

APRH Series

Rooftop Package Unit

Technical Manual

380~415V/3/50Hz



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Part. 1 General information

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1. Product lineup

Nominal ton	Model	Function	Air outlet	Power supply
4	APRH048C7A-DC1141	Cooling only	Side discharge	380~415V 3Ph 50Hz
5	APRH060C7A-DC1170	Cooling only	Side discharge	
6.25	APRH075C7A-DD1220	Cooling only	Side discharge	
7.5	APRH090C7A-DD1260	Cooling only	Side discharge	
8.5	APRH105C7A-DD1300	Cooling only	Side discharge	
10	APRH120C7A-DD1350	Cooling only	Side discharge	
12.5	APRH150C7A-DD1440	Cooling only	Side discharge	
15	APRH180C7A-DD2530	Cooling only	Side discharge	
17.5	APRH210C7A-DD2610	Cooling only	Side discharge	
20	APRH240C7A-DD2700	Cooling only	Side discharge	
25	APRH300C7A-DD2870	Cooling only	Side discharge	
30	APRH360C7A-DD3105	Cooling only	Side discharge	

Notes: Please refer to specification tables for accurate cooling capacity with kW or Btu/h.

2. External Appearances



4&5ton



6.2&7.5ton



8.5&10ton



12.5&15ton



17.5&20ton



25&30ton

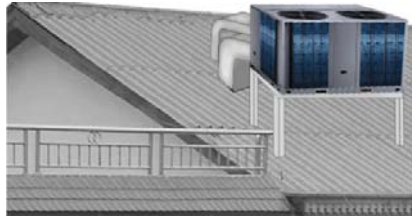
Part. 2 Performances

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1. Features

✧ Design flexibility.

Compact design and flanges of air flow inlet and outlet as standard. It is suitable for installation in rooftop and ground.



✧ Durable construction.

Pre-painted exterior cabinet panels pass 1000 hours salt spray test for durability. Weather-resistant construction with capped steams and sloped top panels design.

The rooftop package air conditioners with special anti-corrosion treatment are suitable for seaside areas or the areas exposed to acidic substances. (It should be customized.)



✧ Reliable scroll compressor.

Famous brand compressor, it is more reliable. No complex internal suction and discharge valves for quieter operation and higher reliability. Compact and light-weight design, fewer moving parts design.

✧ Adjustable pulley

Through changing the working pitch diameter of the pulley mounted on driver shaft, in turn the revolutions per minute of the driven shaft will increase or decrease to change air volume.

✧ Multi-protection design.

Multi-measurement can ensure units operate normally and reliably:

System current protection;

High/low-pressure switch protection;

Temperature sensor on/off protection, etc.

The three-phase protector can be customized.

-
- ✧ Easy to installation.

Removable access door on the electric box is standard. It is easy to move the cover of the electric box. Only connect the wires of power supply, and no need to connect any signal wires. Reserved external drainage port, quickly and accurately connect the rubber drainage pipe.



- ✧ The unit provides external pressure gauge ports for convenient and fast checking system pressure without removing the panel.



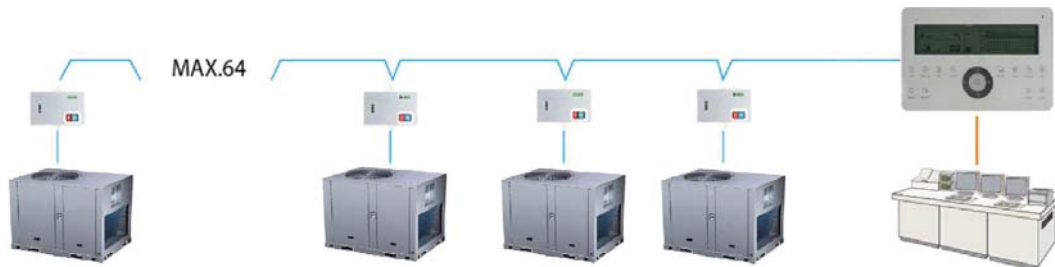
- ✧ System self-diagnostic function.

Press the Check button in Main PCB board, and the LED display of PCB board in unit will display the normal checking code. If the unit is in running with abnormal operation, the LED display will show the error code.

- ✧ Wired controller as standard. Besides the OMEGA controller, other brand thermostat can be matched as optional solution.

- ✧ Centralized control function can be achieved through the centralized controller as optional.

MD-NIM01 should be connected between the rooftop package units and centralized controller.



2. Specifications

Nominal ton		(Ton)	4	5
Model			APRH048C7A-DC1141	APRH060C7A-DC1170
Power supply		\	380~415V, 3Ph, 50Hz	380~415V, 3Ph, 50Hz
Cooling 1	Cooling capacity	Btu/h	48,000	58,000
		kW	14.1	17.0
	Power input	kW	4.1	5.0
Cooling 2	Cooling capacity	Btu/h	39,000	47,900
		kW	11.4	14.0
	Power input	kW	4.8	5.9
Max. input consumption		kW	6.2	7.4
Max. current		A	12.4	15.5
Performance	Indoor air flow	CFM	1,750	2,000
	ESP	Pa	Default:75, 0~200	Default:75, 0~200
	EER 1	Btu/h.W	11.7	11.6
	EER 2	Btu/h.W	8.1	8.1
Indoor coil	Number of rows	\	3	4
	Fin spacing	mm	1.3	1.3
	Fin type	\	Hydrophilic aluminum fin	Hydrophilic aluminum fin
	Tube diameter	mm	Φ7	Φ7
	Tube type	\	Inner grooved copper pipe	Inner grooved copper pipe
Indoor fan	Type / Quantity	\	Centrifugal / 1	Centrifugal / 1
	Drive type	\	Direct	Direct
	Motor quantity	\	1	1
	Motor model	\	YKS-550-4-4	YKS-550-4-4
	Motor capacitor	\	25μF/450V	25μF/450V
	Motor input	W	1,045	1,045
	Motor speed	RPM	960	960
Compressor	Type / Quantity	\	Scroll / 1	Scroll / 1
	Model	\	ZP51KSE-TFM-522	ZP61KCE-TFD-522
	Brand	\	Copeland	Copeland
	Capacity	W	15,400	14,700
	Input	W	2,650	4,750
	RLA	A	8.6	10.9
	LRA	A	51.5	64
	Refrigerant oil	ml	1,240	1,685
Outdoor coil	Number of rows	\	2	3
	Fin spacing	mm	1.5	1.5
	Fin type	\	Hydrophilic aluminum fin	Hydrophilic aluminum fin
	Tube diameter	mm	Φ7	Φ7
	Tube type	\	Inner grooved copper pipe	Inner grooved copper pipe

Continued:

Nominal ton		(Ton)	4	5
Model			APRH048C7A-DC1141	APRH060C7A-DC1170
Outdoor fan	Type / Quantity	\	Axial / 1	Axial / 1
	Drive type	\	Direct	Direct
	Motor model	\	YKS-230-6-15	YKS-230-6-15
	Motor capacitor	\	15 μ F/450V	15 μ F/450V
	Motor input	W	345	345
	Fan speed	RPM	915	915
Refrigerant	Type / Volume	\	R410A / 2.65kg	R410A / 2.95kg
	Control	\	Throttle valve	Throttle valve
Sound pressure level		dB(A)	64.4	66.3
Wired controller		\	KJR-12B/dP(T)-E	KJR-12B/dP(T)-E
Centralized controller (Optional)		\	Yes	Yes
Ambient temperature (Cooling)		°C	10~52	10~52
System stage		\	1	1
Dimensions	Net (W×H×D)	mm	1,310×840×900	1,310×840×900
	Packing (W×H×D)	mm	1,340×865×935	1,340×865×935
Weight	Net	kg	167	180
	Gross	kg	170	183

Notes:

1. Nominal ton only for reference. Cooling capacity as per specifications;
2. Cooling capacity test condition: (1)
 Outdoor ambient temperature: 35°C, indoor temperature: 26.7°CDB, 19.4°CWB;
 Cooling capacity test condition: (2)
 Outdoor ambient temperature: 46.1°C, indoor temperature: 26.7°CDB, 19.4°CWB;
3. Units are suitable for operation to $\pm 20\%$ of nominal indoor air flow.
4. ESP: external static pressure;
5. Specifications are subject to change without prior notice for product improvement.

Nominal ton		(Ton)	6.2	7.5
Model			APRH075C7A-DD1220	APRH090C7A-DD1260
Power supply		\	380~415V, 3Ph, 50Hz	380~415V, 3Ph, 50Hz
Cooling 1	Cooling capacity	Btu/h	75,000	89,000
		kW	22.0	26.0
	Power input	kW	6.6	7.9
Cooling 2	Cooling capacity	Btu/h	61,400	69,600
		kW	18.0	20.4
	Power input	kW	7.8	9.0
Max. input consumption		kW	9.0	13.6
Max. current		A	19.3	27.2
Performance	Indoor air flow	CFM	2,800	2,830
	ESP	Pa	Default:80; 0~250	Default: 80; 0~250
	EER 1	Btu/h.W	11.4	11.3
	EER 2	Btu/h.W	7.9	7.8
Indoor coil	Number of rows	\	4	3
	Fin spacing	mm	1.3	1.3
	Fin type	\	Hydrophilic aluminum fin	Hydrophilic aluminum fin
	Tube diameter	mm	Φ7	Φ7
	Tube type	\	Inner grooved copper pipe	Inner grooved copper pipe
Indoor fan	Type / Quantity	\	Centrifugal / 1	Centrifugal / 1
	Drive type	\	Direct	Direct
	Motor quantity	\	1	1
	Motor model	\	YKS-750-4-2	YKS-750-4-2
	Motor capacitor	\	25μF/450V	25μF/450V
	Motor input	W	1,600/1,350/1,150	1,600/1,350/1,150
	Motor speed	RPM	1,090/985/895	1,090/985/895
Compressor	Type	\	Scroll / 1	Scroll / 1
	Model	\	ZP72KCE-TFD-52E	HCJ106
	Brand	\	Copeland	Danfoss
	Capacity	W	17,200	26,100
	Input	W	5,650	8,080
	RLA	A	12.5	14.3
	LRA	A	75	121.2
	Refrigerant oil	ml	1,774	2,460
Outdoor coil	Number of rows	\	2.5	3
	Fin spacing	mm	1.5	1.5
	Fin type	\	Hydrophilic aluminum fin	Hydrophilic aluminum fin
	Tube diameter	mm	Φ7	Φ7
	Tube type	\	Inner grooved copper pipe	Inner grooved copper pipe

Continued:

Nominal ton		(Ton)	6.2	7.5
Model			APRH075C7A-DD1220	APRH090C7A-D1260
Outdoor fan	Type	\	Axial	Axial
	Quantity	\	1	1
	Drive type	\	Direct	Direct
	Motor quantity	\	1	1
	Motor model	\	YKS-450-6-6-2	YKS-580-6-1
	Motor capacitor	\	25 μ F/450V	25 μ F/450V
	Motor input	W	757/403	820/505
	Fan speed	RPM	840/550	870/640
Refrigerant	Type	\	R410A	R410A
	Volume	kg	4.0	3.7
	Control	\	Throttle valve	Throttle valve
Sound pressure level		dB(A)	71.0	71.5
Wired controller		\	KJR-25B	KJR-25B
Centralized controller (Optional)		\	No	No
Ambient temperature (Cooling)		°C	10~52	10~52
System stage		\	1	1
Dimensions	Net (W×H×D)	mm	1,475×840×1,130	1,475×840×1,130
	Packing (W×H×D)	mm	1,495×870×1,150	1,495×870×1,150
Weight	Net	kg	223	231
	Gross	kg	228	236

Notes:

1. Nominal ton only for reference. Cooling capacity as per specifications;
2. Cooling capacity test condition: (1)
 - Outdoor ambient temperature: 35°C, indoor temperature: 26.7°CDB, 19.4°CWB;
 - Cooling capacity test condition: (2)
 - Outdoor ambient temperature: 46.1°C, indoor temperature: 26.7°CDB, 19.4°CWB;
3. Units are suitable for operation to $\pm 20\%$ of nominal indoor air flow.
4. ESP: external static pressure;
5. Specifications are subject to change without prior notice for product improvement.

Nominal ton		(Ton)	8.5	
Model		APRH105C7A-DD1300		
Power Supply		\	380~415V, 3Ph, 50Hz	
Cooling 1	Cooling capacity	Btu/h	102,000	
		kW	30.0	
	Power input	kW	9.2	
Cooling 2	Cooling capacity	Btu/h	80,700	
		kW	23.7	
	Power input	kW	10.3	
Max. input consumption		kW	14.8	
Max. current		A	29.2	
Performance	Indoor air flow	CFM	3,500	
	ESP	Pa	Default: 80; 0~200	
	EER 1	Btu/h.W	11.1	
	EER 2	Btu/h.W	7.9	
Indoor coil	Number of rows	\	4	
	Fin spacing	mm	1.5	
	Fin type	\	Hydrophilic aluminum fin	
	Tube diameter	mm	Φ7	
	Tube type	\	Inner grooved copper pipe	
Indoor fan	Type / Quantity	\	Centrifugal / 1	
	Drive type	\	Belt	
	Motor quantity	\	1	
	Motor model	\	YKSJ-1500-4-9	
	Motor capacitor	\	\	
	Motor input	W	\	
	Motor speed	RPM	1,400	
Compressor	Type / Quantity	\	Scroll / 2	
	Model	\	E604DH-59D2G	E604DH-59D2G
	Brand	\	Hitachi	Hitachi
	Capacity	W	15,390	15,390
	Input	W	5,130	5,130
	RLA	A	8.8	8.8
	LRA	A	62	62
	Refrigerant oil	ml	1,300	1,300
Outdoor coil	Number of rows	\	2.5	
	Fin spacing	mm	1.5	
	Fin type	\	Hydrophilic aluminum fin	
	Tube diameter	mm	Φ7	
	Tube type	\	Inner grooved copper pipe	

Continued:

Nominal ton		(Ton)	8.5
Model		APRH105C7A-DD1300	
Outdoor fan	Type	\	Axial
	Quantity	\	1
	Drive type	\	Direct
	Motor quantity	\	1
	Motor model	\	YKS-580-6-1
	Motor capacitor	\	25 μ F/450V
	Motor input	W	820/505
	Fan speed	RPM	870/640
Refrigerant	Type	\	R410A
	Volume	kg	2.25+2.25
	Control	\	Throttle valve
Sound pressure level		dB(A)	70.3
Wired controller		\	KJR-12B/dP(T)-E
Centralized controller (Optional)		\	Yes
Ambient temperature (Cooling)		$^{\circ}$ C	10~52
System stage		\	2
Dimensions	Net (W×H×D)	mm	1,483×1,231×1,138
	Packing (W×H×D)	mm	1,500×1,255×1,155
Weight	Net	kg	331
	Gross	kg	342

Notes:

1. Nominal ton only for reference. Cooling capacity as per specifications;
2. Cooling capacity test condition: (1)
 Outdoor ambient temperature: 35 $^{\circ}$ C, indoor temperature: 26.7 $^{\circ}$ CDB, 19.4 $^{\circ}$ CWB;
 Cooling capacity test condition: (2)
 Outdoor ambient temperature: 46.1 $^{\circ}$ C, indoor temperature: 26.7 $^{\circ}$ CDB, 19.4 $^{\circ}$ CWB;
3. Units are suitable for operation to $\pm 20\%$ of nominal indoor air flow.
4. ESP: external static pressure;
5. Specifications are subject to change without prior notice for product improvement.

Nominal ton		(Ton)	10	
Model		APRH120C7A-DD1350		
Power supply		\	380~415V, 3Ph, 50Hz	
Cooling 1	Cooling capacity	Btu/h	120,000	
		kW	35.0	
	Power input	kW	10.7	
Cooling 2	Cooling capacity	Btu/h	100,200	
		kW	29.4	
	Power input	kW	12.6	
Max. input consumption		kW	18.0	
Max. current		A	34.1	
Performance	Indoor air flow	CFM	4,100	
	ESP	Pa	Default: 90; 0~250	
	EER 1	Btu/h.W	11.2	
	EER 2	Btu/h.W	8.0	
Indoor coil	Number of rows	\	4	
	Fin spacing	mm	1.5	
	Fin type	\	Hydrophilic aluminum fin	
	Tube diameter	mm	Φ7	
	Tube type	\	Inner grooved copper pipe	
Indoor fan	Type / Quantity	\	Centrifugal / 1	
	Drive type	\	Belt	
	Motor quantity	\	1	
	Motor model	\	YKSJ-1500-4-9	
	Motor capacitor	\	\	
	Motor input	W	\	
	Motor speed	RPM	1,400	
Compressor	Type / Quantity	\	Scroll / 2	
	Model	\	E654DH-65D2G	E654DH-65D2G
	Brand	\	Hitachi	Hitachi
	Capacity	W	17,100	17,100
	Input	W	5,700	5,700
	RLA	A	9.6	9.6
	LRA	A	66	66
	Refrigerant oil	ml	1,300	1,300
Outdoor coil	Number of rows	\	2.5	
	Fin spacing	mm	1.5	
	Fin type	\	Hydrophilic aluminum fin	
	Tube diameter	mm	Φ7	
	Tube type	\	Inner grooved copper pipe	

Continued:

Nominal ton		(Ton)	10
Model		APRH120C7A-DD1350	
Outdoor fan	Type	\	Axial
	Quantity	\	1
	Drive type	\	Direct
	Motor quantity	\	1
	Motor model	\	YKSJ-1100-6-8
	Motor capacitor	\	\
	Motor input	W	\
	Fan speed	RPM	1,120/965
Refrigerant	Type	\	R410A
	Volume	kg	2.35+2.35
	Control	\	Throttle valve
Sound pressure level		dB(A)	72.6
Wired controller		\	KJR-12B/dP(T)-E
Centralized controller (Optional)		\	Yes
Ambient temperature (Cooling)		°C	10~52
System stage		\	2
Dimensions	Net (W×H×D)	mm	1,483×1,231×1,138
	Packing (W×H×D)	mm	1,500×1,255×1,155
Weight	Net	kg	335
	Gross	kg	346

Notes:

1. Nominal ton only for reference. Cooling capacity as per specifications;
2. Cooling capacity test condition: (1)
 Outdoor ambient temperature: 35°C, indoor temperature: 26.7°CDB, 19.4°CWB;
 Cooling capacity test condition: (2)
 Outdoor ambient temperature: 46.1°C, indoor temperature: 26.7°CDB, 19.4°CWB;
3. Units are suitable for operation to $\pm 20\%$ of nominal indoor air flow.
4. ESP: external static pressure;
5. Specifications are subject to change without prior notice for product improvement.

Nominal ton		(Ton)	12.5	
Model		APRH150C7A-DD1440		
Power supply		\	380~415V, 3Ph, 50Hz	
Cooling 1	Cooling capacity	Btu/h	150,000	
		kW	44.0	
	Power input	kW	13.3	
Cooling 2	Cooling capacity	Btu/h	125,400	
		kW	36.8	
	Power input	kW	16.1	
Max. input consumption		kW	21.0	
Max. current		A	41.2	
Performance	Indoor air flow	CFM	5,500	
	ESP	Pa	Default: 110; 0~275	
	EER 1	Btu/h.W	11.3	
	EER 2	Btu/h.W	7.8	
Indoor coil	Number of rows	\	4+4	
	Fin spacing	mm	1.3+1.3	
	Fin type	\	Hydrophilic aluminum fin	
	Tube diameter	mm	Φ7+Φ7	
	Tube type	\	Inner grooved copper pipe	
Indoor fan	Type / Quantity	\	Centrifugal / 1	
	Drive type	\	Belt	
	Motor quantity	\	1	
	Motor model	\	YKSJ-3000-4-11	
	Motor capacitor	\	\	
	Motor input	W	\	
	Motor speed	RPM	1,420	
Compressor	Type / Quantity	\	Scroll / 2	
	Model	\	ZP61KCE-TFD-522	ZP122KCE-TFD-522
	Brand	\	Copeland	Copeland
	Capacity	W	14,700	29,900
	Input	W	4,750	9,190
	RLA	A	10.9	18
	LRA	A	64	127
	Refrigerant oil	ml	1,685	2,513
Outdoor coil	Number of rows	\	3	
	Fin spacing	mm	1.5	
	Fin type	\	Hydrophilic aluminum fin	
	Tube diameter	mm	Φ7	
	Tube type	\	Inner grooved copper pipe	

Continued:

Nominal ton		(Ton)	12.5
Model		APRH150C7A-DD1440	
Outdoor fan	Type	\	Axial
	Quantity	\	1
	Drive type	\	Direct
	Motor quantity	\	1
	Motor model	\	YKS-550-6-4-2
	Motor capacitor	\	25 μ F/450V
	Motor input	W	740/640
	Fan speed	RPM	880/810
Refrigerant	Type	\	R410A
	Volume	kg	2.8+1.7
	Control	\	Throttle valve
Sound pressure level		dB(A)	71.8
Wired controller		\	KJR-12B/dP(T)-E
Centralized controller (Optional)		\	Yes
Ambient temperature (Cooling)		$^{\circ}$ C	10~52
System stage		\	2
Dimensions	Net (W×H×D)	mm	1,965×1,230×1,130
	Packing (W×H×D)	mm	1,995×1,255×1,160
Weight	Net	kg	433
	Gross	kg	453

Notes:

1. Nominal ton only for reference. Cooling capacity as per specifications;
2. Cooling capacity test condition: (1)
 Outdoor ambient temperature: 35 $^{\circ}$ C, indoor temperature: 26.7 $^{\circ}$ CDB, 19.4 $^{\circ}$ CWB;
 Cooling capacity test condition: (2)
 Outdoor ambient temperature: 46.1 $^{\circ}$ C, indoor temperature: 26.7 $^{\circ}$ CDB, 19.4 $^{\circ}$ CWB;
3. Units are suitable for operation to \pm 20% of nominal indoor air flow.
4. ESP: external static pressure;
5. Specifications are subject to change without prior notice for product improvement.

Nominal ton		(Ton)	15	
Model		APRH180C7A-DD2530		
Power supply		\	380~415V, 3Ph, 50Hz	
Cooling 1	Cooling capacity	Btu/h	180,000	
		kW	53.0	
	Power input	kW	16.7	
Cooling 2	Cooling capacity	Btu/h	146,000	
		kW	42.8	
	Power input	kW	18.7	
Max. input consumption		kW	25.0	
Max. current		A	48.0	
Performance	Indoor air flow	CFM	7,000	
	ESP	Pa	Default: 110; 0~325	
	EER 1	Btu/h.W	10.8	
	EER 2	Btu/h.W	7.8	
Indoor coil	Number of rows	\	4+4	
	Fin spacing	mm	1.3+1.3	
	Fin type	\	Hydrophilic aluminum fin	
	Tube diameter	mm	Φ7+Φ7	
	Tube type	\	Inner grooved copper pipe	
Indoor fan	Type / Quantity	\	Centrifugal / 1	
	Drive type	\	Belt	
	Motor quantity	\	1	
	Motor model	\	YKSJ-4000-4-9	
	Motor capacitor	\	\	
	Motor input	W	\	
	Motor speed	RPM	1,440	
Compressor	Type / Quantity	\	Scroll / 2	
	Model	\	ZP61KCE-TFD-522	ZP144KCE-TFD-522
	Brand	\	Copeland	Copeland
	Capacity	W	14,700	35,400
	Input	W	4,750	10,800
	RLA	A	10.9	21.1
	LRA	A	64	144
	Refrigerant oil	ml	1,685	3,253
Outdoor coil	Number of rows	\	3.5	
	Fin spacing	mm	1.6	
	Fin type	\	Hydrophilic aluminum fin	
	Tube diameter	mm	Φ8	
	Tube type	\	Inner grooved copper pipe	

Nominal ton		(Ton)	15
Model		APRH180C7A-DD2530	
Outdoor fan	Type	\	Axial
	Quantity	\	1
	Drive type	\	Direct
	Motor quantity	\	1
	Motor model	\	YKSJ-1100-6-3
	Motor capacitor	\	\
	Motor input	W	\
	Fan speed	RPM	1,120/965
Refrigerant	Type	\	R410A
	Volume	kg	4.9+2.25
	Control	\	Throttle valve
Sound pressure level		dB(A)	75.5
Wired controller		\	KJR-12B/dP(T)-E
Centralized controller (Optional)		\	Yes
Ambient temperature (Cooling)		°C	10~52
System stage		\	2
Dimensions	Net (W×H×D)	mm	1,965×1,230×1,130
	Packing (W×H×D)	mm	1,995×1,255×1,160
Weight	Net	kg	470
	Gross	kg	490

Notes:

1. Nominal ton only for reference. Cooling capacity as per specifications;
2. Cooling capacity test condition: (1)
Outdoor ambient temperature: 35°C, indoor temperature: 26.7°CDB, 19.4°CWB;
Cooling capacity test condition: (2)
Outdoor ambient temperature: 46.1°C, indoor temperature: 26.7°CDB, 19.4°CWB;
3. Units are suitable for operation to $\pm 20\%$ of nominal indoor air flow.
4. ESP: external static pressure;
5. Specifications are subject to change without prior notice for product improvement.

Nominal ton		(Ton)	17.5	
Model		APRH210C7A-DD2610		
Power supply		\	380~415V, 3Ph, 50Hz	
Cooling 1	Cooling capacity	Btu/h	208,000	
		kW	61.0	
	Power input	kW	19.1	
Cooling 2	Cooling capacity	Btu/h	181,100	
		kW	53.1	
	Power input	kW	22.6	
Max. input consumption		kW	26.5	
Max. current		A	55.0	
Performance	Indoor air flow	CFM	7,600	
	ESP	Pa	Default: 110; 0~250	
	EER 1	Btu/h.W	10.9	
	EER 2	Btu/h.W	8.0	
Indoor coil	Number of rows	\	3	
	Fin spacing	mm	1.3	
	Fin type	\	Hydrophilic aluminum fin	
	Tube diameter	mm	Φ7	
	Tube type	\	Inner grooved copper pipe	
Indoor fan	Type / Quantity	\	Centrifugal / 2	
	Drive type	\	Belt	
	Motor quantity	\	1	
	Motor model	\	YKSJ-4000-4-9	
	Motor capacitor	\	\	
	Motor input	W	\	
	Motor speed	RPM	1,440	
Compressor	Type / Quantity	\	Scroll / 2	
	Model	\	ZP122KCE-TFD-522	ZP122KCE-TFD-522
	Brand	\	Copeland	Copeland
	Capacity	W	29,900	29,900
	Input	W	9,190	9,190
	RLA	A	18	18
	LRA	A	127	127
	Refrigerant oil	ml	2,513	2,513
Outdoor coil	Number of rows	\	2.4+2.4	
	Fin spacing	mm	1.5+1.5	
	Fin type	\	Hydrophilic aluminum fin	
	Tube diameter	mm	Φ7+Φ7	
	Tube type	\	Inner grooved copper pipe	

Continued:

Nominal ton		(Ton)	17.5
Model		APRH210C7A-DD2610	
Outdoor fan	Type	\	Axial
	Quantity	\	2
	Drive type	\	Direct
	Motor quantity	\	2
	Motor model	\	YKS-550-6-4-2
	Motor capacitor	\	25 μ F/450V
	Motor input	W	740/640
	Fan speed	RPM	880/810
Refrigerant	Type	\	R410A
	Volume	kg	3.7+3.7
	Control	\	Throttle valve
Sound pressure level		dB(A)	75.0
Wired controller		\	KJR-12B/dP(T)-E
Centralized controller (Optional)		\	Yes
Ambient temperature (Cooling)		$^{\circ}$ C	10~52
System stage		\	2
Dimensions	Net (W×H×D)	mm	1,670×1,247×2,192
	Packing (W×H×D)	mm	1,695×1,284×2,212
Weight	Net	kg	590
	Gross	kg	620

Notes:

1. Nominal ton only for reference. Cooling capacity as per specifications;

2. Cooling capacity test condition: (1)

Outdoor ambient temperature: 35 $^{\circ}$ C, indoor temperature: 26.7 $^{\circ}$ CDB, 19.4 $^{\circ}$ CWB;

Cooling capacity test condition: (2)

Outdoor ambient temperature: 46.1 $^{\circ}$ C, indoor temperature: 26.7 $^{\circ}$ CDB, 19.4 $^{\circ}$ CWB;

3. Units are suitable for operation to $\pm 20\%$ of nominal indoor air flow.

4. ESP: external static pressure;

5. Specifications are subject to change without prior notice for product improvement.

Nominal ton		(Ton)	20	
Model		APRH240C7A-DD2700		
Power supply		\	380~415V, 3Ph, 50Hz	
Cooling 1	Cooling capacity	Btu/h	240,000	
		kW	70.0	
	Power input	kW	22.6	
Cooling 2	Cooling capacity	Btu/h	199,200	
		kW	58.4	
	Power input	kW	25.1	
Max. input consumption		kW	33.0	
Max. current		A	66.9	
Performance	Indoor air flow	CFM	8,800	
	ESP	Pa	Default: 120; 0~375	
	EER 1	Btu/h.W	10.6	
	EER 2	Btu/h.W	7.9	
Indoor coil	Number of rows	\	4	
	Fin spacing	mm	1.3	
	Fin type	\	Hydrophilic aluminum fin	
	Tube diameter	mm	Φ7	
	Tube type	\	Inner grooved copper pipe	
Indoor fan	Type / Quantity	\	Centrifugal / 2	
	Drive type	\	Belt	
	Motor quantity	\	1	
	Motor model	\	YKSJ-5500-4-12	
	Motor capacitor	\	\	
	Motor input	W	\	
	Motor speed	RPM	1,440	
Compressor	Type / Quantity	\	Scroll / 2	
	Model	\	ZP144KCE-TFD-522	ZP144KCE-TFD-522
	Brand	\	Copeland	Copeland
	Capacity	W	35,400	35,400
	Input	W	10,800	10,800
	RLA	A	21.1	21.1
	LRA	A	144	144
	Refrigerant oil	ml	3,253	3,253
Outdoor coil	Number of rows	\	3	
	Fin spacing	mm	1.5+1.5	
	Fin type	\	Hydrophilic aluminum fin	
	Tube diameter	mm	Φ7+Φ7	
	Tube type	\	Inner grooved copper pipe	

Continued:

Nominal ton		(Ton)	20
Model		APRH240C7A-DD2700	
Outdoor fan	Type	\	Axial
	Quantity	\	2
	Drive type	\	Direct
	Motor quantity	\	2
	Motor model	\	YKSJ-1100-6-9
	Motor capacitor	\	\
	Motor input	W	\
	Fan speed	RPM	1,090/944
Refrigerant	Type	\	R410A
	Volume	kg	5.65+5.65
	Control	\	Throttle valve
Sound pressure level		dB(A)	75.3
Wired controller		\	KJR-12B/dP(T)-E
Centralized controller (Optional)		\	Yes
Ambient temperature (Cooling)		°C	10~52
System stage		\	2
Dimensions	Net (W×H×D)	mm	1,670×1,247×2,192
	Packing (W×H×D)	mm	1,695×1,284×2,212
Weight	Net	kg	670
	Gross	kg	700

Notes:

1. Nominal ton only for reference. Cooling capacity as per specifications;
2. Cooling capacity test condition: (1)
 Outdoor ambient temperature: 35°C, indoor temperature: 26.7°CDB, 19.4°CWB;
 Cooling capacity test condition: (2)
 Outdoor ambient temperature: 46.1°C, indoor temperature: 26.7°CDB, 19.4°CWB;
3. Units are suitable for operation to $\pm 20\%$ of nominal indoor air flow.
4. ESP: external static pressure;
5. Specifications are subject to change without prior notice for product improvement.

Nominal ton		(Ton)	25	
Model		APRH300C7A-DD2870		
Power supply		\	380~415V, 3Ph, 50Hz	
Cooling 1	Cooling capacity	Btu/h	300,000	
		kW	87.0	
	Power input	kW	28.0	
Cooling 2	Cooling capacity	Btu/h	251,700	
		kW	73.8	
	Power input	kW	32.0	
Max. input consumption		kW	40.5	
Max. current		A	77.4	
Performance	Indoor air flow	CFM	10,000	
	ESP	Pa	Default: 110; 0~350	
	EER 1	Btu/h.W	10.7	
	EER 2	Btu/h.W	7.9	
Indoor coil	Number of rows	\	4	
	Fin spacing	mm	1.6	
	Fin type	\	Hydrophilic aluminum fin	
	Tube diameter	mm	Φ8	
	Tube type	\	Inner grooved copper pipe	
Indoor fan	Type / Quantity	\	Centrifugal / 2	
	Drive type	\	Belt	
	Motor quantity	\	1	
	Motor model	\	YKSJ-7500-4-14	
	Motor capacitor	\	\	
	Motor input	W	\	
	Motor speed	RPM	1,440	
Compressor	Type / Quantity	\	Scroll / 2	
	Model	\	SH161A4ALC	SH161A4ALC
	Brand	\	Danfoss	Danfoss
	Capacity	W	38,800	38,800
	Input	W	12,145	12,145
	RLA	A	23.6	23.6
	LRA	A	158	158
	Refrigerant oil	ml	3,300	3,300
Outdoor coil	Number of rows	\	3+2+3+2	
	Fin spacing	mm	1.5+1.5+1.5+1.5	
	Fin type	\	Hydrophilic aluminum fin	
	Tube diameter	mm	Φ7+Φ7+Φ7+Φ7	
	Tube type	\	Inner grooved copper pipe	

Continued:

Nominal ton		(Ton)	25
Model		APRH300C7A-DD2870	
Outdoor fan	Type	\	Axial
	Quantity	\	2
	Drive type	\	Direct
	Motor quantity	\	2
	Motor model	\	YKSJ-1500-6-7
	Motor capacitor	\	\
	Motor input	W	\
	Fan speed	RPM	910
Refrigerant	Type	\	R410A
	Volume	kg	6+6
	Control	\	Capillary
Sound pressure level		dB(A)	76.8
Wired controller		\	KJR-12B/dP(T)-E
Centralized controller (Optional)		\	Yes
Ambient temperature (Cooling)		°C	10~52
System stage		\	2
Dimensions	Net (W×H×D)	mm	2,320×1,245×2,220
	Packing (W×H×D)	mm	2,330×1,275×2,230
Weight	Net	kg	895
	Gross	kg	925

Notes:

1. Nominal ton only for reference. Cooling capacity as per specifications;
2. Cooling capacity test condition: (1)
 Outdoor ambient temperature: 35°C, indoor temperature: 26.7°CDB, 19.4°CWB;
 Cooling capacity test condition: (2)
 Outdoor ambient temperature: 46.1°C, indoor temperature: 26.7°CDB, 19.4°CWB;
3. Units are suitable for operation to $\pm 20\%$ of nominal indoor air flow.
4. ESP: external static pressure;
5. Specifications are subject to change without prior notice for product improvement.

Nominal ton		(Ton)	30	
Model		APRH360C7A-DD3105		
Power supply		\	380~415V, 3Ph, 50Hz	
Cooling 1	Cooling capacity	Btu/h	360,000	
		kW	105.0	
	Power input	kW	34.3	
Cooling 2	Cooling capacity	Btu/h	336,300	
		kW	98.6	
	Power input	kW	41.8	
Max. input consumption		kW	49.5	
Max. current		A	94.1	
Performance	Indoor air flow	CFM	12,000	
	ESP	Pa	Default: 270; 0~400	
	EER 1	Btu/h.W	10.5	
	EER 2	Btu/h.W	8.0	
Indoor coil	Number of rows	\	4	
	Fin spacing	mm	1.6	
	Fin type	\	Hydrophilic aluminum fin	
	Tube diameter	mm	Φ8	
	Tube type	\	Inner grooved copper pipe	
Indoor fan	Type / Quantity	\	Centrifugal / 2	
	Drive type	\	Belt	
	Motor quantity	\	1	
	Motor model	\	YKSJ-7500-4--14	
	Motor capacitor	\	\	
	Motor input	W	\	
	Motor speed	RPM	1,440	
Compressor	Type / Quantity	\	Scroll / 2	
	Model	\	SH184A4ALC	SH184A4ALC
	Brand	\	Danfoss	Danfoss
	Capacity	W	44,661	44,661
	Input	W	13,732	13,732
	RLA	A	27.6	27.6
	LRA	A	197	197
	Refrigerant oil	ml	3,600	3,600
Outdoor coil	Number of rows	\	3+3+3+3	
	Fin spacing	mm	1.5+1.5+1.5+1.5	
	Fin type	\	Hydrophilic aluminum fin	
	Tube diameter	mm	Φ7+Φ7+Φ7+Φ7	
	Tube type	\	Inner grooved copper pipe	

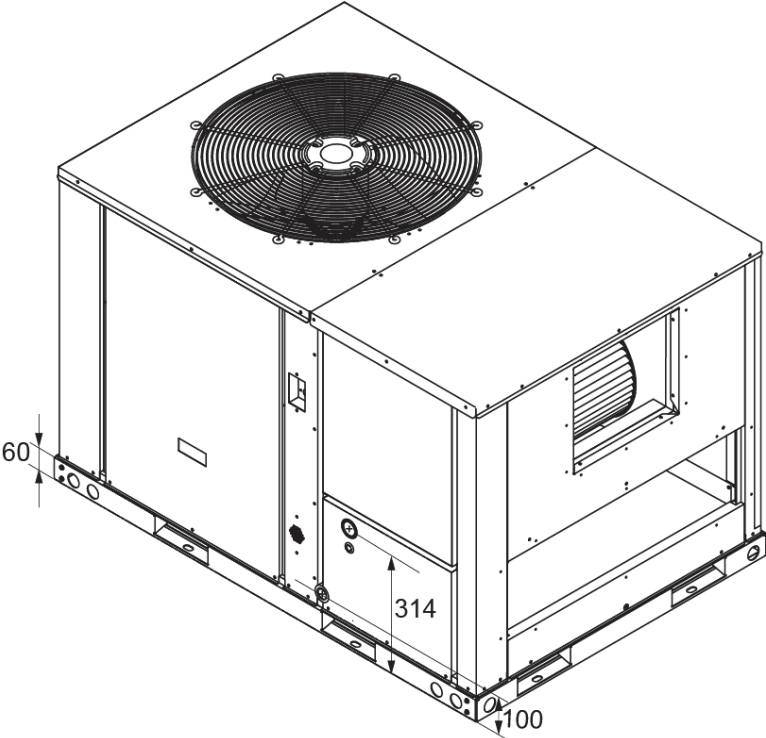
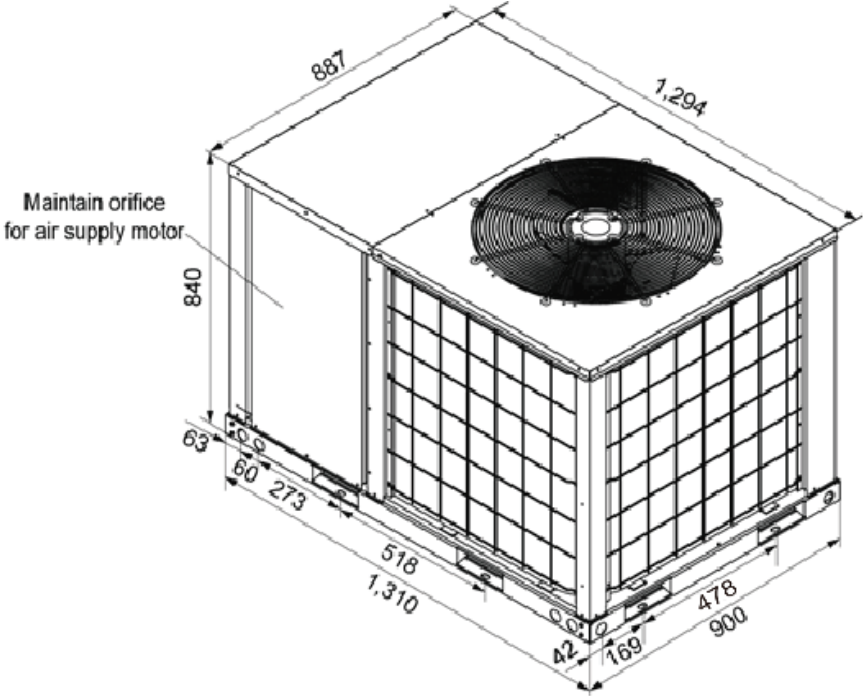
Nominal ton		(Ton)	30
Model		APRH360C7A-DD3105	
Outdoor fan	Type	\	Axial
	Quantity	\	2
	Drive type	\	Direct
	Motor quantity	\	2
	Motor model	\	YKSJ-1500-6-2
	Motor capacitor	\	\
	Motor input	W	\
	Fan speed	RPM	910
Refrigerant	Type	\	R410A
	Volume	kg	7.6+7.6
	Control	\	Capillary
Sound pressure level		dB(A)	77.9
Wired controller		\	KJR-12B/dP(T)-E
Centralized controller (Optional)		\	Yes
Ambient temperature (Cooling)		°C	10~52
System stage		\	2
Dimensions	Net (W×H×D)	mm	2,320×1,245×2,220
	Packing (W×H×D)	mm	2,330×1,275×2,230
Weight	Net	kg	910
	Gross	kg	940

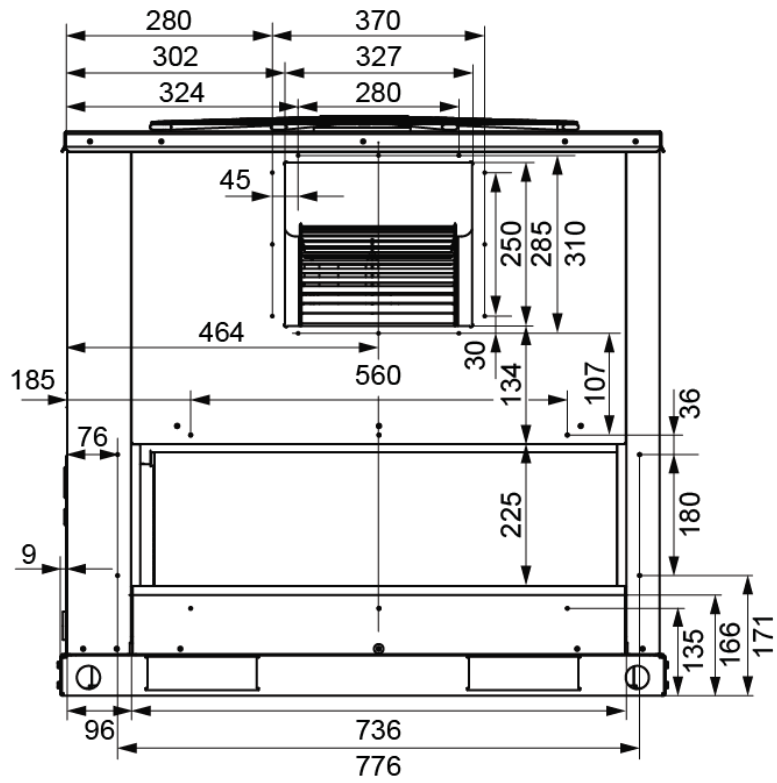
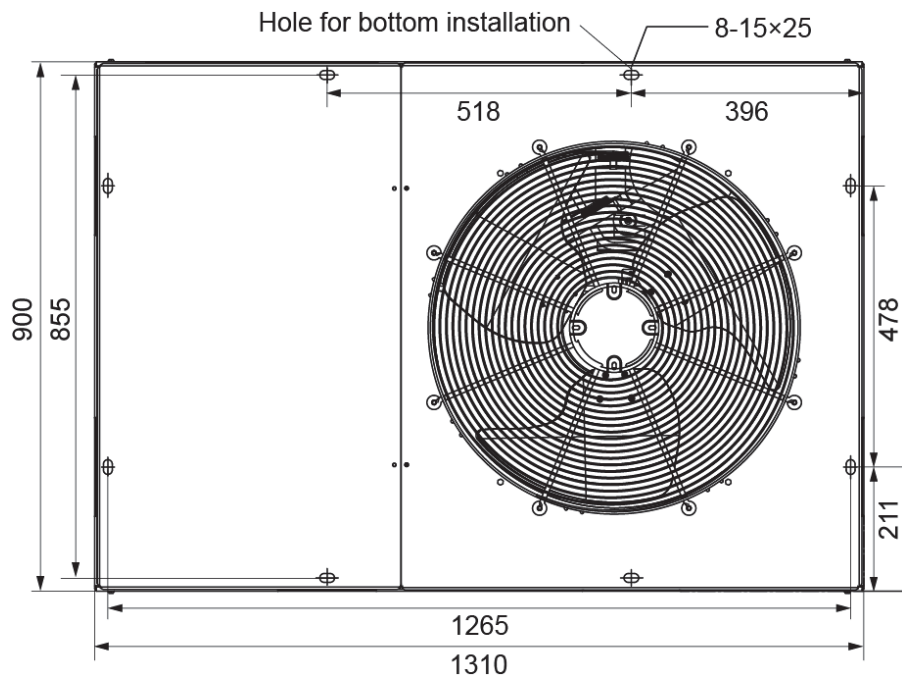
Notes:

1. Nominal ton only for reference. Cooling capacity as per specifications;
2. Cooling capacity test condition: (1)
Outdoor ambient temperature: 35°C, indoor temperature: 26.7°CDB, 19.4°CWB;
Cooling capacity test condition: (2)
Outdoor ambient temperature: 46.1°C, indoor temperature: 26.7°CDB, 19.4°CWB;
3. Units are suitable for operation to $\pm 20\%$ of nominal indoor air flow.
4. ESP: external static pressure;
5. Specifications are subject to change without prior notice for product improvement.

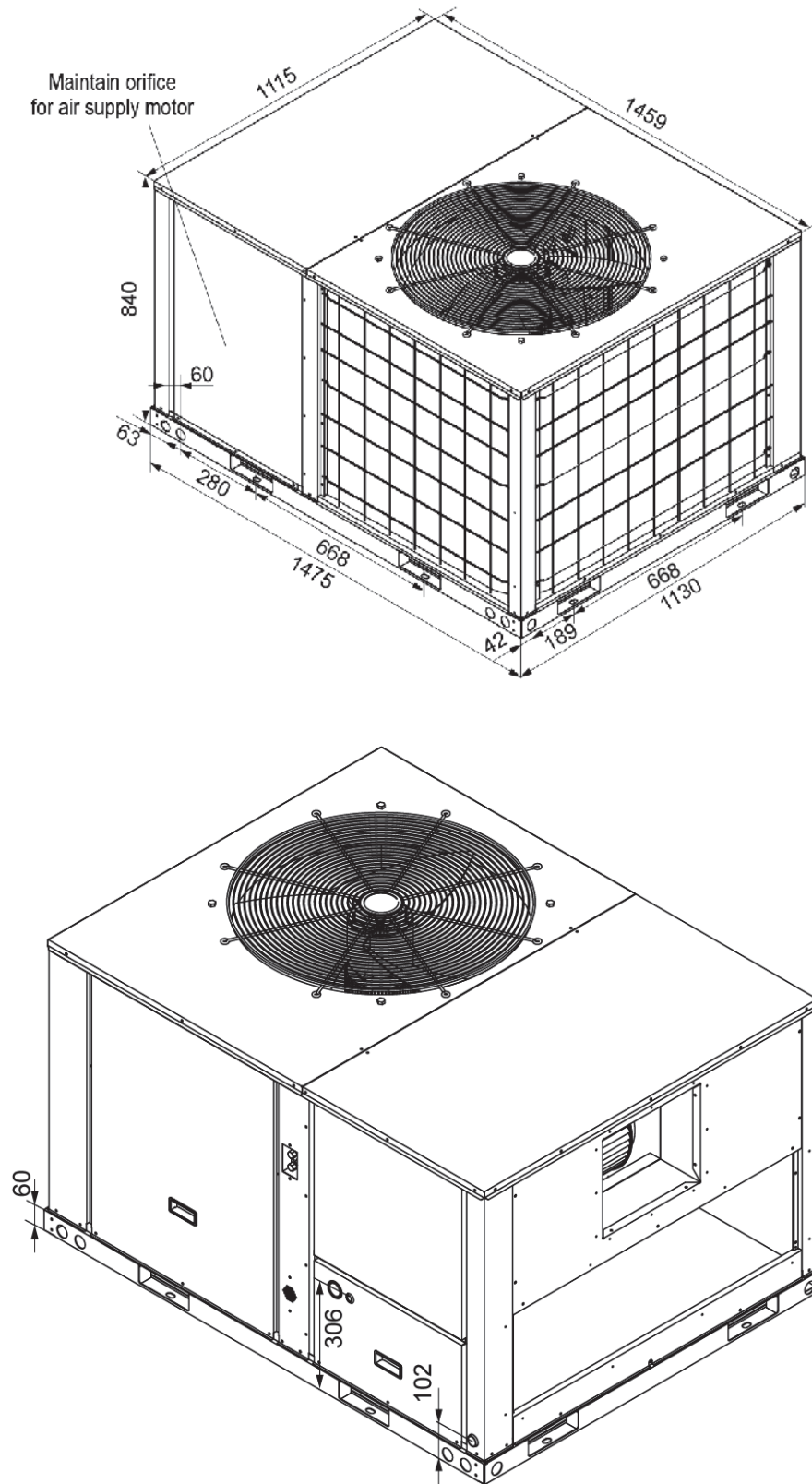
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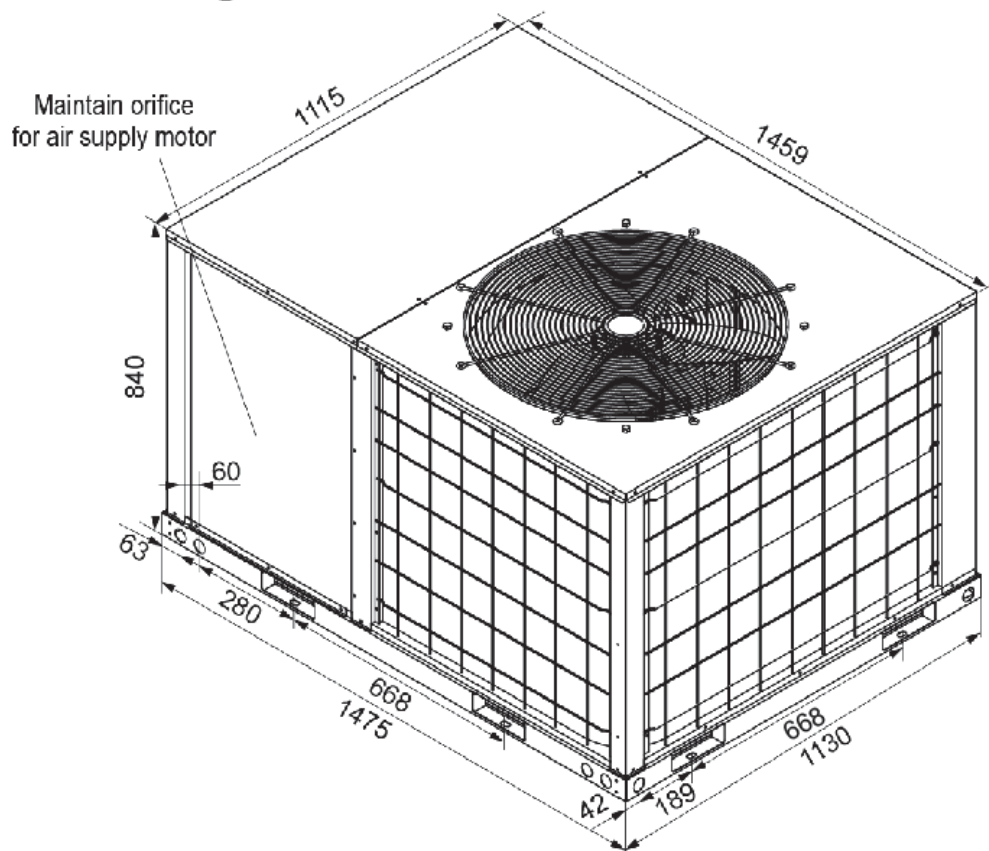
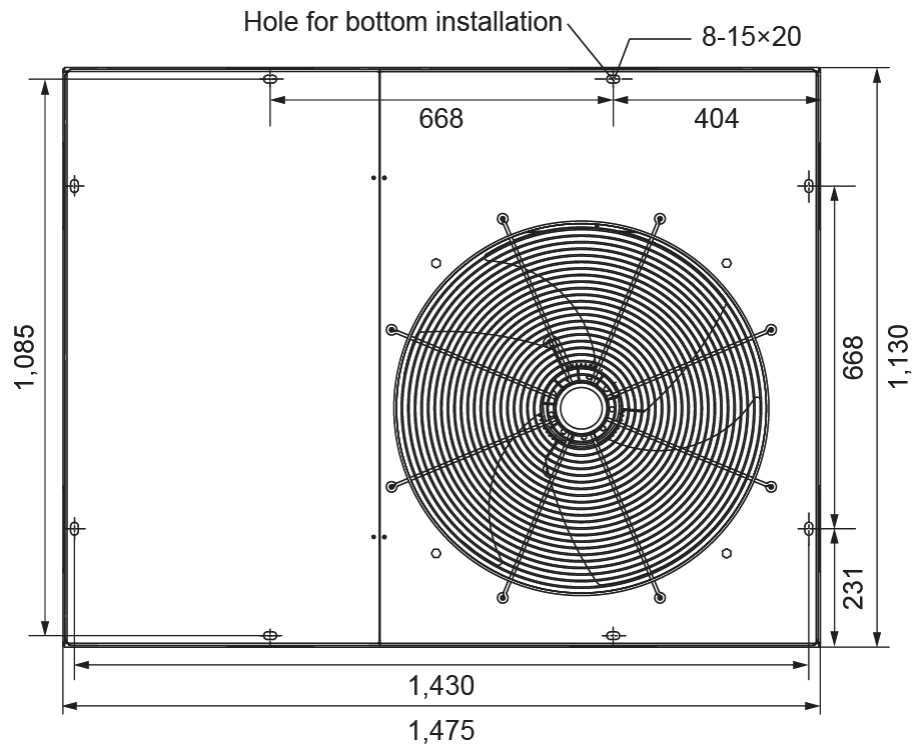
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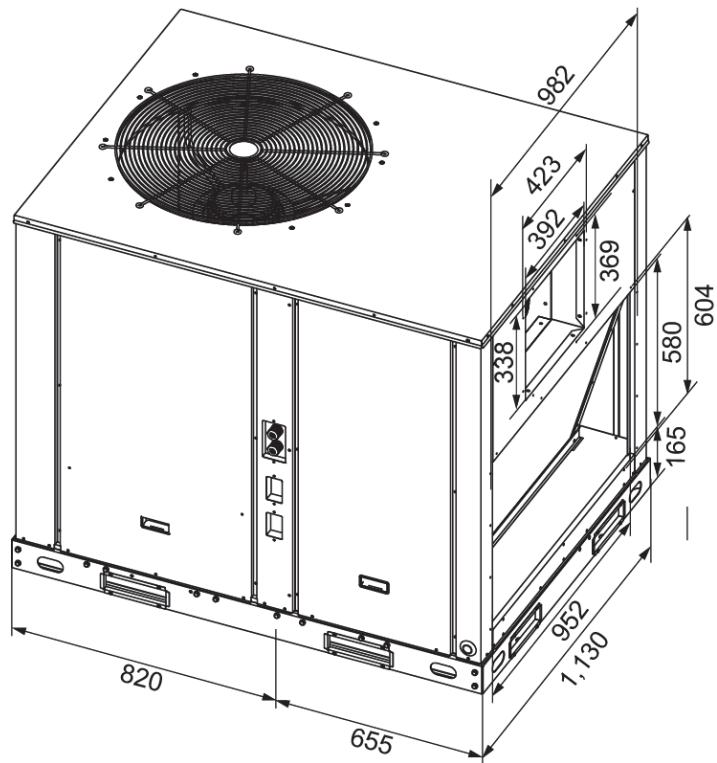
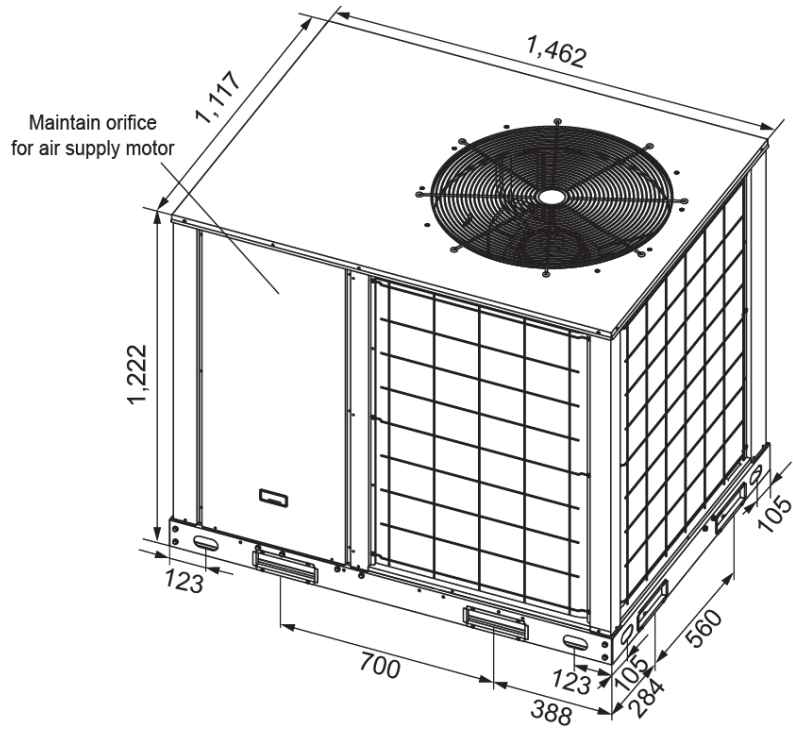


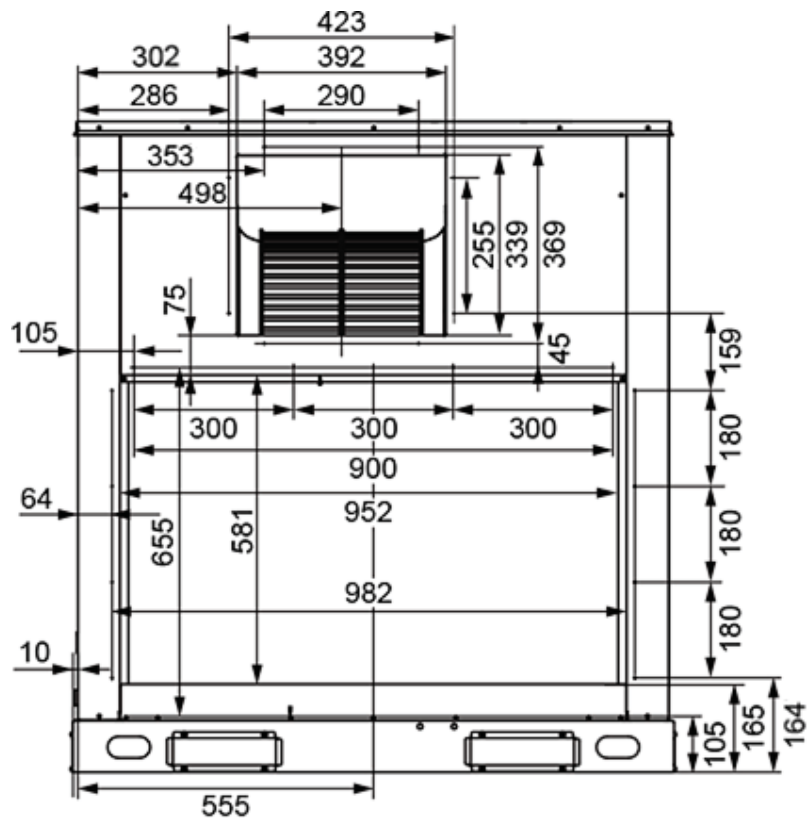
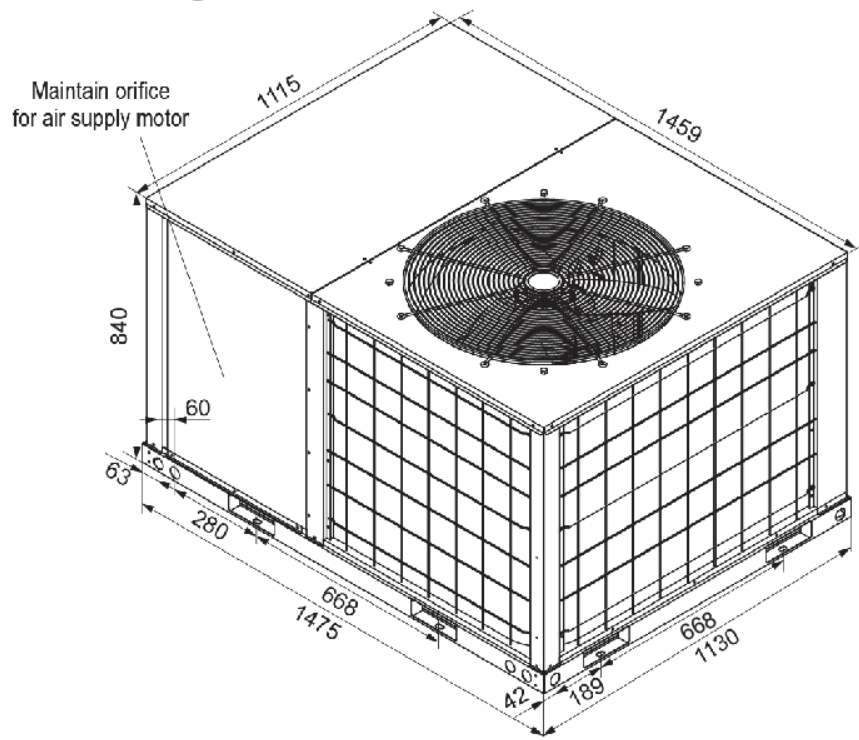
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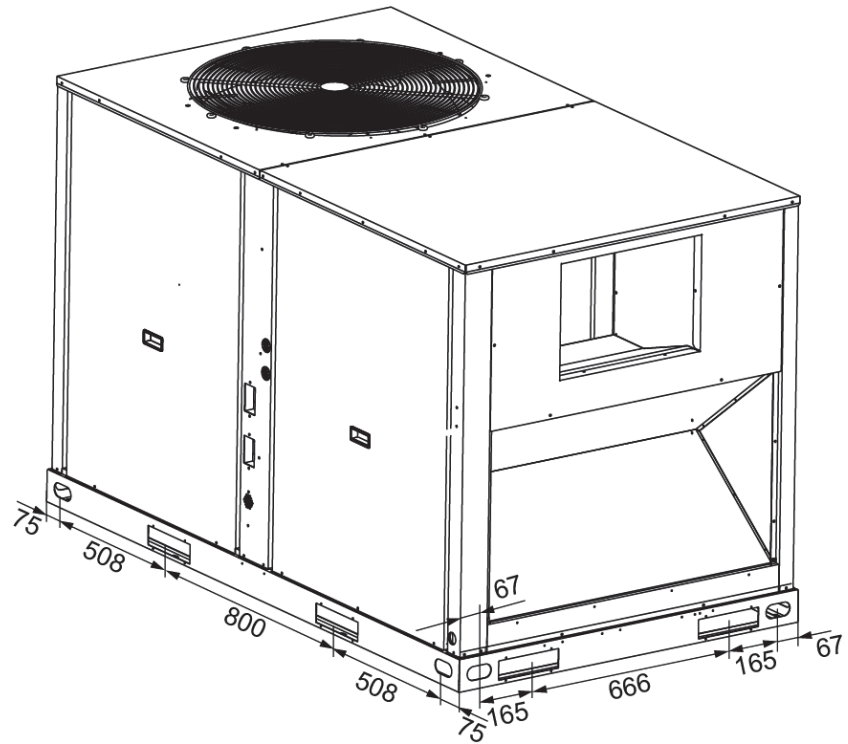
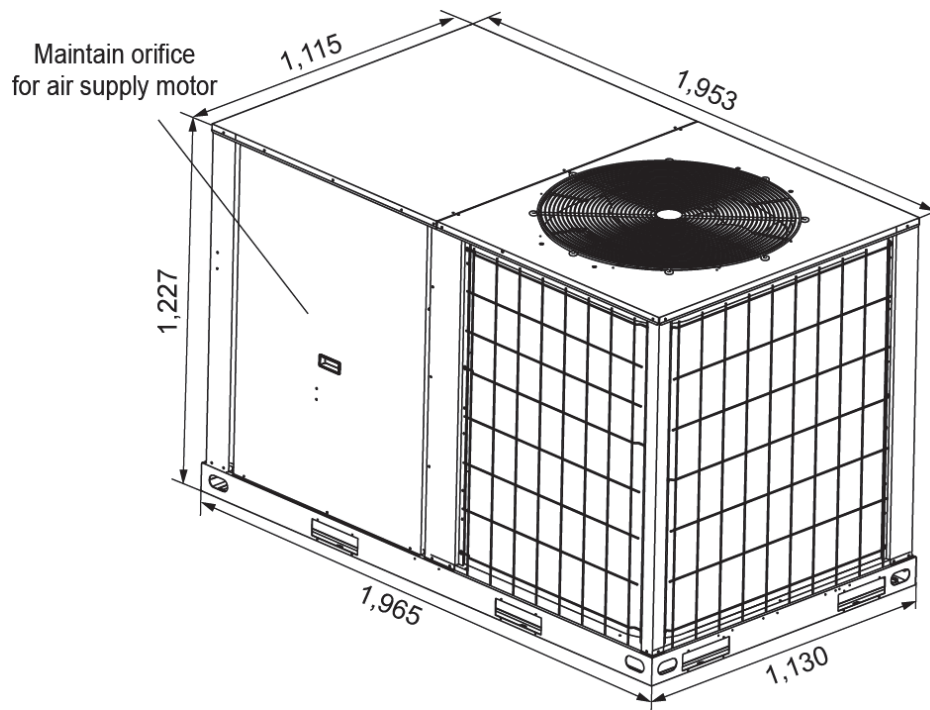


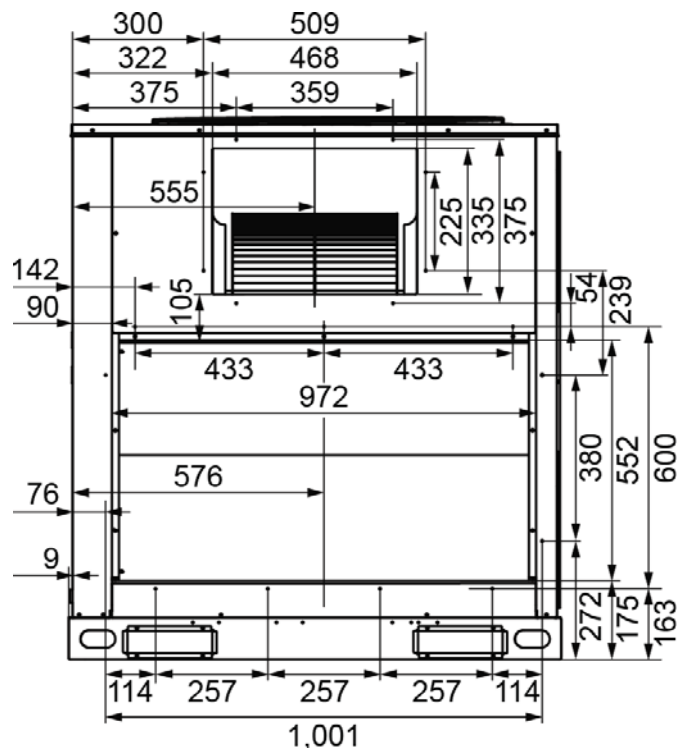
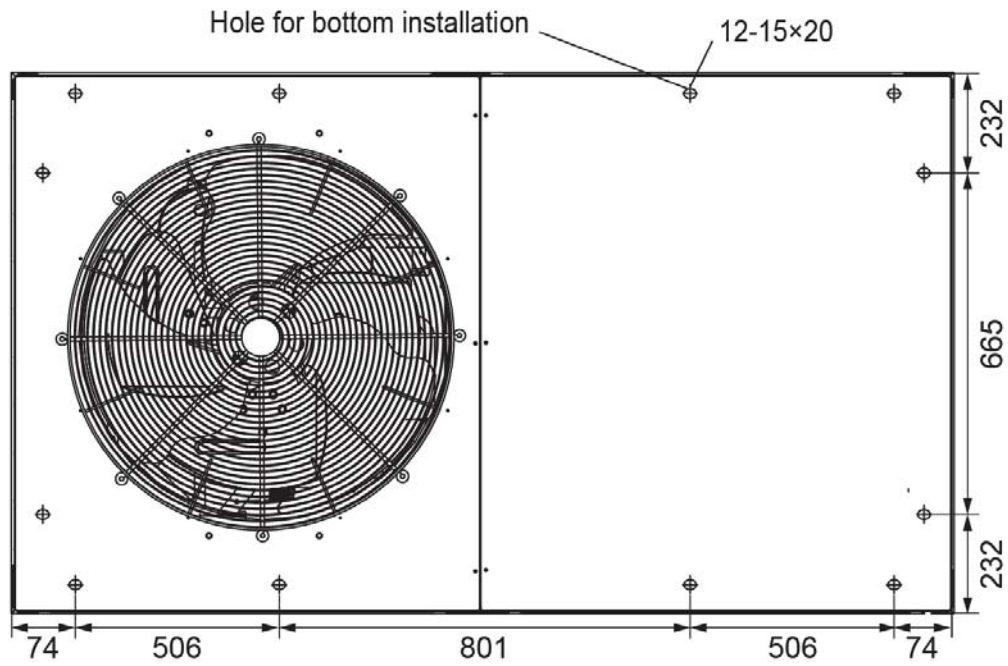
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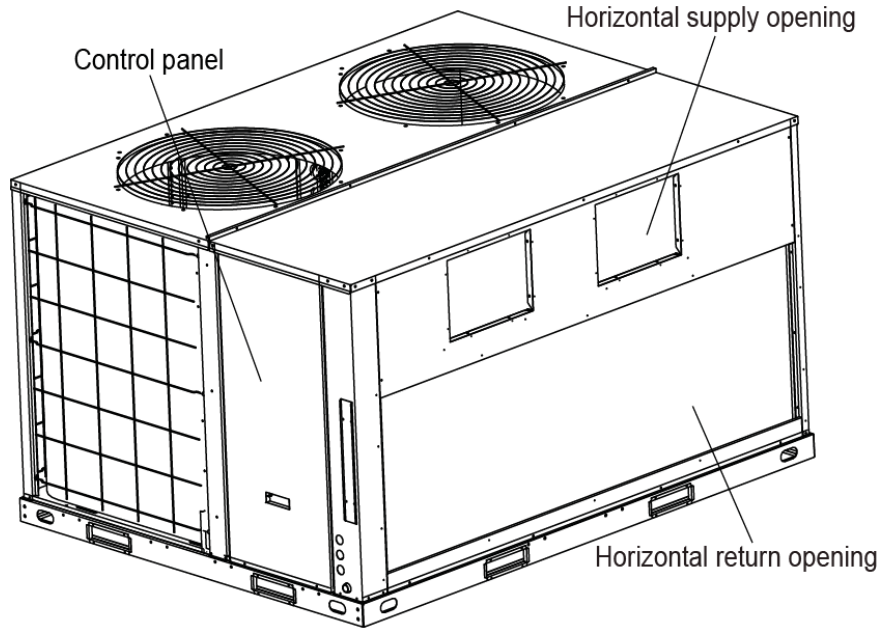
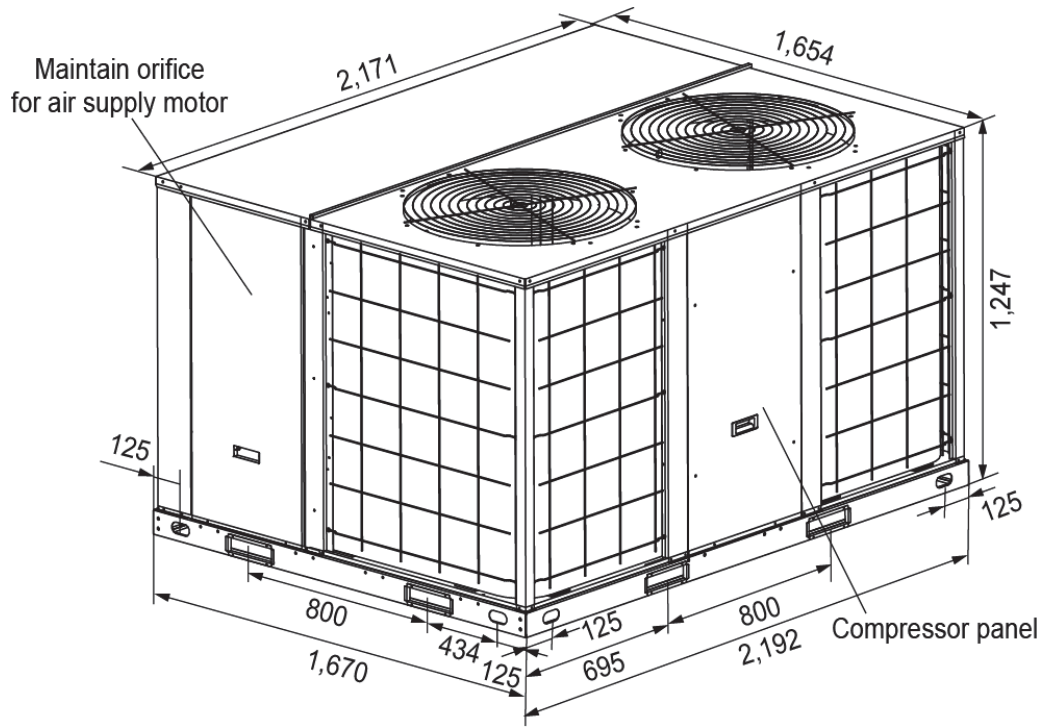


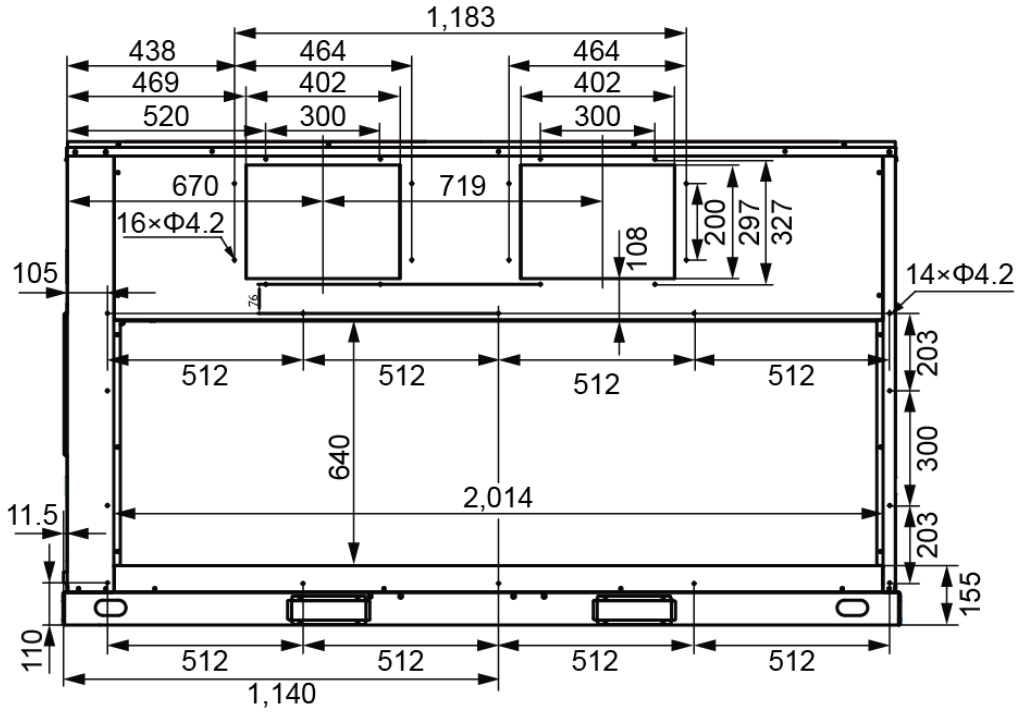
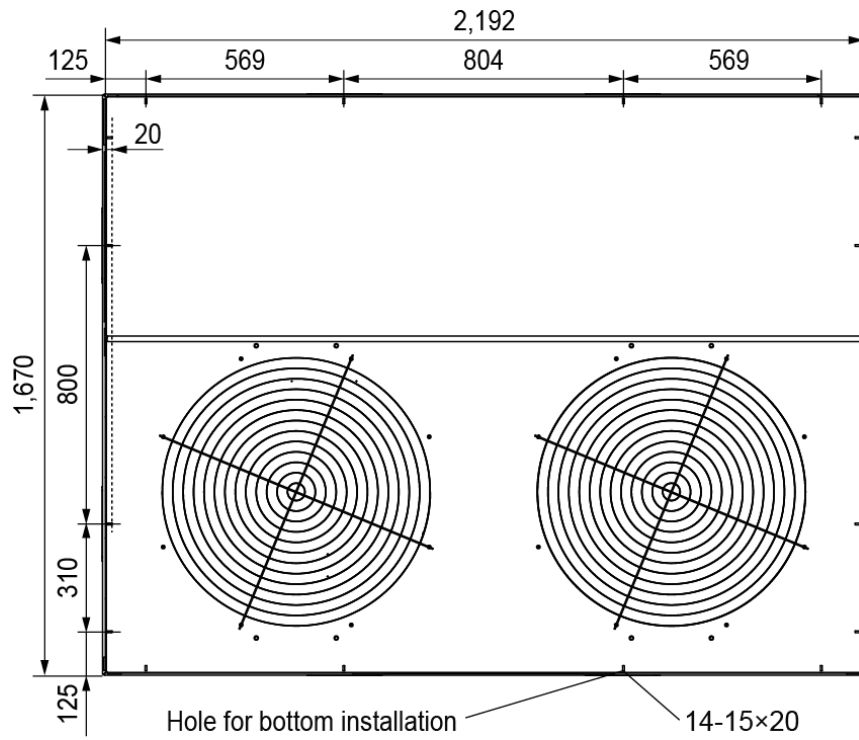
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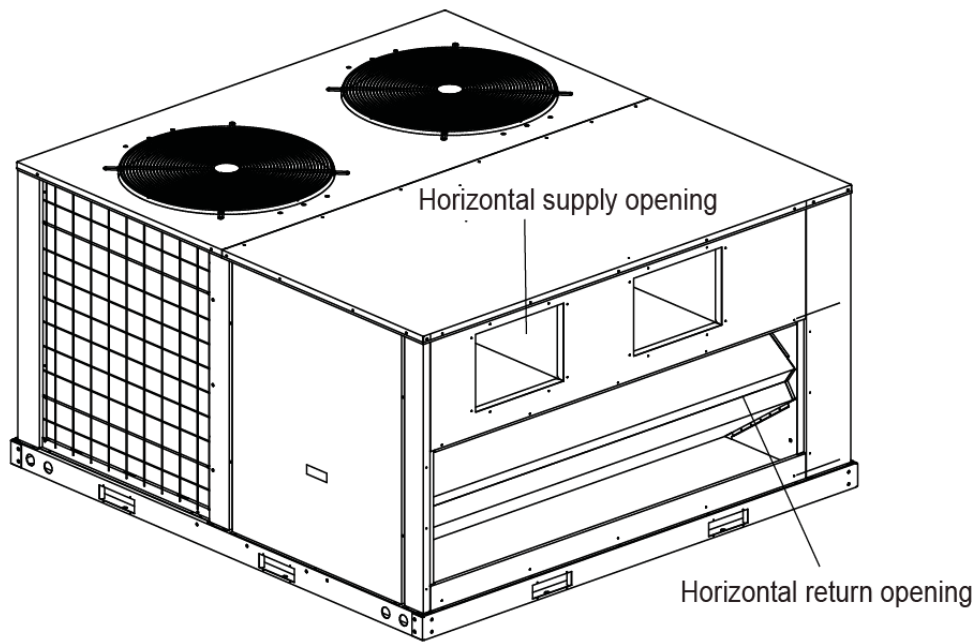
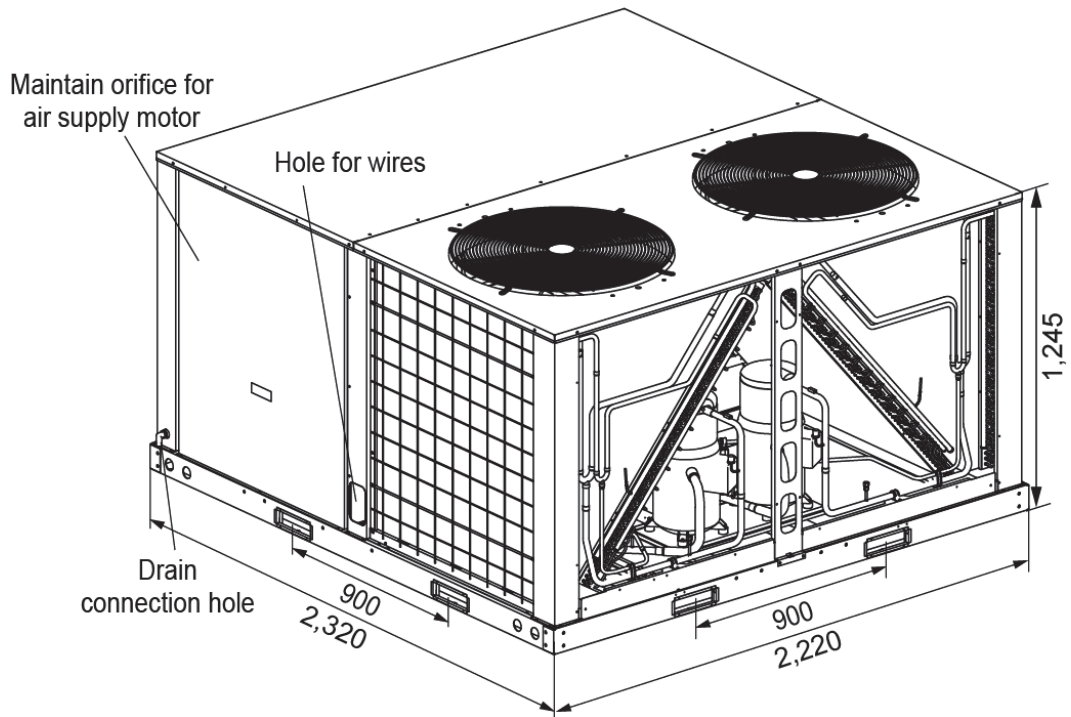


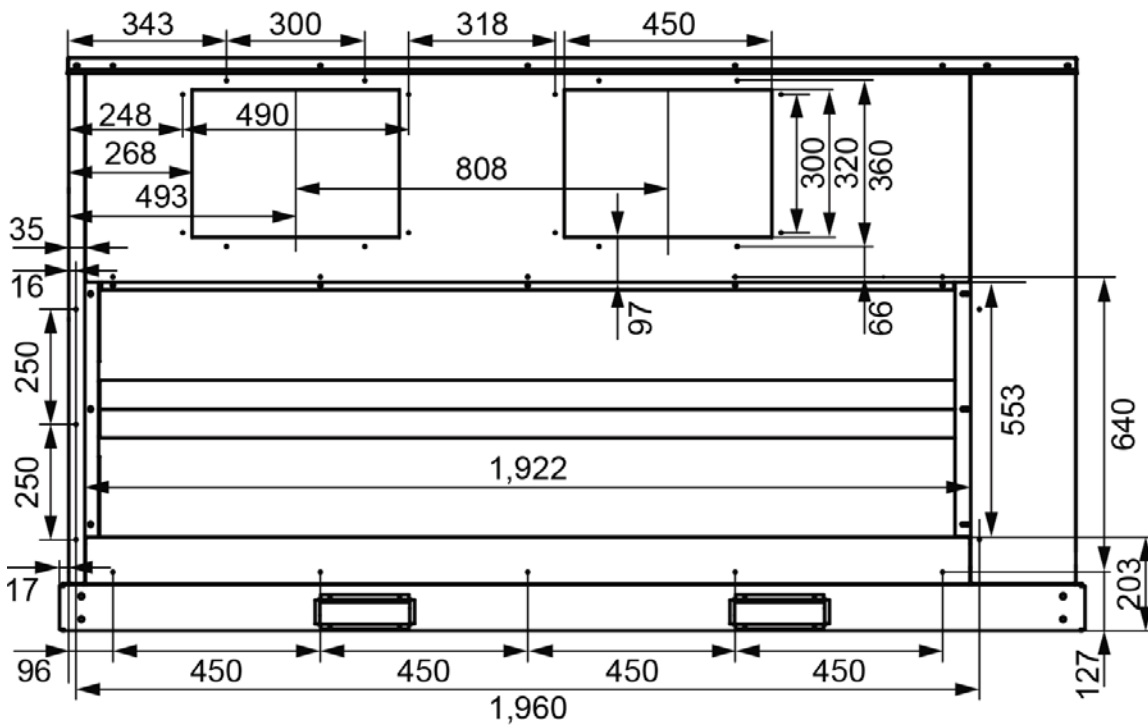
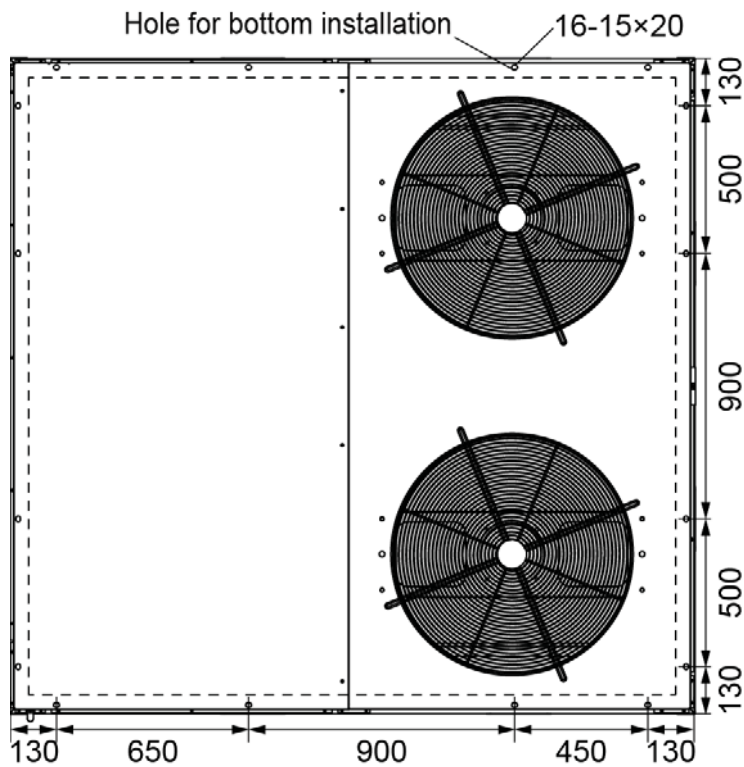
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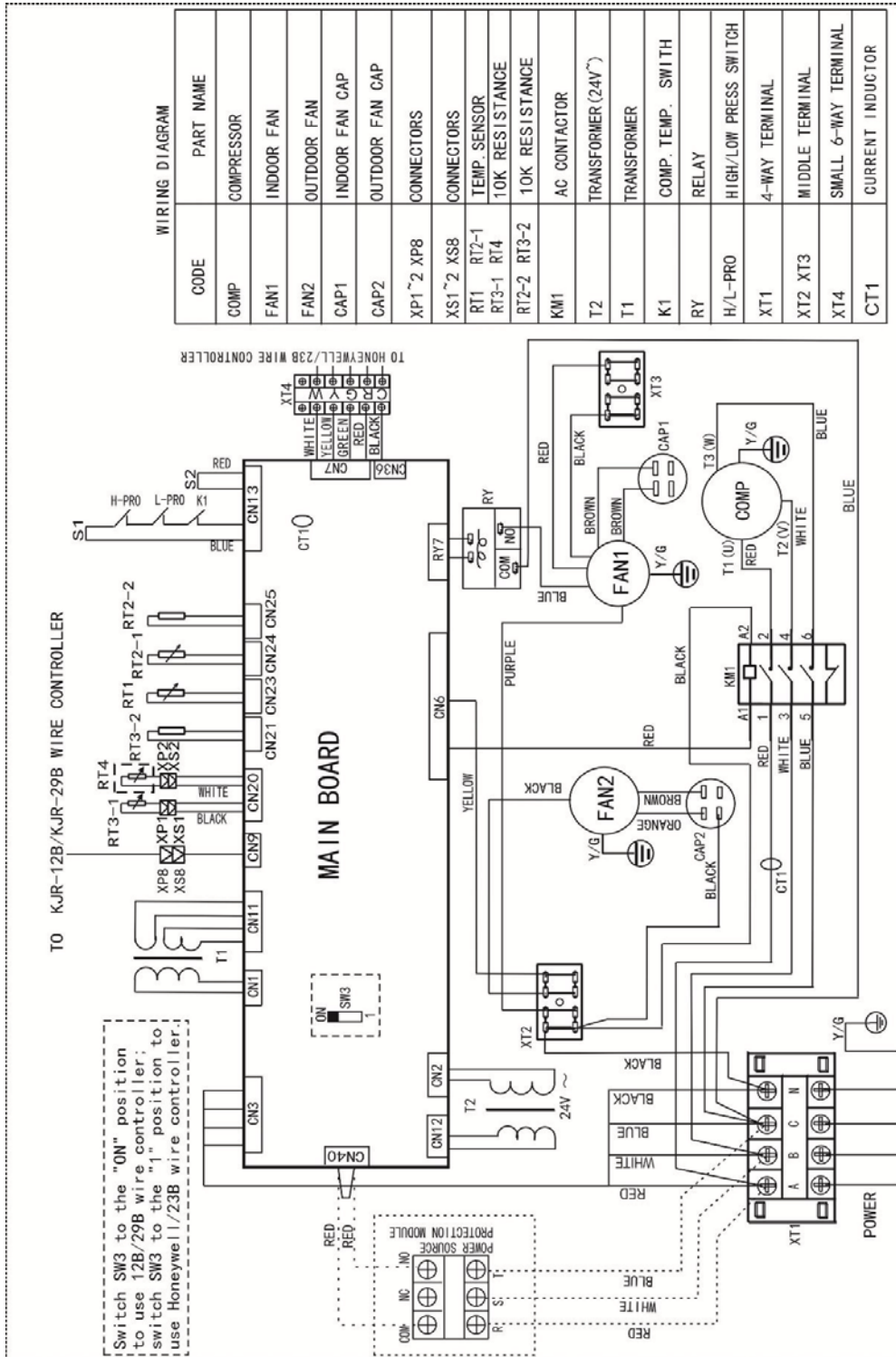
APRH300, 360C7A-D: (Unit: mm)



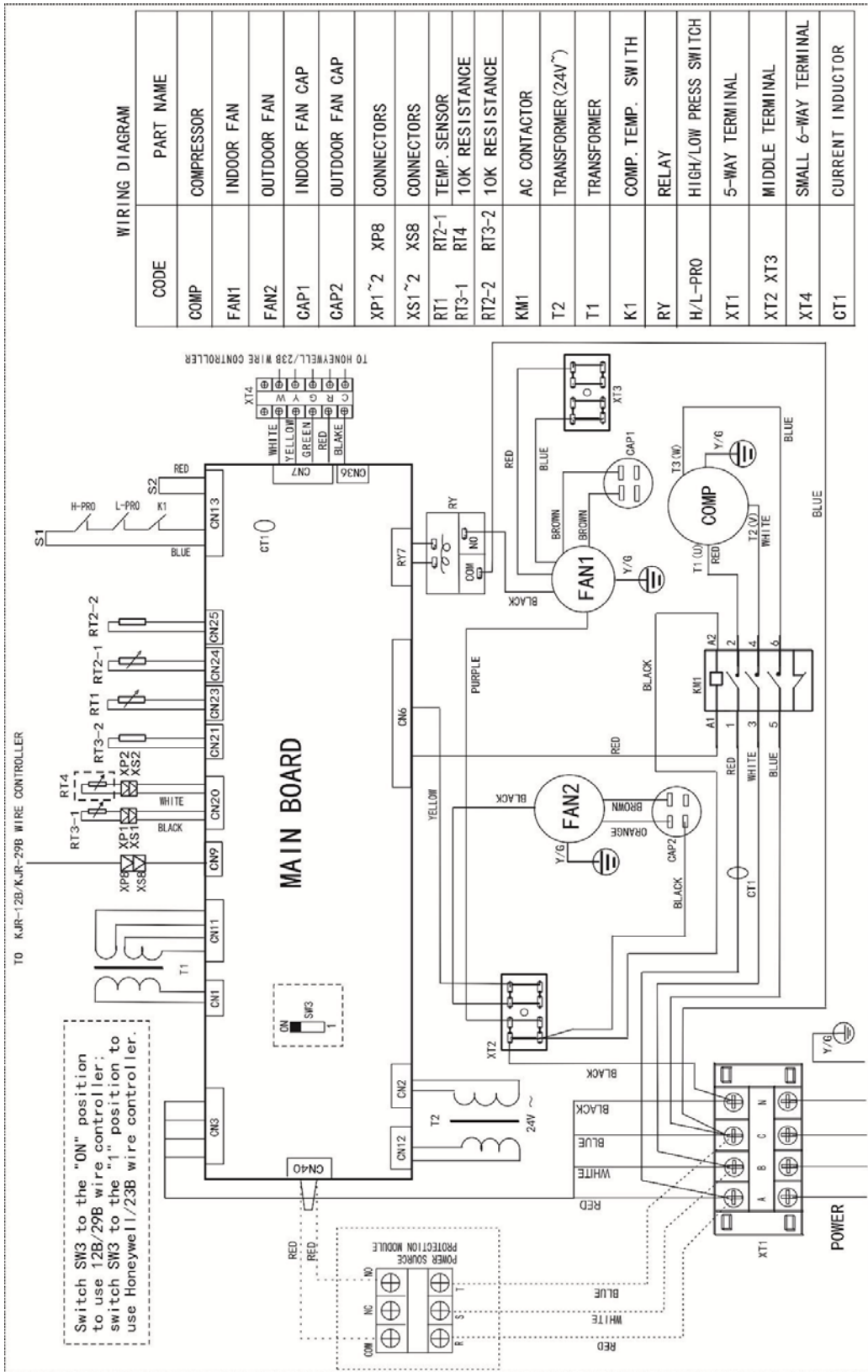


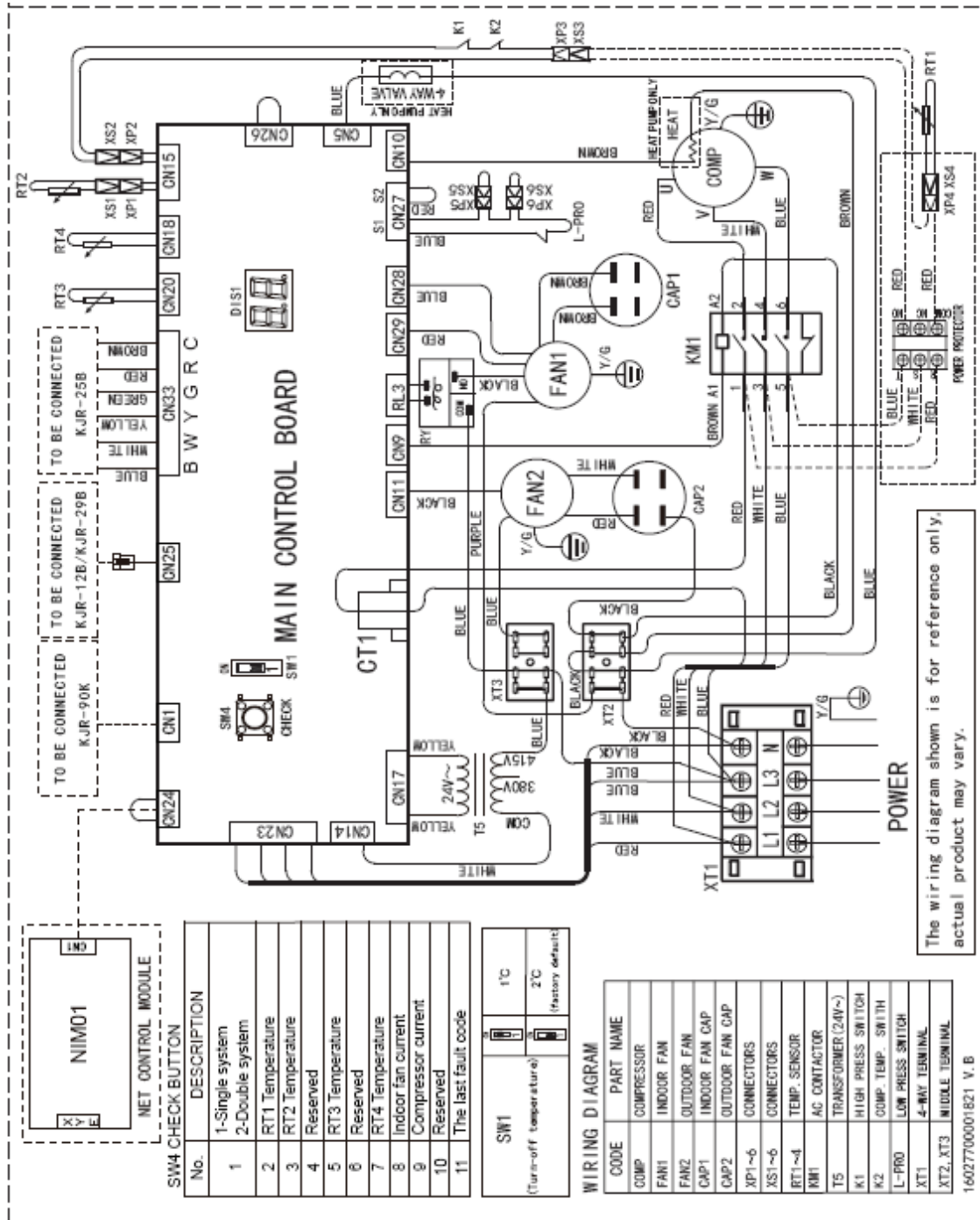
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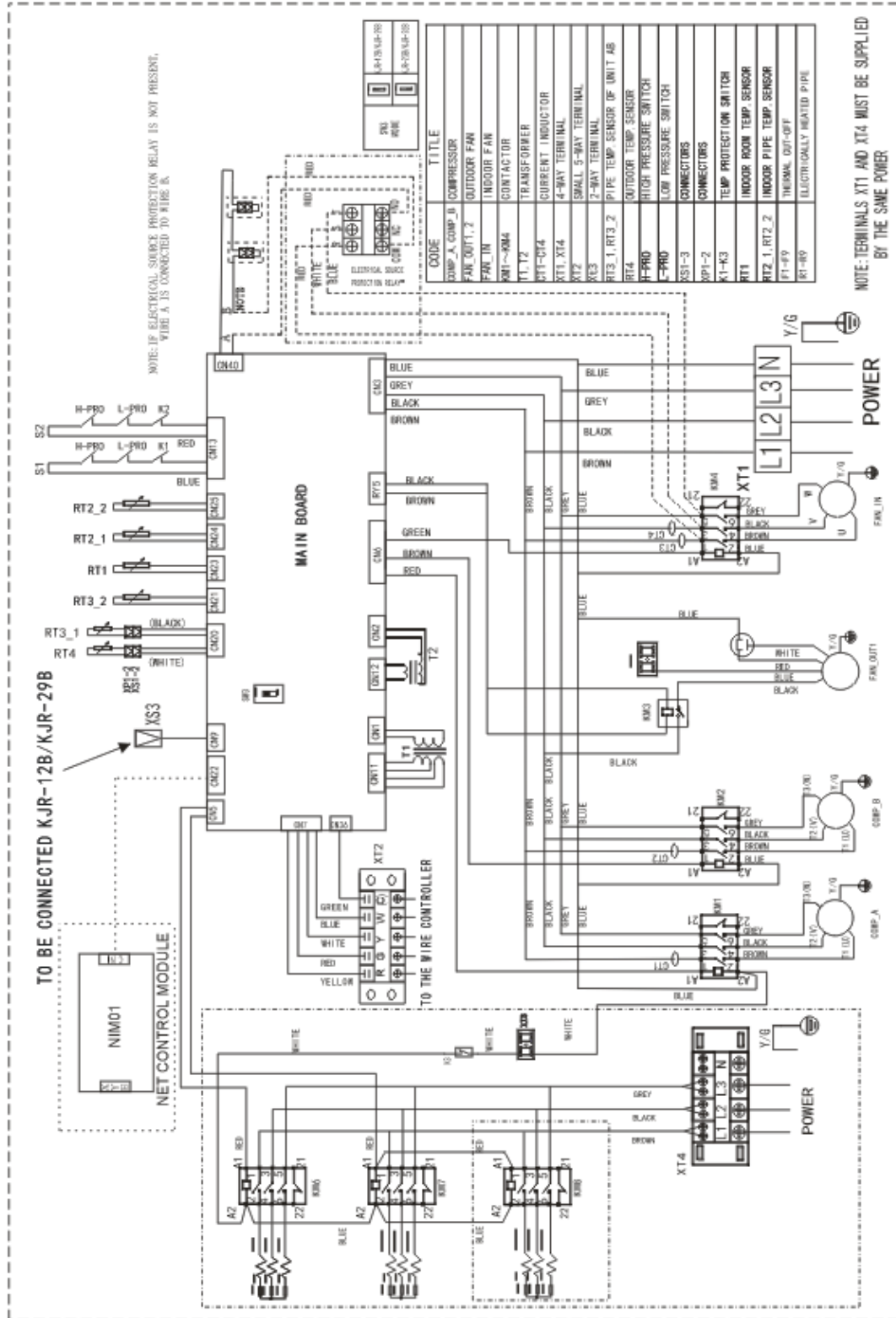
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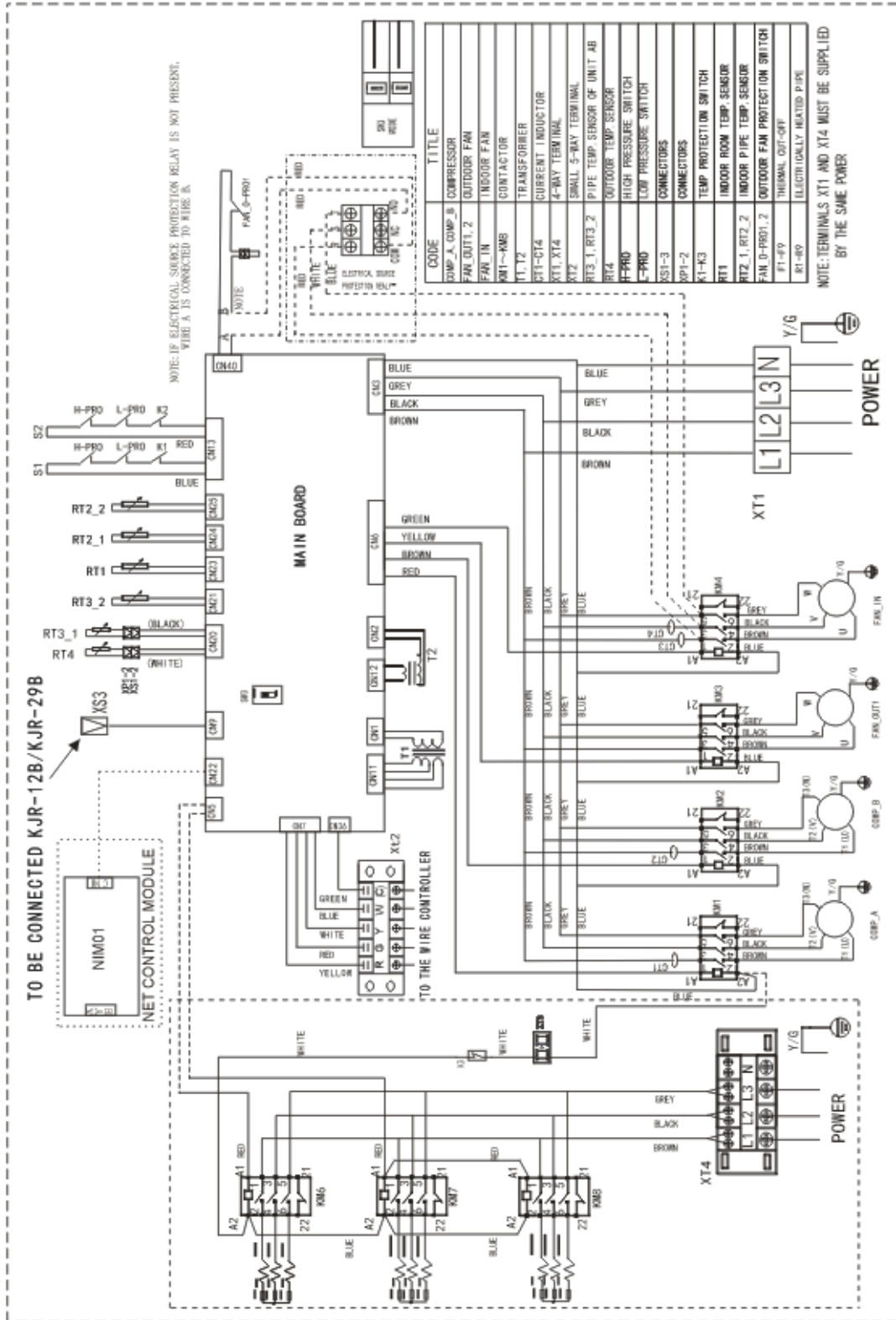


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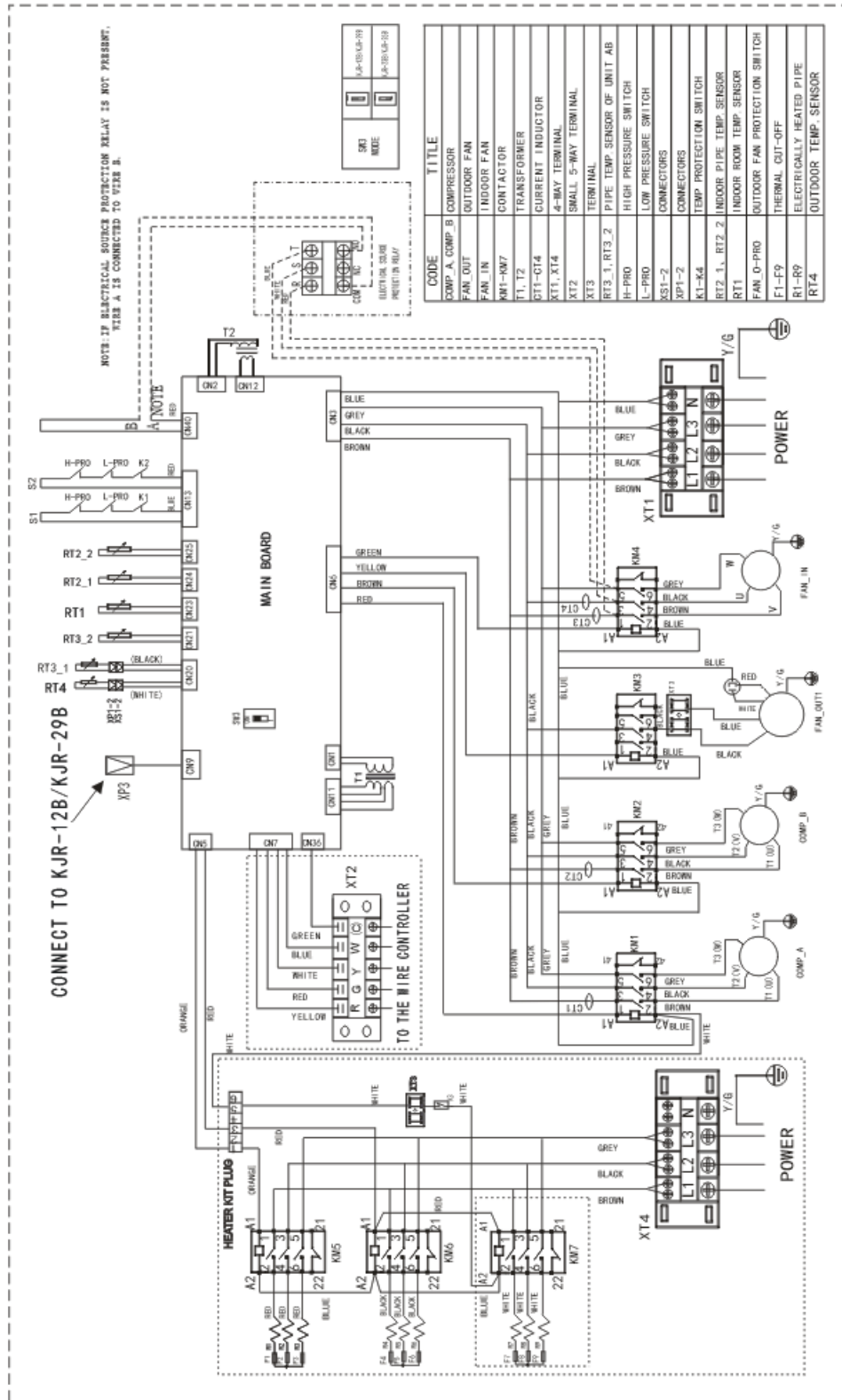


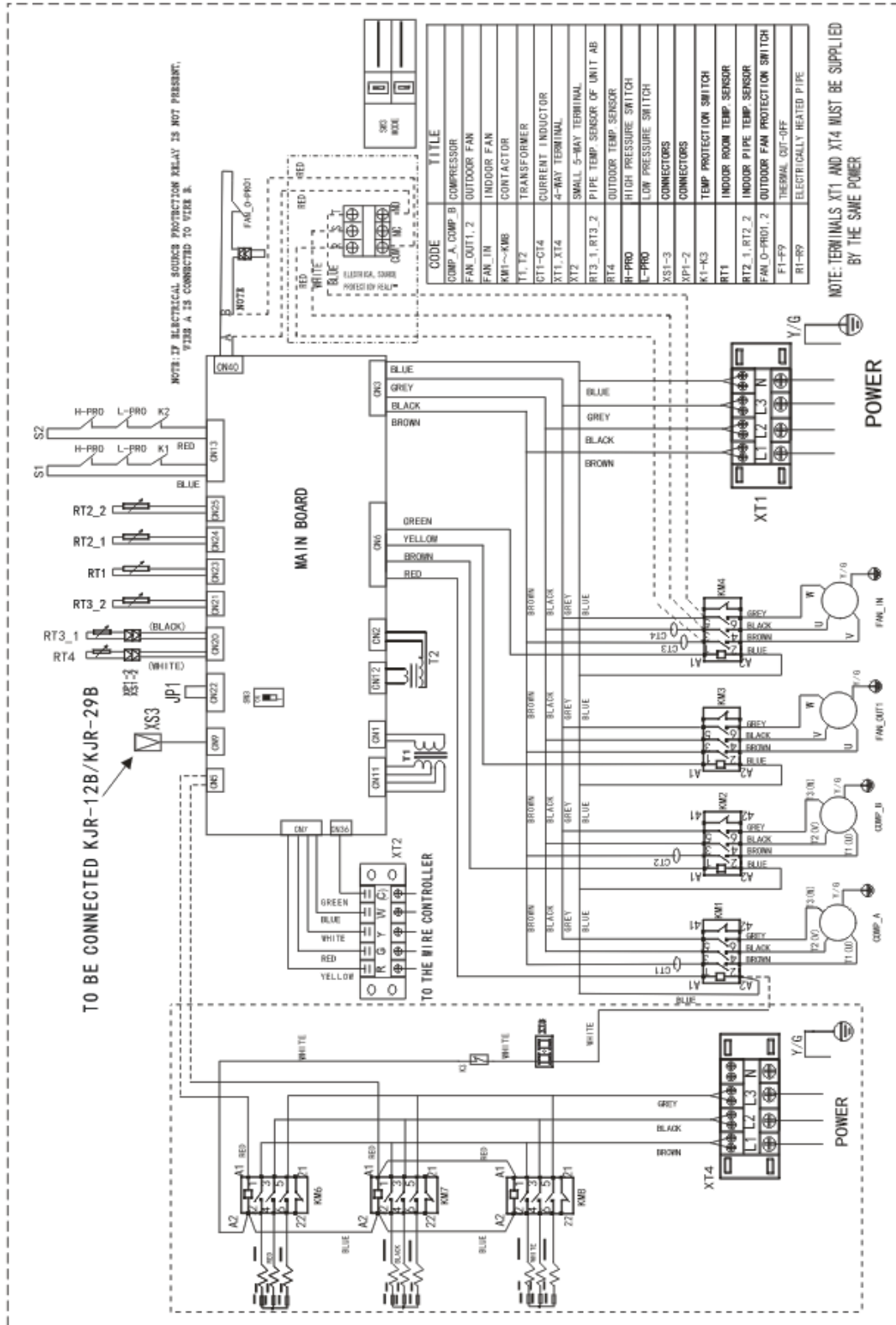


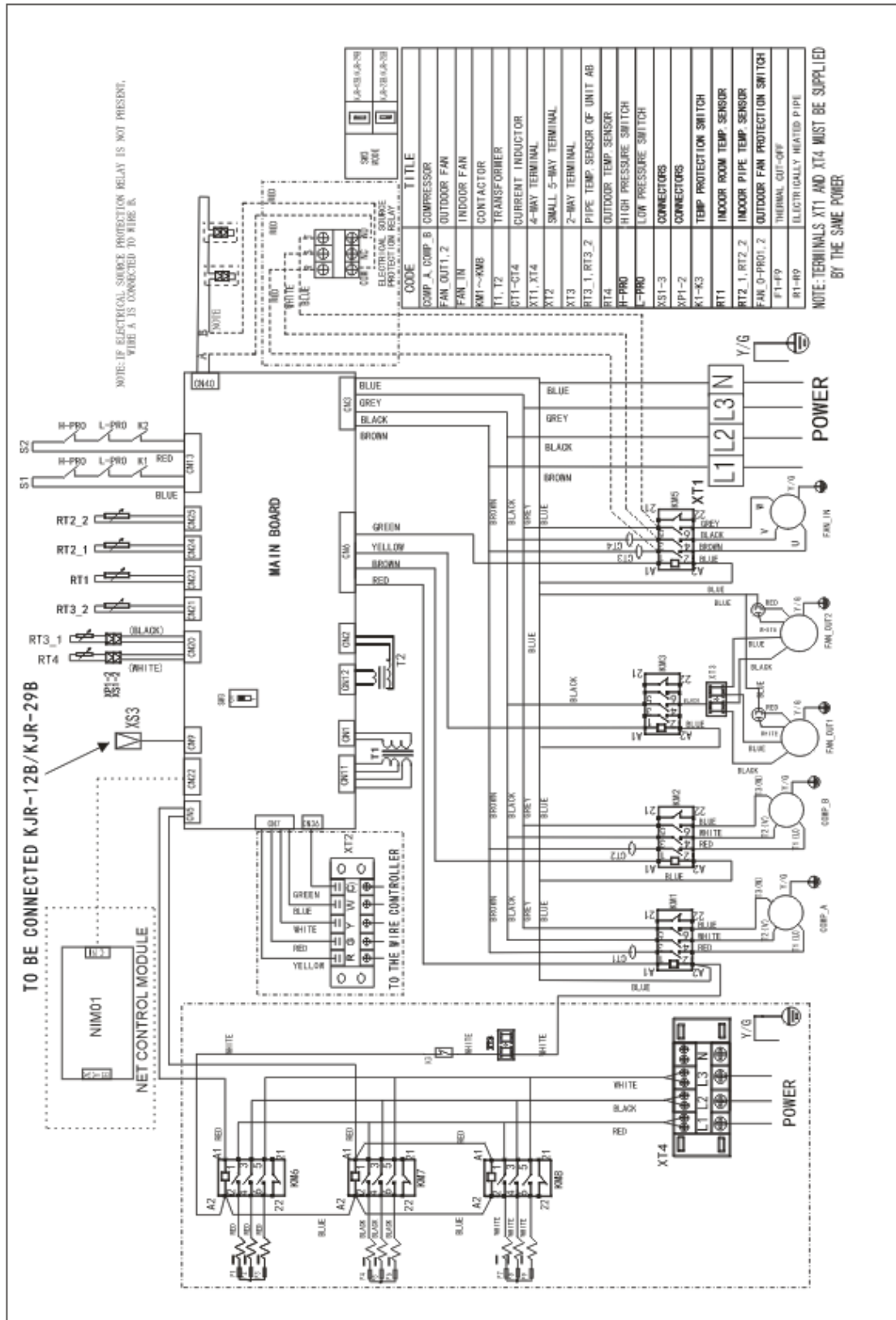


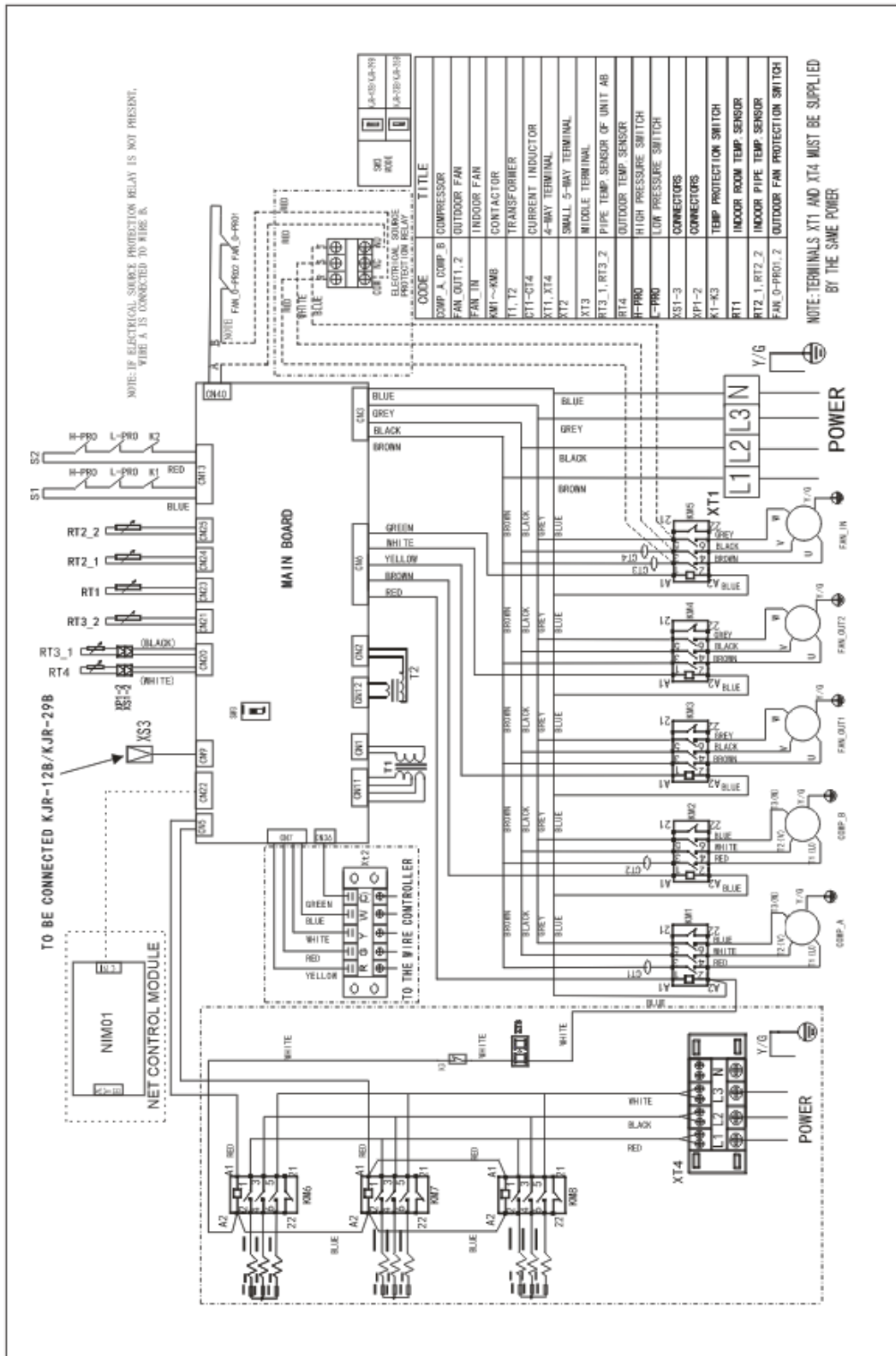


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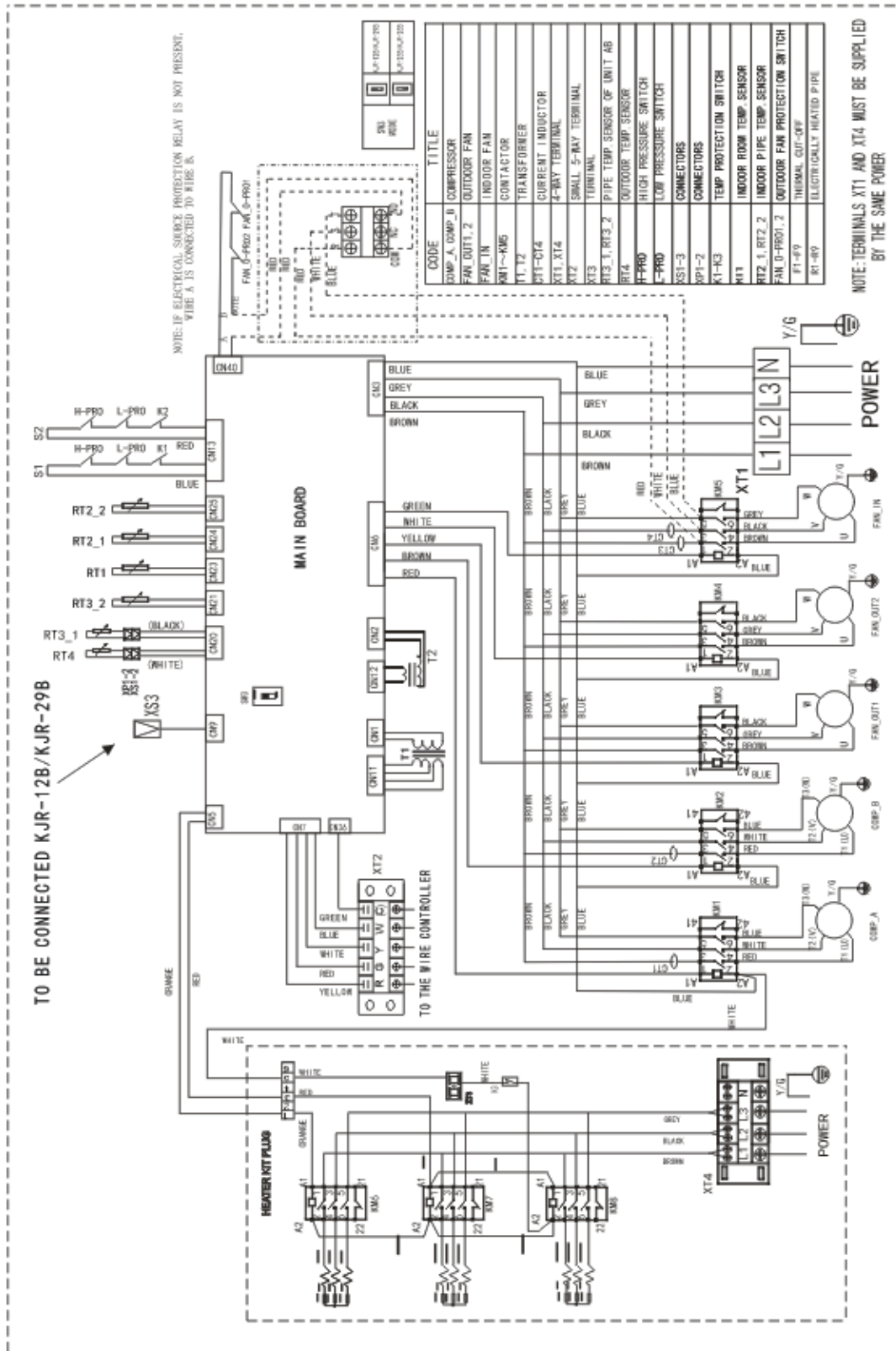








APRH300, 360C7A-D



5. Performance data

APRH048C7A-D

Cooling capacity:

Gross Cooling Capacity																			
Ambient DB(°C)		29.4									35								
Indoor	WB(°C)	16.1			19.4			22.8			16.1			19.4			22.8		
CFM	DB(°C)	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
1,263	23.9	40.6	35.2	3238.4	48.9	27.8	3703.0	51.6	17.6	4864.8	37.5	33.2	3254.3	42.4	25.9	3719.0	51.1	17.0	4880.7
	26.7	51.8	39.5	3358.8	50.3	35.2	3849.3	53.0	25.7	5032.0	38.6	36.6	3556.0	43.6	33.5	4046.6	52.5	25.2	5229.2
	29.4	42.9	42.4	3570.2	51.6	42.7	4215.2	54.5	32.0	5324.6	39.8	38.1	3727.2	44.9	41.2	4372.2	53.9	32.1	5481.6
	32.2	44.2	43.8	3810.9	53.0	50.0	4507.8	55.9	38.1	5654.0	40.9	40.2	3952.8	46.1	44.0	4649.7	55.3	39.2	5795.8
1,800	23.9	44.0	38.4	3480.3	49.7	29.2	3758.5	52.1	17.9	4895.0	39.2	35.0	3496.2	43.5	27.4	3774.4	51.4	17.3	4910.9
	26.7	45.2	41.8	3600.6	51.1	37.1	3904.8	53.5	27.0	5062.2	40.3	38.2	3797.8	48.0	37.2	4102.0	52.8	25.7	5259.4
	29.4	46.5	44.8	3822.2	52.5	44.9	4275.6	54.9	32.2	5354.8	41.5	40.2	3979.2	50.2	45.0	4432.6	54.2	33.2	5511.8
	32.2	47.8	46.6	4067.9	53.9	51.2	4568.2	56.3	39.7	5684.2	42.7	42.7	4209.8	51.2	47.9	4710.1	55.7	40.8	5826.1
2,252	23.9	45.4	41.2	3581.0	50.3	30.1	3798.8	52.2	18.2	4905.1	40.8	36.9	3536.5	46.5	29.1	3784.5	51.7	17.6	4951.3
	26.7	46.7	42.8	3706.4	51.6	38.2	3945.1	53.6	27.9	5072.3	42.0	39.3	3838.2	50.0	38.6	4112.1	53.1	26.2	5299.8
	29.4	48.0	44.9	3928.0	53.0	46.5	4315.9	55.0	32.8	5364.9	43.2	41.9	4019.5	51.3	47.6	4442.7	54.5	34.1	5552.1
	32.2	49.4	47.6	4178.8	54.5	53.5	4608.5	56.5	39.9	5699.3	44.4	43.9	4250.1	52.5	48.6	4725.2	55.9	42.0	5866.4

Notes:

1. All capacities are gross and have not considered indoor fan heat. To obtain net cooling capacity subtract indoor fan heat;
2. TC = Total Capacity (Unit: 1,000Btu/h); SC = Sensible Capacity (Unit: 1,000Btu/h).

APRH048C7A-D

Cooling capacity: (Continued)

Gross Cooling Capacity																			
Ambient DB(°C)		40.6									46.1								
Indoor	WB(°C)	16.1			19.4			22.8			16.1			19.4			22.8		
CFM	DB(°C)	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
1,263	23.9	32.9	30.4	3864.4	41.6	24.3	4067.4	49.3	16.0	5229.2	26.4	25.7	4474.4	36.4	20.2	4513.6	44.4	13.4	5577.7
	26.7	33.9	31.6	4117.2	42.8	31.9	4382.1	50.6	24.3	5564.7	27.3	26.6	4678.4	37.5	27.7	4717.6	45.7	21.0	5900.2
	29.4	35.0	33.4	4296.4	44.0	39.7	4707.7	52.1	32.9	5817.1	28.3	27.8	4865.6	38.7	34.7	5043.2	47.1	29.3	6152.6
	32.2	36.0	34.6	4532.1	45.3	43.9	4985.2	53.4	40.2	6131.3	29.3	29.2	5111.4	39.9	37.5	5320.7	48.4	37.8	6466.8
1,800	23.9	34.5	33.2	4033.2	42.9	25.9	4109.9	49.2	15.9	5246.4	27.8	25.2	4570.2	37.8	21.8	4545.4	41.1	13.4	5581.9
	26.7	35.6	34.2	4286.0	44.1	34.4	4437.5	50.6	24.9	5594.9	28.7	28.0	4774.1	39.0	30.1	4773.0	42.3	20.2	5930.4
	29.4	36.7	36.4	4472.8	45.4	43.2	4768.1	51.9	33.7	5847.3	29.7	28.8	4966.4	40.1	36.6	5103.6	43.5	30.0	6182.8
	32.2	37.8	37.8	4711.0	46.7	46.4	5045.6	53.3	41.3	6161.6	30.7	29.9	5212.2	41.3	38.9	5381.1	44.8	38.1	6497.1
2,252	23.9	36.0	35.7	4118.8	44.0	27.4	4120.0	50.3	16.7	5286.8	29.6	28.7	4701.2	39.0	23.4	4455.5	45.9	14.2	5622.3
	26.7	37.1	36.6	4374.2	45.3	36.8	4447.6	51.6	26.2	5635.3	30.6	29.8	4910.2	40.1	32.4	4783.1	47.3	23.4	5970.8
	29.4	38.2	37.6	4561.0	46.5	46.5	4778.2	53.0	34.8	5887.6	31.6	31.1	5102.4	41.3	35.8	5113.7	48.6	32.5	6223.1
	32.2	39.3	39.2	4801.7	47.8	47.7	5060.7	54.5	42.7	6201.9	32.6	32.5	5353.2	42.6	40.5	5396.2	50.0	41.4	6537.4

Notes:

1. All capacities are gross and have not considered indoor fan heat. To obtain net cooling capacity subtract indoor fan heat;
2. TC = Total Capacity (Unit: 1,000Btu/h); SC = Sensible Capacity (Unit: 1,000Btu/h).

APRH048C7A-D

Cooling capacity: (Continued)

Gross Cooling Capacity																			
Ambient DB(°C)		48									51.7								
Indoor	WB(°C)	16.1			19.4			22.8			16.1			19.4			22.8		
CFM	DB(°C)	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
1,263	23.9	24.9	24.2	4032.3	34.8	19.9	4497.0	42.9	12.1	5658.7	22.6	22.0	4498.0	30.0	17.5	4962.6	39.1	11.5	6124.4
	26.7	25.8	25.1	4334.0	35.9	27.4	4824.6	44.2	19.7	6007.2	23.5	22.9	4747.1	31.0	24.1	5237.7	40.3	18.4	6420.3
	29.4	26.8	26.3	4505.2	37.0	34.4	5150.2	45.6	27.9	6259.6	24.3	23.9	5110.6	32.0	30.3	5755.5	41.6	25.7	6864.9
	32.2	27.8	27.7	4730.8	38.2	37.2	5427.7	46.9	36.4	6573.8	25.2	25.1	5322.2	33.1	32.8	6019.0	42.8	33.4	7165.2
1,800	23.9	26.3	23.7	4274.2	36.1	21.5	4552.4	39.6	12.2	5688.9	23.9	21.6	4859.1	31.2	18.9	5137.3	40.4	11.6	6273.8
	26.7	27.2	26.5	4575.8	36.9	29.4	4880.0	40.8	18.9	6037.4	24.7	24.1	5098.5	32.2	26.2	5402.6	41.6	19.3	6560.1
	29.4	28.2	27.3	4757.2	38.4	36.2	5210.6	42.0	28.6	6289.8	25.6	24.8	5493.6	33.2	32.0	5947.0	42.8	26.3	7026.2
	32.2	29.2	28.4	4987.8	39.6	38.5	5488.1	43.3	36.6	6604.1	26.5	25.8	5709.4	34.3	34.0	6209.7	44.0	33.5	7325.7
2,252	23.9	28.1	27.2	4314.5	37.3	23.0	4562.5	44.4	12.9	5729.3	25.5	24.7	4997.6	32.2	20.3	5245.6	42.0	12.3	6412.3
	26.7	29.1	28.3	4616.2	38.4	32.1	4890.1	45.8	22.1	6077.8	26.4	25.8	5256.4	33.3	28.3	5530.3	43.3	20.5	6718.0
	29.4	30.1	29.6	4797.5	39.6	36.4	5220.7	47.1	31.1	6330.1	27.3	26.9	5643.5	34.3	34.0	6066.7	44.6	28.6	7176.1
	32.2	31.1	31.0	5028.1	40.8	40.1	5503.2	48.5	39.9	6644.4	28.3	28.2	5858.7	35.4	35.5	6333.8	45.9	36.5	7474.9

Notes:

1. All capacities are gross and have not considered indoor fan heat. To obtain net cooling capacity subtract indoor fan heat;
2. TC = Total Capacity (Unit: 1,000Btu/h); SC = Sensible Capacity (Unit: 1,000Btu/h).

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Cooling capacity:

Gross Cooling Capacity																			
Ambient DB(°C)		29.4									35								
Indoor	WB(°C)	16.1			19.4			22.8			16.1			19.4			22.8		
CFM	DB(°C)	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
1,362	23.9	48.2	42.1	3873.7	58.6	33.0	4429.5	61.8	20.9	5819.1	44.9	39.4	4600.5	50.8	30.8	4784.3	61.2	20.1	6229.3
	26.7	49.6	47.3	4017.7	60.2	41.9	4604.5	63.5	30.5	6019.1	46.3	43.4	4756.5	52.3	39.8	4955.3	62.8	29.9	6479.3
	29.4	51.0	50.7	4270.6	61.8	50.7	5042.1	65.2	38.0	6369.1	47.6	45.3	5115.5	53.8	49.0	5320.3	64.5	38.1	6987.0
	32.2	52.4	52.4	4558.6	63.5	59.3	5392.1	66.9	45.2	6763.1	49.0	47.7	5409.5	55.2	52.3	5664.3	66.2	46.5	7387.0
2,000	23.9	52.3	46.0	4163.0	59.5	34.7	4495.8	62.3	21.3	5855.3	46.9	41.6	4657.5	52.1	32.5	4836.7	61.6	20.5	6259.4
	26.7	53.7	49.9	4307.0	61.2	44.0	4670.8	64.0	32.0	6055.3	48.3	45.4	4766.1	58.0	44.4	4986.2	63.3	30.6	6509.4
	29.4	55.2	53.6	4572.0	62.8	53.3	5114.4	65.7	38.3	6405.3	49.7	47.8	5266.2	60.1	53.5	5445.4	65.0	39.4	7017.1
	32.2	56.8	55.8	4865.9	64.5	60.9	5464.4	67.4	47.1	6799.3	51.2	50.7	5566.2	61.3	56.9	5786.2	66.7	48.5	7417.1
2,172	23.9	54.0	49.3	4283.5	60.2	35.7	4544.0	62.5	21.6	5867.3	48.9	43.8	4960.8	55.7	34.6	4902.9	61.9	20.9	6283.5
	26.7	55.5	51.2	4433.5	61.8	45.4	4719.0	64.2	33.1	6067.3	50.3	46.7	5145.8	59.9	45.9	5134.0	63.6	31.2	6533.5
	29.4	57.0	53.8	4698.5	63.5	55.3	5162.6	65.9	39.0	6417.3	51.8	49.7	5410.8	61.4	56.6	5538.2	65.3	40.5	7041.3
	32.2	58.6	57.0	4998.5	65.2	63.5	5512.6	67.7	47.4	6817.3	53.2	52.1	5710.8	62.8	57.7	5897.7	67.0	49.8	7441.3

Notes:

1. All capacities are gross and have not considered indoor fan heat. To obtain net cooling capacity subtract indoor fan heat;
2. TC = Total Capacity (Unit: 1,000Btu/h); SC = Sensible Capacity (Unit: 1,000Btu/h).

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Cooling capacity: (Continued)

Gross Cooling Capacity																			
Ambient DB(°C)		40.6									46.1								
Indoor	WB(°C)	16.1			19.4			22.8			16.1			19.4			22.8		
CFM	DB(°C)	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
1,362	23.9	39.4	36.1	4765.2	49.8	28.8	4949.0	59.0	19.0	6856.9	35.3	30.5	5194.9	45.0	24.0	5482.6	56.9	15.9	6942.5
	26.7	40.6	37.5	4994.2	51.3	37.9	5193.0	60.6	28.8	7136.9	36.4	31.6	5438.9	46.3	32.9	5751.5	58.4	24.9	7236.5
	29.4	41.9	39.6	5371.8	52.7	47.2	5576.6	62.3	39.1	7744.7	37.5	33.0	5662.8	47.6	41.2	6135.2	60.1	34.8	7844.2
	32.2	43.1	41.1	5665.7	54.2	52.1	5920.6	63.9	47.7	8138.6	38.7	34.6	5956.8	49.0	44.5	6479.1	61.7	44.9	8244.2
2,000	23.9	41.4	39.4	4903.8	51.4	30.8	5063.5	59.0	18.9	6850.9	37.0	29.9	5309.4	46.5	25.9	5591.1	52.9	15.9	6653.2
	26.7	42.6	40.6	5138.8	52.9	40.9	5307.5	60.6	29.6	7130.9	38.1	33.2	5553.4	47.9	35.7	5866.1	54.3	24.1	6941.2
	29.4	43.9	43.2	5516.4	54.4	51.3	5697.1	62.2	40.0	7732.6	39.2	34.2	5783.4	49.2	43.4	6249.7	55.8	35.6	7542.9
	32.2	45.2	44.9	5816.4	55.9	55.1	6041.1	63.9	49.1	8132.6	40.4	35.5	6077.3	50.6	46.1	6593.6	57.3	45.2	7936.9
2,172	23.9	43.1	42.4	5030.4	52.7	32.6	5153.9	60.2	19.9	6941.3	39.2	34.0	5466.1	47.9	27.7	5687.5	58.7	16.8	7069.1
	26.7	44.4	43.5	5265.4	54.2	43.7	5403.9	61.8	31.1	7221.3	40.3	35.4	5716.1	49.2	38.5	5962.5	60.3	27.8	7369.1
	29.4	45.8	44.7	5649.0	55.7	55.2	5787.5	63.5	41.3	7829.0	41.5	36.9	5946.1	50.6	42.5	6346.1	61.9	38.6	7976.8
	32.2	47.1	46.6	5949.0	57.3	56.7	6137.5	65.2	50.7	8229.0	42.8	38.6	6246.1	52.0	48.1	6696.1	63.5	49.1	8376.8

Notes:

1. All capacities are gross and have not considered indoor fan heat. To obtain net cooling capacity subtract indoor fan heat;
2. TC = Total Capacity (Unit: 1,000Btu/h); SC = Sensible Capacity (Unit: 1,000Btu/h).

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Cooling capacity: (Continued)

Gross Cooling Capacity																			
Ambient DB(°C)		48									51.7								
Indoor	WB(°C)	16.1			19.4			22.8			16.1			19.4			22.8		
CFM	DB(°C)	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
1,362	23.9	32.2	28.7	5642.2	43.2	23.7	5635.5	53.7	14.4	7615.0	27.1	26.1	4845.3	36.0	20.8	5266.5	46.9	13.7	7325.8
	26.7	33.3	29.9	5886.2	44.5	32.5	5904.5	55.3	23.4	7959.0	28.1	27.2	5081.1	37.2	28.6	5522.3	48.3	21.8	7679.8
	29.4	34.4	31.2	6230.1	45.8	40.9	6297.0	56.9	33.1	8566.7	29.1	28.4	5365.5	38.3	36.0	5878.9	49.8	30.5	8211.7
	32.2	35.5	32.8	6524.1	47.2	44.1	6642.0	58.5	43.2	8966.7	30.2	29.8	5626.4	39.6	39.0	6181.9	51.2	39.6	8570.8
2,000	23.9	33.8	28.2	5756.7	44.7	25.6	5744.0	49.7	14.5	7325.7	28.6	25.6	5015.4	37.3	22.4	5395.1	48.4	13.8	7504.6
	26.7	34.9	31.4	6000.7	45.6	35.0	6019.0	51.1	22.5	7663.7	29.6	28.6	5246.7	38.6	31.1	5643.9	49.8	22.9	7848.9
	29.4	36.0	32.5	6350.7	47.4	43.0	6411.5	52.6	33.9	8265.4	30.6	29.5	5535.9	39.8	37.9	6017.1	51.3	31.2	8404.6
	32.2	37.2	33.7	6644.6	48.8	45.7	6756.6	54.2	43.5	8659.4	31.7	30.6	5796.4	41.0	40.4	6320.4	52.7	39.8	8762.8
2,172	23.9	36.0	32.3	5913.4	46.1	27.4	5840.4	55.5	15.4	7741.6	30.6	29.3	5226.9	38.6	24.1	5514.2	50.4	14.6	7670.3
	26.7	37.1	33.7	6163.4	47.4	38.1	6115.4	57.1	26.2	8091.6	31.7	30.6	5471.4	39.9	33.6	5778.4	51.9	24.3	8035.9
	29.4	38.3	35.1	6513.4	48.8	43.2	6509.0	58.7	36.9	8699.3	32.8	31.9	5766.3	41.1	40.4	6145.4	53.4	34.0	8583.9
	32.2	39.6	36.8	6813.4	50.2	47.7	6859.0	60.3	47.4	9099.3	33.9	33.5	6035.6	42.4	42.2	6449.2	54.9	43.4	8941.3

Notes:

1. All capacities are gross and have not considered indoor fan heat. To obtain net cooling capacity subtract indoor fan heat;
2. TC = Total Capacity (Unit: 1,000Btu/h); SC = Sensible Capacity (Unit: 1,000Btu/h).

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Cooling capacity:

Gross Cooling Capacity																			
Ambient DB(°C)		29.4									35								
Indoor	WB(°C)	16.1			19.4			22.8			16.1			19.4			22.8		
CFM	DB(°C)	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
2,000	23.9	65.4	57.1	5614.7	75.8	42.6	6170.5	79.0	26.7	7560.1	62.1	54.5	5930.5	68.0	41.2	6189.5	78.4	25.8	7970.3
	26.7	66.8	63.6	5758.7	77.4	53.8	6345.5	80.7	38.8	7760.1	63.5	59.6	6274.9	69.5	52.9	6534.0	80.0	38.1	8220.3
	29.4	68.2	67.8	6011.6	79.0	64.8	6783.1	82.4	48.1	8110.1	64.8	61.6	6705.8	71.0	64.6	6970.9	81.7	48.3	8728.0
	32.2	69.6	69.6	6299.6	80.7	75.4	7133.1	84.1	56.9	8504.1	66.2	64.5	6999.8	72.4	68.5	7302.8	83.4	58.6	9128.0
2,800	23.9	69.5	61.1	5904.0	76.7	44.7	6236.8	79.5	27.2	7596.3	64.1	56.8	6219.8	69.3	43.2	6255.8	78.8	26.2	8000.4
	26.7	70.9	66.9	6048.0	78.4	57.0	6411.8	81.2	38.5	7796.3	65.5	62.1	6564.2	75.0	56.1	6600.3	80.5	38.9	8250.4
	29.4	72.4	70.2	6313.0	80.0	67.9	6855.4	82.9	48.3	8146.3	66.9	64.3	7007.2	77.3	68.8	7043.2	82.2	49.8	8758.1
	32.2	74.0	72.7	6606.9	81.7	77.1	7205.4	84.6	59.1	8540.3	68.4	67.8	7307.2	78.5	72.9	7375.1	83.9	61.0	9158.1
3,600	23.9	71.2	65.0	6024.5	77.4	45.9	6285.0	79.7	27.6	7608.3	66.1	59.2	6340.3	72.9	45.3	6515.0	79.1	26.7	8024.5
	26.7	72.7	67.1	6174.5	79.0	58.0	6460.0	81.4	42.0	7808.3	67.5	62.7	6690.8	77.1	59.1	6740.0	80.8	39.6	8274.5
	29.4	74.2	70.0	6439.5	80.7	70.2	6903.6	83.1	49.2	8158.3	69.0	66.3	7133.7	78.6	72.4	7133.6	82.5	51.1	8782.3
	32.2	75.8	73.7	6739.5	82.4	80.3	7253.6	84.9	59.4	8558.3	70.4	69.0	7439.8	80.0	73.4	7483.6	84.2	62.6	9182.3

Notes:

1. All capacities are gross and have not considered indoor fan heat. To obtain net cooling capacity subtract indoor fan heat;
2. TC = Total Capacity (Unit: 1,000Btu/h); SC = Sensible Capacity (Unit: 1,000Btu/h).

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Cooling capacity: (Continued)

Gross Cooling Capacity																			
Ambient DB(°C)		40.6									46.1								
Indoor	WB(°C)	16.1			19.4			22.8			16.1			19.4			22.8		
CFM	DB(°C)	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
2,000	23.9	56.6	51.8	6506.2	67.0	38.8	6690.0	76.2	24.5	8597.9	48.9	47.1	7093.2	58.5	34.0	7380.9	70.4	21.0	8840.8
	26.7	57.8	53.4	6735.2	68.5	50.6	6934.0	77.8	37.0	8877.9	50.0	48.3	7337.2	59.8	46.1	7649.8	72.0	32.8	9134.8
	29.4	59.1	55.9	7112.8	69.9	62.6	7317.6	79.5	49.9	9485.7	51.1	49.8	7561.1	61.1	57.4	8033.5	73.6	45.4	9742.5
	32.2	60.3	57.5	7406.7	71.4	68.6	7661.6	81.1	60.6	9879.6	52.2	51.6	7855.1	62.5	61.5	8377.4	75.2	58.2	10142.5
2,800	23.9	58.6	55.8	6644.8	68.6	41.0	6804.5	76.2	24.5	8591.9	50.5	45.4	7207.7	60.0	36.3	7489.4	66.4	21.5	8551.5
	26.7	59.8	56.9	6879.8	70.1	51.6	7048.5	77.8	38.2	8871.9	51.6	48.0	7451.7	61.4	49.4	7764.4	67.8	34.6	8839.5
	29.4	61.1	60.2	7257.4	71.6	67.5	7438.1	79.4	51.1	9473.6	52.7	50.8	7681.7	62.7	59.9	8148.0	69.3	47.3	9441.2
	32.2	62.4	61.9	7557.4	73.1	72.0	7782.1	81.1	62.3	9873.6	53.9	52.1	7975.6	64.1	63.1	8491.9	70.9	59.7	9835.2
3,600	23.9	60.3	59.3	6771.4	69.9	43.2	6894.9	77.4	25.6	8682.3	52.7	50.5	7364.4	61.4	38.5	7585.8	72.2	22.1	8967.4
	26.7	61.6	60.3	7006.4	71.4	57.6	7144.9	79.0	39.8	8962.3	53.8	52.1	7614.4	62.7	53.0	7860.8	73.8	39.2	9267.4
	29.4	63.0	61.5	7360.0	72.9	72.3	7528.5	80.7	52.5	9570.0	55.0	53.7	7844.4	64.1	58.1	8244.4	75.4	50.0	9875.1
	32.2	64.3	63.6	7690.0	74.5	73.7	7878.5	82.4	64.1	9970.0	56.3	55.5	8144.4	65.5	65.2	8594.4	77.0	63.2	10275.1

Notes:

1. All capacities are gross and have not considered indoor fan heat. To obtain net cooling capacity subtract indoor fan heat;
2. TC = Total Capacity (Unit: 1,000Btu/h); SC = Sensible Capacity (Unit: 1,000Btu/h).

APRH075C7A-D

Cooling capacity: (Continued)

Gross Cooling Capacity																			
Ambient DB(°C)		48									51.7								
Indoor	WB(°C)	16.1			19.4			22.8			16.1			19.4			22.8		
CFM	DB(°C)	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
2,000	23.9	47.1	45.3	7423.2	58.1	33.6	7416.5	68.6	19.2	9396.0	44.3	42.7	7922.3	53.2	30.7	7784.9	64.1	18.7	10013.3
	26.7	48.2	46.5	7667.2	59.4	45.7	7685.5	70.2	31.0	9740.0	45.3	43.8	8191.3	54.4	41.8	8078.9	65.5	29.6	10413.3
	29.4	49.3	48.0	8011.1	60.7	57.0	8078.0	71.8	43.6	10347.7	46.3	45.1	8535.2	55.5	52.2	8516.4	67.0	41.1	11050.0
	32.2	50.4	49.8	8305.1	62.1	61.1	8423.0	73.4	56.4	10747.7	47.4	46.8	8829.2	56.8	55.9	8866.4	68.4	52.9	11450.0
2,800	23.9	48.7	43.6	7537.7	59.6	35.9	7525.0	64.6	19.7	9106.7	45.8	41.1	8030.8	54.5	32.8	7881.3	60.4	19.2	9748.1
	26.7	49.8	46.2	7781.7	60.5	48.9	7800.0	66.0	32.8	9444.7	46.8	43.5	8299.8	55.8	44.9	8181.3	61.7	31.2	10142.1
	29.4	50.9	49.0	8131.7	62.3	59.5	8192.5	67.5	45.5	10046.4	47.8	46.1	8643.7	57.0	54.4	8618.9	63.1	42.9	10772.8
	32.2	52.1	50.3	8425.6	63.7	62.7	8537.6	69.1	57.9	10440.4	48.9	47.2	8937.7	58.2	57.3	8968.9	64.4	54.3	11166.7
3,600	23.9	50.9	48.7	7694.4	61.0	38.1	7621.4	70.4	20.3	9522.6	47.8	45.8	8169.4	55.8	34.8	7971.7	65.7	19.7	10127.8
	26.7	52.0	50.3	7944.4	62.3	52.6	7896.4	72.0	34.4	9872.6	48.9	47.2	8444.4	57.1	48.1	8271.7	67.1	32.7	10527.8
	29.4	53.2	51.9	8294.4	63.7	59.2	8290.0	73.6	48.2	10480.3	50.0	48.7	8794.4	58.3	57.3	8715.3	68.7	45.3	11170.5
	32.2	54.5	53.7	8594.4	65.1	64.8	8640.0	75.2	61.4	10880.3	51.1	50.5	9094.4	59.6	59.3	9065.3	70.1	57.5	11570.5

Notes:

1. All capacities are gross and have not considered indoor fan heat. To obtain net cooling capacity subtract indoor fan heat;
2. TC = Total Capacity (Unit: 1,000Btu/h); SC = Sensible Capacity (Unit: 1,000Btu/h).

APRH090C7A-D

Cooling capacity:

Gross Cooling Capacity																			
Ambient DB(°C)		29.4									35								
Indoor	WB(°C)	16.1			19.4			22.8			16.1			19.4			22.8		
CFM	DB(°C)	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
2,100	23.9	77.6	67.8	7012.8	89.9	50.7	7460.0	93.7	31.9	8494.4	73.7	64.7	7576.0	80.7	49.0	7882.8	92.9	30.8	8930.9
	26.7	79.4	75.6	7157.9	91.9	64.0	7635.1	95.8	46.2	8694.5	75.4	70.8	7756.1	82.5	62.9	8085.4	95.0	45.4	9181.0
	29.4	81.1	80.6	7413.1	93.9	77.1	8045.9	97.9	57.3	9044.6	77.1	73.3	8016.3	84.4	76.9	8425.9	97.1	57.6	9656.6
	32.2	82.9	81.5	7703.3	96.0	89.7	8396.0	100.0	67.8	9439.8	78.8	76.8	8311.4	86.2	81.6	8776.0	99.2	69.9	10056.7
2,830	23.9	82.4	72.5	7250.1	91.0	53.1	7514.3	94.3	32.4	8524.1	76.1	67.4	7694.6	82.2	51.4	7883.0	93.4	31.3	8955.7
	26.7	84.2	79.5	7395.2	93.0	67.8	7689.4	96.4	45.9	8724.2	77.8	73.8	7874.8	89.0	66.6	7900.2	95.5	46.4	9205.8
	29.4	86.1	83.5	7660.3	95.1	80.7	8105.3	98.5	57.6	9074.3	79.6	76.5	8139.9	91.9	81.8	8300.7	97.6	59.4	9681.4
	32.2	88.0	86.5	7955.5	97.2	91.7	8455.4	100.6	70.5	9469.4	81.4	80.7	8440.0	93.4	86.7	8635.9	99.7	72.7	10081.5
3,800	23.9	84.4	77.1	7348.9	91.8	54.6	7553.9	94.5	32.9	8534.0	78.4	70.3	7808.3	86.5	53.8	7964.5	93.8	31.9	8975.4
	26.7	86.3	79.7	7499.0	93.8	69.0	7729.0	96.6	50.0	8734.1	80.2	74.5	7993.4	91.4	70.2	8153.3	95.9	47.2	9225.5
	29.4	88.2	83.2	7764.1	95.9	83.5	8144.8	98.7	58.6	9084.2	82.0	78.8	8258.5	93.4	86.1	8314.8	98.0	60.9	9701.1
	32.2	90.2	87.7	8064.2	98.0	95.5	8494.9	100.9	70.8	9484.3	83.8	82.1	8558.6	95.2	87.4	8724.9	100.1	74.6	10101.2

Notes:

1. All capacities are gross and have not considered indoor fan heat. To obtain net cooling capacity subtract indoor fan heat;
2. TC = Total Capacity (Unit: 1,000Btu/h); SC = Sensible Capacity (Unit: 1,000Btu/h).

APRH090C7A-D

Cooling capacity: (Continued)

Gross Cooling Capacity																			
Ambient DB(°C)		40.6									46.1								
Indoor	WB(°C)	16.1			19.4			22.8			16.1			19.4			22.8		
CFM	DB(°C)	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
2,100	23.9	67.2	61.5	7750.7	79.5	46.1	7917.1	90.4	29.3	9650.3	54.7	52.6	8307.4	66.1	37.2	8611.1	80.2	21.8	9721.5
	26.7	68.7	63.5	7980.8	81.3	60.2	8162.3	92.4	44.1	9930.4	56.1	54.1	8552.6	67.7	51.6	8881.2	82.1	35.8	10016.7
	29.4	70.3	66.6	8331.7	83.1	74.5	8518.1	94.5	59.5	10506.0	57.5	56.0	8777.7	69.4	65.0	9237.1	84.1	50.8	10592.2
	32.2	71.9	68.6	8626.8	85.0	81.7	8863.2	96.5	72.2	10901.1	59.0	58.3	9072.9	71.1	69.9	9582.2	86.1	66.1	10992.2
2,830	23.9	69.5	66.3	7864.4	81.4	48.8	8011.0	90.3	29.2	9645.3	56.6	50.6	8401.4	67.9	39.9	8700.1	75.4	22.4	9484.2
	26.7	71.1	67.6	8099.5	83.2	61.4	8256.2	92.3	45.6	9925.4	58.0	53.8	8646.5	69.6	55.5	8975.2	77.2	37.9	9774.4
	29.4	72.7	71.6	8450.3	85.1	80.3	8617.0	94.3	60.9	10496.1	59.5	57.2	8876.6	71.3	67.9	9331.0	79.1	53.1	10345.1
	32.2	74.4	73.8	8750.4	87.0	85.7	8962.1	96.4	74.2	10896.2	61.0	58.8	9171.8	73.0	71.8	9676.2	81.0	67.8	10740.2
3,800	23.9	71.6	70.4	7968.2	82.9	51.4	8085.2	91.8	30.5	9719.5	59.2	56.7	8529.9	69.5	42.5	8779.2	82.3	23.1	9825.3
	26.7	73.2	71.7	8203.3	84.8	68.5	8335.3	93.8	47.4	9999.6	60.7	58.6	8780.0	71.2	59.7	9054.3	84.3	39.9	10125.4
	29.4	74.9	73.2	8559.1	86.6	85.9	8691.1	95.9	62.5	10575.2	62.2	60.6	9010.1	72.9	71.7	9410.1	86.3	56.2	10701.0
	32.2	76.6	75.8	8859.2	88.6	87.7	9041.2	98.0	76.3	10975.3	63.8	62.9	9310.2	74.7	74.3	9760.2	88.3	72.0	11101.1

Notes:

1. All capacities are gross and have not considered indoor fan heat. To obtain net cooling capacity subtract indoor fan heat;
2. TC = Total Capacity (Unit: 1,000Btu/h); SC = Sensible Capacity (Unit: 1,000Btu/h).

APRH090C7A-D

Cooling capacity: (Continued)

Gross Cooling Capacity																			
Ambient DB(°C)		48									51.7								
Indoor	WB(°C)	16.1			19.4			22.8			16.1			19.4			22.8		
CFM	DB(°C)	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
2,100	23.9	53.7	51.6	8637.4	65.6	36.7	8635.8	79.2	20.8	10369.3	49.3	47.4	9132.2	59.8	33.3	8986.5	72.7	19.1	11076.9
	26.7	55.1	53.1	8882.6	67.1	51.0	8906.0	81.1	34.8	10714.4	50.6	48.8	9402.4	61.3	46.5	9281.7	74.5	32.0	11477.0
	29.4	56.5	55.0	9227.7	68.7	64.3	9269.6	83.1	49.8	11290.0	51.9	50.5	9747.5	62.8	58.8	9688.7	76.3	45.7	12082.6
	32.2	58.0	57.3	9522.9	70.3	69.1	9613.0	85.1	65.1	11690.1	53.3	52.6	10042.7	64.4	63.3	10038.8	78.1	59.8	12482.7
2,830	23.9	55.6	49.6	8731.4	67.4	39.4	8724.8	74.4	21.4	10131.9	51.1	45.5	9221.2	61.4	35.7	9065.6	68.3	19.7	10859.4
	26.7	57.0	52.8	8976.5	69.6	54.7	8999.9	76.2	36.9	10472.2	52.4	48.5	9491.3	63.0	50.1	9365.7	70.0	33.9	11254.5
	29.4	58.5	56.2	9326.6	70.6	67.2	9363.6	78.1	52.1	11042.8	53.7	51.6	9836.5	64.5	61.4	9772.7	71.7	47.9	11855.2
	32.2	60.0	57.8	9621.8	72.2	71.0	9707.0	80.0	66.8	11438.0	55.1	53.1	10131.7	66.1	65.0	10122.8	73.4	61.4	12250.4
3,800	23.9	58.2	55.7	8859.9	69.0	42.0	8803.9	81.3	22.1	10473.1	53.4	51.1	9334.9	62.9	38.1	9139.8	74.6	20.3	11170.8
	26.7	59.7	57.6	9110.0	70.6	59.1	9079.0	83.3	38.9	10823.2	54.8	52.9	9610.0	64.5	53.9	9439.9	76.4	35.7	11570.9
	29.4	61.2	59.6	9460.1	72.2	70.5	9440.9	85.3	55.2	11398.8	56.2	54.7	9960.1	66.1	64.9	9851.8	78.3	50.7	12181.5
	32.2	62.8	61.9	9760.2	73.9	73.5	9791.0	87.3	71.0	11798.9	57.7	56.9	10260.2	67.7	67.3	10201.9	80.1	65.2	12581.6

Notes:

1. All capacities are gross and have not considered indoor fan heat. To obtain net cooling capacity subtract indoor fan heat;
2. TC = Total Capacity (Unit: 1,000Btu/h); SC = Sensible Capacity (Unit: 1,000Btu/h).

APRH105C7A-D

Cooling capacity:

Gross Cooling Capacity																			
Ambient DB(°C)		29.4									35								
Indoor	WB(°C)	16.1			19.4			22.8			16.1			19.4			22.8		
CFM	DB(°C)	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
2,450	23.9	89.1	77.0	8400.4	99.8	56.7	8825.0	103.6	34.9	9516.1	82.1	73.5	8742.2	95.7	54.7	8936.5	102.7	33.7	10074.2
	26.7	91.0	78.7	8547.1	102.0	73.0	9000.1	106.0	49.7	9716.2	84.0	75.2	8923.9	97.9	71.1	9100.9	104.9	50.2	10320.9
	29.4	93.1	80.5	8808.9	104.3	87.0	9247.5	108.3	62.4	10066.3	85.9	76.8	9185.6	100.1	87.3	9359.0	107.3	64.1	10631.9
	32.2	95.2	82.3	9105.6	106.6	101	9597.6	110.6	76.0	10463.0	87.8	78.6	9479.0	102.3	100	9672.0	109.7	78.1	11035.4
3,500	23.9	91.5	82.5	8498.3	100.8	58.8	8865.5	104.0	35.4	9529.6	84.8	79.0	8846.8	99.0	57.7	9064.7	102.9	34.5	10084.3
	26.7	93.6	84.4	8648.4	103.0	74.9	9040.6	106.3	50.5	9729.7	86.7	80.8	9028.5	102.0	75.4	9189.0	105.2	51.3	10331.0
	29.4	95.7	86.3	8910.1	105.3	90.9	9288.0	108.6	63.8	10079.8	88.7	82.7	9293.6	104.3	91.9	9527.7	107.5	66.5	10642.0
	32.2	97.8	88.2	9210.2	107.6	104	9638.1	111.0	77.2	10479.9	90.6	84.6	9590.3	105.8	101	9810.4	109.9	81.6	11045.5
4,200	23.9	93.9	87.6	8589.4	101.7	60.9	8902.6	104.2	36.0	9539.7	87.3	84.3	8948.0	100.1	60.3	9108.6	103.5	34.7	10107.9
	26.7	95.9	89.6	8739.5	104.0	77.5	9077.7	106.6	55.9	9739.8	89.3	86.2	9133.1	103.8	79.6	9333.7	105.9	52.0	10358.0
	29.4	98.1	91.6	9004.6	106.3	94.1	9328.5	108.9	64.8	10089.9	91.3	88.2	9398.2	104.5	97.3	9534.5	108.2	67.7	10669.0
	32.2	100.2	93.6	9304.7	108.6	106	9678.6	111.3	78.6	10490.0	93.4	90.2	9698.3	107.7	104	9884.6	110.5	84.0	11069.1

Notes:

1. All capacities are gross and have not considered indoor fan heat. To obtain net cooling capacity subtract indoor fan heat;
2. TC = Total Capacity (Unit: 1,000Btu/h); SC = Sensible Capacity (Unit: 1,000Btu/h).

APRH105C7A-D

Cooling capacity: (Continued)

Gross Cooling Capacity																			
Ambient DB(°C)		40.6									46.1								
Indoor	WB(°C)	16.1			19.4			22.8			16.1			19.4			22.8		
CFM	DB(°C)	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
2,450	23.9	75.0	69.9	9079.1	88.5	51.9	9313.0	100.1	32.0	10688.9	62.9	61.4	9412.1	75.7	43.3	9883.7	91.1	25.1	10864.4
	26.7	76.7	71.6	9310.8	90.5	68.2	9559.8	102.4	48.3	10969.0	64.4	63.0	9658.8	77.5	60.3	10155.5	93.2	41.5	11164.5
	29.4	78.5	73.2	9498.2	92.6	85.0	9750.5	104.6	63.6	11376.7	66.1	64.5	9885.5	79.4	76.6	10342.9	95.4	57.8	11572.1
	32.2	80.3	74.9	9795.0	94.7	93.4	10097.3	106.9	78.6	11776.8	67.7	66.2	10182.2	81.3	78.4	10689.6	97.6	73.8	11972.2
3,500	23.9	77.8	75.6	9190.4	90.8	55.1	9400.8	100.8	32.7	10715.9	65.4	62.8	9509.9	77.4	46.6	9947.8	91.8	25.7	10894.7
	26.7	79.6	77.3	9425.5	92.8	73.0	9650.9	103.0	50.3	10996.0	67.0	64.3	9760.0	80.7	64.6	10280.3	94.0	43.9	11194.8
	29.4	81.5	79.1	9616.3	94.9	91.7	9841.6	105.3	67.3	11403.7	68.6	66.0	9986.7	81.2	79.4	10410.3	96.2	61.4	11605.9
	32.2	83.3	80.9	9913.0	97.0	95.4	10188.4	107.6	83.2	11803.8	70.4	67.6	10286.8	83.1	81.3	10757.1	98.5	78.4	12006.0
4,200	23.9	79.5	74.1	9257.9	92.2	57.6	9458.1	101.3	33.2	10736.2	68.0	66.2	9614.5	79.4	49.6	10028.8	92.4	26.4	10918.3
	26.7	81.4	75.8	9493.0	94.3	78.4	9708.2	103.6	52.0	11016.3	69.7	67.9	9864.6	81.3	69.7	10303.9	94.6	46.3	11218.4
	29.4	83.2	77.5	9683.8	96.4	93.2	9899.0	105.9	68.7	11427.3	71.4	69.5	10094.7	83.3	81.1	10494.7	96.8	64.4	11629.5
	32.2	85.1	79.2	9983.9	98.5	95.1	10249.1	108.2	85.8	11827.4	73.1	71.2	10394.8	85.3	83.9	10844.8	99.1	82.9	12029.6

Notes:

1. All capacities are gross and have not considered indoor fan heat. To obtain net cooling capacity subtract indoor fan heat;
2. TC = Total Capacity (Unit: 1,000Btu/h); SC = Sensible Capacity (Unit: 1,000Btu/h).

APRH105C7A-D

Cooling capacity: (Continued)

Gross Cooling Capacity																			
Ambient DB(°C)		48									51.7								
Indoor	WB(°C)	16.1			19.4			22.8			16.1			19.4			22.8		
CFM	DB(°C)	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
2,450	23.9	60.8	59.3	9742.1	75.5	43.1	9903.4	89.0	23.0	11425.7	56.2	54.8	10237.3	67.8	38.4	10208.0	81.8	21.8	12043.8
	26.7	62.3	60.9	9988.8	77.3	60.1	10175.1	91.1	39.4	11775.8	57.6	56.2	10505.7	69.5	53.8	10497.9	83.7	36.7	12440.5
	29.4	64.0	62.4	10335.5	79.2	76.4	11043.7	93.3	55.7	12183.5	59.0	57.7	10835.5	71.2	68.6	11422.4	85.7	51.5	12883.2
	32.2	65.6	64.1	10632.2	81.1	78.2	11389.6	95.5	71.7	12583.6	60.6	59.1	11152.5	72.9	70.4	11769.1	87.8	66.1	13286.6
3,500	23.9	63.3	60.7	9839.9	77.2	46.4	9967.5	89.7	23.6	11456.1	58.4	56.1	10325.0	69.3	41.4	10265.3	82.5	22.3	12070.8
	26.7	64.9	62.2	10090.0	80.5	64.4	10300.0	91.9	41.8	11806.2	59.9	57.5	10596.8	72.9	57.7	10632.9	84.5	39.0	12470.9
	29.4	66.5	63.9	10436.7	81.0	79.2	11111.2	94.1	59.3	12217.2	61.4	59.0	10930.0	73.3	71.1	11503.4	86.5	54.8	12913.5
	32.2	68.3	65.5	10736.8	82.9	81.1	11457.1	96.4	76.3	12617.3	63.0	60.5	11247.0	74.6	72.9	11833.2	88.5	70.3	13317.0
4,200	23.9	65.9	64.1	9944.5	79.2	49.4	10048.5	90.3	24.3	11479.7	60.8	59.2	10419.5	71.2	44.1	10339.5	83.0	22.9	12091.0
	26.7	67.6	65.8	10194.6	81.1	69.5	10323.6	92.5	44.2	11829.8	62.4	60.7	10694.6	73.1	62.3	10639.6	85.0	41.0	12491.1
	29.4	69.3	67.4	10544.7	83.1	80.8	11194.7	94.7	62.3	12240.8	64.4	62.2	11044.7	74.7	72.7	11560.7	87.1	57.6	12937.2
	32.2	71.0	69.1	10844.8	85.1	83.7	11544.8	97.0	80.8	12640.9	65.5	63.8	11344.8	76.5	75.3	11910.8	89.1	74.4	13337.3

Notes:

1. All capacities are gross and have not considered indoor fan heat. To obtain net cooling capacity subtract indoor fan heat;
2. TC = Total Capacity (Unit: 1,000Btu/h); SC = Sensible Capacity (Unit: 1,000Btu/h).

APRH120C7A-D

Cooling capacity:

Gross Cooling Capacity																			
Ambient DB(°C)		29.4									35								
Indoor	WB(°C)	16.1			19.4			22.8			16.1			19.4			22.8		
CFM	DB(°C)	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
3,300	23.9	106.6	92.5	9374.6	119.1	68.9	10455.4	123.6	43.4	10837.3	98.5	88.4	8753.4	114.4	66.5	10317.4	122.5	42.0	10828.7
	26.7	109.0	94.6	9686.2	121.8	87.9	10790.6	126.4	60.8	11187.5	100.8	90.5	9073.6	117.0	85.7	10471.4	125.2	61.3	11178.9
	29.4	111.4	96.7	10043.3	124.4	104	11165.0	129.1	75.6	11570.6	103.0	92.4	9499.7	119.5	105	10923.4	127.9	77.5	11648.2
	32.2	113.7	98.7	10557.7	127.0	121	11698.0	131.7	91.3	12111.9	105.1	94.4	10014.1	122.0	119	11534.1	130.6	93.8	12198.2
4,100	23.9	109.6	95.5	9633.5	122.1	71.9	10714.3	126.6	46.4	11096.2	101.5	91.4	9012.2	117.4	69.5	10576.2	125.5	45.0	11087.6
	26.7	112.0	97.6	9945.0	124.8	90.9	11049.5	129.4	63.8	11446.4	103.8	93.5	9332.4	120.0	88.7	10710.2	128.2	64.3	11437.8
	29.4	114.4	99.7	10302.2	127.4	107	11423.9	132.1	78.6	11829.4	106.0	95.4	9758.6	122.5	108	11182.3	130.9	80.5	11907.1
	32.2	116.7	102	10816.6	130.0	124	11956.9	134.7	94.3	12370.8	108.1	97.4	10273.0	125.0	122	11792.9	133.6	96.8	12457.1
4,600	23.9	112.5	102	9883.7	123.3	74.3	10817.8	127.0	47.0	11130.7	104.6	97.9	9279.7	121.2	73.0	10904.1	125.8	45.9	11113.4
	26.7	115.0	104	10203.9	126.0	93.2	11153.0	129.8	64.7	11480.9	106.9	100	9599.9	125.9	93.7	11239.3	128.5	65.6	11463.6
	29.4	117.4	106	10561.0	128.6	112	11527.4	132.5	80.2	11863.9	109.2	102	10034.7	127.5	113	11613.7	131.2	83.3	11933.0
	32.2	119.8	109	11084.0	131.2	128	12060.4	135.2	95.7	12413.9	111.4	104	10557.7	129.1	123	12146.7	133.9	101	12483.0

Notes:

1. All capacities are gross and have not considered indoor fan heat. To obtain net cooling capacity subtract indoor fan heat;
2. TC = Total Capacity (Unit: 1,000Btu/h); SC = Sensible Capacity (Unit: 1,000Btu/h).

APRH120C7A-D

Cooling capacity: (Continued)

Gross Cooling Capacity																			
Ambient DB(°C)		40.6									46.1								
Indoor	WB(°C)	16.1			19.4			22.8			16.1			19.4			22.8		
CFM	DB(°C)	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
3,300	23.9	90.2	84.3	10064.9	106.0	63.3	11439.1	119.5	40.0	12606.2	80.0	78.3	10694.2	95.0	57.2	12146.0	112.9	35.9	13554.7
	26.7	92.3	86.3	10376.5	108.4	82.3	11765.6	122.2	59.1	12956.4	81.9	80.2	11005.7	97.2	77.1	12325.9	115.5	55.2	13904.9
	29.4	94.3	88.2	10716.4	110.8	102	12140.0	124.8	77.0	13348.0	83.8	82.0	11500.9	99.4	96.1	12847.0	118.0	74.1	14451.9
	32.2	96.3	90.0	11239.4	113.1	112	12673.0	127.4	94.3	13898.0	85.6	83.8	12015.3	101.5	98.1	13380.0	120.5	92.7	15001.9
4,100	23.9	93.2	87.3	10323.7	109.0	66.3	11697.9	122.5	43.0	12865.0	83.0	81.3	10953.0	98.0	60.2	12404.8	115.9	38.9	13813.5
	26.7	95.3	89.3	10635.3	111.4	85.3	12024.5	125.2	62.1	13215.2	84.9	83.2	11264.6	100.2	80.1	12584.7	118.5	58.2	14163.7
	29.4	97.3	91.2	10975.2	113.8	105	12398.9	127.8	80.0	13606.9	86.8	85.0	11759.8	102.4	99.1	13105.8	121.0	77.1	14710.7
	32.2	99.3	93.0	11498.2	116.1	115	12931.9	130.4	97.3	14156.9	88.6	86.8	12274.2	104.5	101	13638.8	123.5	95.7	15260.7
4,600	23.9	96.5	93.9	10608.5	111.6	70.0	11922.3	123.3	43.9	12934.0	85.9	82.9	11203.2	99.9	64.0	12568.8	116.8	39.6	13891.2
	26.7	98.7	96.0	10928.7	114.1	91.0	12257.5	126.0	64.5	13284.2	87.9	84.8	11523.4	103.9	85.1	12904.0	119.4	61.0	14241.4
	29.4	100.8	98.0	11277.2	116.5	113	12631.9	128.6	84.3	13675.9	89.8	86.7	12018.6	104.4	102.3	13278.4	122.0	81.3	14797.0
	32.2	102.8	100	11800.2	118.8	117	13164.9	131.2	103	14225.9	91.7	88.5	12541.6	106.5	104	13811.4	124.5	101	15347.0

Notes:

1. All capacities are gross and have not considered indoor fan heat. To obtain net cooling capacity subtract indoor fan heat;
2. TC = Total Capacity (Unit: 1,000Btu/h); SC = Sensible Capacity (Unit: 1,000Btu/h).

APRH120C7A-D

Cooling capacity: (Continued)

Gross Cooling Capacity																			
Ambient DB(°C)		48									51.7								
Indoor	WB(°C)	16.1			19.4			22.8			16.1			19.4			22.8		
CFM	DB(°C)	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
3,300	23.9	77.8	76.1	10815.0	93.2	55.4	12301.3	110.7	33.7	13675.5	72.2	70.6	11720.9	85.8	51.4	13095.1	102.1	32.1	14322.6
	26.7	79.7	78.0	11126.5	95.4	75.3	12481.2	113.3	53.0	14025.7	73.9	72.3	12032.5	87.8	69.5	13231.9	104.4	49.6	14664.2
	29.4	81.6	79.8	11622.5	97.6	94.3	13003.1	115.8	71.9	14573.4	75.6	74.0	12519.1	89.8	86.8	13744.3	106.7	66.8	15202.5
	32.2	83.4	81.6	12136.9	99.7	96.3	13535.3	118.3	90.5	15123.4	77.3	75.6	13042.1	91.7	88.7	14320.5	109.0	83.7	15752.5
4,100	23.9	80.8	79.1	11073.8	96.2	58.4	12560.2	113.7	36.7	13934.3	75.2	73.6	11979.8	88.8	54.4	13354.0	105.1	35.1	14581.5
	26.7	82.7	81.0	11385.4	98.4	78.3	12705.0	116.3	56.0	14284.5	76.9	75.3	12291.4	90.8	72.5	13490.7	107.4	52.6	14923.0
	29.4	84.6	82.8	11881.4	100.6	97.3	13261.9	118.8	74.9	14832.3	78.6	77.0	12778.0	92.8	89.8	14003.2	109.7	69.8	15461.4
	32.2	86.4	84.6	12395.7	102.7	99.3	13794.1	121.3	93.5	15382.3	80.3	78.6	13301.0	94.7	91.7	14579.3	112.0	86.7	16011.4
4,600	23.9	83.7	80.7	11324.0	98.1	62.2	12724.1	114.6	37.4	14012.0	77.8	75.1	12204.1	90.5	57.9	13500.7	105.9	35.7	14650.5
	26.7	85.7	82.6	11644.2	102.1	83.3	13059.3	117.2	58.8	14362.2	76.8	84.8	12524.3	94.8	77.1	13835.9	108.3	55.2	15000.7
	29.4	87.6	84.5	12140.2	102.6	97.7	13433.7	119.8	79.1	14918.6	78.5	86.7	13019.5	95.2	92.7	14210.3	110.6	73.6	15539.1
	32.2	89.5	86.3	12663.2	104.7	103	13966.7	122.3	98.9	15468.6	80.2	88.5	13542.5	96.6	94.6	14743.3	112.9	91.6	16089.1

Notes:

1. All capacities are gross and have not considered indoor fan heat. To obtain net cooling capacity subtract indoor fan heat;
2. TC = Total Capacity (Unit: 1,000Btu/h); SC = Sensible Capacity (Unit: 1,000Btu/h).

APRH150C7A-D

Cooling capacity:

Gross Cooling Capacity																			
Ambient DB(°C)		29.4									35								
Indoor	WB(°C)	16.1			19.4			22.8			16.1			19.4			22.8		
CFM	DB(°C)	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
3,500	23.9	130.8	114	10392.2	145.8	85.5	11818.4	151.2	54.9	12325.4	121.1	109	10483.5	140.1	82.7	12499.8	149.9	53.3	13222.4
	26.7	133.4	116	10700.9	148.8	108	12153.4	154.3	75.6	12675.4	123.6	111	10792.2	143.0	106	12630.5	152.9	76.2	13561.0
	29.4	136.3	119	11151.5	151.9	128	12626.7	157.5	93.3	13160.1	126.2	114	11435.7	146.0	128	13308.1	156.1	95.6	14261.3
	32.2	139.0	121	11663.2	155.0	148	13159.7	160.6	112	13698.7	128.7	116	11936.0	149.0	146	13716.3	159.3	115	14822.7
5,500	23.9	134.3	122	10721.3	147.2	88.4	11954.6	151.7	55.7	12370.8	124.8	117	10835.3	144.7	86.9	12931.0	150.2	54.3	13256.4
	26.7	137.0	124	11041.3	150.2	111	12289.6	154.8	76.7	12720.8	127.3	119	11144.0	150.0	111	13300.0	153.2	77.7	13595.1
	29.4	139.9	127	11492.0	153.3	133	12762.9	158.0	95.2	13205.5	130.0	122	11798.9	152.0	135	13875.5	156.4	99.0	14295.4
	32.2	142.8	129	12015.0	156.4	152	13295.9	161.2	114	13755.5	132.7	124	12310.5	153.9	147	14181.5	159.7	120	14856.7
6,400	23.9	137.5	129	11027.7	148.5	91.3	12079.4	152.0	56.5	12404.8	128.4	124	11175.7	146.3	90.6	13078.5	151.1	54.7	13335.8
	26.7	140.3	131	11347.7	151.5	115	12414.4	155.1	84.2	12754.8	131.0	127	11495.7	151.3	117	13413.5	154.2	78.8	13685.8
	29.4	143.2	134	11809.7	154.8	138	12899.1	158.4	96.7	13239.5	133.8	129	12150.6	152.2	142	13898.2	157.4	101	14386.1
	32.2	146.1	137	12332.7	157.9	154	13432.1	161.6	116	13789.5	136.5	132	12673.6	156.6	152	14431.2	160.5	123	14936.1

Notes:

1. All capacities are gross and have not considered indoor fan heat. To obtain net cooling capacity subtract indoor fan heat;
2. TC = Total Capacity (Unit: 1,000Btu/h); SC = Sensible Capacity (Unit: 1,000Btu/h).

APRH150C7A-D

Cooling capacity: (Continued)

Gross Cooling Capacity																			
Ambient DB(°C)		40.6									46.1								
Indoor	WB(°C)	16.1			19.4			22.8			16.1			19.4			22.8		
CFM	DB(°C)	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
3,500	23.9	111.1	104	12036.3	130.1	78.8	13848.3	146.3	50.9	15387.9	100.6	98.5	13610.7	118.6	73.2	15331.9	140.0	47.6	17382.1
	26.7	113.4	106	12344.9	132.7	101	14171.9	149.3	73.5	15737.9	102.6	101	13919.3	121.0	96.8	15655.5	142.9	70.6	17732.1
	29.4	115.8	108	12784.2	135.6	125	14656.6	152.4	95.0	16245.3	104.9	103	14358.6	123.6	120	16128.9	145.9	93.2	18239.5
	32.2	118.2	111	13295.9	138.3	137	15178.2	155.5	116	16795.3	107.0	105	14870.3	126.1	122	16650.5	148.9	116	18789.5
5,500	23.9	115.1	112	12410.7	133.2	83.3	14143.3	147.2	51.9	15478.7	104.0	100	13939.7	120.8	77.8	15547.5	141.1	48.5	17484.3
	26.7	117.5	114	12730.7	135.9	108	14478.3	150.2	76.4	15828.7	106.2	103	14259.7	125.4	103	16075.4	144.0	73.9	17834.3
	29.4	120.0	117	13181.4	138.8	134	14963.0	153.3	100	16336.1	108.5	105	14699.0	126.0	124	16335.8	147.1	98.3	18353.0
	32.2	122.4	119	13693.0	141.6	139	15484.6	156.4	122	16886.1	110.7	107	15222.0	128.5	126	16877.5	150.1	122	18903.0
6,400	23.9	117.5	110	12637.7	135.2	86.7	14336.2	147.9	52.5	15546.8	107.8	105	14291.5	123.7	82.0	15819.8	142.0	49.4	17563.7
	26.7	119.9	112	12957.7	138.0	116	14671.2	150.9	78.7	15896.8	109.9	107	14611.5	126.2	110	16154.8	144.8	77.2	17913.7
	29.4	122.4	114	13408.3	140.9	136	15155.9	154.2	102	16415.5	112.3	110	15062.2	129.0	126	16639.5	147.9	103	18432.4
	32.2	124.9	117	13931.3	143.7	139	15688.9	157.3	126	16965.5	114.6	112	15585.2	131.6	130	17172.5	150.9	128	18982.4

Notes:

1. All capacities are gross and have not considered indoor fan heat. To obtain net cooling capacity subtract indoor fan heat;
2. TC = Total Capacity (Unit: 1,000Btu/h); SC = Sensible Capacity (Unit: 1,000Btu/h).

APRH150C7A-D

Cooling capacity: (Continued)

Gross Cooling Capacity																			
Ambient DB(°C)		48									51.7								
Indoor	WB(°C)	16.1			19.4			22.8			16.1			19.4			22.8		
CFM	DB(°C)	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
3,500	23.9	97.1	95.0	13671.4	117.7	72.3	15356.4	136.5	44.1	17160.9	91.2	89.3	14915.6	107.5	66.2	16489.3	127.1	43.1	18335.4
	26.7	99.1	97.1	13980.0	120.1	95.9	15680.1	139.4	67.1	17510.9	93.0	91.1	15213.0	109.7	87.7	16790.3	129.6	63.8	18674.0
	29.4	101.4	99.2	14457.3	122.7	119	16191.4	142.4	89.7	18056.3	95.0	93.1	15710.8	112.1	109	17322.1	132.3	84.5	19239.9
	32.2	103.5	101	14969.0	125.2	121	16710.9	145.4	112	18606.3	97.1	95.0	16290.5	114.3	111	17843.8	135.1	105	19801.3
5,500	23.9	100.5	96.9	14000.5	119.9	76.9	15572.1	137.6	45.0	17263.0	94.3	91.1	15210.7	109.6	70.4	16682.2	128.0	43.8	18426.1
	26.7	102.7	99.0	14320.5	124.4	102	16100.0	140.5	70.4	17613.0	96.2	92.9	15519.3	114.5	93.2	17244.2	130.7	67.0	18776.1
	29.4	105.0	101	14797.8	125.1	123	16418.4	143.6	94.8	18169.7	98.4	94.9	16028.5	114.9	112	17594.5	133.4	89.0	19342.0
	32.2	107.2	103	15320.8	127.6	125	16937.9	146.6	119	18719.7	100.4	96.9	16608.2	116.6	114	18059.4	136.2	111	19903.4
6,400	23.9	104.3	102	14352.2	122.8	81.1	15844.4	138.5	45.9	17342.4	97.7	95.4	15528.4	112.2	74.3	16931.9	128.8	44.6	18494.2
	26.7	106.4	104	14672.2	125.3	109	16179.4	141.3	73.7	17692.4	99.7	97.3	15848.4	114.7	99.6	17266.9	131.4	69.8	18844.2
	29.4	108.8	106	15160.9	128.1	121	16699.9	144.4	99.1	18249.2	102.5	99.5	16414.3	117.0	114	17787.4	134.3	93.0	19421.5
	32.2	111.1	108	15683.9	130.7	129	17232.9	147.4	125	18799.2	103.9	102	16937.3	119.4	118	18320.4	136.9	116	19971.5

Notes:

1. All capacities are gross and have not considered indoor fan heat. To obtain net cooling capacity subtract indoor fan heat;
2. TC = Total Capacity (Unit: 1,000Btu/h); SC = Sensible Capacity (Unit: 1,000Btu/h).

APRH180C7A-D

Cooling capacity:

Gross Cooling Capacity																			
Ambient DB(°C)		29.4									35								
Indoor	WB(°C)	16.1			19.4			22.8			16.1			19.4			22.8		
CFM	DB(°C)	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
5,500	23.9	163.5	131	15041.6	183.2	105	15388.1	193.5	72.1	15888.1	153.3	125	15898.0	171.6	99.8	16270.9	188.7	68.9	16770.9
	26.7	165.6	156	15321.7	185.5	128	15668.2	197.3	96.8	16168.2	157.1	150	16148.1	174.2	123	16551.0	191.1	93.1	17051.0
	29.4	173.0	166	16002.1	187.7	150	16298.6	199.9	117	16798.6	164.6	160	16678.5	176.7	146	16843.8	193.6	115	17343.8
	32.2	182.9	176	16225.2	190.4	173	16521.7	202.4	137	17021.7	175.6	170	17201.6	180.4	169	17366.9	196.3	135	17866.9
7,000	23.9	167.9	139	15191.6	188.6	109	15538.1	195.7	73.5	16038.1	155.2	133	16048.0	178.9	104	16420.9	190.1	70.4	16920.9
	26.7	171.6	166	15471.7	190.0	133	15818.2	198.5	99.0	16318.2	162.0	157	16298.1	180.0	129	16701.0	192.2	96.3	17201.0
	29.4	179.1	174	16152.1	191.2	157	16448.6	202.3	120	16948.6	171.8	167	16828.5	182.8	154	16993.8	195.3	118	17493.8
	32.2	188.9	183	16375.2	192.6	180	16671.7	204.7	139	17171.7	181.6	176	17351.6	184.1	179	17516.9	198.7	140	18016.9
7,800	23.9	169.8	146	15491.6	190.9	111	15838.1	198.2	74.8	16338.1	160.7	140	16348.0	185.0	128	16720.9	191.8	71.7	17220.9
	26.7	174.2	167	15771.7	192.5	166	16118.2	201.0	99.9	16618.2	164.5	160	16598.1	187.3	164	17001.0	194.3	97.9	17501.0
	29.4	185.2	178	16452.1	193.7	172	16748.6	203.4	122	17248.6	176.7	171	17128.5	187.8	171	17293.8	196.9	121	17793.8
	32.2	193.8	186	16675.2	195.3	188	16971.7	206.0	144	17471.7	186.5	181	17651.6	188.9	187	17816.9	198.2	144	18316.9

Notes:

1. All capacities are gross and have not considered indoor fan heat. To obtain net cooling capacity subtract indoor fan heat;
2. TC = Total Capacity (Unit: 1,000Btu/h); SC = Sensible Capacity (Unit: 1,000Btu/h).

APRH180C7A-D

Cooling capacity: (Continued)

Gross Cooling Capacity																			
Ambient DB(°C)		40.6									46.1								
Indoor	WB(°C)	16.1			19.4			22.8			16.1			19.4			22.8		
CFM	DB(°C)	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
5,500	23.9	142.6	120	16610.8	163.5	94.5	17014.1	185.6	65.5	17514.1	117.6	102	17211.6	141.0	85.6	18401.2	160.6	49.3	18901.2
	26.7	146.4	141	16840.9	166.1	118	17144.2	187.0	89.2	17644.2	122.6	119	17696.7	143.5	101	18531.3	163.2	72.9	19031.3
	29.4	153.9	148	17071.3	169.8	141	17637.0	188.3	112	18137.0	135.0	131	18182.1	144.8	124	19224.1	165.8	96.3	19724.1
	32.2	166.3	160	17794.4	171.2	166	18360.1	189.6	133	18860.1	147.4	143	19160.2	148.4	147	19974.2	167.1	119	20474.2
7,000	23.9	147.5	128	16760.8	164.7	109	17164.1	188.1	66.9	17664.1	121.3	109	17361.6	142.2	90.5	18551.2	165.6	50.7	19051.2
	26.7	151.3	145	16990.9	168.5	124	17294.2	189.4	92.3	17794.2	128.8	123	17846.7	146.0	107	18681.3	168.1	77.1	19181.3
	29.4	163.7	157	17221.3	173.5	150	17787.0	190.8	116	18287.0	141.2	135	18332.1	148.5	133	19374.1	169.4	101	19874.1
	32.2	171.2	164	17944.4	176.1	171	18510.1	193.3	139	19010.1	153.6	147	19310.2	151.1	151	20124.2	170.8	124	20624.2
7,800	23.9	150.0	135	17060.8	173.3	103	17464.1	190.6	68.2	17964.1	125.0	115	17661.6	150.8	104	18851.2	169.2	53.6	19351.2
	26.7	156.2	152	17290.9	175.9	130	17594.2	191.9	95.3	18094.2	127.7	124	18146.7	153.4	121	18981.3	170.6	79.6	19481.3
	29.4	169.8	165	17521.3	178.5	157	18087.0	193.2	119	18587.0	138.3	134	18632.1	157.1	147	19674.1	171.9	106	20174.1
	32.2	178.8	173	18244.4	181.0	176	18810.1	194.5	143	19310.1	159.7	155	19610.2	161.5	165	20424.2	173.2	131	20924.2

Notes:

1. All capacities are gross and have not considered indoor fan heat. To obtain net cooling capacity subtract indoor fan heat;
2. TC = Total Capacity (Unit: 1,000Btu/h); SC = Sensible Capacity (Unit: 1,000Btu/h).

APRH180C7A-D

Cooling capacity: (Continued)

Gross Cooling Capacity																			
Ambient DB(°C)		48									51.7								
Indoor	WB(°C)	16.1			19.4			22.8			16.1			19.4			22.8		
CFM	DB(°C)	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
5,500	23.9	114.6	98.7	17039.4	140.5	85.1	18421.9	157.6	46.3	18921.9	112.6	97.3	16867.3	135.0	81.8	18766.8	154.0	46.9	19266.8
	26.7	119.6	116	17779.5	142.9	100	18552.0	160.2	69.9	19052.0	117.4	114	17862.4	137.5	96.3	18896.9	156.4	69.6	19396.9
	29.4	132.0	128	18520.0	144.1	123	19419.8	162.8	93.3	19919.8	129.3	125	18857.8	138.8	119	19864.4	158.9	92.1	20364.4
	32.2	144.4	140	19753.1	147.6	147	20199.9	164.1	116	20699.9	139.6	135	20345.9	141.3	141	20664.5	160.2	114	21164.5
7,000	23.9	118.3	106	17189.4	141.7	90.0	18571.9	162.6	47.7	19071.9	116.1	104	17017.3	136.2	86.5	18916.8	158.7	48.2	19416.8
	26.7	125.8	120	17929.5	145.4	107	18702.0	165.1	74.1	19202.0	123.3	119	18012.4	139.9	103	19046.9	161.2	73.6	19546.9
	29.4	138.2	132	18670.0	147.8	132	19569.8	166.4	97.6	20069.8	135.2	131	19007.8	142.3	127	20014.4	162.4	96.2	20514.4
	32.2	150.6	144	19903.1	150.3	150	20349.9	167.8	121	20849.9	147.2	142	20495.9	144.8	140	20814.5	163.7	119	21314.5
7,800	23.9	122.0	112	17489.4	150.3	103	18871.9	166.2	50.6	19371.9	119.7	110	17317.3	144.5	91.3	19216.8	162.2	51.1	19716.8
	26.7	124.7	121	18229.5	152.8	121	19002.0	167.6	76.6	19502.0	128.0	124	18312.4	147.0	108	19346.9	163.5	76.0	19846.9
	29.4	135.3	131	18970.0	156.4	142	19869.8	168.9	103	20369.8	141.2	137	19307.8	150.6	133	20314.4	164.8	101	20814.4
	32.2	156.7	152	20203.1	160.7	164	20649.9	170.2	128	21149.9	153.1	148	20795.9	154.6	150	21114.5	166.1	126	21614.5

Notes:

1. All capacities are gross and have not considered indoor fan heat. To obtain net cooling capacity subtract indoor fan heat;
2. TC = Total Capacity (Unit: 1,000Btu/h); SC = Sensible Capacity (Unit: 1,000Btu/h).

APRH210C7A-D

Cooling capacity:

Gross Cooling Capacity																			
Ambient DB(°C)		29.4									35								
Indoor	WB(°C)	16.1			19.4			22.8			16.1			19.4			22.8		
CFM	DB(°C)	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
6,000	23.9	190.7	154	13977.6	213.3	123	16251.8	225.1	85.9	17368.9	179.0	147	15723.7	200.0	118	17997.9	219.6	82.2	19115.0
	26.7	193.1	182	14237.2	215.9	150	16511.4	229.4	114	17628.5	183.3	175	15983.3	202.9	144	18257.5	222.3	110	19374.6
	29.4	201.6	194	16404.4	218.4	175	18678.6	232.4	138	19545.7	191.9	186	17900.6	205.8	171	20174.7	225.2	135	21091.9
	32.2	212.8	104	16689.9	221.4	202	18964.0	235.2	160	19881.2	204.4	198	18236.0	209.9	197	20510.2	228.2	158	21477.3
7,600	23.9	195.8	160	14868.1	218.4	128	17142.3	230.2	91.0	18209.4	184.1	152	16564.2	205.1	123	18838.4	224.7	87.3	19905.5
	26.7	198.2	187	15130.7	221.0	155	17404.9	234.5	119	18472.0	188.4	180	16826.8	208.0	149	19101.0	227.4	115	20168.1
	29.4	206.7	199	16889.7	223.5	180	19163.9	237.5	143	20031.0	197.0	191	18385.9	210.9	176	20660.0	230.3	140	21577.1
	32.2	217.9	209	17175.2	226.5	207	19449.3	240.3	165	20316.5	209.5	203	18671.3	215.0	202	20945.5	233.3	163	21862.6
9,000	23.9	200.8	167	15868.6	224.6	134	18142.8	232.7	92.6	19159.9	186.3	160	17514.7	213.5	128	19788.9	226.3	89.0	20806.0
	26.7	205.1	198	16134.2	226.2	161	18408.4	235.9	122	19425.5	194.1	188	17780.3	218.0	160	20054.5	228.7	119	21071.6
	29.4	213.7	208	17415.5	227.5	189	19639.6	240.3	146	20606.8	205.3	199	18911.6	220.5	187	21135.8	232.2	144	22102.9
	32.2	224.8	218	17700.9	229.0	215	19925.1	242.9	167	20892.2	216.4	210	19197.1	221.6	215	21421.2	236.0	169	22388.4

Notes:

1. All capacities are gross and have not considered indoor fan heat. To obtain net cooling capacity subtract indoor fan heat;
2. TC = Total Capacity (Unit: 1,000Btu/h); SC = Sensible Capacity (Unit: 1,000Btu/h).

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Cooling capacity: (Continued)

Gross Cooling Capacity																			
Ambient DB(°C)		40.6									46.1								
Indoor	WB(°C)	16.1			19.4			22.8			16.1			19.4			22.8		
CFM	DB(°C)	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
6,000	23.9	166.7	140	17469.9	190.7	112	19744.0	216.0	78.3	22124.4	146.3	122	19500.2	173.2	110	21633.7	195.6	68.0	23888.2
	26.7	171.1	164	17729.5	193.7	139	20003.6	217.6	106	22384.0	152.0	147	19759.8	176.0	127	21893.3	198.6	95.1	24147.8
	29.4	179.7	173	19446.7	197.9	165	21670.9	219.1	131	23923.3	166.2	161	21299.1	177.5	154	23382.6	201.6	122	25587.1
	32.2	193.8	186	19832.2	199.4	193	22056.3	220.5	156	24358.8	180.4	175	21734.6	180.4	180	23818.1	202.9	148	26072.5
7,600	23.9	171.8	145	18260.4	195.8	117	20534.5	221.1	83.4	22864.9	151.4	133	20240.7	178.3	115	22374.2	200.7	73.1	24578.7
	26.7	176.2	169	18523.0	198.8	144	20797.1	222.7	111	23172.5	157.1	152	20503.3	181.1	132	22636.8	203.7	100	24841.3
	29.4	184.8	178	19932.0	203.0	170	22156.2	224.2	137	24408.6	171.3	166	21784.4	182.6	159	23867.9	206.7	127	26072.4
	32.2	198.9	191	20217.5	204.5	198	22441.6	225.6	161	24694.1	185.5	180	22069.8	185.5	186	24153.4	208.0	153	26357.8
9,000	23.9	177.4	155	19160.9	197.2	133	21435.0	224.0	85.0	23715.4	155.7	141	21091.2	179.5	120	23224.7	206.5	74.7	25379.2
	26.7	181.8	175	19426.5	201.5	151	21700.6	225.5	114	23891.0	164.3	158	21356.8	184.0	140	23490.3	209.3	105	25644.8
	29.4	196.0	188	20407.8	207.2	180	22631.9	227.1	141	24862.3	178.5	171	22188.1	186.8	169	24271.6	210.8	132	26526.1
	32.2	204.5	197	20693.2	210.1	204	22917.4	229.8	168	25147.8	192.6	185	22473.5	189.7	190	24557.1	212.3	159	26811.5

Notes:

1. All capacities are gross and have not considered indoor fan heat. To obtain net cooling capacity subtract indoor fan heat;
2. TC = Total Capacity (Unit: 1,000Btu/h); SC = Sensible Capacity (Unit: 1,000Btu/h).

APRH210C7A-D

Cooling capacity: (Continued)

Gross Cooling Capacity																			
Ambient DB(°C)		48									51.7								
Indoor	WB(°C)	16.1			19.4			22.8			16.1			19.4			22.8		
CFM	DB(°C)	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
6,000	23.9	140.5	122	20152.1	170.1	107	21847.9	189.8	62.2	24415.4	140.6	123	21536.1	166.3	97.2	22193.9	188.1	65.3	24616.4
	26.7	146.2	142	20411.7	172.9	124	22107.5	192.8	89.3	24799.7	146.1	142	21920.3	169.1	122	22578.1	190.8	91.3	25000.6
	29.4	160.4	155	21851.0	174.4	150	23546.8	195.8	116	26139.0	159.7	155	23259.6	170.6	148	23967.4	193.7	117	26239.9
	32.2	174.6	169	22336.4	177.3	177	24032.3	197.1	142	26674.4	171.4	166	23795.1	173.4	173	24502.8	195.0	142	26775.4
7,600	23.9	145.6	127	20842.6	175.2	112	22538.4	194.9	67.3	25055.9	145.7	128	22176.6	171.4	102	22834.4	193.2	70.4	25256.9
	26.7	151.3	147	21105.2	178.0	129	22800.0	197.9	94.4	25443.2	151.2	147	22563.8	174.2	127	23221.6	195.9	96.4	25644.1
	29.4	165.5	161	22336.3	179.5	156	24032.1	200.9	121	26624.2	164.8	160	23744.9	175.7	153	24452.7	198.8	122	26725.2
	32.2	179.7	174	22621.7	182.4	182	24317.5	202.9	147	26909.7	176.5	171	24030.3	178.5	179	24738.1	200.1	147	27010.7
9,000	23.9	149.9	136	21643.1	176.5	117	23338.9	200.7	68.9	25806.4	149.7	136	22927.1	172.8	115	23584.9	198.6	71.8	26007.4
	26.7	158.5	152	21908.7	180.9	136	23604.5	203.5	99.2	26196.7	157.9	153	23317.3	177.0	134	23975.1	201.4	101	26397.6
	29.4	172.7	166	22740.0	183.7	167	24385.8	205.0	126	27078.0	171.6	167	24148.6	179.7	162	24756.4	202.8	127	27178.9
	32.2	186.8	179	23025.4	186.6	187	24671.2	206.5	153	27363.4	185.2	180	24434.0	182.5	177	25041.8	204.1	153	27464.4

Notes:

1. All capacities are gross and have not considered indoor fan heat. To obtain net cooling capacity subtract indoor fan heat;
2. TC = Total Capacity (Unit: 1,000Btu/h); SC = Sensible Capacity (Unit: 1,000Btu/h).

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Cooling capacity:

Gross Cooling Capacity																			
Ambient DB(°C)		29.4									35								
Indoor	WB(°C)	16.1			19.4			22.8			16.1			19.4			22.8		
CFM	DB(°C)	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
7,000	23.9	216.2	174	20278.5	242.2	138	21474.3	225.9	95.5	22772.2	202.7	166	20646.9	227.0	132	21842.7	249.5	91.3	23140.6
	26.7	218.8	206	20347.6	245.2	169	21613.6	260.8	128	22857.5	207.6	198	20786.3	230.2	163	22052.3	252.6	123	23296.1
	29.4	228.6	222	20902.9	247.9	198	21796.9	264.0	155	23029.6	217.4	211	21341.6	233.5	193	22235.5	255.7	152	23468.2
	32.2	241.4	234	20918.6	251.3	229	22002.3	267.3	180	23085.1	231.8	225	21357.3	238.2	224	22441.0	259.1	179	23523.8
8,800	23.9	222.1	183	20598.6	249.4	145	22043.4	258.8	97.3	22865.2	205.3	175	20957.4	236.5	138	22402.1	251.3	93.2	23223.9
	26.7	226.8	219	20638.7	251.2	175	22163.4	262.4	131	22940.7	214.1	206	21077.4	240.0	171	22602.0	254.1	127	23379.4
	29.4	236.5	229	20919.0	252.6	208	22235.5	267.3	158	23157.3	227.0	218	21357.7	241.4	203	22674.2	258.0	156	23596.0
	32.2	249.4	242	21006.7	254.3	238	22324.4	270.3	183	23212.8	239.8	230	21445.4	243.0	237	22763.1	262.4	185	23651.5
10,300	23.9	224.5	193	20425.4	252.5	147	22246.7	262.1	99.1	22788.8	212.5	185	21069.5	244.7	193	22890.8	253.6	95.0	23432.9
	26.7	230.2	223	20902.9	254.4	180	22518.7	265.6	132	23096.2	217.4	211	21341.6	246.5	231	22957.4	256.9	130	23534.9
	29.4	244.7	237	20992.0	255.9	214	22607.6	268.7	161	23198.2	233.5	226	21430.7	248.1	233	23046.2	260.1	160	23636.9
	32.2	255.9	248	21080.3	257.8	248	22679.8	272.0	190	23308.2	246.3	239	21519.0	249.4	246	23118.4	261.7	190	23746.9

Notes:

1. All capacities are gross and have not considered indoor fan heat. To obtain net cooling capacity subtract indoor fan heat;
2. TC = Total Capacity (Unit: 1,000Btu/h); SC = Sensible Capacity (Unit: 1,000Btu/h).

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Cooling capacity: (Continued)

Gross Cooling Capacity																			
Ambient DB(°C)		40.6									46.1								
Indoor	WB(°C)	16.1			19.4			22.8			16.1			19.4			22.8		
CFM	DB(°C)	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
7,000	23.9	188.6	158	22346.6	216.2	125	22790.6	245.5	86.7	24988.5	178.9	158	23928.7	192.7	120	24372.7	218.7	71.7	26993.8
	26.7	193.5	188	22486.0	219.5	156	23000.2	247.1	118	25144.0	185.4	180	24068.1	196.0	139	24582.3	222.0	103	27149.3
	29.4	203.2	197	23041.2	224.4	187	23183.4	248.7	148	25316.1	201.6	196	24623.4	197.6	170	24765.5	225.2	133	27321.4
	32.2	219.5	213	23057.0	226.0	219	23388.9	250.4	176	25371.6	217.9	212	24639.1	200.9	201	24971.0	226.9	164	27376.9
8,800	23.9	195.1	169	22657.1	217.9	144	23350.0	248.7	88.7	25071.8	183.7	167	24239.2	194.4	126	24932.1	225.2	73.5	27077.1
	26.7	200.0	194	22777.1	222.7	164	23549.9	250.4	122	25227.2	193.5	188	24359.2	199.2	148	25132.0	228.5	108	27232.6
	29.4	216.2	210	23057.4	229.2	198	23622.1	252.0	153	25443.8	209.7	204	24639.5	202.5	181	25204.2	230.1	139	27449.1
	32.2	226.0	219	23145.1	232.5	209	23710.9	255.2	184	25499.3	226.0	219	24727.2	205.7	206	25293.1	231.7	170	27504.6
10,300	23.9	198.4	179	22769.1	229.2	136	23838.6	252.0	90.3	25280.7	188.6	176	24351.3	205.7	150	25420.8	230.1	77.4	27286.0
	26.7	206.5	200	23041.2	232.5	172	23905.3	253.6	126	25382.7	200.0	194	24623.4	209.0	172	25487.4	231.7	112	27388.0
	29.4	224.4	218	23130.3	235.7	208	23994.1	255.2	157	25484.7	217.9	212	24712.5	213.9	207	26687.4	233.4	146	27490.0
	32.2	239.0	232	23218.6	239.0	239	24066.3	256.9	188	25594.7	234.1	227	24800.8	217.1	208	26759.6	235.0	180	27600.0

Notes:

1. All capacities are gross and have not considered indoor fan heat. To obtain net cooling capacity subtract indoor fan heat;
2. TC = Total Capacity (Unit: 1,000Btu/h); SC = Sensible Capacity (Unit: 1,000Btu/h).

APRH240C7A-D

Cooling capacity: (Continued)

Gross Cooling Capacity																			
Ambient DB(°C)		48									51.7								
Indoor	WB(°C)	16.1			19.4			22.8			16.1			19.4			22.8		
CFM	DB(°C)	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
7,000	23.9	175.3	154	24299.7	191.8	119	24743.7	215.1	68.1	27360.2	152.1	132	24849.7	181.2	112	25293.7	205.8	67.0	27760.2
	26.7	181.8	176	24439.1	194.9	138	24953.3	218.4	99.1	27515.6	158.2	153	24989.1	184.3	131	25503.3	208.8	96.3	27915.6
	29.4	198.0	192	24994.4	196.3	169	25136.5	221.6	130	27687.8	173.6	168	25544.4	185.8	160	25686.5	211.9	125	28087.8
	32.2	214.3	208	25010.1	199.4	199	25342.0	223.3	160	27743.4	188.9	183	25560.1	199.9	179	25892.0	213.4	154	28143.3
8,800	23.9	180.1	164	24610.2	193.5	125	25303.1	221.6	69.9	27443.4	156.7	141	25160.2	182.8	118	25853.1	211.9	68.7	27843.4
	26.7	189.9	184	24730.2	198.0	147	25503.1	224.9	105	27598.9	165.9	161	25280.2	187.4	139	26053.0	215.0	102	27998.9
	29.4	206.1	200	25010.5	201.2	180	25575.2	226.5	136	27815.5	181.2	176	25560.5	190.4	171	26125.2	216.5	131	28215.5
	32.2	222.4	216	25098.2	204.2	204	25664.1	228.1	166	27871.0	196.6	190	25648.2	193.5	189	26214.1	218.0	160	28271.0
10,300	23.9	185.0	172	24722.3	204.8	149	25791.8	226.5	73.8	27652.4	161.3	149	25272.3	193.5	125	26341.8	216.5	72.4	28052.4
	26.7	196.4	191	24994.4	207.9	171	25858.4	228.1	108	27754.4	172.0	167	25544.4	196.6	146	26408.4	218.0	105	28154.4
	29.4	214.3	208	25083.5	212.6	195	27058.4	229.8	142	27856.4	188.9	183	25633.5	201.2	178	27608.4	219.6	137	28256.4
	32.2	230.5	224	25171.8	215.6	207	27130.6	231.4	176	27600.0	204.2	198	25721.8	204.2	200	27680.6	221.1	169	27600.0

Notes:

1. All capacities are gross and have not considered indoor fan heat. To obtain net cooling capacity subtract indoor fan heat;
2. TC = Total Capacity (Unit: 1,000Btu/h); SC = Sensible Capacity (Unit: 1,000Btu/h).

APRH300C7A-D

Cooling capacity:

Gross Cooling Capacity																			
Ambient DB(°C)		29.4									35								
Indoor	WB(°C)	16.1			19.4			22.8			16.1			19.4			22.8		
CFM	DB(°C)	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
8,500	23.9	266.7	231	24732.7	297.9	172	25232.7	309.2	109	25809.0	246.4	221	24500.5	273.7	166	27210.1	306.4	105	28599.0
	26.7	272.2	236	24932.6	304.1	219	25432.6	315.5	162	26013.3	251.5	226	24682.6	279.3	214	27410.0	312.7	153	28808.0
	29.4	277.9	241	25004.8	310.4	265	25504.8	322.1	198	26086.8	256.8	231	24749.6	285.1	258	27482.2	319.2	193	28882.9
	32.2	283.6	246	25132.5	316.8	301	25632.5	328.7	238	26217.1	262.1	235	24866.6	291.0	298	27609.9	325.8	234	29016.2
9,300	23.9	273.9	247	25022.7	300.9	178	25522.7	310.2	110	26119.0	254.2	237	24750.5	278.2	175	27500.1	307.2	107	28909.0
	26.7	279.6	253	25222.6	307.1	230	25722.6	316.6	164	26323.3	259.4	242	24932.6	289.4	226	27700.0	313.5	156	29118.0
	29.4	285.4	258	25294.8	313.5	284	25794.8	323.1	205	26396.8	264.8	247	24999.6	295.4	274	27772.2	320.0	200	29192.9
	32.2	291.3	263	25422.5	320.0	311	25922.5	329.8	256	26527.1	270.4	253	25116.6	301.5	300	27899.9	326.6	252	29326.2
10,000	23.9	280.7	262	25312.7	303.7	187	25812.7	310.9	112	26429.0	261.7	253	25000.5	293.9	183	27800.1	308.9	108	29219.0
	26.7	286.5	268	25512.6	309.9	263	26012.6	317.3	170	26633.3	267.1	259	25182.6	300.0	258	28000.0	315.3	158	29428.0
	29.4	292.4	273	25584.8	316.3	281	26084.8	323.9	220	26706.8	272.6	264	25249.6	306.2	270	28072.2	321.8	209	29502.9
	32.2	298.5	279	25712.5	322.9	315	26212.5	330.6	260	26837.1	278.3	269	25366.6	312.5	310	28199.9	328.5	251	29636.2
11,000	23.9	285.9	276	25602.7	305.2	213	26102.7	313.9	114	26739.0	267.2	261	25250.5	297.2	190	28266.5	309.7	110	29529.0
	26.7	291.8	282	25802.6	311.5	259	26302.6	320.4	178	26943.3	272.7	266	25432.6	303.3	250	28355.4	316.1	171	29738.0
	29.4	297.9	288	25874.8	317.9	288	26374.8	327.0	225	27016.8	278.4	272	25499.6	309.6	279	28428.6	322.6	209	29812.9
	32.2	304.0	294	26002.5	324.5	317	26502.5	333.8	268	27147.1	284.2	277	25616.6	316.0	284	28499.7	329.3	256	29946.2

Notes:

1. All capacities are gross and have not considered indoor fan heat. To obtain net cooling capacity subtract indoor fan heat;
2. TC = Total Capacity (Unit: 1,000Btu/h); SC = Sensible Capacity (Unit: 1,000Btu/h).

APRH300C7A-D

Cooling capacity: (Continued)

Gross Cooling Capacity																			
Ambient DB(°C)		40.6									46.1								
Indoor	WB(°C)	16.1			19.4			22.8			16.1			19.4			22.8		
CFM	DB(°C)	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
8,500	23.9	225.7	211	26487.9	265.2	158	29197.5	298.9	100	32028.6	198.2	194	28475.3	235.7	141	31184.9	280.4	87.9	36055.2
	26.7	230.4	215	26670.0	270.7	205	29397.4	305.1	147	32245.5	202.5	198	28657.4	240.7	190	31384.8	286.4	136	36279.1
	29.4	235.2	220	26737.0	276.3	254	29469.6	311.4	187	32322.5	206.9	202	28724.4	245.9	238	31457.0	292.4	175	36355.6
	32.2	240.1	225	26854.0	282.0	278	29597.3	317.8	223	32460.3	211.4	207	28841.4	251.2	243	31584.7	298.6	204	36496.3
9,300	23.9	233.9	227	26737.9	271.7	168	29487.5	300.9	102	32338.6	205.4	198	28725.3	240.4	151	31474.9	282.7	89.7	36365.2
	26.7	238.8	232	26920.0	277.3	220	29687.4	307.1	153	32555.5	209.9	202	28907.4	245.6	203	31674.8	288.7	143	36589.1
	29.4	243.8	237	26987.0	283.1	269	29759.6	313.5	193	32632.5	214.4	207	28974.4	250.8	246	31747.0	294.8	178	36665.6
	32.2	248.9	242	27104.0	288.9	284	29887.3	320.0	249	32770.3	219.0	211	29091.4	256.2	251	31874.7	301.0	235	36806.3
10,000	23.9	238.9	223	26987.9	275.9	175	29787.5	302.4	104	32648.6	213.2	208	28975.3	246.4	159	31774.9	284.4	91.7	36675.2
	26.7	243.9	228	27170.0	281.6	235	29987.4	308.7	153	32865.5	217.8	212	29157.4	251.7	218	31974.8	290.4	142	36899.1
	29.4	249.0	232	27237.0	287.5	265	30059.6	315.0	199	32942.5	222.5	217	29224.4	257.1	251	32047.0	296.6	185	36975.6
	32.2	254.2	237	27354.0	293.4	281	30187.3	321.6	246	33080.3	227.3	222	29341.4	262.6	259	32174.7	302.9	231	37116.3
11,000	23.9	248.2	242	27237.9	280.2	184	30253.9	303.9	105	32958.6	221.9	218	29225.3	252.9	168	32241.3	285.2	93.2	36985.2
	26.7	253.3	248	27420.0	286.0	246	30342.8	310.2	164	33175.5	226.7	223	29407.4	258.3	231	32330.2	291.2	150	37209.1
	29.4	258.6	253	27487.0	291.9	269	30414.9	316.6	200	33252.5	231.6	228	29474.4	263.8	258	32402.3	297.4	185	37285.6
	32.2	264.0	258	27604.0	297.9	280	30487.1	323.1	245	33390.3	236.6	233	29591.4	269.5	264	32474.5	303.7	232	37426.3

Notes:

1. All capacities are gross and have not considered indoor fan heat. To obtain net cooling capacity subtract indoor fan heat;
2. TC = Total Capacity (Unit: 1,000Btu/h); SC = Sensible Capacity (Unit: 1,000Btu/h).

APRH300C7A-D

Cooling capacity: (Continued)

Gross Cooling Capacity																			
Ambient DB(°C)		48									51.7								
Indoor	WB(°C)	16.1			19.4			22.8			16.1			19.4			22.8		
CFM	DB(°C)	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
8,500	23.9	195.5	191	29071.5	233.0	139	31781.1	277.7	85.2	36798.7	175.5	172	30462.7	209.6	124	33172.3	250.3	75.3	38458.3
	26.7	199.8	195	29253.6	238.0	188	31981.0	283.7	133	37018.0	179.5	176	30644.8	214.2	169	33372.2	255.7	119	38679.8
	29.4	204.2	200	29320.6	243.2	235	32053.2	289.7	172	37096.8	183.5	179	30711.8	218.9	211	33444.4	261.3	154	38753.7
	32.2	208.7	204	29437.6	248.5	240	32180.9	295.9	202	37236.4	187.5	183	30828.8	223.7	216	33572.1	266.9	181	38892.1
9,300	23.9	202.7	195	29321.5	237.7	148	32071.1	280.0	87.0	37108.7	182.1	175	30712.7	213.9	132	33462.3	252.4	76.9	38768.3
	26.7	207.2	200	29503.6	242.9	200	32271.0	286.0	140	37328.0	186.2	179	30894.8	218.6	180	33662.2	257.8	125	38989.8
	29.4	211.7	204	29570.6	248.1	243	32343.2	292.1	175	37406.8	190.3	183	30961.8	223.4	219	33734.4	263.4	157	39063.7
	32.2	216.3	208	29687.6	253.5	248	32470.9	298.3	233	37546.4	194.5	187	31078.8	228.3	224	33862.1	269.1	209	39202.1
10,000	23.9	210.5	205	29571.5	243.7	157	32371.1	281.7	89.0	37418.7	189.2	184	30962.7	219.4	140	33762.3	253.9	78.7	39078.3
	26.7	215.1	210	29753.6	249.0	215	32571.0	287.7	139	37638.0	193.4	189	31144.8	224.2	193	33962.2	259.4	124	39299.8
	29.4	219.8	214	29820.6	254.4	248	32643.2	293.9	183	37716.8	197.6	193	31211.8	229.1	223	34034.4	265.0	164	39373.7
	32.2	224.6	219	29937.6	259.9	256	32770.9	300.2	228	37856.4	202.0	197	31328.8	234.1	231	34162.1	270.7	205	39512.1
11,000	23.9	219.2	216	29821.5	250.2	165	32837.5	282.5	90.5	37728.7	197.1	194	31212.7	225.3	148	34228.7	254.6	80.1	39388.3
	26.7	224.0	220	30003.6	255.6	229	32926.4	288.5	148	37948.0	201.5	198	31394.8	230.2	206	34317.5	260.1	132	39609.8
	29.4	228.9	225	30070.6	261.1	256	32998.6	294.7	183	38026.8	205.9	202	31461.8	235.2	230	34389.7	265.7	164	39683.7
	32.2	233.9	230	30187.6	266.8	261	33070.7	301.0	229	38166.4	210.5	207	31578.8	240.4	235	34461.9	271.5	206	39822.1

Notes:

1. All capacities are gross and have not considered indoor fan heat. To obtain net cooling capacity subtract indoor fan heat;
2. TC = Total Capacity (Unit: 1,000Btu/h); SC = Sensible Capacity (Unit: 1,000Btu/h).

APRH360C7A-D

Cooling capacity:

Gross Cooling Capacity																			
Ambient DB(°C)		29.4									35								
Indoor	WB(°C)	16.1			19.4			22.8			16.1			19.4			22.8		
CFM	DB(°C)	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
10,000	23.9	319.7	262	28343.2	357.8	210	31730.7	377.7	147	32822.2	300.0	250	28735.9	345.7	201	33314.0	368.5	141	34967.1
	26.7	323.6	309	28952.0	362.1	255	31948.1	384.9	195	33274.4	307.2	297	32566.0	350.5	246	34000.0	372.9	188	35329.2
	29.4	337.7	329	30195.7	366.1	297	32130.7	389.7	234	33900.6	321.5	316	31756.2	355.2	290	34666.9	377.5	230	35881.8
	32.2	356.7	347	31830.7	371.2	342	32348.2	394.4	271	34283.2	342.5	337	33537.9	362.1	335	34886.1	382.6	269	36491.6
12,000	23.9	328.2	276	28543.2	368.3	219	32030.7	382.0	150	33222.2	303.7	264	28935.9	352.8	261	33614.0	371.2	144	35367.1
	26.7	335.2	328	29152.0	370.8	264	32248.1	387.2	199	33674.4	343.9	307	32766.0	360.0	309	34300.0	375.0	194	35729.2
	29.4	349.5	343	30395.7	372.9	312	32430.7	394.4	239	34300.6	335.4	330	31956.2	367.0	333	34966.9	380.8	236	36281.8
	32.2	368.3	356	32030.7	375.4	356	32648.2	398.8	276	34683.2	354.1	348	33737.9	369.3	344	35186.1	387.2	279	36891.6
13,500	23.9	331.9	290	28743.2	372.7	223	32330.7	386.8	153	33622.2	314.3	279	29135.9	371.6	264	33914.0	374.4	147	35767.1
	26.7	340.2	331	29352.0	375.6	271	32548.1	392.0	201	34074.4	321.5	316	32966.0	374.3	281	34600.0	379.1	197	36129.2
	29.4	361.3	351	30595.7	377.7	321	32730.7	396.5	243	34700.6	344.9	339	32156.2	376.6	325	35266.9	383.9	241	36681.8
	32.2	377.7	367	32230.7	380.6	350	32948.2	401.3	272	35083.2	363.6	357	33937.9	378.6	350	35486.1	386.2	286	37291.6
14,800	23.9	344.9	302	28943.2	375.6	228	32630.7	392.0	155	34022.2	321.5	290	29335.9	372.8	274	34214.0	381.6	149	36167.1
	26.7	349.5	340	29552.0	377.7	279	32848.1	398.2	203	34474.4	333.1	328	33166.0	377.6	312	34900.0	388.8	200	36529.2
	29.4	368.5	358	30795.7	382.6	330	33030.7	402.9	246	35100.6	354.1	348	32356.2	380.7	330	35566.9	393.4	246	37081.8
	32.2	382.6	372	32430.7	384.9	362	33248.2	407.7	293	35483.2	370.8	364	34137.9	396.3	373	35786.1	398.2	293	37691.6

Notes:

1. All capacities are gross and have not considered indoor fan heat. To obtain net cooling capacity subtract indoor fan heat;
2. TC = Total Capacity (Unit: 1,000Btu/h); SC = Sensible Capacity (Unit: 1,000Btu/h).

APRH360C7A-D

Cooling capacity: (Continued)

Gross Cooling Capacity																			
Ambient DB(°C)		40.6									46.1								
Indoor	WB(°C)	16.1			19.4			22.8			16.1			19.4			22.8		
CFM	DB(°C)	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
10,000	23.9	279.3	239	35380.5	319.7	191	39383.2	362.5	135	44851.9	271.5	235	34444.3	326.8	230	40609.3	344.7	134	43641.9
	26.7	286.5	279	36267.6	324.6	236	40257.9	365.0	180	45135.2	281.0	267	36221.9	331.4	259	41504.3	349.5	179	44226.1
	29.4	300.8	293	39187.5	331.5	281	41428.3	367.3	224	45443.2	304.8	291	39180.4	333.7	303	41827.5	354.3	224	44512.0
	32.2	324.6	316	40949.2	334.0	328	42019.7	369.6	265	46022.3	328.6	314	42138.9	338.6	328	42672.8	356.7	268	44822.8
12,000	23.9	288.8	255	35580.5	322.1	219	39683.2	367.3	137	45251.9	278.7	249	34644.3	329.1	239	40909.3	354.3	140	44041.9
	26.7	296.0	288	36467.6	329.2	248	40557.9	369.6	186	45535.2	293.0	276	36421.9	336.3	271	41804.3	359.0	187	44626.1
	29.4	319.7	311	39387.5	338.7	297	41728.3	372.1	231	45843.2	316.8	299	39380.4	338.9	320	42127.5	361.3	233	44912.0
	32.2	334.0	325	41149.2	343.5	338	42319.7	376.8	276	46422.3	340.6	322	42338.9	345.7	324	42972.8	363.8	278	45222.8
13,500	23.9	293.6	269	35780.5	338.7	206	39983.2	372.1	140	45651.9	285.9	261	34844.3	345.7	254	41209.3	361.3	142	44441.9
	26.7	305.4	301	36667.6	343.5	260	40857.9	374.4	192	45935.2	290.9	275	36621.9	350.6	287	42104.3	363.8	192	45026.1
	29.4	331.5	326	39587.5	348.3	312	42028.3	376.8	237	46243.2	311.2	288	39580.4	357.5	327	42427.5	366.1	242	45312.0
	32.2	353.0	343	41349.2	353.0	347	42619.7	378.7	283	46822.3	352.4	327	42538.9	365.8	331	43272.8	368.5	292	45622.8
14,800	23.9	300.8	279	35980.5	345.8	213	40283.2	374.4	142	46051.9	293.0	260	35044.3	352.9	261	41509.3	363.8	202	44841.9
	26.7	317.4	312	36867.6	350.7	269	41157.9	376.8	195	46335.2	312.0	298	36821.9	357.5	319	42404.3	366.1	229	45426.1
	29.4	341.2	335	39787.5	355.3	326	42328.3	379.1	243	46643.2	338.1	323	39780.4	362.4	330	42727.5	368.5	247	45712.0
	32.2	360.1	354	41549.2	364.0	354	42919.7	383.9	295	47222.3	359.5	344	42738.9	369.7	337	43572.8	371.0	297	46022.8

Notes:

1. All capacities are gross and have not considered indoor fan heat. To obtain net cooling capacity subtract indoor fan heat;
2. TC = Total Capacity (Unit: 1,000Btu/h); SC = Sensible Capacity (Unit: 1,000Btu/h).

APRH360C7A-D

Cooling capacity: (Continued)

Gross Cooling Capacity																			
Ambient DB(°C)		48									51.7								
Indoor	WB(°C)	16.1			19.4			22.8			16.1			19.4			22.8		
CFM	DB(°C)	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI	TC	SC	PI
10,000	23.9	269.5	233	35335.6	324.8	228	41708.3	342.7	132	44844.6	245.9	227	38351.3	289.2	177	44188.2	325.9	123	50727.1
	26.7	279.0	265	37172.1	329.4	257	42630.0	347.5	177	45448.2	255.0	232	40457.5	293.8	219	45256.5	330.4	167	51429.1
	29.4	302.8	289	40228.6	331.7	301	42966.9	352.3	222	45743.6	277.8	254	43937.2	296.1	262	45928.0	335.0	210	51764.9
	32.2	326.6	312	43285.2	336.6	326	43840.2	354.7	266	46064.7	297.5	273	47447.4	300.8	285	46645.3	337.3	252	52115.9
12,000	23.9	276.7	247	35535.6	327.1	237	42008.3	352.3	138	45244.6	252.6	234	38551.3	291.5	199	44488.2	335.0	126	51127.1
	26.7	291.0	274	37372.1	334.3	269	42930.0	357.0	185	45848.2	266.4	263	40657.5	298.5	231	45556.5	339.6	175	51829.1
	29.4	314.8	297	40428.6	336.9	318	43266.9	359.3	231	46143.6	289.2	285	44137.2	302.9	278	46228.0	341.8	218	52164.9
	32.2	338.6	320	43485.2	343.7	322	44140.2	361.8	276	46464.7	312.2	307	47647.4	307.6	293	46945.3	344.1	262	52515.9
13,500	23.9	283.9	259	35735.6	343.7	252	42308.3	359.3	140	45644.6	259.6	246	38751.3	307.6	209	44788.2	341.8	131	51527.1
	26.7	288.9	273	37572.1	348.6	285	43230.0	361.8	190	46248.2	275.5	262	40857.5	312.2	241	45856.5	344.1	179	52229.1
	29.4	309.2	286	40628.6	355.5	325	43566.9	364.1	240	46543.6	300.8	286	44337.2	319.0	289	46528.0	346.4	227	52564.9
	32.2	350.4	343	43685.2	363.8	329	44440.2	366.5	290	46864.7	323.6	316	47847.4	326.5	317	47245.3	348.7	275	52915.9
14,800	23.9	291.0	258	35935.6	350.9	259	42608.3	361.8	200	46044.6	266.4	244	38951.3	314.3	197	45088.2	344.1	131	51927.1
	26.7	310.0	296	37772.1	355.5	317	43530.0	364.1	227	46648.2	284.7	278	41057.5	319.0	252	46156.5	346.4	186	52629.1
	29.4	336.1	321	40828.6	360.4	328	43866.9	366.5	245	46943.6	309.9	302	44537.2	323.6	307	46828.0	348.7	232	52964.9
	32.2	357.5	342	43885.2	367.7	335	44740.2	369.0	295	47264.7	330.4	312	48047.4	334.2	329	47545.3	351.1	280	53315.9

Notes:

1. All capacities are gross and have not considered indoor fan heat. To obtain net cooling capacity subtract indoor fan heat;
2. TC = Total Capacity (Unit: 1,000Btu/h); SC = Sensible Capacity (Unit: 1,000Btu/h).

6. Electrical data

Model	Power Supply			Compressor				Eva.Fan Motor			Con. Fan Motor		
	MCA	TOCA	MFA	STC	RNC	IPT	Qty	RNC	IPT	Qty	RNC (Each)	IPT (Each)	Qty.
APRH048C7A-DC1141	14.65	18.3	21.45	51.5	6.8	4.04	1	4.10	0.91	1	1.50	0.35	1
APRH060C7A-DC1170	16.5	21.41	24.8	64	8.3	4.75	1	4.65	1.05	1	1.50	0.35	1
APRH075C7A-DD1220	23.5	28.9	33.2	75	9.7	5.65	1	7.22	1.62	1	3.65	0.83	1
APRH090C7A-DD1260	29.4	36.5	43.7	121.2	14.3	8.08	1	7.18	1.61	1	3.93	0.88	1
APRH105C7A-DD1300	29.6	36.3	47.2	62	8.8	5.13	2	2.90	1.39	1	3.93 3.93	0.88 0.88	1
APRH120C7A-DD1350	30.2	37.3	49.4	66	9.6	5.7	2	3.50	1.84	1	2.51 2.51	0.98 0.98	1
APRH150C7A-DD1440	41.5	52.9	66.4	64+139	8.3+16.6	4.75+9.16	2	4.84	2.03	1	3.66	0.83	1
APRH180C7A-DD2530	45.4	58.1	72.4	64+144	8.3+18.7	4.75+10.8	2	7.50	3.97	1	2.80	1.27	1
APRH210C7A-DD2610	57.4	68.1	90.6	139	16.6	9.16	2	6.60	3.03	1	3.53	0.80	2
APRH240C7A-DD2700	64.1	77.9	101.5	144	18.7	10.8	2	8.90	4.35	1	2.84	1.29	2
APRH300C7A-DD2870	74.7	93.4	116.0	158	20.66	12.1	2	9.70	4.4	1	3.71	2.07	2
APRH360C7A-DD3105	84.3	104.6	133.4	197	24.52	13.7	2	13.6	7.4	1	3.71	2.07	2

Notes:

MCA: Min. Current Amps. (A)

TOCA: Total Over-current Amps. (A)

MFA: Max. Fuse Amps (A)

STC: Starting Current (A);

RNC: Running Current (A);

IPT: Input Power (kW);

Qty: Quantity

Voltage imbalance between each phases should be <2%.

7. Fan performance data

APRH048C7A-DC1141

Static Pressure	Item	High speed	Medium speed	Low speed
0Pa	Fan speed (rpm)	1,045	978	921
	Power input (W)	961	838	733
	Air flow (CFM)	2,252	2,082	1,931
50Pa	Fan speed (rpm)	1,102	1,038	992
	Power input (W)	919	805	707
	Air flow (CFM)	2,140	1,979	1,832
75Pa	Fan speed (rpm)	1,128	1,068	1,021
	Power input (W)	903	791	696
	Air flow (CFM)	2,088	1,826	1,780
100Pa	Fan speed (rpm)	1,150	1,096	1,050
	Power input (W)	883	774	681
	Air flow (CFM)	2,028	1,871	1,727
150Pa	Fan speed (rpm)	1,190	1,144	1,096
	Power input (W)	845	740	654
	Air flow (CFM)	1,904	1,710	1,608
200Pa	Fan speed (rpm)	1,231	1,184	1,156
	Power input (W)	806	708	621
	Air flow (CFM)	1,756	1,593	1,462

Notes: The unit only has one speed of indoor side fan, and low speed is the factory default. If the unit operating with other fan speed, the wiring between fan motor and main PCB board should be adjusted.

APRH060C7A-DC1170

Static Pressure	Item	High speed	Medium speed	Low speed
0Pa	Fan speed (rpm)	1,062	1,001	940
	Power input (W)	944	830	734
	Air flow (CFM)	2,172	2,022	1,876
50Pa	Fan speed (rpm)	1,115	1,060	1,008
	Power input (W)	910	790	698
	Air flow (CFM)	2,064	1,911	1,774
75Pa	Fan speed (rpm)	1,139	1,088	1,039
	Power input (W)	889	775	684
	Air flow (CFM)	2,010	1,859	1,722
100Pa	Fan speed (rpm)	1,166	1,117	1,069
	Power input (W)	859	758	670
	Air flow (CFM)	1,943	1,804	1,671
150Pa	Fan speed (rpm)	1,210	1,166	1,121
	Power input (W)	823	721	640
	Air flow (CFM)	1,819	1,687	1,556
200Pa	Fan speed (rpm)	1,246	1,205	1,187
	Power input (W)	780	687	596
	Air flow (CFM)	1,677	1,558	1,362

Notes: The unit only has one speed of indoor side fan, and high speed is the factory default. If the unit operating with other fan speed, the wiring between fan motor and main PCB board should be adjusted.

APRH075C7A-DD1220

Static Pressure	Item	High speed	Medium speed	Low speed
0Pa	Fan speed (rpm)	1,001	901	810
	Power input (W)	1,665	1,386	1,164
	Air flow (CFM)	3,001	2,647	2,356
50Pa	Fan speed (rpm)	1,063	972	899
	Power input (W)	1,607	1,341	1,133
	Air flow (CFM)	2,909	2,564	2,270
75Pa	Fan speed (rpm)	1,098	1,016	946
	Power input (W)	1,582	1,317	1,120
	Air flow (CFM)	2,825	2,503	2,190
100Pa	Fan speed (rpm)	1,122	1,047	977
	Power input (W)	1,526	1,280	1,079
	Air flow (CFM)	2,759	2,401	2,105
150Pa	Fan speed (rpm)	1,173	1,106	/
	Power input (W)	1,452	1,230	/
	Air flow (CFM)	2,560	2,250	/
200Pa	Fan speed (rpm)	1,219	1,162	/
	Power input (W)	1,375	1,182	/
	Air flow (CFM)	2,367	2,109	/
250Pa	Fan speed (rpm)	1,265	/	/
	Power input (W)	1,305	/	/
	Air flow (CFM)	2,182	/	/

Notes: The unit only has one speed of indoor side fan, and high speed is the factory default. If the unit operating with other fan speed, the wiring between fan motor and main PCB board should be adjusted.

APRH090C7A-DD1260

Static Pressure	Item	High speed	Medium speed	Low speed
0Pa	Fan speed (rpm)	1,035	936	844
	Power input (W)	1,716	1,432	1,197
	Air flow (CFM)	3,074	2,697	2,403
50Pa	Fan speed (rpm)	1,081	991	909
	Power input (W)	1,652	1,409	1,160
	Air flow (CFM)	2,981	2,596	2,284
75Pa	Fan speed (rpm)	1,110	1,026	954
	Power input (W)	1,650	1,360	1,137
	Air flow (CFM)	2,951	2,574	2,223
100Pa	Fan speed (rpm)	1,127	1,051	984
	Power input (W)	1,591	1,377	1,126
	Air flow (CFM)	2,825	2,438	2,146
150Pa	Fan speed (rpm)	1,173	1,110	/
	Power input (W)	1,525	1,338	/
	Air flow (CFM)	2,657	2,313	/
200Pa	Fan speed (rpm)	1,217	1,165	/
	Power input (W)	1,449	1,281	/
	Air flow (CFM)	2,483	2,187	/
250Pa	Fan speed (rpm)	1,263	/	/
	Power input (W)	1,420	/	/
	Air flow (CFM)	2,331	/	/

Notes: The unit only has one speed of indoor side fan, and high speed is the factory default. If the unit operating with other fan speed, the wiring between fan motor and main PCB board should be adjusted.

Blower drive options						
Model	Motor			Blower		
	HP	rpm	Pulley pitch Dia. (inch)	Fan speed range (rpm)		Pulley pitch Dia.(inch)
				Min.	Max.	
APRH105C7A-DD1300	2	1,400	4.53~5.25	821	918	8.35
APRH120C7A-DD1350	2	1,400	4.53~5.25	931	1,016	7.48
APRH150C7A-DD2530	4	1,420	4.53~5.25	769	871	8.82
APRH180C7A-DD2530	5.3	1,440	4.53~5.25	949	1,112	7.48
APRH210C7A-DD2610	5.3	1,440	4.53~5.25	927	1,045	9.84
APRH240C7A-DD2700	5.3	1,440	4.53~5.25	1,081	1,284	5.91
APRH300C7A-DD2870	7.3	1,440	4.53~5.25	925	1,088	7.09
APRH360C7A-DD3105	7.3	1,440	4.53~5.25	1,022	1,195	6.30

Example for selection process:

The following data are the rated design points for MRCT-085CWN1-R(C) rooftop packages:

Air flow = 3520CFM; External static pressure = 0.3in.w.g; Fan speed = 862rpm;

Power input = 1405W; The No. of turns = 1N.

To increase the ESP (External Static Pressure) to 0.4in.w.g, but maintain the airflow rate at 3500CFM, please follow the steps below:

Step 1: Selection of new desired point.

From the table data, select the point that can meet both of the requirements.

ESP = 0.4in.w.g;

Air flow rate (Near or equal to) \approx 3500CFM.

Step 2: Read fan speed, power input:

Air flow = 3483CFM;

Fan speed = 896rpm;

Power input = 1400W.

Step 3: Read number of turns for variable pitch pulley.

Similarly, use this RPM value to read the No. of turns (N) by referring to the table of 'Motor Variable Pitch Pulley Data'. The variable pitch pulley for motor shall be adjusted to this 'N' in order to get 3483cfm. First, adjust the motor pulley to 0 turns. Then, make 0.25 turns on the pulley. Cross check the dimension 'X', and it stands for regulation space of motor pulley. In this case, $X = 1\text{mm}$.

Pulley pitch factory set point: the table, No. of turns = $1.5N$.

APRH105C7A-DD1300

ESP (Pa)	N	0	0.25	0.5	0.75	1	1.25	1.5	1.75	2
	X	0.5	1	1.5	2	2.5	3	3.5	4	4.5
0	Fan speed (rpm)	896	887	876	866	855	847	839	830	821
	Power input (W)	1,790	1,720	1,710	1,665	1,620	1,560	1,500	1,445	1,390
	Air flow (CFM)	4,320	4,213	4,166	4,130	4,094	4,041	3,988	3,946	3,905
25	Fan speed (rpm)	899	890	878	867	857	849	842	849	823
	Power input (W)	1,710	1,640	1,630	1,590	1,550	1,490	1,430	1,378	1,325
	Air flow (CFM)	4,134	4,035	3,987	3,943	3,899	3,855	3,810	3,761	3,713
50	Fan speed (rpm)	902	893	880	869	858	851	844	851	825
	Power input (W)	1,630	1,560	1,550	1,515	1,480	1,420	1,360	1,310	1,260
	Air flow (CFM)	3,947	3,858	3,808	3,756	3,705	3,669	3,632	3,577	3,521
75	Fan speed (rpm)	904	896	880	871	862	854	847	854	827
	Power input (W)	1,555	1,485	1,467	1,436	1,405	1,345	1,285	1,235	1,185
	Air flow (CFM)	3,770	3,675	3,620	3,570	3,520	3,470	3,420	3,364	3,307
100	Fan speed (rpm)	907	896	885	876	866	858	849	858	828
	Power input (W)	1,470	1,400	1,390	1,360	1,330	1,265	1,200	1,150	1,100
	Air flow (CFM)	3,582	3,483	3,428	3,321	3,215	3,215	3,215	3,154	3,092
125	Fan speed (rpm)	910	900	886	877	869	860	852	860	830
	Power input (W)	1,375	1,310	1,295	1,265	1,235	1,175	1,115	1,065	1,015
	Air flow (CFM)	3,362	3,266	3,206	3,122	3,039	3,005	2,971	2,901	2,831
150	Fan speed (rpm)	913	903	887	879	871	863	854	863	832
	Power input (W)	1,280	1,220	1,200	1,170	1,140	1,085	1,030	980	930
	Air flow (CFM)	3,141	3,048	2,984	2,924	2,864	2,795	2,727	2,649	2,570
175	Fan speed (rpm)	915	906	892	883	874	865	857	/	/
	Power input (W)	1,170	1,115	1,095	1,068	1,040	945	850	/	/
	Air flow (CFM)	2,851	2,761	2,683	2,619	2,555	2,325	2,094	/	/
200	Fan speed (rpm)	918	909	897	887	876	868	859	/	/
	Power input (W)	1,060	1,010	990	965	940	805	670	/	/
	Air flow (CFM)	2,560	2,473	2,383	2,315	2,246	1,854	1,462	/	/

Notes:

1. Legend: X – Regulation space of motor pulley (mm); N: Number of turns; ESP: External static pressure (Pa);
2. Pulley pitch factory set point: The table, No. of turns (N) = 5;
3. Bold data is the performance testing set point;
4. Shading data are rated airflow.

APRH120C7A-DD1350

ESP (Pa)	N	0	0.25	0.5	0.75	1	1.25	1.5	1.75	2
	X	0.5	1	1.5	2	2.5	3	3.5	4	4.5
0	Fan speed (rpm)	/	/	/	/	/	/	962	946	931
	Power input (W)	/	/	/	/	/	/	2,020	1,945	1,870
	Air flow (CFM)	/	/	/	/	/	/	4,571	4,500	4,428
25	Fan speed (rpm)	/	/	/	/	/	969	964	969	933
	Power input (W)	/	/	/	/	/	2,010	1,930	1,855	1,780
	Air flow (CFM)	/	/	/	/	/	4,442	4,398	4,323	4,248
50	Fan speed (rpm)	/	/	/	/	977	972	967	972	935
	Power input (W)	/	/	/	/	1,990	1,915	1,840	1,765	1,690
	Air flow (CFM)	/	/	/	/	4,320	4,272	4,224	4,146	4,067
75	Fan speed (rpm)	/	/	/	981	980	975	970	975	937
	Power input (W)	/	/	/	1,998	1,915	1,843	1,770	1,695	1,620
	Air flow (CFM)	/	/	/	4,214	4,183	4,127	4,072	3,997	3,922
100	Fan speed (rpm)	/	/	986	984	982	977	972	977	938
	Power input (W)	/	/	2,000	1,900	1,800	1,730	1,660	1,590	1,520
	Air flow (CFM)	/	/	4,129	4,052	3,974	3,905	3,835	3,771	3,707
125	Fan speed (rpm)	/	989	989	987	985	980	975	980	940
	Power input (W)	/	1,980	1,960	1,833	1,705	1,635	1,565	1,495	1,425
	Air flow (CFM)	/	3,953	4,065	3,927	3,789	3,719	3,648	3,579	3,509
150	Fan speed (rpm)	1,009	991	991	990	988	983	978	983	942
	Power input (W)	2,050	1,880	1,865	1,738	1,610	1,540	1,470	1,400	1,330
	Air flow (CFM)	3,830	3,778	3,891	3,748	3,605	3,532	3,460	3,386	3,312
175	Fan speed (rpm)	1,011	993	994	992	990	/	/	/	/
	Power input (W)	1,945	1,775	1,770	1,638	1,505	/	/	/	/
	Air flow (CFM)	3,656	3,586	3,718	3,549	3,381	/	/	/	/
200	Fan speed (rpm)	1,012	995	997	995	993	/	/	/	/
	Power input (W)	1,840	1,670	1,660	1,530	1,400	/	/	/	/
	Air flow (CFM)	3,481	3,394	3,517	3,337	3,157	/	/	/	/
225	Fan speed (rpm)	1,014	996	1,000	/	/	/	/	/	/
	Power input (W)	1,725	1,545	1,550	/	/	/	/	/	/
	Air flow (CFM)	3,292	3,148	3,316	/	/	/	/	/	/
250	Fan speed (rpm)	1,016	998	1,002	/	/	/	/	/	/
	Power input (W)	1,610	1,420	1,425	/	/	/	/	/	/
	Air flow (CFM)	3,104	2,902	3,048	/	/	/	/	/	/

Notes:

1. Legend: X – Regulation space of motor pulley (mm); N: Number of turns; ESP: External static pressure (Pa);
2. Pulley pitch factory set point: The table, No. of turns (N) = 5;
3. Bold data is the performance testing set point;
4. Shading data are rated airflow.

APRH150C7A-DD1440

ESP (Pa)	N	0	0.25	0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.5
	X	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5
0	Fan speed (rpm)	857	849	840	828	816	806	795	784	774	772	769
	Power input (W)	3,530	3,445	3,360	3,225	3,090	3,000	2,910	2,810	2,710	2,620	2,530
	Air flow (CFM)	6,773	6,718	6,662	6,575	6,487	6,395	6,302	6,230	6,158	6,103	6,049
25	Fan speed (rpm)	858	850	841	829	817	807	796	785	775	772	770
	Power input (W)	3,415	3,323	3,230	3,103	2,975	2,878	2,780	2,690	2,600	2,513	2,425
	Air flow (CFM)	6,571	6,503	6,435	6,354	6,272	6,176	6,079	6,004	5,929	5,872	5,815
50	Fan speed (rpm)	859	851	842	830	818	808	797	787	776	773	770
	Power input (W)	3,300	3,200	3,100	2,980	2,860	2,755	2,650	2,570	2,490	2,405	2,320
	Air flow (CFM)	6,368	6,288	6,208	6,133	6,057	5,956	5,856	5,778	5,699	5,641	5,582
75	Fan speed (rpm)	861	852	843	831	819	809	798	788	777	774	771
	Power input (W)	3,175	3,078	2,980	2,868	2,755	2,643	2,530	2,455	2,380	2,278	2,175
	Air flow (CFM)	6,151	6,069	5,987	5,901	5,814	5,711	5,608	5,534	5,461	5,363	5,265
700	Fan speed (rpm)	862	853	844	832	821	810	799	789	778	775	772
	Power input (W)	3,050	2,955	2,860	2,755	2,650	2,530	2,410	2,340	2,270	2,150	2,030
	Air flow (CFM)	5,933	5,850	5,766	5,669	5,571	5,465	5,359	5,291	5,222	5,085	4,948
125	Fan speed (rpm)	863	854	845	833	822	811	800	790	779	776	773
	Power input (W)	2,900	2,800	2,700	2,583	2,465	2,358	2,250	2,183	2,115	1,983	1,850
	Air flow (CFM)	5,645	5,538	5,432	5,361	5,290	5,179	5,067	4,977	4,887	4,694	4,500
150	Fan speed (rpm)	864	855	846	834	823	812	801	791	780	777	774
	Power input (W)	2,800	2,700	2,600	2,475	2,350	2,245	2,140	2,075	2,010	1,860	1,710
	Air flow (CFM)	5,456	5,347	5,238	5,169	5,101	4,978	4,856	4,754	4,652	4,398	4,144
175	Fan speed (rpm)	865	856	847	835	824	813	802	792	781	778	774
	Power input (W)	2,635	2,535	2,435	2,323	2,210	2,103	1,995	1,925	1,855	1,713	1,570
	Air flow (CFM)	5,187	5,066	4,946	4,870	4,794	4,656	4,519	4,397	4,275	4,031	3,788

Continued: APRH150C7A-DD1440

ESP (Pa)	N	0	0.25	0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.5
	X	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5
200	Fan speed (rpm)	866	857	848	836	825	814	804	793	782	/	/
	Power input (W)	2,470	2,370	2,270	2,170	2,070	1,960	1,850	1,775	1,700	/	/
	Air flow (CFM)	4,917	4,786	4,654	4,571	4,488	4,335	4,182	4,040	3,898	/	/
225	Fan speed (rpm)	868	859	849	837	826	815	805	794	783	/	/
	Power input (W)	2,295	2,203	2,110	2,000	1,890	1,788	1,685	1,608	1,530	/	/
	Air flow (CFM)	4,575	4,434	4,293	4,187	4,082	3,922	3,763	3,622	3,481	/	/
250	Fan speed (rpm)	869	860	850	838	827	816	806	795	784	/	/
	Power input (W)	2,120	2,035	1,950	1,830	1,710	1,615	1,520	1,440	1,360	/	/
	Air flow (CFM)	4,232	4,082	3,932	3,804	3,676	3,510	3,344	3,204	3,064	/	/
275	Fan speed (rpm)	870	861	851	839	828	/	/	/	/	/	/
	Power input (W)	1,950	1,855	1,760	1,675	1,590	/	/	/	/	/	/
	Air flow (CFM)	3,816	3,674	3,533	3,423	3,314	/	/	/	/	/	/

Notes:

1. Legend: X – Regulation space of motor pulley (mm); N: Number of turns; ESP: External static pressure (Pa);
- 2: Pulley pitch factory set point: The table, No. of turns (N) = 5;
3. Bold data is the performance testing set point;
4. Shading data are rated airflow.

APRH180C7A-DD2530

ESP (Pa)	N	0	0.25	0.5	0.75	1	1.25	1.5	1.75	2
	X	0.5	1	1.5	2	2.5	3	3.5	4	4.5
0	Fan speed (rpm)	/	/	1,008	999	989	979	969	959	949
	Power input (W)	/	/	5,146	4,968	4,790	4,575	4,360	4,155	3,950
	Air flow (CFM)	/	/	7,928	7,867	7,805	7,686	7,566	7,452	7,338
25	Fan speed (rpm)	/	/	1,014	1,003	991	983	974	964	953
	Power input (W)	/	/	5,043	4,824	4,605	4,418	4,230	4,025	3,820
	Air flow (CFM)	/	/	7,791	7,691	7,592	7,473	7,353	7,239	7,124
50	Fan speed (rpm)	/	1,022	1,020	1,006	993	986	979	968	957
	Power input (W)	/	4,954	4,940	4,680	4,420	4,260	4,100	3,895	3,690
	Air flow (CFM)	/	7,700	7,653	7,516	7,379	7,259	7,139	7,025	6,910
75	Fan speed (rpm)	1,031	1,026	1,022	1,009	995	989	982	971	960
	Power input (W)	4,870	4,810	4,750	4,495	4,240	4,088	3,935	3,745	3,555
	Air flow (CFM)	7,622	7,529	7,436	7,313	7,191	7,048	6,904	6,790	6,675
100	Fan speed (rpm)	1,035	1,028	1,021	1,008	995	988	982	971	959
	Power input (W)	4,770	4,665	4,560	4,310	4,060	3,915	3,770	3,595	3,420
	Air flow (CFM)	7,475	7,347	7,219	7,111	7,002	6,836	6,669	6,554	6,439
125	Fan speed (rpm)	1,050	1,044	1,039	1,026	1,013	1,006	998	990	981
	Power input (W)	4,510	4,440	4,370	4,123	3,875	3,760	3,645	3,465	3,285
	Air flow (CFM)	7,113	7,046	6,979	6,844	6,708	6,571	6,434	6,297	6,159
150	Fan speed (rpm)	1,060	1,056	1,052	1,039	1,026	1,021	1,015	1,005	995
	Power input (W)	4,350	4,290	4,230	4,005	3,780	3,695	3,610	3,410	3,210
	Air flow (CFM)	6,899	6,863	6,828	6,679	6,531	6,411	6,291	6,134	5,976
175	Fan speed (rpm)	1,070	1,065	1,060	1,049	1,039	1,032	1,025	1,017	1,008
	Power input (W)	4,170	4,078	3,985	3,808	3,630	3,518	3,405	3,248	3,090
	Air flow (CFM)	6,658	6,609	6,559	6,419	6,279	6,161	6,043	5,859	5,675

Continued: APRH180C7A-DD2530

ESP (Pa)	N	0	0.25	0.5	0.75	1	1.25	1.5	1.75	2
	X	0.5	1	1.5	2	2.5	3	3.5	4	4.5
200	Fan speed (rpm)	1,082	1,074	1,067	1,059	1,051	1,044	1,036	1,028	1,020
	Power input (W)	3,990	3,865	3,740	3,610	3,480	3,340	3,200	3,085	2,970
	Air flow (CFM)	6,418	6,354	6,291	6,159	6,027	5,911	5,794	5,584	5,375
225	Fan speed (rpm)	1,089	1,082	1,074	1,065	1,056	1,048	1,040	1,033	1,027
	Power input (W)	3,855	3,728	3,600	3,455	3,310	3,180	3,050	2,928	2,805
	Air flow (CFM)	6,194	6,108	6,022	5,879	5,736	5,600	5,464	5,269	5,075
250	Fan speed (rpm)	1,097	1,089	1,082	1,072	1,061	1,053	1,044	1,038	1,033
	Power input (W)	3,720	3,590	3,460	3,300	3,140	3,020	2,900	2,770	2,640
	Air flow (CFM)	5,971	5,862	5,754	5,600	5,446	5,289	5,133	4,954	4,776
275	Fan speed (rpm)	1,104	1,095	1,086	1,076	1,065	/	/	/	/
	Power input (W)	3,595	3,438	3,280	3,115	2,950	/	/	/	/
	Air flow (CFM)	5,705	5,585	5,464	5,308	5,151	/	/	/	/
300	Fan speed (rpm)	1,112	/	/	/	/	/	/	/	/
	Power input (W)	3,470	/	/	/	/	/	/	/	/
	Air flow (CFM)	5,439	/	/	/	/	/	/	/	/
325	Fan speed (rpm)	1,112	/	/	/	/	/	/	/	/
	Power input (W)	3,470	/	/	/	/	/	/	/	/
	Air flow (CFM)	5,439	/	/	/	/	/	/	/	/

Notes:

1. Legend: X – Regulation space of motor pulley (mm); N: Number of turns; ESP: External static pressure (Pa);
- 2: Pulley pitch factory set point: The table, No. of turns (N) = 5;
3. Bold data is the performance testing set point;
4. Shading data are rated airflow.

APRH210C7A-DD2610

ESP (Pa)	N	0	0.25	0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.5
	X	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5
0	Fan speed (rpm)	/	/	994	987	980	971	961	953	944	936	927
	Power input (W)	/	/	4,751	4,857	4,962	4,643	4,323	4,216	4,109	3,960	3,811
	Air flow (CFM)	/	/	9,837	9,896	9,955	9,722	9,489	9,498	9,507	9,346	9,185
25	Fan speed (rpm)	/	/	994	988	981	972	963	954	946	937	928
	Power input (W)	/	/	4,580	4,683	4,787	4,494	4,202	4,078	3,955	3,809	3,664
	Air flow (CFM)	/	/	9,575	9,635	9,695	9,506	9,317	9,264	9,211	9,041	8,871
50	Fan speed (rpm)	1,010	1,003	995	988	982	973	965	956	947	939	930
	Power input (W)	4,581	4,495	4,408	4,510	4,612	4,346	4,080	3,940	3,800	3,659	3,517
	Air flow (CFM)	9,591	9,451	9,312	9,373	9,434	9,290	9,145	9,030	8,915	8,736	8,557
75	Fan speed (rpm)	1,012	1,004	997	990	983	975	966	958	949	940	931
	Power input (W)	4,392	4,313	4,235	4,338	4,442	4,181	3,920	3,777	3,635	3,495	3,356
	Air flow (CFM)	9,307	9,153	8,998	9,067	9,136	8,999	8,861	8,729	8,597	8,421	8,246
100	Fan speed (rpm)	1,013	1,005	998	991	984	976	968	959	951	942	933
	Power input (W)	4,202	4,132	4,061	4,166	4,271	4,015	3,759	3,614	3,469	3,332	3,194
	Air flow (CFM)	9,024	8,854	8,683	8,761	8,839	8,708	8,578	8,429	8,279	8,107	7,934
125	Fan speed (rpm)	1,015	1,007	999	992	985	977	969	961	952	943	934
	Power input (W)	4,005	3,934	3,864	3,967	4,071	3,810	3,550	3,404	3,258	3,127	2,996
	Air flow (CFM)	8,684	8,510	8,336	8,421	8,507	8,350	8,194	8,027	7,860	7,684	7,507
150	Fan speed (rpm)	1,018	1,009	1,000	994	987	979	971	962	954	945	935
	Power input (W)	3,807	3,737	3,667	3,769	3,870	3,605	3,340	3,193	3,046	2,922	2,797
	Air flow (CFM)	8,345	8,167	7,989	8,082	8,175	7,992	7,809	7,625	7,441	7,261	7,081
175	Fan speed (rpm)	1,019	1,011	1,002	995	988	980	972	964	955	946	937
	Power input (W)	3,570	3,509	3,448	3,548	3,649	3,374	3,100	2,950	2,801	2,682	2,564
	Air flow (CFM)	7,899	7,719	7,539	7,648	7,757	7,518	7,279	7,093	6,907	6,715	6,522

Continued: APRH210C7A-DD2610

ESP (Pa)	N	0	0.25	0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.5
	X	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5
200	Fan speed (rpm)	1,021	1,012	1,004	998	992	983	974	965	957	947	938
	Power input (W)	3,332	3,281	3,229	3,328	3,427	3,143	2,859	2,707	2,555	2,443	2,330
	Air flow (CFM)	7,454	7,272	7,090	7,215	7,339	7,044	6,748	6,561	6,374	6,169	5,963
225	Fan speed (rpm)	1,033	1,019	1,006	1,000	994	/	/	/	/	/	/
	Power input (W)	3,042	3,135	3,229	3,128	3,026	/	/	/	/	/	/
	Air flow (CFM)	6,817	6,953	7,090	6,696	6,303	/	/	/	/	/	/
250	Fan speed (rpm)	1,045	/	/	/	/	/	/	/	/	/	/
	Power input (W)	2,751	/	/	/	/	/	/	/	/	/	/
	Air flow (CFM)	6,180	/	/	/	/	/	/	/	/	/	/

Notes:

1. Legend: X – Regulation space of motor pulley (mm); N: Number of turns; ESP: External static pressure (Pa);
- 2: Pulley pitch factory set point: The table, No. of turns (N) = 5;
3. Bold data is the performance testing set point;
4. Shading data are rated airflow.

APRH240C7A-DD2700

ESP (Pa)	N	0	0.25	0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.5	2.75	3
	X	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5
0	Fan speed (rpm)	/	/	/	/	1,194	1,181	1,168	1,154	1,140	1,127	1,113	1,098	1,081
	Power input (W)	/	/	/	/	6,951	6,710	6,468	6,266	6,063	5,831	5,599	5,422	5,188
	Air flow (CFM)	/	/	/	/	11,210	11,104	10,997	10,872	10,746	10,623	10,499	10,306	10,078
25	Fan speed (rpm)	/	/	/	/	1,195	1,182	1,169	1,155	1,141	1,128	1,114	1,100	1,083
	Power input (W)	/	/	/	/	6,756	6,531	6,306	6,103	5,901	5,671	5,442	5,255	5,057
	Air flow (CFM)	/	/	/	/	10,982	10,890	10,798	10,668	10,539	10,398	10,258	10,068	9,892
50	Fan speed (rpm)	/	/	/	1,214	1,196	1,183	1,170	1,156	1,142	1,129	1,115	1,101	1,084
	Power input (W)	/	/	/	6,944	6,561	6,352	6,143	5,941	5,738	5,512	5,285	5,088	4,926
	Air flow (CFM)	/	/	/	10,877	10,754	10,676	10,599	10,465	10,332	10,174	10,016	9,829	9,705
75	Fan speed (rpm)	/	/	/	1,214	1,197	1,184	1,171	1,157	1,143	1,130	1,116	1,102	1,085
	Power input (W)	/	/	/	6,738	6,390	6,180	5,970	5,754	5,539	5,328	5,118	5,069	4,748
	Air flow (CFM)	/	/	/	10,628	10,540	10,453	10,367	10,207	10,047	9,898	9,749	9,807	9,403
100	Fan speed (rpm)	/	1,240	1,228	1,215	1,198	1,185	1,172	1,158	1,145	1,131	1,117	1,103	1,087
	Power input (W)	/	6,941	6,765	6,532	6,218	6,008	5,797	5,568	5,339	5,145	4,950	5,049	4,570
	Air flow (CFM)	/	10,582	10,491	10,378	10,326	10,230	10,135	9,948	9,761	9,622	9,483	9,785	9,102
125	Fan speed (rpm)	/	1,241	1,230	1,215	1,199	1,186	1,173	1,159	1,146	1,131	1,117	1,105	1,091
	Power input (W)	/	6,753	6,659	6,367	6,068	5,866	5,663	5,441	5,218	5,013	4,808	4,570	4,351
	Air flow (CFM)	/	10,357	10,349	10,170	10,113	10,017	9,922	9,753	9,584	9,435	9,285	9,024	8,815
150	Fan speed (rpm)	1,258	1,242	1,230	1,216	1,202	1,189	1,175	1,162	1,149	1,134	1,120	1,105	1,091
	Power input (W)	6,736	6,565	6,360	6,158	5,820	5,611	5,401	5,180	4,958	4,769	4,579	4,327	4,141
	Air flow (CFM)	10,287	10,132	10,049	9,952	9,818	9,692	9,566	9,395	9,224	9,069	8,915	8,599	8,418

Continued: APRH240C7A-DD2700

ESP (Pa)	N	0	0.25	0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.5	2.75	3
	X	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5
175	Fan speed (rpm)	1,261	1,244	1,232	1,218	1,204	1,190	1,177	1,163	1,149	1,135	1,121	1,106	1,093
	Power input (W)	6,511	6,332	6,169	5,929	5,607	5,391	5,175	4,953	4,731	4,545	4,358	4,107	3,925
	Air flow (CFM)	10,042	9,864	9,794	9,650	9,524	9,377	9,231	9,046	8,861	8,699	8,537	8,243	8,045
200	Fan speed (rpm)	1,263	1,245	1,233	1,221	1,205	1,192	1,179	1,164	1,150	1,136	1,123	1,106	1,094
	Power input (W)	6,285	6,099	5,977	5,700	5,394	5,172	4,949	4,727	4,504	4,321	4,137	3,887	3,709
	Air flow (CFM)	9,798	9,597	9,540	9,347	9,230	9,063	8,896	8,697	8,497	8,328	8,158	7,887	7,672
225	Fan speed (rpm)	1,264	1,248	1,235	1,222	1,207	1,194	1,181	1,166	1,152	1,138	1,124	1,110	1,096
	Power input (W)	6,046	5,871	5,696	5,451	5,160	4,923	4,686	4,461	4,237	4,049	3,861	3,624	3,433
	Air flow (CFM)	9,505	9,301	9,183	9,019	8,877	8,693	8,508	8,291	8,074	7,871	7,669	7,387	7,138
250	Fan speed (rpm)	1,265	1,251	1,237	1,224	1,209	1,196	1,183	1,169	1,154	1,140	1,126	1,113	1,099
	Power input (W)	5,807	5,643	5,415	5,201	4,925	4,674	4,422	4,196	3,969	3,777	3,585	3,361	3,157
	Air flow (CFM)	9,212	9,004	8,826	8,691	8,524	8,322	8,120	7,885	7,650	7,415	7,180	6,887	6,605
275	Fan speed (rpm)	1,267	1,253	1,239	1,226	1,211	1,198	1,185	1,171	1,157	1,144	1,130	1,117	1,094
	Power input (W)	5,523	5,350	5,120	4,872	4,585	4,322	4,059	3,812	3,564	3,331	3,098	2,800	2,662
	Air flow (CFM)	8,831	8,594	8,380	8,204	8,010	7,740	7,470	7,173	6,876	6,487	6,099	5,562	5,395
300	Fan speed (rpm)	1,269	1,254	1,242	1,228	1,213	1,201	1,188	1,174	1,160	1,147	1,134	1,120	1,088
	Power input (W)	5,238	5,056	4,825	4,542	4,245	3,971	3,696	3,428	3,159	2,885	2,611	2,239	2,167
	Air flow (CFM)	8,450	8,184	7,933	7,717	7,495	7,157	6,819	6,460	6,102	5,560	5,018	4,237	4,186
325	Fan speed (rpm)	1,272	1,258	1,245	1,233	1,218	1,206	1,193	/	/	/	/	/	/
	Power input (W)	4,892	4,650	4,334	3,987	3,707	3,334	2,961	/	/	/	/	/	/
	Air flow (CFM)	7,955	7,559	7,136	6,775	6,406	5,820	5,234	/	/	/	/	/	/

Continued: APRH240C7A-DD2700

ESP (Pa)	N	0	0.25	0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.5	2.75	3
	X	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5
350	Fan speed (rpm)	1,276	1,262	1,248	1,235	1,223	/	/	/	/	/	/	/	/
	Power input (W)	4,546	4,243	3,842	3,731	3,169	/	/	/	/	/	/	/	/
	Air flow (CFM)	7,459	6,935	6,339	6,285	5,318	/	/	/	/	/	/	/	/
375	Fan speed (rpm)	1,280	1,267	1,254	/	/	/	/	/	/	/	/	/	/
	Power input (W)	3,982	3,457	3,371	/	/	/	/	/	/	/	/	/	/
	Air flow (CFM)	6,465	5,433	5,387	/	/	/	/	/	/	/	/	/	/
400	Fan speed (rpm)	1,284	/	/	/	/	/	/	/	/	/	/	/	/
	Power input (W)	3,417	/	/	/	/	/	/	/	/	/	/	/	/
	Air flow (CFM)	5,471	/	/	/	/	/	/	/	/	/	/	/	/

Notes:

1. Legend: X – Regulation space of motor pulley (mm); N: Number of turns; ESP: External static pressure (Pa);
- 2: Pulley pitch factory set point: The table, No. of turns (N) = 5;
3. Bold data is the performance testing set point;
4. Shading data are rated airflow.

APRH300C7A-DD2870

ESP (Pa)	N	0	0.25	0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.5	2.75	3
	X	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5
0	Fan speed (rpm)	1,075	1,059	1,044	1,034	1,026	1,009	1,002	985	973	963	934	939	925
	Power input (W)	6,962	6,840	6,589	6,382	6,068	5,930	5,651	5,544	5,232	5,085	4,765	4,893	4,734
	Air flow (CFM)	12,304	12,345	12,115	12,068	11,907	11,717	11,587	11,472	11,269	11,177	10,868	10,894	10,757
25	Fan speed (rpm)	1,075	1,060	1,041	1,035	1,027	1,010	1,003	986	974	964	935	939	926
	Power input (W)	6,750	6,663	6,363	6,203	5,914	5,736	5,487	5,374	5,065	4,905	4,632	4,740	4,597
	Air flow (CFM)	12,052	12,092	11,849	11,797	11,645	11,431	11,322	11,191	10,982	10,879	10,572	10,610	10,471
50	Fan speed (rpm)	1,074	1,061	1,038	1,036	1,028	1,011	1,004	987	975	965	936	940	927
	Power input (W)	6,538	6,485	6,137	6,023	5,759	5,541	5,323	5,203	4,898	4,724	4,498	4,587	4,459
	Air flow (CFM)	11,801	11,838	11,583	11,527	11,383	11,144	11,058	10,909	10,695	10,581	10,276	10,326	10,185
75	Fan speed (rpm)	1,075	1,062	1,040	1,036	1,029	1,011	1,004	987	976	966	937	941	928
	Power input (W)	6,391	6,301	5,903	5,842	5,573	5,329	5,152	5,019	4,698	4,524	4,304	4,410	4,282
	Air flow (CFM)	11,575	11,558	11,249	11,218	11,055	10,820	10,745	10,585	10,345	10,217	9,914	9,964	9,825
100	Fan speed (rpm)	1,075	1,063	1,041	1,036	1,030	1,012	1,005	988	977	967	937	942	928
	Power input (W)	6,243	6,117	5,668	5,660	5,387	5,116	4,980	4,834	4,498	4,324	4,110	4,233	4,104
	Air flow (CFM)	11,350	11,278	10,915	10,910	10,728	10,496	10,432	10,260	9,995	9,853	9,552	9,602	9,465
125	Fan speed (rpm)	1,076	1,063	1,044	1,037	1,030	1,013	1,005	989	979	968	938	943	929
	Power input (W)	6,089	5,904	5,425	5,441	5,178	4,900	4,790	4,626	4,292	4,114	3,928	4,040	3,911
	Air flow (CFM)	11,019	10,945	10,566	10,567	10,361	10,123	10,054	9,870	9,598	9,432	9,155	9,168	9,021
150	Fan speed (rpm)	1,077	1,063	1,047	1,037	1,031	1,015	1,005	990	980	969	939	944	930
	Power input (W)	5,934	5,690	5,181	5,222	4,969	4,683	4,600	4,418	4,085	3,904	3,746	3,846	3,717
	Air flow (CFM)	10,688	10,612	10,217	10,224	9,994	9,749	9,677	9,480	9,201	9,010	8,758	8,735	8,577

Continued: APRH300C7A-DD2870

ESP (Pa)	N	0	0.25	0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.5	2.75	3
	X	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5
175	Fan speed (rpm)	1,077	1,064	1,047	1,038	1,032	1,015	1,006	991	981	969	939	944	931
	Power input (W)	5,613	5,449	4,984	4,995	4,746	4,455	4,382	4,203	3,862	3,683	3,548	3,645	3,512
	Air flow (CFM)	10,300	10,229	9,839	9,828	9,590	9,294	9,245	9,031	8,703	8,496	8,259	8,225	8,064
200	Fan speed (rpm)	1,078	1,065	1,048	1,039	1,033	1,016	1,006	992	982	969	940	945	932
	Power input (W)	5,292	5,207	4,786	4,768	4,522	4,226	4,163	3,987	3,638	3,462	3,349	3,443	3,307
	Air flow (CFM)	9,913	9,847	9,462	9,432	9,186	8,838	8,812	8,581	8,206	7,983	7,760	7,715	7,551
225	Fan speed (rpm)	1,079	1,066	1,051	1,040	1,034	1,017	1,007	993	983	970	941	946	932
	Power input (W)	5,294	4,968	4,527	4,522	4,299	3,990	3,958	3,758	3,408	3,240	3,135	3,203	3,078
	Air flow (CFM)	9,875	9,378	8,936	8,922	8,670	8,306	8,296	8,037	7,615	7,383	7,169	7,025	6,863
250	Fan speed (rpm)	1,080	1,067	1,053	1,042	1,034	1,018	1,008	994	984	970	942	947	933
	Power input (W)	5,295	4,728	4,267	4,275	4,076	3,753	3,753	3,528	3,177	3,018	2,921	2,962	2,849
	Air flow (CFM)	9,837	8,910	8,410	8,412	8,154	7,775	7,780	7,492	7,024	6,784	6,578	6,335	6,175
275	Fan speed (rpm)	1,082	1,068	1,050	1,042	1,035	1,019	1,009	995	985	971	942	948	934
	Power input (W)	4,879	4,488	4,013	4,034	3,825	3,496	3,486	3,341	2,975	2,803	2,717	2,792	2,530
	Air flow (CFM)	8,972	8,391	7,852	7,864	7,575	7,096	7,053	6,824	6,335	5,996	5,844	5,744	5,204
300	Fan speed (rpm)	1,084	1,070	1,047	1,043	1,035	1,021	1,010	995	986	973	943	949	935
	Power input (W)	4,463	4,248	3,759	3,793	3,574	3,239	3,219	3,153	2,773	2,587	2,512	2,621	2,210
	Air flow (CFM)	8,107	7,871	7,293	7,316	6,996	6,418	6,325	6,156	5,647	5,209	5,110	5,152	4,234
325	Fan speed (rpm)	1,084	1,072	1,054	1,046	1,036	1,023	1,010	997	986	/	/	/	/
	Power input (W)	4,219	3,996	3,636	3,538	3,313	3,089	3,219	2,818	2,773	/	/	/	/
	Air flow (CFM)	7,663	7,324	6,813	6,603	6,221	5,896	6,325	5,316	5,647	/	/	/	/

Continued: APRH300C7A-DD2870

ESP (Pa)	N	0	0.25	0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.5	2.75	3
	X	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5
350	Fan speed (rpm)	1,085	1,073	1,061	1,050	1,038	1,025	1,011	/	/	/	/	/	/
	Power input (W)	3,975	3,744	3,513	3,282	3,051	2,940	3,024	/	/	/	/	/	/
	Air flow (CFM)	7,219	6,776	6,332	5,889	5,445	5,375	5,815	/	/	/	/	/	/
375	Fan speed (rpm)	1,087	1,074	1,062	/	/	/	/	/	/	/	/	/	/
	Power input (W)	3,708	3,474	3,241	/	/	/	/	/	/	/	/	/	/
	Air flow (CFM)	6,428	5,990	5,551	/	/	/	/	/	/	/	/	/	/
400	Fan speed (rpm)	1,088	/	/	/	/	/	/	/	/	/	/	/	/
	Power input (W)	3,440	/	/	/	/	/	/	/	/	/	/	/	/
	Air flow (CFM)	5,637	/	/	/	/	/	/	/	/	/	/	/	/

Notes:

1. Legend: X – Regulation space of motor pulley (mm); N: Number of turns; ESP: External static pressure (Pa);
- 2: Pulley pitch factory set point: The table, No. of turns (N) = 5;
3. Bold data is the performance testing set point;
4. Shading data are rated airflow.

APRH360C7A-DD3105

ESP (Pa)	N	0	0.25	0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.5	2.75	3
	X	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5
0	Fan speed (rpm)	/	/	/	/	/	/	1,106	1,090	1,074	1,053	1,032	1,027	1,022
	Power input (W)	/	/	/	/	/	/	8,203	7,899	7,595	7,256	6,917	6,894	6,872
	Air flow (CFM)	/	/	/	/	/	/	13,393	13,210	13,026	12,794	12,563	12,499	12,434
25	Fan speed (rpm)	/	/	/	/	1,133	1,133	1,106	1,090	1,074	1,053	1,032	1,027	1,022
	Power input (W)	/	/	/	/	9,142	9,142	8,010	7,702	7,394	7,078	6,761	6,736	6,710
	Air flow (CFM)	/	/	/	/	13,735	13,735	13,243	13,044	12,845	12,605	12,366	12,307	12,248
50	Fan speed (rpm)	/	/	/	/	1,135	1,135	1,108	1,092	1,076	1,055	1,034	1,029	1,023
	Power input (W)	/	/	/	/	8,664	8,664	7,736	7,427	7,118	6,828	6,537	6,509	6,480
	Air flow (CFM)	/	/	/	/	13,304	13,304	12,902	12,690	12,479	12,234	11,990	11,937	11,884
75	Fan speed (rpm)	/	/	/	/	1,137	1,137	1,109	1,094	1,078	1,056	1,035	1,030	1,025
	Power input (W)	/	/	/	/	8,425	8,425	7,490	7,160	6,831	6,544	6,258	6,241	6,225
	Air flow (CFM)	/	/	/	/	13,089	13,089	12,619	12,384	12,149	11,897	11,644	11,591	11,539
100	Fan speed (rpm)	/	/	1,153	1,146	1,138	1,138	1,110	1,095	1,080	1,058	1,036	1,031	1,026
	Power input (W)	/	/	9,127	8,545	8,186	8,186	7,244	6,893	6,543	6,261	5,978	5,974	5,970
	Air flow (CFM)	/	/	13,410	12,993	12,873	12,873	12,336	12,078	11,820	11,558	11,296	11,245	11,193
125	Fan speed (rpm)	/	/	1,155	1,148	1,140	1,140	1,112	1,097	1,083	1,060	1,038	1,033	1,028
	Power input (W)	/	/	8,920	8,330	7,963	7,963	7,007	6,642	6,278	6,012	5,746	5,733	5,720
	Air flow (CFM)	/	/	13,149	12,713	12,576	12,576	12,002	11,730	11,457	11,193	10,929	10,849	10,769
150	Fan speed (rpm)	1,172	1,165	1,157	1,150	1,142	1,142	1,113	1,099	1,085	1,062	1,039	1,035	1,030
	Power input (W)	9,645	9,015	8,712	8,069	7,741	7,080	6,770	6,391	6,012	5,763	5,513	5,492	5,470
	Air flow (CFM)	13,274	12,898	12,887	12,386	12,278	11,362	11,669	11,381	11,094	10,827	10,560	10,451	10,342

Continued: APRH360C7A-DD3105

ESP (Pa)	N	0	0.25	0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.5	2.75	3
	X	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5
175	Fan speed (rpm)	1,172	1,166	1,158	1,152	1,144	1,144	1,114	1,100	1,087	1,064	1,041	1,036	1,032
	Power input (W)	9,364	8,711	8,385	7,748	7,426	7,426	6,467	6,083	5,699	5,468	5,236	5,210	5,184
	Air flow (CFM)	12,944	12,550	12,522	12,006	11,884	11,884	11,246	10,916	10,587	10,317	10,047	9,928	9,809
200	Fan speed (rpm)	1,173	1,167	1,159	1,153	1,145	1,145	1,116	1,102	1,088	1,065	1,042	1,038	1,033
	Power input (W)	9,083	8,407	8,058	7,415	7,111	7,111	6,164	5,775	5,387	5,173	4,959	4,928	4,897
	Air flow (CFM)	12,615	12,175	12,156	11,586	11,489	11,489	10,822	10,450	10,078	9,804	9,530	9,402	9,273
225	Fan speed (rpm)	1,174	1,168	1,161	1,155	1,147	1,147	1,117	1,104	1,091	1,067	1,044	1,039	1,035
	Power input (W)	8,884	8,145	7,732	7,083	6,772	6,772	5,812	5,408	5,004	4,804	4,603	4,562	4,520
	Air flow (CFM)	12,356	11,835	11,735	11,139	11,016	11,016	10,298	9,875	9,452	9,175	8,898	8,708	8,518
250	Fan speed (rpm)	1,176	1,172	1,162	1,156	1,148	1,148	1,119	1,106	1,093	1,069	1,046	1,041	1,036
	Power input (W)	8,686	7,877	7,406	6,744	6,433	6,433	5,460	5,041	4,622	4,436	4,250	4,197	4,145
	Air flow (CFM)	12,097	11,466	11,313	10,604	10,546	10,546	9,773	9,298	8,823	8,542	8,262	8,009	7,756
275	Fan speed (rpm)	1,187	1,176	1,168	1,159	1,149	1,149	1,121	1,108	1,095	1,071	1,047	1,042	1,038
	Power input (W)	8,462	7,587	7,067	6,394	6,081	6,081	5,095	4,722	4,348	4,159	3,970	3,834	3,697
	Air flow (CFM)	11,693	10,973	10,835	10,015	9,895	9,895	8,955	8,500	8,044	7,732	7,420	7,014	6,608
300	Fan speed (rpm)	1,182	1,175	1,166	1,159	1,150	1,150	1,123	1,109	1,096	1,072	1,048	1,044	1,039
	Power input (W)	8,114	7,246	6,711	6,082	5,721	5,721	4,730	4,402	4,075	3,883	3,691	3,469	3,247
	Air flow (CFM)	11,270	10,508	10,253	9,488	9,195	9,195	8,138	7,701	7,265	6,919	6,574	6,010	5,447
325	Fan speed (rpm)	1,185	1,178	1,169	1,161	1,152	1,138	1,124	/	/	/	/	/	/
	Power input (W)	7,721	6,884	6,379	5,782	5,453	4,990	4,527	/	/	/	/	/	/
	Air flow (CFM)	10,729	9,983	9,745	8,998	8,723	8,211	7,700	/	/	/	/	/	/

Continued: APRH360C7A-DD3105

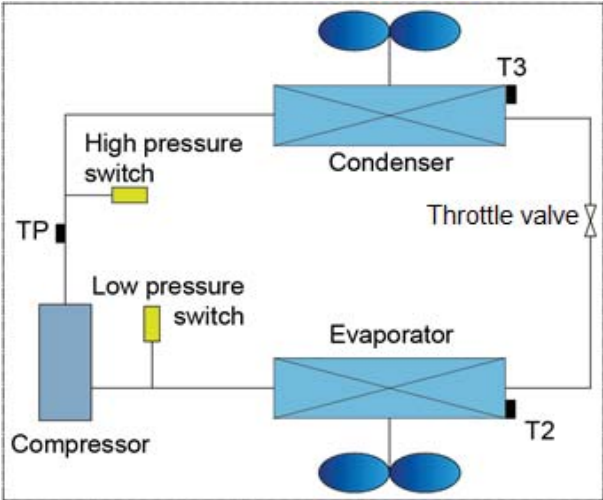
ESP (Pa)	N	0	0.25	0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.5	2.75	3
	X	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5
350	Fan speed (rpm)	1,188	1,182	1,171	1,164	1,154	1,139	1,125	/	/	/	/	/	/
	Power input (W)	7,328	6,237	6,046	5,347	5,185	4,755	4,324	/	/	/	/	/	/
	Air flow (CFM)	10,187	8,913	9,238	8,209	8,250	7,756	7,262	/	/	/	/	/	/
375	Fan speed (rpm)	1,191	1,183	1,173	1,165	1,155	1,140	1,126	/	/	/	/	/	/
	Power input (W)	7,114	6,130	5,596	5,121	4,916	4,576	4,236	/	/	/	/	/	/
	Air flow (CFM)	9,916	8,778	8,439	7,810	7,715	7,353	6,991	/	/	/	/	/	/
400	Fan speed (rpm)	1,195	1,185	1,175	1,166	1,156	1,141	1,127	/	/	/	/	/	/
	Power input (W)	6,899	6,022	5,146	4,896	4,647	4,397	4,148	/	/	/	/	/	/
	Air flow (CFM)	9,645	8,643	7,640	7,410	7,180	6,951	6,721	/	/	/	/	/	/

Notes:

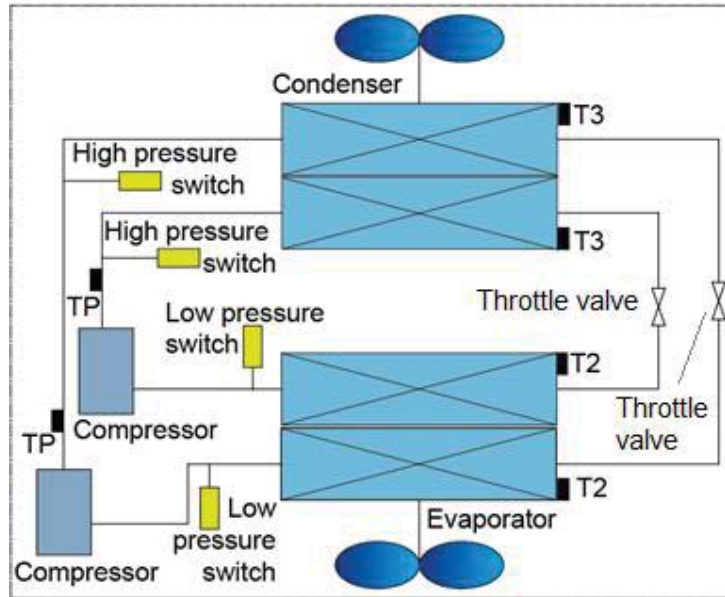
1. Legend: X – Regulation space of motor pulley (mm); N: Number of turns; ESP: External static pressure (Pa);
- 2: Pulley pitch factory set point: The table, No. of turns (N) = 5;
3. Bold data is the performance testing set point;
4. Shading data are rated airflow.

8. Refrigerant cycle diagram

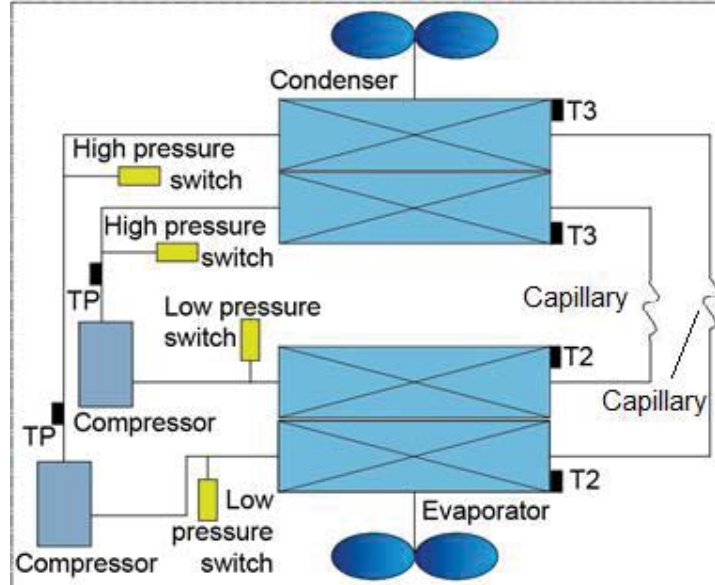
APRH105, 120C7A-D



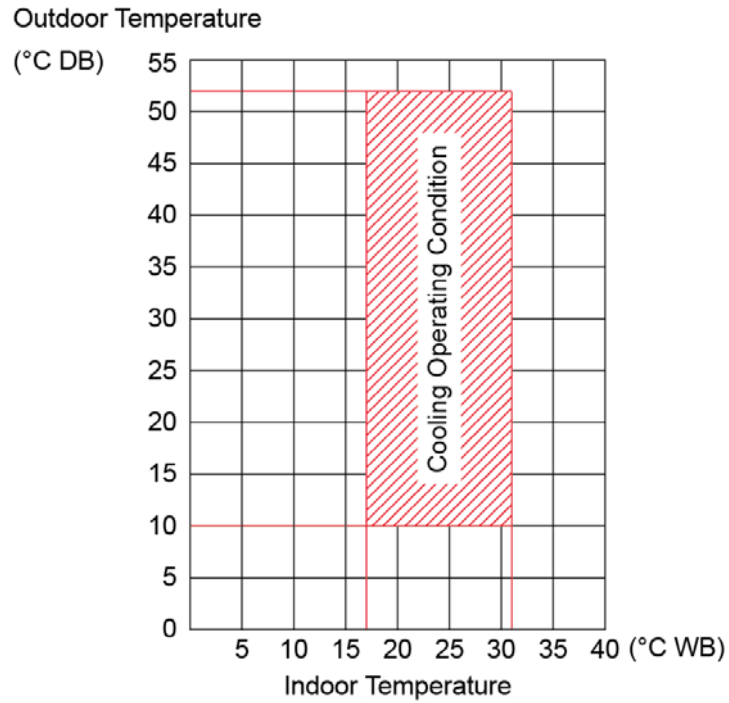
APRH150-240C7A-D:



APRH300, 360C7A-D







9. Operation limits



	Outdoor temperature	Indoor temperature
Cooling only mode	10°C~52°C	17°C~31°C

Room relative humidity should be less than 80%. If the unit operates in excess, the surface of the unit may attract condensation.

10. Accessories

Item	Quantity	Shape
User manual	1	-----
Drain outlet	1	
Snap ring	1	
Drain pipe	1	
Wired controller & wires	1	

Part. 3 Installations

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1. General information

Warning and cautions appear at appropriate locations throughout this manual. Read these carefully, please.

Caution:

- ✧ Read this entire manual before beginning installation procedures.
- ✧ Body injury can result from high voltage electrical components, fast moving fans. For protection from these inherent hazards during installation and servicing, the electrical supply must be disconnected.
- ✧ If operating checks must be performed with the unit operating, it is the technicians responsibility to recognize these hazards and proceed safely.

Warning:

- ✧ Never replace a fuse with that of wrong rated current or other wires when a fuse blows out. Use of wire or copper wire may cause the unit to break down or cause a fire.
- ✧ Do not insert fingers, rods or other objects into the air inlet or outlet. When the fan is rotating at high speed, it will cause injury.
- ✧ Never use a flammable spray such as hair spray, lacquer or paint near the unit. It may cause a fire.
- ✧ Keep far away from high-frequency equipment. Also, keep away from the following places:
A place where it is full of oil, gas; Places where salty air surrounding (near the coast); A place where is caustic gas (the sulfide in hot spring); Location in above places may cause malfunction or shorten the life span of the machine.
- ✧ In the case of extremely strong wind, please prevent the air from flowing backwards into the outside.
- ✧ Snow canopy is necessary in snowfall places on the outside.
- ✧ In the frequent thunderstruck place, lighting proof action should be taken.
- ✧ The refrigerant in the air conditioner is safe and normally does not leak.
- ✧ The temperature of refrigerant circuit will be high, please keep the interconnection cable away from the copper tube.
- ✧ The appliance should not be used by children without supervision.

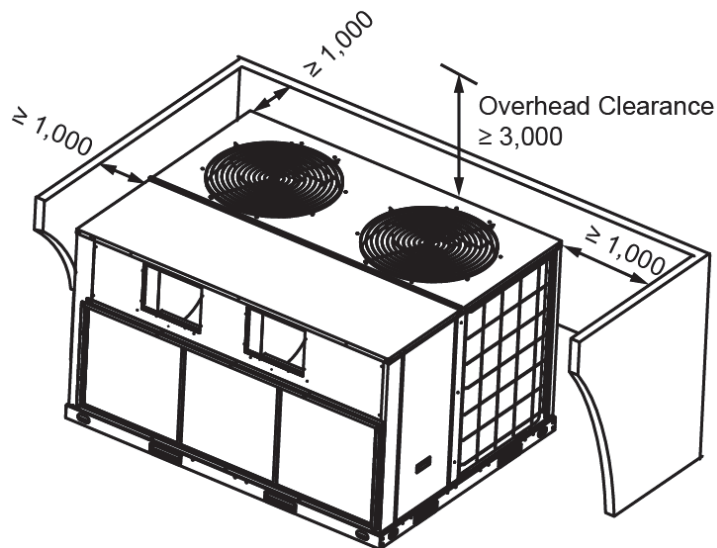
2. Recommendations

2.1 Horizontal airflow application

- ✧ These units are designed and certified for outdoor installation. These units may be installed directly on wood flooring or on Class A, Class B and Class C roof covering material.
- ✧ Location of the unit must allow service clearance around it. Clearance of the unit must be given careful consideration.
- ✧ Check the handling facilities to ensure the safety of personnel and the units.
- ✧ Caution must be taken at all times to avoid personal injuries and damage to equipment.
- ✧ Unit must be mounted level for proper drainage of water through the holes in the base pan.
- ✧ Unit must not be exposed to direct roof water run-off.
- ✧ Flexible duct connectors must be of a flame retardant material. All duct work outside of the structure must be insulated and weatherproofed in accordance with local codes.
- ✧ Holes through exterior walls must be sealed in accordance with local codes.
- ✧ All fabricated outdoor ducts should be as short as possible.

2.2 Clearances

- ✧ The recommended clearances for single-unit installations reference to the following figure. These requirements are not only an important consideration when determining unit placement, but they are also essential to ensure adequate serviceability, maximum capacity, and peak operating efficiency.

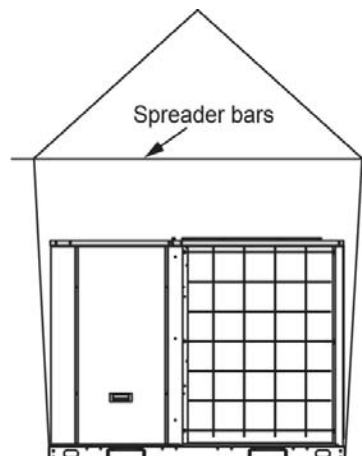
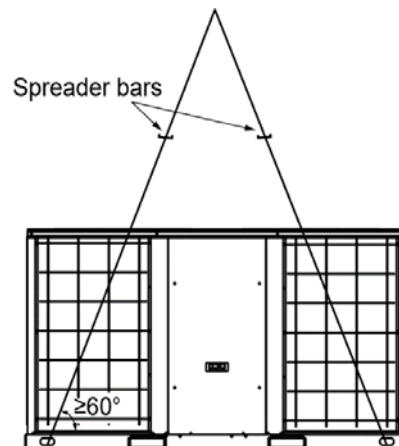


(Unit: mm)

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- ✧ Any reduction of the unit clearances indicated in these pictures may result in condenser coil starvation or the recirculation of warm condenser air. Actual clearances which appear to be inadequate should be reviewed.

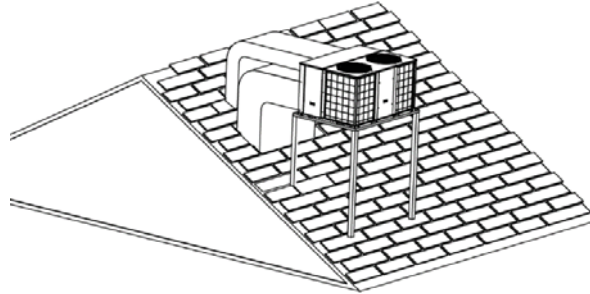
3. Lifting

- ✧ Rigging cables should have adequate capability to resist 3 times weight of unit. Before lift, please check and ensure that hooks are holding tightly to unit and lifting angles are no less than 60° .
- ✧ Cloth material or hard-paper should be padded in the contact place between unit and rigging cable. Rigging cable should be entwined a round at the hook for prevent danger by cable slip because of weight unbalance.
- ✧ During lifting, anyone forbidden lingering under the lifting unit.



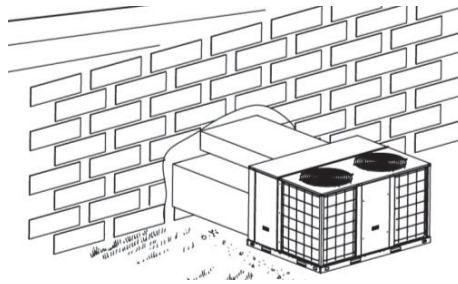
4. Installation

4.1 For roof top applications using a field fabricated frame and ducts:



- ✧ The frame must be located and secured by bolting or welding to the roof. Flashing is required.
- ✧ The hole in the roof must be prepared in advance of installing the unit.
- ✧ Secure the ducts to the roof.
- ✧ Place the unit to the frame or roof curb.
- ✧ Insulate any ductwork outside of the structure with at least 2 inches of insulation and then weatherproof. There must be a weatherproof seal where the duct enters the structure.
- ✧ Complete the installation according to the instructions.
- ✧ Typical rooftop application with frame.

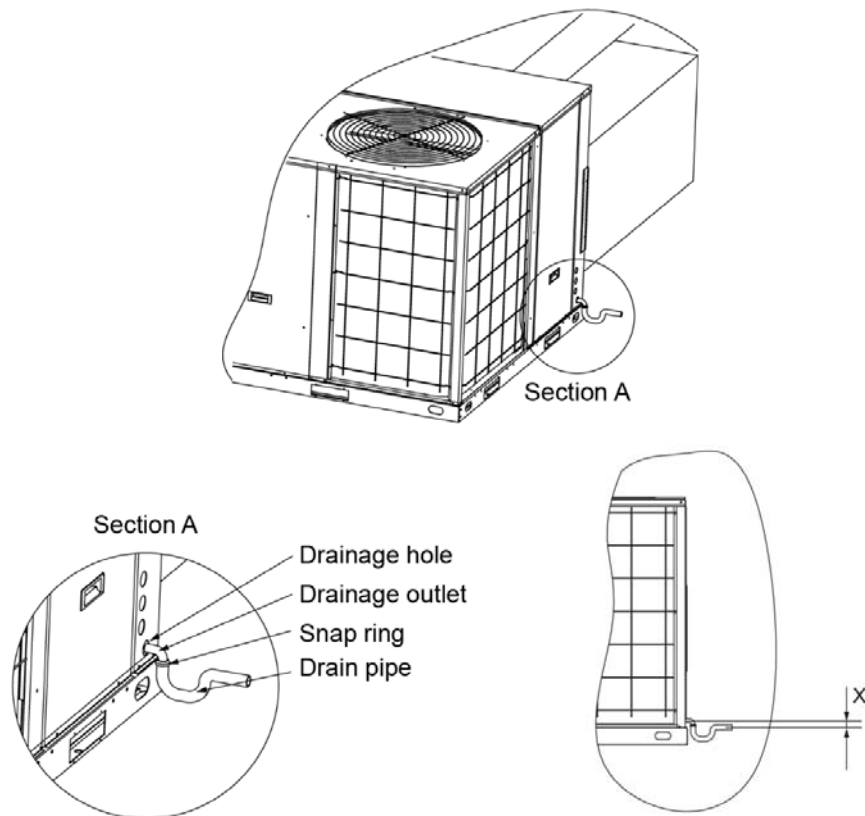
4.2 For ground level installations:



- ✧ The unit should be positioned on a pad in the size of the unit or larger. The unit must be level on the pad. The pad must not come in contact with the structure. Be sure the outdoor portion of the supply and return air ducts are as short as possible.
- ✧ Place the unit on the pad.

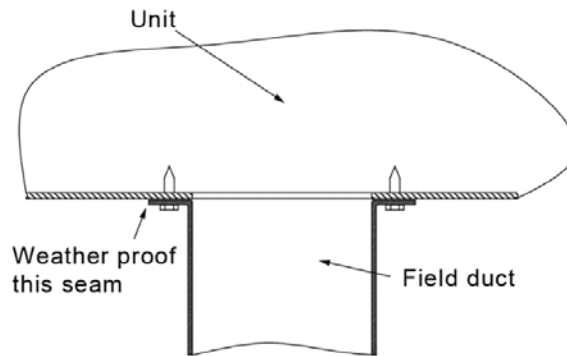
- ✧ Attach the supply and return air ducts to the unit.
- ✧ Insulate any ductwork outside of the structure with at least 2 inches of insulation and weatherproof. There must be a weatherproof seal where the duct enters the structure.
- ✧ Complete the installation.

5. Condensate drainage



Model	X value (mm)	Model	X value (mm)
APRH048C7A-DC1140D	$20 \leq X \leq 40$	APRH060C7A-DC1170	$20 \leq X \leq 40$
APRH075C7A-DD1220	$20 \leq X \leq 40$	APRH090C7A-DD1260	$20 \leq X \leq 40$
APRH105C7A-DD1300	$20 \leq X \leq 40$	APRH090C7A-DD1260	$20 \leq X \leq 40$
APRH120C7A-DD1350	$20 \leq X \leq 40$	APRH120C7A-DD1350	$20 \leq X \leq 40$
APRH150C7A-DD1440	$20 \leq X \leq 40$	APRH180C7A-DD2530	$20 \leq X \leq 40$
APRH210C7A-DD2610	$20 \leq X \leq 40$	APRH240C7A-DD2700	$20 \leq X \leq 40$
APRH300C7A-DD2870	$20 \leq X \leq 40$	APRH360C7A-DD3105	$0 < X \leq 20$

6. Duct work



- ✧ All conditioned air ductwork should be insulated to minimize heating and cooling duct losses. Use a minimum of 2 inches of insulation with a vapor barrier. The outside ductwork must be weatherproofed between the unit and the building.
- ✧ When attaching ductwork to a horizontal unit, provide a flexible watertight connection to prevent noise transmission from the unit to the ducts. The flexible connection must be indoors and made out of heavy canvas.
- ✧ Do not draw the canvas taut between the solid ducts.
- ✧ At least 1m flame resistant layer must be laid at the end of air duct internal surface.

7. Electrical wiring

7.1 Warning

- ✧ An all-pole disconnection switch having a contact separation of at least 3mm in all poles should be connected in fixed wiring.
- ✧ The appliance shall be installed in accordance with national wiring regulations.
- ✧ An all-pole disconnection device which has at least 3mm separation distance in all pole and a residual current device (RCD) with the rating of above 10mA shall be incorporated in the fixed wiring according to the national rule.
- ✧ The appliance shall be installed in accordance with national wiring regulations.

7.2 Wiring provision

- ✧ The units are internally wired at the factory according to generally accepted electrical technology.

- ◇ Main power wiring to the unit control wiring between the control center and the unit, and earth wiring are required in the field.
- ◇ The following components are required: main power fuses; conduit coupling.
- ◇ Wire and fuse sizes should be selected in accordance with national and standard, taking the designed maximum current shall be the total of the compressor maximum current, condenser fan motor current and evaporator fan motor current.
- ◇ The wire size between the wired controller and the unit should be determined according to the following table, because the 24V power source is applied to the control circuit.

	Wiring length between wired controller and unit (One way)				
Min. wire size (mm ²)	10m	15m	20m	30m	40m
	0.5	0.5	0.75	0.75	1.0

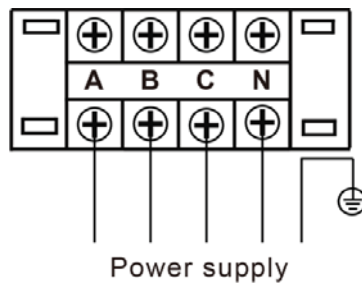
- ◇ Main power supply parameters:

Model	Main power	Main power switch	Fuse
APRH048C7A-D	380~415V, 3Ph~, 50Hz	25A	20A
APRH060C7A-D		30A	25A
APRH075C7A-D		35A	25A
APRH090C7A-D		40A	30A
APRH105C7A-D		45A	35A
APRH120C7A-D		50A	40A
APRH150C7A-D		63A	50A
APRH180C7A-D		75A	63A
APRH210C7A-D		90A	80A
APRH240C7A-D		100A	90A
APRH300C7A-D		120A	100A
APRH360C7A-D		120A	100A

Model	Wires for power supply	Type of wires
APRH048C7A-D	3×6mm ² + 2×3mm ²	3 × UL1015 9AWG 2 × UL1015 12AWG
APRH060C7A-D	3×6mm ² + 2×3mm ²	3 × UL1015 9AWG 2 × UL1015 12AWG
APRH075C7A-D	3×6mm ² + 2×3mm ²	3 × UL1015 9AWG 2 × UL1015 12AWG
APRH090C7A-D	3×10mm ² + 2×6mm ²	3 × UL1015 7AWG 2 × UL1015 9AWG
APRH105C7A-D	3×10mm ² + 2×6mm ²	3 × UL1015 7AWG 2 × UL1015 9AWG
APRH120C7A-D	3×10mm ² + 2×6mm ²	3 × UL1015 7AWG 2 × UL1015 9AWG
APRH150C7A-D	3×16mm ² + 2×10mm ²	3 × UL1015 5AWG 2 × UL1015 7AWG
APRH180C7A-D	3×16mm ² + 2×10mm ²	3 × UL1015 5AWG 2 × UL1015 7AWG
APRH210C7A-D	3×25mm ² + 2×10mm ²	3 × UL1015 3AWG 2 × UL1015 7AWG
APRH240C7A-D	3×25mm ² + 2×10mm ²	3 × UL1015 3AWG 2 × UL1015 7AWG
APRH300C7A-D	3×35mm ² + 2×16mm ²	3 × UL1015 2AWG 2 × UL1015 5AWG
APRH360C7A-D	3×35mm ² + 2×16mm ²	3 × UL1015 2AWG 2 × UL1015 5AWG

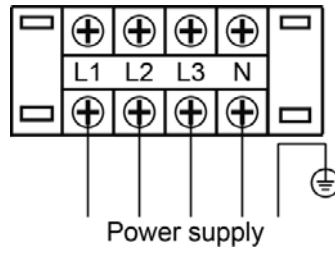
◇ Power supply wiring diagram

APRH048, 060C7A-D:



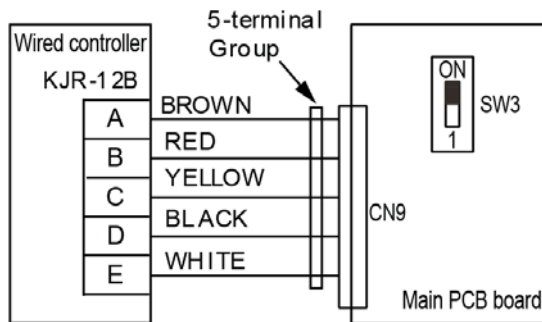
APRH075-120C7A-D

APRH150-360C7A-D



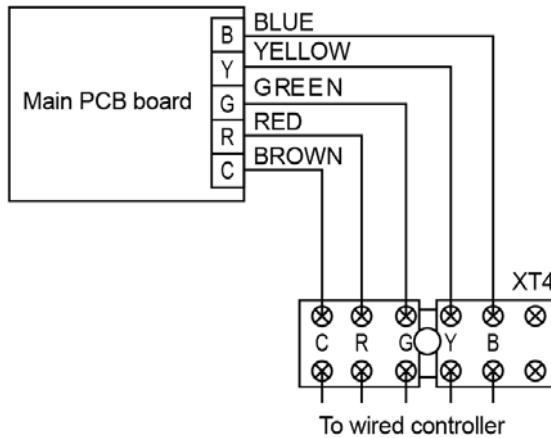
◇ Wired controller wiring diagram (Standard wired controller)

APRH048-360C7A-D



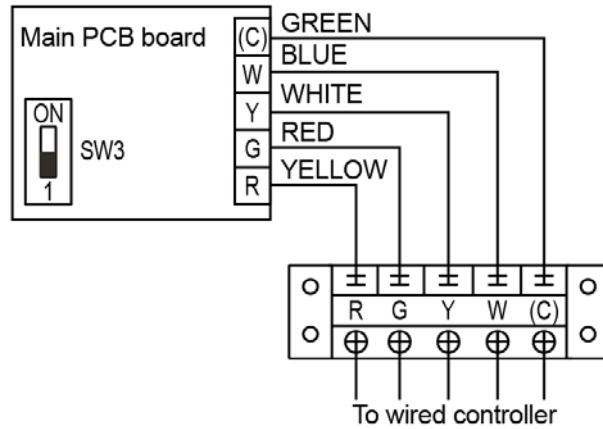
The standard wired controller model of these units is KJR-12B/dp(T)-E. When KJR-12B is connected, the switch SW3 should be set to ON.

APRH075, 090C7A-D:



The standard wired controller model of these units is KJR-25B.

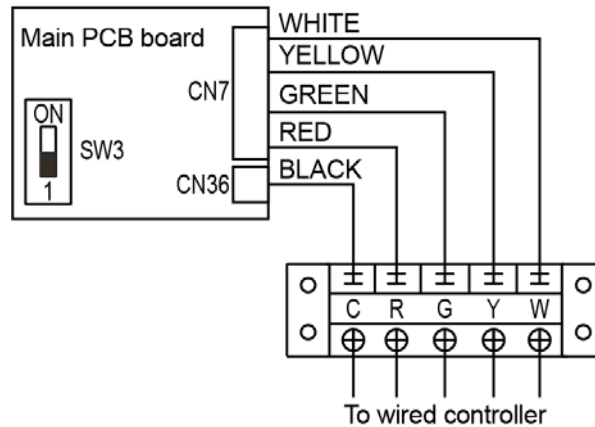
APRH105, 120C7A-D:



The standard wired controller model of these units is KJR-25B. When KJR-25B is connected, the switch SW3 should be set to 1.

- ◇ Wired controller wiring diagram (Optional wired controller)

APRH048, 060C7A-D:

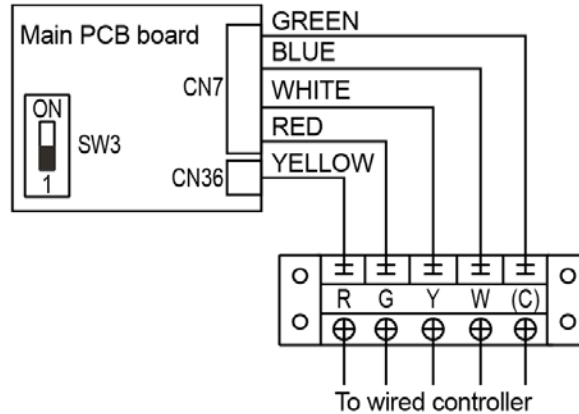


Optional wired controller of these two units is KJR-25B. When KJR-25B is connected, the switch SW3 should be set to 1. After settings, please shut off the power supply and repower again, otherwise, the new settings function could not work.

APRH075-120C7A-D

These units cannot directly connect with wired controller KJR-12B. If these units connect with KJR-12B, it should be customized to change the main PCB board of the unit.

APRH105-360C7A-D



- ✧ If choose KJR-25B or Non-programmed electrical thermostat of other brand, such as Honeywell. Wiring should refer to the manual of the thermostat. After connection, set SW3 in 1. Finally, shut off the power supply and then repower.

8. Start-up

Before starting unit:

- ✧ Is the unit properly located and level with the proper clearance?
- ✧ Is the duct work correctly sized, run, taped, insulated, and weatherproofed with proper unit arrangement?
- ✧ Is the wiring properly sized and run according to the unit wiring diagram?
- ✧ Are all the wiring connections tight, including those in the unit?
- ✧ Has the unit been properly grounded and fused with the recommended fuse size?
- ✧ Has the air conditioning system been checked at the service ports for charge and leak tested if necessary?
- ✧ Does the condenser fan and indoor blower fan free without rubbing, and are they tight on the shafts?
- ✧ Are all covers and access panels in place to prevent air loss and safety hazards?

Starting the unit:

- ✧ When the unit operates under cooling mode, please check the line voltage of the unit. The

voltage should be within the range shown on the unit nameplate.

- ✧ If low voltage is encountered, check the size and the length of power supply wire from the main disconnect to the unit. The line may be undersized for the length of the run.

Shut-down the unit:

- ✧ Place the system selector in the OFF position or reset thermostat (Wired controller) at a setting above room temperature.
- ✧ Do not de-energize the main power supply disconnect except when unit is to be serviced.

9. Safety control

Functions

- ✧ Minutes delay for the compressor start-up:
At the beginning of energizing, 3-minutes delay should be taken to start the compressor. While after the stop of the compressor, 7-minutes delay should be taken to restart the compressor.
- ✧ Compressor discharge temperature protection:
When the temperature of compressor discharge is higher than 125°C (257°F), the compressor will stop. Once the temperature is lower than 90°C (194°F), the compressor can be started again.
- ✧ Reverse phase protection relay:
The reverse phase protection relay will make the unit not start, when the power supply source is in correctly conneted.

The checking of phase order is just carried out at the first time of electrifying. If malfunction happens then the checking will be going on until the order of phase is right, and the error code will be displayed on the board. If there is no problem in the first checking, then it will be omitted.
- ✧ High pressure and low pressure protection :
When high pressure is equal or higher than 638 Psi, and lower pressure is equal or lower than 21Psi, the unit will stop.

Error & protection code



APRH048-360C7A-D

Type	Content	Code	Remarks
Normal	Standby	-----	
Normal	Constraint cool	ON	
Normal	Run	10.	
Error	Compressor phase sequence error or phase lack	E0	
Error	Condenser pipe temperature sensor (T3) in system A error	E1	
Error	Condenser pipe temperature sensor (T3) in system B error	E2	
Error	Over current protection of system A's compressor is active 3 times within 1 hour	E3	Unit shall be power-off to recovery
Error	Over current protection of system B's compressor is active 3 times within 1 hour	E4	Unit shall be power-off to recovery
Error	Evaporator pipe temperature sensor (T2) in system A error	E5	
Error	Evaporator pipe temperature sensor (T2) in system B error	E6	
Error	High & low pressure protection, or high discharge temperature protection of system A reached 3 times within 1 hour.	E7	Unit shall be power-off to recovery
Error	High & low pressure protection, or high discharge temperature protection of system B reached 3 times within 1 hour.	E8	Unit shall be power-off to recovery
Error	Indoor side room temperature sensor (T1) error	E9	
Error	Ambient temperature sensor (T4) error	EA	
Error	Wired controller communication error	Eb	
Error	Eeprom error	EE	
Protection	Over-current protection of compressor in system A	P0	
Protection	Over-current protection of compressor in system B	P1	
Protection	Over-current protection of indoor side fan motor	P2	

Continued :

Type	Content	Code	Remarks
Protection	Comprehensive protection of outdoor side fan motor	P3	
Protection	Protection of high/low pressure or high temperature protection of discharge sensor in system A	P4	Comprehensive protection of system A
Protection	Protection of high/low pressure or high temperature protection of discharge sensor in system B	P5	Comprehensive protection of system B
Protection	Hi-pressure protection initiated in T2 evaporator stops the outdoor unit fan	P6	
Protection	Hi-pressure protection initiated in T2 evaporator stops the outdoor unit fan and compressor	P7	
Protection	High temperature protection of condenser in system A	P8	Power off to recovery.
Protection	High temperature protection of condenser in system B	P9	Power off to recovery.
Protection	Anti-freezing protection of evaporator in system A	Pc	
Protection	Anti-freezing protection of evaporator in system B	Pd	
Protection	Protection of outdoor ambient temperature	PA	

Notes: If same protection which includes all system for 2-stage products is triggered 3 times within 1 hour, the unit should be power-off to recovery.

✧ **APRH075-120C7A-D**

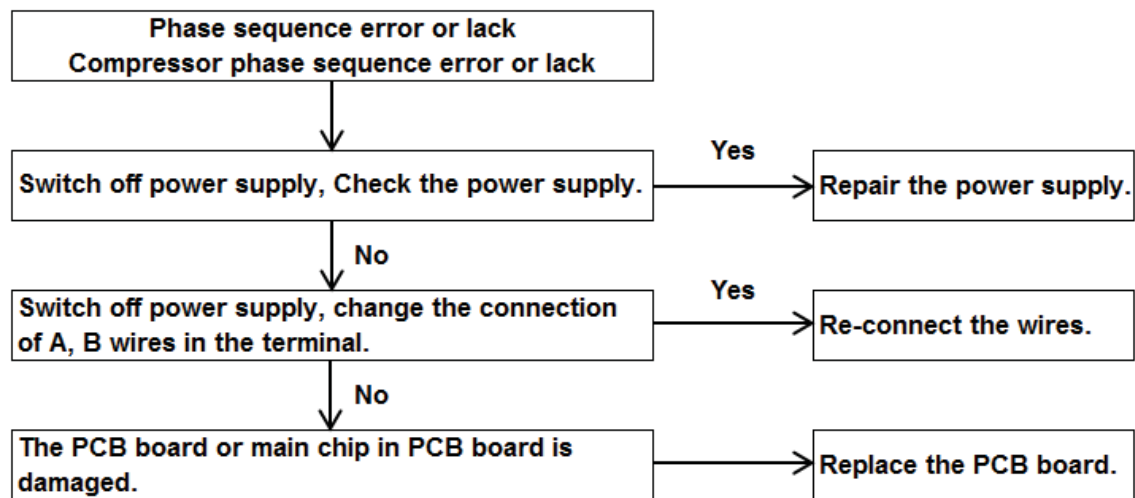
Content	LED1	LED2	LED3
	(Red)	(Yellow)	(Green)
Standby	OFF	OFF	ON
Normal operation	ON	ON	ON
Phase sequence error or phase lack	FLASH	FLASH	FLASH
Indoor side room temperature (T1) error, or high pressure protection, or high temperature protection of discharge sensor	FLASH	FLASH	FLSAH
Evaporator pipe temperature sensor (T2) error	FLASH	OFF	FLASH
Condenser pipe temperature sensor (T3) error	OFF	FLASH	FLASH
Ambient temperature sensor (T4) error	ON	FLASH	FLASH
Over-current protection of compressor	OFF	OFF	FLASH

Continued:

Content	LED1	LED2	LED3
	(Red)	(Yellow)	(Green)
Low temperature protection of evaporator	OFF	FLASH	OFF
High temperature protection of evaporator	FLASH	ON	ON
High temperature protection of condenser	FLASH	OFF	OFF
Wired controller communication error	FLASH	FLASH	ON
Low pressure protection	FLASH	ON	FLASH

Phase sequence error or phase default:

Compressor sequence error or phase default:

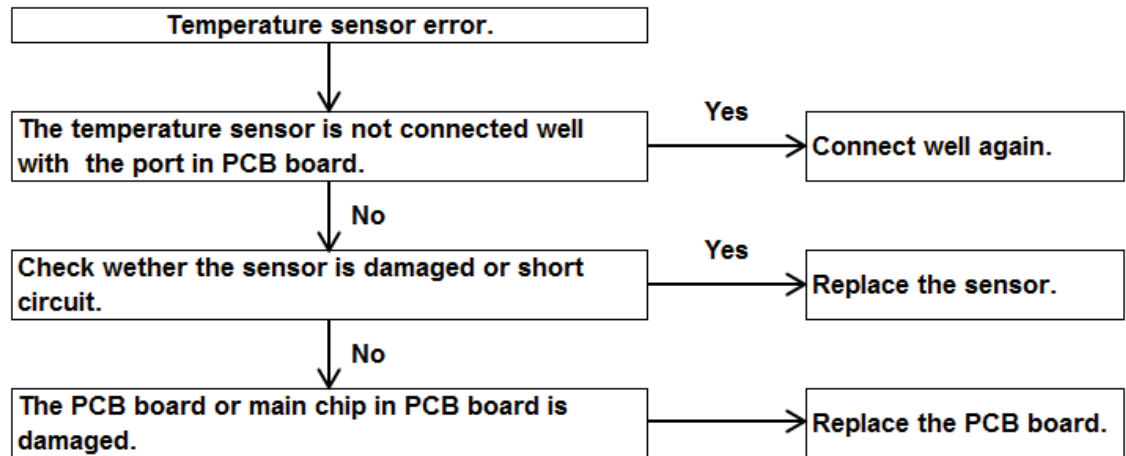


Evaporator pipe temperature sensor (T2) error:

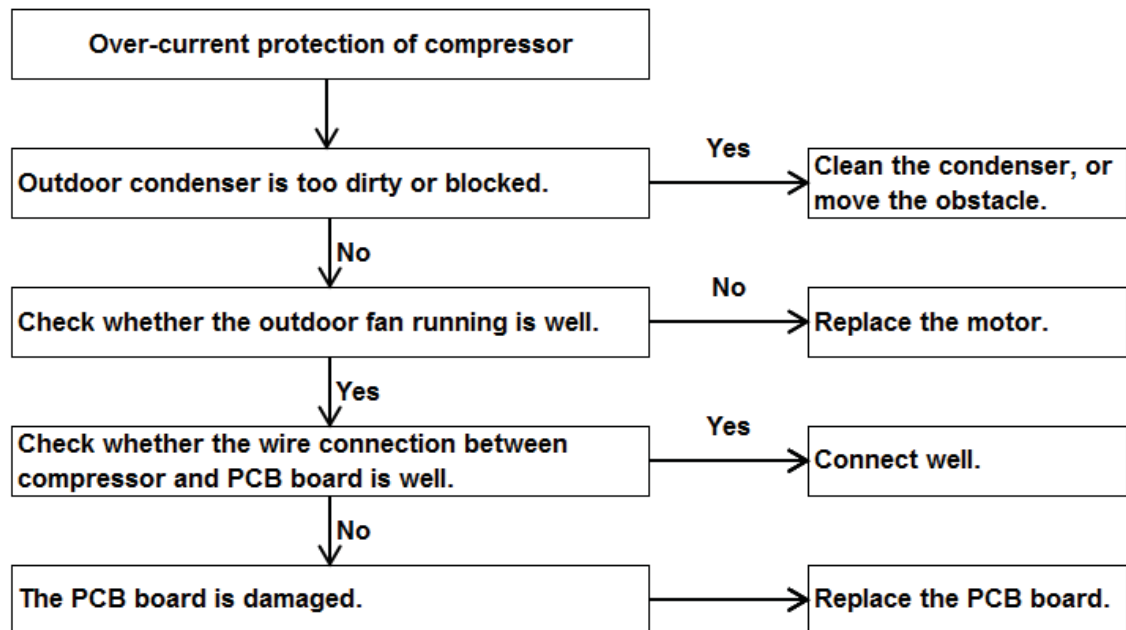
Condenser pipe temperature sensor (T3) error :

Ambient temperature sensor (T4) error:

Indoor side room temperature sensor (T1) error :

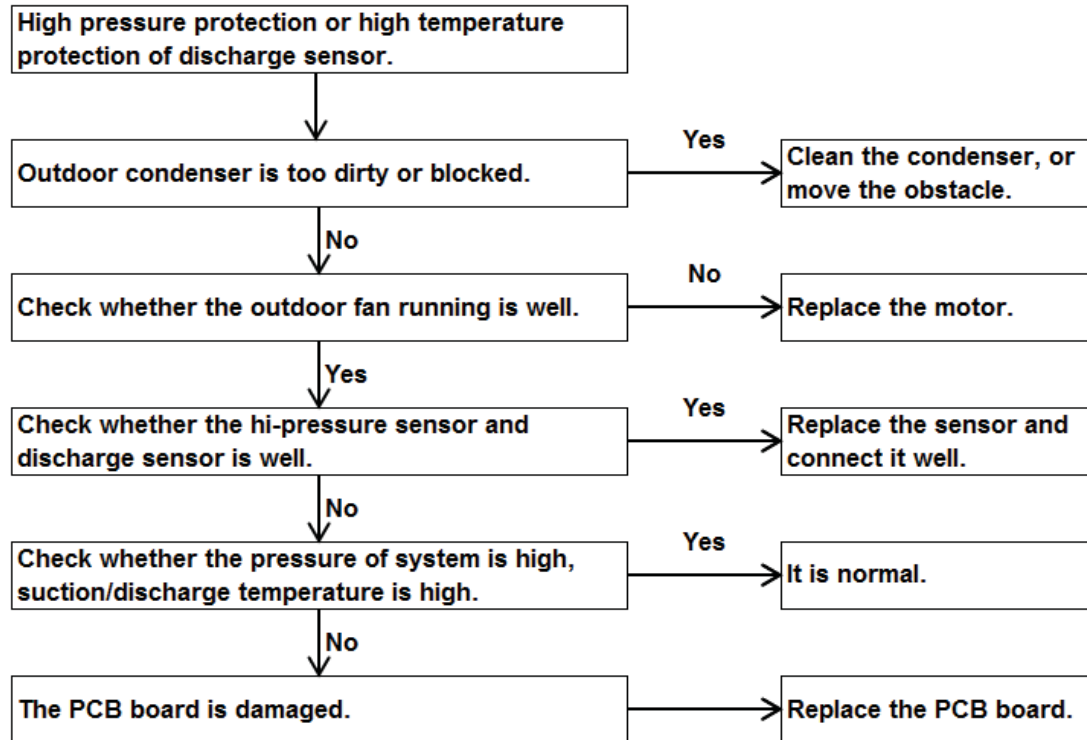


Over-current protection of compressor:

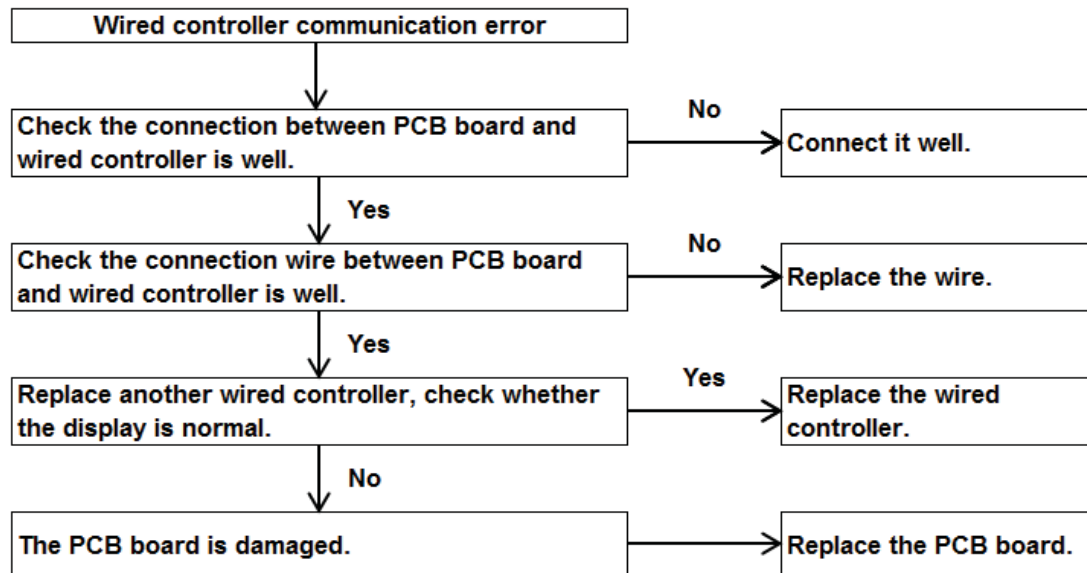


High pressure protection:

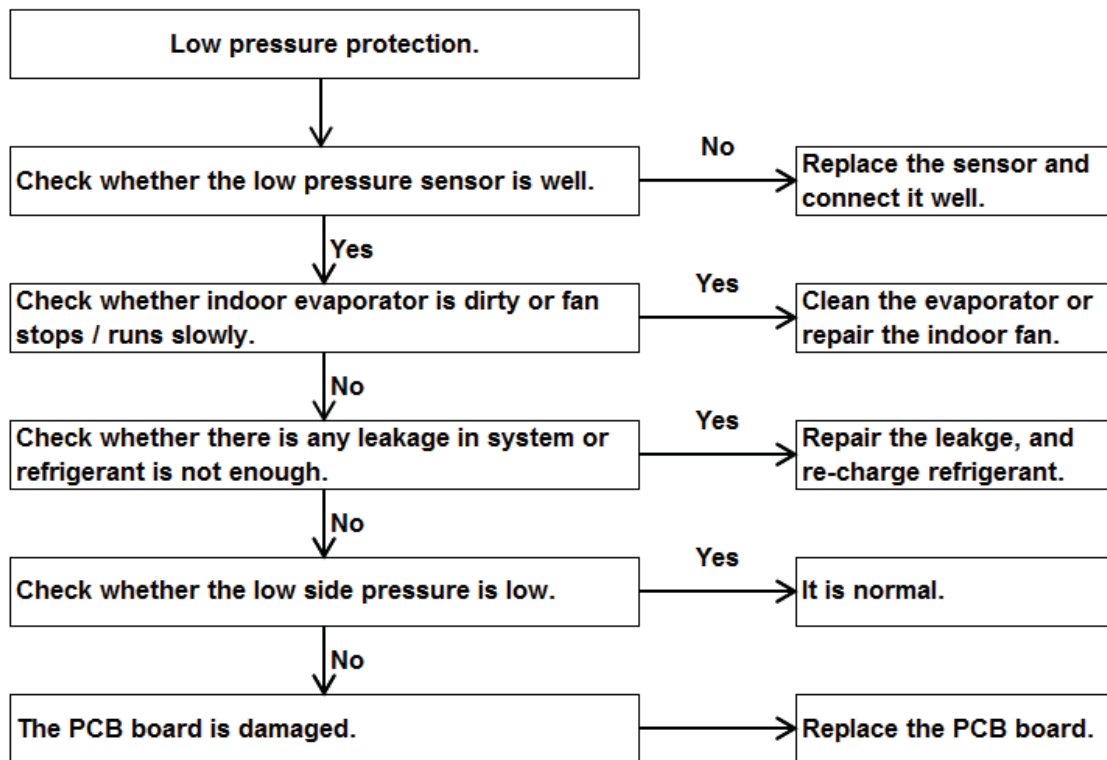
High discharge temperature protection :



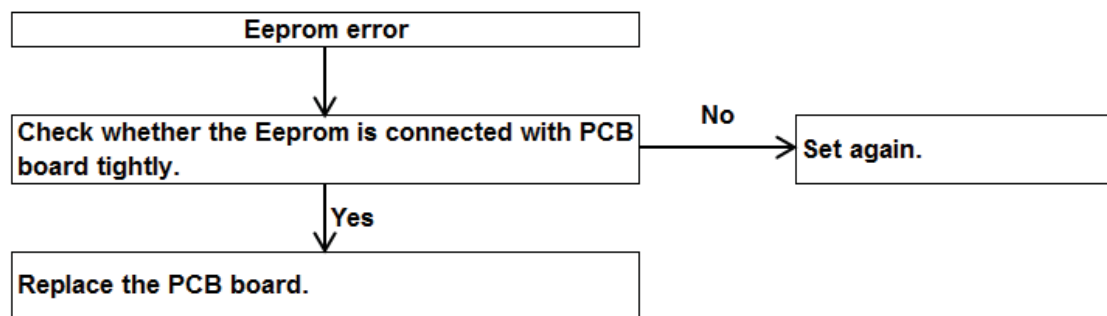
Wired controller communication error :



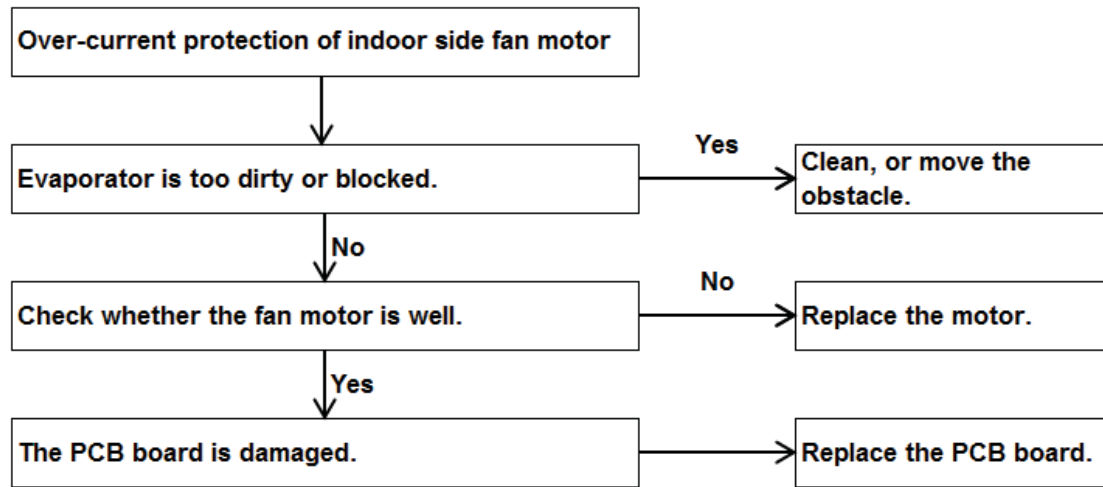
Low pressure protection :



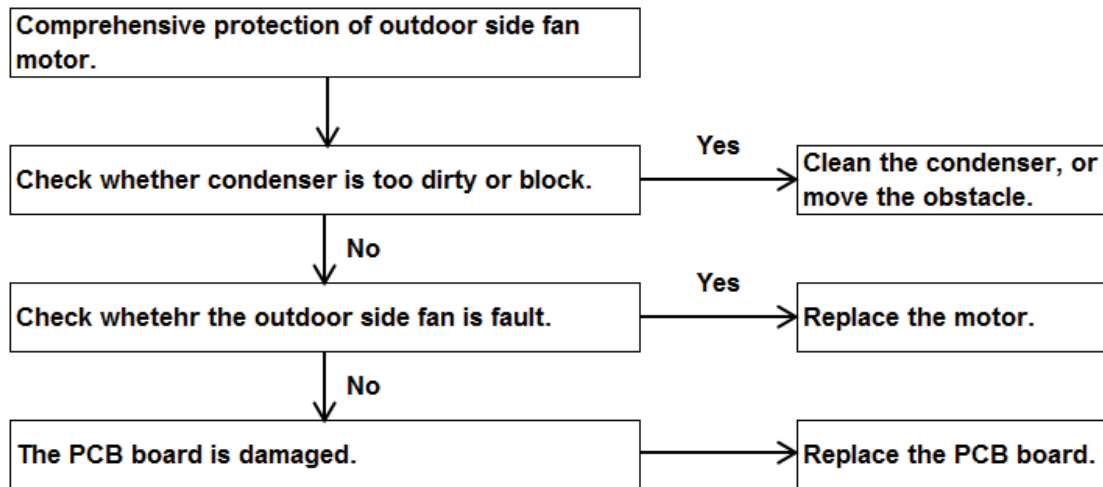
Eeprom error :



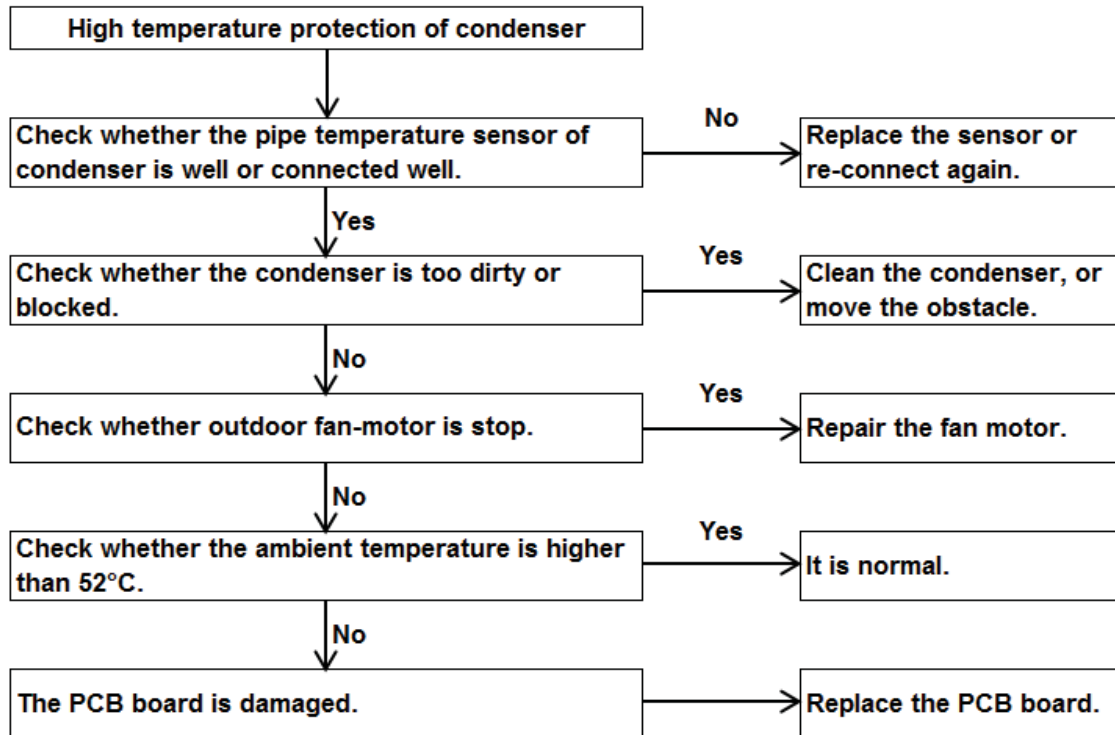
Over-current protection of indoor side fan motor :



Comprehensive protection of outdoor side fan motor :

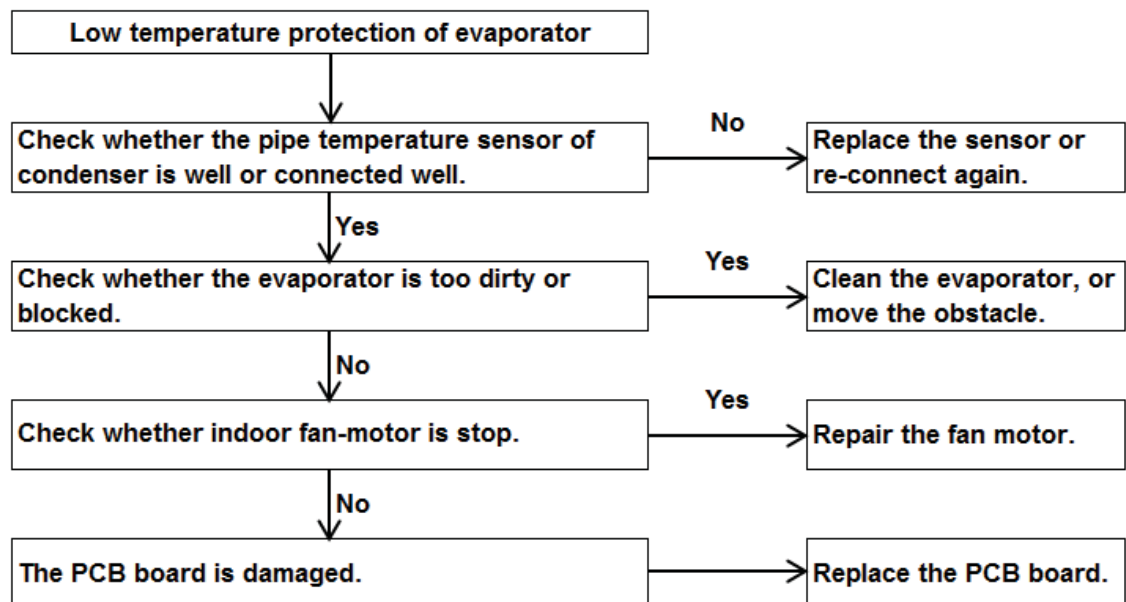


High temperature protection of condenser :

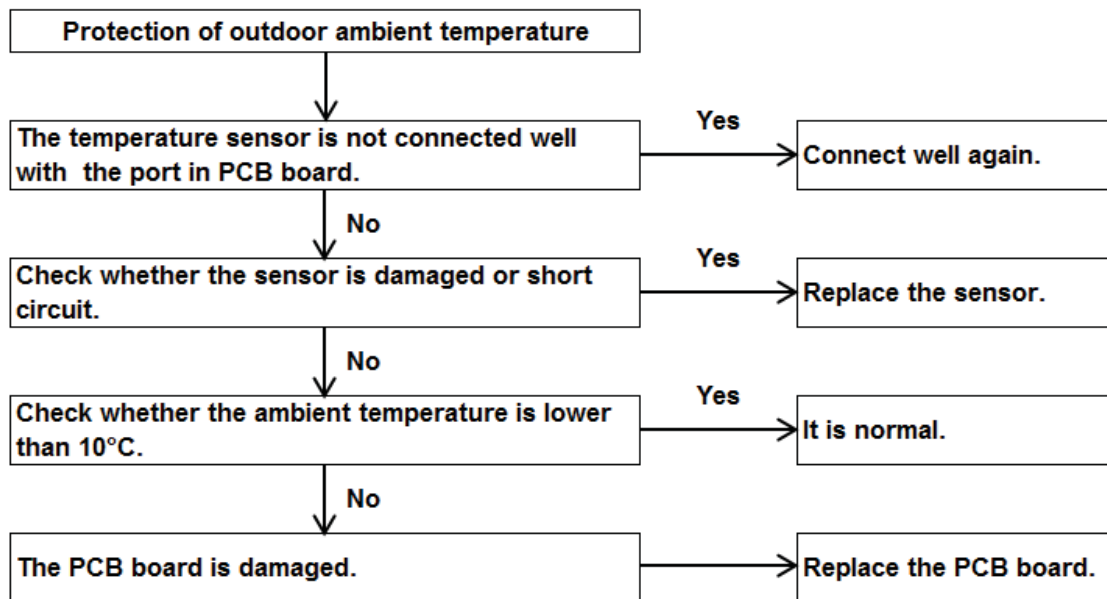


Low temperature protection of evaporator:

Anti-freezing protection of evaporator :



Protection of outdoor ambient temperature :



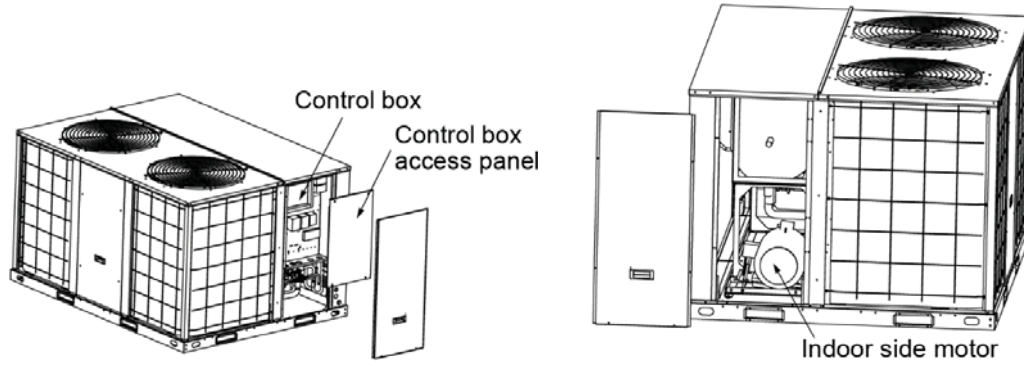
10. Maintenance

Caution

- ✧ Do not operate the unit without the evaporator fan access panel in place. Reinstall the access panel after performing any maintenance. Operating the unit without the access panel may result in severe personal injury.
- ✧ Disconnect the power supply before cleaning and maintenance.

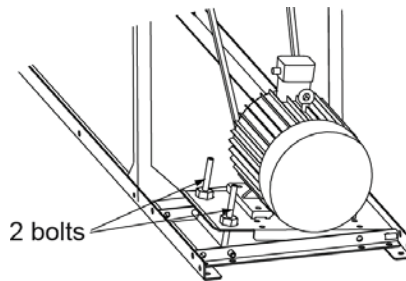
Regular maintenance

Some regular maintenance has been carry on by user. It includes: change the one-time dust filter, clean casing, wash condenser and replace a new belt, as well as do some test for the equipment.



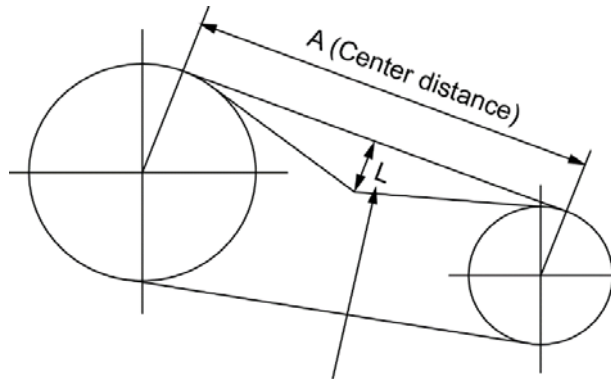
Regulating belt of tension

Refer to the following figure, loose 2 bolts, and move the electric motor to adjust belt tension. These two bolts are used for precision adjustment.



Belt tension is measured by belt tension indicator

- ◇ Calculate the deflection, deflection (L) = A/64.



Belt tension indicator applied to middle center distance

Notes: $L=A/64$

Model	A (mm)
APRH105C7A-DD1300	380

APRH120C7A-DD1350	380
APRH150C7A-DD1440	560
APRH180C7A-DD2530	560
APRH210C7A-DD2610	580
APRH240C7A-DD2700	580
APRH300C7A-DD2870	480
APRH3607CA-DD3105	480

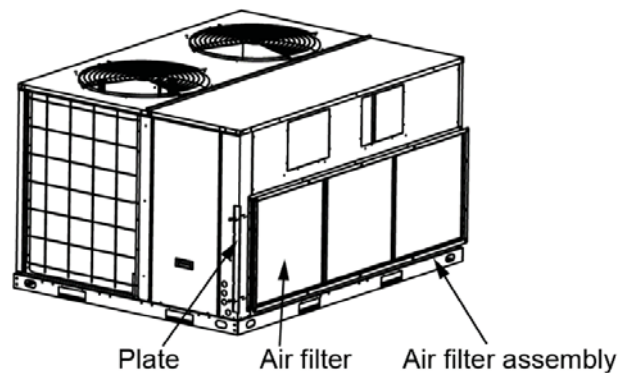
- ◇ Measure the belt deflection force, the force should be between the values shown in the following lists.
- ◇ The belt which is too tight or too loose may generate noise and be harmful to the unit.

Belt section	For required to deflection		
	Small pulley diameter	Newton	Kilogram-force
SPA	80mm~132mm	25N~35N	2.5kg.f~3.6kg.f

Air intake filter clean (The filter should be customized).

Step 1: Dismantle the air filter.

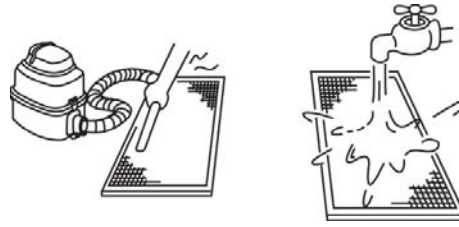
- ◇ Twist of screws and get out the plate.
- ◇ Pull out the filter along the supporting slot.



Step 2: Clean the air filter.

- ◇ Vacuum cleaner or fresh water may be used to clean the air filter. If the dust accumulated too much, please use soft brush and mild detergent to clean.
- ◇ The air-in side should face up when using vacuum cleaner.

-
- ◇ The air-in side should face down when using water.



- ◇ After cleaning, please dry out in cool place. Do not dry out the air filter under direct sunshine or heat.

Step 3: Re-install the air filter.

Condenser coil

Unfiltered air circulates through the unit's condenser coil can cause the coil's surface to become clogged with dust. Clean the coil, vertically (i.e., with the fins), and stroke the coil surface with a soft brush. Be sure to keep all vegetation away from the condenser coil area.

Periodic maintenance

To keep the unit operating safety and efficiently, the entire system should be checked at least once each year. The examining the areas include:

- ✓ Filter;
- ✓ Motors and drive system components;
- ✓ Economizer gaskets (Reserved);
- ✓ Safety controls;
- ✓ Electrical components and wiring (For possible replacement and connection tightness);
- ✓ Condenser drainage (For cleaning);
- ✓ Unit duct connections (To check that they are physically sound and sealed to the unit casing);
- ✓ Unit mounting support (For structural integrity);
- ✓ The unit (For obvious unit deterioration).

Appendix: - Temperature sensor

Room / Pipe temperature sensor Resistance Valve (R25 = 10 kOhm \pm 1%, B25/50 = 4100K \pm 1%)

Temperature (°C)	R _{Max.} (KΩ)	R _{Nor.} (KΩ)	R _{Min.} (KΩ)	Temperature Tolerance (°C)	
0	35.630	34.840	34.064	-0.41	0.42
1	33.741	33.011	32.292	-0.40	0.42
2	31.963	31.288	30.624	-0.39	0.41
3	30.290	29.666	29.051	-0.38	0.40
4	28.714	28.137	27.569	-0.38	0.39
5	27.230	26.697	26.172	-0.37	0.39
6	25.831	25.339	24.853	-0.36	0.38
7	24.513	24.058	23.609	-0.36	0.37
8	23.270	22.850	22.435	-0.35	0.36
9	22.097	21.710	21.327	-0.34	0.36
10	20.991	20.633	20.279	-0.33	0.35
11	19.947	19.617	19.290	-0.32	0.34
12	18.961	18.656	18.355	-0.32	0.33
13	18.030	17.749	17.471	-0.31	0.32
14	17.150	16.891	16.635	-0.30	0.32
15	16.318	16.080	15.844	-0.29	0.31
16	15.532	15.313	15.095	-0.29	0.30
17	14.788	14.587	14.386	-0.28	0.29
18	14.085	13.899	13.715	-0.27	0.28
19	13.419	13.249	13.079	-0.26	0.27
20	12.789	12.632	12.477	-0.25	0.27
21	12.191	12.048	11.906	-0.25	0.26
22	11.626	11.495	11.364	-0.24	0.25
23	11.090	10.970	10.850	-0.23	0.24

Continued:

Temperature (°C)	R _{Max.} (KΩ)	R _{Nor.} (KΩ)	R _{Min.} (KΩ)	Temperature Tolerance (°C)	
24	10.582	10.472	10.363	-0.22	0.23
25	10.100	10.000	9.9000	-0.21	0.22
26	9.6518	9.5519	9.4520	-0.22	0.23
27	9.2262	9.1265	9.0270	-0.23	0.25
28	8.8218	8.7226	8.6235	-0.25	0.26
29	8.4376	8.3389	8.2405	-0.26	0.27
30	8.0723	7.9743	7.8767	-0.27	0.28
31	7.7250	7.6279	7.5312	-0.28	0.29
32	7.3947	7.2985	7.2028	-0.29	0.31
33	7.0805	6.9853	6.8906	-0.30	0.32
34	6.7814	6.6873	6.5939	-0.32	0.33
35	6.4968	6.4038	6.3116	-0.33	0.34
36	6.2257	6.1340	6.0431	-0.34	0.35
37	5.9676	5.8772	5.7875	-0.35	0.37
38	5.7216	5.6326	5.5443	-0.36	0.38
39	5.4873	5.3996	5.3127	-0.38	0.39
40	5.2639	5.1776	5.0922	-0.39	0.40
41	5.0509	4.9660	4.8821	-0.40	0.42
42	4.8478	4.7644	4.6819	-0.41	0.43
43	4.6541	4.5721	4.4911	-0.43	0.44
44	4.4692	4.3887	4.3092	-0.44	0.45
45	4.2928	4.2137	4.1357	-0.45	0.47
46	4.1244	4.0468	3.9702	-0.46	0.48
47	3.9636	3.8874	3.8123	-0.48	0.49
48	3.8100	3.7353	3.6617	-0.49	0.51

Continued:

Temperature (°C)	R _{Max.} (KΩ)	R _{Nor.} (KΩ)	R _{Min.} (KΩ)	Temperature Tolerance (°C)	
49	3.6632	3.5900	3.5179	-0.50	0.52
50	3.5230	3.4512	3.3805	-0.52	0.53
51	3.3890	3.3186	3.2494	-0.53	0.55
52	3.2608	3.1919	3.1241	-0.54	0.56
53	3.1383	3.0708	3.0044	-0.56	0.57
54	3.0211	2.9550	2.8900	-0.57	0.59
55	2.9090	2.8442	2.7806	-0.58	0.60
56	2.8017	2.7382	2.6760	-0.60	0.61
57	2.6990	2.6369	2.5759	-0.61	0.63
58	2.6006	2.5398	2.4802	-0.63	0.64
59	2.5064	2.4469	2.3886	-0.64	0.66
60	2.4162	2.3580	2.3009	-0.65	0.67
61	2.3298	2.2728	2.2170	-0.67	0.68
62	2.2470	2.1912	2.1366	-0.68	0.70
63	2.1676	2.1130	2.0596	-0.70	0.71
64	2.0914	2.0381	1.9858	-0.71	0.73
65	2.0184	1.9662	1.9151	-0.73	0.74
66	1.9484	1.8973	1.8474	-0.74	0.76
67	1.8812	1.8312	1.7824	-0.76	0.77
68	1.8167	1.7678	1.7201	-0.77	0.78
69	1.7548	1.7070	1.6603	-0.79	0.80
70	1.6954	1.6486	1.6029	-0.80	0.81

Appendix: - EHK (Electrical Heater Kits)

1. EHK Parameter

Model	EHK					
	Controlling Box	EH Duct	Input	FLA	MCA	MOP
APRH075C7A-DD1220	EHK-BOX-A	EHK-15F(D)	15kW	22.7A	28.4A	35A
APRH090C7A-DD1260	EHK-BOX-A	EHK-15F(D)	15kW	22.7A	28.4A	35A
APRH105C7A-DD1300	EHK-BOX-A	EHK-20F(D)	20kW	30.3A	37.9A	40A
APRH120C7A-DD1350	EHK-BOX-A	EHK-20F(D)	20kW	30.3A	37.9A	40A
APRH150C7A-DD1440	EHK-BOX-A	EHK-20F(D)	20kW	30.3A	37.9A	40A
APRH180C7A-DD2530	EHK-BOX-A	EHK-20F(D)	20kW	30.3A	37.9A	40A
APRH210C7A-DD2610	EHK-BOX-B	EHK-40C(D)	40kW	60.6A	75.8A	80A
APRH240C7A-DD2700	EHK-BOX-B	EHK-40C(D)	40kW	60.6A	75.8A	80A
APRH300C7A-DD2870	EHK-BOX-B	EHK-40D(D)	40kW	60.6A	75.8A	80A
APRH360C7A-DD3105	EHK-BOX-B	EHK-40D(D)	40kW	60.6A	75.8A	80A

Notes:

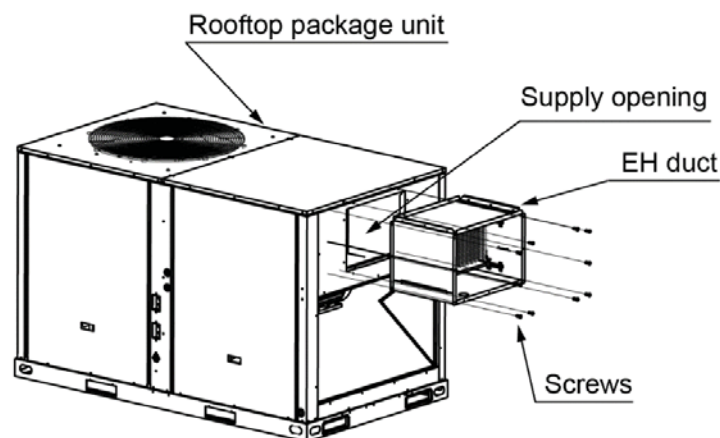
1. EHK (Electrical heater kits) includes controlling box and EH (Electrical heater) duct. It is independently packaged, and should be fixed with rooftop package unit on-site.
2. APRH150C7A-DD1440 & APRH180C7A-DD2530 can be customized with 20kW EHK or 30kW electrical heater kits;
3. FLA: Full Load Amps;
4. MCA: Min. Current Amps;
5. MOP: Max. Over Protector;
6. The values of FLA, MCA and MOP are based on the power supply of 380V.

2. Airflow pressure drop

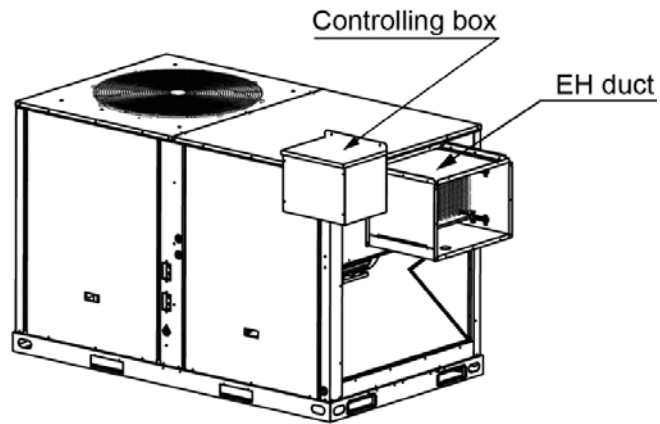
Model	Airflow pressure drop (inches W.C. [Pa])			
	15kW EHK	20kW EHK	30kW EHK	40kW EHK
APRH075C7A-DD1220	0.32 [80]	-	-	-
APRH090C7A-DD1260	0.32 [80]	-	-	-
APRH105C7A-DD1300	-	0.32 [80]	-	-
APRH120C7A-DD1350	-	0.32 [80]	-	-
APRH150C7A-DD1440	-	0.32 [80]	0.40 [100]	-
APRH180C7A-DD2530	-	0.32 [80]	0.40 [100]	-
APRH210C7A-DD2610	-	-	-	0.64 [160]
APRH240C7A-DD2700	-	-	-	0.64 [160]
APRH300C7A-DD2870	-	-	-	0.64 [160]
APRH360C7A-DD3105	-	-	-	0.64 [160]

3. Assemble

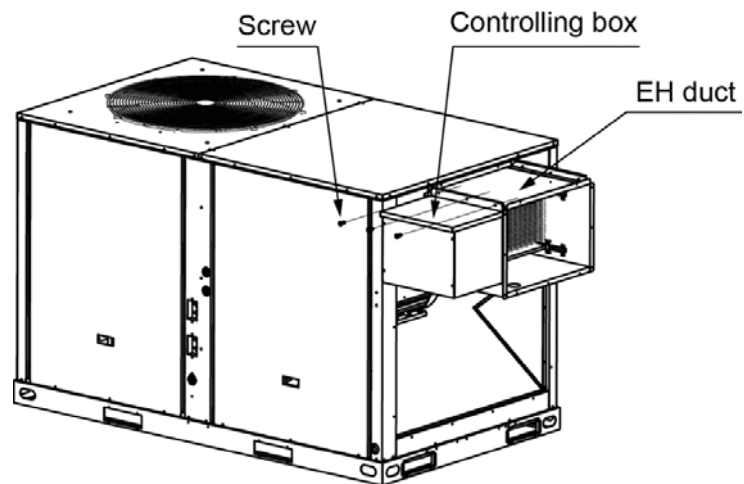
Step 1: Assembly the electrical heater duct to the supply opening by 10 pieces of screws.



Step 2: Place the controlling box into the buckle of the electrical heater duct.

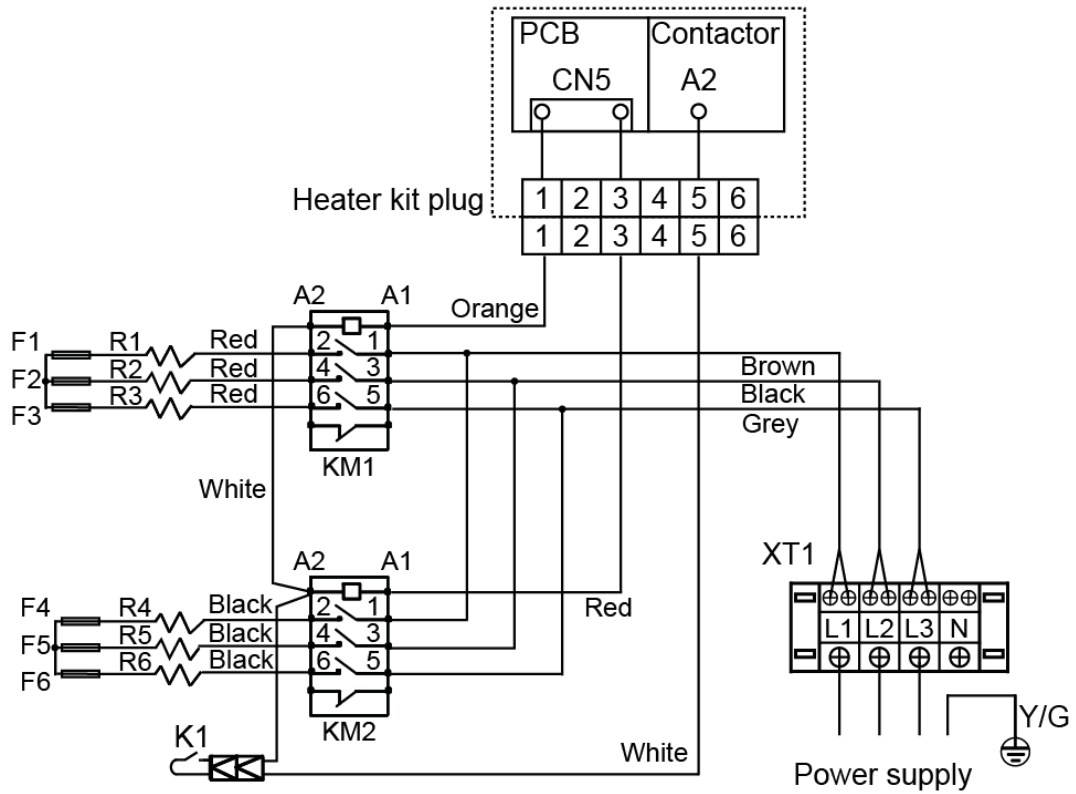


Step 3: Assembly the controlling box to the electrical heater duct by 3 pieces of screws.



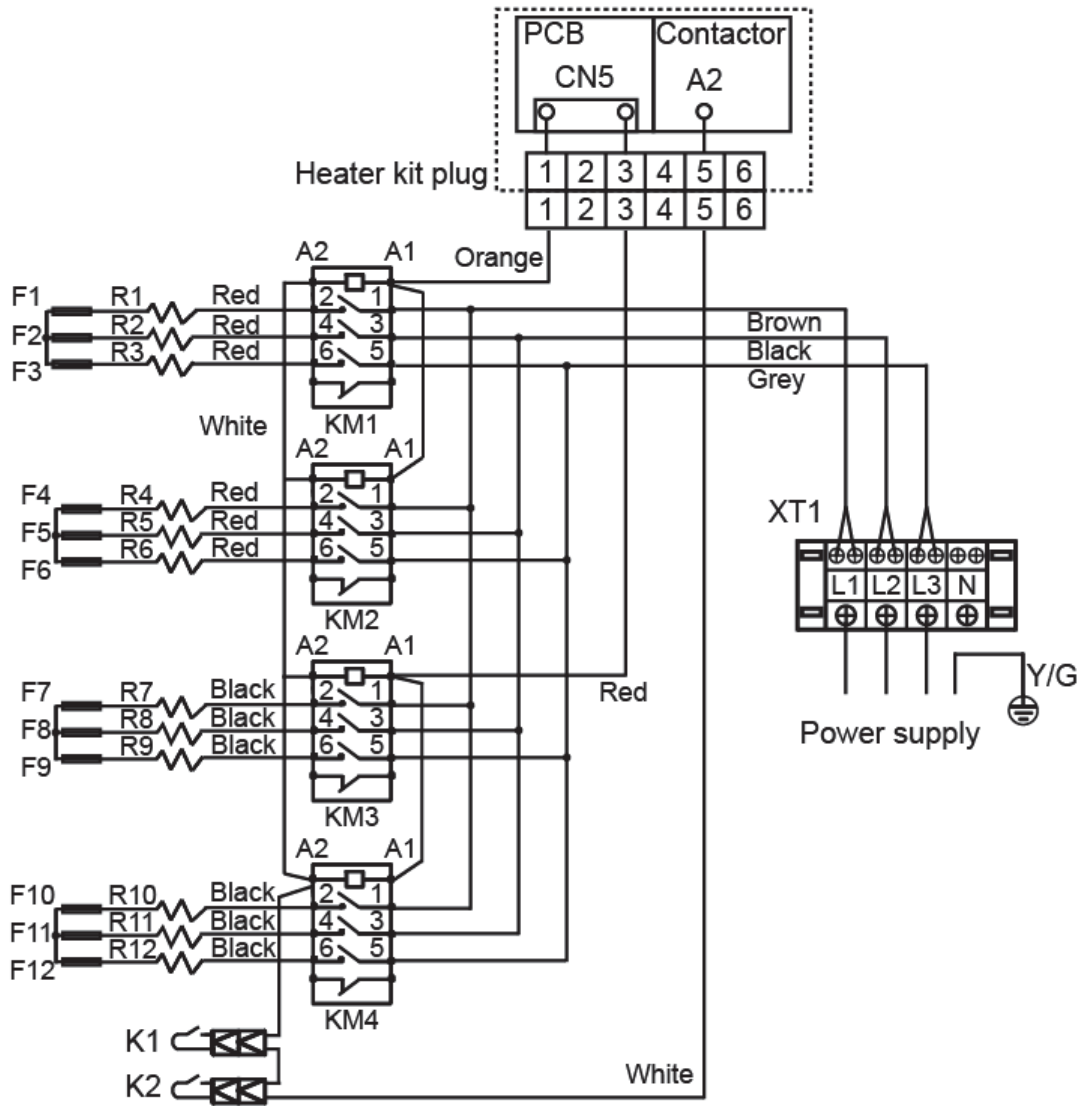
Step 4: Wiring

Electric diagram – 15kW/20kW EHK:



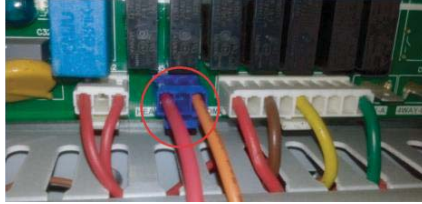
Code	Title
F1~F6	Thermal cut-off
R1~R6	Electrically heated pipe
KM1~KM2	Contactors
K1	Temperature protection switch
XT1	4-way terminal

Electric diagram – 30kW/40kW EHK:

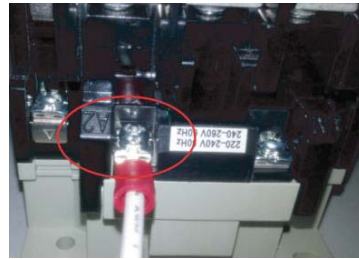


Code	Title
F1~F12	Thermal cut-off
R1~R12	Electrically heated pipe
KM1~KM4	Contactors
K1~K2	Temperature protection switch
XT1	4-way terminal

-
- ✧ From the electric diagram, the bundle of signal line coming from the heat kit into the rooftop unit can be found. First, one line connect to PCB of the unit. When unpack the packing of the controlling box, the bundle of signal line also can be found.



- ✧ The other line is connected to contactor of the rooftop package unit.



- ✧ After connect all wires, check all screws of breaker and make sure all screws are properly right. Failure to do so will result in breaker malfunction, fire, death, personal injure or property damage.

Part. 4 Controller

1. Wired controller: APACT-D12	153
2. Wired Controller:APACT-D25	162
3. Centralized Controller: VAECC-D064T (Optional)	172

1. Wired controller: APACT-D12

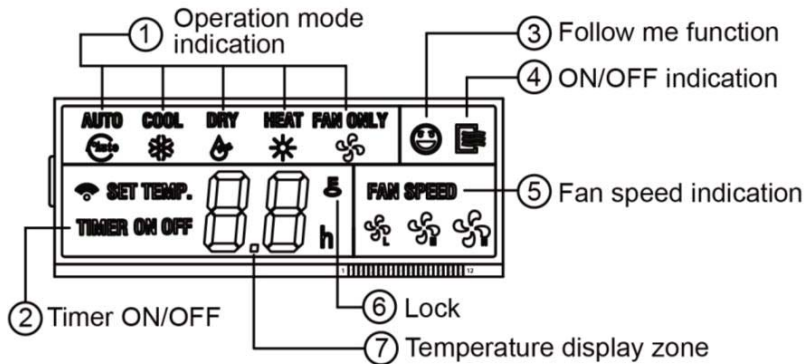


APACT-D12

1.1 Wired controller specifications

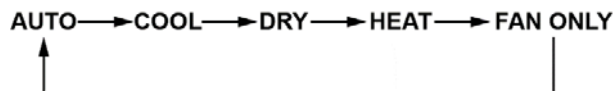
Model	APACT-D12
Power supply	5.0V DC
Operation temperature	-15°C~43°C
Operation humidity	40%~90% RH

1.2 Introduction of indicators function



1. Operation mode indication:

When press 'MODE' button, the following mode can be selected in circle.



For cooling only model, the indicator '**HEAT**' is skipped.

2. Timer ON/OFF

When adjust setting on time or only on time is set, the indicator '**ON**' is lighted.

When adjust setting off time or only off time is set, the indicator '**OFF**' is lighted.

If timer-on and timer-off timer both set, the indicators '**ON**' and '**OFF**' will be both lighted.

3. Follow me function

There is a temperature sensor inside the wired controller, after setting temperature; the detected temperature by this sensor will be compared with setting temperature. The space of wired controller will be same as the setting temperature.

It is available under cooling, heating and auto mode.

4. ON/OFF indication

When it is on, the icon will be displayed, otherwise it is extinguished.

5. Fan speed indication (For rooftop packages, it is not available.)

There are four fan modes: low, medium, high and auto. For some models, there is not medium fan speed, and the medium fan speed is seen as high speed.

6. LOCK

When the '**LOCK**' button is pressed, the icon will be displayed and other button is unable.

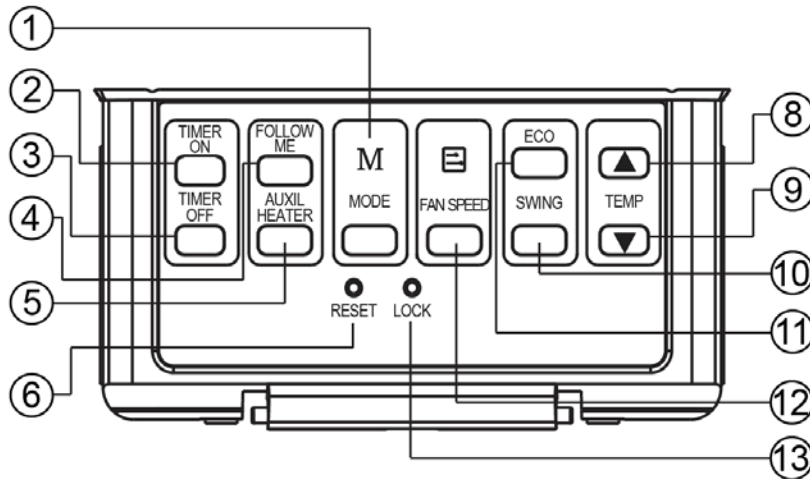
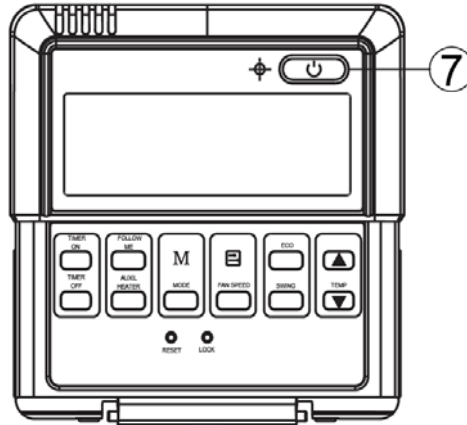
Press the '**LOCK**' again, the icon will be extinguished.

7. Temperature display zone

Generally it displays setting temperature, it can be adjusted by press temperature button

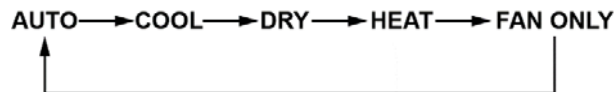
▲ and ▼. But in fan only mode, the temperature display zone will be blank.

1.3 Introduction of buttons



1. Mode button:

When press this button, the operation mode changes as the following sequence:



But for the cooling only model, the heating mode is skipped.

2. TIMER ON button:

Press this button, timer-on function is active. Then every press, the time will increase 0.5h, after 10 hours, increase by 1 hour for each press. If cancel this function, just set it to **0.0**.

3. Timer off button:

Press this button, timer-off function is active. Then Then every press, the time will increase

0.5h, after 10 hours, increase by 1 hour for each press. If cancel this function, just set it to

0.0

4. **FOLLOW ME** button:

When under cool, heat and auto mode, and press this button, follow me function is active.

Press again, this function is ineffective.

5. **AUXIL HEATER** button: (Only available for Cooling only with EHK model.)

If press this button in heat mode, electrical heater function become ineffective.

6. **RESET** button: (Hidden)

Use a 1 mm stick to press in the little hole, then the current setting is canceled. The wired controller enters into original state.

7. **ON/OFF** button

When in off state, press this button, the indicator is on, the wired controller enters into on state, and send setting information to main PCB board. When in on state, press this button, the indicator is off, and send instruction. If timer-on or timer-off has been set, it cancels this setting then sends instruction to stop the machine.

8. **TEMP ▲** adjust button:

Set indoor temperature up. If press and hold on, it will increase at 1°C (2°F) per 0.5 second.

9. **TEMP ▼** adjust button:

Set indoor temperature up. If press and hold on, it will decrease at 1°C (2°F) per 0.5 second.

10. **SWING** button: (Reserved)

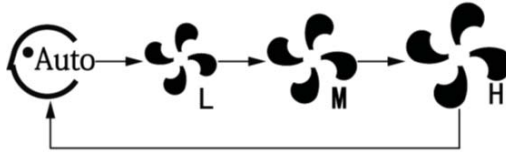
First press, then start swing function; after second press, stop swing.

11. **ECO** button: (Economy operation, Reserved)

Press this button, and then the unit will operate in economy mode. Press again, this mode can be exited.

12. **FAN SPEED** button: (For rooftop packages, it is not available.)

When press this button consecutively, and then the indoor side fan speed will circles as following:



13. **LOCK** button: (Hidden)

When push the **LOCK** button, all current settings are locked in and the wired controller does not accept any instruction except that of the **LOCK** button. Use the lock mode when want to prevent setting from being changed accidentally or play fully. Push the **LOCK** button again when want to cancel the lock mode.

1.4 Operation

Automatic operation

Connect to the power supply, and the operation lamp in main PCB board will flash.

Step 1: Press **MODE** button, and select **AUTO** icon.

Step 2: Press the button ▲ and ▼, set temperature as requirement; generally it is among from 17°C to 30°C.

Step 3: Press **ON/OFF** button, operation lamp is on, the unit can be worked in auto mode, and indoor side fan speed is auto, and cannot be changed. Auto is displayed on LCD. Press it again to stop.

Notes: Economy operation is valid in auto mode.

Cool / Heat / Fan only mode operation

Step 1: Press **MODE** button, and select **COOL**, or **HEAT**, or **FAN ONLY** icon.

Step 2: Press temperature adjust button to select setting temperature.

Step 3: Press **FAN SPEED** button to select high, medium, low or auto. (For rooftop packages, it is not available.)

Step 4: Press **ON/OFF** button, indoor unit operation lamp on, it works in selected mode. Press **ON/OFF** button again, it stops to work.

Notes: In fan only mode, temperature cannot be set.

Dry operation

Step 1: Press **MODE** button, select **DRY** icon.

Step 2: Press temperature adjust button to select setting temperature.

Step 3: Press **ON/OFF** button, indoor unit operation lamp on, it works in dry mode. Press **ON/OFF** button again, it stops to work.

Notes: Under dry mode, economy operation and fan speed adjustment are ineffective.

Timer setting

The timer time is relative time, and that is delay after setting time. So when timer is set, the standard time cannot be adjusted.

Timer setting – Timer on only

Step 1: Press **TIME ON** button, it display **SET** on LCD screen, and display **H** and **ON**, it is waiting for timer on setting.

Step 2: Press **TIMER ON** button repeatedly to adjust time setting.

Step 3: If press this button and hold on, the time will increase at 0.5h, after 10 hours, it increase at 1 hour.

Step 4: After setting 0.5 second, the wired controller sends timer-on information to the unit, it is finished.

Timer setting – Timer off only

Step 1: Press **TIME OFF** button, it display **SET** on LCD screen, and display **H** and **OFF**, it is waiting for timer on setting.

Step 2: Press **TIMER OFF** button repeatedly to adjust time setting.

Step 3: If press this button and hold on, the time will increase at 0.5h, after 10 hours, it increase at 1 hour.

Step 4: After setting 0.5 second, the wired controller sends timer-on information to the unit, it is finished.

Timer-on and timer-off both

Step 1: Set timer-on time as the corresponding step 1 and step 2.

Step 2: Set timer-off time as the corresponding step 1 and step 2.

Notes: Timer-off time must be longer than timer-on time.

Step 3: 0.5 second after setting, the wired controller send information to the unit. And the setting is finished.

Change timer

When need to change timer time, press corresponding button to revise it. If cancel timer, please change timer time to **0.0**.

1.5 Installation of wired controller

Caution

- ◇ Do not install it in a place where combustible gas easily leaks. Once combustible gas leaks and remains around wired controller, fire may be cause. Do not install it in a place with oil, steam or sulphur gas, or else deform or malfunction may occur.
- ◇ Wires must be suitable for the current of the wired controller. Otherwise, electricity leakage or heating may be caused, which may result in fire.
- ◇ Install the wire joint (5P) to the appointed position of the electric controlling box.
- ◇ Circuit of wired controller is low voltage circuit, and never connected with a standard 220V or 380V circuit. Also do not put it into a same wiring tube, and the interval must be more than 300~ 500mm.
- ◇ The shield cable must be connected stable to the ground, otherwise transmission may fail.
- ◇ Wire must be suitable for wired controller, never bring outside force to bear on the terminal.
- ◇ Do not to attempt to extend the shield cable by cutting. If it is necessary, please use terminal connection block to connect.

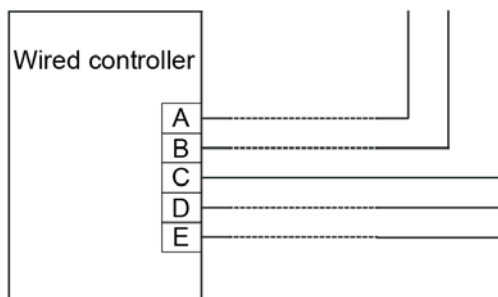
Accessories

Item	Quantity	Remarks
Wired controller	1	\
Wood mounting screw	3	M4×20 (For mounting on the wall)
Mounting screw	3	M4×25 (For mounting on the electrical switch box)
Installation manual	1	\
Owner's manual	1	\
5P terminal group	\	\
Installation screw	\	For fixing terminal.

Preparing at site

Item	Quantity	Remarks
5-core shield cable	1	RVVP-05mm ² ×5. The longest wire is 30m.
Switch box	1	\
Wiring tube	1	Insulating sleeve and tightening screw.

Wiring principle

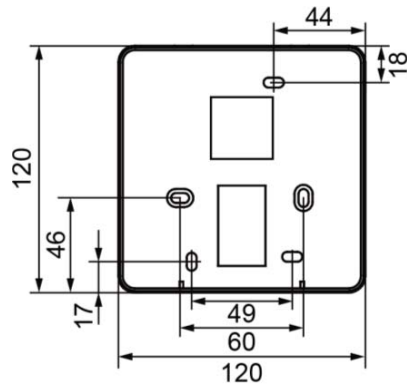


When it is necessary to use the wired controller, please follow the label of A/B/C/D/E to connect the wired controller. And the other side of the signal wire should be connected with main PCB board well. A is anode, and B is cathode. C is +5V. D is GND and E is RUN.

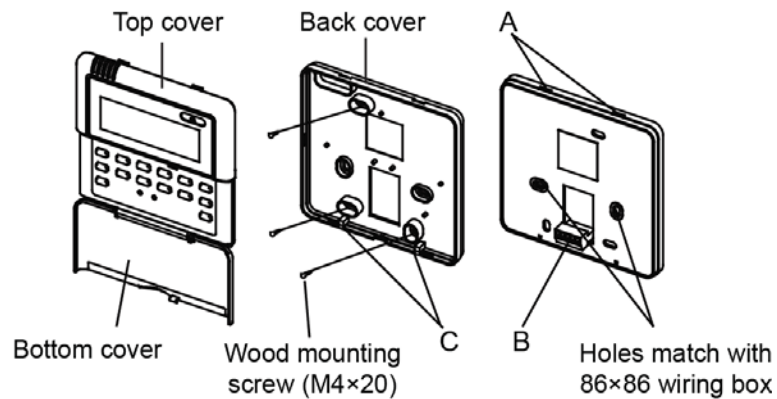
Installation:

Confirm the installed location of wired controller, before install the wired controller. If install it on the wall without electric switch box, the hole for 5P-terminal of wired controller is necessary.

Dimension of rear cover as following picture (Unit: mm):



Installation figure as following:



A: Turn a screwdriver at the concave on bottom panel of the wired controller to remove the back cover.

B: When installing the wired controller cover, it is sure that there is a hole in the wall to avoid the wired controller back cover being fixed directly to the wall which is not allowed for the wire joint extrudes out of the back cover.

C: When installing the wired controller, adjust the bottom of the controller board to the back cover which should be fixed first, then press the other end of the controller board.

Notes: The connecting wire should be a little longer as to take away the switch board and controller easily for maintenance.

2. Wired Controller: APACT-D25

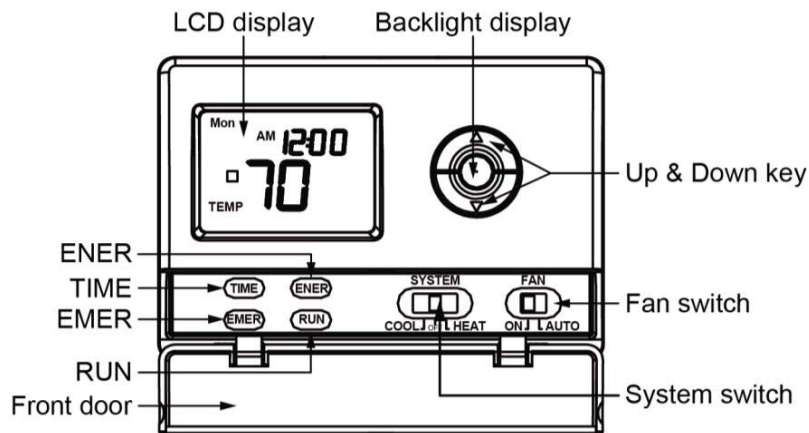


APACT-D25

2.1 Wired controller specifications

Model	APACT-D25
Power Supply Voltage	AC 24V
Temperature display range	0°C~37°C
Temperature control range	7°C~35°C
Temperature control accuracy	±0.5°C
Sensor	NTC 1%, B=3950

2.2 Introduction of button



TIME:

Be used to entering time.

ENER:

Measures and displays heating and cooling system operating time for today, yesterday, this week, last week or total. By monitoring energy usage, the thermostat can be programmed to

optimize energy savings.

EMER:

It is used to select operating under EMER mode.

RUN:

Returns display to current time and temperature.

Backlight display:

This key allows users to operate the device in a dark room. The device lights up when a button is pressed, and turns off when a given operation is completed. The display will remain illuminated for 8 seconds after the last key is pressed. If the controller is in low battery warning condition, this function will not operate. Replace with 2 AA alkaline batteries to restore the function.

Up & Down key:

It is used to change the temperature setting. Also used for increasing and decreasing selections in the time, program and span functions.

Fan switch:

It is used to select automatic or continuous fan operation. It should normally be located in the **AUTO** position. The fan will be turned on along with normal operation of the unit. To run the fan on continuously, slide the FAN switch to the **ON** position.

System switch:

It can determine the operating mode of the wired controller. Select **COOL**, **OFF** and **HEAT**. Anytime you install or remove the controller from the wall plate, slide the system selector to the **OFF** position to prevent the possibility of a rapid system ON-OFF.

Front door:

Cover keys open with one finger from left or right.

2.3 Configuration

After installation and wiring connection of wired controller, it should be operated configuration first.

Set **SYSTEM** switch to **OFF**, and then press both **UP** and **DOWN** keys for 5 seconds to enter configuration menu. The display will show the first item in the configuration menu.

Press button	Displayed	Press up or down button to select	Comments
	(Factory default)		
Backlight button	MS 2	SS1	Single stage
		MS1	Multi-stage
		HP1	Heat Pump (Single stage)
		HP2	Heat Pump (2-stage)
Backlight button	(RECO)off	On	Recovery enable
		Off	Recovery disabled
Backlight button	(SPAN)2	1	Span(one stage)1
		2	Span(one stage)2
		3	Span(one stage)3
Backlight button	(BLIT)on	On	Backlight on
		Off	Backlight off
Backlight button	(SP2)2	1	Span(Two Stage) 1
		2	Span(Two Stage) 2
		3	Span(Two Stage)3
Backlight button	(TEMP)F	F	Selects temperature display °F
		C	Selects temperature display °C
Backlight button	HOUR(12)	12	Selects time format display 12hours
		24	Selects time format display 24hours
Backlight button	COMP(OFF)	OFF	Selects Compressor Lockout OFF
		ON	Selects Compressor Lockout ON
Backlight button	COOL(2)	2	This model must select 2
		1	Just use for one stage system
Backlight button	FACT(0)	0	Display normal
		1	Use for another model to go back to factory default
		2	All the setting will go back to factory default

The configuration menu allows you to set certain thermostat operating characteristics to your system or personal requirements.

The configuration menu table summarizes the configuration options. An explanation of each option follows. Press **Backlight** button to change to the next menu item.

Press **RUN** button to exit the menu and unit will return to the normal operation. If no keys are pressed within 15 seconds, the thermostat will revert to normal operation.

1) Single Stage, Multi-stage or Heat Pump System Configuration

This control can be configured for Heat Pump or two stage heat/one stage cool multi-stage operation. The display indicates **MS2** (default for multi-stage mode) in the display. The Multi-stage configuration can be toggled to **SS1** or **HP1** by pressing the up or down key. In Multi-stage configuration, EMER mode is useless.

2) Fast or Slow Cycle Selection (one stage)

3) Select Backlight function OFF or ON

4) Fast or Slow Cycle Selection (two stages)

5) Select °F or °C Readout. Changes the display readout to Centigrade or Fahrenheit as required

6) Selects time format display 12hours or 24hours

7) Select Compressor Lockout COMP OFF or ON.

Selecting **COMP ON** will cause the thermostat to wait 4 minutes before turning on the compressor if the heating and cooling system loses power. It will also wait 5 minutes minimum between cooling and heating cycles. This is intended to help protect the compressor from short cycling. Some newer compressors already have a time delay built in and do not require this feature. Your compressor manufacturer can tell you if the lockout feature is already present in their system. When the thermostat compressor time delay occurs it will flash the set point for about four minutes.

8) This model must select 1.

9) This model must select 1 to back factory Default.

2.4 Operation instructions

1) Fan operation:

Step 1: Turn on power supply to system.

Step 2: Move **FAN** switch to **ON** position. The fan of unit will begin to operate.

Step 3: Move **FAN** switch to **AUTO** position. The fan of unit will operate according to the setting of system immediately.

2) Cooling operation:

Step 1: Move **SYSTEM** switch to **COOL** position to select cool mode.

Step 2: Press to adjust the wired controller setting below room temperature. The fan of indoor side should come on immediately on high speed, followed by cold air circulation. The display should show **STG1**.

Step 3: Adjust temperature setting to 2°C below room temperature. The second stage cooling should begin to operate and display should show **STG1+2**.

Step 4: Press to adjust the temperature setting above room temperature. The cooling system should stop operating.

3) Heating operation (Only for heat pump unit):

Step 1: Move **SYSTEM** switch to heat mode. If the auxiliary heating system has a standing pilot, be sure to light it.

Step 2: Press to adjust the wired controller setting to 1°C above room temperature. The heating system should begin to operate. The display should show **STG1**. However, if the set point temperature display is flashing, the compressor lockout feature is operating.

Step 3: Adjust temperature setting to 3°C above room temperature. If the system configuration is set at **MS2**, **HP2** or **HP1**, the auxiliary heat system should begin to operate and the display should show **STG1+2**.

Step 4: Press to adjust the wired controller below room temperature. The heating system should stop operating.

4) Emergency operation (Only for heat pump unit)

EMER by passed the heat pump to use the heat source wired to terminal E on the wired controller. EMER is typically used when compressor operations is not desired, or prefer back-up heat only.

Step 1: Press **SYSTEM** switch to select heat mode, then press **EMER** key. **EMER** will show on the display.

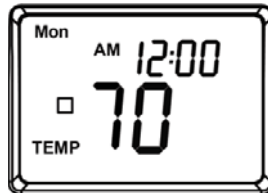
Step 2: Press to adjust wired controller setting above room temperature. The Aux. heating system will begin to operate. The display will show **STG1, EMMER** to indicate that the Aux. heating system is operating.

Step 3: Adjust temperature setting to 2°C above room temperature. The auxiliary heat system should begin to operate and the display should show **STG1+2**.

Step 4: Press to adjust the wired controller below room temperature. The Aux. heating system should stop operating.

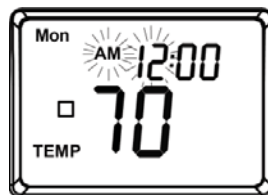
5) Day and time setting

The LCD will show this following figure information when batteries are first installed. The temperature will update after a few seconds. During time and day setting mode, the temperature displays will go blank.



Examples: Set the wired controller to the current time of 2:16 PM on Saturday.

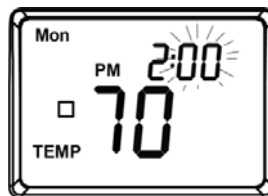
Step 1: Press **TIME** to enter time and day setting mode. The current hour and **AM / PM** indicator will be flashing.



Press **UP** or **DOWN** to change the hour up or down to the current hour.

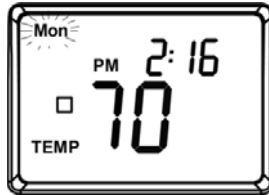
Notes: The **AM / PM** indicator, as the display will change at 12 AM and 12PM.

Step 2: Press **TIME** again to change from hour setting to minute setting. The current minute will be flashing.

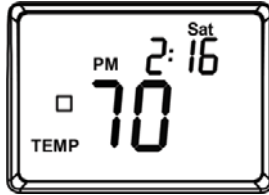


Press **UP** or **DOWN** to change the minute up or down to the current minute.

Step 3: Press **TIME** again to change from minute setting to day setting. The current days will be flashing. Press **UP** or **DOWN** to change the day up or down to the current day.

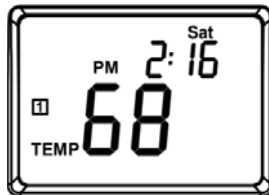


Step 4: Press **TIME** again to change back to the normal display.



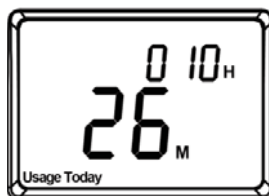
6) Reviewing the current temperature setting

Press **UP** and **DOWN** keys for less than 1 second. The setting temperature is shown above current room temperature.



7) Energy monitor

The energy monitor feature measures and stores the amount of time the heating and air conditioning system operates. Press **ENER** key, and the usage can be display for today (Since 12 AM), yesterday, this week (Since Monday), last week (Last Monday through Sunday), and total (Up to 999 hours). By monitoring energy usage, it is easy to know how much the set-back periods are saving. To review energy usage, press **ENER** to cycle through today, yesterday, this week, last week and total. Press it again to return to normal mode, or wait 15 seconds for display to return to normal mode. Also, return to normal mode at any time by pressing **RUN**.



Example: this LCD display shows today's usage to be 10 hours, 26 minutes. Press **RUN** and hold for 3 seconds to reset the energy monitor's counters. The display will blink and counter will be cleared to zero.

Clearing the energy monitor counter will also clear the filter monitor counter, as filter usage and total energy usage are the same. Also, clearing the filter monitor counter will clear all energy monitor counters as well.

8) Filter monitor

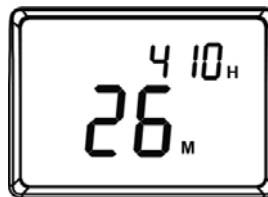
This controller also keeps a record of the number of hours filter has been in use. To maximize unit's performance and energy efficiency, changing or clearing filter regularly is necessary.



When the total system run-time for heat and cool reaches 500 hours, the filter is needed to clean or change, and the FILT will continue to flash until the counter is set back to zero.

Press **ENER** to review total filter usage. The display will blink FILT. Then show the filter monitor counter. After 15 seconds, the display will return to normal mode, or press **RUN** to exit immediately.

The filter monitor will display up to 999 hours and 59 minutes of usage. In this example, the counter is at 410 hours and 26 minutes.



9) Keyboard lock

The keyboard can be locked to prevent unauthorized changes to the controller. To lock or unlock the keyboard, press and hold **RUN** key for 3 seconds. The keyboard is locked. When **LOCK** appears on the display, all keys are locked, and any time a key is pressed, **LOCK** will appear on the display for 1 second.

10) Low battery warning

The controller has a two-stage lower battery warning system. When the batteries are first detected to be weak, the first stage low battery warning is indicated by **BATT** flashing on the LCD display. At earliest convenience, the batteries with 2 new AA alkaline batteries should be replaced.

When the batteries become too weak for normal operation, the controller enters the second stage low battery warning which shuts down the controller. In this condition, **BATT** flashes alone on the display screen and the thermostat will turn unit off. The unit will remain shut-off until the batteries are replaced.

The controller will still keep the current set temperature and filter run-time in memory until new batteries are installed. After confirming that new batteries have been inserted, the controller will return to normal operation.

2.5 Installation of wired controller

Caution:

- ✧ This controller cannot connect with 110/220 and 380V power.
- ✧ To prevent electrical shock and / or unit damage, disconnect electric power to unit at main fuse or circuit breaker box until installation is complete.

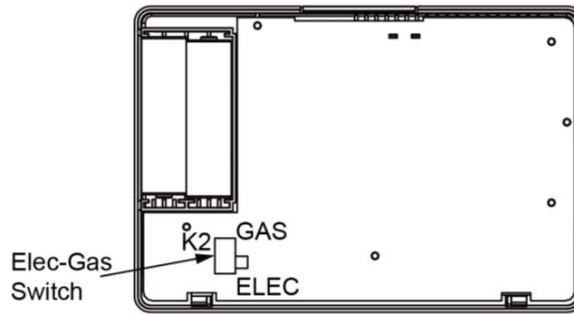
Electric / gas switch:

This controller is configured from the factory to operate a heat/ cool, fossil fuel (gas, oil, etc.), forced-air system. It is configured correctly for any system that DOES NOT requires the controller to energize the fan on a call for heat.

If the system is an electric heat or heat-pump system that requires the controller to turn on the fan on a call for heat, locate the **ELEC/GAS** switch on the back of the controller and switch it to the **ELEC** position.

This will allow the controller to energize the fan immediately on a call for heat. If it is unsure if the heating/ cooling system requires the thermostat to control the fan, contact a qualified heating and air conditioning service person. When the controller is configured for heat pump, the controller will always power the circulator fan on a call for heat in the heat mode. The **ELEC/GAS** switch must be set to match the type of auxiliary heat system uses for proper operation in the emergency mode.

All wiring diagrams are for typical systems only.

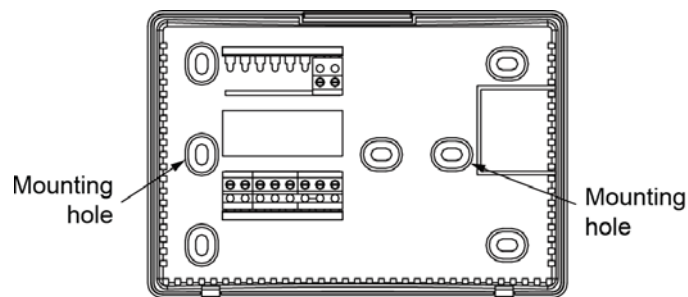


Installation:

Step 1: Remove the packing material from the controller. Gently pull the cover straight off the base. Forcing or prying on the controller will cause damage to the unit.

Step 2: Connect wires beneath terminal screws on base using appropriate wiring schematic.

Notes: The default setting value of the reminding function is 2,500 hours, and it can change to be 5,000 hours or 10,000 hours. The setting methods refer to the part of wired controller initial parameter setting.



Step 3: Place base over hole in wall and mark the locations of mounting hole on wall using base as a template.

Step 4: Move base out of the way. Drill mounting holes.

Step 5: Fasten base loosely to wall, using two mounting screws. Place a level against bottom of base, adjust until level, and then tighten screws. Leveling is for appearance only and will not affect the controller operation. If using existing mounting holes, or if holes drilled are too large and do not allow to tighten base snugly, use plastic screw anchors to secure sub-base.

Step 6: Push excess wire into wall and plug hole with a fire-resistant material (such as fiberglass insulation) to prevent drafts from affecting controller operation.

3. Centralized Controller: VAECC-D064T (Optional)



Notes: For some model, the products with factory default cannot be connected with centralized controller.

3.1 Centralized controller specifications

Model	VAECC-D064T
Power Supply Voltage	220~240V 50Hz 1Ph
Ambient Temperature Range	-15°C~43°C
Ambient Humidity Range	RH40%~RH90%

Performance Features

1. System composition, centralized control.
2. Keywords and general function description.
3. Technical indices and requirements.
4. Indoor unit working status display.
5. Locking remote controller, locking keyboard of centralized controller and locking running mode.

3.2 Keypad of centralized controller



1) LOCK: In the mode setting mode, press the lock key, and the remote controller of the currently selected air conditioner will be locked or unlocked. The operation mode is: If the single-machine setting is selected, the operation is performed for the air conditioner of the current address only. If the remote controller of the air conditioner is locked currently, issue the lock command; otherwise, send the lock command. If the single-machine mode is not selected, and the remote controller of one or more currently selected air conditioners is locked, issue the unlock command; if the remote controllers of all currently selected air conditioners are in the non-locked status, issue the remote controller lock command.

When the remote controller of the air conditioner is locked, the air conditioner does not receive remote control signals from the remote controller or wired controller until the remote controller is unlocked. Press THE **QUERY** key and then press the **LOCK** key, and the keys of the centralized controller will be locked or unlocked. If the keys are currently locked, press the **LOCK** and ▲ keys concurrently again, and the keys will be unlocked; if the keys are currently unlocked, press the **LOCK** and ▲ keys concurrently, and the keys will be locked. If the keys are locked, pressing any key will be ineffective, except unlock operation. In the unified setting page, press the ▲ key and the **LOCK** key concurrently to lock all air conditioner modules in the network. The mode locking is cancelled when the key is pressed again.

Note: When locking or cancelling lock, the corresponding icon indication appears or disappears only after all the attached air conditioners are set completely, so it takes a time period. When there are many attached air conditioners, please wait patiently.

2) OK: In the setting page, press it to send the currently selected mode status and the auxiliary function status to the selected air conditioner, and display the mode setting operation results. After select the operation mode and auxiliary function status information of the air conditioner, if do not press the **OK** key, the selected information will not be sent to the air conditioner, and will not affect the current operation of the air conditioner.

The operations of remote controller locking and unlocking need no pressing of the **OK** key. The command information is sent directly after the **LOCK** key is pressed.

3) SET: In other display mode, press this key to enter the setting mode. By default, it is single

setting, and the first in-service air conditioner is displayed. In setting operation mode, press the key again, and the operation will be performed for all air conditioners in the network. Press it repeatedly to shift between single setting and global setting.



- 4) **QUERY:** Any time when pressing the key, the selected operation mode is to query the operation status of the air conditioner. By default, the first in-service air conditioner will be queried. Through the **ADD** and **REDUCE** keys, the parameter page can be changed to be queried. Through the ▲, ▼, ◀ and ▶ keys, the query status of other air conditioners can be changed.
- 5) ▲: In the query mode, every time when pressing the key, the operation status data of the air conditioner corresponding to the previous row of the matrix will be displayed. If it is currently in the first row, press the key, and the data of the air conditioner corresponding to the last row will be displayed. If this key was held down, the row will decrease one by one. In the setting mode, every time when press the key, if it is in the single operation mode, the air conditioner corresponding to the last row will be selected. If it is in the global operation mode, no effect will result after the key is pressed. In the main page, press the key to enter the query mode. By default, it is the first in-service air conditioner.
- 6) ▼: In the query mode, every time when pressing the key, the operation status data of the air conditioner corresponding to the next row of the matrix will be displayed. If it is currently in the last row, press the key, and the data of the air conditioner corresponding to the first row will be displayed. If this key was held down, the row will increase one by one. In the setting mode, every time when press the key, if it is in the single operation mode, the air conditioner corresponding to the last row will be selected. If it is in the global operation mode, no effect will result after the key is pressed. In the main page, press the key to enter the query mode. By default, it is the first in-service air conditioner.
- 7) ◀: In the query mode, every time when pressing the key, the operation status data of the previous air conditioner will be displayed. If it is currently on the first machine, press it again, and the data of the last machine will be displayed. If this key was held down, the address will decrease one by one. In the setting mode, every time when pressing the key, if it is in

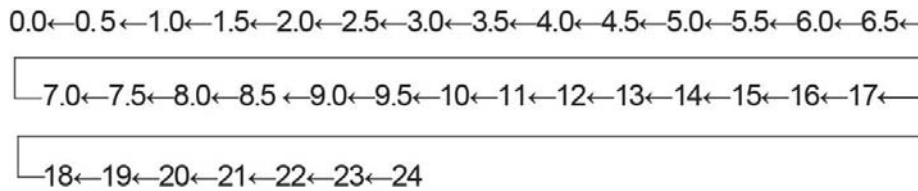
single operation mode, the air conditioner of previous in-service address number will be selected. If it is in the global operation mode, no effect will result after the key is pressed. In the main page, press it to enter the query mode. By default, it is the first in-service air conditioner.

8) ►: In the query mode, every time when pressing the key, the operation status data of the last air conditioner will be displayed. If it is currently on the last machine, press it again, and the data of the first machine will be displayed. If this key was held down, the address will increase one by one. In the setting mode, every time when pressing the key, if it is in single operation mode, the air conditioner of previous in-service address number will be selected. If it is in the global operation mode, no effect will result after the key is pressed. In the main page, press it to enter the query mode. By default, it is the first in-service air conditioner.

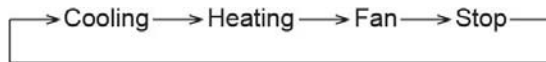
9) ADD: In the main page or the query mode, every time when pressing the key, the data of the current page will be displayed. If it is now in the last page, press the key again, and the first page will be displayed. In the setting mode, every time when pressing the key, if it is in the temperature regulation mode, the set temperature will decrease by 1°C (or 2°C) until the highest allowed set temperature. If it is in the timing startup/shutdown time setting mode, select the upper-level set time, if no time is set, 0.0 will be displayed, if hold down the key, the upper-level data will be selected consecutively. The specific change mode is as follows:

0.0→0.5→1.0→1.5→2.0→2.5→3.0→3.5→4.0→4.5→5.0→5.5→6.0→6.5→7.0
→7.5→8.0→8.5→9.0→9.5→10→11→12→13→14→15→16→17→18→19
→20→21→22→23→24

10) REDUCE: In the main page or the query mode, every time when pressing the key, the data of the current page will be displayed. If it is now in the first page, press the key again, and the last page will be displayed. In the setting mode, every time when pressing the key, if it is in the temperature regulation mode, the set temperature will decrease by 1°C (or 2°C) until the lowest allowed set temperature. If it is in the timing startup/shutdown time setting mode, select the upper-level set time, if no time is set, 0.0 will be displayed, if hold down the key, the upper-level data will be selected consecutively. The specific change mode is as follows:

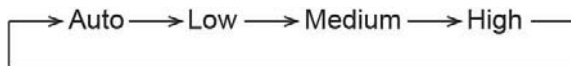


11) MODE: In setting operation mode, press this key to set the operation.

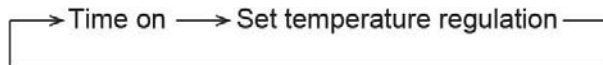


In other display mode, press this key to enter the setting mode. By default, it is single-machine setting, and the first in-service air conditioner is displayed.

12) FAN: In setting operation mode, press this key to set the fan of the indoor unit of the air conditioner to run in the following picture: (For rooftop packages, it is not available.)



13) TIME ON/TIME OFF: In setting operation mode, press them to set the timing startup of air conditioner. Press them again to exit the timing setting, and restore the normal temperature regulation operation mode.



14) SWING: In the setting operation mode, press this key to enable or disable the swing function.

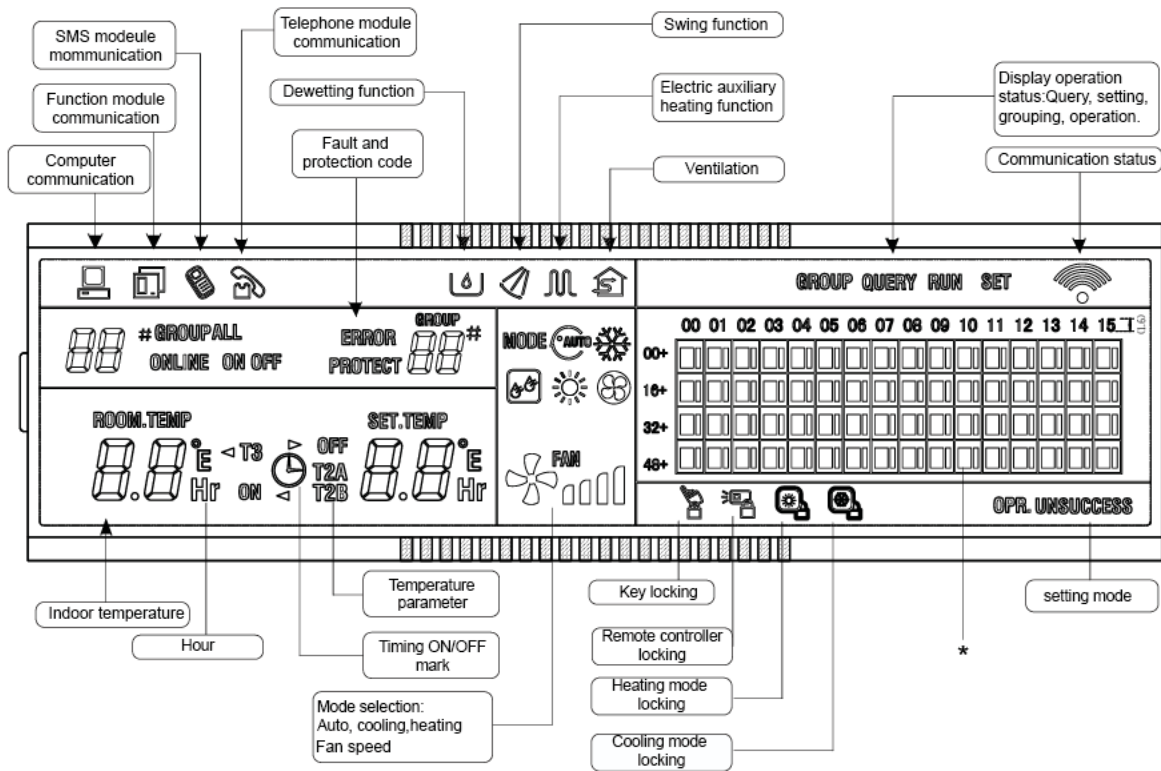
If all currently selected air conditioner have no swing function, no effect will result after pressing the key. (For rooftop packages, it is not available.)

15) RESET: Anytime when the **RESET** key is pressed, the centralized controller will reset. The result is the same as the result of restoring power-on after power failure.

16) ON/OFF: Any time when pressing the key, the centralized startup/shutdown operation is performed for all current in-service air conditioners in the centralized controller network. If all in-service air conditioners in the network are in the power-off status, press the key to perform the startup operation. If it is in the mode setting page currently, and the parameters such as startup mode, temperature and air speed are selected, the air conditioner will be started according to the selected parameters. If no mode is selected currently, and the air conditioner is powered off or it is in other display page currently, and the default startup mode is: cooling, high speed fan air, set temperature 24°C, swing function enabled. The default startup mode is locked according to the system mode or judged according to other

constraint conditions. If any conflict exists, the next conflict-free mode will apply automatically. If conflict exists for all modes, startup will be impossible. If one or more in-service air conditioners in the network (including in the timing process of timing startup/shutdown), pressing this key will shut down all air conditioners. When performing the shutdown operation, the shutdown command is issued to the air conditioners in the startup status only, and is not issued to those in the shutdown status.

3.3 Display of the centralized controller

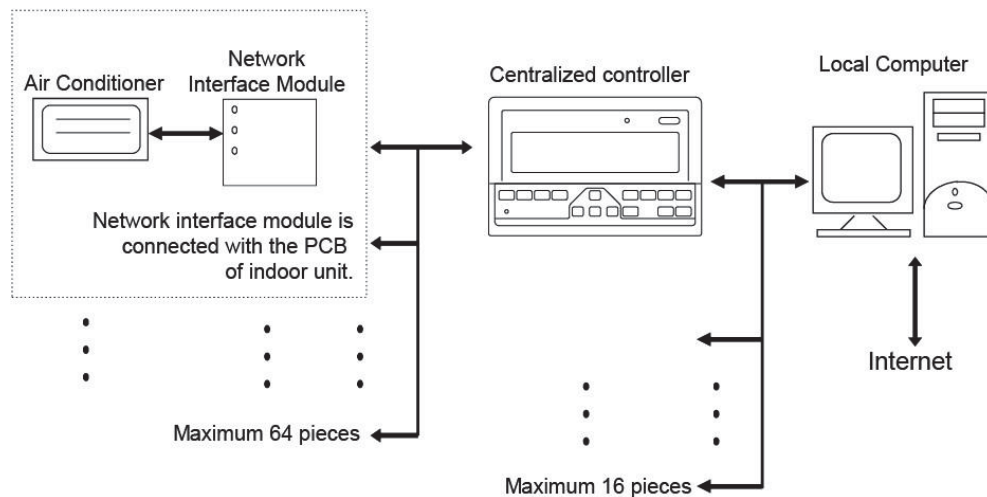


*: The matrix is composed of 4×16 grids and each grid is composed of two blocks of different sizes. The matrix include horizontal coordinates 00-15 and vertical coordinates 00+, 16+, 32+ and 48+, which indicate the address of the indoor unit. The sum of the horizontal coordinate and vertical coordinate of the grid is the address of the grid. Each grid corresponds to an indoor unit of this address.

3.4 Operation instructions

1) System composition:

- ✓ The centralized controller is used to perform centralized control and data query for the network air conditioner. Each centralized controller can communicate with a maximum of 64 air conditioners to make up an air conditioner LAN, and implement centralized monitoring for the air conditioners in the network.
- ✓ The centralized controller can be interfaced with computer or gateway to implement centralized control and status query for all air conditioners in the network. It can be connected with WAN via computer or gateway to implement remote computerized control (with support of computer software). Each local computer or gateway can be connected to 16 centralized controllers as a maximum.
- ✓ The master or slave answer mode is implemented for communication between the centralized controller and the air conditioner, between the computer and the centralized controller. In the LAN composed of centralized controller and air conditioner, the centralized controller is a master, and the air conditioner is a slave. In the LAN composed of computer and centralized controller, the computer or gateway is a master, and the centralized controller is a slave.
- ✓ The schematic diagram of network control system composition of air conditioner:



2) Keywords and general function description:

✓ Power on or reset:

When the centralized controller is powered on or reset, all display segments of the LCD are luminous for 2 seconds and then goes off. 1 second later, the system enters the normal display status. The centralized controller is in the main page display status and displays the first page, and searches the in-service air conditioners in the network. Once the search is finished, the centralized controller enters the mode setting page, and sets the first in-service air conditioner by default.

✓ Network area address of centralized controller:

The local computer or gateway can be connected with 16 centralized controllers for communication. Each centralized controller serves as an area of the air conditioner network. The centralized controllers are differentiated by bit selection address. The configurable range is 0~15.

✓ State indication:

If any local keypad operation is setting the operation status of the air conditioner, the indicator is on when the signals are sent. Upon completion of the setting process, the indicator goes off. If an in-service air conditioner in the network is faulty, or the centralized controller network itself is faulty, the indicator will blink at 2Hz.

If one or more in-service air conditioners in the network are running, including under setting of timing start or shutdown, the indicator will be luminous. Otherwise, the indicator is off.

✓ Locking of centralized controller:

After receiving the centralized controller locking command sent from the computer, the centralized controller disables the startup or shutdown and setting of the air conditioner, and sends commands to lock remote controllers of all air conditioners in the network of the centralized controller. After receiving the unlocking command, the centralized controller enables the startup or shutdown operation, and sends commands to unlock the remote controller of all air conditioners.

The locking status of the remote controller can be locked or unlocked by the computer or centralized controller separately. The locking status of the centralized controller is

memorized after power failure of the centralized controller, and will not vanish after the power supply is restored, unless the command of unlocking is received.

✓ Mode locking function:

After the mode locking command is received, the command is forwarded to the air conditioner, and the centralized controller displays the mode locking flag. After the command of unlocking is received, the non-conflict mode can be selected freely. The centralized controller can also lock modes of all indoor units.








✓ Emergent shutdown and compulsory startup:

If the emergent switch of the centralized controller was switch off, all air conditioners in the network of the centralized controller will be shut down compulsorily. The centralized controller and computer and all functional modules are disabled from startup and shutdown until the foregoing switch is turned off. If the switch was turned on, all air conditioners in the network of the centralized controller will be start up compulsorily. By default, they will run in the cooling mode. The startup and shut-down operations of the centralized controller and the computer and all functional modules will be disabled (Only the command of startup is sent to the air conditioner, without affecting operation of the remote controller after startup) until the foregoing switch is turned off. If the foregoing two switches are turned on concurrently, the emergent shutdown switch shall have preference.


3.5 General display data entries

1) General display data is displayed in all display pages.

- ✓ Under the interconnected control of the computer or gateway, the data is displayed in graphic (🖥️). Otherwise, no data is displayed.
- ✓ If the centralized controller is connected with the functional module for communication, the data is displayed in graphics (📺). Otherwise, no data is displayed.
- ✓ If the centralized controller is connected with the SMS remote control module for communication, the data is displayed in graphics (📱). Otherwise, no data is displayed.
- ✓ If the centralized controller is connected with the telephone remote control module for communication, the data is displayed in graphics (☎️). Otherwise, no data is displayed.

- ✓ In normal operation of the centralized controller, the periodical cycle module communicates with the network interface module, and the data is displayed dynamically and cyclically: (blank), , , .
- ✓ In the centralized control locked status or the keypad locked status, the locking flag () is displayed. After unlocking, it is not displayed. In the centralized controller locked status or the keypad locked status, the locking flag is displayed constantly. If both of them are locked concurrently, the locking flag is displayed constantly.
- ✓ In the setting page, if the selected air conditioner is in the remote controller locked status (in case of non-single machine operation, as long as one machine is in the remote controller locked status, it is deemed the locked status), the flag () is displayed constantly.
- ✓ If all indoor units lock the cooling mode, this flag () will display, and if all indoor units lock the heating mode, the flag () will display.

2) Data display handling

- ✓ Indoor unit code (address) display: display range: 00~63, and with # being luminous concurrently.
- ✓ Indoor temperature display: display range: 00~99°C. The indoor temperature is displayed concurrently. If the temperature is higher than 99°C, 99°C will be displayed. If the temperature value is invalid, '--' will be displayed.
- ✓ If timing startup or shutdown is set, the flag () is displayed.
- ✓ T3, T2A and T2B display: in the single-machine query page, display can shift between T3, T2A and T2B; by the way, the temperature value is displayed concurrently, with the corresponding °C being luminous.
- ✓ In case of air conditioner fault or protection, the corresponding fault code or protection, the corresponding fault code or protection code can be displayed.
- ✓ Liquid crystal matrix display description:

	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
00+																
16+																
32+																
48+																

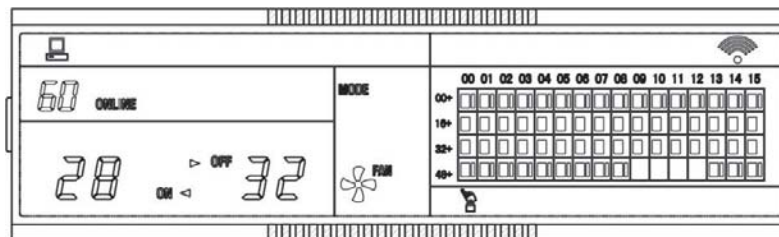
The liquid crystal matrix is composed of 4×16 grids, and each grid is composed of two blocks of different sizes. The matrix includes horizontal coordinates 00~15 on the upper side and vertical coordinates 00+, 16+, 32+ and 48+ on the left side, which indicate the address of the indoor unit. The sum of the horizontal coordinate and the vertical coordinate of the grid is the address of the grid. Each grid corresponds to an indoor unit of this address. One grid is composed of two blocks of different sizes. The status indication table is as follows;

	Constantly on	Slow blink		Fast blink
Big black block	In-service	Selected		Out of service
Small black block	Power on		Fault of indoor or outdoor unit	Power off

3) LCD display description

- ✓ Description of the standby page

The LCD displays the standby page, 60 air conditioners are in service, of which 28 are powered on and 32 off.



In the matrix, the big dots from (00, 16+) to (15, 32+) are luminous, and the small dots are not luminous. It indicates the 32 air conditioners with the addresses from 16 to 47 are powered off.

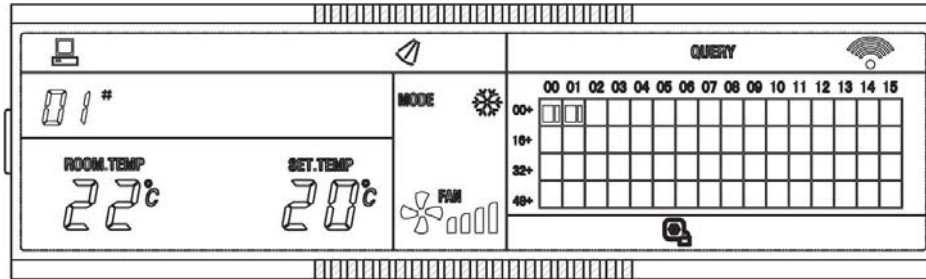
In the matrix, the big and small dots from (09, 48+) to (12, 48+) are not luminous. It indicates the four air conditioners with the address from 57 to 60 are outside the network.

All other big and small dots in the matrix are luminous. It indicates all other air conditioners are in the network and powered on.

The address of the air conditioner is sum of the coordinates. For example, the address of (09, 48+) is 09+48=57.

The centralized controller keypad is locked, and the centralized controller communicates with the computer normally.

- ✓ Description of the query page

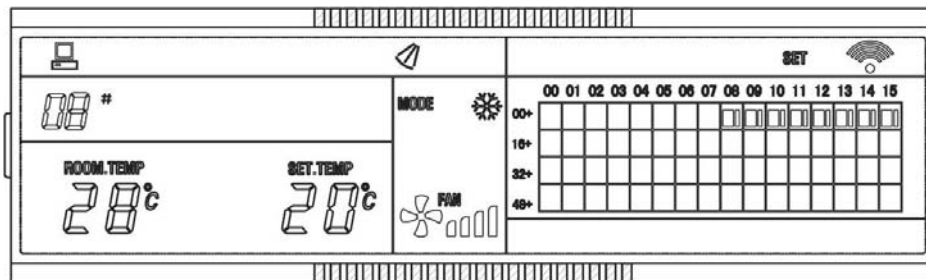


The LCD displays the query page, and the air conditioner with the address of 08 is being queried. Mode of the air conditioner with the address 01 is cooling, high speed air supply, swing on, indoor temperature 22°C, setting temperature 20°C and cooling mode locked.

In the matrix, only the big and small black dots at (00, 00+) and (01, 00+) are luminous. It indicates the in-service and power-on status of the air conditioners with the addresses of 00 and 01.

The centralized controller communicates with the computer normally.

- ✓ Description of the setting page

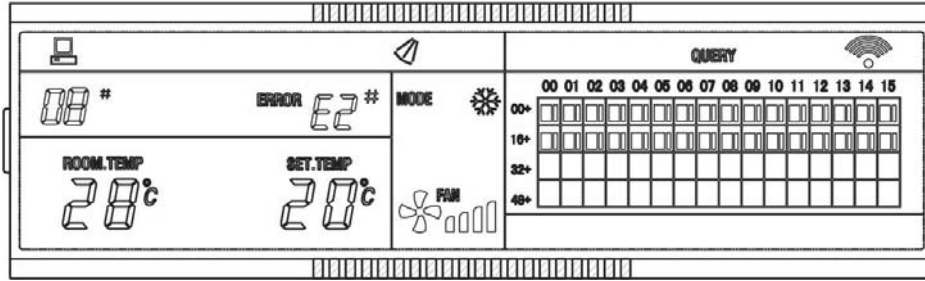


The LCD displays the setting page, and queries the air conditioner with the address of 08. The mode of the air conditioner with the address 08 is: cooling, high speed air supply, swing on, indoor temperature 28°C, setting temperature 22°C and cooling.

In the matrix, only the big black dots from (08, 00+) to (15, 00+) are luminous. It indicates the air conditioners with the addresses from 08 to 15 are in service.

The centralized controller communicates with the computer normally.

- ✓ Fault page display description



Query the air conditioner with the address of 08 in the query page. The air conditioner with the address of 08 is faulty, and the fault code is E2. The big black dot below (08, 00+) blinks.

In the matrix, only the big and small black dots from (00, 00+) to (15, 16+) illuminate. It indicates the in-service status of the air conditioners with the addresses from 00 to 31.

The centralized controller communicates with the computer normally.

Fault code table:

Fault code	Fault content
EE	Water level detection faults
EC	Cleaning fault
EB	Inverter module protection
EA	Over-current of compressor (4 times)
E9	Fault of communication between main board and display board
E7	EEPROM error
E6	Zero crossing detection error
E5	Outdoor unit fault protection
E4	T2B sensor fault
E3	T2A sensor fault
E2	T1 sensor fault
E1	Communication fault
E0	Phase order error or phase loss
03#	Fault of communication between centralized controller and computer (gateway)
02#	Fault of communication between centralized controller and functional module

01#	Fault of communication between centralized controller and network interface module
00#	Fault of communication between network interface module and main control board

Protection code table:

Fault code	Fault content
PF	Other protection
P8	Over-current of compressor
P7	Power supply over-voltage and undervoltage protection
P6	Discharge low pressure protection
P5	Discharge high pressure protection
P4	Discharge pipe temperature protection
P3	Compressor temperature protection
P2	Condenser hi-temperature protection
P1	Anti-cool air or defrost protection (Only for heat pump units)
P0	Evaporator temperature protection

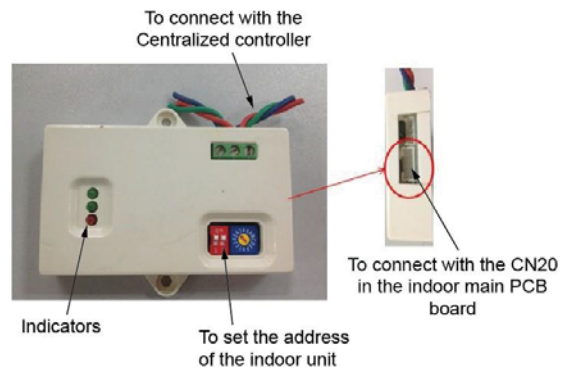
3.6 Installation

The wireless remote controller is the standard controller for split series air conditioner. Wired controller as optional controller can directly be connected with the display board of the indoor units. Centralized controller should be connected with the main PCB board of the indoor unit through network interface module, which is named as APANM-D01.



1) The installation of network interface module

Outlook of APANM-D01

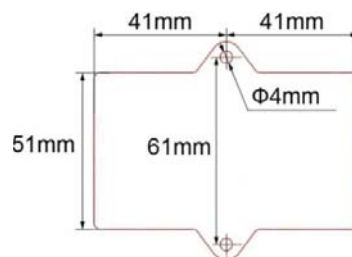


The first green lighter: Ready indicator. When the module and controller is connected rightly, the lighter will be on; otherwise, it will be off. If the unit is in the status of locking remote controller and locking mode, the lighter will flash.

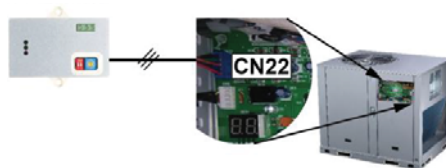
The second green lighter: Communication indicator. When there is any signal between the network interface module and centralized controller, the indicator will be on.

The third lighter: Alarm indicator. If there is any error between the module and controller for communication, it will be on.

Dimension of APANM-D01

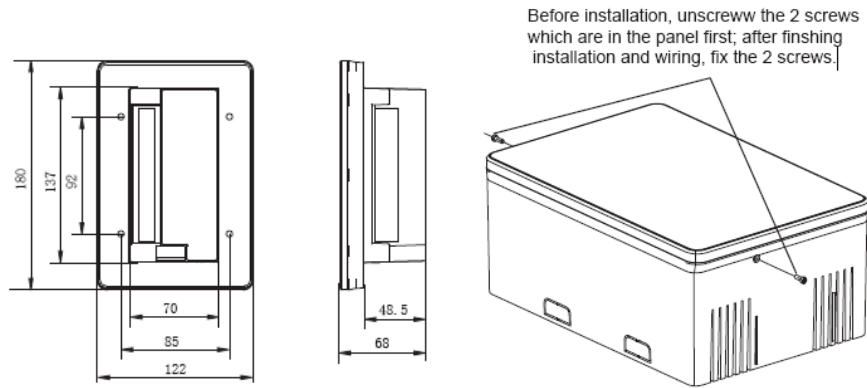


Connect the network interface module with the port CN22 in the main PCB board of indoor unit through the signal wire, which is as the attachment of the module.

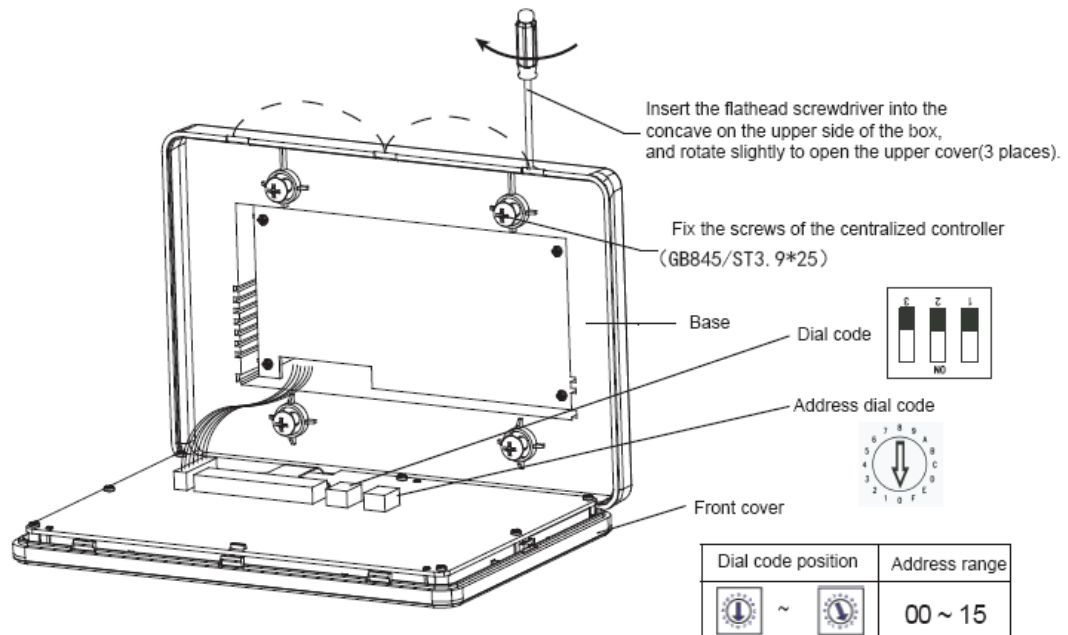


Fix the network interface module on the wall near the indoor unit. And set the different address of the indoor unit.

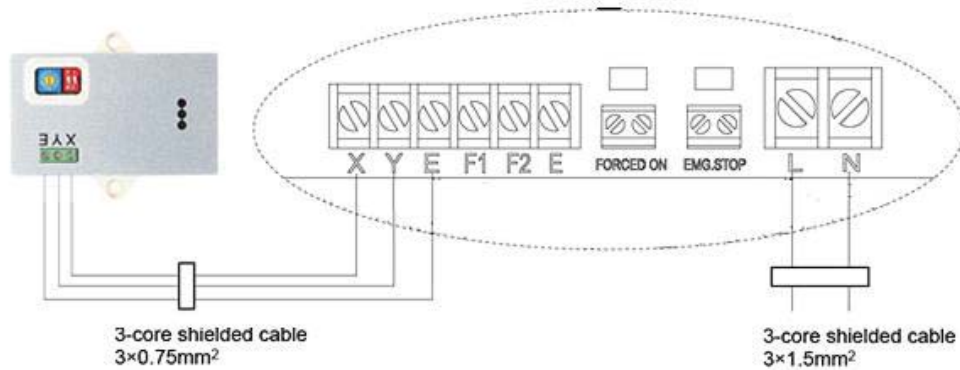
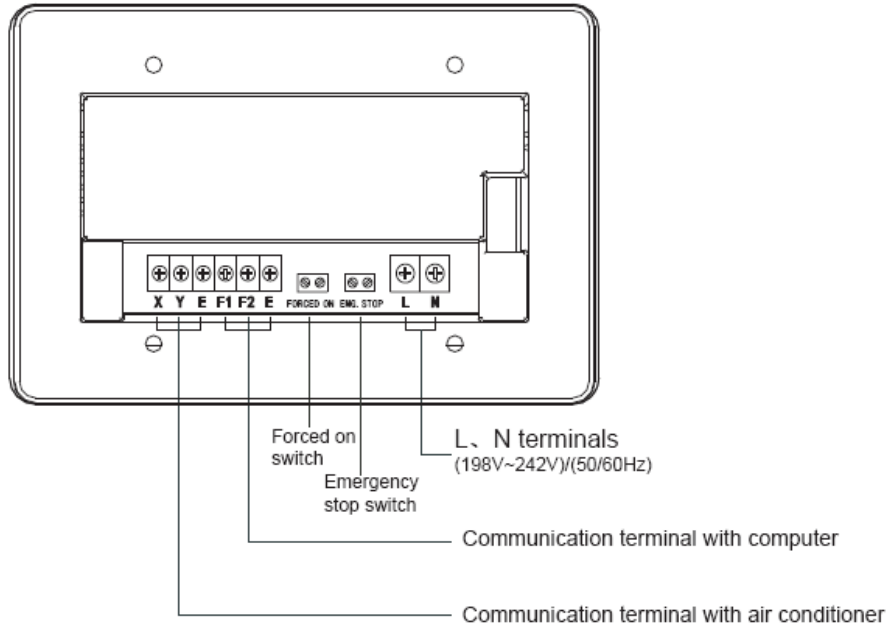
2) The installation of centralized controller



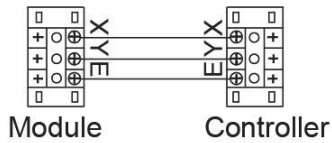
According to size of the hole in controller body, fix the controller on the place as needed. (Unit: mm)



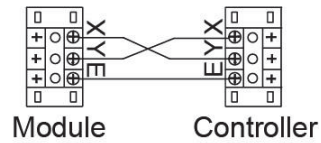
3) The wire connection



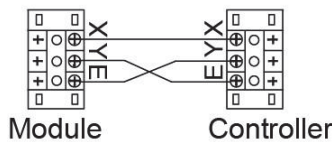
Correct connection



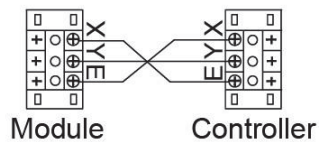
Incorrect connection



Incorrect connection



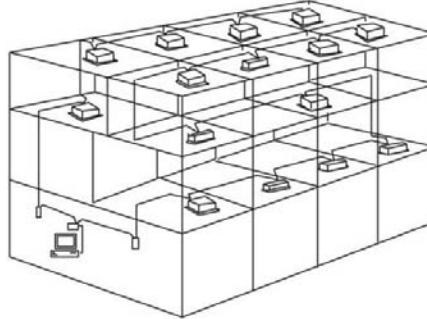
Incorrect connection



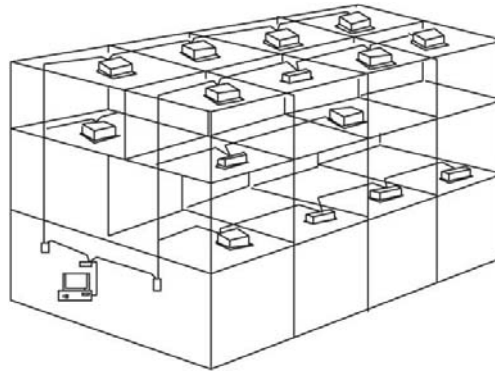
4) System wiring instruction

- ✓ Wiring diagram of building network air conditioning system

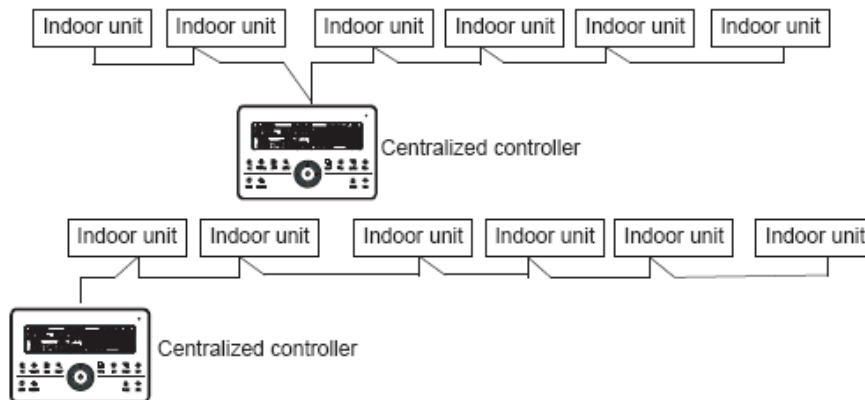
Wiring diagram with good communication effect



Wiring diagram with poor communication effect (not recommended because it may lead to poor communication)



- ✓ System wiring diagram of centralized monitoring and indoor unit of air conditioner
Both of the following wiring modes of centralized monitor and indoor unit are applicable:
(Quantity of indoor units connected with each centralized monitor is less than or equal to 64).





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