

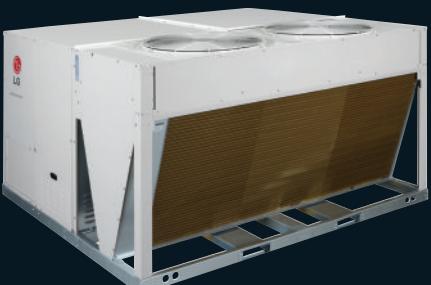
LG

TOTAL HVAC SOLUTION PROVIDER

ENGINEERING PRODUCT DATA BOOK

Single Package

Cooling Only R410A(60Hz)
6CUK0-03A(Replaces 6CUK0-02A)



Single Package

Introduction

Preface

Thank you very much for your special patronage of LG air conditioners.

LG's "Roof Top or Single Package" is an ideal choice when we talk about high load applications.

As the name Roof Top signifies, this unit is generally installed on the top of the roof. Also the Single Package signifies that both condenser and evaporator are enclosed in a single body(same as window type). The unit is used along with ducts and has flexible air flow as per installation conditions. The air flow can be horizontal or vertically downward which offers wider flexibility in the field applications.

This unit is ideal for Single story and Double story houses as they offer high static pressure.

With its easy installation and simple control system, this product is suitable for Factories, Shopping malls, Multiplex, Hotels etc.

A lot of information regarding the design & installation of this system is provided in this edition. This new product series contains data on the same pattern.

Please utilize all the information for conducting your business efficiently.

Make sure the specification, dimensions and other technical data are same as provided in engineering data book before you start the project.

We look forward to your continuing support.

LG Electronics Inc.

Single Package

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Single Package

1. Model line up

■ 1 Series

Power Supply (V, Ø, Hz)	Model Name			
	10RT	12.5RT	20 RT	25 RT
220, 3, 60	AK-Q120BC01	AK-Q150BC01	AK-Q240BC01	AK-Q300BC01

2. Nomenclature

AK-Q300BC01

Development Sequence

SEER Grade

10~25RT There is no SEER regulation for these units so "0" is allotted to these units.

Type of Flow

H: Horizontal, C: Convertible

Electric Standard (Volts, Phase, Freq.)

8 : 380-415 V, 3 Ø, 50 Hz

9 : 380 V, 3 Ø, 60 Hz

D : 460 V, 3 Ø, 60 Hz

B : 220 V, 3 Ø, 60 Hz

Cooling capacity grade

Ex) 300 : 300,000 Btu/h

Model Type

Q : Inverter Cooling Only

Type of Air Conditioner

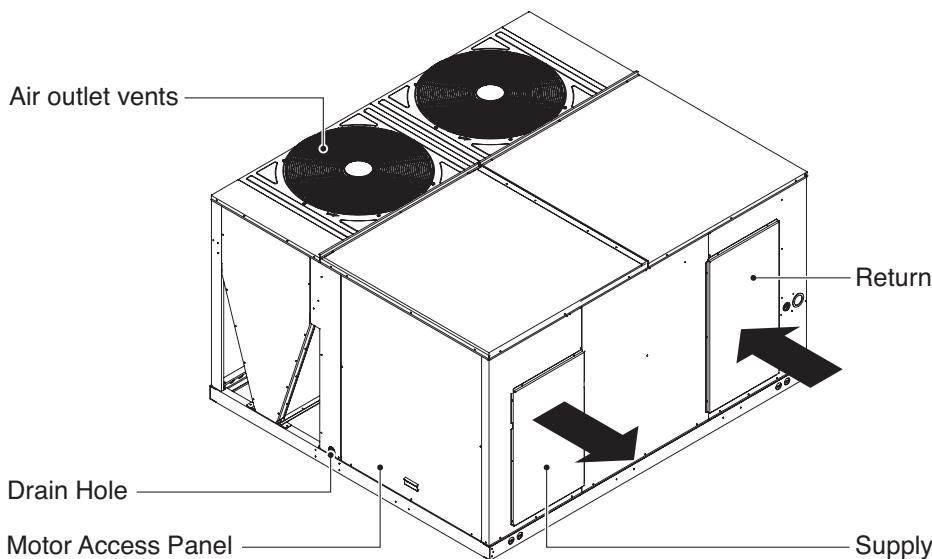
AK : LG Single Package Air Conditioner, R410A

Single Package

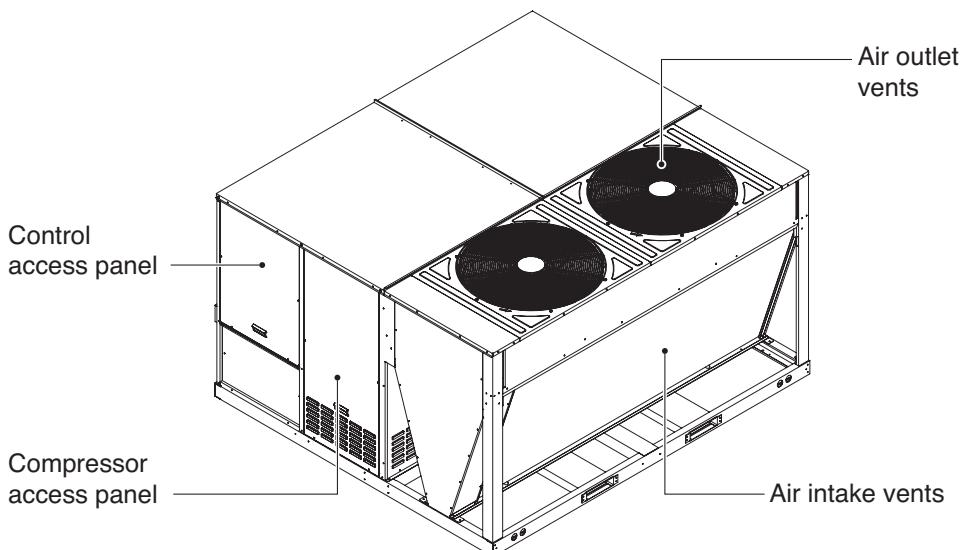
3. Features & Benefits

■ 10 / 12.5RT

Front View



Rear View

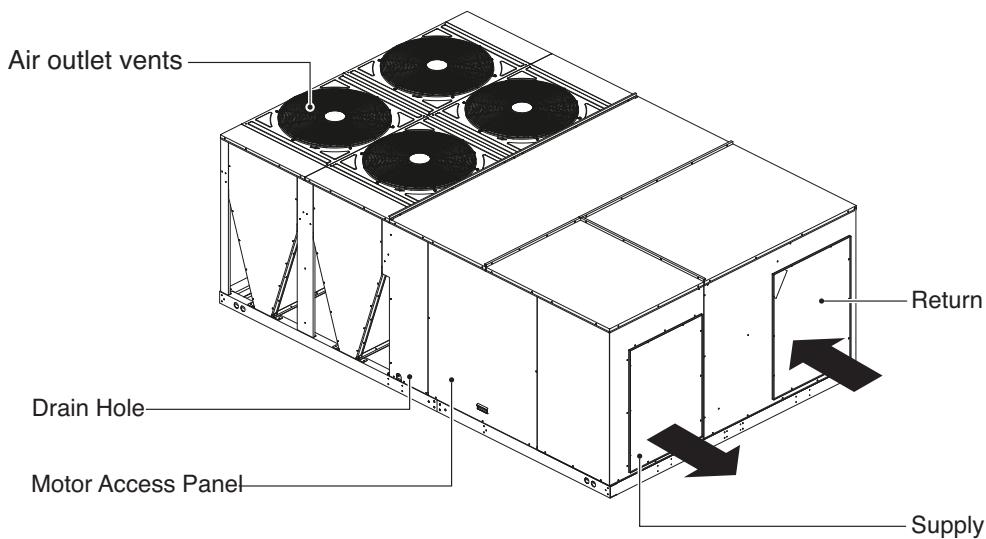


Single Package

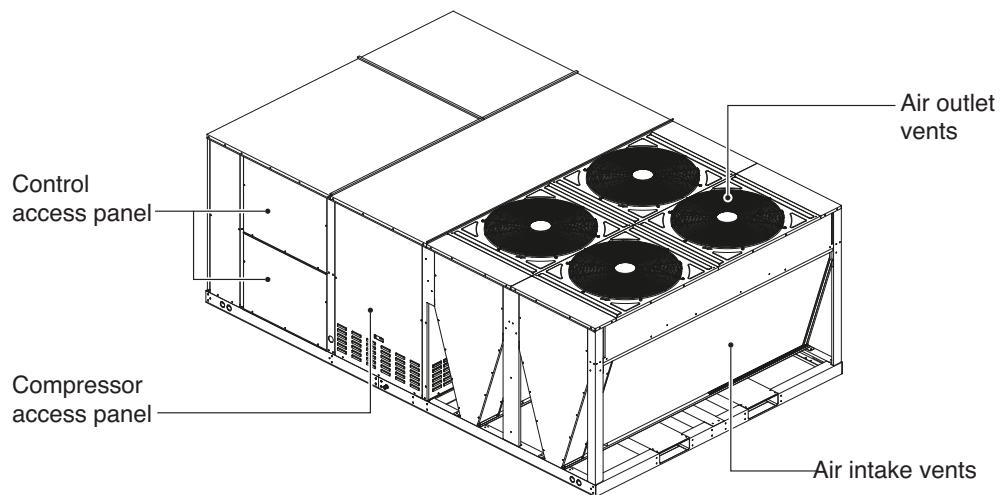
3. Features & Benefits

■ 20 / 25RT

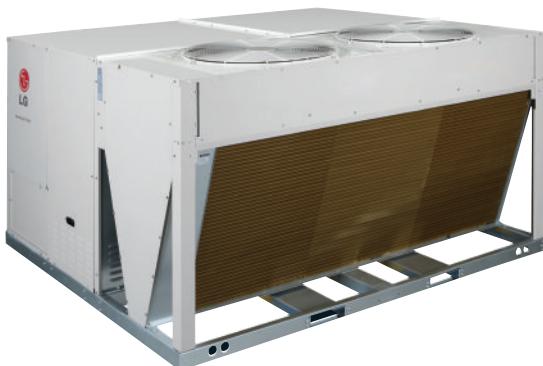
Front View



Rear View



3. Features & Benefits



■ Eco-friendly leadership

■ Higher Energy Efficiency

- LG BLDC Inverter Compressor
- BLDC Inverter Fan Motor
- Newly designed propeller fan
- Wide Louver Fin in Heat Exchanger

■ High Reliability & Comfort

- Enhanced Logic
- Emergency back up operation & Alternate-Cycling
- Auto Restart Operation
- Soft Start Function
- Automatic emergency back-up operation
- Night silent operation
- Pressure & Temperature Control

■ Easy Maintenance & Service

- Automatic test run
- Additional functions available with duct system

Higher Energy Efficiency

LG BLDC Inverter compressor

- Improved the energy efficiency by 11%, compared to the AC inverter compressor, by using the high efficiency LG BLDC inverter compressor.

We have developed a new compressor with better performance, higher efficiency, and a more enhanced reliability than the conventional compressors.

For the motor, which is the core of the compressor, the product uses a BLDC motor.

The BLDC motor is a highly efficient motor, where strong Nd magnetism inside the rotor produces magnetic torque and the metal part of the rotor produces reluctance torque to generate strong rotational force.

Efficiency is improved because it has no slip loss, which always occurs in the normal induction motor, and noise is also reduced due to its low torque ripple design.

In addition, because the LG BLDC inverter compressor has the back pressure structure in which the interior of the compressor is maintained at a high pressure, the compression efficiency is improved.

The compressor is also a high pressure type that makes oil lubrication smoother. Compared to the conventional models, the LG BLDC inverter compressor has more improved performance and reliability.

3. Features & Benefits

BLDC Inverter Fan Motor

- BLDC inverter fan motor reduced to motor energy consumption power 35% and improved to motor output 75%. The product is equipped with highly efficient BLDC motor.

The BLDC motor power consumption has been reduced and output has been improved, compared to the normal induction motor. With strong torque and powerful Neodymium magnet inside the rotor, the BLDC motor provides large air volume and high static pressure.

Newly designed propeller fan

- The Super Aero fan is a large air volume and high static pressure fan, and at the same time it produces low levels of noise.

To provide our customers with high cooling and heating performance at a minimum size, and as well as a pleasant environment ensured by quiet operation,

LG inverter single package uses various low noise technologies.

It has minimized operation noise by using a compressor with BLDC motors, low noise fan motors, new sound-proof technology, outdoor fans, and a newly developed shroud shape.

Wide Louver Fin in Heat Exchanger

- Fin Efficiency improvement by 14% Change heat exchange shape.

Improved efficiency by using wide louver fins with an increased thermal transfer area.

LG's patented chloride-induced corrosion resistant Gold-fin has low corrosion and erosion rates and high hydrophilicity.

Its performance will not be affected even in a humid area.

The exchangers of our outdoor unit are treated against corrosion and pollution.

This treatment guarantees the durability of the systems and high-level performance.

3. Features & Benefits

More Reliability

Emergency back up operation & Alternate-Cycling

- Minimizing any inconvenience that may occur in an emergency situation
 - For emergency, it makes back up operation possible before trouble-shooting
 - Error notice in indoor unit : 4 times per day (every 6hour)
 - To extend compressors life span by operating them alternately
 - To meet diverse load in operation

Auto Restart Operation :

- Whenever there is electricity failure the system shuts off and resumption of the power, unit will start in the same mode as prior to the power failure.
Memorized condition are on / off condition, operating mode (cooling), set temperature and fan speed.

Soft Start Function:

- All single package air conditioners has soft start function i.e.
Indoor fan, outdoor fan & compressor start in sequence to prevent overcurrent during starting.

Automatic emergency back-up operation

- Minimizing any inconvenience that may occur in an emergency situation. For emergency, it makes back-up operation possible before trouble-shooting. Error notice in indoor unit : 4 time per day (every 6hour)

Night silent operation

- It is possible to operate air-conditioner silently by V-scroll compressor, Fan control technology and real-time sensing the outdoor temperature. The night silent operation function can save the running cost 55%.

Pressure & Temperature Control

- Conventional temperature control sensed temperature and calculated target pressure based on in/ outdoor temperature, desired temperature, etc. It was hard to respond to target load quickly.
To control the cycle, pressure sensor is added to the conventional temperature control to enable elaborate control to Improve reliability with stabilized system and quick and proper response.

3. Features & Benefits

More Convenience

Fast Cooling Operation

- With PI control logic, the set temperature is achieved more quickly and also the air conditioning efficiency is improved by 30% , It provides not only quick but powerful air conditioning operation.

Cooling & Fan Operation :

- LG air conditioners can provide cooling & fan operation. In the cooling mode, it cools the air with an operation range of -5~56°C. In the fan operation mode, only indoor fan at the selected speed will run, outdoor fan and compressor will be off.

Real time smart operation

- In situations where the cooling load difference is large, if performance of one side is high enough, performance of the other side can be overloaded.

To control these situations, the product uses the real-time power saving operation algorithm, which enables the product to automatically decide on the operation status for the indoor units and automatically control them to maintain an optimal operation level and reduce power consumption.

Time Delay Relay

- It delays restarting of the compressor by three minutes thereby preventing damage to the compressor

Self Diagnosis Function :

- This function provides diagnosis of the unit.

An error code will be displayed on the LCD wired remote controller & diagnosis can be done as per the code indication.

The same is also printed on key cover of the LCD wired remote controller.

3. Features & Benefits

Easy Installation, Maintenance & Service

- The unit can be installed outside to save valuable indoor space or where no ceiling space is available. Install the unit on the ground or on the roof. This means that the installation is totally flexible depending on your requirements.

Since the unit has not been split into two, maintenance is easy, especially because all access panels are on the same side of the unit and all wiring inside has been color coded.

Automatic test run

- Easy and fast automatic test run by dip switch, help you to save the checking time during the final stage of installation. If it detects errors, it sends error messages on PC screen.

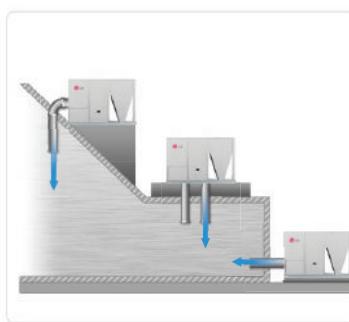
Additional functions available with duct system

All units come standard in Reverse Cycle, however electric heating can be added (Electric Heating provided by Specialist Dealers). You have complete control over the fresh air input, amount of air purification and zone controls (extras provided by Specialist Dealers), all using the powerful LG control system.

Typical Installation

① Roof Jack Installation

② Slab on Ground Installation



Single Package

3. Features & Benefits

Controller & Accessories

LCD Wired Remote Control :

- It can control all the functions of the unit. You can check/set temperature, change operation mode, set timer & also diagnose the error of the unit. It also has the weekly program.

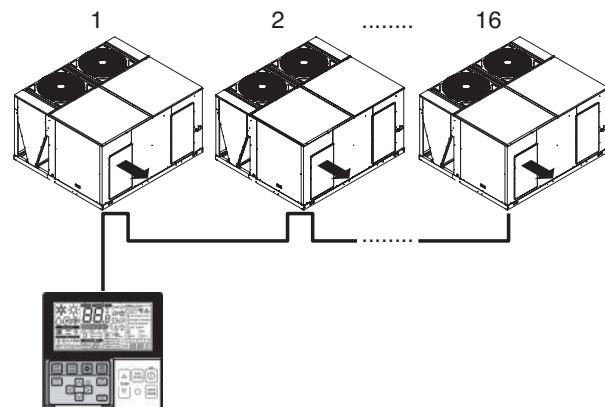


Two Thermistor Control(Return Air Control):(Accessory)

- There may be a significant difference between the return air temperature in the duct and the room temperature. Return air sensing temperature is designed to control temperature more accurately by applying additional thermistor which senses the return air temperature inside the duct specially.
After selecting the duct thermistor, which is connected to the main PCB, the room temperature measurement by LCD wired remote control thermistor is neglected. It helps to control the room temperature more accurately.(Thermistor is a field-installed accessory)

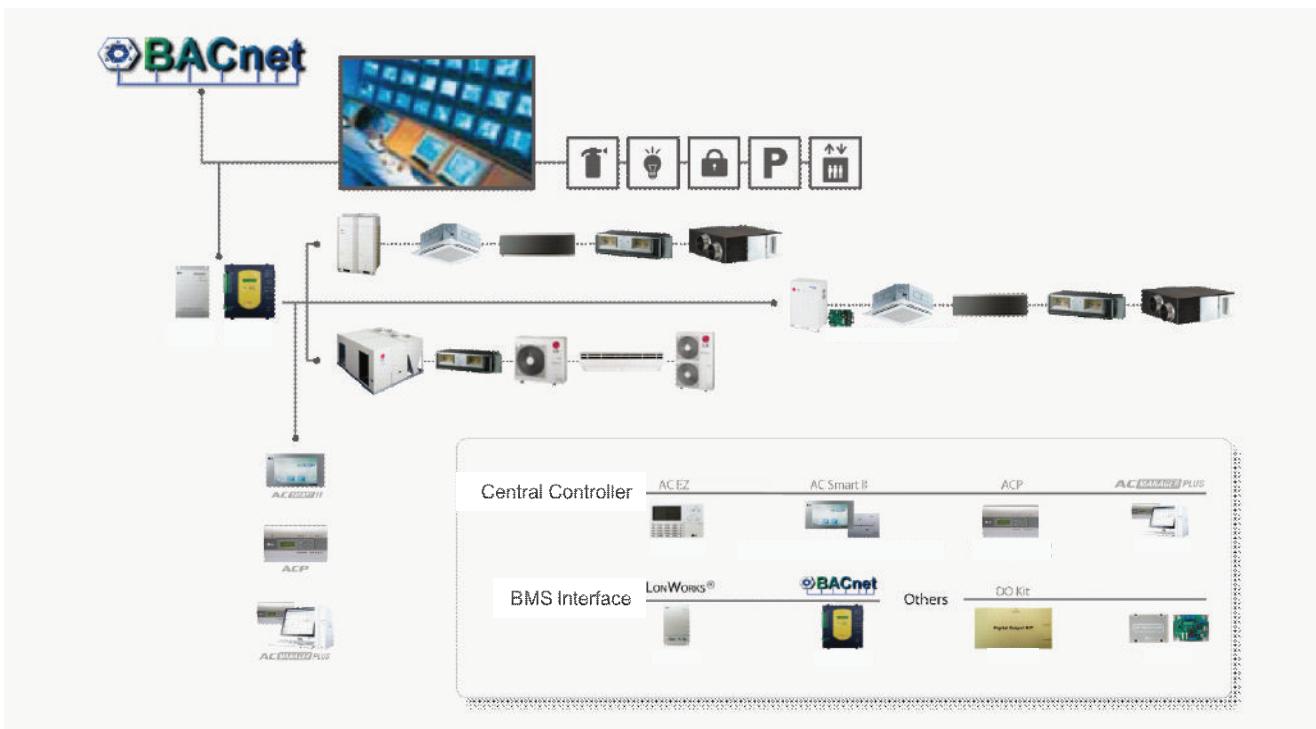
Group Control :(Accessory)

- It enables to control max of 16 units with the help of one wired remote controller. All the units will follow same setting of temperature & other sub functions.



V net :(Accessory)

- LG V-Net supports to interlock with all LG commercial air conditioner.
In addition, LG V-Net can extend central control to BMS Interface (LonWork / BACnet) as well.



3. Features & Benefits

Child Lock Function :

- It prevents the children or others from tampering with the control buttons.

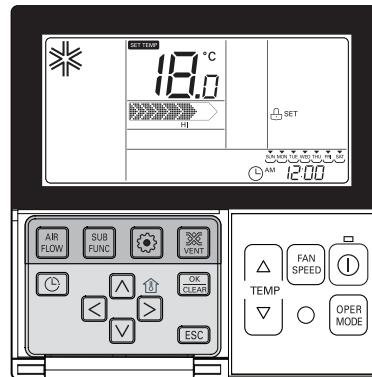
Press  button repeatedly until the  is flashing.

If moving to 'setup' icon area by using   button, 'setup' icon blinks, and child lock function is setup if pressing  button at that time.

When cancelling lock function, if moving to 'cancel' icon by pressing   button and then, pressing  button, child lock function is cancelled. Press  button to exit.

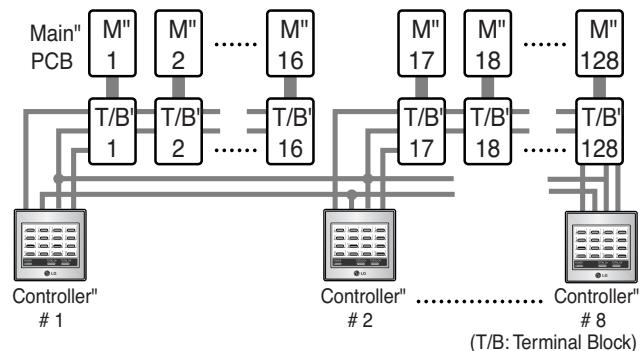
* After setup, it automatically gets out of setup mode if there is no button input for 25 seconds.

* When exiting without pressing set button, the manipulated value is not reflected.



Central Control :(Accessory)

- It enables to control $16 \times 8 = 128$ units with the help of 8 controllers. All units can be put on and off from one Central Room. For Setting Temperature, Fan Speed and other sub functions, access the LCD wired remote controller of each unit.



Wireless Remote Control:(Accessory)

- It provides ease of control.



Electric Heater:(Accessory)

- Electric Heater can be used to provide heat in addition to cycle heat. It also provides quick heating. It can also work as a stand alone heater with only fan operation.



Single Package

4. List of functions

Category	Functions	AK-Q120BC01	AK-Q150BC01
Air flow	Air supply outlet	1	1
	Airflow steps (fan/cool/heat)	1 / 1 / -	1 / 1 / -
	Jet cool/heat	X / X	X / X
Air purifying	Long-life prefilter (washable / anti-fungus)	O	O
Installation	E.S.P. control	X	X
	Electric heater	LKAEH098 / LKAEH188 / LKAEH09B / LKAEH18B	LKAEH188 / LKAEH18B
Reliability	Hot start	X	X
	Self diagnosis	O	O
	Soft dry operation	X	X
	Defrost / Deicing	X	X
	High pressure switch	O	O
	Low pressure switch	X	X
	Phase protection	O	O
	Restart delay (3-minutes)	O	O
	Soft start	O	O
	Test function	X	X
Convenience	Auto changeover	X	X
	Auto operation(artificial intelligence)	X	X
	Auto Restart	O	O
	Child lock	O	O
	Group control	PZCWRCG3	PZCWRCG3
	Sleep mode	X	X
	Timer(on/off)	O	O
	Timer(weekly)	O	O
	Two thermistor control	PQRSTA0	PQRSTA0
Individual control	Night Silent Operation	O	O
	Standard Wired remote controller	PQRCVSL0*** / PQRCVSL0QW / PREMTB001 / PREMTBB01	PQRCVSL0*** / PQRCVSL0QW / PREMTB001 / PREMTBB01
	Premium Wired remote controller	PREMTA000 / PREMTA000A / PREMTA000B	PREMTA000 / PREMTA000A / PREMTA000B
	Simple Wired remote controller	PQRCVCL0Q / PQRCVCL0QW	PQRCVCL0Q / PQRCVCL0QW
	Simple Wired remote controller(for hotel use)	PQRCHCA0Q / PQRCHCA0QW	PQRCHCA0Q / PQRCHCA0QW
	Extension wire for Wired remote controller	PZCWRC1	PZCWRC1
Network Function	Wireless remote controller*	PQWRHQ0FDB	PQWRHQ0FDB
	General central controller (Non LGAP)	X	X
	Network Solution(LGAP)	O	O
	Dry contact	PDRYCB000 / PDRYCB400 / PDRYCB300	PDRYCB000 / PDRYCB400 / PDRYCB300
Special function kit	PI 485	X **	X **
	Zone controller	X	X
	CTI(Communication transfer interface)	PKFC0	PKFC0
	Electronic thermostat	X	X

Note :

1. O: Applied, X: Not applied
2. Accessory model name : Installed at field, ordered and purchased separately by the corresponding model name, supplied with separate package.
3. * : These functions can be operated only when the wired remote controller is connected.
The applicability of each function depends on the above table.
4. ** : These models are not require PI 485 kit, because it can communicate through RS485 method by itself.
5. *** : It is included by default when the product is manufactured.

Single Package

4. List of functions

Category	Functions	AK-Q240BC01 / AK-Q300BC01
Air flow	Air supply outlet	1
	Airflow steps (fan/cool/heat)	1 / 1 / -
	Jet cool/heat	X / X
Air purifying	Long-life prefilter (washable / anti-fungus)	O
Installation	E.S.P. control	X
	Electric heater	LKAH368L / LKAH36BL
Reliability	Hot start	X
	Self diagnosis	O
	Soft dry operation	X
	Defrost / Deicing	X
	High pressure switch	O
	Low pressure switch	X
	Phase protection	O
	Restart delay (3-minutes)	O
	Soft start	O
	Test function	X
	Auto changeover	X
	Auto operation(artificial intelligence)	X
Convenience	Auto Restart	O
	Child lock	O
	Group control	PZCWRCG3
	Sleep mode	X
	Timer(on/off)	O
	Timer(weekly)	O
	Two thermistor control	PQRSTA0
	Night Silent Operation	O
	Standard Wired remote controller	PQRCVSL0*** / PQRCVSL0QW / PREMTB001 / PREMTBB01
Individual control	Premium Wired remote controller	PREMTA000 / PREMTA000A / PREMTA000B
	Simple Wired remote controller	PQRCVCL0Q / PQRCVCL0QW
	Simple Wired remote controller(for hotel use)	PQRCHCA0Q / PQRCHCA0QW
	Extension wire for Wired remote controller	PZCWRC1
	Wireless remote controller*	PQWRHQ0FDB
	General central controller (Non LGAP)	X
Network Function	Network Solution(LGAP)	O
	Dry contact	PDRYCB000 / PDRYCB400 / PDRYCB300
	PI 485	X **
	Zone controller	X
Special function kit	CTI(Communication transfer interface)	PKFC0
	Electronic thermostat	X

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Single Package

4. List of functions

Device		AK-Q120BC01 / AK-Q150BC01 AK-Q240BC01 / AK-Q300BC01
Central Controller	AC Ez	PQCSZ250S0
	AC Smart IV	PACS4B000
	ACP IV	PACP4B000
	AC Manager IV	PACM4B000
	PI485	X*
BNU (Building Network Unit)	LONWORKS Gateway	PLNWKB000
	BACnet Gateway	PQNFB17C0
Low Ambient Kit		O (Logical operation)

Note :

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3. * : These models are not require PI 485 kit, because it can communicate through RS485 method by itself.

Single Package

5. Specifications

Nominal Capacity		RT	10	12.5
Model Name		-	AK-Q120BC01	AK-Q150BC01
Cooling Capacity	Net Capacity	kW	35.2	39.9
		kcal/h	30,240	34,280
		Btu/h	120,000	136,000
	Gross Capacity	kW	36.5	42.0
		kcal/h	31,400	36,100
		Btu/h	124,500	143,200
EER	Btu / Wh	11.0	10.0	
IEER	Btu / Wh	17.0	15.0	
Power Input	Cooling	kW	10.9	13.6
Power Supply	V, Ø, Hz	220 , 3 , 60	220 , 3 , 60	
Indoor Coil	Fin Type	-	Louver	Louver
	Tube Size	Outer Dia.	mm (inch)	9.52 (3/8)
	(Row x Column x Fins per inch) x No.		(3 x 26 x 14) x 2	(3 x 26 x 14) x 2
	Face Area	m ² (ft ²)	2.18(23.47)	2.18(23.47)
Indoor Fan	Type		Sirocco Fan	Sirocco Fan
	Diameter	mm (inch)	380(15)	380 (15)
	Motor Output	Hp	3.0	3.0
	Air Flow Rate	Nominal	m ³ /min	113.3
		Nominal	ft ³ /min	4,000
Compressor (#1, A Cycle)	Drive type		Belt	Belt
	Type		HSS DC SCROLL	HSS DC SCROLL
	Motor Output	W x No.	5,300 x 1	5,300 x 1
	Oil Type		FVC68D	FVC68D
Compressor (#2, B Cycle)	Oil Charge	cc x No.	1,800 x 1	1,800 x 1
	Type		HSS Const. SCROLL	HSS Const. SCROLL
	Motor Output	W x No.	5,920 x 1	5,920 x 1
	Oil Type		FVC68D	FVC68D
Compressor (#3, A Cycle)	Oil Charge	cc x No.	1,800 x 1	1,800 x 1
	Type		-	-
	Motor Output	W x No.	-	-
	Oil Type		-	-
Compressor (#4, B Cycle)	Oil Charge	cc x No.	-	-
	Type		-	-
	Motor Output	W x No.	-	-
	Oil Type		-	-
Outdoor Coil	Oil Charge	cc x No.	-	-
	Fin Type		Wide Louver Plus(Gold)	Wide Louver Plus(Gold)
	Tube Size	Outer Dia.	mm(inch)	7 (9/32)
	(Row x Column x Fins per inch) x No.		(3 x 42 x 14) x 2	(3 x 42 x 14) x 2
Outdoor Fan	Face Area	m ² (ft ²)	3.53 (37.99)	3.53 (37.99)
	Type		Propeller Fan	Propeller Fan
	Diameter	mm(inch)	680 (26-25/32)	680 (26-25/32)
	Motor Output	W x No.	900 x 2	900 x 2
	Air Flow Rate	m ³ /min x No.	105 x 2	105 x 2
		ft ³ /min x No.	3,700 x 2	3,700 x 2
	Drive		BLDC Inverter	BLDC Inverter
Dehumidification rate		l /h	11.8	13.8
Drain Connection Size			Male NPT 1	Male NPT 1
Refrigerant	Refrigerant name		R410A	R410A
	Precharged Amount	kg	13.0	13.0
	Control		EEV	EEV
Dimensions (W*D*H)		mm	2,230 x 1,237 x 1,958	2,230 x 1,237 x 1,958
		inch	87-25/32 x 48-11/16 x 77-3/32	87-25/32 x 48-11/16 x 77-3/32
Net Weight		kg(lbs)	580 (1,279)	580 (1,279)
Sound pressure levels	Cooling	dB(A)	75	75
Operation Range (Outdoor Temperature)	Cooling	Min. ~ Max.	°C DB (°F DB)	-5 ~ 48 (23 ~ 118.4)
Note :				
1. All data are based on the following conditions:				
- Indoor 26.7°C(80°F) DB / 19.4°C(67°F) WB				
- Outdoor 35°C(95°F) DB / 23.9°C(75°F) WB				
2. Wiring cable size must comply with the applicable local and national code.				
3. Due to our policy of innovation some specifications may be changed without notification.				
4. Sound Level Values are measured at Anechoic chamber. Its back ground noise is 55dB(A). Therefore, these values can be increased owing to ambient conditions during operation.				
5. EER : Energy Efficiency Ratio IEER : Integrated Energy Efficiency Ratio				

Single Package

5. Specifications

Nominal Capacity		RT	20	25
Model Name		-	AK-Q240BC01	AK-Q300BC01
Cooling Capacity	Net Capacity	kW	70.3	80.9
		kcal/h	60,500	69,600
		Btu/h	240,000	276,000
	Gross Capacity	kW	73.3	85.3
		kcal/h	63,000	73,400
		Btu/h	250,000	291,200
EER	Btu / Wh	10.6	10.0	
IEER	Btu / Wh	17	17.0	
Power Input	Cooling	kW	22.7	27.6
Power Supply	V, Ø, Hz	220, 3, 60	220, 3, 60	
Indoor Coil	Fin Type	-	Louver	Louver
	Tube Size	Outer Dia.	mm (inch)	9.52 (3/8)
	(Row x Column x Fins per inch) x No.		-	(3 x 26 x 14) x 2
	Face Area	m ² (ft ²)	2.18(23.47)	2.18(23.47)
Indoor Fan	Type		Sirocco Fan	Sirocco Fan
	Diameter	mm (inch)	457(18)	457(18)
	Motor Output	Hp	7.5	7.5
	Air Flow Rate	Nominal	m ³ /min	226.5
		Nominal	ft ³ /min	8,000
Compressor (#1, A Cycle)	Drive type		Belt	Belt
	Type		HSS DC SCROLL	HSS DC SCROLL
	Motor Output	W x No.	5,300 x 1	5,300 x 1
	Oil Type		FVC68D	FVC68D
Compressor (#2, B Cycle)	Oil Charge	cc x No.	1,800 X 1	1,800 X 1
	Type		HSS DC SCROLL	HSS DC SCROLL
	Motor Output	W x No.	5,300 x 1	5,300 x 1
	Oil Type		FVC68D	FVC68D
Compressor (#3, A Cycle)	Oil Charge	cc x No.	1,800 X 1	1,800 X 1
	Type		HSS Const SCROLL	HSS Const SCROLL
	Motor Output	W x No.	5,920 x 1	5,920 x 1
	Oil Type		FVC68D	FVC68D
Compressor (#4, B Cycle)	Oil Charge	cc x No.	1,800 X 1	1,800 X 1
	Type		HSS Const SCROLL	HSS Const SCROLL
	Motor Output	W x No.	5,920 x 1	5,920 x 1
	Oil Type		FVC68D	FVC68D
Outdoor Coil	Oil Charge	cc x No.	1,800 X 1	1,800 X 1
	Fin Type		Wide Louver Plus (Gold)	Wide Louver Plus (Gold)
	Tube Size	Outer Dia.	mm(inch)	7 (9/32)
	(Row x Column x Fins per inch) x No.		(3 x 42 x 14) x 4	(3 x 42 x 14) x 4
Outdoor Fan	Face Area	m ² (ft ²)	6.32(68.02)	6.32(68.02)
	Type		Propeller Fan	Propeller Fan
	Diameter	mm(inch)	680 (26-25/32)	680 (26-25/32)
	Motor Output	W x No.	900 x 4	900 x 4
	Air Flow Rate	m ³ /min x No.	105 x 4	105 x 4
		ft ³ /min x No.	3,700 x 4	3,700 x 4
	Drive		BLDC Inverter	BLDC Inverter
Dehumidification rate		l /h	24.42	24.42
Drain Connection Size			Male NPT 1	Male NPT 1
Refrigerant	Refrigerant name		R410A	R410A
	Precharged Amount	kg	21.0	21.0
	Control		EEV	EEV
Dimensions (W*D*H)		mm	2,230 x 1,242 x 3,520	2,230 x 1,242 x 3,520
		inch	87-25/32 x 48-29/32 x 138-19/32	87-25/32 x 48-29/32 x 138-19/32
Net Weight		kg(lbs)	1,040(2,293)	1,040(2,293)
Sound pressure levels	Cooling	dB(A)	85	85
Operation Range (Outdoor Temperature)	Cooling	Min. ~ Max.	°C DB (°F DB)	-5 ~ 48 (23 ~ 118.4)
Note :				
1. All data are based on the following conditions:				
- Indoor 26.7°C(80°F) DB / 19.4°C(67°F) WB				
- Outdoor 35°C(95°F) DB / 23.9°C(75°F) WB				
2. Wiring cable size must comply with the applicable local and national code.				
3. Due to our policy of innovation some specifications may be changed without notification.				
4. Sound Level Values are measured at Anechoic chamber.				
Its back ground noise is 55dB(A).				
Therefore, these values can be increased owing to ambient conditions during operation.				
5. EER : Energy Efficiency Ratio				
IEER : Integrated Energy Efficiency Ratio				

Single Package

6. Dimensions

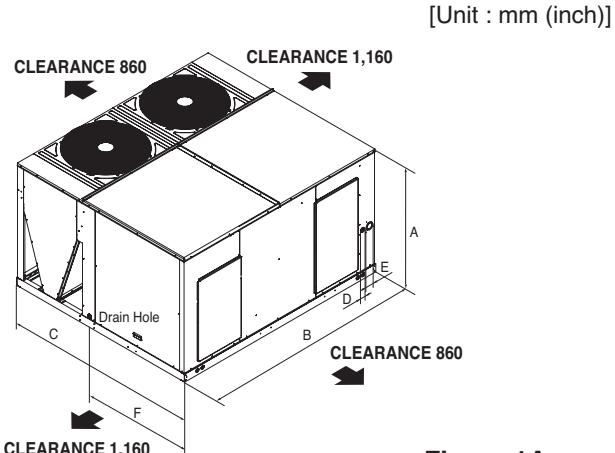
■ 10 / 12.5 RT

Single packaged cooling unit are designed for outdoor mounting with vertical condenser discharge. They can be located either at ground level or on roof.

Each unit contains an operating charge of Refrigerant as shipped.

Product Dimensions (Figure 1A)

Tool	10 / 12.5 RT
A	1,237 (48-11/16)
B	2,230 (87-25/32)
C	1,958 (77-3/32)
D	36 (1-13/32)
E	60 (2-3/8)
F	1,111 (47-3/4)



[Unit : mm (inch)]

Figure 1A

Horizontal Flow Application (Figure 1B)

Tool	10 / 12.5 RT
A	484 (19-1/16)
B	864 (34-1/32)
C	482 (18-31/32)
D	206 (8-1/8)
E	126 (4-31/32)
F	913 (35-15/16)
G	130 (5-1/8)
H	800 (31-1/2)

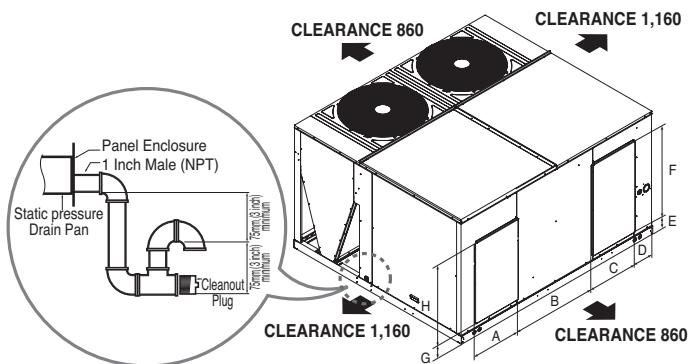
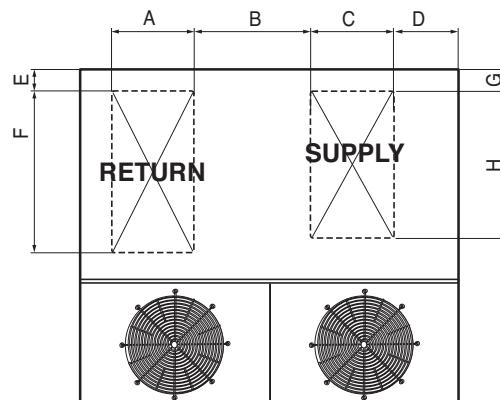


Figure 1B

Down Flow Application (Figure 1C)

Tool	10 / 12.5 RT
A	484 (19-1/16)
B	427 (16-13/16)
C	482 (18-31/32)
D	642 (25-9/32)
E	92 (3-5/8)
F	800 (31-1/2)
G	92 (3-5/8)
H	913 (35-15/16)



TOP VIEW

Figure 1C

Single Package

6. Dimensions

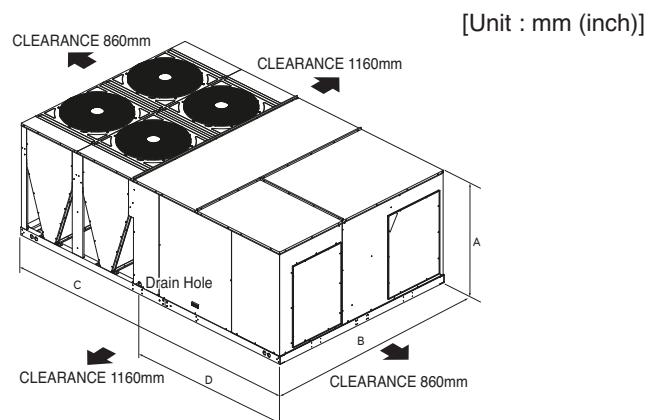
■ 20 / 25 RT

Single packaged cooling unit are designed for outdoor mounting with vertical condenser discharge. They can be located either at ground level or on roof.

Each unit contains an operating charge of Refrigerant as shipped.

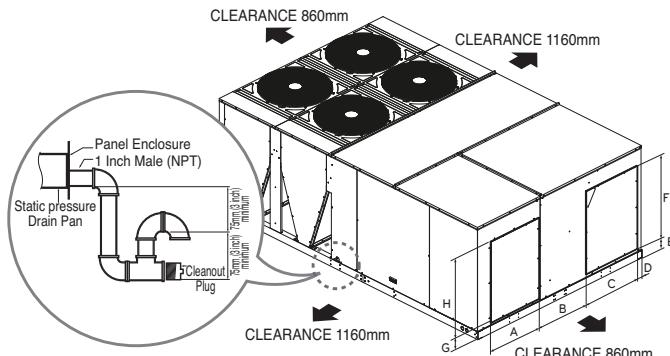
Product Dimensions (Figure 1A)

Tool	20 / 25 RT
A	1,242 (48-29/32)
B	2,230 (87-25/32)
C	3,520 (138-19/32)
D	1,911 (75-1/4)



Horizontal Flow Application (Figure 1B)

Tool	20 / 25 RT
A	616 (24-1/4)
B	678 (26-11/16)
C	655 (25-25/32)
D	60 (2-3/8)
E	125 (4-29/32)
F	882 (34-23/32)
G	115 (4-17/32)
H	860 (33-27/32)



Down Flow Application (Figure 1C)

Tool	20 / 25 RT
A	655 (25-25/32)
B	457 (18)
C	616 (24-1/4)
D	196 (7-23/32)
E	116 (4-9/16)
F	882 (34-23/32)
G	116 (4-9/16)
H	860 (33-27/32)

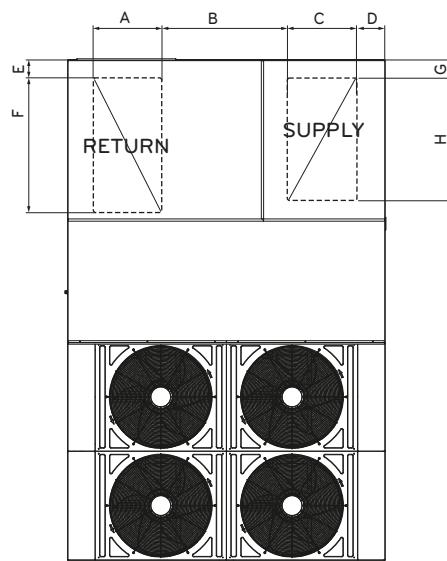


Figure 1C

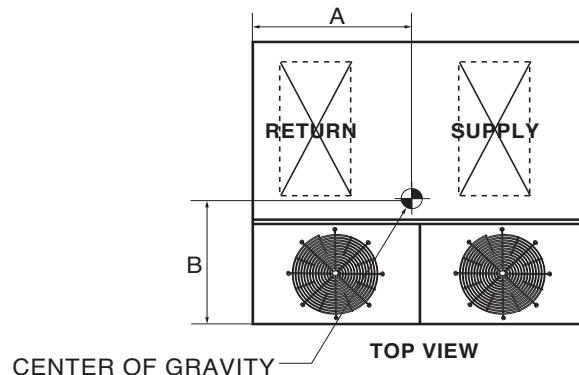
Single Package

6. Dimensions

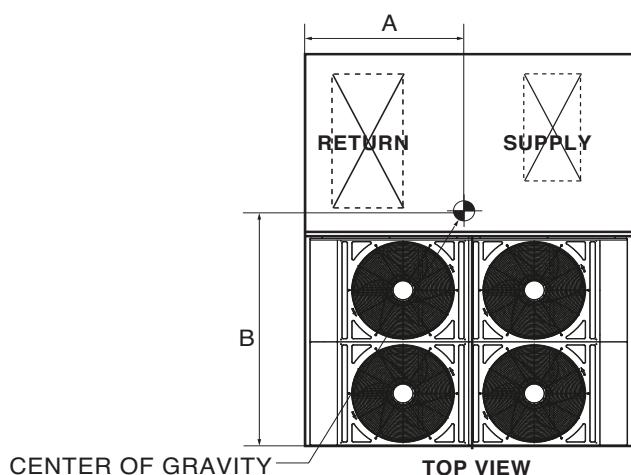
Weights

Maximum Weight [kg (lb)] and Center of Gravity Dimensions [mm (inch)]

Model Name	Maximum Weights [kg (lb)]		Center of Gravity [mm (inch)]	
	Shipping	Net	A	B
AK-Q120BC01	620 (1,367)	580 (1,279)	1,016 (40)	991 (39)
AK-Q150BC01				



Model Name	Maximum Weights [kg (lb)]		Center of Gravity [mm (inch)]	
	Shipping	Net	A	B
AK-Q240BC01	1,070(2,359)	1,040(2,293)	995 (39)	1,786 (70)
AK-Q300BC01				



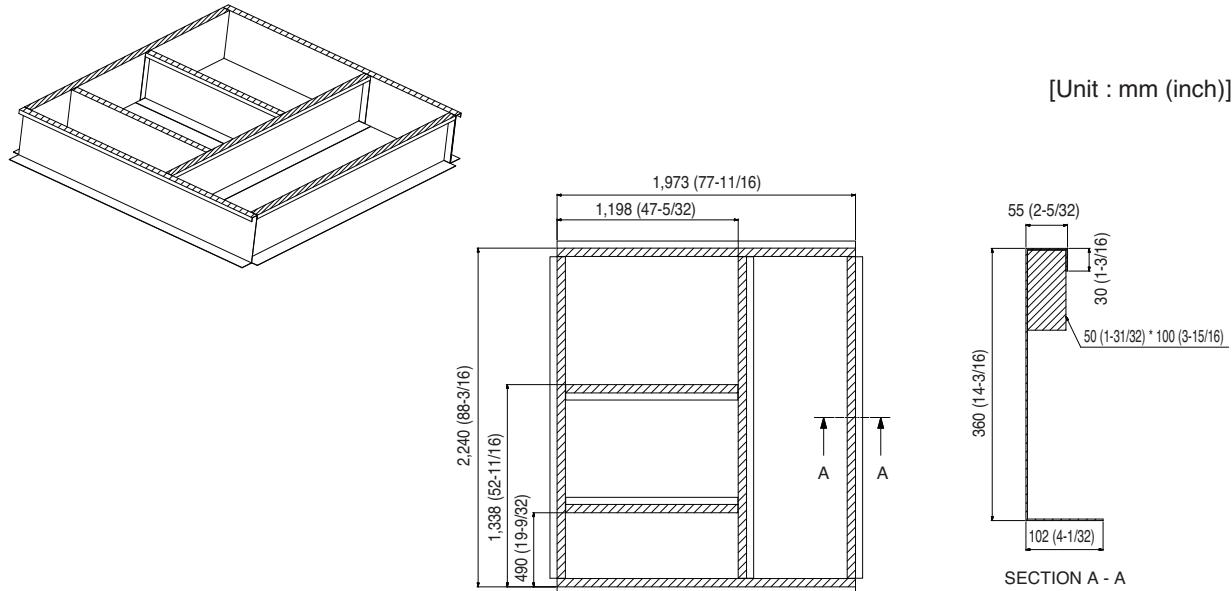
Note: 1. Corner weights are given for information only.

2. Weights are approximate.

Single Package

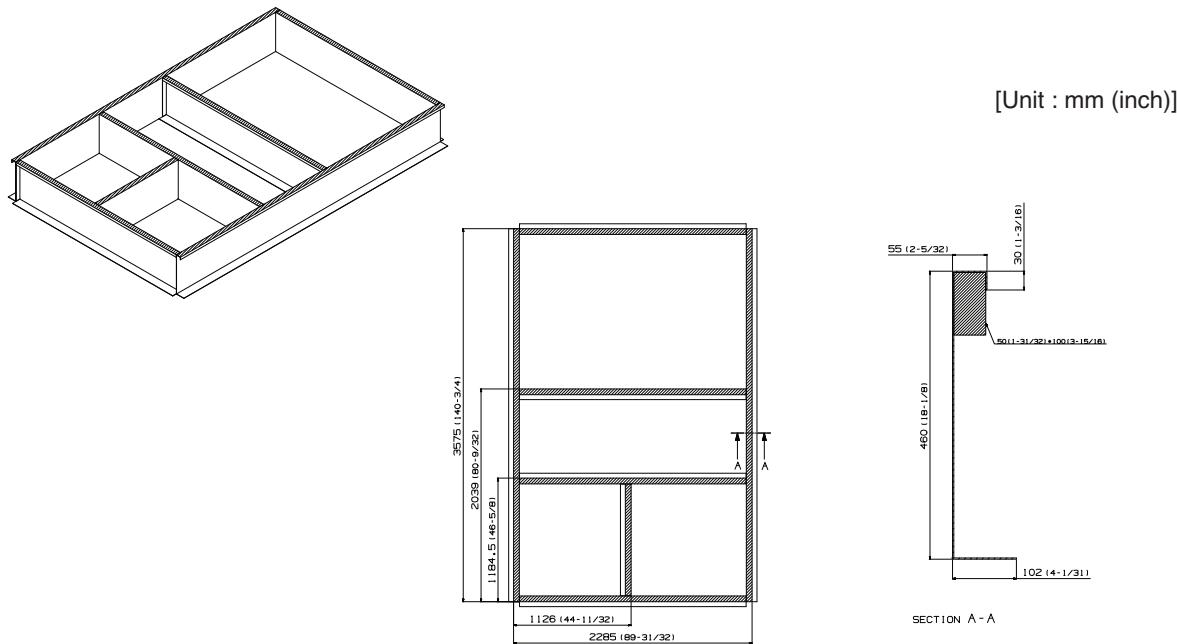
7. Roof Curbs

■ 10 / 12.5RT



Note: ① Roof Curb – Galvanized steel
② Remove the Fork Guides for Roof Curb installation

■ 20 / 25RT



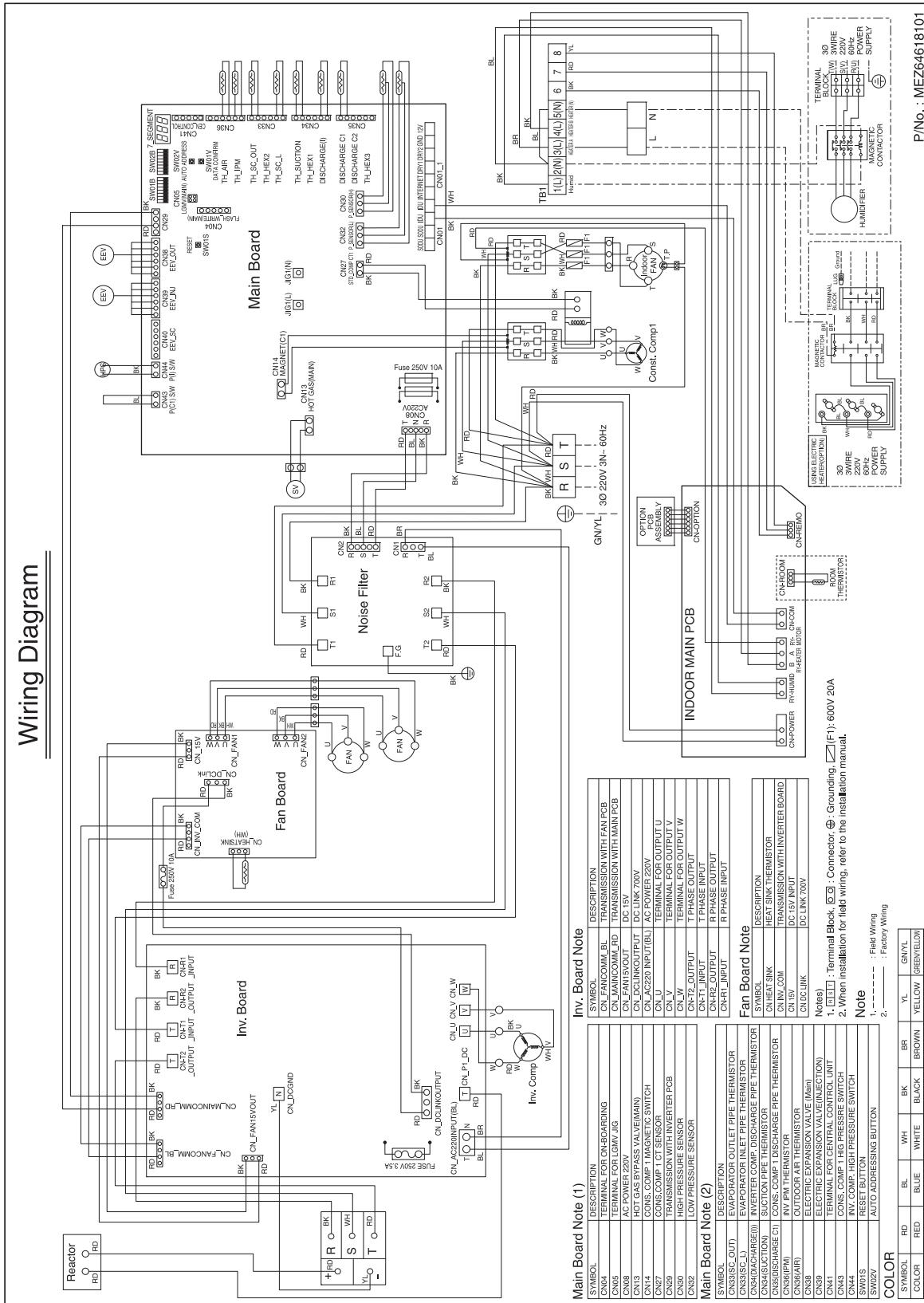
Note: ① Roof Curb – Galvanized steel
② Remove the Fork Guides for Roof Curb installation

Single Package

8. Wiring diagrams

Model : AK-Q120BC01 / AK-Q150BC01

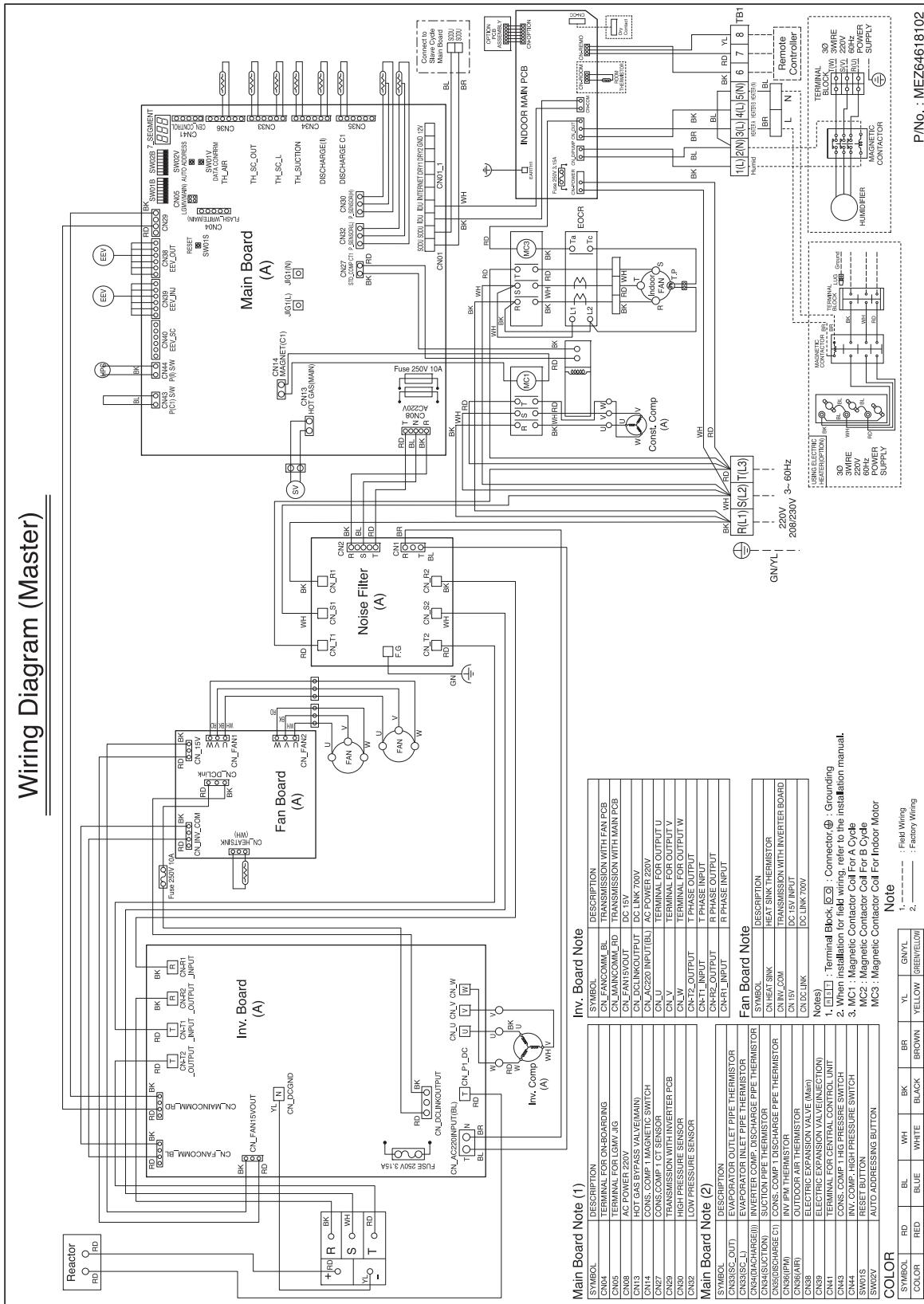
Wiring Diagram



Single Package

8. Wiring diagrams

Model : AK-Q240BC01 / AK-Q300BC01 [Master]

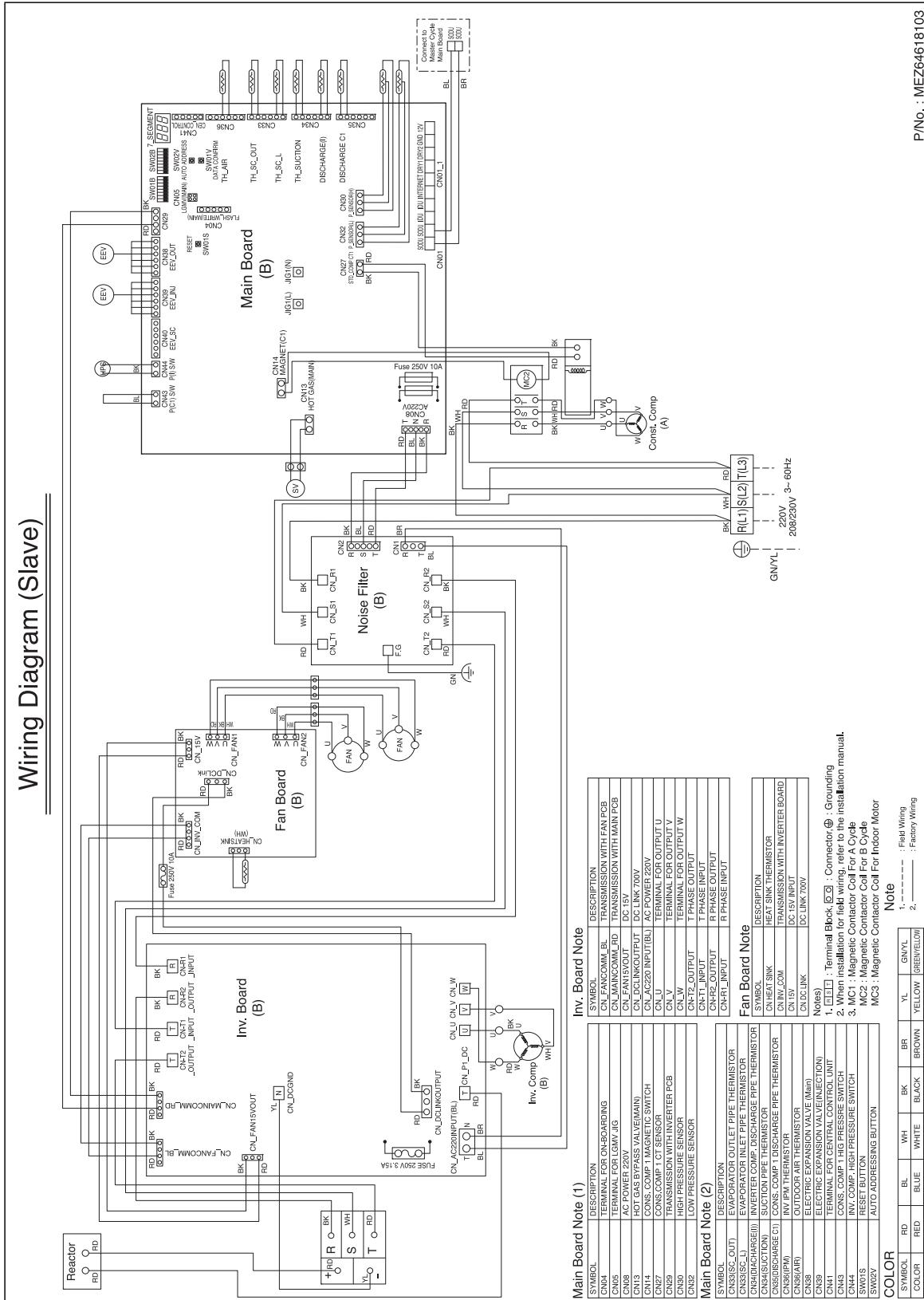


Single Package

8. Wiring diagrams

Model : AK-Q240BC01 / AK-Q300BC01 [Slave]

Wiring Diagram (Slave)



Single Package

9. Capacity tables

10RT AK-Q120BC01 (SI)

Outdoor DB(°C)		27.5									35.0								
Indoor WB(°C)		16.1			19.4			22.8			16.1			19.4			22.8		
I/s	DB(°C)	TGC	SHC	PI															
1510	23.9	30.4	24.0	3.21	33.6	18.0	3.31	36.2	8.0	3.38	30.4	24.7	9.30	33.6	18.6	9.59	36.2	8.3	9.77
	26.7	31.7	27.4	3.22	34.2	22.7	3.32	36.2	14.8	3.39	31.7	28.3	9.33	34.2	23.4	9.62	36.2	15.3	9.80
	29.4	32.9	30.1	3.23	34.7	27.2	3.33	36.1	20.5	3.40	32.9	31.1	9.35	34.7	28.1	9.65	36.1	21.2	9.83
	32.2	34.0	31.8	3.24	35.1	30.3	3.34	35.9	25.1	3.41	34.0	32.8	9.38	35.1	31.3	9.68	35.9	25.9	9.86
1699	23.9	31.7	26.4	3.24	35.0	19.9	3.34	37.7	8.8	3.41	31.7	27.3	9.38	35.0	20.5	9.68	37.7	9.1	9.86
	26.7	33.1	30.2	3.25	35.7	25.0	3.35	37.7	16.3	3.42	33.1	31.2	9.41	35.7	25.8	9.71	37.7	16.9	9.88
	29.4	34.3	33.2	3.26	36.2	29.9	3.36	37.6	22.6	3.43	34.3	34.3	9.44	36.2	30.9	9.73	37.6	23.4	9.91
	32.2	35.4	35.0	3.27	36.6	33.4	3.37	37.4	27.7	3.44	35.4	35.4	9.46	36.6	34.5	9.76	37.4	28.6	9.94
1888	23.9	32.7	28.7	3.28	36.1	21.6	3.38	38.8	9.6	3.44	32.7	29.7	9.48	36.1	22.3	9.78	38.8	9.9	9.96
	26.7	34.1	32.9	3.29	36.8	27.2	3.39	38.8	17.8	3.45	34.1	34.0	9.51	36.8	28.1	9.81	38.8	18.4	9.99
	29.4	35.4	35.4	3.30	37.3	32.6	3.40	38.7	24.6	3.46	35.4	35.4	9.54	37.3	33.7	9.84	38.7	25.4	10.02
	32.2	36.5	36.5	3.31	37.7	36.4	3.41	38.5	30.1	3.47	36.5	36.5	9.57	37.7	37.6	9.87	38.5	31.1	10.05
2077	23.9	33.3	30.8	3.29	36.8	23.1	3.40	39.5	10.3	3.46	33.3	31.8	9.53	36.8	23.9	9.83	39.5	10.6	10.02
	26.7	34.7	34.7	3.30	37.4	29.1	3.41	39.6	19.0	3.47	34.7	34.7	9.56	37.4	30.1	9.86	39.6	19.6	10.05
	29.4	36.0	36.0	3.31	38.0	34.9	3.42	39.5	26.4	3.48	36.0	36.0	9.59	38.0	36.0	9.89	39.5	27.2	10.08
	32.2	37.2	37.2	3.32	38.4	38.4	3.43	39.2	32.2	3.49	37.2	37.2	9.62	38.4	38.4	9.92	39.2	33.3	10.11
2266	23.9	33.6	32.6	3.31	37.1	24.5	3.42	39.9	10.9	3.48	33.6	33.6	9.59	37.1	25.3	9.89	39.9	11.3	10.07
	26.7	35.0	35.0	3.32	37.8	30.9	3.43	39.9	20.1	3.49	35.0	35.0	9.61	37.8	31.9	9.92	39.9	20.8	10.10
	29.4	36.4	36.4	3.33	38.3	36.9	3.44	39.8	27.9	3.50	36.4	36.4	9.64	38.3	38.2	9.95	39.8	28.8	10.13
	32.2	37.5	37.5	3.34	38.7	38.7	3.45	39.6	34.1	3.51	37.5	37.5	9.67	38.7	38.7	9.98	39.6	35.3	10.16

Outdoor DB(°C)		40.0						46.0						48.0					
Indoor WB(°C)		16.1			19.4			22.8			16.1			19.4			22.8		
I/s	DB(°C)	TGC	SHC	PI															
1510	23.9	30.4	23.8	11.86	33.6	17.9	12.23	36.2	8.0	12.46	30.4	22.9	16.63	33.6	17.2	17.16	36.2	7.7	17.48
	26.7	31.7	27.3	11.89	34.2	22.6	12.27	36.2	14.7	12.49	31.7	26.3	16.68	34.2	21.7	17.21	36.2	14.2	17.53
	29.4	32.9	29.9	11.93	34.7	27.0	12.30	36.1	20.4	12.53	32.9	28.8	16.73	34.7	26.0	17.26	36.1	19.6	17.58
	32.2	34.0	31.6	11.96	35.1	30.1	12.34	35.9	25.0	12.57	34.0	30.4	16.78	35.1	29.0	17.31	35.9	24.0	17.63
1699	23.9	31.7	26.3	11.96	35.0	19.7	12.34	37.7	8.8	12.57	31.7	25.3	16.78	35.0	19.0	17.31	37.7	8.5	17.63
	26.7	33.1	30.1	12.00	35.7	24.9	12.38	37.7	16.2	12.61	33.1	28.9	16.83	35.7	23.9	17.36	37.7	15.6	17.68
	29.4	34.3	33.0	12.03	36.2	29.8	12.41	37.6	22.5	12.64	34.3	31.7	16.88	36.2	28.7	17.41	37.6	21.6	17.74
	32.2	35.4	34.9	12.07	36.6	33.2	12.45	37.4	27.5	12.68	35.4	33.5	16.93	36.6	32.0	17.47	37.4	26.5	17.79
1888	23.9	32.7	28.6	12.09	36.1	21.5	12.47	38.8	9.6	12.70	32.7	27.5	16.96	36.1	20.7	17.50	38.8	9.2	17.82
	26.7	34.1	32.7	12.13	36.8	27.1	12.51	38.8	17.7	12.74	34.1	31.5	17.01	36.8	26.1	17.55	38.8	17.0	17.87
	29.4	35.4	35.4	12.16	37.3	32.4	12.55	38.7	24.5	12.78	35.4	34.5	17.06	37.3	31.2	17.60	38.7	23.6	17.93
	32.2	36.5	36.5	12.20	37.7	36.2	12.58	38.5	30.0	12.82	36.5	36.5	17.11	37.7	34.8	17.65	38.5	35.6	17.75
2077	23.9	33.3	30.6	12.16	36.8	23.0	12.54	39.5	10.2	12.77	33.3	29.4	17.05	36.8	22.1	17.59	39.5	9.8	17.92
	26.7	34.7	34.7	12.19	37.4	29.0	12.58	39.6	18.9	12.81	34.7	33.7	17.11	37.4	27.9	17.65	39.6	18.2	17.97
	29.4	36.0	36.0	12.23	38.0	34.7	12.62	39.5	26.2	12.85	36.0	36.0	17.16	38.0	33.4	17.70	39.5	25.2	18.03
	32.2	37.2	37.2	12.27	38.4	38.4	12.65	39.2	32.1	12.89	37.2	37.2	17.21	38.4	37.2	17.75	39.2	30.9	18.08
2266	23.9	33.6	32.4	12.22	37.1	24.4	12.61	39.9	10.8	12.84	33.6	31.2	17.15	37.1	23.4	17.69	39.9	10.4	18.02
	26.7	35.0	35.0	12.26	37.8	30.7	12.65	39.9	20.0	12.88	35.0	35.0	17.20	37.8	29.5	17.74	39.9	19.3	18.07
	29.4	36.4	36.4	12.30	38.3	36.7	12.69	39.8	27.8	12.92	36.4	36.4	17.25	38.3	35.3	17.80	39.8	26.7	17.89
	32.2	37.5	37.5	12.33	38.7	38.7	12.72	39.6	34.0	12.96	37.5	37.5	17.30	38.7	38.7	17.85	39.6	32.7	18.51

Notes:

- All capacities are gross, evaporator fan motor heat is not deducted.
- To obtain net cooling capacity, subtract evaporator fan motor heat.
- DB = Dry Bulb Temperature(°C), WB = Wet Bulb Temperature(°C)
- I/s = Liters per second
- TGC = Total Gross Cooling Capacity(Unit : kW)
Net Cooling Capacity = TGC – Fan motor heat
Fan motor heat = 1.28 x BkW (Refer to the Fan performance data)

5. SHC = Sensible Heat Capacity(Unit : kW)

6. PI = Power Input(kW), Sum of Compressor & Outdoor Fan Power Input

7. The rated capacity at the outdoor temperature of 27.5 DB is the same as that at IEER B test condition.

The rated capacity at the outdoor temperature of 35.0 DB is the same as that at IEER A test condition.

Single Package

9. Capacity tables

10RT AK-Q120BC01 (English)

Outdoor DB(°F)		81.5									95.0								
Indoor WB(°F)		61.0			67.0			73.0			61.0			67.0			73.0		
CFM	DB(°F)	TGC	SHC	PI															
3200	75	103.8	81.7	3.21	114.8	61.5	3.31	123.4	27.4	3.38	103.8	84.4	9.30	114.8	63.5	9.59	123.4	28.3	9.77
	80	108.3	93.6	3.22	116.8	77.4	3.32	123.5	50.5	3.39	108.3	96.7	9.33	116.8	80.0	9.62	123.5	52.2	9.80
	85	112.4	102.7	3.23	118.5	92.7	3.33	123.1	70.0	3.40	112.4	106.1	9.35	118.5	95.8	9.65	123.1	72.3	9.83
	90	116.1	108.5	3.24	119.8	103.4	3.34	122.4	85.7	3.41	116.1	112.0	9.38	119.8	106.8	9.68	122.4	88.5	9.86
3600	75	108.2	90.1	3.24	119.6	67.7	3.34	128.6	30.2	3.41	108.2	93.1	9.38	119.6	70.0	9.68	128.6	31.1	9.86
	80	112.8	103.2	3.25	121.7	85.4	3.35	128.6	55.7	3.42	112.8	106.6	9.41	121.7	88.2	9.71	128.6	57.5	9.88
	85	117.1	113.2	3.26	123.5	102.2	3.36	128.3	77.2	3.43	117.1	116.9	9.44	123.5	105.5	9.73	128.3	79.7	9.91
	90	121.0	119.6	3.27	124.8	114.0	3.37	127.5	94.5	3.44	121.0	121.0	9.46	124.8	117.8	9.76	127.5	97.6	9.94
4000	75	111.4	98.0	3.28	123.2	73.7	3.38	132.4	32.8	3.44	111.4	101.3	9.48	123.2	76.2	9.78	132.4	33.9	9.96
	80	116.2	112.3	3.29	125.4	92.9	3.39	132.5	60.6	3.45	116.2	116.0	9.51	125.4	96.0	9.81	132.5	62.6	9.99
	85	120.6	120.6	3.30	127.2	111.2	3.40	132.1	84.0	3.46	120.6	120.6	9.54	127.2	114.9	9.84	132.1	86.8	10.02
	90	124.6	124.6	3.31	128.6	124.1	3.41	131.3	102.8	3.47	124.6	124.6	9.57	128.6	128.2	9.87	131.3	106.2	10.05
4400	75	113.5	104.9	3.29	125.5	78.9	3.40	134.9	35.1	3.46	113.5	108.4	9.53	125.5	81.5	9.83	134.9	36.3	10.02
	80	118.4	118.4	3.30	127.8	99.4	3.41	135.0	64.9	3.47	118.4	118.4	9.56	127.8	102.7	9.86	135.0	67.0	10.05
	85	122.9	122.9	3.31	129.6	119.0	3.42	134.6	89.9	3.48	122.9	122.9	9.59	129.6	122.9	9.89	134.6	92.9	10.08
	90	127.0	127.0	3.32	131.0	131.0	3.43	133.8	110.0	3.49	127.0	127.0	9.62	131.0	131.0	9.92	133.8	113.7	10.11
4800	75	114.6	111.1	3.31	126.7	83.6	3.42	136.2	37.2	3.48	114.6	114.6	9.59	126.7	86.3	9.89	136.2	38.4	10.07
	80	119.5	119.5	3.32	128.9	105.3	3.43	136.2	68.7	3.49	119.5	119.5	9.61	128.9	108.8	9.92	136.2	71.0	10.10
	85	124.0	124.0	3.33	130.8	126.0	3.44	135.8	95.2	3.50	124.0	124.0	9.64	130.8	130.2	9.95	135.8	98.4	10.13
	90	128.1	128.1	3.34	132.2	132.2	3.45	135.0	116.5	3.51	128.1	128.1	9.67	132.2	132.2	9.98	135.0	120.4	10.16

Outdoor DB(°F)		104.0						114.8						118.4					
Indoor WB(°F)		61.0			67.0			73.0			61.0			67.0			73.0		
CFM	DB(°F)	TGC	SHC	PI															
3200	75	103.8	81.3	11.86	114.8	61.1	12.23	123.4	27.2	12.46	103.8	78.2	16.63	114.8	58.8	17.16	123.4	26.2	17.48
	80	108.3	93.1	11.89	116.8	77.0	12.27	123.5	50.3	12.49	108.3	89.6	16.68	116.8	74.1	17.21	123.5	48.4	17.53
	85	112.4	102.1	11.93	118.5	92.2	12.30	123.1	69.7	12.53	112.4	98.2	16.73	118.5	88.7	17.26	123.1	67.0	17.58
	90	116.1	107.9	11.96	119.8	102.9	12.34	122.4	85.2	12.57	116.1	103.8	16.78	119.8	99.0	17.31	122.4	82.0	17.63
3600	75	108.2	89.6	11.96	119.6	67.4	12.34	128.6	30.0	12.57	108.2	86.2	16.78	119.6	64.8	17.31	128.6	28.8	17.63
	80	112.8	102.6	12.00	121.7	84.9	12.38	128.6	55.4	12.61	112.8	98.7	16.83	121.7	81.7	17.36	128.6	53.3	17.68
	85	117.1	112.6	12.03	123.5	101.6	12.41	128.3	76.8	12.64	117.1	108.3	16.88	123.5	97.8	17.41	128.3	73.9	17.74
	90	121.0	118.9	12.07	124.8	113.4	12.45	127.5	94.0	12.68	121.0	114.4	16.93	124.8	109.1	17.47	127.5	90.4	17.79
4000	75	111.4	97.5	12.09	123.2	73.3	12.47	132.4	32.6	12.70	111.4	93.8	16.96	123.2	70.6	17.50	132.4	31.4	17.82
	80	116.2	111.7	12.13	125.4	92.4	12.51	132.5	60.3	12.74	116.2	107.5	17.01	125.4	88.9	17.55	132.5	58.0	17.87
	85	120.6	120.6	12.16	127.2	110.6	12.55	132.1	83.6	12.78	120.6	117.9	17.06	127.2	106.4	17.60	132.1	80.4	17.93
	90	124.6	124.6	12.20	128.6	123.4	12.58	131.3	102.3	12.82	124.6	124.5	17.11	128.6	118.7	17.65	131.3	98.4	17.98
4400	75	113.5	104.4	12.16	125.5	78.5	12.54	134.9	34.9	12.77	113.5	100.4	17.05	125.5	75.5	17.59	134.9	33.6	17.92
	80	118.4	118.4	12.19	127.8	98.9	12.58	135.0	64.5	12.81	118.4	115.0	17.11	127.8	95.2	17.65	135.0	62.1	17.97
	85	122.9	122.9	12.23	129.6	118.4	12.62	134.6	89.4	12.85	122.9	122.9	17.16	129.6	113.9	17.70	134.6	86.0	18.03
	90	127.0	127.0	12.27	131.0	131.0	12.65	133.8	109.4	12.89	127.0	127.0	17.21	131.0	127.0	17.75	133.8	105.3	18.08
4800	75	114.6	110.5	12.22	126.7	83.1	12.61	136.2	37.0	12.84	114.6	106.3	17.15	126.7	80.0	17.69	136.2	35.6	18.02
	80	119.5	119.5	12.26	128.9	104.7	12.65	136.2	68.3	12.88	119.5	119.5	17.20	128.9	100.8	17.74	136.2	65.7	18.07
	85	124.0	124.0	12.30	130.8	125.4	12.69	135.8	94.7	12.92	124.0	124.0	17.25	130.8	120.6	17.80	135.8	91.1	18.13
	90	128.1	128.1	12.33	132.2	132.2	12.72	135.0	115.9	12.96	128.1	128.1	17.30	132.2	123.2	17.85	135.0	111.5	18.18

Notes:

- All capacities are gross, evaporator fan motor heat is not deducted.
- To obtain net cooling capacity, subtract evaporator fan motor heat.
- DB = Dry Bulb Temperature(°F), WB = Wet Bulb Temperature(°F)
- CFM = Cubic ft per minute
- TGC = Total Gross Cooling Capacity(Unit : MBH = kBtu/h)
Net Cooling Capacity = TGC – Fan motor heat
Fan motor heat = 3.1 x BHP (Refer to the Fan performance data)

5. SHC = Sensible Heat Capacity(Unit : MBH = kBtu/h)

6. PI = Power Input(kW), Sum of Compressor & Outdoor Fan Power Input

7. The rated capacity at the outdoor temperature of 81.5 DB is the same as that at IEER B test condition.

The rated capacity at the outdoor temperature of 95.0 DB is the same as that at IEER A test condition.

Single Package

9. Capacity tables

12.5RT AK-Q150BC01 (SI)

Outdoor DB(°C)		27.5									35.0								
Indoor	WB(°C)	16.1			19.4			22.8			16.1			19.4			22.8		
I/s	DB(°C)	TGC	SHC	PI	TGC	SHC	PI	TGC	SHC	PI									
1888	23.9	35.1	27.6	4.01	38.8	20.8	4.14	41.7	9.3	4.21	35.1	28.6	10.90	38.8	21.5	11.24	41.7	9.6	11.45
	26.7	36.6	31.7	4.02	39.5	26.2	4.15	41.8	17.1	4.22	36.6	32.7	10.93	39.5	27.1	11.28	41.8	17.7	11.49
	29.4	38.0	34.7	4.03	40.1	31.4	4.16	41.6	23.7	4.24	38.0	35.9	10.96	40.1	32.4	11.31	41.6	24.5	11.52
	32.2	39.3	36.7	4.05	40.5	35.0	4.17	41.4	29.0	4.25	39.3	37.9	11.00	40.5	36.2	11.34	41.4	30.0	11.55
2124	23.9	36.6	30.5	4.04	40.4	22.9	4.17	43.5	10.2	4.25	36.6	31.5	11.00	40.4	23.7	11.34	43.5	10.5	11.55
	26.7	38.2	34.9	4.06	41.2	28.9	4.19	43.5	18.8	4.26	38.2	36.1	11.03	41.2	29.8	11.38	43.5	19.5	11.59
	29.4	39.6	38.3	4.07	41.8	34.6	4.20	43.4	26.1	4.28	39.6	39.6	11.06	41.8	35.7	11.41	43.4	27.0	11.62
	32.2	40.9	40.4	4.08	42.2	38.6	4.21	43.1	31.9	4.29	40.9	40.9	11.10	42.2	39.9	11.45	43.1	33.0	11.66
2360	23.9	37.7	33.2	4.09	41.7	24.9	4.22	44.8	11.1	4.29	37.7	34.3	11.11	41.7	25.8	11.46	44.8	11.5	11.68
	26.7	39.3	38.0	4.10	42.4	31.4	4.23	44.8	20.5	4.31	39.3	39.3	11.15	42.4	32.5	11.50	44.8	21.2	11.71
	29.4	40.8	40.8	4.11	43.0	37.6	4.24	44.7	28.4	4.32	40.8	40.8	11.18	43.0	38.9	11.53	44.7	29.4	11.75
	32.2	42.1	42.1	4.12	43.5	42.0	4.25	44.4	34.8	4.33	42.1	42.1	11.21	43.5	43.4	11.57	44.4	35.9	11.78
2596	23.9	38.4	35.5	4.11	42.5	26.7	4.24	45.6	11.9	4.32	38.4	36.7	11.18	42.5	27.6	11.53	45.6	12.3	11.74
	26.7	40.1	40.1	4.12	43.2	33.6	4.25	45.7	21.9	4.33	40.1	40.1	11.21	43.2	34.8	11.56	45.7	22.7	11.78
	29.4	41.6	41.6	4.14	43.8	40.3	4.27	45.5	30.4	4.34	41.6	41.6	11.24	43.8	41.6	11.60	45.5	31.4	11.81
	32.2	42.9	42.9	4.15	44.3	44.3	4.28	45.3	37.2	4.36	42.9	42.9	11.28	44.3	44.3	11.63	45.3	38.5	11.85
2832	23.9	38.7	37.6	4.13	42.8	28.3	4.26	46.1	12.6	4.34	38.7	38.7	11.24	42.8	29.2	11.59	46.1	13.0	11.81
	26.7	40.4	40.4	4.15	43.6	35.6	4.28	46.1	23.2	4.36	40.4	40.4	11.27	43.6	36.8	11.63	46.1	24.0	11.84
	29.4	42.0	42.0	4.16	44.2	42.6	4.29	45.9	32.2	4.37	42.0	42.0	11.30	44.2	44.1	11.66	45.9	33.3	11.88
	32.2	43.3	43.3	4.17	44.7	44.7	4.30	45.7	39.4	4.38	43.3	43.3	11.34	44.7	44.7	11.70	45.7	40.7	11.91

Outdoor DB(°C)		40.0						46.0						48.0					
Indoor	WB(°C)	16.1			19.4			22.8			16.1			19.4			22.8		
I/s	DB(°C)	TGC	SHC	PI															
1888	23.9	35.1	27.5	14.09	38.8	20.7	14.54	41.7	9.2	14.81	35.1	26.4	20.05	38.8	19.9	20.68	41.7	8.9	21.06
	26.7	36.6	31.5	14.14	39.5	26.1	14.58	41.8	17.0	14.85	36.6	30.3	20.11	39.5	25.1	20.74	41.8	16.4	21.12
	29.4	38.0	34.5	14.18	40.1	31.2	14.62	41.6	23.6	14.90	38.0	33.2	20.17	40.1	30.0	20.80	41.6	22.7	21.94
	32.2	39.3	36.5	14.22	40.5	34.8	14.67	41.4	28.8	14.94	39.3	35.1	20.23	40.5	33.5	20.86	41.4	27.7	21.25
2124	23.9	36.6	30.3	14.22	40.4	22.8	14.67	43.5	10.1	14.94	36.6	29.2	20.22	40.4	21.9	20.86	43.5	9.8	21.25
	26.7	38.2	34.7	14.26	41.2	28.7	14.71	43.5	18.7	14.98	38.2	33.4	20.28	41.2	27.6	20.93	43.5	18.0	21.31
	29.4	39.6	38.1	14.30	41.8	34.4	14.75	43.4	26.0	15.03	39.6	36.6	20.35	41.8	33.1	20.99	43.4	25.0	21.38
	32.2	40.9	40.2	14.35	42.2	38.3	14.80	43.1	31.8	15.07	40.9	38.7	20.41	42.2	36.9	21.05	43.1	30.6	21.44
2360	23.9	37.7	33.0	14.37	41.7	24.8	14.82	44.8	11.0	15.10	37.7	31.7	20.44	41.7	23.9	21.08	44.8	10.6	21.47
	26.7	39.3	37.8	14.41	42.4	31.3	14.87	44.8	20.4	15.14	39.3	36.3	20.50	42.4	30.1	21.15	44.8	19.6	21.54
	29.4	40.8	40.8	14.46	43.0	37.4	14.91	44.7	28.3	15.19	40.8	39.9	20.56	43.0	36.0	21.21	44.7	27.2	21.60
	32.2	42.1	42.1	14.50	43.5	41.7	14.96	44.4	34.6	15.23	42.1	42.1	20.62	43.5	40.1	21.27	44.4	33.3	21.67
2596	23.9	38.4	35.3	14.45	42.5	26.5	14.91	45.6	11.8	15.18	38.4	34.0	20.55	42.5	25.5	21.20	45.6	11.4	21.59
	26.7	40.1	40.1	14.49	43.2	33.5	14.95	45.7	21.8	15.23	40.1	38.9	20.61	43.2	32.2	21.27	45.7	21.0	21.66
	29.4	41.6	41.6	14.54	43.8	40.0	15.00	45.5	30.2	15.27	41.6	41.6	20.68	43.8	38.5	21.33	45.5	29.1	21.72
	32.2	42.9	42.9	14.58	44.3	44.3	15.04	45.3	37.0	15.32	42.9	42.9	20.74	44.3	43.0	21.39	45.3	35.6	21.79
2832	23.9	38.7	37.4	14.53	42.8	28.1	14.99	46.1	12.5	15.27	38.7	36.0	20.67	42.8	27.0	21.32	46.1	12.0	21.71
	26.7	40.4	40.4	14.57	43.6	35.4	15.03	46.1	23.1	15.31	40.4	40.4	20.73	43.6	34.1	21.38	46.1	22.2	21.78
	29.4	42.0	42.0	14.62	44.2	42.4	15.08	45.9	32.0	15.36	42.0	42.0	20.79	44.2	40.8	21.45	45.9	30.8	21.84
	32.2	43.3	43.3	14.66	44.7	44.7	15.12	45.7	39.2	15.40	43.3	43.3	20.85	44.7	44.7	21.51	45.7	37.7	21.91

Notes:

- All capacities are gross, evaporator fan motor heat is not deducted.
- To obtain net cooling capacity, subtract evaporator fan motor heat.
- DB = Dry Bulb Temperature(°C), WB = Wet Bulb Temperature(°C)
- I/s = Liters per second
- TGC = Total Gross Cooling Capacity(Unit : kW)
- Net Cooling Capacity = TGC – Fan motor heat
- Fan motor heat = 1.28 x BkW (Refer to the Fan performance data)

5. SHC = Sensible Heat Capacity(Unit : kW)

6. PI = Power Input(kW), Sum of Compressor & Outdoor Fan Power Input

7. The rated capacity at the outdoor temperature of 27.5 DB is the same as that at IEER B test condition.

The rated capacity at the outdoor temperature of 35.0 DB is the same as that at IEER A test condition.

Single Package

9. Capacity tables

12.5RT AK-Q150BC01 (English)

Outdoor DB(°F)		81.5								95.0									
Indoor WB(°F)		61.0			67.0			73.0			61.0			67.0			73.0		
CFM	DB(°F)	TGC	SHC	PI	TGC	SHC	PI	TGC	SHC	PI									
4000	75	119.8	94.3	4.01	132.5	70.9	4.14	142.4	31.6	4.21	119.8	97.5	10.90	132.5	73.3	11.24	142.4	32.6	11.45
	80	125.0	108.0	4.02	134.8	89.4	4.15	142.5	58.3	4.22	125.0	111.7	10.93	134.8	92.4	11.28	142.5	60.3	11.49
	85	129.7	118.5	4.03	136.8	107.0	4.16	142.1	80.8	4.24	129.7	122.5	10.96	136.8	110.6	11.31	142.1	83.5	11.52
	90	134.0	125.2	4.05	138.3	119.3	4.17	141.2	98.9	4.25	134.0	129.4	11.00	138.3	123.4	11.34	141.2	102.2	11.55
4500	75	124.8	104.0	4.04	138.0	78.2	4.17	148.4	34.8	4.25	124.8	107.5	11.00	138.0	80.8	11.34	148.4	36.0	11.55
	80	130.2	119.1	4.06	140.5	98.5	4.19	148.4	64.3	4.26	130.2	123.1	11.03	140.5	101.8	11.38	148.4	66.4	11.59
	85	135.1	130.6	4.07	142.5	117.9	4.20	148.0	89.1	4.28	135.1	135.0	11.06	142.5	121.9	11.41	148.0	92.1	11.62
	90	139.6	138.0	4.08	144.0	131.5	4.21	147.1	109.0	4.29	139.6	139.6	11.10	144.0	136.0	11.45	147.1	112.7	11.66
5000	75	128.6	113.2	4.09	142.2	85.1	4.22	152.8	37.9	4.29	128.6	117.0	11.11	142.2	88.0	11.46	152.8	39.1	11.68
	80	134.1	129.6	4.10	144.7	107.2	4.23	152.9	70.0	4.31	134.1	134.0	11.15	144.7	110.8	11.50	152.9	72.3	11.71
	85	139.2	139.2	4.11	146.8	128.3	4.24	152.5	97.0	4.32	139.2	139.2	11.18	146.8	132.7	11.53	152.5	100.2	11.75
	90	143.8	143.8	4.12	148.4	143.2	4.25	151.5	118.6	4.33	143.8	143.8	11.21	148.4	148.0	11.57	151.5	122.6	11.78
5500	75	131.0	121.1	4.11	144.8	91.1	4.24	155.7	40.5	4.32	131.0	125.2	11.18	144.8	94.1	11.53	155.7	41.9	11.74
	80	136.7	136.7	4.12	147.5	114.8	4.25	155.8	74.9	4.33	136.7	136.7	11.21	147.5	118.6	11.56	155.8	77.4	11.78
	85	141.9	141.9	4.14	149.6	137.4	4.27	155.4	103.8	4.34	141.9	141.9	11.24	149.6	142.0	11.60	155.4	107.3	11.81
	90	146.5	146.5	4.15	151.2	151.2	4.28	154.4	127.0	4.36	146.5	146.5	11.28	151.2	151.2	11.63	154.4	131.3	11.85
6000	75	132.2	128.2	4.13	146.2	96.4	4.26	157.1	42.9	4.34	132.2	132.2	11.24	146.2	99.7	11.59	157.1	44.4	11.81
	80	137.9	137.9	4.15	148.8	121.5	4.28	157.2	79.3	4.36	137.9	137.9	11.27	148.8	125.6	11.63	157.2	82.0	11.84
	85	143.1	143.1	4.16	150.9	145.5	4.29	156.8	109.9	4.37	143.1	143.1	11.30	150.9	150.4	11.66	156.8	113.6	11.88
	90	147.8	147.8	4.17	152.6	152.6	4.30	155.8	134.5	4.38	147.8	147.8	11.34	152.6	152.6	11.70	155.8	139.0	11.91

Outdoor DB(°F)		104.0						114.8						118.4														
Indoor WB(°F)		61.0			67.0			73.0			61.0			67.0			73.0											
CFM	DB(°F)	TGC	SHC	PI																								
4000	75	119.8	93.8	14.09	132.5	70.5	14.54	142.4	31.4	14.81	119.8	90.2	20.05	132.5	67.9	20.68	142.4	30.2	21.06	115.3	85.6	20.76	127.4	64.3	21.41	137.0	28.6	21.81
	80	125.0	107.5	14.14	134.8	88.9	14.58	142.5	58.0	14.85	125.0	103.4	20.11	134.8	85.5	20.74	142.5	55.8	21.12	120.3	98.0	20.82	129.7	81.1	21.48	137.1	52.9	21.87
	85	129.7	117.8	14.18	136.8	106.4	14.62	142.1	80.4	14.90	129.7	113.4	20.17	136.8	102.4	20.80	142.1	77.3	21.19	124.8	107.5	20.88	131.6	97.0	21.54	136.7	73.3	21.94
	90	134.0	124.5	14.22	138.3	118.7	14.67	141.2	98.4	14.94	134.0	119.8	20.23	138.3	114.2	20.86	141.2	94.6	21.25	128.9	113.6	20.94	133.0	108.3	21.60	135.9	89.7	22.00
4500	75	124.8	103.4	14.22	138.0	77.8	14.67	148.4	34.6	14.94	124.8	99.5	20.22	138.0	74.8	20.86	148.4	33.3	21.25	120.1	94.3	20.94	132.8	70.9	21.60	142.7	31.6	22.00
	80	130.2	118.4	14.26	140.5	98.0	14.71	148.4	63.9	14.98	130.2	113.9	20.28	140.5	94.3	20.93	148.4	61.5	21.31	125.3	108.0	21.00	135.1	89.4	21.67	142.8	58.3	22.07
	85	135.1	129.9	14.30	142.5	117.3	14.75	148.0	88.6	15.03	135.1	125.0	20.35	142.5	112.8	20.99	148.0	85.2	21.38	130.0	118.5	21.07	137.1	107.0	21.73	142.4	80.8	22.13
	90	139.6	137.2	14.35	144.0	130.8	14.80	147.1	108.4	15.07	139.6	132.0	20.41	144.0	125.9	21.05	147.1	104.3	21.44	134.3	125.2	21.13	138.6	119.3	21.80	141.5	98.9	22.20
5000	75	128.6	112.5	14.37	142.2	84.6	14.82	152.8	37.7	15.10	128.6	108.3	20.44	142.2	81.4	21.08	152.8	36.2	21.47	123.7	102.6	21.16	136.8	77.2	21.83	147.0	34.4	22.24
	80	134.1	128.9	14.41	144.7	106.7	14.87	152.9	69.6	15.14	134.1	124.0	20.50	144.7	102.6	21.15	152.9	66.9	21.54	129.1	117.6	21.23	139.2	97.3	21.90	147.1	63.5	22.30
	85	139.2	139.2	14.46	146.8	127.6	14.91	152.5	96.4	15.19	139.2	136.0	20.56	146.8	122.8	21.21	152.5	92.8	21.60	133.9	128.9	21.29	141.2	116.4	21.96	146.7	88.0	22.37
	90	143.8	143.8	14.50	148.4	142.4	14.96	151.5	118.0	15.23	143.8	143.7	20.62	148.4	137.0	21.27	151.5	113.5	21.67	138.3	136.2	21.36	142.7	129.9	22.03	145.8	107.6	22.44
5500	75	131.0	120.4	14.45	144.8	90.6	14.91	155.7	40.3	15.18	131.0	115.9	20.55	144.8	87.1	21.20	155.7	38.8	21.59	126.0	109.9	21.28	139.3	82.6	21.95	149.8	36.8	22.36
	80	136.7	136.7	14.49	147.5	114.1	14.95	155.8	74.5	15.23	136.7	132.7	20.61	147.5	109.8	21.27	155.8	71.6	21.66	131.5	125.8	21.35	141.9	104.1	22.02	149.9	67.9	22.43
	85	141.9	141.9	14.54	149.6	136.6	15.00	155.4	103.2	15.27	141.9	141.9	20.68	149.6	131.4	21.33	155.4	99.3	21.72	136.5	126.5	21.41	143.9	124.6	22.08	149.5	94.1	22.49
	90	146.5	146.5	14.58	151.2	151.2	15.04	154.4	126.3	15.32	146.5	146.5	20.74	151.2	146.6	21.39	154.4	121.5	21.79	140.9	140.9	21.47	145.4	139.0	22.15	148.6	115.2	22.56
6000	75	132.2	127.6	14.53	146.2	95.9	14.99	157.1	42.7	15.27	132.2	122.7	20.67	146.2	92.3	21.32	157.1	41.1	21.71	127.2	116.3	21.40	140.6	87.5	22.07	151.2	38.9	22.48
	80	137.9	137.9	14.57	148.8	120.9	15.03	157.2	78.9	15.31	137.9	137.9	20.73	148.8	116.3	21.38	157.2	75.9	21.78	132.7	127.1							

Single Package

9. Capacity tables

20RT AK-Q240BC01 (SI)

Outdoor DB(°C)		27.5									35.0								
Indoor WB(°C)		16.1			19.4			22.8			16.1			19.4			22.8		
I/s	DB(°C)	TGC	SHC	PI	TGC	SHC	PI	TGC	SHC	PI									
3022	23.9	60.7	41.3	6.46	67.1	31.1	6.67	72.1	13.8	6.79	60.7	47.1	19.46	67.1	35.4	20.07	72.1	15.8	20.44
	26.7	63.3	47.3	6.48	68.3	39.2	6.69	72.2	25.6	6.81	63.3	53.9	19.52	68.3	44.6	20.13	72.2	29.1	20.50
	29.4	65.7	51.9	6.50	69.3	46.9	6.71	72.0	35.4	6.83	65.7	59.1	19.57	69.3	53.4	20.19	72.0	40.3	20.57
	32.2	67.9	54.8	6.52	70.0	52.3	6.73	71.5	43.3	6.85	67.9	62.5	19.63	70.0	59.6	20.25	71.5	49.4	20.63
3399	23.9	63.2	45.6	6.52	69.9	34.3	6.73	75.2	15.2	6.85	63.2	51.9	19.63	69.9	39.0	20.25	75.2	17.4	20.62
	26.7	66.0	52.2	6.54	71.2	43.2	6.75	75.2	28.2	6.87	66.0	59.4	19.69	71.2	49.2	20.31	75.2	32.1	20.69
	29.4	68.5	57.2	6.56	72.2	51.7	6.77	75.0	39.0	6.89	68.5	65.2	19.75	72.2	58.8	20.37	75.0	44.5	20.75
	32.2	70.7	60.5	6.58	73.0	57.6	6.79	74.5	47.8	6.91	70.7	68.9	19.81	73.0	65.6	20.43	74.5	54.4	20.81
3777	23.9	65.1	49.6	6.59	72.0	37.3	6.80	77.4	16.6	6.92	65.1	56.5	19.84	72.0	42.5	20.47	77.4	18.9	20.85
	26.7	67.9	56.8	6.61	73.3	47.0	6.82	77.4	30.7	6.95	67.9	64.7	19.90	73.3	53.5	20.53	77.4	34.9	20.91
	29.4	70.5	62.3	6.63	74.4	56.2	6.84	77.2	42.5	6.97	70.5	70.5	19.96	74.4	64.0	20.59	77.2	48.4	20.97
	32.2	72.8	65.8	6.65	75.2	62.7	6.86	76.8	52.0	6.99	72.8	72.8	20.02	75.2	71.4	20.65	76.8	59.2	21.03
4155	23.9	66.4	53.1	6.63	73.4	39.9	6.84	78.9	17.8	6.96	66.4	60.4	19.95	73.4	45.4	20.58	78.9	20.2	20.96
	26.7	69.2	60.8	6.65	74.7	50.3	6.86	78.9	32.8	6.98	69.2	69.2	20.01	74.7	57.3	20.64	78.9	37.4	21.02
	29.4	71.9	66.7	6.67	75.8	60.2	6.88	78.7	45.5	7.00	71.9	71.9	20.07	75.8	68.5	20.70	78.7	51.8	21.09
	32.2	74.2	70.4	6.69	76.6	67.1	6.90	78.2	55.6	7.03	74.2	74.2	20.13	76.6	76.5	20.76	78.2	63.4	21.15
4532	23.9	67.0	56.2	6.66	74.0	42.3	6.87	79.6	18.8	7.00	67.0	64.0	20.06	74.0	48.1	20.69	79.6	21.4	21.08
	26.7	69.9	64.4	6.68	75.4	53.3	6.90	79.6	34.7	7.02	69.9	69.9	20.12	75.4	60.6	20.76	79.6	39.6	21.14
	29.4	72.5	70.6	6.70	76.5	63.7	6.92	79.4	48.2	7.04	72.5	72.5	20.18	76.5	72.6	20.82	79.4	54.8	21.20
	32.2	74.9	74.6	6.72	77.3	71.1	6.94	78.9	58.9	7.06	74.9	74.9	20.24	77.3	77.3	20.88	78.9	67.1	21.27

Outdoor DB(°C)		40.0						46.0						48.0													
Indoor WB(°C)		16.1			19.4			22.8			16.1			19.4			22.8			16.1			19.4				
I/s	DB(°C)	TGC	SHC	PI	TGC	SHC	PI	TGC	SHC	PI																	
3022	23.9	60.7	46.2	24.88	67.1	34.7	25.66	72.1	15.5	26.14	60.7	43.8	35.57	67.1	33.0	36.69	72.1	14.7	37.37	58.7	42.4	36.20	64.9	31.9	37.35		
	26.7	63.3	52.9	24.95	68.3	43.7	25.74	72.2	28.5	26.22	63.3	50.2	35.68	68.3	41.5	36.81	72.2	27.1	37.48	61.2	48.5	36.31	66.1	40.1	37.46		
	29.4	65.7	58.0	25.03	69.3	52.4	25.82	72.0	39.6	26.30	65.7	55.1	35.78	69.3	49.7	36.91	72.0	37.6	37.60	63.6	53.2	36.42	67.0	48.0	37.57		
	32.2	67.9	61.3	25.10	70.0	58.4	25.89	71.5	48.4	26.37	67.9	58.2	35.89	70.0	55.5	37.02	71.5	46.0	37.71	65.6	56.2	36.53	67.7	53.6	37.68		
3399	23.9	63.2	50.9	25.10	69.9	38.3	25.89	75.2	17.0	26.37	63.2	48.3	35.89	69.9	36.3	37.02	75.2	16.2	37.70	61.2	46.7	36.53	67.6	35.1	37.68		
	26.7	66.0	58.3	25.18	71.2	48.2	25.97	75.2	31.5	26.45	66.0	55.4	35.99	71.2	45.8	37.13	75.2	29.9	37.82	63.8	53.5	36.64	68.8	44.2	37.80		
	29.4	68.5	63.9	25.25	72.2	57.7	26.05	75.0	43.6	26.53	68.5	60.7	36.10	72.2	54.8	37.24	75.0	41.4	37.93	66.2	58.6	36.75	69.8	53.0	37.90		
	32.2	70.7	67.5	25.33	73.0	64.4	26.12	74.5	53.4	26.61	70.7	64.1	36.21	73.0	61.1	37.35	74.5	50.7	38.04	68.4	62.0	36.86	70.6	59.1	38.02		
3777	23.9	65.1	55.4	25.37	72.0	41.6	26.17	77.4	18.5	26.65	65.1	52.6	36.27	72.0	39.6	37.41	77.4	17.6	38.11	63.0	50.8	36.92	69.6	38.2	38.08		
	26.7	67.9	63.4	25.44	73.3	52.5	26.25	77.4	34.2	26.73	67.9	60.2	36.38	73.3	49.8	37.53	77.4	32.5	38.22	65.7	58.2	37.03	70.9	48.2	38.20		
	29.4	70.5	69.6	25.52	74.4	62.8	26.33	77.2	47.5	26.81	70.5	66.1	36.49	74.4	59.7	37.64	77.2	45.1	38.34	68.2	63.8	37.14	71.9	57.6	38.31		
	32.2	72.8	72.8	25.60	75.2	70.1	26.40	76.8	58.1	26.89	72.8	69.8	36.60	75.2	66.6	37.75	76.8	55.1	38.45	70.4	67.4	37.25	72.7	64.3	38.42		
4155	23.9	66.4	59.3	25.51	73.4	44.6	26.31	78.9	19.8	26.80	66.4	56.3	36.47	73.4	42.3	37.62	78.9	18.8	38.32	64.2	54.4	37.12	71.0	40.9	38.29		
	26.7	69.2	67.9	25.59	74.7	56.2	26.39	78.9	36.6	26.88	69.2	64.5	36.58	74.7	53.3	37.74	78.9	34.8	38.43	67.0	62.3	37.23	72.2	51.5	38.41		
	29.4	71.9	71.9	25.66	75.8	67.2	26.47	78.7	50.8	26.96	71.9	70.7	36.69	75.8	63.8	37.85	78.7	48.2	38.55	69.5	68.3	37.34	73.3	61.7	38.52		
	32.2	74.2	74.2	25.74	76.6	75.0	26.55	78.2	62.1	27.04	74.2	74.2	36.80	76.6	71.2	37.96	78.2	59.0	38.66	71.8	71.8	37.46	74.1	68.8	38.64		
4532	23.9	67.0	62.8	25.65	74.0	47.2	26.46	79.6	21.0	26.95	67.0	59.6	36.67	74.0	44.8	37.83	79.6	20.0	38.53	64.8	57.6	37.33	71.6	43.3	38.50		
	26.7	69.9	69.9	25.73	75.4	59.5	26.54	79.6	38.8	27.03	69.9	68.3	36.78	75.4	56.5	37.95	79.6	36.9	38.64	67.6	66.0	37.44	72.9	54.6	38.62		
	29.4	72.5	72.5	25.80	76.5	71.2	26.62	79.4	53.8	27.11	72.5	72.5	36.89	76.5	67.6	38.06	79.4	51.1	38.76	70.1	37.55	74.0	65.3	38.73	76.8	49.4	39.45
	32.2	74.9	74.9	25.88	77.3	77.3	26.70	78.9	65.8	27.19	74.9	74.9	37.00	77.3	75.4	38.17	78.9	62.5	38.88	72.4	72.4	37.66	74.7	72.9	38.85		

Notes:

- All capacities are gross, evaporator fan motor heat is not deducted.
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Single Package

9. Capacity tables

20RT AK-Q240BC01 (English)

Outdoor	DB(°F)	81.5									95.0								
Indoor	WB(°F)	61.0			67.0			73.0			61.0			67.0			73.0		
CFM	DB(°F)	TGC	SHC	PI	TGC	SHC	PI	TGC	SHC	PI									
6400	75	207.0	141.0	6.46	228.8	106.0	6.67	246.0	47.2	6.79	207.0	160.5	19.46	228.8	120.7	20.07	246.0	53.7	20.44
	80	215.9	161.5	6.48	233.0	133.6	6.69	246.1	87.2	6.81	215.9	183.9	19.52	233.0	152.1	20.13	246.1	99.3	20.50
	85	224.1	177.1	6.50	236.3	159.9	6.71	245.4	120.8	6.83	224.1	201.7	19.57	236.3	182.1	20.19	245.4	137.6	20.57
	90	231.5	187.1	6.52	238.9	178.4	6.73	244.0	147.8	6.85	231.5	213.0	19.63	238.9	203.1	20.25	244.0	168.3	20.63
7200	75	215.6	155.4	6.52	238.4	116.8	6.73	256.3	52.0	6.85	215.6	176.9	19.63	238.4	133.1	20.25	256.3	59.2	20.62
	80	225.0	178.0	6.54	242.7	147.2	6.75	256.4	96.1	6.87	225.0	202.7	19.69	242.7	167.7	20.31	256.4	109.4	20.69
	85	233.5	195.2	6.56	246.2	176.2	6.77	255.7	133.1	6.89	233.5	222.3	19.75	246.2	200.7	20.37	255.7	151.6	20.75
	90	241.1	206.2	6.58	248.8	196.6	6.79	254.2	162.9	6.91	241.1	234.8	19.81	248.8	223.9	20.43	254.2	185.5	20.81
8000	75	222.1	169.1	6.59	245.6	127.2	6.80	264.0	56.6	6.92	222.1	192.6	19.84	245.6	144.8	20.47	264.0	64.5	20.85
	80	231.7	193.7	6.61	250.0	160.3	6.82	264.1	104.6	6.95	231.7	220.6	19.90	250.0	182.5	20.53	264.1	119.1	20.91
	85	240.5	212.4	6.63	253.6	191.8	6.84	263.4	144.9	6.97	240.5	240.5	19.96	253.6	218.4	20.59	263.4	165.0	20.97
	90	248.4	224.4	6.65	256.3	214.0	6.86	261.8	177.3	6.99	248.4	248.4	20.02	256.3	243.7	20.65	261.8	201.9	21.03
8800	75	226.3	181.0	6.63	250.2	136.1	6.84	269.0	60.6	6.96	226.3	206.1	19.95	250.2	155.0	20.58	269.0	69.0	20.96
	80	236.1	207.3	6.65	254.7	171.5	6.86	269.2	111.9	6.98	236.1	236.1	20.01	254.7	195.3	20.64	269.2	127.4	21.02
	85	245.1	227.3	6.67	258.4	205.3	6.88	268.4	155.1	7.00	245.1	245.1	20.07	258.4	233.8	20.70	268.4	176.6	21.09
	90	253.1	240.2	6.69	261.2	229.0	6.90	266.8	189.8	7.03	253.1	253.1	20.13	261.2	260.8	20.76	266.8	216.1	21.15
9600	75	228.4	191.7	6.66	252.5	144.1	6.87	271.5	64.1	7.00	228.4	218.3	20.06	252.5	164.1	20.69	271.5	73.1	21.08
	80	238.3	219.5	6.68	257.1	181.6	6.90	271.6	118.5	7.02	238.3	238.3	20.12	257.1	206.8	20.76	271.6	135.0	21.14
	85	247.3	240.8	6.70	260.8	217.4	6.92	270.8	164.2	7.04	247.3	247.3	20.18	260.8	247.6	20.82	270.8	187.0	21.20
	90	255.4	254.4	6.72	263.6	242.5	6.94	269.2	201.0	7.06	255.4	255.4	20.24	263.6	263.6	20.88	269.2	228.9	21.27

Outdoor	DB(°F)	104.0									114.8									118.4								
Indoor	WB(°F)	61.0			67.0			73.0			61.0			67.0			73.0			61.0			67.0			73.0		
CFM	DB(°F)	TGC	SHC	PI																								
6400	75	207.0	157.4	24.88	228.8	118.4	25.66	246.0	52.7	26.14	207.0	149.5	35.57	228.8	112.5	36.69	246.0	50.0	37.37	200.3	144.5	36.20	221.4	108.7	37.35	238.1	48.4	38.04
	80	215.9	180.4	24.95	233.0	149.2	25.74	246.1	97.3	26.22	215.9	171.3	35.68	233.0	141.7	36.81	246.1	92.5	37.48	209.0	165.6	36.31	225.4	137.0	37.46	238.2	89.4	38.15
	85	224.1	197.8	25.03	236.3	178.6	25.82	245.4	134.9	26.30	224.1	187.8	35.78	236.3	169.6	36.91	245.4	128.1	37.60	216.9	181.6	36.42	228.7	163.9	37.57	237.5	123.8	38.27
	90	231.5	209.0	25.10	238.9	199.2	25.89	244.0	165.1	26.37	231.5	198.5	35.89	238.9	189.2	37.02	244.0	156.8	37.71	224.0	191.8	36.53	231.1	182.9	37.68	236.1	151.5	38.38
7200	75	215.6	173.6	25.10	238.4	130.5	25.89	256.3	58.1	26.37	215.6	164.8	35.89	238.4	124.0	37.02	256.3	55.2	37.70	208.7	159.3	36.53	230.7	119.8	37.68	248.0	53.3	38.38
	80	225.0	198.8	25.18	242.7	164.5	25.97	256.4	107.3	26.45	225.0	188.8	35.99	242.7	156.2	37.13	256.4	101.9	37.82	217.7	182.5	36.64	234.8	151.0	37.80	248.1	98.5	38.49
	85	233.5	218.0	25.25	246.2	196.8	26.05	255.7	148.7	26.53	233.5	207.0	36.10	246.2	186.9	37.24	255.7	141.2	37.93	225.9	200.1	36.75	238.2	180.7	37.90	247.4	136.5	38.61
	90	241.1	230.3	25.33	248.8	219.6	26.12	254.2	182.0	26.61	241.1	218.7	36.21	248.8	208.6	37.35	254.2	172.8	38.04	233.3	211.4	36.86	240.8	201.6	38.02	245.9	167.0	38.72
8000	75	222.1	188.9	25.37	245.6	142.1	26.17	264.0	63.2	26.65	222.1	179.4	36.27	245.6	134.9	37.41	264.0	60.0	38.11	215.0	173.4	36.92	237.6	130.4	38.08	255.5	58.0	38.79
	80	231.7	216.4	25.44	250.0	179.0	26.25	264.1	116.8	26.73	231.7	205.5	36.38	250.0	170.0	37.53	264.1	110.9	38.22	224.3	198.6	37.03	241.9	164.3	38.20	255.6	107.2	38.90
	85	240.5	237.3	25.52	253.6	214.2	26.33	263.4	161.9	26.81	240.5	225.3	36.49	253.6	203.5	37.64	263.4	153.7	38.34	232.7	217.8	37.14	245.4	196.7	38.31	254.9	148.6	39.02
	90	248.4	248.4	25.60	256.3	239.0	26.40	261.8	198.1	26.89	248.4	238.1	36.60	256.3	227.0	37.75	261.8	188.1	38.45	240.4	230.1	37.25	248.0	219.4	38.42	253.3	181.8	39.14
8800	75	226.3	202.2	25.51	250.2	152.0	26.31	269.0	67.7	26.80	226.3	192.0	36.47	250.2	144.4	37.62	269.0	64.3	38.32	219.0	185.6	37.12	242.2	139.6	38.29	260.3	62.1	39.00
	80	236.1	231.6	25.59	254.7	191.6	26.39	269.2	125.0	26.88	236.1	219.9	36.58	254.7	181.9	37.74	269.2	118.7	38.43	228.5	212.6	37.23	246.5	175.9	38.41	260.5	114.7	39.12
	85	245.1	245.1	25.66	258.4	229.3	26.47	268.4	173.2	26.96	245.1	241.2	36.69	258.4	217.8	37.85	268.4	164.5	38.55	237.1	233.1	37.34	250.1	210.5	38.52	259.7	159.0	39.23
	90	253.1	253.1	25.74	261.2	255.8	26.55	266.8	212.0	27.04	253.1	253.1	36.80	261.2	242.9	37.96	266.8	201.3	38.66	244.9	244.9	37.46	252.7	234.8	38.64	258.2	194.6	39.35
9600	75	228.4	214.1	25.65	252.5	161.0	26.46	271.5	71.7	26.95	228.4	203.3	36.67	2														

Single Package

9. Capacity tables

25RT AK-Q300BC01 (SI)

Outdoor DB(°C)		27.5									35.0								
Indoor WB(°C)		16.1			19.4			22.8			16.1			19.4			22.8		
I/s	DB(°C)	TGC	SHC	PI	TGC	SHC	PI	TGC	SHC	PI									
3474	23.9	70.7	48.6	6.99	78.1	36.5	7.21	84.0	16.3	7.35	70.7	55.9	22.22	78.1	42.1	22.93	84.0	18.7	23.35
	26.7	73.7	55.6	7.02	79.5	46.0	7.24	84.0	30.0	7.37	73.7	64.1	22.29	79.5	53.0	23.00	84.0	34.6	23.42
	29.4	76.5	61.0	7.04	80.7	55.1	7.26	83.8	41.6	7.39	76.5	70.3	22.36	80.7	63.4	23.06	83.8	47.9	23.49
	32.2	79.0	64.5	7.06	81.5	61.5	7.28	83.3	50.9	7.41	79.0	74.2	22.43	81.5	70.8	23.13	83.3	58.6	23.56
3908	23.9	73.6	53.5	7.06	81.4	40.3	7.28	87.5	17.9	7.41	73.6	61.6	22.42	81.4	46.4	23.13	87.5	20.6	23.56
	26.7	76.8	61.3	7.08	82.8	50.7	7.30	87.5	33.1	7.44	76.8	70.6	22.49	82.8	58.4	23.20	87.5	38.1	23.63
	29.4	79.7	67.2	7.10	84.0	60.7	7.32	87.3	45.9	7.46	79.7	77.4	22.56	84.0	69.9	23.27	87.3	52.8	23.70
	32.2	82.3	71.1	7.12	84.9	67.7	7.34	86.8	56.1	7.48	82.3	81.8	22.62	84.9	78.0	23.34	86.8	64.6	23.77
4342	23.9	75.8	58.3	7.13	83.8	43.8	7.36	90.1	19.5	7.49	75.8	67.1	22.66	83.8	50.5	23.38	90.1	22.5	23.81
	26.7	79.1	66.7	7.15	85.3	55.2	7.38	90.2	36.0	7.52	79.1	76.9	22.73	85.3	63.6	23.45	90.2	41.5	23.88
	29.4	82.1	73.2	7.18	86.6	66.1	7.40	89.9	49.9	7.54	82.1	82.1	22.80	86.6	76.1	23.52	89.9	57.5	23.95
	32.2	84.8	77.3	7.20	87.5	73.7	7.42	89.4	61.1	7.56	84.8	84.8	22.87	87.5	84.9	23.59	89.4	70.3	24.02
4776	23.9	77.3	62.4	7.17	85.4	46.9	7.40	91.8	20.9	7.53	77.3	71.8	22.79	85.4	54.0	23.51	91.8	24.0	23.94
	26.7	80.6	71.4	7.19	87.0	59.1	7.42	91.9	38.6	7.56	80.6	80.6	22.86	87.0	68.0	23.58	91.9	44.4	24.01
	29.4	83.7	78.3	7.21	88.2	70.7	7.44	91.6	53.4	7.58	83.7	83.7	22.92	88.2	81.4	23.65	91.6	61.5	24.09
	32.2	86.4	82.8	7.24	89.2	78.9	7.46	91.1	65.4	7.60	86.4	86.4	22.99	89.2	89.2	23.72	91.1	75.3	24.16
5210	23.9	78.0	66.0	7.21	86.2	49.7	7.44	92.7	22.1	7.58	78.0	76.0	22.91	86.2	57.2	23.64	92.7	25.4	24.07
	26.7	81.3	75.6	7.23	87.8	62.6	7.46	92.7	40.8	7.60	81.3	81.3	22.98	87.8	72.1	23.71	92.7	47.0	24.15
	29.4	84.4	83.0	7.25	89.0	74.9	7.48	92.5	56.6	7.62	84.4	84.4	23.05	89.0	86.2	23.78	92.5	65.2	24.22
	32.2	87.2	87.2	7.28	90.0	83.6	7.51	91.9	69.2	7.64	87.2	87.2	23.12	90.0	90.0	23.85	91.9	79.7	24.29

Outdoor DB(°C)		40.0						46.0						48.0														
Indoor WB(°C)		16.1			19.4			22.8			16.1			19.4			22.8			16.1			19.4					
I/s	DB(°C)	TGC	SHC	PI	TGC	SHC	PI	TGC	SHC	PI	TGC	SHC	PI	TGC	SHC	PI	TGC	SHC	PI	TGC	SHC	PI	TGC	SHC	PI			
3474	23.9	70.7	51.3	27.48	78.1	38.6	28.34	84.0	17.2	28.87	66.7	49.1	32.76	73.7	36.9	33.80	79.2	16.4	34.42	63.4	46.8	33.36	70.1	35.2	34.41	75.4	15.7	35.05
	26.7	73.7	58.8	27.56	79.5	48.7	28.43	84.0	31.7	28.95	69.5	56.2	32.86	75.0	46.5	33.90	79.3	30.3	34.53	66.2	53.6	33.46	71.4	44.3	34.52	75.4	28.9	35.16
	29.4	76.5	64.5	27.64	80.7	58.2	28.51	83.8	44.0	29.04	72.2	61.6	32.96	76.1	55.7	34.00	79.0	42.1	34.63	68.7	58.8	33.56	72.4	53.1	34.62	75.2	40.1	35.26
	32.2	79.0	68.1	27.72	81.5	65.0	28.60	83.3	53.8	29.13	74.5	65.1	33.06	76.9	62.1	34.10	78.6	51.5	34.73	70.9	62.1	33.66	73.2	59.2	34.72	74.7	49.1	35.37
3908	23.9	73.6	56.6	27.72	81.4	42.6	28.59	87.5	18.9	29.12	69.4	54.1	33.06	76.8	40.7	34.10	82.5	18.1	34.73	66.1	51.6	33.66	73.0	38.8	34.72	78.5	17.3	35.36
	26.7	76.8	64.8	27.80	82.8	53.6	28.68	87.5	35.0	29.21	72.4	62.0	33.15	78.2	51.3	34.20	82.6	33.4	34.83	68.9	59.1	33.76	74.4	48.9	34.83	78.6	31.9	35.47
	29.4	79.7	71.1	27.89	84.0	64.2	28.77	87.3	48.5	29.30	75.2	68.0	33.25	79.3	61.4	34.30	82.3	46.4	34.94	71.5	64.8	33.86	75.4	58.5	34.93	78.3	44.2	35.57
	32.2	82.3	75.1	27.97	84.9	71.6	28.85	86.8	59.3	29.39	77.7	71.8	33.35	80.1	68.4	34.41	81.8	56.7	35.04	73.9	68.5	33.96	76.2	65.3	35.03	77.9	54.1	35.68
4342	23.9	75.8	61.6	28.02	83.8	46.3	28.90	90.1	20.6	29.43	71.5	58.9	33.41	79.1	44.3	34.46	85.0	19.7	35.10	68.1	56.1	34.02	75.2	42.2	35.09	80.9	18.8	35.74
	26.7	79.1	70.6	28.10	85.3	58.4	28.99	90.2	38.1	29.52	74.6	67.4	33.51	80.5	55.8	34.57	85.1	36.4	35.21	71.0	64.3	34.12	76.6	53.2	35.20	80.9	34.7	35.85
	29.4	82.1	77.4	28.19	86.6	69.9	29.07	89.9	52.8	29.61	77.4	74.0	33.61	81.7	66.8	34.67	84.8	50.4	35.31	73.7	70.5	34.22	77.7	63.7	35.30	80.7	48.1	35.96
	32.2	84.8	81.8	28.27	87.5	77.9	29.16	89.4	64.6	29.70	80.0	78.1	33.71	82.5	74.5	34.77	84.3	61.7	35.42	76.1	74.5	34.32	78.5	71.0	35.41	80.2	58.9	36.06
4776	23.9	77.3	65.9	28.17	85.4	49.6	29.06	91.8	22.1	29.60	72.9	63.0	33.59	80.6	47.4	34.65	86.6	21.1	35.29	69.4	60.1	34.21	76.7	45.2	35.28	82.4	20.1	35.94
	26.7	80.6	75.5	28.26	87.0	62.5	29.15	91.9	40.8	29.69	76.0	72.2	33.69	82.0	59.7	34.76	86.7	39.0	35.40	72.4	68.8	34.31	78.1	56.9	35.39	82.5	37.1	36.05
	29.4	83.7	82.8	28.34	88.2	74.8	29.23	91.6	56.5	29.78	78.9	78.9	33.80	83.2	71.5	34.86	86.4	54.0	35.51	75.1	75.1	34.41	79.2	68.1	35.50	82.2	51.5	36.15
	32.2	86.4	86.4	28.43	89.2	83.4	29.32	91.1	69.1	29.86	81.5	81.5	33.90	84.1	79.7	34.97	85.9	66.1	35.61	77.6	77.6	34.51	80.0	76.0	35.60	81.7	63.0	36.26
5210	23.9	78.0	69.8	28.33	86.2	52.5	29.22	92.7	23.4	29.76	73.6	66.7	33.78	81.3	50.2	34.84	87.4	22.3	35.49	70.0	63.6	34.40	77.4	47.8	35.48	83.2	21.3	36.14
	26.7	81.3	80.0	28.41	87.8	66.2	29.31	92.7	43.2	29.85	76.7	76.4	33.88	82.8	63.2	34.95	87.5	41.3	35.60	73.0	72.9	34.50	78.8	60.3	35.59	83.2	39.3	36.25
	29.4	84.4	84.4	28.50	89.0	79.2	29.40	92.5	59.8	29.94</td																		

Single Package

9. Capacity tables

25RT AK-Q300BC01 (English)

Outdoor DB(°F)		81.5									95.0								
Indoor WB(°F)		61.0			67.0			73.0			61.0			67.0			73.0		
CFM	DB(°F)	TGC	SHC	PI	TGC	SHC	PI	TGC	SHC	PI									
7360	75	241.1	165.7	6.99	266.6	124.6	7.21	286.6	55.5	7.35	241.1	190.8	22.22	266.6	143.5	22.93	286.6	63.9	23.35
	80	251.5	189.8	7.02	271.3	157.0	7.24	286.7	102.5	7.37	251.5	218.6	22.29	271.3	180.8	23.00	286.7	118.0	23.42
	85	261.0	208.2	7.04	275.3	188.0	7.26	285.9	142.0	7.39	261.0	239.7	22.36	275.3	216.4	23.06	285.9	163.5	23.49
	90	269.6	219.9	7.06	278.2	209.7	7.28	284.2	173.8	7.41	269.6	253.3	22.43	278.2	241.5	23.13	284.2	200.1	23.56
8280	75	251.2	182.7	7.06	277.7	137.4	7.28	298.5	61.1	7.41	251.2	210.3	22.42	277.7	158.2	23.13	298.5	70.4	23.56
	80	262.0	209.2	7.08	282.7	173.1	7.30	298.7	112.9	7.44	262.0	240.9	22.49	282.7	199.3	23.20	298.7	130.1	23.63
	85	271.9	229.5	7.10	286.8	207.2	7.32	297.8	156.5	7.46	271.9	264.2	22.56	286.8	238.6	23.27	297.8	180.2	23.70
	90	280.9	242.4	7.12	289.8	231.1	7.34	296.0	191.5	7.48	280.9	279.2	22.62	289.8	266.1	23.34	296.0	220.5	23.77
9200	75	258.7	198.8	7.13	286.1	149.5	7.36	307.5	66.5	7.49	258.7	228.9	22.66	286.1	172.2	23.38	307.5	76.6	23.81
	80	269.9	227.7	7.15	291.2	188.4	7.38	307.7	122.9	7.52	269.9	262.2	22.73	291.2	216.9	23.45	307.7	141.5	23.88
	85	280.1	249.7	7.18	295.4	225.5	7.40	306.8	170.4	7.54	280.1	280.1	22.80	295.4	259.7	23.52	306.8	196.2	23.95
	90	289.3	263.9	7.20	298.6	251.6	7.42	305.0	208.5	7.56	289.3	289.3	22.87	298.6	289.7	23.59	305.0	240.0	24.02
10120	75	263.6	212.8	7.17	291.5	160.0	7.40	313.4	71.2	7.53	263.6	245.0	22.79	291.5	184.3	23.51	313.4	82.0	23.94
	80	275.1	243.7	7.19	296.7	201.6	7.42	313.5	131.6	7.56	275.1	275.1	22.86	296.7	232.2	23.58	313.5	151.5	24.01
	85	285.4	267.3	7.21	301.0	241.3	7.44	312.6	182.3	7.58	285.4	285.4	22.92	301.0	277.9	23.65	312.6	209.9	24.09
	90	294.8	282.4	7.24	304.2	269.2	7.46	310.7	223.1	7.60	294.8	294.8	22.99	304.2	304.2	23.72	310.7	256.9	24.16
11040	75	266.0	225.3	7.21	294.1	169.5	7.44	316.2	75.4	7.58	266.0	259.5	22.91	294.1	195.1	23.64	316.2	86.8	24.07
	80	277.6	258.1	7.23	299.4	213.5	7.46	316.4	139.3	7.60	277.6	277.6	22.98	299.4	245.9	23.71	316.4	160.4	24.15
	85	288.0	283.1	7.25	303.7	255.6	7.48	315.5	193.1	7.62	288.0	288.0	23.05	303.7	294.3	23.78	315.5	222.3	24.22
	90	297.5	297.5	7.28	307.0	285.1	7.51	313.6	236.3	7.64	297.5	297.5	23.12	307.0	307.0	23.85	313.6	272.1	24.29

Outdoor DB(°F)		104.0									114.8									118.4								
Indoor WB(°F)		61.0			67.0			73.0			61.0			67.0			73.0			61.0			67.0			73.0		
CFM	DB(°F)	TGC	SHC	PI	TGC	SHC	PI	TGC	SHC	PI	TGC	SHC	PI															
7360	75	241.1	175.2	27.48	266.6	131.8	28.34	286.6	58.6	28.87	227.4	167.4	32.76	251.4	125.9	33.80	270.3	56.0	34.42	216.4	159.7	33.36	239.2	120.1	34.41	257.2	53.4	35.05
	80	251.5	200.7	27.56	271.3	166.0	28.43	286.7	108.3	28.95	237.3	191.8	32.86	256.0	158.7	33.90	270.5	103.5	34.53	225.8	182.9	33.46	243.6	151.3	34.52	257.3	98.7	35.16
	85	261.0	220.1	27.64	275.3	198.7	28.51	285.9	150.1	29.04	246.2	210.3	32.96	259.7	189.9	34.00	269.7	143.5	34.63	234.3	200.6	33.56	247.1	181.1	34.62	256.6	136.8	35.26
	90	269.6	232.5	27.72	278.2	221.7	28.60	284.2	183.7	29.13	254.3	222.2	33.06	262.5	211.9	34.10	268.1	175.6	34.73	242.0	211.9	33.66	249.7	202.0	34.72	255.1	167.4	35.37
8280	75	251.2	193.1	27.72	277.7	145.2	28.59	298.5	64.6	29.12	236.9	184.6	33.06	262.0	138.8	34.10	281.6	61.8	34.73	225.4	176.0	33.66	249.2	132.4	34.72	268.0	58.9	35.36
	80	262.0	221.2	27.80	282.7	183.0	28.68	298.7	119.4	29.21	247.2	211.4	33.15	266.7	174.9	34.20	281.8	114.1	34.83	235.2	201.6	33.76	253.7	166.8	34.83	268.1	108.8	35.47
	85	271.9	242.6	27.89	286.8	219.0	28.77	297.8	165.5	29.30	256.5	231.9	33.25	270.5	209.3	34.30	281.0	158.2	34.94	244.1	221.1	33.86	257.4	199.6	34.93	267.3	150.8	35.57
	90	280.9	256.3	27.97	289.8	244.4	28.85	296.0	202.5	29.39	265.0	245.0	33.35	273.4	233.5	34.41	279.3	193.5	35.04	252.1	233.6	33.96	260.1	222.7	35.03	265.7	184.5	35.68
9200	75	258.7	210.2	28.02	286.1	158.1	28.90	307.5	70.3	29.43	244.1	200.9	33.41	269.8	151.1	34.46	290.1	67.2	35.10	232.2	191.6	34.02	256.8	144.1	35.09	276.0	64.1	35.74
	80	269.9	240.8	28.10	291.2	199.2	28.99	307.7	130.0	29.52	254.6	230.1	33.51	274.7	190.4	34.57	290.2	124.2	35.21	242.3	219.4	34.12	261.4	181.5	35.20	276.2	118.4	35.85
	85	280.1	264.0	28.19	295.4	238.4	29.07	306.8	180.1	29.61	264.3	252.3	33.61	278.7	227.8	34.67	289.4	172.1	35.31	251.4	240.6	34.22	265.1	217.3	35.30	275.4	164.1	35.96
	90	289.3	279.0	28.27	298.6	266.0	29.16	305.0	220.4	29.70	272.9	266.6	33.71	281.7	254.2	34.77	287.7	210.6	35.42	259.7	254.2	34.32	268.0	242.4	35.41	273.7	200.8	36.06
10120	75	263.6	224.9	28.17	291.5	169.2	29.06	313.4	75.3	29.60	248.7	215.0	33.59	275.0	161.7	34.65	295.6	72.0	35.29	236.6	205.0	34.21	261.6	154.2	35.28	281.3	68.6	35.94
	80	275.1	257.7	28.26	296.7	213.2	29.15	313.5	139.1	29.69	259.5	246.3	33.69	279.9	203.7	34.76	295.7	132.9	35.40	246.9	234.8	34.31	266.3	194.3	35.39	281.4	126.8	36.05
	85	285.4	282.6	28.34	301.0	255.1	29.23	312.6	192.8	29.78	269.3	269.3	33.80	283.9	243.8	34.86	294.9	184.2	35.51	256.2	234.41	35.50	270.2	232.5	35.50	280.6	175.7	36.15
	90	294.8	294.8	28.43	304.2	284.6	29.32	310.7	235.9	29.86	278.1	231.9	33.90	287.0	272.0	34.97	293.1	225.4	35.61	264.6	264.6	34.51	273.1	259.4	35.60	278.9	215.0	36.26
11040	75	266.0	238.2	28.33	294.1	179.1	29.22	316.2																				

Single Package

10. Fan Performance data

Evaporator Fan Performance Data AK-Q120BC01 (SI)

I/s	External Static Pressure(mmAq.)																			
	2.54		5.08		7.62		10.16		12.70		15.24		17.78		20.32		22.86		25.40	
	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW		
1,510	-	-	-	-	577	0.53	609	0.57	642	0.62	674	0.67	705	0.72	737	0.78	768	0.83	798	0.90
1,699	-	-	576	0.57	607	0.62	639	0.68	670	0.73	700	0.79	730	0.85	760	0.91	790	0.98	820	1.04
1,888	580	0.65	610	0.70	640	0.76	670	0.82	700	0.88	729	0.95	758	1.01	787	1.08	815	1.16	843	1.23
2,077	618	0.81	647	0.87	676	0.94	704	1.00	732	1.07	760	1.14	788	1.22	815	1.29	842	1.37	869	1.46
2,265	658	1.01	686	1.08	713	1.15	740	1.22	767	1.30	794	1.38	820	1.46	846	1.55	872	1.63	897	1.72

I/s	External Static Pressure(mmAq.)																			
	27.94		30.48		33.02		35.56		38.10		40.64		43.18		45.72		48.26		50.80	
	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW		
1,510	829	0.96	859	1.03	889	1.09	918	1.17	948	1.24	976	1.32	1005	1.40	1033	1.48	1061	1.57	1089	1.65
1,699	849	1.12	877	1.19	906	1.27	934	1.34	962	1.43	990	1.51	1017	1.60	1044	1.69	1071	1.78	1097	1.88
1,888	871	1.31	898	1.39	925	1.47	952	1.56	979	1.65	1005	1.74	1031	1.84	1057	1.93	1082	2.03	-	-
2,077	895	1.54	922	1.63	947	1.72	973	1.82	998	1.91	1023	2.01	1048	2.11	1072	2.22	1096	2.32	-	-
2,265	922	1.82	947	1.91	971	2.01	996	2.11	1020	2.21	1043	2.32	-	-	-	-	-	-	-	-

• Test condition :

3 HP Standard Motor & Standard Drive

① Voltage : 220V

3 HP Standard Motor & High static Drive

② Operating Mode : Fan operation mode with clean filter, dry coil without electric heater.

Evaporator Fan Performance Data AK-Q120BC01 (English)

CFM	External Static Pressure(in.Aq.)																			
	0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8		0.9		1.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP		
3,200	-	-	-	-	577	0.70	609	0.76	642	0.83	674	0.89	705	0.97	737	1.04	768	1.12	798	1.20
3,600	-	-	576	0.77	607	0.84	639	0.91	670	0.98	700	1.06	730	1.14	760	1.22	790	1.31	820	1.40
4,000	580	0.87	610	0.94	640	1.02	670	1.10	700	1.18	729	1.27	758	1.36	787	1.45	815	1.55	843	1.65
4,400	618	1.09	647	1.17	676	1.25	704	1.34	732	1.44	760	1.53	788	1.63	815	1.74	842	1.84	869	1.95
4,800	658	1.35	686	1.45	713	1.54	740	1.64	767	1.74	794	1.85	820	1.96	846	2.07	872	2.19	897	2.31

CFM	External Static Pressure(in.Aq.)																			
	1.1		1.2		1.3		1.4		1.5		1.6		1.7		1.8		1.9		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP		
3,200	829	1.29	859	1.38	889	1.47	918	1.56	948	1.66	976	1.77	1005	1.88	1033	1.99	1061	2.10	1089	2.22
3,600	849	1.50	877	1.59	906	1.70	934	1.80	962	1.91	990	2.03	1017	2.14	1044	2.26	1071	2.39	1097	2.52
4,000	871	1.76	898	1.86	925	1.98	952	2.09	979	2.21	1005	2.34	1031	2.46	1057	2.59	1082	2.73	-	-
4,400	895	2.07	922	2.19	947	2.31	973	2.44	998	2.56	1023	2.70	1048	2.83	1072	2.97	1096	3.12	-	-
4,800	922	2.43	947	2.56	971	2.69	996	2.83	1020	2.97	1043	3.11	-	-	-	-	-	-	-	-

• Test condition :

3 HP Standard Motor & Standard Drive

① Voltage : 220V

3 HP Standard Motor & High static Drive

② Operating Mode : Fan operation mode with clean filter, dry coil without electric heater.

Fan speed Data AK-Q120BC01

Fan speed Data (RPM)										
Fixed Pulley			Variable Pulley Turn open							
Spec.	O.D(mm)	P.D(mm)	0 Turn	1 Turn	2 Turn	3 Turn	4 Turn	5 Turn	6 Turn	NO.
Standard	230	219	775	738	700	663	625	587	550	B-57
High Static	164	155	1,096	1,043	989	936	883	830	777	B-53

• Factory set at 3 turns open.

• Oversized Motor & Drive are field supplied Accessory.

Single Package

10. Fan Performance data

Evaporator Fan Performance Data AK-Q150BC01 (SI)

I/s	External Static Pressure(mmAq.)																			
	2.54		5.08		7.62		10.16		12.70		15.24		17.78		20.32		22.86		25.40	
	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW
1,888	-	-	610	0.70	640	0.77	670	0.82	700	0.88	729	0.95	758	1.01	787	1.08	815	1.16	843	1.23
2,124	627	0.86	656	0.92	685	0.99	713	1.05	741	1.12	768	1.20	796	1.27	823	1.35	849	1.44	876	1.52
2,360	679	1.12	706	1.20	733	1.27	759	1.35	786	1.43	811	1.51	837	1.60	862	1.68	887	1.78	912	1.87
2,596	734	1.45	759	1.53	784	1.62	809	1.70	834	1.79	858	1.88	882	1.98	906	2.08	929	2.18	952	2.28
2,832	792	1.84	816	1.93	840	2.02	863	2.12	886	2.22	908	2.32	931	2.42	953	2.53	974	2.64	996	2.75

I/s	External Static Pressure(mmAq.)																			
	27.94		30.48		33.02		35.56		38.10		40.64		43.18		45.72		48.26		50.80	
	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW
1,888	871	1.31	898	1.39	925	1.47	952	1.56	979	1.65	1005	1.74	1031	1.84	1057	1.93	1082	2.03	1107	2.14
2,124	902	1.61	928	1.70	953	1.79	978	1.89	1003	1.98	1028	2.08	1052	2.19	1076	2.29	1100	2.40	1123	2.52
2,360	937	1.97	961	2.06	984	2.17	1008	2.27	1031	2.38	1054	2.49	1077	2.60	1099	2.72	1121	2.83	1143	2.96
2,596	975	2.38	997	2.49	1019	2.60	1041	2.72	1063	2.83	1084	2.95	1105	3.07	1126	3.20	1146	3.33	1166	3.45
2,832	1017	2.86	1037	2.98	1058	3.10	1078	3.22	1098	3.35	1118	3.48	1137	3.61	1156	3.74	1174	3.88	1193	4.02

• Test condition :

- ① Voltage : 220V
- ② Operating Mode : Fan operation mode with clean filter, dry coil without electric heater.

 3 HP Standard Motor & Standard Drive

 3 HP Standard Motor & High static Drive

 5 HP Oversized Motor & Drive

Evaporator Fan Performance Data AK-Q150BC01 (English)

CFM	External Static Pressure(in.Aq.)																			
	0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8		0.9		1.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4,000	-	-	610	0.94	640	1.03	670	1.10	700	1.18	729	1.27	758	1.36	787	1.45	815	1.55	843	1.65
4,500	627	1.15	656	1.23	685	1.32	713	1.41	741	1.51	768	1.61	796	1.71	823	1.82	849	1.93	876	2.04
5,000	679	1.51	706	1.60	733	1.70	759	1.81	786	1.92	811	2.03	837	2.14	862	2.26	887	2.38	912	2.51
5,500	734	1.95	759	2.06	784	2.17	809	2.28	834	2.40	858	2.53	882	2.65	906	2.78	929	2.92	952	3.06
6,000	792	2.47	816	2.59	840	2.71	863	2.84	886	2.97	908	3.11	931	3.25	953	3.39	974	3.54	996	3.69

CFM	External Static Pressure(in.Aq.)																			
	1.1		1.2		1.3		1.4		1.5		1.6		1.7		1.8		1.9		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4,000	871	1.76	898	1.86	925	1.98	952	2.09	979	2.21	1005	2.34	1031	2.46	1057	2.59	1082	2.73	1107	2.86
4,500	902	2.16	928	2.28	953	2.40	978	2.53	1003	2.66	1028	2.80	1052	2.93	1076	3.08	1100	3.22	1123	3.37
5,000	937	2.64	961	2.77	984	2.91	1008	3.05	1031	3.19	1054	3.34	1077	3.49	1099	3.64	1121	3.80	1143	3.96
5,500	975	3.20	997	3.34	1019	3.49	1041	3.64	1063	3.80	1084	3.96	1105	4.12	1126	4.29	1146	4.46	1166	4.63
6,000	1017	3.84	1037	4.00	1058	4.16	1078	4.32	1098	4.49	1118	4.66	1137	4.84	1156	5.02	1174	5.20	1193	5.38

• Test condition :

- ① Voltage : 220V
- ② Operating Mode : Fan operation mode with clean filter, dry coil without electric heater.

 3 HP Standard Motor & Standard Drive

 3 HP Standard Motor & High static Drive

 5 HP Oversized Motor & Drive

Fan speed Data AK-Q150BC01

Fan speed Data (RPM)										
Fixed Pulley			Variable Pulley Turn open							
Spec.	O.D(mm)	P.D(mm)	0 Turn	1 Turn	2 Turn	3 Turn	4 Turn	5 Turn	6 Turn	NO.
Standard	210	199	853	812	771	729	688	646	605	B-56
High Static	149	140	1,213	1,154	1,095	1,037	978	919	860	B-52
Oversized Motor & Drive	149	140	1,213	1,154	1,095	1,037	978	919	860	B-52

• Factory set at 3 turns open.

• Oversized Motor & Drive are field supplied Accessory.

Single Package

10. Fan Performance data

Evaporator Fan Performance Data AK-Q240BC01 (SI)

I/s	External Static Pressure(mmAq.)																			
	2.54		5.08		7.62		10.16		12.70		15.24		17.78		20.32		22.86		25.40	
	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW
3,021	-	-	-	-	526	2.30	539	2.45	553	2.61	569	2.77	586	2.92	604	3.08	624	3.24	645	3.39
3,398	517	2.17	525	2.33	536	2.49	548	2.64	562	2.80	578	2.96	595	3.11	614	3.27	634	3.43	654	3.58
3,776	529	2.40	537	2.56	547	2.71	560	2.87	574	3.03	590	3.18	607	3.34	626	3.50	645	3.65	666	3.81
4,154	543	2.66	551	2.82	562	2.97	575	3.13	589	3.29	605	3.44	622	3.60	640	3.76	660	3.91	681	4.07
4,531	560	2.96	569	3.12	579	3.27	592	3.43	606	3.59	622	3.74	639	3.90	658	4.06	677	4.21	698	4.37

I/s	External Static Pressure(mmAq.)																			
	27.94		30.48		33.02		35.56		38.10		40.64		43.18		45.72		48.26		50.80	
	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW
3,021	667	3.55	690	3.71	713	3.86	738	4.02	764	4.17	791	4.33	818	4.49	846	4.64	875	4.80	905	4.96
3,398	676	3.74	699	3.90	723	4.05	748	4.21	773	4.36	800	4.52	827	4.68	856	4.83	885	4.99	914	5.15
3,776	688	3.97	711	4.12	735	4.28	760	4.43	785	4.59	812	4.75	839	4.90	868	5.06	897	5.22	926	5.37
4,154	703	4.23	726	4.38	749	4.54	774	4.69	800	4.85	826	5.01	854	5.16	882	5.32	911	5.48	941	5.63
4,531	720	4.53	743	4.68	767	4.84	792	4.99	817	5.15	844	5.30	871	5.46	899	5.62	-	-	-	-

• Test condition :

 5HP Standard Motor & Standard Drive

① Voltage : 220V

 7.5HP Oversized Motor & Drive

② Operating Mode : Fan operation mode with clean filter, dry coil without electric heater.

 7.5HP Oversized Motor & High Static Drive

Evaporator Fan Performance Data AK-Q240BC01 (English)

CFM	External Static Pressure(in.Aq.)																			
	0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8		0.9		1.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6,400	507	2.66	515	2.87	526	3.08	539	3.29	553	3.50	569	3.71	586	3.92	604	4.13	624	4.34	645	4.55
7,200	517	2.92	525	3.13	536	3.34	548	3.55	562	3.76	578	3.97	595	4.18	614	4.39	634	4.60	654	4.81
8,000	529	3.22	537	3.43	547	3.64	560	3.85	574	4.06	590	4.27	607	4.48	626	4.69	645	4.90	666	5.11
8,800	543	3.57	551	3.78	562	3.99	575	4.20	589	4.41	605	4.62	622	4.83	640	5.04	660	5.25	681	5.46
9,600	560	3.97	569	4.18	579	4.39	592	4.60	606	4.81	622	5.02	639	5.23	658	5.44	677	5.65	698	5.86

CFM	External Static Pressure(in.Aq.)																			
	1.1		1.2		1.3		1.4		1.5		1.6		1.7		1.8		1.9		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6,400	667	4.76	690	4.97	713	5.18	738	5.39	764	5.60	791	5.81	818	6.02	846	6.23	875	6.44	905	6.65
7,200	676	5.02	699	5.22	723	5.43	748	5.64	773	5.85	800	6.06	827	6.27	856	6.48	885	6.69	914	6.90
8,000	688	5.32	711	5.53	735	5.73	760	5.94	785	6.15	812	6.36	839	6.57	868	6.78	897	6.99	926	7.20
8,800	703	5.67	726	5.88	749	6.08	774	6.29	800	6.50	826	6.71	854	6.92	882	7.13	911	7.34	941	7.55
9,600	720	6.07	743	6.28	767	6.48	792	6.69	817	6.90	844	7.11	871	7.32	899	7.53	-	-	-	-

• Test condition :

 5HP Standard Motor & Standard Drive

① Voltage : 220V

 7.5HP Oversized Motor & Drive

② Operating Mode : Fan operation mode with clean filter, dry coil without electric heater.

 7.5HP Oversized Motor & High Static Drive

Fan speed Data AK-Q240BC01

Fan speed Data (RPM)											
Fixed Pulley			Variable Pulley Turn open								V-Belt
Spec.	O.D(mm)	P.D(mm)	0 Turn	1 Turn	2 Turn	3 Turn	4 Turn	5 Turn	6 Turn	NO.	
Standard	508	497	736	701	666	631	596	561	526	B-85	
Oversized Motor & Drive	432	421	869	827	786	745	703	662	621	B-78	
Oversized Motor & High	381	370	988	941	894	847	800	753	706	B-74	

• Factory set at 3 turns open.

• Oversized Motor & Drive are field supplied Accessory.

Single Package

10. Fan Performance data

Evaporator Fan Performance Data AK-Q300BC01 (SI)

l/s	External Static Pressure(mmAq.)																			
	2.54		5.08		7.62		10.16		12.70		15.24		17.78		20.32		22.86		25.40	
	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW
3,776	529	2.40	537	2.55	547	2.71	560	2.87	574	3.02	590	3.18	607	3.34	626	3.49	645	3.65	666	3.81
4,248	547	2.73	555	2.88	566	3.04	579	3.20	593	3.35	609	3.51	626	3.67	644	3.82	664	3.98	685	4.14
4,342	556	2.92	565	3.00	575	3.23	588	3.39	602	3.54	618	3.70	635	3.86	653	4.01	673	4.17	694	4.33
4,720	570	3.12	579	3.28	589	3.43	602	3.59	616	3.75	632	3.90	649	4.06	668	4.22	687	4.37	708	4.53
5,192	599	3.58	607	3.73	618	3.89	630	4.05	644	4.20	660	4.36	677	4.51	696	4.67	716	4.83	736	4.98
5,664	633	4.10	641	4.25	652	4.41	664	4.57	678	4.72	694	4.88	711	5.04	730	5.19	750	5.35	770	5.51

l/s	External Static Pressure(mmAq.)																			
	27.94		30.48		33.02		35.56		38.10		40.64		43.18		45.72		48.26		50.80	
	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW	RPM	BkW
3,776	688	3.96	711	4.12	735	4.28	760	4.43	785	4.59	812	4.75	839	4.90	868	5.06	897	5.22	926	5.37
4,248	707	4.29	730	4.45	753	4.61	778	4.76	804	4.92	830	5.08	858	5.23	886	5.39	915	5.55	945	5.70
4,342	716	4.48	739	4.64	762	4.80	787	4.95	813	5.11	839	5.27	867	5.42	-	-	-	-	-	-
4,720	730	4.69	753	4.84	777	5.00	801	5.16	827	5.31	854	5.47	881	5.63	-	-	-	-	-	-
5,192	758	5.14	781	5.30	805	5.45	830	5.61	-	-	-	-	-	-	-	-	-	-	-	-
5,664	792	5.66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

- Test condition :
 - ① Voltage : 220V, 60Hz
 - ② Operating Mode : Fan operation mode with clean filter, dry coil without electric heater.

 7.5HP Standard Motor & Low static Drive

 7.5HP Standard Motor & Standard Drive

 7.5HP Standard Motor & High static Drive

Evaporator Fan Performance Data AK-Q300BC01 (English)

CFM	External Static Pressure(in.Aq.)																			
	0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8		0.9		1.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
8,000	529	3.21	537	3.42	547	3.63	560	3.84	574	4.05	590	4.26	607	4.47	626	4.68	645	4.89	666	5.10
9,000	547	3.66	555	3.87	566	4.08	579	4.29	593	4.50	609	4.71	626	4.92	644	5.13	664	5.34	685	5.55
9,200	556	3.91	565	4.12	575	4.33	588	4.54	602	4.75	618	4.96	635	5.17	653	5.38	673	5.59	694	5.80
10,000	570	4.18	579	4.39	589	4.60	602	4.81	616	5.02	632	5.23	649	5.44	668	5.65	687	5.86	708	6.07
11,000	599	4.79	607	5.00	618	5.21	630	5.42	644	5.63	660	5.84	677	6.05	696	6.26	716	6.47	736	6.68
12,000	633	5.49	641	5.70	652	5.91	664	6.12	678	6.33	694	6.54	711	6.75	730	6.96	750	7.17	770	7.38

CFM	External Static Pressure(in.Aq.)																			
	1.1		1.2		1.3		1.4		1.5		1.6		1.7		1.8		1.9		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
8,000	688	5.31	711	5.52	735	5.73	760	5.94	785	6.15	812	6.36	839	6.57	868	6.78	897	6.99	926	7.20
9,000	707	5.76	730	5.97	753	6.18	778	6.39	804	6.60	830	6.81	858	7.02	886	7.23	915	7.44	945	7.65
9,200	716	6.01	739	6.22	762	6.43	787	6.64	813	6.85	839	7.06	867	7.27	-	-	-	-	-	-
10,000	730	6.28	753	6.49	777	6.70	801	6.91	827	7.12	854	7.33	881	7.54	-	-	-	-	-	-
11,000	758	6.89	781	7.10	805	7.31	830	7.52	-	-	-	-	-	-	-	-	-	-	-	-
12,000	792	7.59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

- Test condition :
 - ① Voltage : 220V, 60Hz
 - ② Operating Mode : Fan operation mode with clean filter, dry coil without electric heater.

 7.5HP Standard Motor & Low static Drive

 7.5HP Standard Motor & Standard Drive

 7.5HP Standard Motor & High static Drive

Fan speed Data AK-Q300BC01

Fan speed Data (RPM)										
Fixed Pulley			Variable Pulley Turn open							
Spec.	O.D(mm)	P.D(mm)	0 Turn	1 Turn	2 Turn	3 Turn	4 Turn	5 Turn	6 Turn	NO.
Low Static	559	548	667	636	604	572	540	509	477	B-88
Standard	457	446	820	781	742	703	664	625	586	B-81
High Static	368	357	1024	976	927	878	829	781	732	B-73

• Factory set at 3 turns open.

• Oversized Motor & Drive are field supplied Accessory.

Single Package

11. Electric Characteristics

Accessory Static Pressure Drops

Model	Air Flow		Standard filter		Panel filter (2inch)		Electric heater					
	CFM	I/s	in.Aq.	mmAq.	in.Aq.	mmAq.	in.Aq.	mmAq.	in.Aq.	mmAq.	in.Aq.	mmAq.
AK-Q120BC01	4,000	1,888	0.016	0.41	0.052	1.32	0.01	0.25	0.07	1.78	-	-
AK-Q150BC01	5,000	2,360	0.021	0.54	0.079	2.01	-	-	0.06	1.52	-	-
AK-Q240BC01	8,000	3,775	0.052	1.32	0.125	3.17	-	-	-	-	0.09	2.29
AK-Q300BC01	9,200	4,342	0.097	2.47	0.149	3.79	-	-	-	-	0.17	4.32

Electric Heating Capacity

Model	Total		No. of Stages	Stage 1		Stage 2	
	Input(kW)	Output(MBH)		Input(kW)	Output(MBH)	Input(kW)	Output(MBH)
AK-Q120BC01	9	30.72	1	9	30.72	-	-
AK-Q150BC01	18	61.43	1	18	61.43	-	-
AK-Q240BC01 AK-Q300BC01	36	122.86	2	18	61.43	18	61.43

Note:

1. The output ratings shown above is at 240V.
For other voltage, Output = Capacity Multiplier x Rated Output
2. Electric Heater Voltage range is 208-240V.

< Correction Coefficient >

Voltage	Capacity Multiplier
208	0.75
220	0.84
230	0.92
240	1.00
380	0.84
400	0.92
415	1.00

Air Temperature Rise Across Electric Heater(°F)

Model	Stage	9kW	18kW	36kW
AK-Q120BC01 (4,000CFM)	1	7.1	14.2	-
AK-Q150BC01 (5,000CFM)	1	-	11.4	-
AK-Q240BC01 (8,000CFM)	2	-	-	14.2
AK-Q300BC01 (10,000CFM)	2	-	-	11.4

$$\text{Temp. Rise across Electric Heater} = \frac{(\text{kW} \times 3413)}{(1.08 \times \text{CFM})}$$

If you want to take temp rise at different airflow use above equation.

Single Package

11. Electric Characteristics

Electrical Data Unit Wiring - Cooling

Model	Standard indoor fan motor			Oversized indoor fan motor		
	MCA	MOP	MFA	MCA	MOP	MFA
AK-Q120BC01	71.1	98.4	90	77	104.3	100
AK-Q150BC01	71.1	98.4	90	77	104.3	100
AK-Q240BC01	132.8	160.1	150	138.9	166.2	150
AK-Q300BC01	138.9	166.2	150	-	-	-

① MCA : Minimum Circuit Amperes

MCA = $(1.25 \times \text{Ampere of largest motor}) + \text{Load2} + \text{Load3} + \text{Load4}$.

② MOP : Maximum Over-current Protective Device

MOP = $(2.25 \times \text{Ampere of largest motor}) + \text{Load2} + \text{Load3} + \text{Load4}$.

③ MFA: Maximum Fuse Amperes(A)

MFA is used to select the circuit breaker and ground fault circuit interrupter (earth leakage circuit breaker)

Electrical Data Unit Wiring with Electric Heating

Model	Heater Model No.	Heater Capacity(kW)	Standard indoor fan motor			Oversized indoor fan motor		
			MCA	MOP	MFA	MCA	MOP	MFA
AK-Q120BC01	LKAEH09B	9	25.5	60	60	38.1	50	50
	LKAEH18B	18	42.6	60	60	61.5	70	70
AK-Q150BC01	LKAEH18B	18	42.6	60	60	61.5	70	70
AK-Q240BC01	LKAEH36BL	36	84.6	150	150	92.1	160	160
AK-Q300BC01	LKAEH36BL	36	92.1	160	160	-	-	-

① MCA : Minimum Circuit Amperes

MCA = $(1.25 \times \text{Ampere of largest motor}) + \text{Load2} + \text{Load3} + \text{Load4}$.

② MOP : Maximum Over-current Protective Device

MOP = $(2.25 \times \text{Ampere of largest motor}) + \text{Load2} + \text{Load3} + \text{Load4}$.

③ MFA: Maximum Fuse Amperes(A)

MFA is used to select the circuit breaker and ground fault circuit interrupter (earth leakage circuit breaker)

Single Package

11. Electric Characteristics

Electrical Characteristics Indoor Fan Motor

Model	Standard indoor fan motor					Oversized indoor fan motor				
	No.	Phase	HP	FLA	LRA	No.	Phase	HP	FLA	LRA
AK-Q120BC01	1	3	3	8.5	81	1	3	5	14.4	100
AK-Q150BC01	1	3	3	8.5	81	1	3	5	14.4	100
AK-Q240BC01	1	3	5	14.4	100	1	3	7.5	20.5	139
AK-Q300BC01	1	3	7.5	20.5	139	-	-	-	-	-

① FLA : Full Load Amperes (A)

② LRA : Locked Rotor Amperes (A)

Electrical Characteristics Compressor and Outdoor Fan Motor

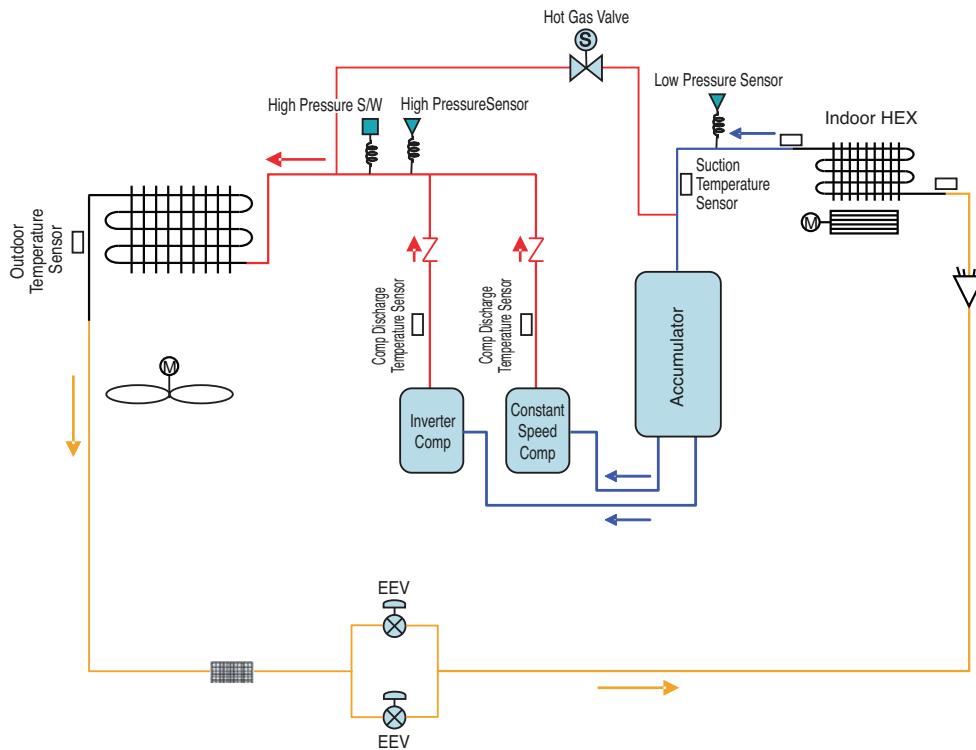
Model	Compressor (INV)				Compressor (Constant speed)					Outdoor Fan Motor			
	No.	Phase	HP	FLA	No.	Phase	HP	FLA	LRA	No.	Phase	HP	FLA
AK-Q120BC01	1	3	8	27.3	1	3	7	20.5	140	2	3	1.2	4
AK-Q150BC01	1	3	8	27.3	1	3	7	20.5	140	2	3	1.2	4
AK-Q240BC01	2	3	8	27.3	2	3	7	20.5	140	4	3	1.2	4
AK-Q300BC01	2	3	8	27.3	2	3	7	20.5	140	4	3	1.2	4

① FLA : Full Load Amperes (A)

② LRA : Locked Rotor Amperes (A)

12. Piping diagrams

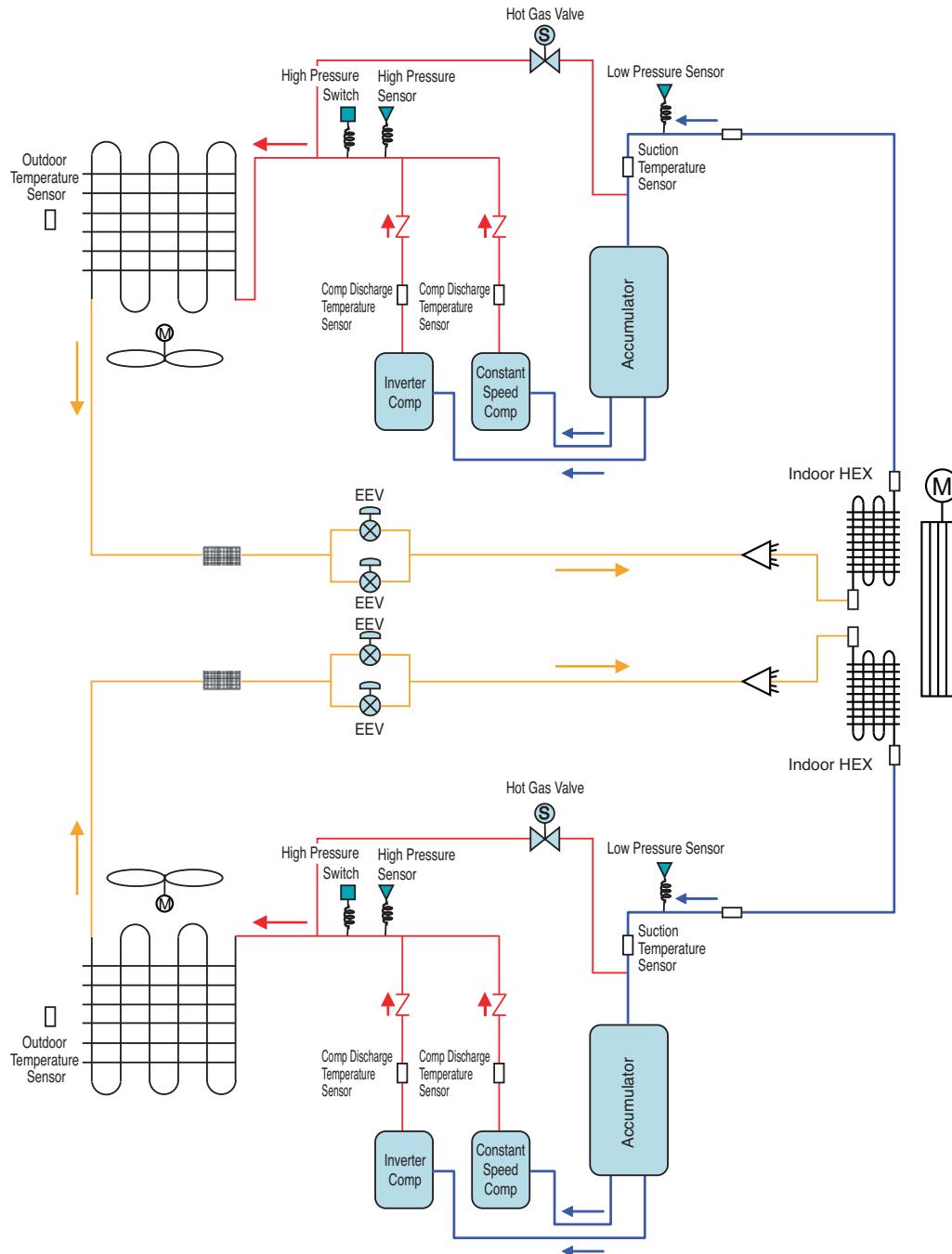
■ 10 / 12.5RT



Remarks	Pressure Sensor Temperature Sensor Check valve Hot Gas valve Pressure Switch EEV Strainer Distributor Motor + Fan (Propeller Fan) Motor + Fan (Sirocco Fan)
---------	---

12. Piping diagrams

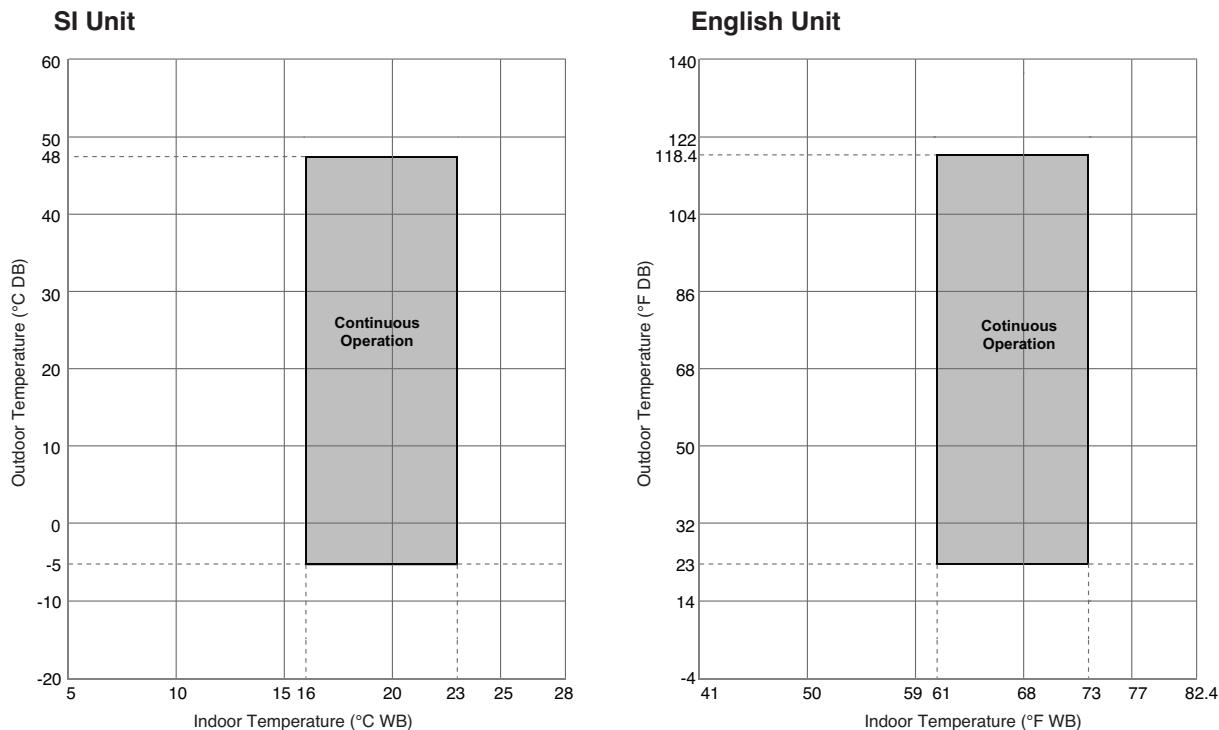
■ 20 / 25RT



Remarks	Pressure Sensor Temperature Sensor Check valve Hot Gas valve Pressure Switch EEV Strainer Motor + Fan (Propeller Fan) Motor + Fan (Sirocco Fan)
---------	---

13. Operation range

■ 1 Series

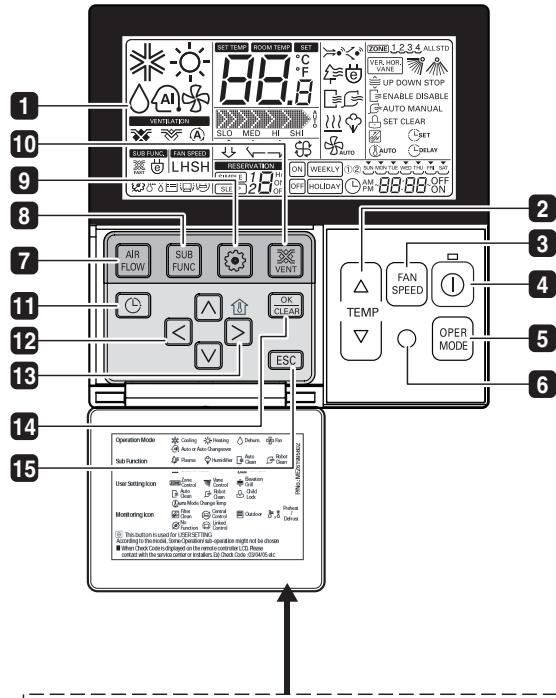


- Without low ambient kit, unit can be operated when outdoor temperature goes down to -5°C.

Single Package

14. Controller

1) LCD wired remote controller



Please attach the inform label inside of the door.
Please choose proper language depend on your country.

1 OPERATION INDICATION SCREEN

2 SET TEMPERATURE BUTTON

3 FAN SPEED BUTTON

4 ON/OFF BUTTON

5 OPERATION MODE SELECTION BUTTON

6 WIRELESS REMOTE CONTROLLER RECEIVER

7 AIR FLOW BUTTON

8 SUB FUNCTION BUTTON

9 FUNCTION SETTING BUTTON

10 VENTILATION BUTTON

11 RESERVATION

12 UP, DOWN, LEFT, RIGHT BUTTON

- To check the indoor temperature, press button.

13 ROOM TEMPERATURE BUTTON

14 SETTING/CANCEL BUTTON

15 EXIT BUTTON

Single Package

15. Appendix

Unit Conversion

Cooling Capacity

RT	Btu/h	kcal/h	W
1	12,000	3024.2	3516.7

Volume

CMM	CFM	l/s
1	35.3	16.67

Length

m	cm	mm	inch
1	100	1000	39.37

Power

HP	W	kW
1	746	0.746

Temperature

$$C = \frac{5}{9} (F - 32)$$

Where,

C is Temperature in °C

F is Temperature in °F



P/No.: MFL67452910



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The air conditioners manufactured by LG have received ISO9001 certificate for quality assurance and ISO14001 certificate for environmental management system.