATSUSHITA	R04019029629
9	PANEL FRONT / LEFT	R01014070947
10	PANEL SERVICE (SL25C/28C/CR)	R01014070949
11	ASSY CONTROL PANEL (5SL28C 3PH)	R50044092274
12	PANEL TOP (SL20C/25C/28C/CR)	R01014070596
13	ASSY FRONT GRILLE (SL20C/25C/28C/CR)	R50124072880
14	PLASTIC,HANDLE SL07C/09C/10C/15C/CR	R12014057948

No	Descriptions	Part No
15	ASSY VALVE COVER (SL25C/28C/CR)	R50124073905
16	ASSY,CAPILLARY TUBE (5SL28C)	R50024079593
17	PARTITION (SL25C/28C/CR)	R01014070951
18	PLASTIC HANDLE FRONT (SL25C/28C/CR)	R12014070955
<b>Parts Not In The Diagram</b>		
	ASSY,VALVE 3 WAY(5/8")JB58264-2MA-R410	R50059023336
	ASSY,3 WAY VALVE (3/8")5SL28C/CR	R50059024820
	PANEL TERMINAL COVER (SL20C/25C/28C/CR)	R01014070838
	CAPACITOR, CMPSR 5uF/450V 50/60Hz Shizuk	R04029026966
	CAPACITOR, CMPSR 45uF/450VAC Shizuki	R04029026778
	CLAMP, CAPACITOR 126.0mm	R07054028872
	ASSY TERMINAL PANEL (SL20C/25C/28C/CR)	R50014072877
	PHASE PROTECTOR, PP1.03 NO SENSOR EXPORT	R04089018834

## Model : A5LC 20CR (3 PHASE)

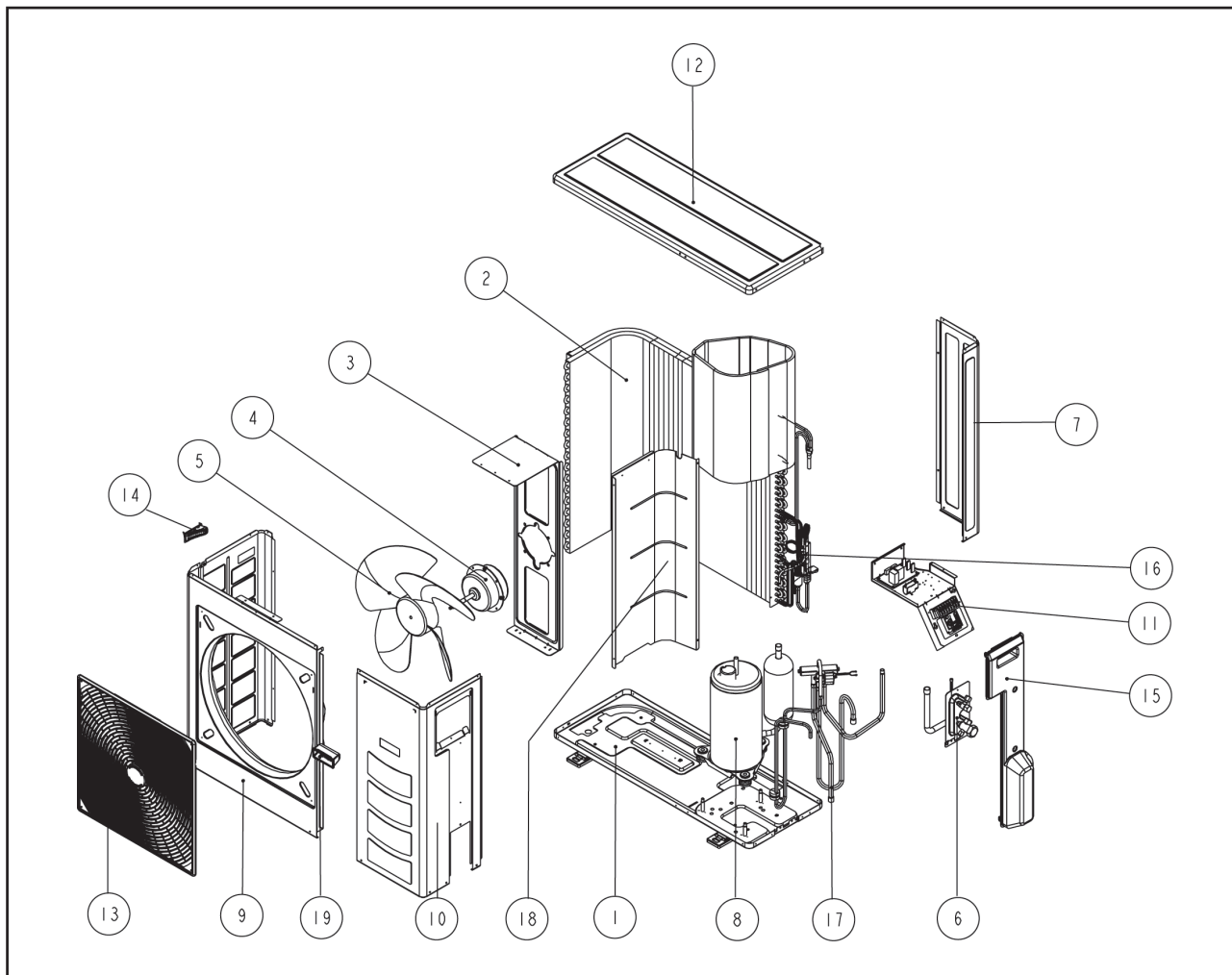


No	Descriptions	Part No
1	ASSY,PAN BASE (5SL20C/CR)	R50014078281
2	ASSY,OUTDOOR COIL (5SL20C/CR 2RX28TH)	R50024075143
3	BRACKET MOTOR (SL20C/CR)	R01014070601
4	MOTOR,YDK64-6C/MSL25C-501-WL	R03039023391
5	FAN PROPELLER, ¥460 0Z40700 SUNWILL CHIN	R03019023393
6	ASSY,VALVE BRACKET (5SL20C/CR)	R50014078280
7	PANEL RIGHT BACK (SL20C/CR)	R01014070599
8	COMPRESSOR, 5KS205PAB01 MAT	R04019029246
9	PANEL FRONT/LEFT (SL20C/CR)	R01014070597
10	PANEL SERVICE (SL20C/CR)	R01014070598
11	ASSY CONTROL PANEL (5SL20CR 3PH)	R50044092275
12	PANEL TOP (SL20C/25C/28C/CR)	R01014070596
13	ASSY FRONT GRILLE (SL20C/25C/28C/CR)	R50124072880
14	PLASTIC,HANDLE SL07C/09C/10C/15C/CR	R12014057948

No	Descriptions	Part No
15	ASSY VALVE COVER (SL20C/CR)	R50124072885
16	ASSY,CAPILLARY TUBE (5SL20CR)	R50024081904
17	ASSY,TUBING 4-WAY VALVE (5SL20CR)	R50024080655
18	ASSY PARTITION (SL20C/CR)	R50064072871
<b>Parts Not In The Diagram</b>		
	ASSY,VALVE 3-WAY(1/2")JB48420-1MA(R410A)	R50059023335
	ASSY,VALVE 2-WAY(1/4")JA28493-2MA(R410A)	R50059023334
	PANEL TERMINAL COVER (SL20C/25C/28C/CR)	R01014070838
	CAPACITOR, CMPSR 3.5uF/450V(TAB250)Shizu	R04029026759
	CAPACITOR, CMPSR 50uF/450VAC Shizuki	R04029026779
	CLAMP, CAPACITOR 126.0mm	R07054028872
	ASSY TERMINAL PANEL (SL20C/25C/28C/CR)	R50014072877
	VALVE, REV 4 WAY SHF-7H-34U(RK) SHANHUA	R05019016937
	PHASE PROTECTOR, PP1.03 NO SENSOR EXPORT	R04089018834



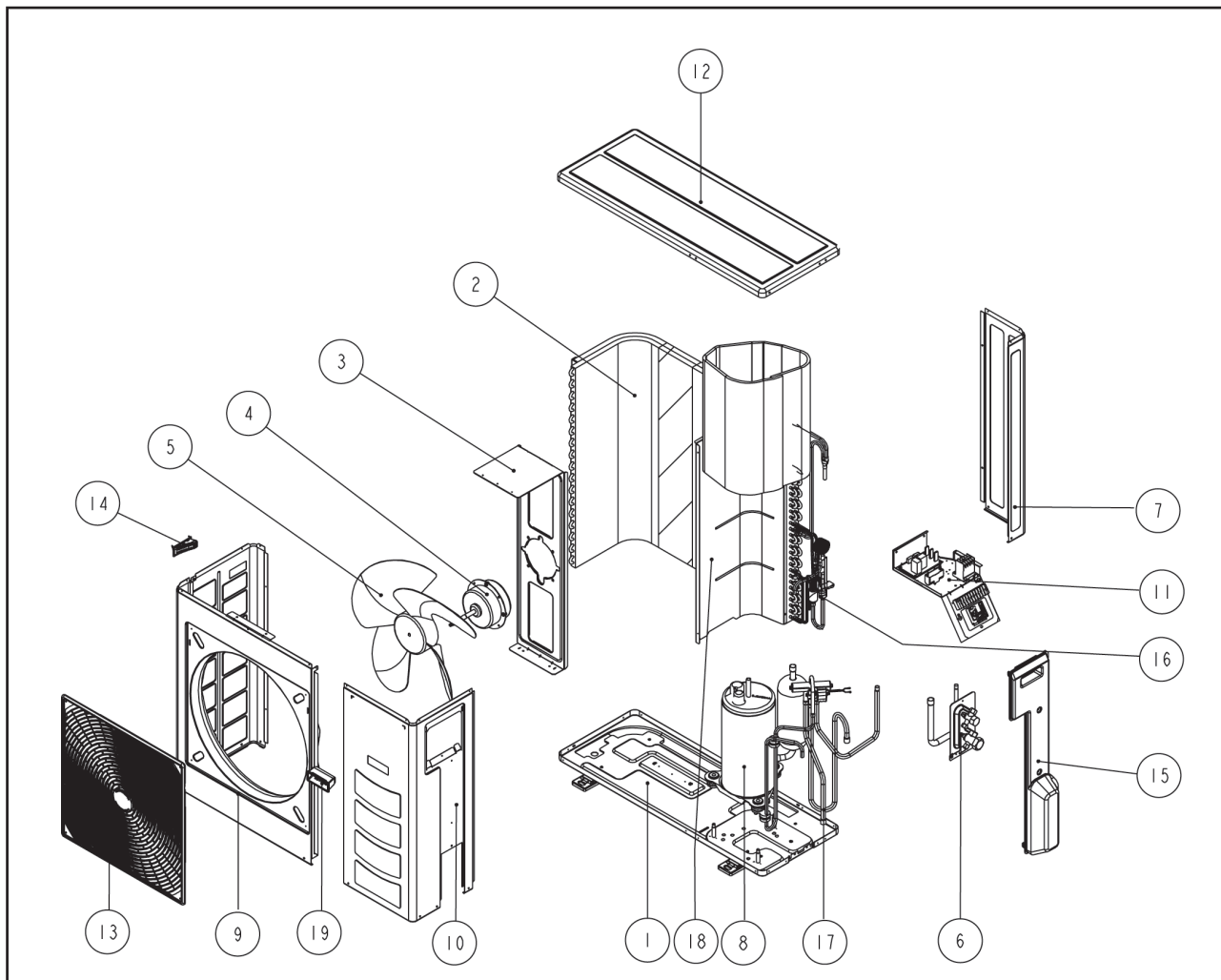
## Model : A5LC 25CR (3 PHASE)



No	Descriptions	Part No
1	ASSY PAN BASE (SL20/25/28C(R))	R50014073884
2	ASSY. OUTDOOR COIL (5SL25CR/28CR)	R50024075147
3	BRACKET MOTOR (SL25C/28C/CR)	R01014070948
4	MOTOR, MSL20C/25C-501 64W WELLING CHINA	R03039023391
5	FAN PROPELLER, ¥460 0Z40700 SUNWILL CHIN	R03019023393
6	ASSY, VALVE BRACKET (5SL25C/25CR)	R50014078321
7	PANEL RIGHT BACK (SL25C/28C/CR)	R01014070950
8	COMPRESSOR, 5JS270PAB01 MATSUSHITA	R04019029248
9	PANEL FRONT / LEFT	R01014070947
10	PANEL SERVICE (SL25C/28C/CR)	R01014070949
11	ASSY CONTROL PANEL (5SL25CR 3PH)	R50044092276
12	PANEL TOP (SL20C/25C/28C/CR)	R01014070596
13	ASSY FRONT GRILLE (SL20C/25C/28C/CR)	R50124072880
14	PLASTIC, HANDLE SL07C/09C/10C/15C/CR	R12014057948

No	Descriptions	Part No
15	ASSY VALVE COVER (SL25C/28C/CR)	R50124073905
16	ASSY, CAPILLARY TUBE (5SL25CR-3PHASE)	R50024092178
17	ASSY, TUBING 4-WAY VALVE (5SL25CR)	R50024080572
18	ASSY PARTITION (SL25C/28C/CR)	R50064073900
19	PLASTIC HANDLE FRONT (SL25C/28C/CR)	R12014070955
<b>Parts Not In The Diagram</b>		
	ASSY, VALVE BRACKET (5SL25C/25CR)	R50014078321
	ASSY, VALVE 3 WAY (5/8") JB58264-2MA-R410	R50059023336
	PANEL TERMINAL COVER (SL20C/25C/28C/CR)	R01014070838
	CAPACITOR, CMPSR 3.5uF/450V(TAB250)Shizu	R04029026759
	CAPACITOR, CMPSR 45uF/450VAC Shizuki	R04029026778
	CLAMP, CAPACITOR 126.0mm	R07054028872
	ASSY TERMINAL PANEL (SL20C/25C/28C/CR)	R50014072877
	PHASE PROTECTOR, PP1.03 NO SENSOR EXPORT	R04089018834

## Model : A5LC 28CR (3 PHASE)



No	Descriptions	Part No
1	ASSY PAN BASE (SL20/25/28C(R))	R50014073884
2	ASSY. OUTDOOR COIL (5SL25CR/28CR)	R50024075147
3	BRACKET MOTOR (SL25C/28C/CR)	R01014070948
4	MOTOR, YDK75-6S/MSL28C-501-WL	R03039024538
5	FAN PROPELLER, ¥460 0Z40700 SUNWILL CHIN	R03019023393
6	ASSY, VALVE BRACKET (5SL28C/CR)	R50014080371
7	PANEL RIGHT BACK (SL25C/28C/CR)	R01014070950
8	COMPRESSOR, 5JS315PAB01 MATSUSHITA	R04019029629
9	PANEL FRONT / LEFT	R01014070947
10	PANEL SERVICE (SL25C/28C/CR)	R01014070949
11	ASSY CONTROL PANEL (5SL28CR 3PH)	R50044092277
12	PANEL TOP (SL20C/25C/28C/CR)	R01014070596
13	ASSY FRONT GRILLE (SL20C/25C/28C/CR)	R50124072880
14	PLASTIC, HANDLE SL07C/09C/10C/15C/CR	R12014057948

No	Descriptions	Part No
15	ASSY VALVE COVER (SL25C/28C/CR)	R50124073905
16	ASSY, CAPILLARY TUBE (5SL25CR-3PHASE)	R50024092178
17	ASSY, TUBING 4WV (5SL28CR)	R50024080540
18	ASSY PARTITION (SL25C/28C/CR)	R50064073900
19	PLASTIC HANDLE FRONT (SL25C/28C/CR)	R12014070955
<b>Parts Not In The Diagram</b>		
	ASSY, 3 WAY VALVE (3/8") 5SL28C/CR	R50059024820
	ASSY, VALVE 2-WAY (1/4") JA28493-2MA (R410A)	R50059023334
	PANEL TERMINAL COVER (SL20C/25C/28C/CR)	R01014070838
	CAPACITOR, CMPSR 5uF/450V 50/60Hz Shizuk	R04029026966
	CLAMP, CAPACITOR 126.0mm	R07054028872
	ASSY TERMINAL PANEL (SL20C/25C/28C/CR)	R50014072877
	PHASE PROTECTOR, PP1.03 NO SENSOR EXPORT	R04089018834



