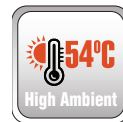




# Product Catalogue



## Ducted-Split Tropical High Efficiency system Concealed unit

4MCD-UA / 4TTK-UA - 50 Hz

1-5 tons (Cooling only)

R410A, 50Hz



### Indoor Units

4MCDUA18TB  
4MCDUA24TB  
4MCDUA30TB  
4MCDUA36TB  
4MCDUA36TD  
4MCDUA48TD  
4MCDUA60TD

### Outdoor Units

4TTKUA18TB  
4TTKUA24TB  
4TTKUA30TB  
4TTKUA36TB  
4TTKUA36TD  
4TTKUA48TD  
4TTKUA60TD



# Contents

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01. Model List	04
02. Model Nomenclature	05
03. Feature & Benefits	07
04. List of Functions	12
05. Specifications	14
06. Dimensional Drawings	16
07. Wiring Diagrams	20
08. Refrigerant Cycle Diagrams	28
09. Performance Data	30
10. The Coefficient of Capacity Change	37
11. Operation Range	40
12. Sound Levels	41
13. Functions of Controller	48
14. Installation	49
15. Appendix	70



# Models List

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## Cooling only

Nominal Capacity	Refrigerant	Unit	Unit Model Name	Power Supply		
18K	R410A	Indoor	4MCDUA18TB000AA	1Ph, 220~240V, 50 Hz		
		Outdoor	4TTKUA18TB000DA			
24K		Indoor	4MCDUA24TB000AA		1Ph, 220~240V, 50 Hz	
		Outdoor	4TTKUA24TB000DA			
30K		Indoor	4MCDUA30TB000AA			1Ph, 220~240V, 50 Hz
		Outdoor	4TTKUA30TB000DA			
36K		Indoor	4MCDUA36TB000AA	1Ph, 220~240V, 50 Hz		
		Outdoor	4TTKUA36TB000DA			
36K		Indoor	4MCDUA36TD000AA		3Ph, 380~420 V, 50 Hz	
		Outdoor	4TTKUA36TD000DA			
48K		Indoor	4MCDUA48TD000AA			3Ph, 380~420 V, 50 Hz
		Outdoor	4TTKUA48TD000DA			
60K	Indoor	4MCDUA60TD000AA	3Ph, 380~420 V, 50 Hz			
	Outdoor	4TTKUA60TD000DA				



# Model Nomenclature

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## Indoor Unit

4 M C D U A 1 8 T B 0 0 0 A A  
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

### Digit #1 = Refrigerant

4 = R410A  
2 = R22

### Digit #2 = Brand

M = Trane Indoor unit

### Digit #3 = Function Type

C = Cooling Only Fixed Speed, Single  
W = Heat Pump Fixed Speed, Single

### Digit #4 = Indoor Unit type

D = Concealed Duct Type  
W = High wall unit  
C = Cassette Type  
X = Convertible Type  
V = Tall Floor

### Digit #5 = Product family

U = U-Match

### Digit #6 = Major Development

A = First Major Development  
B = Second Major Development  
C = Third Major Development

### Digit #7, 8 = Nominal Capacity (BTU/h x 1,000)

18 = 18,000 BTU/h  
24 = 24,000 BTU/h  
36 = 36,000 BTU/h  
48 = 48,000 BTU/h  
60 = 60,000 BTU/h

### Digit #9 = Ambient Temperature

T = High Ambient  
S = Standard Ambient

### Digit #10 = Electric Power Supply Characteristics

B = 220-240/50/1  
K = matching with 380-415/50/3  
outdoor

### Digit #11 = Factory Supplied Options

0 = Standard  
S = Special

### Digit #12 = Controls

0 = Default Wired Control  
R = Wireless Control

### Digit #13 = Reserved for Future Use

0 = Not currently used

### Digit #14 = Minor Design Sequence

A = First Design Sequence  
B = Second Design Sequence  
C = Third Design Sequence

### Digit #15 = Service Digit

A = First Sequence



# Model Nomenclature

---

## Outdoor Unit

4 T T K U A 1 8 T B 0 0 0 D A  
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

### Digit #1 = Refrigerant

4 = R410A  
2 = R22

### Digit #2 = Brand

T = Trane

### Digit #3 = Function Type

T = Cooling Only Fixed Speed, Single  
W = Heat Pump Fixed Speed, Single

### Digit #4 = Configuration Outdoor Unit

K = Single Refrigerant Circuit, Horizontal Discharge  
D = Dual Refrigerant Circuit, Horizontal Discharge  
T = Triple Refrigerant Circuit, Horizontal Discharge  
Q = Quadruple Refrigerant Circuit, Horizontal Discharge

### Digit #5 = Product family

U = U-Match

### Digit #6 = Major Development

A = First Major Development  
B = Second Major Development  
C = Third Major Development

### Digit #7, 8 = Nominal Capacity

(BTU/h x 1,000)

18 = 18,000 BTU/h  
24 = 24,000 BTU/h  
30 = 30,000 BTU/h  
36 = 36,000 BTU/h  
48 = 48,000 BTU/h  
60 = 60,000 BTU/h

### Digit #9 = Ambient Temperature

T = High Ambient  
S = Standard Ambient

### Digit #10 = Electric Power Supply Characteristics

1 = 220-240/50/1  
K = 380-415/50/3

### Digit #11 = Factory Supplier Options

0 = Standard  
S = Special

### Digit #12 = Number of Refrigerant Ports

0 = Standard

### Digit #13 = Coil Fin Protection

0 = Standard  
C = Corrosion Resistant

### Digit #14 = Matching outdoor

D = Ducted  
A = High Wall  
C = Cassette  
V = Tall Floor  
X = Convertible

### Digit #15 = Service Digit / Minor Design Sequence

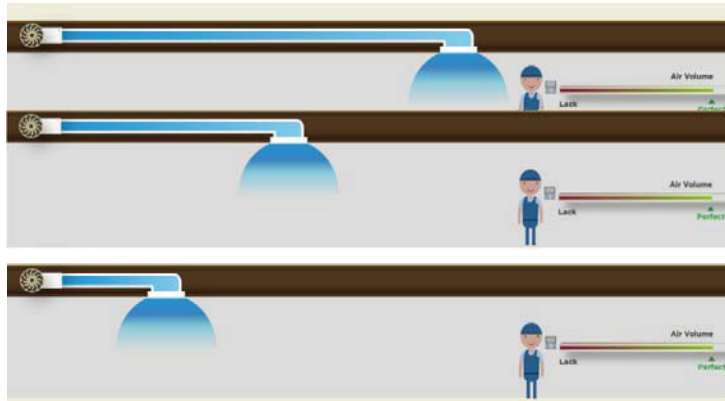
A = First Sequence  
B = Second Sequence

## Features & Benefits

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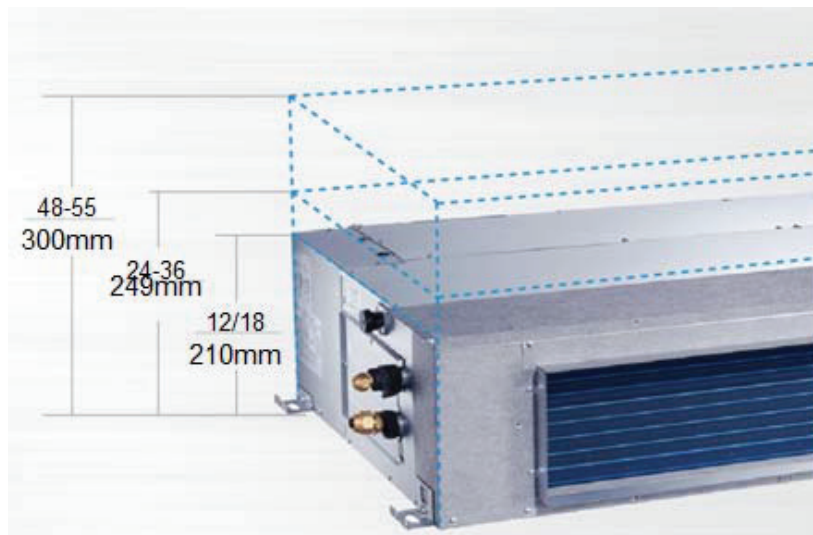
### Constant Airflow control

- With constant air volume control technology, the duct will automatically adjust to perfect static pressure and keep constant air volume.



### Slim Design

- TRANE duct has lowest height designed to be fitted into tight roof spaces.
- 18K unit - 210mm, 24K/30K unit - 249mm, 36K unit - 300mm



### Self-Diagnosis Function:

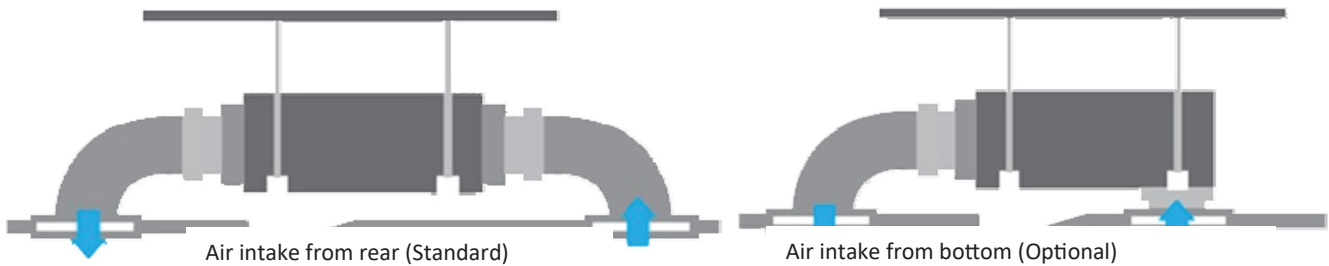
- This function provides diagnosis of the unit. An error code will be displayed on the LCD wired remote controller & diagnosis can be done as per the code indication. The same is also printed on key cover of the LCD wired remote controller.

## Features & Benefits

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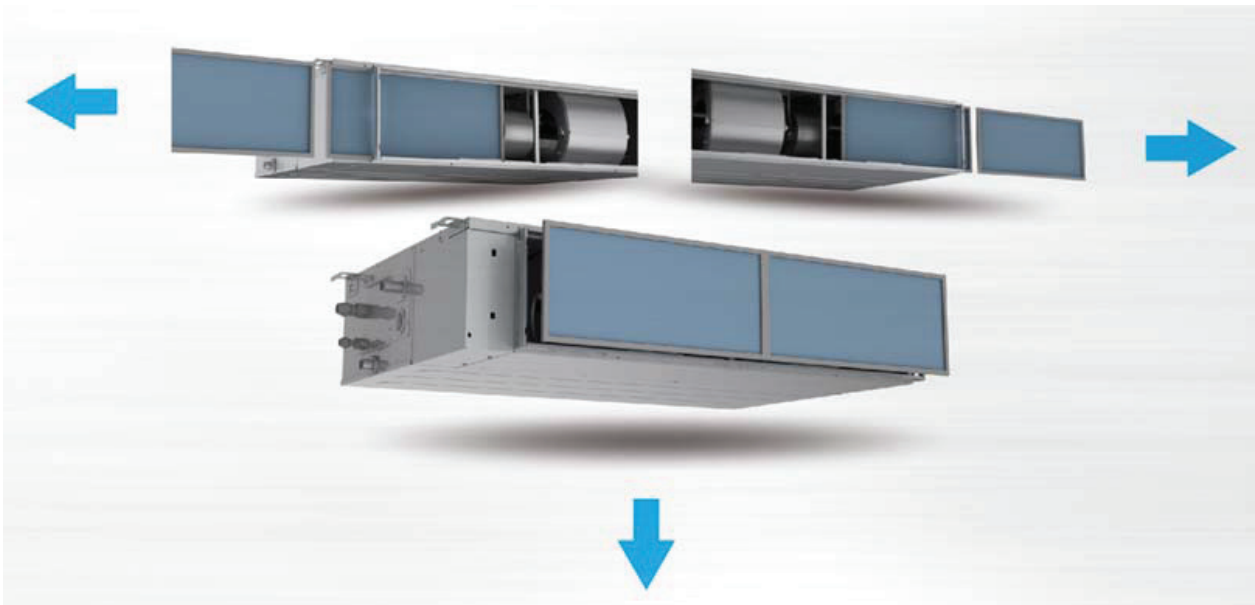
### Flexible Air Intake Way (Bottom side or Rear side)

- The frame size of air inlet in rear and bottom is the same. It's very easy to switch to match different application.



### Easy Clean

- Clean the filter.
- It is easy to draw out the filter from the indoor unit for cleaning, even the filter is installed in rear side or bottom side.



- With a larger window design, once the motor and the blower wheels have been detached, heat exchanger and water receiver tray in behind can be seen very clearly. Dust can be easily removed from the inside by vacuum.

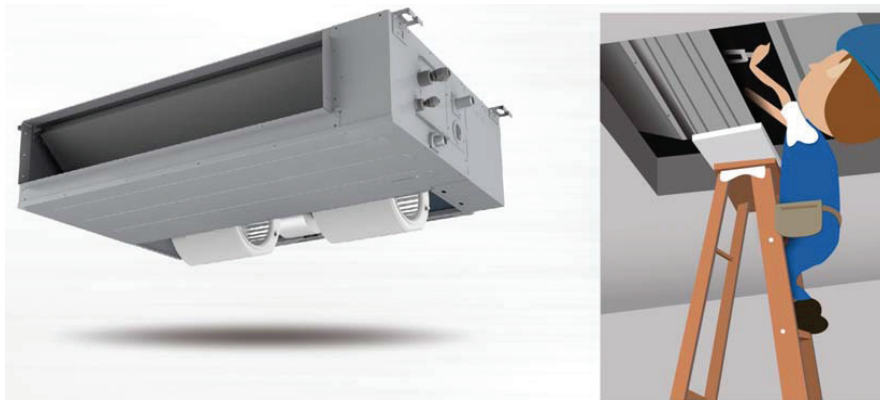


## Features & Benefits

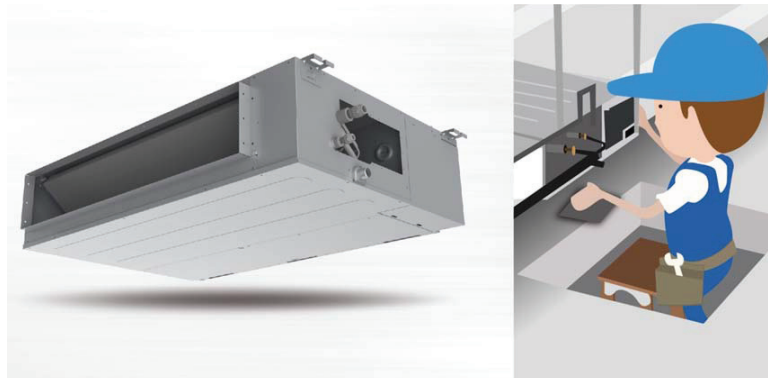
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### Easy maintenance

- TRANE duct allows operators maintenance the motor from the bottom more easily compare with that on the top.



- TRANE duct has big access for maintenance at the side



### Auto Restart Operation:

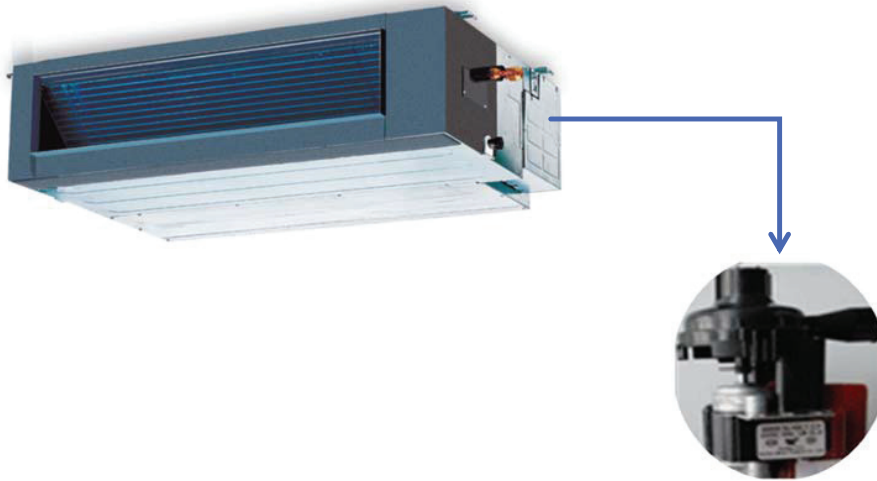
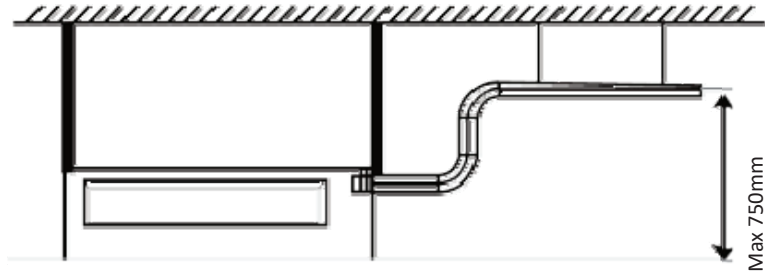
- When there is electricity failure to the unit. After resumption of the power, unit will start in the same mode as prior to the power failure. Memorized condition are on/off condition, operating mode (cooling / fan), set temperature and fan speed. The unit will memorize the above conditions and start with same memorized condition.

## Features & Benefits

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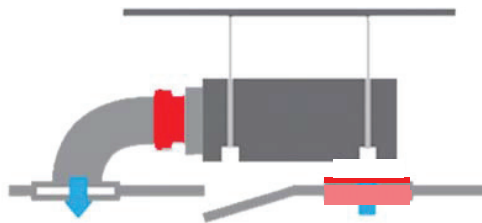
### Built-in drain pump (Optional)

- Built-in drain pump can lift the water to 750mm upmost, which widens the drainage piping range.



### Installation accessories: (Optional)

- Front Board, Canvas Air Passage, Filter, Panel, for easy installation



Front Board



Filter



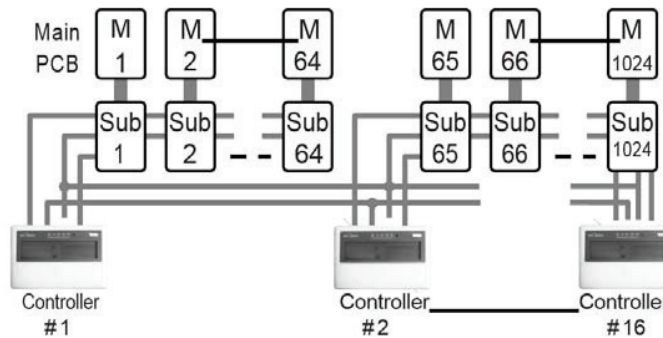
Panel

## Features & Benefits

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### Central Control (Optional):

- It enables to control  $64 \times 16 = 1024$  units with the help of 16 controllers. All units can be put on and off from one Central Room. For Setting Temperature, Fan speed and other sub functions, access the LCD wired remote controller of each unit.



### BMS control (Optional):

- BMS Gateways are compatible to multiple communication protocol of BACnet, LonWorks, Modbus.



# List of Functions

Function	Model			
	4MCDUA18TB000AA	4MCDUA24TB000AA	4MCDUA30TB000AA	4MCDUA36TB000AA
Constant Airflow Control	S	S	S	S
Air Discharge Flange	S	S	S	S
Air Return Flange	Optional	Optional	Optional	Optional
Air Return from Back	S	S	S	S
Air Return from Bottom	Optional	Optional	Optional	Optional
Auto Operation	S	S	S	S
Auto Restart Operation	S	S	S	S
Central Control	Accessory	Accessory	Accessory	Accessory
Child Lock Function	S	S	S	S
Cooling & Fan Operation	S	S	S	S
Drain Pump	Accessory	Accessory	Accessory	Accessory
E.S.P. Control	S	S	S	S
Energy Saving Gold Fin	Optional	Optional	Optional	Optional
Environment Friendly Refrigerant	S	S	S	S
Remote Alarm Output	S	S	S	S
Forced Operation	S	S	S	S
Remote ON/OFF Control	S	S	S	S
Hot Start	S	S	S	S
Prefilter (Washable / Anti-fungus)	S	S	S	S
Self Diagnosis	S	S	S	S
ECO Mode	S	S	S	S
Temperature Control	S	S	S	S
Time Delay Safety Function	S	S	S	S
Timer (weekly)	Accessory	Accessory	Accessory	Accessory
Timer (24 hr On / Off)	S	S	S	S
Follow Me	S	S	S	S
Wired LCD Remote Control	S	S	S	S
Wireless Remote Control	Accessory	Accessory	Accessory	Accessory

Notes:  
 • S: Standard  
 • Optional: Factory-Installed  
 • Accessory: Field-Installed

# List of Functions

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Function	Model		
	4MCDUA36TD000AA	4MCDUA48TD000AA	4MCDUA60TD000AA
Constant Airflow Control	S	S	S
Air Discharge Flange	S	S	S
Air Return Flange	Optional	S	S
Air Return from Back	S	S	S
Air Return from Bottom	Optional	-	-
Auto Operation	S	S	S
Auto Restart Operation	S	S	S
Central Control	Accessory	Accessory	Accessory
Child Lock Function	S	S	S
Cooling & Fan Operation	S	S	S
Drain Pump	Accessory	Accessory	Accessory
E.S.P. Control	S	S	S
Energy Saving Gold Fin	Optional	Optional	Optional
Environment Friendly Refrigerant	S	S	S
Remote Alarm Output	S	S	S
Forced Operation	S	S	S
Remote ON/OFF Control	S	S	S
Hot Start	S	S	S
Prefilter (Washable / Anti-fungus)	S	S	S
Self Diagnosis	S	S	S
ECO Mode	S	S	S
Temperature Control	S	S	S
Time Delay Safety Function	S	S	S
Timer (weekly)	Accessory	Accessory	Accessory
Timer (24 hr On / Off)	S	S	S
Follow Me	S	S	S
Wired LCD Remote Control	S	S	S
Wireless Remote Control	Accessory	Accessory	Accessory

Notes:  
 • S: Basic  
 • Optional: Factory-Installed  
 • Accessory: Field-Installed



# Specifications

Trane indoor model			4MCDUA18TB000AA	4MCDUA24TB000AA	4MCDUA30TB000AA	4MCDUA36TB000AA
Trane outdoor model			4TTKUA18TB000DA	4TTKUA24TB000DA	4TTKUA30TB000DA	4TTKUA36TB000DA
Power supply	V-ph-Hz		220-240-1-50	220-240-1-50	220-240-1-50	220-240-1-50
Max. input consumption	W		2010	2730	4160	4650
Max. input current	A		8.8	12.1	22.6	20.7
Cooling (T1 condition) Outdoor: 95°F DB Indoor: 80.6°F DB/66.2°F WB	Capacity	Btu/h	18000	24000	33000	37000
	Input	W	1500	2000	2773	3080
	Current	A	6.7	9	12.6	14
	EER	(Btu/h)/W	12.00	12.00	11.90	12.01
Cooling (T3 condition) Outdoor: 114.8°F DB Indoor: 84.2°F DB/66.2°F WB	Capacity	Btu/h	16236	22330	29900	35347
	Input	W	1884	2532	3505	4021
	Current	A	8.35	11.30	16.14	18.11
	EER	(Btu/h)/W	8.62	8.82	8.53	8.79
Cooling (MEW condition) Outdoor: 118.4°F DB Indoor: 80°F DB/67°F WB	Capacity	Btu/h	15664	21436.2	26794	34433.9
	Input	W	1886	2553.3	3440	4037
	Current	A	8.02	11.03	15.8	17.60
	EER	(Btu/h)/W	8.31	8.4	7.79	8.53
Indoor fan motor	Qty		1	1	1	1
	Output	W	160	160	300	300
	Speed(Hi/Med/Lo)	r/min	1380/1250/1100	950/880/770	1148/1046/935	930/840/750
Indoor coil	Number of rows		4	3	4	4
	Tube pitch(a)*row pitch(b)	mm	21x13.37	21x13.37	21x13.37	21x13.37
	Fin spacing	mm	1.4	1.4	1.4	1.5
	Fin type		Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium
	Tube outside dia.and type	mm	Φ7, innergroove tube	Φ7, innergroove tube	Φ7, innergroove tube	Φ7, innergroove tube
	Coil length * height * width	mm	695x252x53.48	915x294x40.11	1175x294x53.48	1030x378x53.48
Number of circuits		6	7	7	8	
Indoor air flow (Hi/Med/Lo)	CFM		606/519/415	824/677/577	1173/1000/796	1330/1114/877
ESP	Rated	Pa	25	25	37	37
	Range	Pa	0-80	0-100	0-80	0-120
Indoor noise level (Hi/Med/Lo)	dB(A)		44/41/37	43/41/37	45/40.5/39.9	50/47/44
Indoor unit	Dimension (WxDxH)	mm	880x674x210	1100x774x249	1360x774x249	1200x874x300
	Packing(WxDxH)	mm	1070x725x270	1305x805x305	1570x805x305	1405x915x355
	Net/Gross weight	kg	25.5/31.1	31.2/37.6	41.5/50	43.9/52.6
Design pressure	MPa		4.8/1.5	4.8/1.5	4.8/1.5	4.8/1.5
Drainage water pipe diameter	mm		ODΦ25	ODΦ25	ODΦ25	ODΦ25
Refrigerant piping	Liquid side/ Gas side	mm	Φ6.35/Φ12.7(1/4"/1/2")	Φ9.52/Φ15.9(3/8"/5/8")	Φ9.52/Φ19(3/8"/3/4")	Φ9.52/Φ19(3/8"/3/4")
Controller			Wired control	Wired control	Wired control	Wired control
Compressor	Type		ROTARY	ROTARY	Twin-ROTARY	Scroll
	Input	W	1535/1550	2095	2640	3140
	Rated current(RLA)	A	7.1/6.6	9.4	12.3	14.5
	Refrigerant oil	ml	RB75EA/700	RB75EA/750	α68HES-H or equivalent/880±20 ml	POE/1242
Outdoor fan motor	Qty		1	1	1	2
	(Output)	W	144	133	150	98
	Speed	r/min	860	870	1150/850	830
Outdoor coil	Number of rows		3	2	3	3
	Tube pitch(a)* row pitch(b)	mm	21x13.37	21x13.37	21x13.37	21x13.37
	Fin spacing	mm	1.4	1.4	1.4	1.4
	Fin type		Unhydrophilic aluminium	Unhydrophilic aluminium	Unhydrophilic aluminium	Hydrophilic aluminium
	Tube outside dia.and type	mm	Φ7, innergroove tube	Φ7, innergroove tube	Φ7, innergroove tube	Φ7, innergroove tube
	Coil length * height * width	mm	780x651x40.11	1005x756x26.74	1000x756x40.11	850x1113x40.11
Number of circuits		6	6	6	8	
Outdoor noise level (sound pressure)	dB(A)		58	60	60.8	61
Outdoor unit	Dimension(WxDxH)	mm	845x363x702	946x410x810	946x410x810	900x350x1170
	Packing(WxDxH)	mm	965x395x755	1090x500x865	1090x500x875	1032x443x1307
	Net/Gross weight	kg	49.1/52.4	58.7/64.4	69/75	90.4/101.9
Refrigerant type/Quantity	Type		R410A	R410A	R410A	R410A
Charged volume	kg		1.90	2.10	3.0	3.90
Design pressure	MPa		4.8/1.5	4.8/1.5	4.8/1.5	4.8/1.5
Refrigerant piping	Liquid side/ Gas side	mm(inch)	Φ6.35/Φ12.7(1/4"/1/2")	Φ9.52/Φ15.9(3/8"/5/8")	Φ9.52/Φ19(3/8"/3/4")	Φ9.52/Φ19(3/8"/3/4")
	Max. pipe length	m	25	25	30	30
	Max. difference in level	m	15	15	20	20
Ambient temperature	Cooling	°C	18-52	18-52	18-52	18-52
Qty'per 20' /40' /40'HQ	Indoor		120/264/297	77/161/184	49/105/120	62/130/149
Qty'per 20' /40' /40'HQ	Outdoor unit		102/216/216	44/96/144	44/96/144	27/57/108

## Notes:

1. Capacities are based on the following conditions:

Cooling: - Interconnecting Piping Length 5m  
- Level Difference of Zero.

2. Capacities are Net Capacities.

3. Trane has a policy of continuous product and product data improvement and reserves the right to change design and specifications without notice.

# Specifications

Trane indoor model			4MCDUA36TD000AA	4MCDUA48TD000AA	4MCDUA60TD000AA
Trane outdoor model			4TTKUA36TD000DA	4TTKUA48TD000DA	4TTKUA60TD000DA
Power supply	V-ph-Hz		380~420-3-50	380~420-3-50	380~420-3-50
Max. input consumption	W		4230	5320	6450
Max. input current	A		6.7	9.3	10.4
Cooling (T1 condition) Outdoor: 95°F DB Indoor: 80.6°F DB/66.2°F WB	Capacity	Btu/h	37000	48000	57000
	Input	W	3080	3950	4800
	Current	A	5.4	7.8	8.1
Cooling (T3 condition) Outdoor: 114.8°F DB Indoor: 84.2°F DB/66.2°F WB	Capacity	Btu/h	34909	43493	51731
	Input	W	4112	4988	6100
	Current	A	6.62	9.13	10.00
Cooling (MEW condition) Outdoor: 118.4°F DB Indoor: 80°F DB/67°F WB	Capacity	Btu/h	33099.8	40681.3	49968.7
	Input	W	4032.9	4979.9	6115.9
	Current	A	6.35	9.05	9.73
Indoor fan motor	EER	(Btu/h)/W	8.21	8.17	8.17
	Qty		1	1	1
	Output	W	300	560	560
Indoor coil	Speed(Hi/Med/Lo)	r/min	930/840/750	1020/920/840	1090/990/900
	Number of rows		4	4	4
	Tube pitch(a)*row pitch(b)	mm	21x13.37	25.4x22	25.4x22
	Fin spacing	mm	1.5	1.5	1.5
	Fin type		Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium
	Tube outside dia.and type	mm	Φ7, innergroove tube	Φ9.52, innergroove tube	Φ9.52, innergroove tube
Indoor air flow (Hi/Med/Lo)	Coil length * height * width	mm	1030x378x53.48	1055x356x88	1055x356x88
	Number of circuits		8	7	7
	CFM		1330/1114/877	1526/1438/1171	1937/1654/1386
ESP	Rated	Pa	37	50	50
	Range	Pa	0-120	0-160	0-160
Indoor noise level (Hi/Med/Lo)		dB(A)	50/47/44	53/50/48	53/50/48
	Dimension (WxDxH)	mm	1200x874x300	1200x625x380	1200x625x380
Indoor unit	Packing(WxDxH)	mm	1405x915x355	1485x675x450	1485x675x450
	Net/Gross weight	kg	43.9/52.6	56.5/64.5	56.5/64.5
Design pressure	MPa		4.8/1.5	4.8/1.5	4.8/1.5
Drainage water pipe diameter	mm		ODΦ25	ODΦ25	ODΦ25
Refrigerant piping	Liquid side/ Gas side	mm	Φ9.52/Φ19(3/8"/3/4")	Φ9.52/Φ19(3/8"/3/4")	Φ9.52/Φ22(3/8"/7/8")
Controller			Wired control	Wired control	Wired control
Compressor	Type		Scroll	Scroll	Scroll
	Input	W	3150	3954	4750
	Rated current(RLA)	A	5.30	8.6	10.9
	Refrigerant oil	ml	POE/1242	POE/1242	POE/1656
Outdoor fan motor	Qty		2	2	2
	(Output)	W	98	142	142
	Speed	r/min	830	880	880
Outdoor coil	Number of rows		3	2.6	3
	Tube pitch(a)* row pitch(b)	mm	21x13.37	21x13.37	21x13.37
	Fin spacing	mm	1.4	1.4	1.4
	Fin type		Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium
	Tube outside dia.and type	mm	Φ7, innergroove tube	Φ7, innergroove tube	Φ7, innergroove tube
	Coil length * height * width	mm	850x1113x40.11	990x1260x26.74+580x1260x13.37	985x1260x40.11
Outdoor noise level (sound pressure)	Number of circuits		8	14	13
	dB(A)		61	62	62
	Dimension(WxDxH)	mm	900x350x1170	952x415x1333	952x415x1333
Outdoor unit	Packing(WxDxH)	mm	1032x443x1307	1095x495x1480	1095x495x1480
	Net/Gross weight	kg	86.2/97.7	98.6/111.8	112.5/125.6
Refrigerant type/Quantity	Type		R410A	R410A	R410A
Design pressure	Charged volume	kg	3.90	4.10	4.40
	MPa		4.8/1.5	4.8/1.5	4.8/1.5
Refrigerant piping	Liquid side/ Gas side	mm(inch)	Φ9.52/Φ19(3/8"/3/4")	Φ9.52/Φ19(3/8"/3/4")	Φ9.52/Φ22(3/8"/7/8")
	Max. pipe length	m	30	50	50
	Max. difference in level	m	20	30	30
Ambient temperature	Cooling	°C	18-52	18-52	18-52
Qty'per 20' /40' /40'HQ	Indoor		62/130/149	59/124/125	59/124/125
Qty'per 20' /40' /40'HQ	Outdoor unit		27/57/108	22/48/48	22/48/48

## Notes:

1. Capacities are based on the following conditions:

Cooling: - Interconnecting Piping Length 5m  
- Level Difference of Zero.

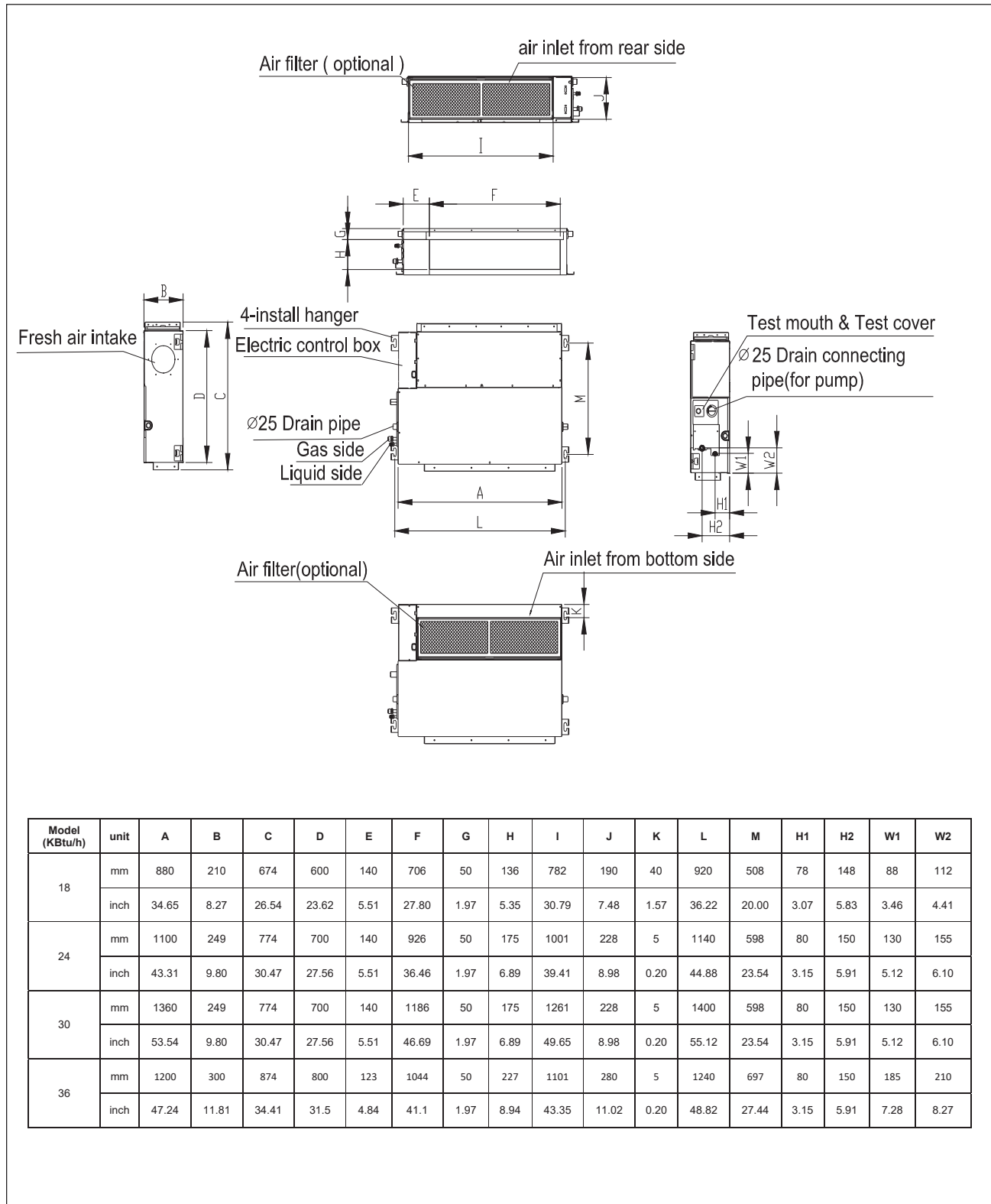
2. Capacities are Net Capacities.

3. Trane has a policy of continuous product and product data improvement and reserves the right to change design and specifications without notice.

# Dimensional Drawings

## 1. Indoor Unit

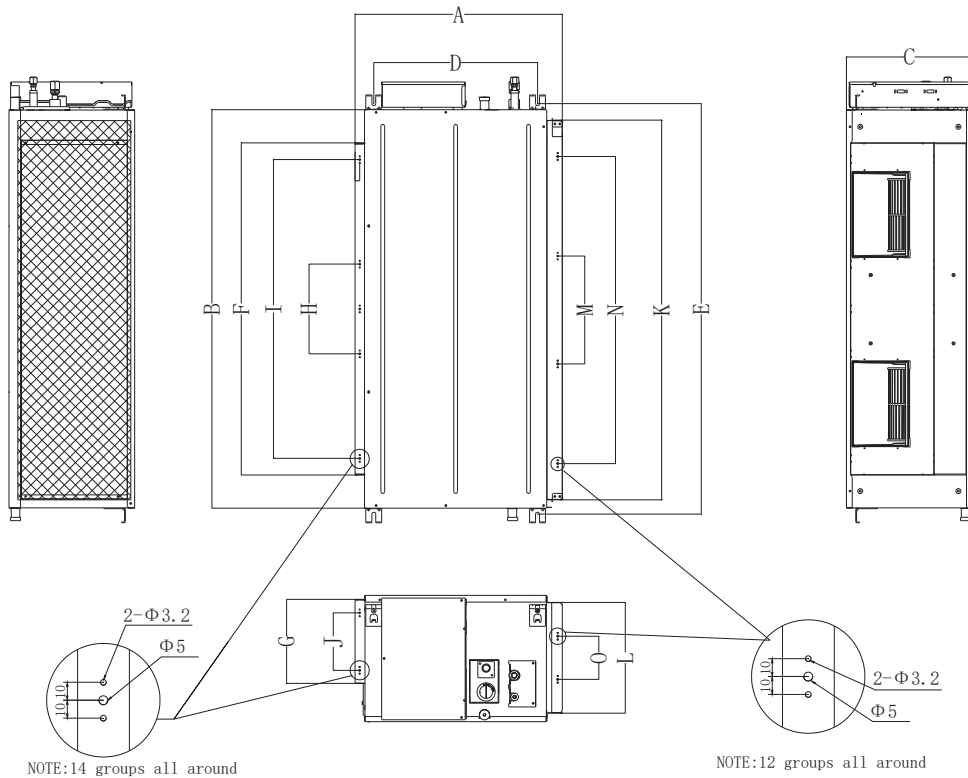
### Middle Static Pressure Type





# Dimensional Drawings

## High Static Pressure Type

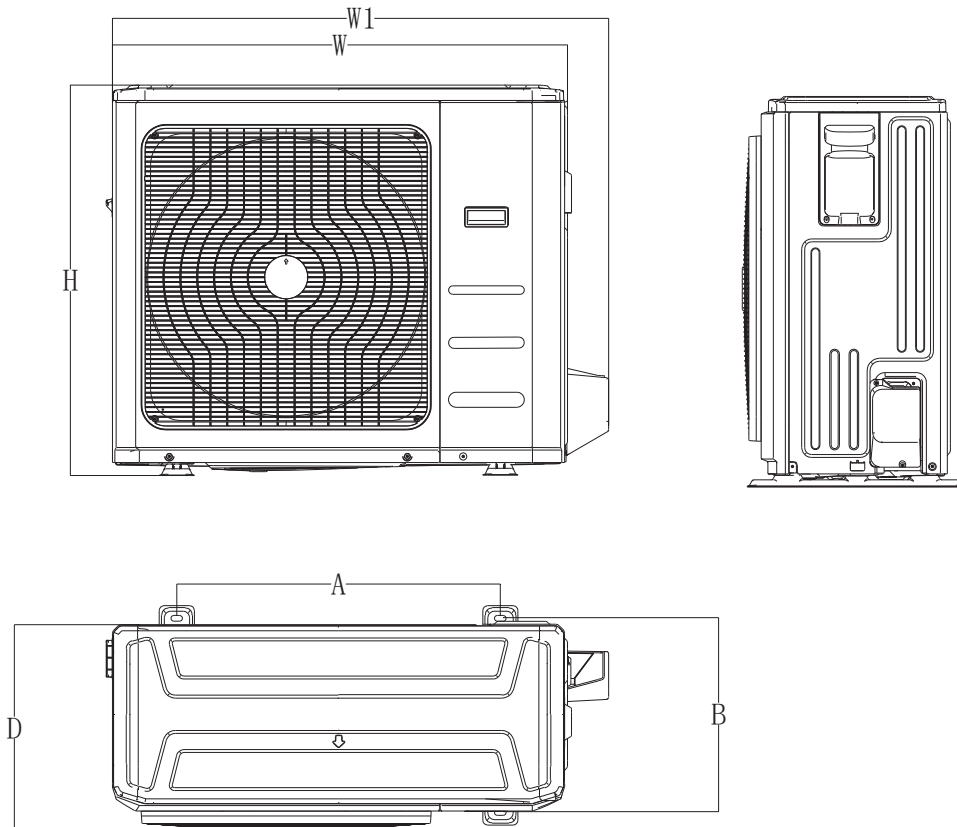


Capacity (KBtu)	unit	Outline dimension			Size of mounted lug		Air outlet opening size(symmetry of air outlet opening)				Air inlet opening size(symmetry of air inlet opening)					
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
48/60	mm	625	1200	380	495	1236	1000	253	270	900	170	1145	334	325	925	130
	inch	24.61	47.24	14.96	19.49	48.66	39.37	9.96	10.63	35.43	6.69	45.08	13.15	12.80	36.42	5.12

# Dimensional Drawings

## 2. Outdoor Unit

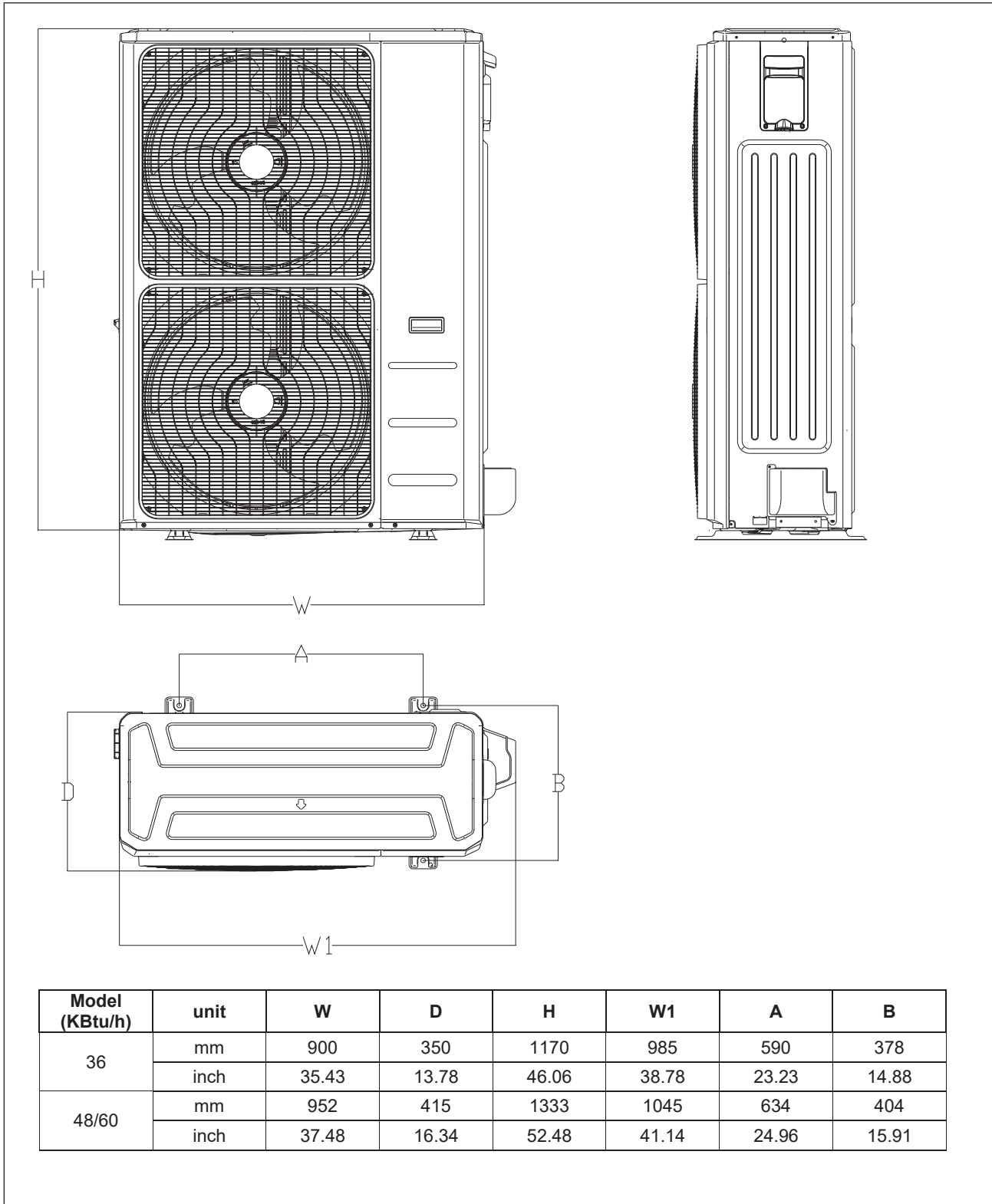
### Single Fan Outdoor Unit



Model (KBtu/h)	unit	W	D	H	W1	A	B
18	mm	845	363	702	914	540	350
	inch	33.27	14.29	27.64	35.98	21.26	13.78
24/30	mm	946	410	810	1030	673	403
	inch	37.24	16.14	31.89	40.55	26.57	15.83

# Dimensional Drawings

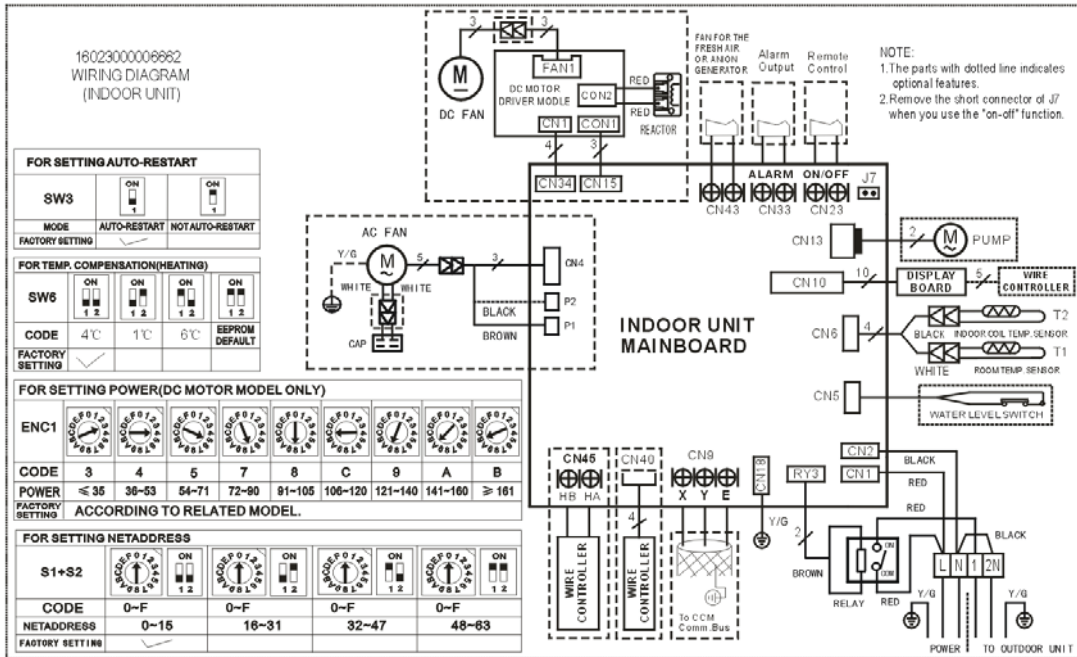
## Double Fan Outdoor Unit



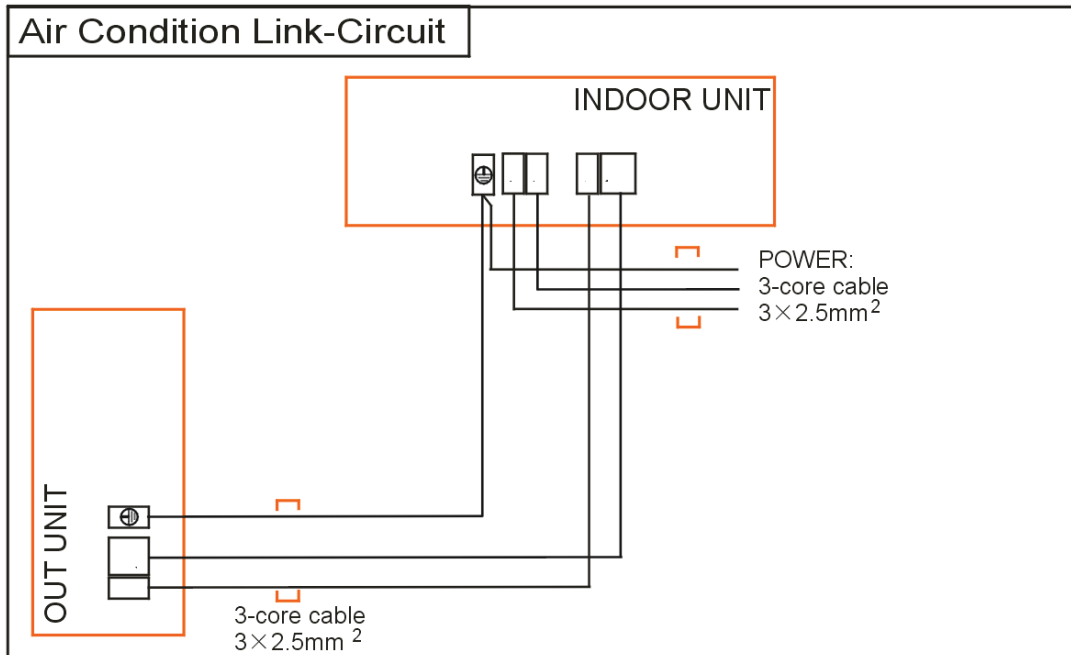
# Wiring Drawings

## Indoor Unit Wiring Diagrams

4MCDUA18TB000AA

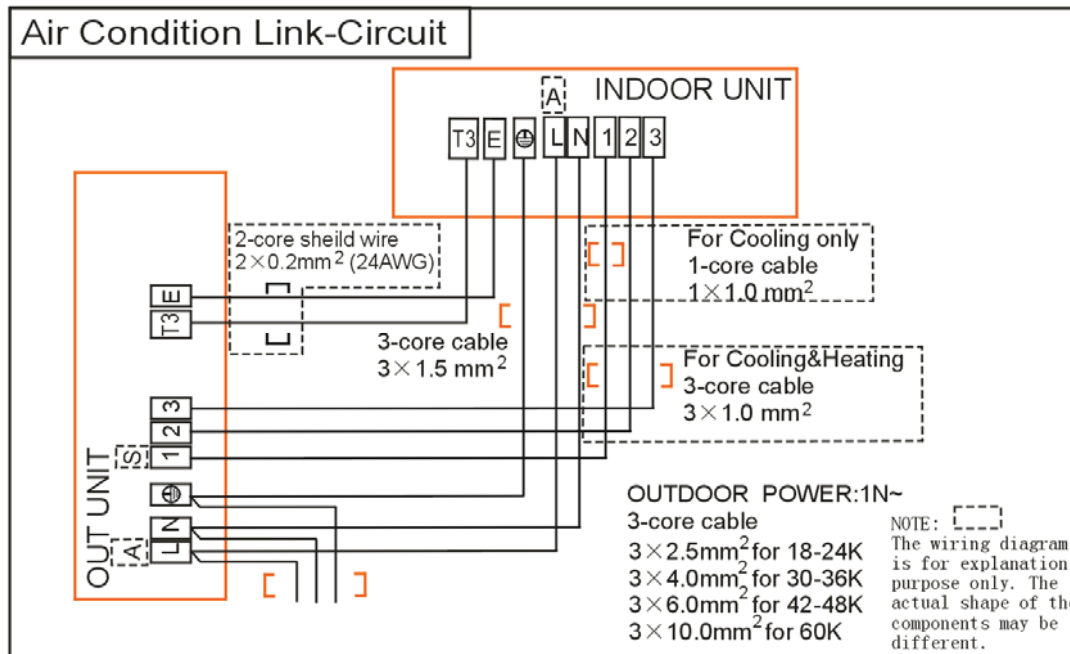
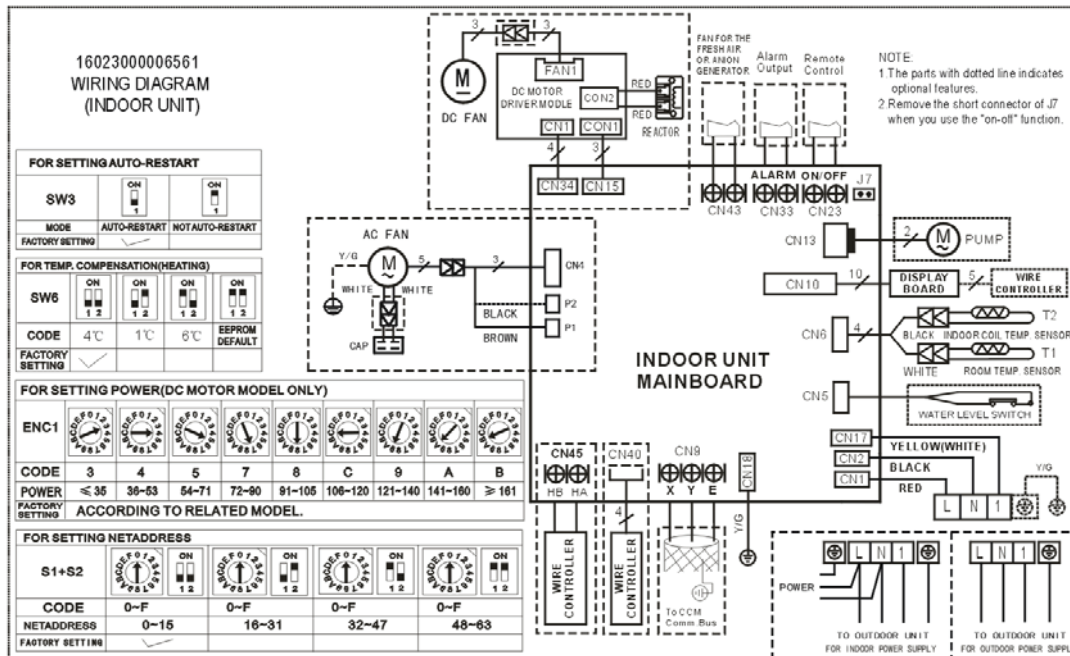


### Air Condition Link-Circuit



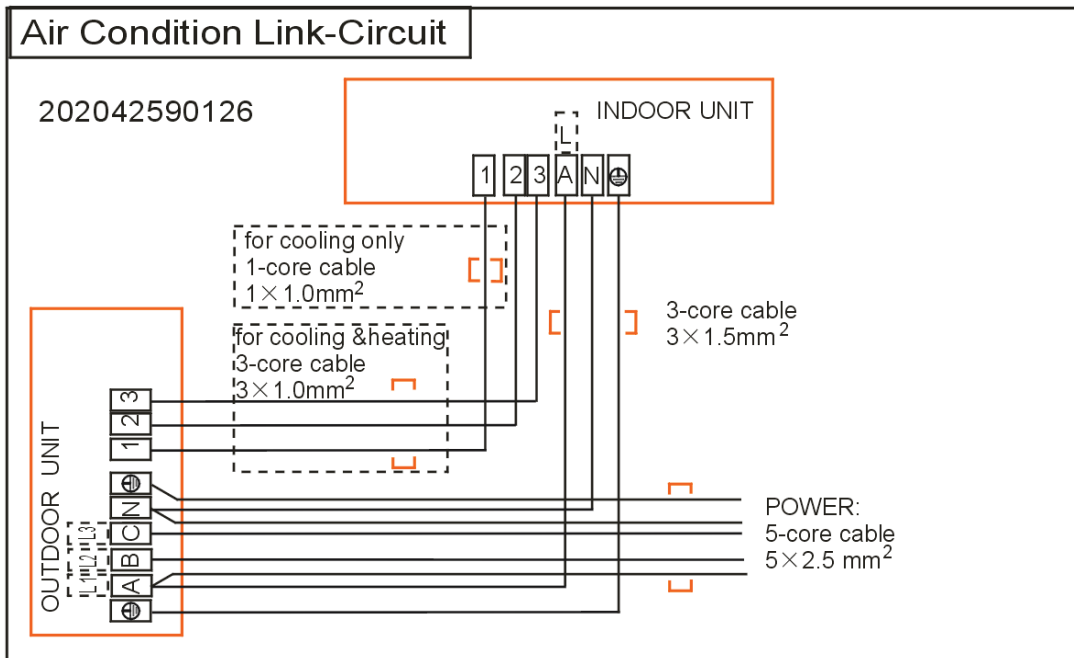
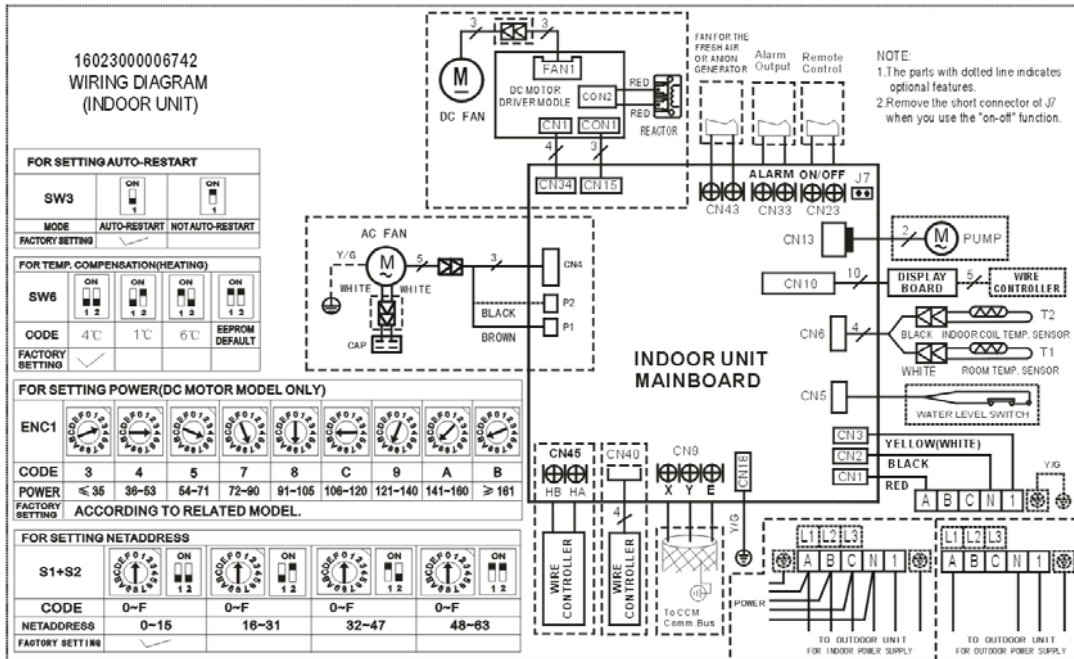
# Wiring Drawings

4MCDUA24TB000AA 4MCDUA30TB000AA 4MCDUA36TB000AA



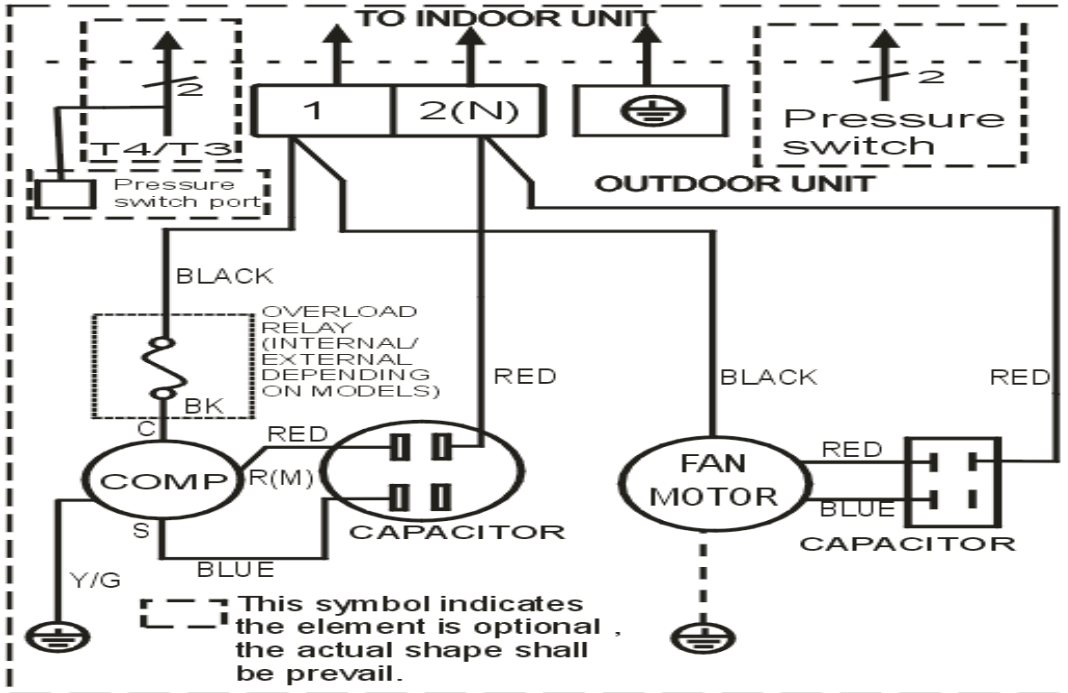
# Wiring Diagrams

4MCDUA36TD000AA 4MCDUA48TD000AA 4MCDUA60TD000AA

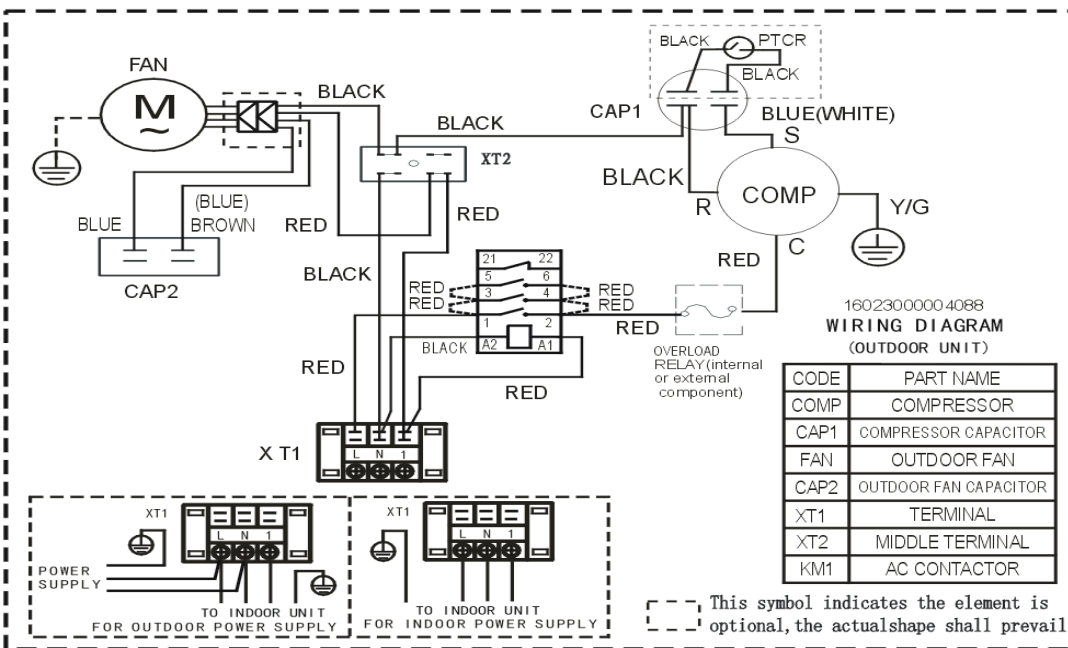


# Wiring Diagrams

## Outdoor Units 4TTKUA18TB000DA

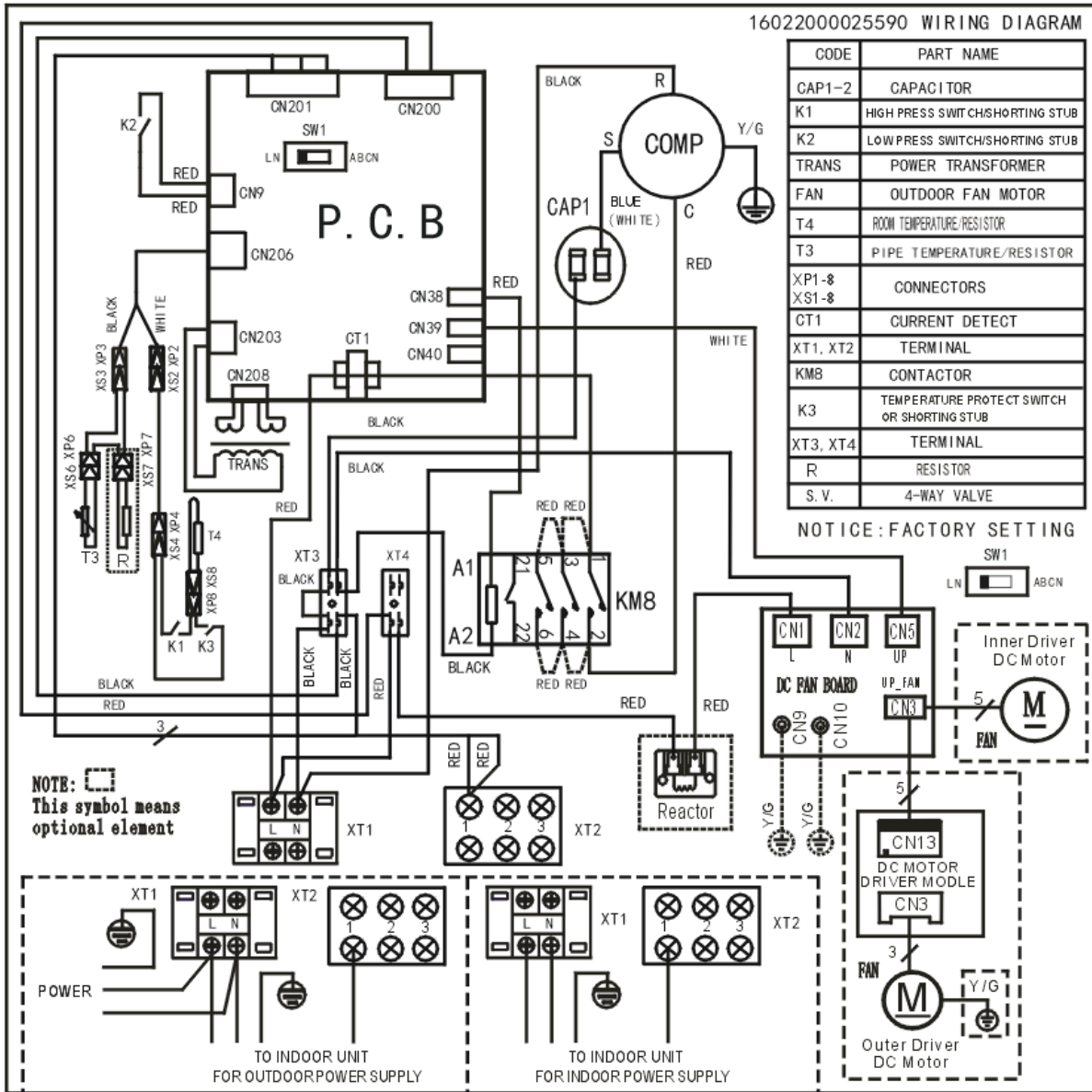


## 4TTKUA24TB000DA



# Wiring Diagrams

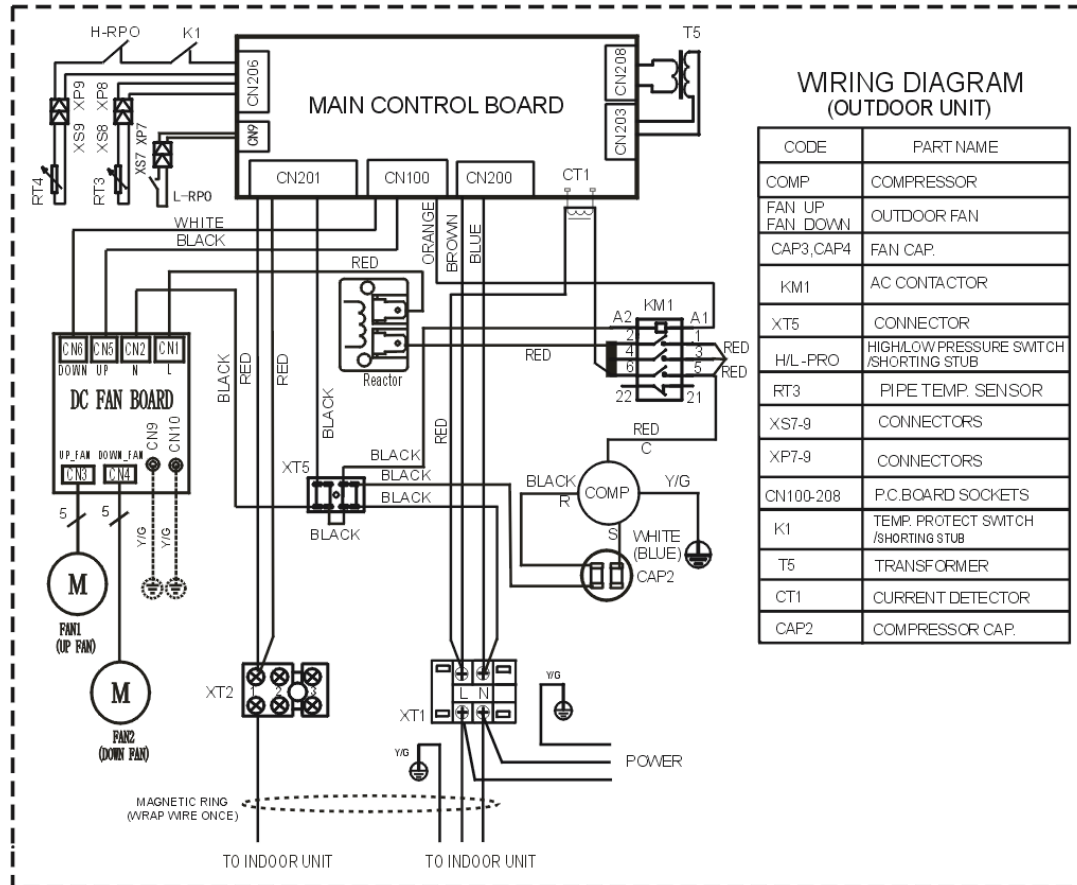
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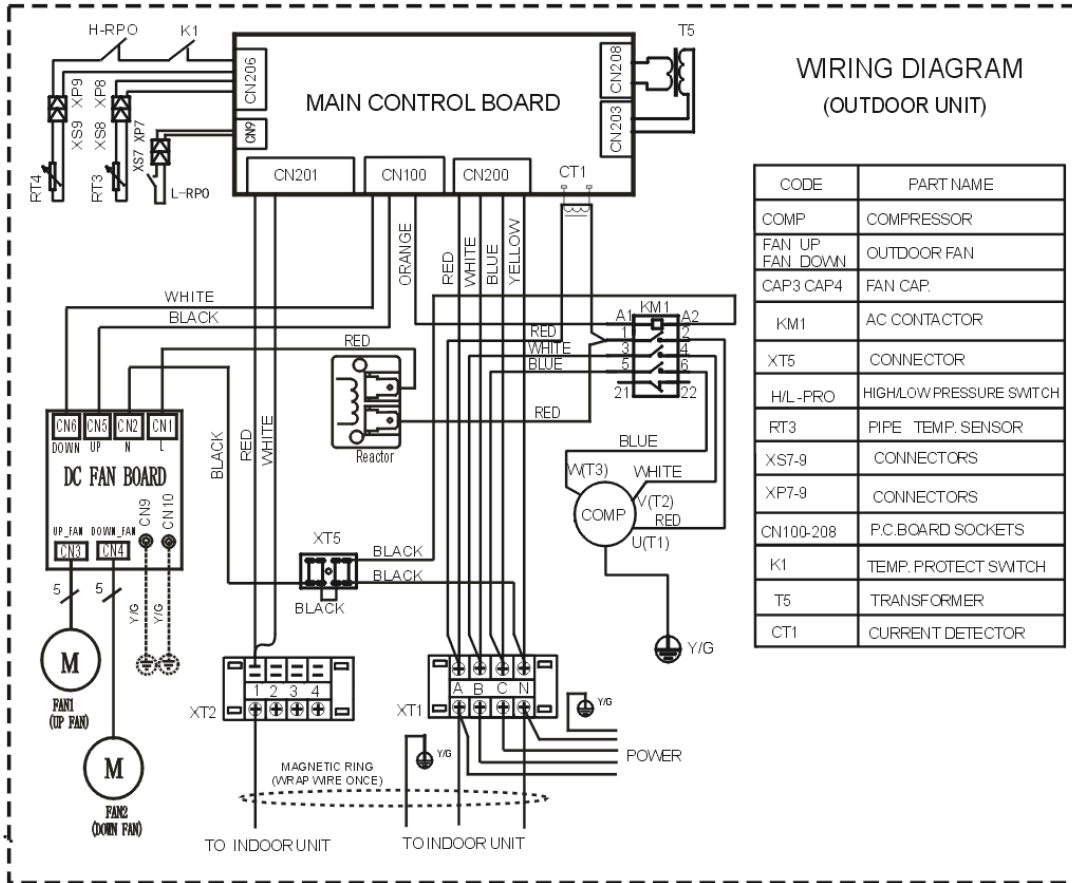
# Wiring Diagrams

4TTKUA36TB000DA



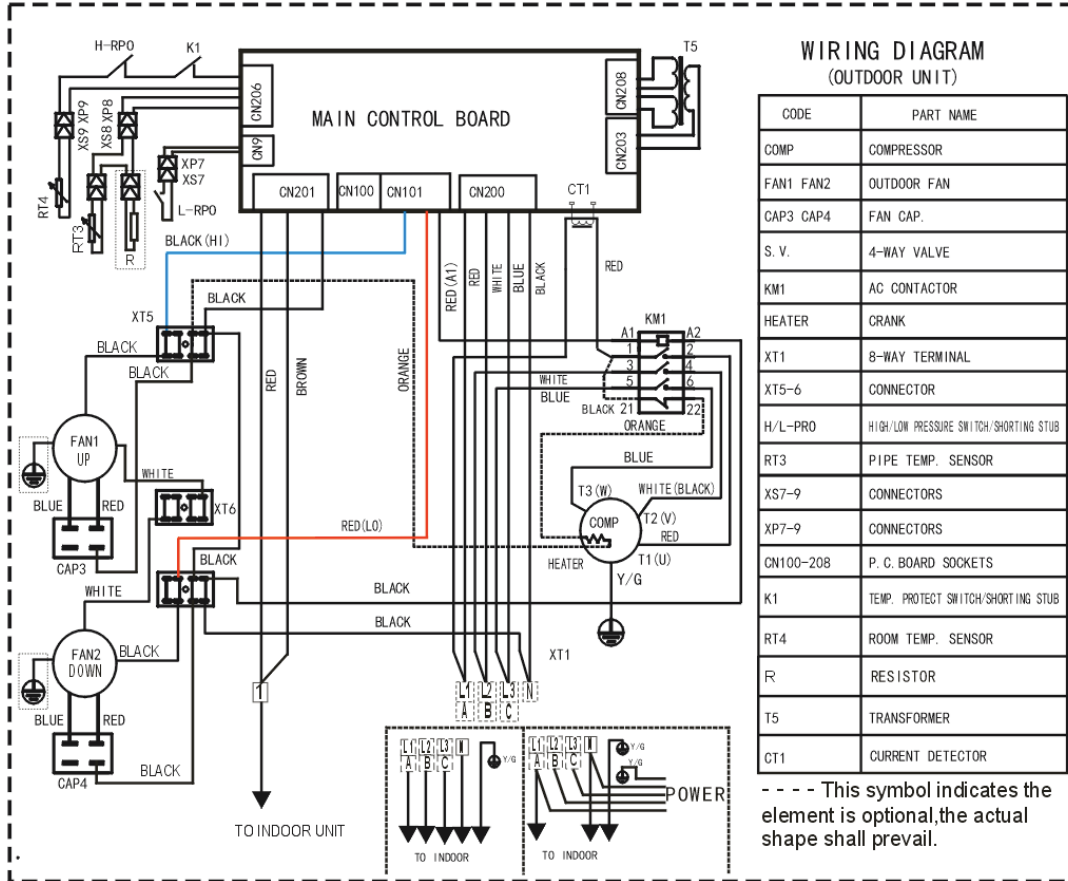
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4TTKUA36TD000DA



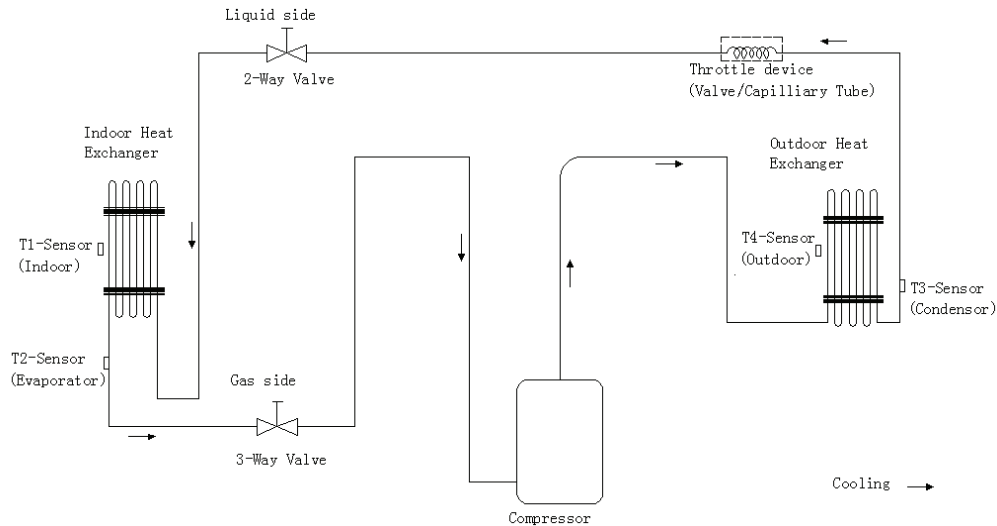
# Wiring Diagrams

4TTKUA48TD000DA 4TTKUA60TD000DA

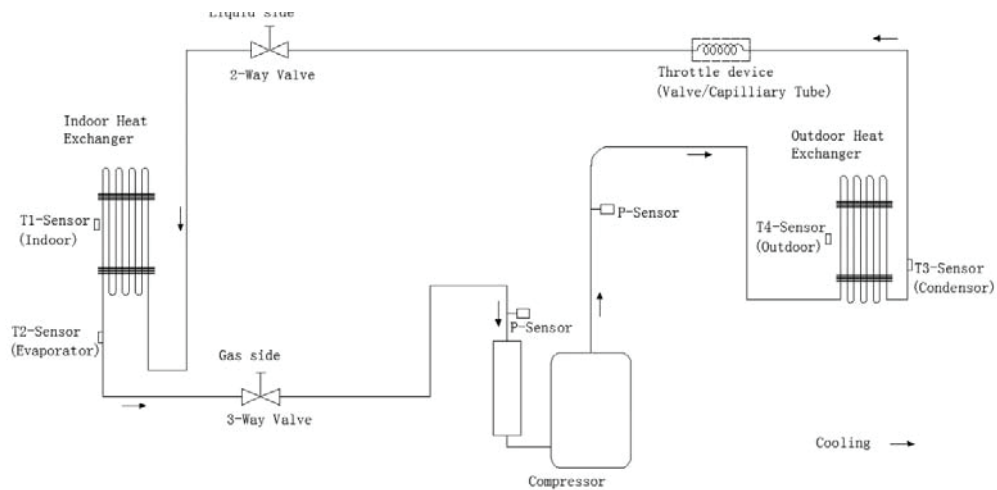


# Refrigerant Cycle Diagrams

## Cooling Only

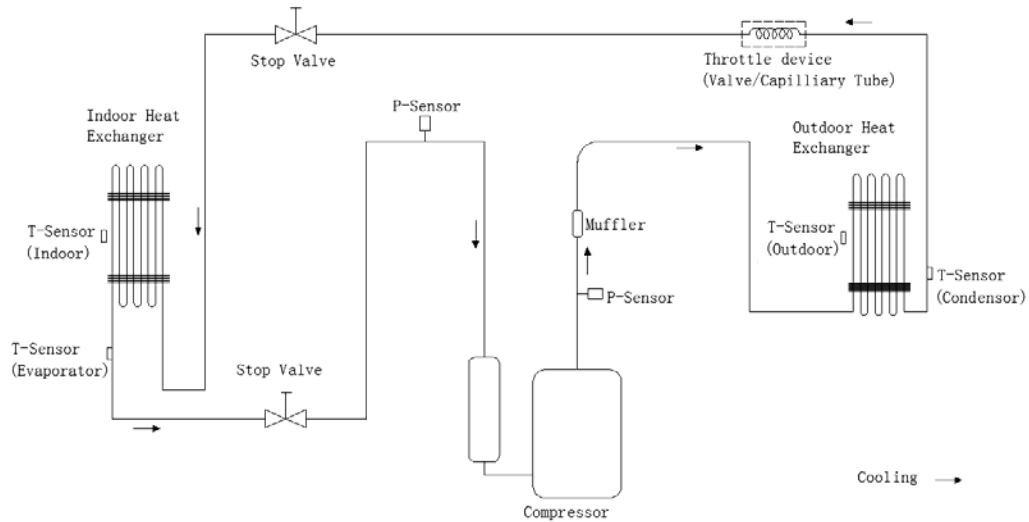


Model No.	Pipe Size (Diameter:ø) inch		Piping length (m)		Elevation (m)		Additional Refrigerant (g/m)
	Gas	Liquid	Rated	Max.	Rated	Max.	
18K Cooling only	1/2	1/4	5	25	0	15	15
24K Cooling only	5/8	3/8	5	25	0	15	30

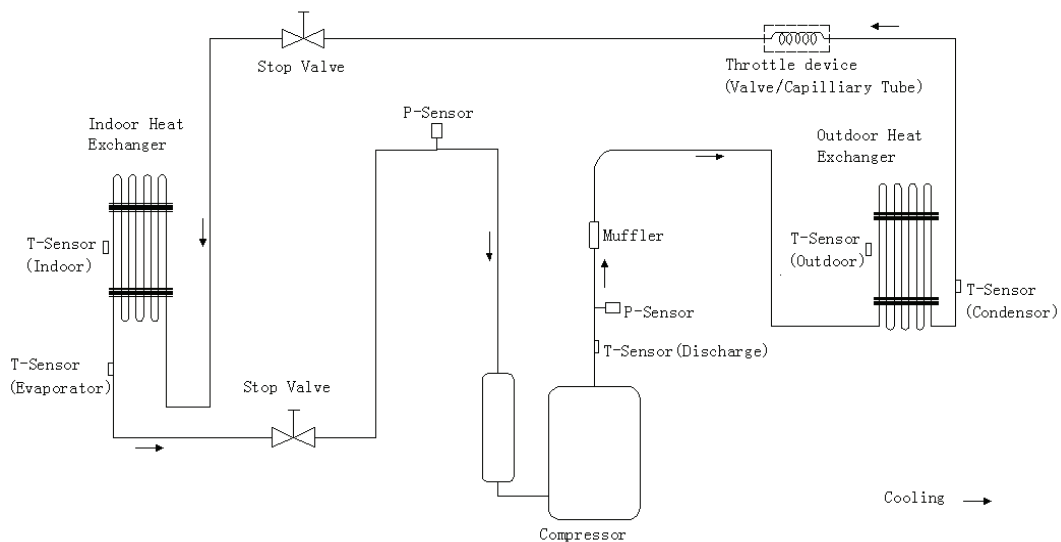


Model No.	Pipe Size (Diameter:ø) inch		Piping length (m)		Elevation (m)		Additional Refrigerant (g/m)
	Gas	Liquid	Rated	Max.	Rated	Max.	
30K Cooling only	3/4	3/8	5	25	0	15	30

# Refrigerant Cycle Diagrams



Model No.	Pipe Size (Diameter:ø) inch		Piping length (m)		Elevation (m)		Additional Refrigerant (g/m)
	Gas	Liquid	Rated	Max.	Rated	Max.	
36K Cooling only	3/4	3/8	5	30	0	20	30



Model No.	Pipe Size(Diameter:ø) inch		Piping length(m)		Elevation(m)		Additional Refrigerant (g/m)
	Gas	Liquid	Rated	Max.	Rated	Max.	
48K Cooling only	3/4	3/8	5	50	0	30	30
60K Cooling only	7/8	3/8	5	50	0	30	30



# Performance Data

## Model No.: 4MCDUA18TB000AA

		4MCDUA18TB000AA																		
Air Flow CFM	Outdoor Air Temp DB(F)	59				62.6				67				69.8						
		ID WB(F) ID DB(F)	73.4	77	80	84.2	73.4	77	80	84.2	73.4	77	80	84.2	73.4	77	80	84.2		
606	78.8	TC	5.02	5.23	5.42	5.67	5.3	5.35	5.42	5.67	5.57	5.67	5.71	5.77	5.71	5.85	5.93	6	6	
		S/T	1	1	1	1	0.77	0.91	1	1	0.55	0.67	0.79	0.93	0.43	0.54	0.64	0.78		
		PI	1.19	1.19	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	
	82.4	TC	4.95	5.16	5.34	5.59	5.21	5.26	5.34	5.59	5.48	5.58	5.62	5.68	5.62	5.76	5.84	5.91		
		S/T	1	1	1	1	0.78	0.92	1	1	0.55	0.68	0.8	0.94	0.44	0.54	0.64	0.79		
		PI	1.25	1.25	1.26	1.26	1.25	1.25	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	
	86	TC	4.87	5.08	5.26	5.51	5.12	5.17	5.26	5.51	5.39	5.49	5.53	5.59	5.52	5.66	5.74	5.81		
		S/T	1	1	1	1	0.78	0.93	1	1	0.55	0.68	0.8	0.95	0.44	0.54	0.65	0.8		
		PI	1.31	1.31	1.31	1.32	1.31	1.31	1.31	1.32	1.31	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	
	91.4	TC	4.76	4.96	5.14	5.38	4.98	5.04	5.14	5.39	5.25	5.34	5.38	5.4	5.38	5.51	5.59	5.65		
		S/T	1	1	1	1	0.8	0.94	1	1	0.56	0.69	0.82	0.99	0.44	0.55	0.65	0.81		
		PI	1.4	1.4	1.4	1.41	1.4	1.4	1.4	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	
95	TC	4.68	4.88	5.06	5.3	4.89	4.94	5.06	5.31	5.15	5.24	5.28	5.31	5.28	5.42	5.5	5.56			
	S/T	1	1	1	1	0.8	0.95	1	1	0.56	0.7	0.82	1	0.44	0.55	0.66	0.82			
	PI	1.46	1.46	1.47	1.47	1.46	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.48	1.48	1.48		
100.4	TC	4.57	4.77	4.94	5.18	4.76	4.81	4.94	5.19	5.01	5.1	5.14	5.19	5.14	5.27	5.35	5.41			
	S/T	1	1	1	1	0.81	0.96	1	1	0.56	0.71	0.84	1	0.44	0.55	0.67	0.83			
	PI	1.54	1.55	1.56	1.57	1.55	1.55	1.56	1.57	1.56	1.56	1.56	1.57	1.56	1.57	1.57	1.57	1.57		
104	TC	4.48	4.68	4.86	5.1	4.66	4.7	4.86	5.1	4.92	5	5.04	5.1	5.04	5.17	5.24	5.29			
	S/T	1	1	1	1	0.82	0.99	1	1	0.57	0.71	0.85	1	0.44	0.56	0.67	0.85			
	PI	1.6	1.61	1.62	1.63	1.61	1.61	1.62	1.63	1.62	1.63	1.63	1.63	1.63	1.63	1.64	1.64	1.64		
114.8	TC	4.24	4.43	4.6	4.83	4.37	4.43	4.6	4.83	4.62	4.7	4.73	4.84	4.73	4.86	4.93	4.97			
	S/T	1	1	1	1	0.85	1	1	1	0.58	0.74	0.88	1	0.44	0.57	0.69	0.88			
	PI	1.8	1.81	1.82	1.83	1.81	1.81	1.82	1.83	1.82	1.83	1.83	1.83	1.83	1.83	1.84	1.84	1.84		
118.4	TC	4.15	4.35	4.51	4.74	4.46	4.46	4.35	4.74	4.52	4.6	4.63	4.75	4.63	4.75	4.82	4.86			
	S/T	1	1	1	1	0.85	1	1	1	0.58	0.75	0.89	1	0.45	0.57	0.7	0.9			
	PI	1.86	1.87	1.89	1.9	1.88	1.87	1.89	1.9	1.89	1.89	1.89	1.9	1.89	1.9	1.91	1.91	1.91		
122	TC	4.06	4.26	4.42	4.65	4.32	4.26	4.42	4.65	4.42	4.49	4.52	4.65	4.53	4.65	4.71	4.75			
	S/T	1	1	1	1	0.7	1	1	1	0.59	0.75	0.91	1	0.45	0.58	0.71	0.91			
	PI	1.93	1.94	1.96	1.97	1.95	1.94	1.96	1.97	1.96	1.96	1.96	1.97	1.96	1.97	1.98	1.98	1.98		
125.6	TC	3.98	4.16	4.33	4.55	4.25	4.17	4.33	4.55	4.31	4.38	4.41	4.56	4.42	4.53	4.59	4.63			
	S/T	1	1	1	1	0.86	1	1	1	0.59	0.76	0.92	1	0.45	0.58	0.72	0.92			
	PI	2	2.02	2.03	2.05	2.02	2.02	2.03	2.05	2.03	2.03	2.04	2.05	2.04	2.04	2.05	2.05	2.05		
Air Flow CFM	Outdoor Air Temp DB(C)	59				62.6				67				69.8						
	ID WB(C) ID DB(C)	73.4	77	80	84.2	73.4	77	80	84.2	73.4	77	80	84.2	73.4	77	80	84.2			
519	78.8	TC	4.92	5.01	5.18	5.41	5.16	5.21	5.22	5.42	5.43	5.52	5.56	5.63	5.6	5.78	5.84			
		S/T	0.91	1	1	1	0.74	0.86	0.98	1	0.54	0.65	0.75	0.87	0.45	0.53	0.62	0.75		
		PI	1.19	1.19	1.19	1.2	1.19	1.19	1.19	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2		
	82.4	TC	4.85	4.94	5.11	5.34	5.07	5.13	5.11	5.34	5.35	5.43	5.47	5.54	5.51	5.61	5.69	5.75		
		S/T	0.92	1	1	1	0.75	0.86	1	1	0.54	0.66	0.76	0.88	0.45	0.53	0.62	0.75		
		PI	1.25	1.25	1.25	1.26	1.25	1.25	1.25	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	
	86	TC	4.76	4.87	5.03	5.27	4.99	5.04	5.04	5.27	5.26	5.34	5.38	5.45	5.42	5.52	5.6	5.65		
		S/T	0.93	1	1	1	0.75	0.87	1	1	0.54	0.66	0.77	0.89	0.45	0.53	0.62	0.76		
		PI	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.32	1.31	1.32	1.32	1.32	
	91.4	TC	4.64	4.75	4.92	5.15	4.85	4.91	4.92	5.15	5.12	5.2	5.24	5.31	5.28	5.38	5.45	5.51		
		S/T	0.94	1	1	1	0.76	0.88	1	1	0.55	0.67	0.78	0.9	0.45	0.53	0.63	0.77		
		PI	1.39	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	
95	TC	4.54	4.68	4.84	5.07	4.76	4.82	4.85	5.07	5.03	5.11	5.14	5.21	5.18	5.29	5.36	5.41			
	S/T	0.96	1	1	1	0.77	0.89	1	1	0.55	0.67	0.78	0.91	0.45	0.54	0.63	0.78			
	PI	1.45	1.46	1.46	1.47	1.46	1.46	1.46	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47		
100.4	TC	4.38	4.57	4.73	4.96	4.64	4.69	4.74	4.96	4.9	4.98	5.01	5.08	5.05	5.15	5.22	5.27			
	S/T	1	1	1	1	0.78	0.9	1	1	0.55	0.68	0.79	0.92	0.45	0.54	0.64	0.79			
	PI	1.54	1.54	1.55	1.56	1.55	1.55	1.55	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.57	1.57	1.57		
104	TC	4.31	4.49	4.66	4.88	4.55	4.6	4.66	4.88	4.81	4.88	4.91	4.98	4.96	5.05	5.12	5.17			
	S/T	1	1	1	1	0.78	0.91	1	1	0.56	0.69	0.8	0.93	0.45	0.54	0.65	0.8			
	PI	1.6	1.61	1.61	1.62	1.61	1.61	1.61	1.62	1.62	1.62	1.62	1.63	1.62	1.63	1.63	1.63	1.63		
114.8	TC	4.08	4.26	4.41	4.63	4.27	4.32	4.41	4.63	4.51	4.59	4.62	4.64	4.56	4.75	4.82	4.86			
	S/T	1	1	1	1	0.81	0.94	1	1	0.56	0.71	0.83	1	0.46	0.55	0.66	0.82			
	PI	1.78	1.8	1.81	1.82	1.8	1.8	1.81	1.82	1.82	1.82	1.82	1.82	1.82	1.83	1.83	1.83	1.83		
118.4	TC	4	4.18	4.33	4.55	4.18	4.21	4.34	4.55	4.42	4.49	4.52	4.56	4.56	4.65	4.71	4.76			
	S/T	1	1	1	1	0.82	0.97	1	1	0.57	0.71	0.84	1	0.46	0.56	0.67	0.83			
	PI	1.85	1.86	1.87	1.89	1.86	1.86	1.87	1.89	1.88	1.88	1.89	1.89	1.89	1.9	1.9	1.9	1.9		
122	TC	3.91	4.09	4.25	4.46	4.08	4.09	4.25	4.46	4.32	4.39	4.42	4.47	4.46	4.55	4.61	4.65			
	S/T	1	1	1	1	0.83	1	1	1	0.57	0.72	0.85	1	0.46	0.56	0.68	0.84			
	PI	1.92	1.93	1.94	1.96	1.93	1.93	1.94	1.96	1.95	1.95	1.96	1.96	1.96	1.96	1.97	1.97	1.97		
125.6	TC	3.83	4.01	4.16	4.37	3.98	4.01	4.16	4.37	4.21	4.28	4.32	4.38	4.35	4.44	4.5	4.54			



# Performance Data

## Model No.: 4MCDUA24TB000AA

Air Flow CFM		Outdoor Air Temp DB(F)	4MCDUA24TB000AA															
			59				62.6				67				69.8			
ID WB(F)	ID DB(F)	73.4	77	80	84.2	73.4	77	80	84.2	73.4	77	80	84.2	73.4	77	80	84.2	
		824	78.8	TC	6.75	6.95	7.18	7.51	7.04	7.13	7.18	7.51	7.3	7.47	7.59	7.69	7.43	7.65
S/T	0.95			1	1	1	0.73	0.87	1	1	0.52	0.63	0.74	0.9	0.42	0.51	0.6	0.73
PI	1.54			1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.56	1.55	1.56	1.56	1.56
82.4	TC		6.63	6.84	7.08	7.4	6.92	7.01	7.08	7.41	7.18	7.35	7.47	7.56	7.31	7.53	7.68	7.84
	S/T		0.96	1	1	1	0.73	0.88	1	1	0.53	0.64	0.75	0.91	0.42	0.51	0.6	0.74
	PI		1.62	1.62	1.63	1.63	1.62	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63
86	TC		6.51	6.74	6.98	7.3	6.81	6.9	6.94	7.3	7.07	7.24	7.34	7.44	7.19	7.41	7.56	7.71
	S/T		0.97	1	1	1	0.74	0.89	0.97	1	0.53	0.64	0.75	0.92	0.42	0.52	0.61	0.75
	PI		1.69	1.7	1.7	1.71	1.7	1.7	1.7	1.71	1.7	1.71	1.7	1.71	1.71	1.71	1.71	1.72
91.4	TC		6.34	6.58	6.82	7.13	6.63	6.71	6.82	7.14	6.88	7.05	7.15	7.24	7	7.21	7.36	7.51
	S/T		0.98	1	1	1	0.75	0.9	1	1	0.53	0.65	0.76	0.93	0.43	0.52	0.61	0.76
	PI		1.81	1.82	1.82	1.83	1.82	1.82	1.82	1.83	1.82	1.83	1.83	1.84	1.83	1.83	1.84	1.84
95	TC		6.22	6.47	6.7	7.02	6.5	6.59	6.71	7.03	6.75	6.92	7.02	7.11	6.87	7.09	7.23	7.38
	S/T		0.99	1	1	1	0.75	0.91	1	1	0.53	0.65	0.77	0.95	0.43	0.52	0.62	0.77
	PI		1.89	1.9	1.91	1.92	1.9	1.9	1.91	1.92	1.91	1.91	1.92	1.92	1.91	1.92	1.92	1.92
100.4	TC		6.06	6.32	6.54	6.86	6.32	6.41	6.55	6.86	6.57	6.73	6.84	6.92	6.68	6.9	7.04	7.19
	S/T		1	1	1	1	0.76	0.93	1	1	0.54	0.66	0.78	0.96	0.43	0.53	0.62	0.78
	PI		2.01	2.02	2.03	2.04	2.02	2.02	2.03	2.04	2.03	2.03	2.04	2.04	2.03	2.04	2.04	2.05
104	TC		5.95	6.21	6.43	6.74	6.2	6.28	6.44	6.75	6.45	6.6	6.7	6.78	6.55	6.77	6.91	7.05
	S/T		1	1	1	1	0.77	0.94	1	1	0.54	0.67	0.79	0.98	0.43	0.53	0.63	0.79
	PI		2.09	2.1	2.11	2.13	2.1	2.11	2.11	2.13	2.11	2.12	2.13	2.13	2.12	2.13	2.14	2.14
114.8	TC		5.61	5.86	6.08	6.39	5.81	5.89	6.09	6.39	6.05	6.2	6.3	6.37	6.15	6.36	6.5	6.63
	S/T		1	1	1	1	0.8	0.98	1	1	0.55	0.68	0.82	0.98	0.43	0.54	0.64	0.82
	PI		2.36	2.38	2.39	2.4	2.37	2.38	2.39	2.4	2.39	2.4	2.4	2.4	2.39	2.4	2.41	2.42
118.4	TC	5.5	5.75	5.97	6.27	5.69	5.76	5.97	6.27	5.92	6.07	6.16	6.27	6.02	6.22	6.36	6.48	
	S/T	1	1	1	1	0.8	1	1	1	0.55	0.69	0.83	1	0.43	0.54	0.65	0.83	
	PI	2.45	2.46	2.48	2.5	2.46	2.47	2.48	2.5	2.48	2.49	2.5	2.5	2.49	2.5	2.51	2.52	
122	TC	5.38	5.63	5.85	6.14	5.55	5.63	5.85	6.15	5.78	5.93	6.02	6.08	5.88	6.08	6.21	6.34	
	S/T	1	1	1	1	0.82	1	1	1	0.55	0.7	0.84	0.94	0.43	0.54	0.66	0.84	
	PI	2.55	2.56	2.58	2.6	2.56	2.56	2.58	2.6	2.57	2.59	2.59	2.6	2.58	2.6	2.61	2.62	
125.6	TC	5.26	5.51	5.72	6.01	5.41	5.51	5.72	6.02	5.64	5.79	5.88	5.94	5.73	5.94	6.07	6.19	
	S/T	1	1	1	1	0.83	1	1	1	0.56	0.71	0.85	0.92	0.43	0.55	0.66	0.85	
	PI	2.64	2.67	2.68	2.7	2.66	2.67	2.68	2.7	2.68	2.69	2.69	2.7	2.68	2.7	2.71	2.72	
677	78.8	TC	6.51	6.6	6.81	7.11	6.81	6.89	6.93	7.12	7.08	7.23	7.33	7.41	7.22	7.42	7.55	7.69
		S/T	0.89	1	1	1	0.7	0.82	0.94	1	0.52	0.62	0.71	0.84	0.42	0.5	0.58	0.7
		PI	1.54	1.54	1.54	1.55	1.54	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.56
	82.4	TC	6.41	6.51	6.72	7.01	6.7	6.77	6.81	7.02	6.97	7.12	7.21	7.3	7.1	7.3	7.43	7.57
		S/T	0.9	1	1	1	0.7	0.83	0.94	1	0.52	0.62	0.71	0.85	0.42	0.51	0.58	0.7
		PI	1.61	1.61	1.62	1.63	1.62	1.62	1.62	1.63	1.62	1.63	1.63	1.63	1.63	1.63	1.63	1.63
	86	TC	6.3	6.41	6.62	6.92	6.58	6.66	6.7	6.92	6.86	7	7.1	7.18	6.99	7.18	7.32	7.45
		S/T	0.91	1	1	1	0.71	0.84	0.95	1	0.52	0.62	0.72	0.86	0.42	0.51	0.59	0.71
		PI	1.69	1.69	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.71
	91.4	TC	6.13	6.26	6.47	6.77	6.41	6.49	6.52	6.77	6.68	6.83	6.92	7	6.81	7	7.13	7.26
		S/T	0.92	1	1	1	0.72	0.85	0.97	1	0.52	0.63	0.73	0.87	0.43	0.51	0.59	0.72
		PI	1.8	1.81	1.81	1.82	1.81	1.81	1.82	1.82	1.82	1.82	1.82	1.83	1.82	1.83	1.83	1.84
	95	TC	6.01	6.16	6.37	6.66	6.3	6.37	6.4	6.66	6.56	6.7	6.79	6.87	6.66	6.87	7.01	7.14
		S/T	0.93	1	1	1	0.72	0.86	0.98	1	0.52	0.63	0.73	0.88	0.43	0.51	0.6	0.72
		PI	1.88	1.89	1.9	1.91	1.89	1.9	1.9	1.91	1.9	1.91	1.91	1.91	1.91	1.91	1.91	1.92
	100.4	TC	5.85	6.02	6.22	6.51	6.13	6.2	6.24	6.51	6.38	6.52	6.61	6.69	6.5	6.69	6.82	6.95
		S/T	0.94	1	1	1	0.73	0.87	0.99	1	0.53	0.64	0.74	0.89	0.43	0.51	0.6	0.73
		PI	2	2.01	2.02	2.03	2.01	2.01	2.02	2.03	2.02	2.03	2.03	2.03	2.03	2.03	2.04	2.04
	104	TC	5.73	5.91	6.12	6.41	6.01	6.08	6.13	6.41	6.26	6.4	6.49	6.56	6.38	6.57	6.7	6.82
		S/T	0.95	1	1	1	0.74	0.88	1	1	0.53	0.64	0.75	0.9	0.43	0.52	0.61	0.74
		PI	2.08	2.09	2.1	2.11	2.1	2.1	2.1	2.11	2.11	2.11	2.12	2.12	2.11	2.12	2.13	2.13
	114.8	TC	5.4	5.59	5.79	6.07	5.64	5.7	5.8	6.08	5.88	6.02	6.1	6.17	5.99	6.18	6.3	6.42
		S/T	0.97	1	1	1	0.76	0.91	1	1	0.54	0.66	0.77	0.94	0.43	0.52	0.62	0.77
		PI	2.34	2.36	2.37	2.39	2.36	2.37	2.37	2.39	2.38	2.39	2.39	2.39	2.38	2.39	2.4	2.41
118.4	TC	5.26	5.49	5.69	5.96	5.52	5.58	5.69	5.97	5.76	5.89	5.97	6.03	5.87	6.05	6.17	6.28	
	S/T	1	1	1	1	0.76	0.92	1	1	0.54	0.66	0.78	0.95	0.43	0.53	0.62	0.77	
	PI	2.43	2.45	2.46	2.48	2.45	2.45	2.46	2.48	2.47	2.48	2.48	2.49	2.47	2.49	2.5	2.5	
122	TC	5.15	5.38	5.57	5.85	5.39	5.45	5.58	5.85	5.62	5.76	5.84	5.9	5.73	5.91	6.03	6.15	
	S/T	1	1	1	1	0.77	0.94	1	1	0.54	0.67	0.79	0.97	0.43	0.53	0.63	0.78	
	PI	2.53	2.54	2.56	2.58	2.55	2.55	2.56	2.58	2.56	2.57	2.58	2.58	2.57	2.58	2.59	2.6	
125.6	TC	5.04	5.26	5.46	5.73	5.26	5.32	5.46	5.73	5.49	5.62	5.7	5.76	5.59	5.78	5.89	6	
	S/T	1	1	1	1	0.78	0.95	1	1	0.54	0.67	0.8	0.98	0.43	0.53	0.64	0.79	
	PI	2.62	2.64	2.66	2.68	2.64	2.65	2.66	2.68	2.66	2.68	2.68	2.69	2.67	2.69	2.7	2.7	
577	78.8	TC	6.31	6.37	6.5	6.77	6.6	6.67	6.71	6.78	6.89	7.02	7.11	7.18	7.04	7.21	7.33	7.45
		S/T	0.85	0.96	1	1	0.68	0.79	0.89	1	0.51	0.6	0.69	0.8	0.43	0.5	0.57	0.68
		PI	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
	82.4	TC	6.21	6.27	6.41	6.68	6.5	6.57	6.61	6.69	6.78	6.91	6.99	7.07	6.93	7.1	7.22	7.34
		S/T	0.86	0.96	1	1	0.69	0.8	0.89	1	0.51	0.61	0.69	0.81	0.43	0.5	0.57	0.68
		PI	1.61	1.61	1.61	1.62	1.61	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.63	1.63
	86	TC	6.1	6.17	6.32	6.59	6.39	6.46	6.5	6.59	6.67	6.81	6.88	6.95	6.82	6.99	7.11	7.23
		S/T	0.87	0.97	1	1	0.69	0.8	0.9	1	0.52	0.61	0.69	0.82	0.43	0.5	0.58	0.68
		PI	1.68	1.69	1.69	1.7	1.69	1.69	1.69	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
	91.4	TC	5.94	6.01	6.18	6.45	6.23	6.29	6.34	6.41	6.5	6.63	6.71	6.78	6.64	6.81	6.93	7.04
		S/T	0.88	0.98	1	1	0.7	0.81										



# Performance Data

## Model No.: 4MCDUA30TB000AA

		4MCDUA30TB000AA																
Air Flow CFM	Outdoor Air Temp DB(F)	ID WB(F)	59				62.6				67				69.8			
		ID DB(F)	73.4	77	80	84.2	73.4	77	80	84.2	73.4	77	80	84.2	73.4	77	80	84.2
1173	78.8	TC	8.91	9.11	1	1	0.68	0.81	0.94	1	0.5	0.59	0.68	0.83	0.41	0.48	0.56	0.68
		S/T	0.88	1	1	1	0.68	0.81	0.94	1	0.5	0.59	0.68	0.83	0.41	0.48	0.56	0.68
		PI	2.05	2.06	2.07	2.08	2.06	2.06	2.07	2.08	2.06	2.07	2.08	2.08	2.07	2.07	2.08	2.09
	82.4	TC	8.76	8.98	9.27	9.68	9.02	9.22	9.35	9.69	9.22	9.50	9.70	9.93	9.33	9.63	9.88	10.17
		S/T	0.89	1	1	1	0.68	0.82	0.95	1	0.5	0.59	0.69	0.84	0.41	0.48	0.56	0.68
		PI	2.15	2.16	2.16	2.17	2.16	2.16	2.17	2.17	2.16	2.17	2.17	2.18	2.17	2.17	2.18	2.19
	86	TC	8.62	8.84	9.13	9.54	8.86	9.06	9.20	9.55	9.07	9.35	9.54	9.77	9.18	9.48	9.72	9.99
		S/T	0.9	1	1	1	0.69	0.82	0.96	1	0.5	0.6	0.7	0.85	0.41	0.49	0.56	0.69
		PI	2.24	2.25	2.25	2.27	2.25	2.25	2.26	2.27	2.25	2.26	2.27	2.28	2.26	2.27	2.28	2.29
	91.4	TC	8.38	8.63	8.91	9.31	8.63	8.82	8.95	9.32	8.84	9.09	9.29	9.51	8.93	9.22	9.46	9.74
		S/T	0.92	1	1	1	0.69	0.84	0.98	1	0.5	0.6	0.7	0.87	0.41	0.49	0.57	0.7
		PI	2.38	2.39	2.41	2.43	2.39	2.40	2.41	2.43	2.40	2.42	2.42	2.43	2.41	2.42	2.43	2.44
95	TC	8.23	8.47	8.77	9.17	8.46	8.65	8.77	9.18	8.67	8.94	9.13	9.35	8.77	9.06	9.30	9.59	
	S/T	0.93	1	1	1	0.7	0.85	1	1	0.5	0.61	0.71	0.87	0.41	0.49	0.57	0.7	
	PI	2.49	2.50	2.51	2.53	2.50	2.51	2.52	2.53	2.51	2.52	2.53	2.54	2.51	2.53	2.54	2.55	2.55
100.4	TC	8.00	8.27	8.55	8.95	8.24	8.43	8.56	8.96	8.44	8.70	8.89	9.10	8.53	8.83	9.06	9.34	
	S/T	0.94	1	1	1	0.71	0.86	1	1	0.51	0.61	0.72	0.89	0.41	0.49	0.58	0.71	
	PI	2.63	2.65	2.66	2.68	2.65	2.66	2.66	2.68	2.66	2.67	2.68	2.69	2.66	2.68	2.69	2.70	2.70
104	TC	7.84	8.12	8.41	8.80	8.08	8.27	8.38	8.80	8.27	8.53	8.72	8.92	8.36	8.65	8.88	9.15	
	S/T	0.96	1	1	1	0.71	0.87	0.98	1	0.51	0.62	0.73	0.9	0.41	0.49	0.58	0.72	
	PI	2.74	2.76	2.77	2.79	2.76	2.76	2.77	2.79	2.76	2.78	2.79	2.80	2.77	2.79	2.80	2.82	2.82
114.8	TC	7.34	7.67	7.94	8.33	7.58	7.75	7.94	8.33	7.77	8.02	8.21	8.40	7.85	8.14	8.37	8.63	
	S/T	1	1	1	1	0.73	0.91	1	1	0.52	0.63	0.75	0.94	0.42	0.5	0.59	0.75	
	PI	3.07	3.10	3.12	3.14	3.09	3.10	3.12	3.14	3.10	3.12	3.14	3.14	3.11	3.13	3.14	3.16	3.16
118.4	TC	7.20	7.51	7.78	8.16	7.42	7.59	7.79	8.17	7.60	7.85	8.03	8.22	7.68	7.96	8.19	8.44	
	S/T	1	1	1	1	0.74	0.92	1	1	0.52	0.64	0.76	0.96	0.42	0.5	0.6	0.76	
	PI	3.17	3.21	3.23	3.26	3.20	3.21	3.23	3.26	3.21	3.24	3.26	3.27	3.22	3.25	3.27	3.29	3.29
122	TC	7.04	7.35	7.63	8.00	7.25	7.42	7.63	8.00	7.43	7.68	7.85	8.03	7.51	7.79	8.01	8.26	
	S/T	1	1	1	1	0.75	0.93	1	1	0.52	0.64	0.77	0.98	0.42	0.51	0.6	0.77	
	PI	3.30	3.33	3.35	3.38	3.32	3.33	3.35	3.38	3.33	3.35	3.37	3.39	3.34	3.36	3.38	3.41	3.41
125.6	TC	6.88	7.18	7.46	7.83	7.07	7.23	7.46	7.84	7.25	7.49	7.67	7.84	7.32	7.60	7.82	8.07	
	S/T	1	1	1	1	0.76	0.95	1	1	0.52	0.65	0.78	1	0.42	0.51	0.61	0.78	
	PI	3.42	3.46	3.48	3.52	3.44	3.46	3.48	3.52	3.46	3.48	3.50	3.52	3.47	3.50	3.52	3.53	3.53

TC: Total Cooling Capacity (kW)  
 S/T: Sensible Cooling Capacity Ratio  
 PI: Power Input (kW)





# Performance Data

## Model No.: 4MCDUA36TB000AA

		4MCDUA36TB000AA																
Air Flow CFM	Outdoor Air Temp DB(F)	59				62.6				67				69.8				
		ID WB(F)	77	80	84.2	73.4	77	80	84.2	73.4	77	80	84.2	73.4	77	80	84.2	
1330	78.8	TC	10.74	11.02	11.37	11.89	11.10	11.31	11.45	11.90	11.40	11.71	11.95	12.19	11.53	11.91	12.19	12.53
		S/T	0.91	1	1	1	0.7	0.84	0.97	1	0.51	0.61	0.71	0.86	0.42	0.49	0.57	0.7
		PI	2.52	2.53	2.53	2.54	2.53	2.53	2.53	2.54	2.53	2.53	2.54	2.54	2.53	2.54	2.54	2.54
	82.4	TC	10.55	10.84	11.20	11.71	10.90	11.12	11.25	11.72	11.19	11.52	11.75	12.00	11.32	11.70	12.00	12.33
		S/T	0.92	1	1	1	0.7	0.84	0.98	1	0.51	0.61	0.71	0.87	0.42	0.49	0.58	0.71
		PI	2.616	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.63
	86	TC	10.36	10.67	11.04	11.53	10.71	10.93	11.06	11.54	11.00	11.32	11.55	11.78	11.13	11.50	11.78	12.11
		S/T	0.93	1	1	1	0.71	0.85	0.99	1	0.51	0.61	0.72	0.88	0.42	0.5	0.58	0.71
		PI	2.70	2.70	2.70	2.71	2.70	2.70	2.70	2.71	2.70	2.71	2.71	2.71	2.70	2.71	2.71	2.71
	91.4	TC	10.08	10.40	10.75	11.25	10.41	10.62	10.75	11.25	10.69	11.01	11.23	11.47	10.80	11.18	11.47	11.78
		S/T	0.95	1	1	1	0.71	0.87	1	1	0.51	0.62	0.73	0.89	0.42	0.5	0.58	0.72
		PI	2.88	2.87	2.87	2.87	2.87	2.87	2.87	2.87	2.87	2.87	2.87	2.88	2.87	2.87	2.88	2.88
95	TC	9.87	10.21	10.57	11.07	10.21	10.41	10.58	11.07	10.49	10.80	11.03	11.26	10.60	10.97	11.26	11.59	
	S/T	0.96	1	1	1	0.72	0.87	1	1	0.51	0.62	0.73	0.9	0.42	0.5	0.59	0.73	
	PI	3.00	3.00	2.99	2.99	3.00	3.00	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.98	
100.4	TC	9.58	9.94	10.30	10.79	9.91	10.12	10.30	10.79	10.18	10.50	10.72	10.95	10.29	10.66	10.95	11.26	
	S/T	0.97	1	1	1	0.73	0.89	1	1	0.52	0.63	0.74	0.92	0.42	0.5	0.59	0.74	
	PI	3.19	3.19	3.18	3.17	3.19	3.18	3.18	3.17	3.18	3.18	3.17	3.17	3.18	3.17	3.17	3.17	
104	TC	9.39	9.76	10.10	10.59	9.71	9.90	10.11	10.59	9.96	10.27	10.50	10.71	10.07	10.43	10.71	11.03	
	S/T	0.98	1	1	1	0.73	0.9	1	1	0.52	0.63	0.75	0.93	0.42	0.5	0.6	0.74	
	PI	3.34	3.34	3.32	3.32	3.34	3.34	3.32	3.32	3.34	3.32	3.32	3.31	3.32	3.32	3.31	3.31	
114.8	TC	8.79	9.18	9.51	9.98	9.07	9.26	9.51	9.98	9.31	9.62	9.83	10.04	9.41	9.76	10.04	10.34	
	S/T	1	1	1	1	0.76	0.94	1	1	0.52	0.65	0.78	0.97	0.42	0.51	0.61	0.77	
	PI	3.96	3.94	3.83	3.80	3.94	3.84	3.83	3.80	3.83	3.82	3.82	3.80	3.83	3.82	3.80	3.79	
118.4	TC	8.58	8.97	9.31	9.78	8.85	9.03	9.31	9.78	9.09	9.38	9.60	9.80	9.18	9.54	9.80	10.10	
	S/T	1	1	1	1	0.76	0.95	1	1	0.53	0.65	0.79	0.99	0.42	0.51	0.61	0.78	
	PI	4.04	4.03	4.01	3.99	4.03	4.02	4.01	3.99	4.02	4.01	4.00	3.99	4.02	4.00	3.99	3.98	
122	TC	8.39	8.77	9.10	9.57	8.63	8.81	9.11	9.57	8.85	9.16	9.36	9.57	8.94	9.30	9.57	9.86	
	S/T	1	1	1	1	0.77	0.96	1	1	0.53	0.66	0.8	1	0.42	0.52	0.62	0.79	
	PI	4.25	4.24	4.22	4.20	4.24	4.23	4.22	4.20	4.23	4.22	4.21	4.20	4.23	4.21	4.20	4.17	
125.6	TC	8.19	8.55	8.88	9.34	8.40	8.57	8.89	9.34	8.62	8.91	9.13	9.31	8.71	9.05	9.32	9.61	
	S/T	1	1	1	1	0.78	0.98	1	1	0.53	0.67	0.81	0.97	0.42	0.52	0.63	0.8	
	PI	4.48	4.46	4.44	4.41	4.47	4.46	4.44	4.41	4.45	4.44	4.43	4.41	4.45	4.43	4.41	4.39	

TC: Total Cooling Capacity (kW)  
 S/T: Sensible Cooling Capacity Ratio  
 PI: Power Input (kW)



# Performance Data

## Model No.: 4MCDUA36TD000AA

Air Flow CFM		Outdoor Air Temp DB(F)		4MCDUA36TD000AA																
				59				62.6				67				69.8				
ID	WB(F)	ID	DB(F)	73.4	77	80	84.2	73.4	77	80	84.2	73.4	77	80	84.2	73.4	77	80	84.2	
1330	78.8	TC	10.55	10.81	11.18	11.69	10.91	11.13	11.26	11.69	11.2	11.53	11.76	12.01	11.34	11.72	12.01	12.35		
		S/T	0.91	1	1	1	0.69	0.83	0.96	1	0.51	0.6	0.7	0.85	0.41	0.49	0.57	0.69		
		PI	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33
	82.4	TC	10.35	10.63	10.99	11.5	10.7	10.92	11.06	11.51	10.99	11.32	11.56	11.8	11.13	11.51	11.8	12.13		
		S/T	0.92	1	1	1	0.7	0.84	0.97	1	0.51	0.61	0.71	0.86	0.42	0.49	0.57	0.7		
		PI	2.43	2.43	2.42	2.42	2.43	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42
	86	TC	10.15	10.45	10.81	11.31	10.5	10.72	10.85	11.31	10.79	11.11	11.34	11.58	10.92	11.29	11.57	11.9		
		S/T	0.93	1	1	1	0.7	0.85	0.98	1	0.51	0.61	0.71	0.87	0.42	0.49	0.58	0.71		
		PI	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53
	91.4	TC	9.84	10.16	10.52	11.01	10.18	10.39	10.52	11.02	10.46	10.77	11	11.24	10.58	10.95	11.24	11.66		
		S/T	0.94	1	1	1	0.71	0.86	1	1	0.51	0.62	0.72	0.89	0.42	0.5	0.58	0.72		
		PI	2.71	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
95	TC	9.62	9.97	10.32	10.82	9.96	10.18	10.33	10.83	10.24	10.56	10.79	11.03	10.36	10.73	11.03	11.35			
	S/T	0.96	1	1	1	0.72	0.87	1	1	0.51	0.62	0.73	0.9	0.42	0.5	0.59	0.72			
	PI	2.84	2.83	2.83	2.82	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83	2.83
100.4	TC	9.31	9.68	10.04	10.53	9.65	9.86	10.04	10.54	9.92	10.24	10.46	10.69	10.03	10.4	10.69	11.01			
	S/T	0.97	1	1	1	0.73	0.89	1	1	0.52	0.63	0.74	0.92	0.42	0.5	0.59	0.73			
	PI	3.03	3.03	3.02	3.01	3.03	3.03	3.02	3.01	3.03	3.02	3.02	3.01	3.02	3.02	3.02	3.01	3.01	3.01	3.01
104	TC	9.11	9.49	9.83	10.32	9.44	9.64	9.84	10.32	9.69	10	10.23	10.45	9.8	10.17	10.45	10.77			
	S/T	0.98	1	1	1	0.74	0.9	1	1	0.52	0.63	0.75	0.93	0.42	0.5	0.6	0.74			
	PI	3.18	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.16	3.16	3.16	3.16
114.8	TC	8.49	8.88	9.22	9.7	8.77	8.96	9.23	9.7	9.01	9.32	9.54	9.74	9.11	9.47	9.75	10.05			
	S/T	1	1	1	1	0.76	0.94	1	1	0.53	0.65	0.78	0.98	0.42	0.51	0.61	0.77			
	PI	3.67	3.66	3.65	3.65	3.66	3.66	3.65	3.65	3.66	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.64
118.4	TC	8.28	8.67	9.01	9.48	8.54	8.73	9.01	9.49	8.78	9.08	9.3	9.49	8.87	9.23	9.51	9.8			
	S/T	1	1	1	1	0.77	0.96	1	1	0.53	0.66	0.79	1	0.42	0.51	0.62	0.78			
	PI	3.85	3.84	3.84	3.83	3.85	3.84	3.84	3.83	3.84	3.84	3.84	3.83	3.84	3.83	3.83	3.82	3.82	3.82	3.82
122	TC	8.08	8.46	8.79	9.26	8.31	8.49	8.8	9.26	8.54	8.84	9.05	9.27	8.63	8.99	9.26	9.56			
	S/T	1	1	1	1	0.78	0.97	1	1	0.53	0.66	0.8	1	0.42	0.52	0.62	0.79			
	PI	4.04	4.04	4.03	4.02	4.04	4.04	4.04	4.03	4.02	4.03	4.02	4.02	4.03	4.03	4.02	4.01	4.01	4.01	4.01
125.6	TC	7.87	8.24	8.57	9.03	8.07	8.25	8.58	9.04	8.3	8.6	8.8	9.03	8.39	8.74	9.01	9.3			
	S/T	1	1	1	1	0.79	1	1	1	0.53	0.67	0.81	1	0.42	0.52	0.63	0.81			
	PI	4.25	4.24	4.23	4.22	4.24	4.24	4.23	4.22	4.24	4.23	4.23	4.22	4.24	4.23	4.22	4.22	4.22	4.22	4.22

TC: Total Cooling Capacity (kW)  
 S/T: Sensible Cooling Capacity Ratio  
 PI: Power Input (kW)

# Performance Data

## Model No.: 4MCDUA48TD000AA

		4MCDUA48TD000AA																					
Air Flow CFM	Outdoor Air Temp DB(F)	59				62.6				67				69.8									
		ID WB(F)	ID DB(F)	73.4	77	80	84.2	73.4	77	80	84.2	73.4	77	80	84.2	73.4	77	80	84.2				
1737	78.8	TC	13.52	14.06	14.54	15.21	13.85	14.2	14.54	15.22	14.08	14.55	14.91	15.32	14.18	14.7	15.12	15.63					
		S/T	1	1	1	1	0.73	0.9	1	1	0.51	0.63	0.75	0.94	0.41	0.5	0.59	0.74					
		PI	3.25	3.26	3.27	3.29	3.26	3.27	3.27	3.29	3.26	3.27	3.28	3.29	3.27	3.28	3.28	3.28	3.29				
	82.4	TC	13.3	13.85	14.33	14.99	13.62	13.97	14.33	15	13.85	14.32	14.68	15.08	13.94	14.46	14.88	15.39					
		S/T	1	1	1	1	0.73	0.91	1	1	0.51	0.63	0.75	0.95	0.42	0.5	0.59	0.75					
		PI	3.38	3.39	3.39	3.41	3.38	3.39	3.39	3.41	3.39	3.39	3.4	3.41	3.39	3.4	3.4	3.42					
	86	TC	13.09	13.63	14.1	14.75	13.4	13.74	14.1	14.76	13.62	14.08	14.43	14.82	13.7	14.21	14.63	15.13					
		S/T	1	1	1	1	0.74	0.92	1	1	0.51	0.63	0.76	0.96	0.42	0.5	0.59	0.75					
		PI	3.5	3.51	3.52	3.54	3.51	3.52	3.52	3.54	3.51	3.52	3.53	3.54	3.52	3.53	3.54	3.55					
	91.4	TC	12.76	13.29	13.75	14.4	13.03	13.37	13.75	14.4	13.24	13.7	14.06	14.44	13.33	13.83	14.24	14.74					
		S/T	1	1	1	1	0.74	0.93	1	1	0.52	0.64	0.76	0.98	0.42	0.5	0.6	0.76					
		PI	3.71	3.72	3.73	3.75	3.72	3.72	3.73	3.75	3.72	3.73	3.74	3.75	3.72	3.74	3.75	3.76					
95	TC	12.53	13.06	13.52	14.17	12.79	13.13	13.52	14.17	13	13.45	13.81	14.18	13.08	13.58	14	14.49						
	S/T	1	1	1	1	0.75	0.94	1	1	0.52	0.64	0.77	1	0.42	0.5	0.6	0.77						
	PI	3.85	3.87	3.88	3.89	3.86	3.87	3.88	3.89	3.86	3.87	3.88	3.89	3.87	3.88	3.88	3.89						
100.4	TC	12.2	12.72	13.17	13.8	12.43	12.77	13.18	13.81	12.63	13.08	13.44	13.81	12.71	13.2	13.61	14.09						
	S/T	1	1	1	1	0.76	0.96	1	1	0.52	0.64	0.78	0.99	0.42	0.51	0.61	0.78						
	PI	4.07	4.09	4.1	4.12	4.08	4.09	4.1	4.12	4.08	4.1	4.11	4.12	4.09	4.1	4.11	4.13						
104	TC	11.96	12.47	12.92	13.55	12.18	12.51	12.92	13.55	12.37	12.81	13.16	13.53	12.44	12.93	13.33	13.81						
	S/T	1	1	1	1	0.76	0.96	1	1	0.52	0.65	0.79	0.98	0.42	0.51	0.61	0.78						
	PI	4.23	4.25	4.26	4.28	4.24	4.25	4.26	4.28	4.25	4.26	4.27	4.28	4.25	4.26	4.28	4.29						
114.8	TC	11.24	11.73	12.16	12.76	11.41	11.73	12.16	12.77	11.58	12.01	12.35	12.76	11.64	12.12	12.5	12.97						
	S/T	1	1	1	1	0.78	1	1	1	0.53	0.66	0.81	0.99	0.42	0.51	0.62	0.81						
	PI	4.75	4.77	4.78	4.81	4.75	4.77	4.78	4.81	4.76	4.78	4.79	4.81	4.76	4.78	4.8	4.81						
118.4	TC	10.99	11.47	11.9	12.49	11.14	11.47	11.9	12.49	11.31	11.74	12.07	12.5	11.37	11.84	12.21	12.67						
	S/T	1	1	1	1	0.79	1	1	1	0.53	0.67	0.82	1	0.42	0.52	0.62	0.82						
	PI	4.93	4.95	4.97	5	4.94	4.95	4.97	5	4.95	4.97	4.98	5	4.95	4.97	4.99	5.01						
122	TC	10.73	11.2	11.63	12.22	10.87	11.21	11.63	12.22	11.02	11.45	11.78	12.22	11.08	11.55	11.93	12.38						
	S/T	1	1	1	1	0.79	1	1	1	0.53	0.67	0.82	1	0.42	0.52	0.63	0.83						
	PI	5.13	5.15	5.17	5.19	5.14	5.15	5.17	5.19	5.14	5.16	5.18	5.19	5.15	5.17	5.18	5.2						
125.6	TC	10.46	10.93	11.35	11.93	10.59	10.93	11.35	11.93	10.74	11.16	11.49	11.93	10.79	11.25	11.62	12.07						
	S/T	1	1	1	1	0.8	1	1	1	0.53	0.68	0.83	1	0.42	0.52	0.63	0.84						
	PI	5.33	5.36	5.38	5.4	5.34	5.36	5.38	5.4	5.35	5.37	5.38	5.4	5.35	5.37	5.39	5.41						
Air Flow CFM	Outdoor Air Temp DB(F)	ID WB(F)	ID DB(F)	59	62.6	67	69.8																
1438	78.8	TC	13.08	13.45	13.89	14.5	13.42	13.73	13.93	14.5	13.68	14.1	14.42	14.77	13.79	14.26	14.64	15.2					
		S/T	0.92	1	1	1	0.7	0.84	0.98	1	0.51	0.61	0.71	0.87	0.41	0.49	0.57	0.7					
		PI	3.24	3.25	3.26	3.27	3.25	3.26	3.26	3.27	3.26	3.26	3.27	3.28	3.26	3.27	3.27	3.28					
	82.4	TC	12.86	13.25	13.68	14.29	13.2	13.51	13.71	14.3	13.45	13.88	14.2	14.55	13.56	14.03	14.41	14.87					
		S/T	0.93	1	1	1	0.7	0.85	0.99	1	0.51	0.61	0.71	0.88	0.41	0.49	0.57	0.71					
		PI	3.37	3.38	3.38	3.39	3.37	3.38	3.38	3.39	3.38	3.38	3.39	3.39	3.38	3.38	3.39	3.4					
	86	TC	12.65	13.05	13.48	14.08	12.99	13.29	13.49	14.08	13.23	13.65	13.96	14.31	13.34	13.8	14.17	14.62					
		S/T	0.94	1	1	1	0.71	0.86	1	1	0.51	0.61	0.72	0.89	0.41	0.49	0.58	0.71					
		PI	3.49	3.5	3.51	3.52	3.5	3.5	3.51	3.52	3.5	3.51	3.52	3.53	3.51	3.52	3.53	3.54					
	91.4	TC	12.32	12.73	13.16	13.75	12.64	12.94	13.16	13.75	12.88	13.29	13.6	13.94	12.97	13.43	13.8	14.26					
		S/T	0.95	1	1	1	0.71	0.87	1	1	0.51	0.62	0.72	0.9	0.41	0.5	0.58	0.72					
		PI	3.69	3.71	3.72	3.73	3.7	3.71	3.72	3.73	3.71	3.72	3.73	3.74	3.71	3.73	3.74	3.75					
95	TC	12.09	12.52	12.94	13.53	12.4	12.71	12.94	13.54	12.63	13.05	13.36	13.71	12.73	13.19	13.56	14.01						
	S/T	0.96	1	1	1	0.72	0.87	1	1	0.51	0.62	0.73	0.91	0.42	0.5	0.58	0.72						
	PI	3.84	3.85	3.86	3.88	3.85	3.86	3.86	3.88	3.86	3.87	3.87	3.88	3.86	3.87	3.88	3.89						
100.4	TC	11.76	12.2	12.62	13.2	12.06	12.36	12.62	13.2	12.28	12.69	13	13.34	12.37	12.83	13.19	13.63						
	S/T	0.97	1	1	1	0.72	0.88	1	1	0.51	0.62	0.74	0.92	0.42	0.5	0.59	0.73						
	PI	4.06	4.07	4.08	4.1	4.07	4.08	4.08	4.1	4.08	4.09	4.09	4.1	4.08	4.09	4.1	4.11						
104	TC	11.53	11.97	12.38	12.96	11.82	12.12	12.39	12.96	12.03	12.43	12.74	13.08	12.12	12.56	12.93	13.36						
	S/T	0.98	1	1	1	0.73	0.89	1	1	0.51	0.63	0.74	0.93	0.42	0.5	0.59	0.74						
	PI	4.22	4.23	4.25	4.27	4.23	4.24	4.25	4.27	4.24	4.25	4.26	4.27	4.24	4.25	4.26	4.28						
114.8	TC	10.83	11.28	11.68	12.23	11.09	11.37	11.68	12.24	11.27	11.66	11.97	12.29	11.35	11.78	12.13	12.56						
	S/T	1	1	1	1	0.74	0.92	1	1	0.52	0.64	0.76	0.96	0.42	0.5	0.6	0.76						
	PI	4.73	4.75	4.77	4.79	4.74	4.75	4.77	4.79	4.75	4.76	4.78	4.79	4.75	4.77	4.78	4.8						
118.4	TC	10.59	11.04	11.43	11.98	10.83	11.11	11.43	11.98	11.01	11.4	11.7	12.02	11.08	11.51	11.86	12.28						
	S/T	1	1	1	1	0.75	0.93	1	1	0.52	0.64	0.77	0.97	0.42	0.51	0.6	0.76						
	PI	4.92	4.94	4.95	4.98	4.93	4.94	4.95	4.98	4.93	4.95	4.96	4.98	4.94	4.95	4.97	4.99						
122	TC	10.34	10.79	11.17	11.72	10.66	10.85	11.18	11.72	10.73	11.12	11.43	11.73	10.8	11.23	11.58	12						
	S/T	1	1	1	1	0.75	0.94	1	1	0.52	0.64	0.77	1	0.42	0.51	0.6	0.77						
	PI	5.11	5.13	5.15	5.17	5.12	5.14	5.15	5.17	5.13	5.15	5.16	5.17	5.13	5.15	5.17	5.18						
125.6	TC	10.09	10.53	10.91	11.45	10.29	10.57	10.91	11.45	10.46	10.84	11.14	11.45	10.52	10.94	11.29	11.7						
	S/T	1	1	1	1	0.76	0.95	1	1	0.52	0.65	0.78	1	0.42	0.51	0.61	0.78						



# Performance Data

## Model No.: 4MCDUA60TD000AA

Air Flow CFM		Outdoor Air Temp DB(F)		4MCDUA60TD000AA																																																																	
				59								62.6								67								69.8																																									
				ID	WB(F)	ID	DB(F)	73.4	77	80	84.2	73.4	77	80	84.2	73.4	77	80	84.2	73.4	77	80	84.2	73.4	77	80	84.2	73.4	77	80	84.2																																						
1937	78.8	TC	16.37	16.89	17.46	18.24	16.71	17.16	17.46	18.25	16.97	17.53	17.98	18.51	17.07	17.69	18.19	18.83	TC	16.37	16.89	17.46	18.24	16.71	17.16	17.46	18.25	16.97	17.53	17.98	18.51	17.07	17.69	18.19	18.83	S/T	0.92	1	1	1	0.69	0.84	1	1	0.5	0.6	0.7	0.87	0.41	0.48	0.56	0.69	PI	3.68	3.69	3.7	3.72	3.69	3.7	3.7	3.72	3.69	3.71	3.72	3.73	3.7	3.71	3.72	3.73
		TC	16.08	16.62	17.18	17.96	16.42	16.87	17.19	17.96	16.67	17.23	17.68	18.19	16.77	17.38	17.88	18.5	S/T	0.93	1	1	1	0.69	0.85	1	1	0.5	0.6	0.71	0.88	0.41	0.49	0.56	0.7	PI	3.85	3.86	3.88	3.9	3.86	3.87	3.88	3.9	3.86	3.88	3.89	3.91	3.87	3.88	3.9	3.92																	
		TC	15.79	16.33	16.89	17.65	16.12	16.56	16.89	17.66	16.35	16.91	17.36	17.87	16.45	17.06	17.55	18.18	S/T	0.94	1	1	1	0.7	0.85	1	1	0.5	0.6	0.71	0.89	0.41	0.49	0.57	0.7	PI	4.02	4.04	4.06	4.09	4.03	4.05	4.06	4.09	4.04	4.06	4.08	4.09	4.05	4.07	4.08	4.1																	
	82.4	TC	15.33	15.89	16.44	17.19	15.65	16.09	16.47	17.2	15.87	16.43	16.87	17.37	15.97	16.57	17.06	17.68	S/T	0.95	1	1	1	0.71	0.87	0.98	1	0.5	0.61	0.72	0.9	0.41	0.49	0.57	0.71	PI	4.3	4.33	4.35	4.38	4.32	4.33	4.35	4.38	4.33	4.35	4.36	4.38	4.33	4.35	4.37	4.4																	
		TC	15.03	15.6	16.15	16.9	15.34	15.78	16.15	16.91	15.56	16.12	16.56	17.06	15.65	16.25	16.75	17.36	S/T	0.96	1	1	1	0.71	0.87	1	1	0.5	0.61	0.72	0.91	0.41	0.49	0.57	0.72	PI	4.49	4.51	4.53	4.56	4.5	4.52	4.53	4.56	4.51	4.53	4.55	4.57	4.52	4.54	4.56	4.59																	
		TC	14.56	15.16	15.7	16.44	14.88	15.32	15.7	16.44	15.09	15.63	16.07	16.56	15.18	15.76	16.24	16.85	S/T	0.99	1	1	1	0.72	0.89	1	1	0.51	0.62	0.73	0.92	0.41	0.49	0.58	0.72	PI	4.77	4.8	4.83	4.87	4.79	4.81	4.83	4.87	4.8	4.82	4.85	4.87	4.8	4.83	4.86	4.89																	
	104	TC	14.25	14.85	15.38	16.11	14.55	14.98	15.38	16.12	14.75	15.29	15.72	16.22	14.83	15.41	15.89	16.5	S/T	1	1	1	1	0.72	0.9	1	1	0.51	0.62	0.74	0.94	0.41	0.49	0.58	0.73	PI	4.98	5.01	5.04	5.08	4.99	5.02	5.04	5.08	5.01	5.04	5.06	5.09	5.01	5.04	5.07	5.1																	
		TC	13.32	13.9	14.41	15.13	13.56	13.98	14.41	15.13	13.74	14.26	14.69	15.17	13.81	14.37	14.85	15.43	S/T	1	1	1	1	0.74	0.93	1	1	0.51	0.63	0.76	0.97	0.41	0.5	0.59	0.75	PI	5.6	5.65	5.69	5.74	5.62	5.66	5.69	5.74	5.64	5.68	5.71	5.75	5.65	5.69	5.72	5.77																	
		TC	13	13.57	14.07	14.78	13.22	13.64	14.08	14.78	13.39	13.91	14.33	14.78	13.46	14.02	14.48	15.05	S/T	1	1	1	1	0.74	0.94	1	1	0.51	0.63	0.76	1	0.42	0.5	0.59	0.76	PI	5.83	5.88	5.92	5.98	5.85	5.88	5.92	5.98	5.86	5.91	5.94	5.98	5.87	5.92	5.96	6.01																	
	114.8	TC	12.67	13.24	13.73	14.43	12.87	13.28	13.74	14.43	13.04	13.55	13.97	14.44	13.1	13.65	14.12	14.68	S/T	1	1	1	1	0.75	0.95	1	1	0.52	0.64	0.77	1	0.42	0.5	0.6	0.77	PI	6.06	6.11	6.16	6.22	6.08	6.12	6.16	6.22	6.09	6.14	6.18	6.22	6.1	6.15	6.19	6.24																	
		TC	12.38	12.89	13.38	14.07	12.56	12.92	13.38	14.07	12.72	13.18	13.59	14.07	12.76	13.28	13.73	14.3	S/T	1	1	1	1	0.76	0.97	1	1	0.52	0.64	0.78	1	0.42	0.5	0.6	0.78	PI	6.26	6.35	6.4	6.47	6.28	6.36	6.4	6.47	6.3	6.38	6.42	6.47	6.32	6.39	6.44	6.49																	
		TC	12.08	12.6	13.1	13.8	12.2	12.6	13.1	13.8	12.5	13.0	13.5	14.0	12.6	13.1	13.6	14.1	S/T	1	1	1	1	0.77	0.98	1	1	0.53	0.65	0.79	1	0.43	0.5	0.6	0.79	PI	6.49	6.59	6.64	6.71	6.50	6.58	6.62	6.69	6.41	6.49	6.53	6.59	6.44	6.51	6.56	6.61																	
1654	78.8	TC	16	16.4	16.93	17.67	16.35	16.77	17.07	17.68	16.63	17.15	17.58	18.06	16.75	17.33	17.8	18.39	TC	16	16.4	16.93	17.67	16.35	16.77	17.07	17.68	16.63	17.15	17.58	18.06	16.75	17.33	17.8	18.39	S/T	0.89	1	1	1	0.68	0.81	0.94	1	0.5	0.59	0.68	0.83	0.41	0.48	0.55	0.67	PI	3.67	3.68	3.69	3.71	3.68	3.69	3.7	3.71	3.68	3.7	3.71	3.72	3.69	3.7	3.71	3.72
		TC	15.71	16.13	16.67	17.4	16.07	16.48	16.77	17.41	16.33	16.86	17.29	17.77	16.45	17.03	17.5	18.08	S/T	0.89	1	1	1	0.68	0.82	0.95	1	0.5	0.59	0.69	0.84	0.41	0.48	0.56	0.68	PI	3.84	3.85	3.86	3.88	3.85	3.86	3.87	3.88	3.86	3.87	3.88	3.89	3.86	3.87	3.88	3.9																	
		TC	15.44	15.87	16.39	17.12	15.78	16.19	16.48	17.12	16.04	16.56	16.97	17.45	16.15	16.72	17.18	17.76	S/T	0.9	1	1	1	0.68	0.82	0.96	1	0.5	0.59	0.69	0.85	0.41	0.48	0.56	0.68	PI	4.01	4.03	4.04	4.07	4.02	4.04	4.05	4.07	4.03	4.05	4.06	4.08	4.04	4.06	4.07	4.09																	
	82.4	TC	15	15.45	15.96	16.68	15.33	15.73	16.02	16.68	15.57	16.09	16.5	16.97	15.68	16.24	16.77	17.28	S/T	0.91	1	1	1	0.69	0.83	0.97	1	0.5	0.6	0.7	0.86	0.41	0.49	0.56	0.69	PI	4.29	4.31	4.33	4.36	4.3	4.32	4.33	4.36	4.31	4.33	4.35	4.37	4.32	4.34	4.36	4.38																	
		TC	14.7	15.17	15.68	16.4	15.02	15.43	15.72	16.41	15.26	15.78	16.2	16.67	15.36	15.93	16.39	16.97	S/T	0.92	1	1	1	0.69	0.84	0.98	1	0.5	0.6	0.7	0.87	0.41	0.49	0.56	0.69	PI	4.48	4.5	4.52	4.54	4.49	4.51	4.52	4.54	4.5	4.52	4.54	4.55	4.5	4.53	4.54	4.57																	
		TC	14.28	14.75	15.26	15.96	14.57	14.98	15.26	15.96	14.8	15.31	15.72	16.18	14.89	15.46	15.91	16.47	S/T	0.94	1	1	1	0.7	0.85	1	1	0.5	0.6	0.71	0.88	0.41	0.49	0.57	0.7	PI	4.76	4.78	4.81	4.84	4.77	4.79	4.81	4.84	4.78	4.81	4.83	4.85	4.79	4.82	4.84	4.87																	
	104	TC	13.95	14.44	14.95	15.64	14.26	14.65	14.95	15.65	14.47	14.98	15.38	15.84	14.56	15.11	15.56	16.13	S/T	0.95	1	1	1	0.7	0.86	1	1	0.5	0.61	0.71	0.89	0.41	0.49	0.57	0.71	PI	4.96	4.99	5.02	5.06	4.98	5	5.02	5.06	4.99	5.02	5.04	5.07	5	5.03	5.05	5.08																	
		TC	13.01	13.54	14.02	14.7	13.29	13.68	14.03	14.7	13.49	13.98	14.37	14.82	13.56	14.1	14.54	15.09	S/T	0.98	1	1	1	0.72	0.89	1	1	0.51	0.62	0.73	0.92	0.41	0.49	0.58	0.72	PI	5.58	5.62	5.66	5.71	5.6	5.63	5.66	5.71	5.62	5.66	5.69	5.72	5.62	5.67	5.7	5.74																	
		TC	12.68	13.23	13.7	14.37	12.96	13.35	13.71	14.37	13.15	13.64	14.02	14.47	13.22	13.75	14.18	14.73	S/T	1	1	1	1	0.72	0.9	1	1	0.51	0.62	0.74	0.93	0.41	0.5	0.58	0.73	PI	5.8	5.85	5.89	5.95	5.82	5.86	5.89	5.95	5.84	5.88	5.92	5.96	5.85	5.89	5.93	5.98																	
	114.8	TC	12.36	12.9	13.37	14.04	12.62	13	13.38	14.04	12.8	13.28	13.67	14.11	12.87	13.39	13.83	14.37	S/T	1	1	1	1	0.73	0.91	1	1	0.52	0.64	0.75	0.95	0.42	0.5	0.59	0.74	PI	6.02	6.08	6.12	6.18	6.05	6.09	6.12	6.18	6.07	6.12	6.15	6.19	6.08	6.12	6.16	6.21																	
		TC	12.08	12.62	13.03	13.69	12.32	12.7	13.04	13.69	12.49	12.92	13.31	13.74	12.56	13.02	13.46	13.99	S/T	1	1	1	1	0.73	0.92	1	1	0.51	0.63	0.75	0.96	0.41	0.5	0.59	0.75	PI	6.23	6.28	6.37	6.43	6.25	6.29	6.37	6.43	6.27	6.36	6.4	6.44	6.28	6.37	6.41	6.46																	
		TC	11.77	12.3	12.8	13.5	12.1	12.5	12.9	13.6	12.4	12.9	13.3	13.7	12.5	13.0	13.4	13.9	S/T	1	1	1	1	0.74	0.93	1	1	0.52	0.64	0.76	0.97	0.42	0.5	0.59	0.76	PI	6.46	6.51	6.59	6.66	6.47	6.51	6.59	6.66	6.48	6.57	6.61	6.65	6.49	6.58	6.62	6.67																	
1386	78.8	TC	15.56	15.81	16.3	17	15.94	16.31	16.57	17	16.24	16.72	17.1	17.54	16.37	16.91	17.35	17.89	TC	15.56	15.81	16.3	17	15.94	16.31	16.57	17	16.24	16.72	17.1	17.54	16.37	16.91	17.35	17.89	S/T	0.85	1	1	1	0.66	0.78	0.89	1	0.49	0.58	0.66	0.8	0.41	0.48	0.55																		

# The Coefficient of Capacity Change

Model	4MCDUA18TB000AA		Pipe Length (m)			
	4TTKUA18TB000DA		5	15	20	25
<b>Cooling</b>			5	15	20	25
Height difference H (m)	Indoor Upper than Outdoor	15			0.897	0.872
		10		0.935	0.910	0.886
		5	0.995	0.945	0.920	0.895
		0	<b>1.000</b>	<b>0.950</b>	<b>0.924</b>	<b>0.899</b>
	Outdoor Upper than Indoor	-5	0.999	0.949	0.923	0.898
		-10		0.948	0.922	0.897
		-15			0.921	0.896

Model	4MCDUA24TB000AA		Pipe Length (m)			
	4TTKUA24TB000DA		5	15	20	25
<b>Cooling</b>			5	15	20	25
Height difference H (m)	Indoor Upper than Outdoor	15			0.866	0.832
		10		0.915	0.879	0.844
		5	0.995	0.924	0.888	0.853
		0	<b>1.000</b>	<b>0.929</b>	<b>0.893</b>	<b>0.857</b>
	Outdoor Upper than Indoor	-5	0.999	0.928	0.892	0.856
		-10		0.927	0.891	0.855
		-15			0.890	0.854

Model	4MCDUA30TB000AA		Pipe Length (m)			
	4TTKUA30TB000DA		5	15	20	25
<b>Cooling</b>			5	15	20	25
Height difference H (m)	Indoor Upper than Outdoor	15			0.833	0.788
		10		0.892	0.846	0.800
		5	0.995	0.901	0.855	0.808
		0	<b>1.000</b>	<b>0.906</b>	<b>0.859</b>	<b>0.812</b>
	Outdoor Upper than Indoor	-5	0.999	0.905	0.858	0.811
		-10		0.904	0.857	0.810
		-15			0.856	0.810

# The Coefficient of Capacity Change

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Model		4MCDUA36TB000AA	Pipe Length (m)			
		4TTKUA36TB000DA	5	15	20	30
		Cooling	5	15	20	30
Height difference H (m)	Indoor Upper than Outdoor	20			0.829	0.734
		10		0.889	0.841	0.746
		5	0.995	0.898	0.850	0.753
		0	<b>1.000</b>	<b>0.903</b>	<b>0.854</b>	<b>0.757</b>
	Outdoor Upper than Indoor	-5	0.999	0.902	0.853	0.756
		-10		0.901	0.852	0.755
		-20			0.852	0.755

Model		4MCDUA36TD000AA	Pipe Length (m)			
		4TTKUA36TD000DA	5	15	20	30
		Cooling	5	15	20	30
Height difference H (m)	Indoor Upper than Outdoor	20			0.826	0.731
		10		0.888	0.839	0.742
		5	0.995	0.897	0.848	0.749
		0	<b>1.000</b>	<b>0.901</b>	<b>0.852</b>	<b>0.753</b>
	Outdoor Upper than Indoor	-5	0.999	0.900	0.851	0.752
		-10		0.899	0.850	0.751
		-20			0.849	0.751

# The Coefficient of Capacity Change

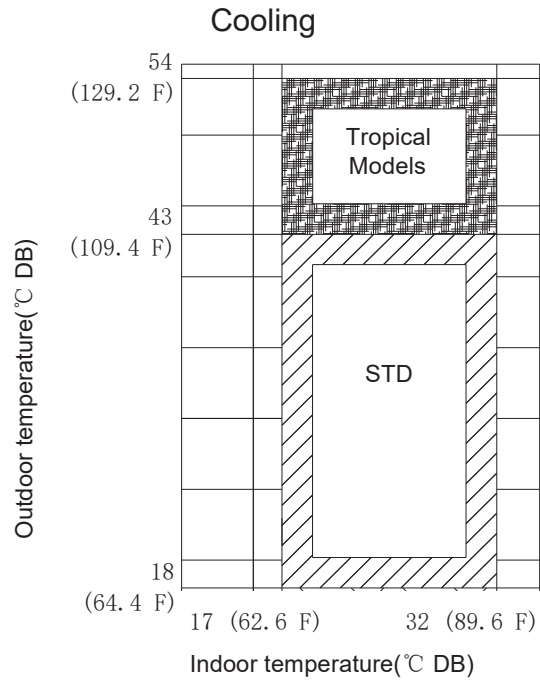
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Model		4MCDUA48TD000AA		4TTKUA48TD000DA		Pipe Length (m)						
		Cooling						5	10	20	30	40
Height difference H (m)	Indoor Upper than Outdoor	30	/	/	/	0.754	0.673	0.593				
		20	/	/	0.847	0.765	0.684	0.602				
		10	/	0.943	0.860	0.777	0.694	0.611				
		5	0.995	0.953	0.869	0.785	0.701	0.617				
		0	<b>1.000</b>	<b>0.958</b>	<b>0.873</b>	<b>0.789</b>	<b>0.704</b>	<b>0.620</b>				
	Outdoor Upper than Indoor	-5	0.999	0.957	0.872	0.788	0.704	0.619				
		-10	/	0.956	0.872	0.787	0.703	0.619				
		-20	/	/	0.871	0.787	0.702	0.618				
		-30	/	/	/	0.786	0.702	0.618				

Model		4MCDUA60TD000AA		4TTKUA60TD000DA		Pipe Length (m)						
		Cooling						5	10	20	30	40
Height difference H (m)	Indoor Upper than Outdoor	30	/	/	/	0.762	0.684	0.607				
		20	/	/	0.852	0.774	0.695	0.616				
		10	/	0.945	0.865	0.785	0.705	0.626				
		5	0.995	0.955	0.874	0.793	0.713	0.632				
		0	<b>1.000</b>	<b>0.959</b>	<b>0.878</b>	<b>0.797</b>	<b>0.716</b>	<b>0.635</b>				
	Outdoor Upper than Indoor	-5	0.999	0.958	0.877	0.796	0.715	0.634				
		-10	/	0.958	0.877	0.796	0.715	0.634				
		-20	/	/	0.876	0.795	0.714	0.633				
		-30	/	/	/	0.794	0.713	0.632				

# Operation Range

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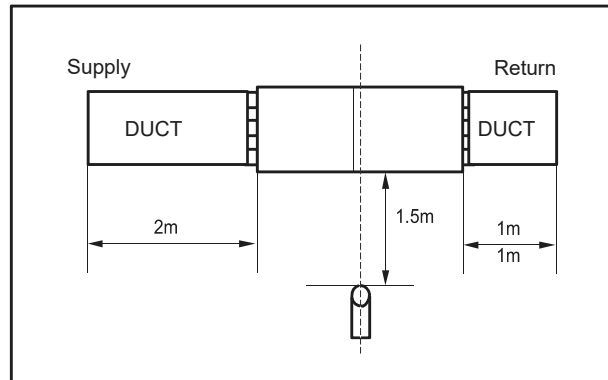




# Sound Levels

## Indoor Unit NC Curve

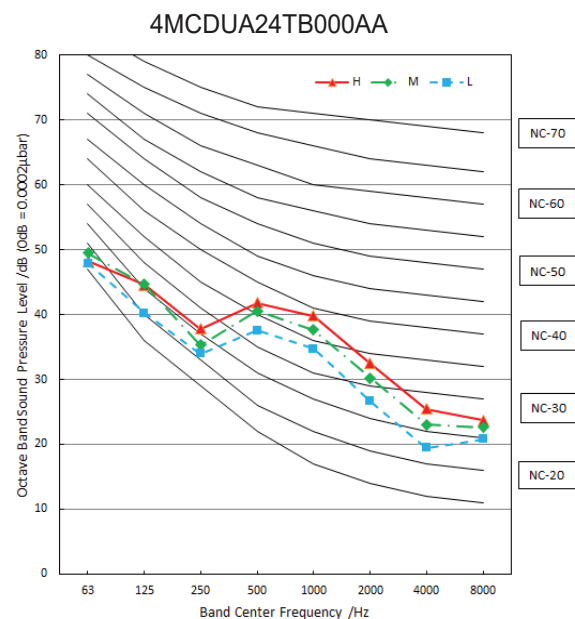
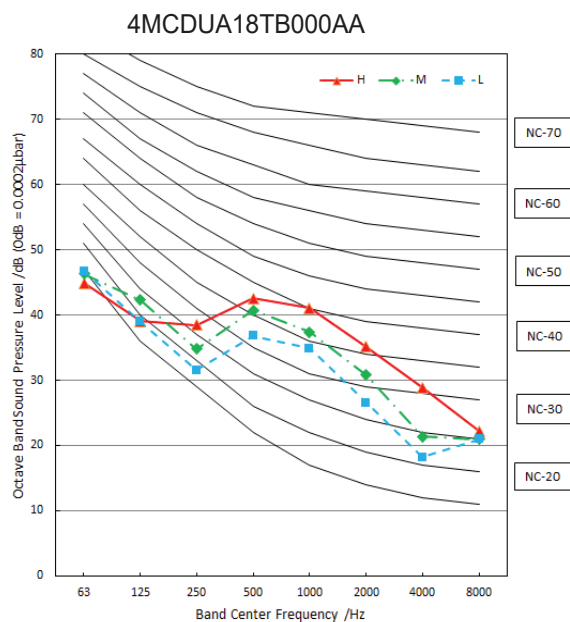
### Overall



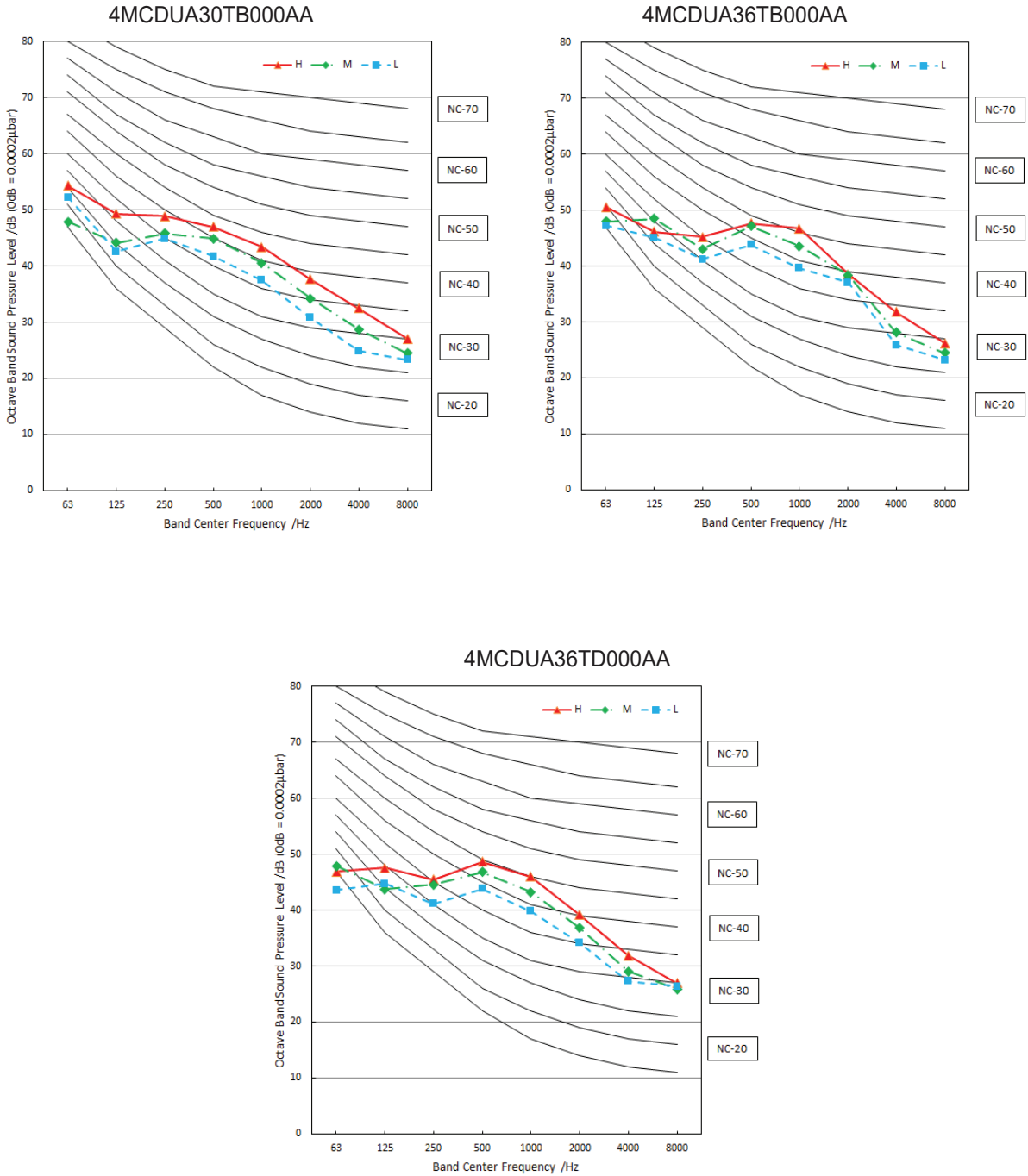
**Notes:**

- Sound measured at 1.5m away from the center of the unit.
- Data is valid at free field condition
- Data is valid at nominal operation condition
- Reference acoustic pressure  $OdB = 20\mu Pa$
- Sound level will vary depending on a range of factors such as the construction -(acoustic absorption coefficient) of particular room in which the equipment is installed.
- The operating conditions are assumed to be standard.

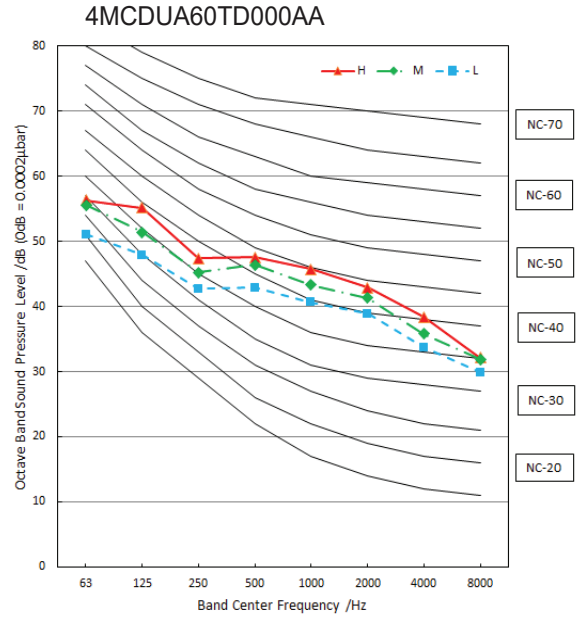
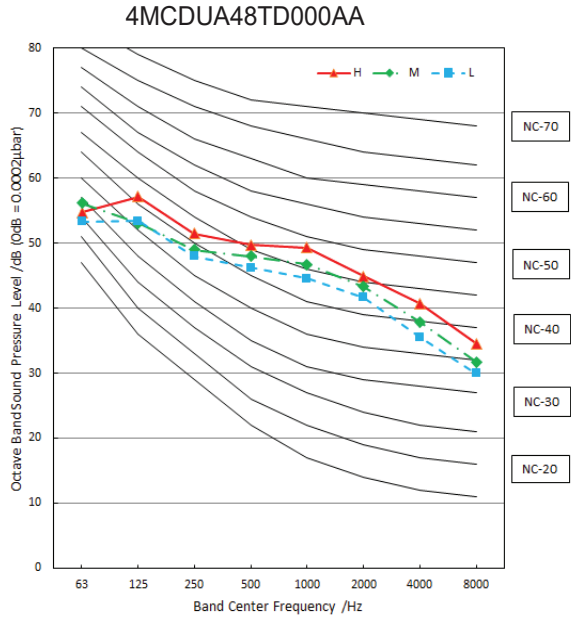
### Cooling Only



# Sound Levels

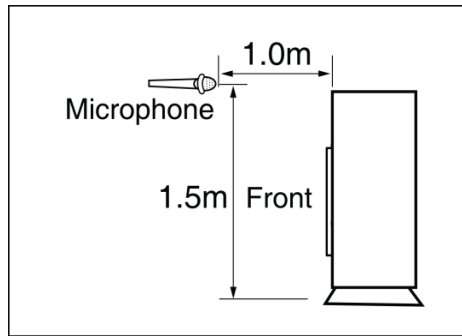


# Sound Levels



# Sound Levels

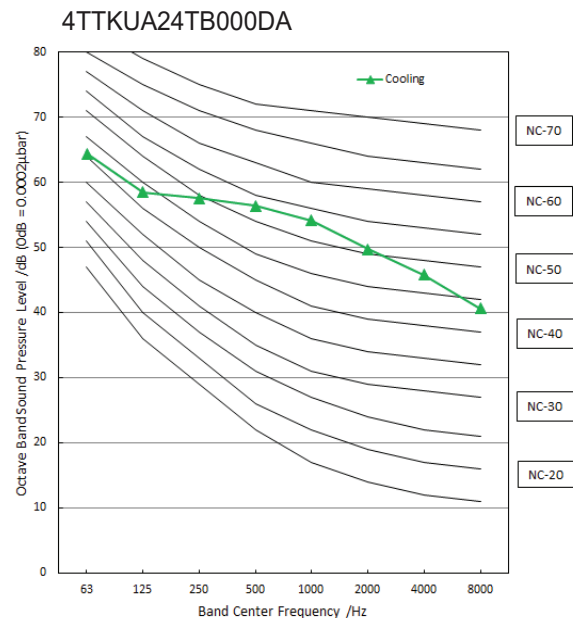
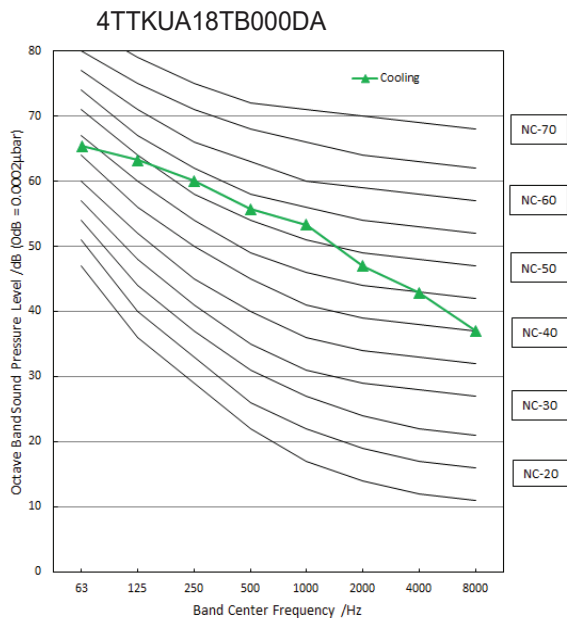
## Outdoor Unit NC Curve



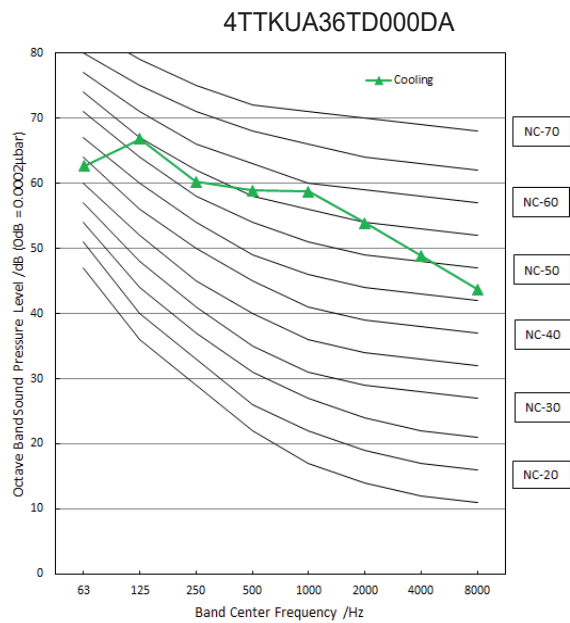
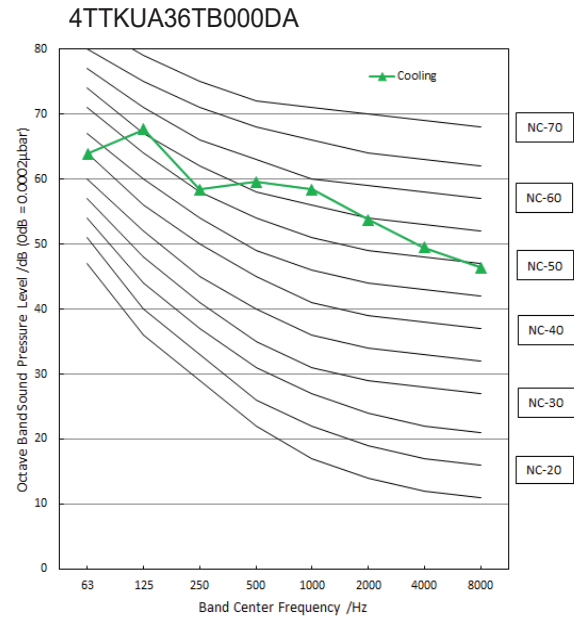
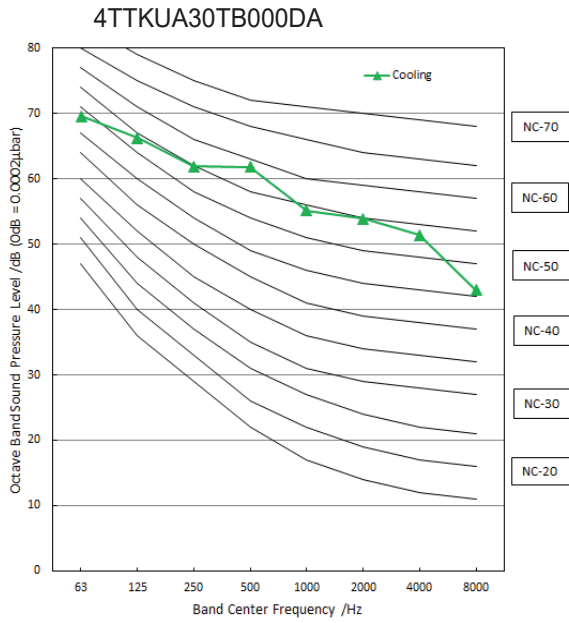
**Notes:**

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

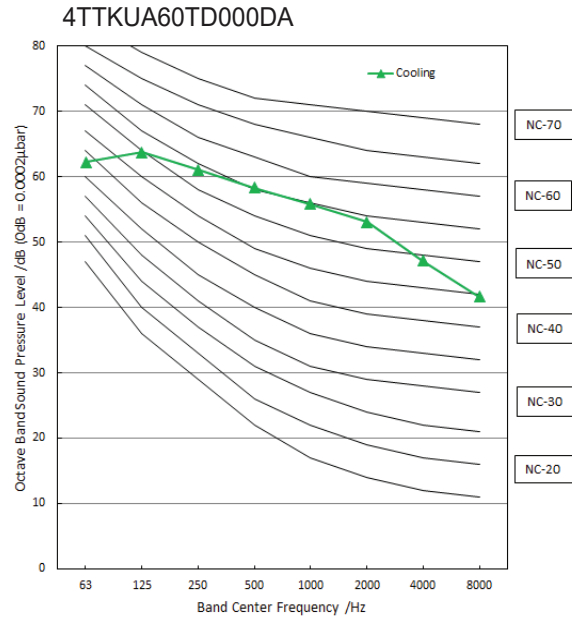
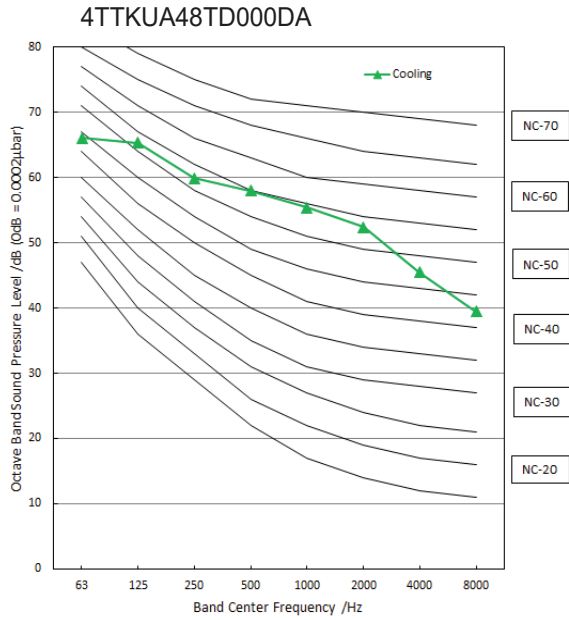
### Cooling Only



# Sound Levels



# Sound Levels



# Sound Levels

## Indoor Unit

Model	Indoor Unit			Power Supply			IFM	
	Phase	Hz	Voltage	MCA	MOP	MFA	kW	FLA
4MCDUA18TB000AA	1	50	220~240	2.00	15	10	0.16	1.50
4MCDUA24TB000AA				2.00	15	10	0.16	1.50
4MCDUA30TB000AA				3.75	15	10	0.30	3.00
4MCDUA36TB000AA				3.75	15	10	0.30	3.00
4MCDUA36TD000AA	3	50	380~420	3.75	15	10	0.30	3.00
4MCDUA48TD000AA				5.20	15	10	0.56	4.10
4MCDUA60TD000AA				5.20	15	10	0.56	4.10

## Outdoor Unit

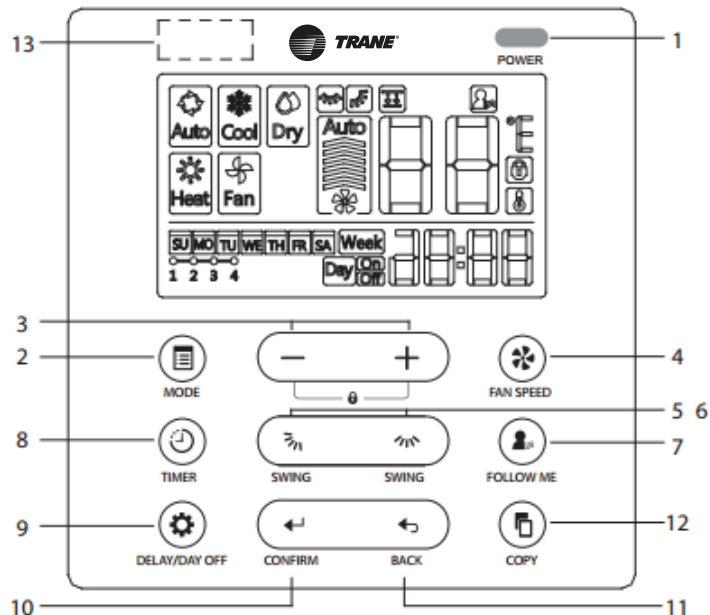
Model	Indoor Units			Power Supply			Compressor		OFM		
	Phase	Hz	Voltage	MCA	MOP	MFA	MSC	RLA	Qty	kW	FLA
4TTKUA18TB000DA	1	50	220~240	10.0	25	20	-	7.10	1	0.075	0.62
4TTKUA24TB000DA				13.0	32	25	-	9.40	1	0.600	0.59
4TTKUA30TB000DA				18.0	32	25	-	13.57	1	0.120	0.61
4TTKUA36TB000DA				22.0	50	40	-	15.90	2	0.098	0.73
4TTKUA36TD000DA	3	50	380~420	10.5	25	20	-	6.70	2	0.098	0.73
4TTKUA48TD000DA				11.0	45	35	-	7.30	2	0.090	0.62
4TTKUA60TD000DA				15.0	45	35	-	10.90	2	0.090	0.62

**Note:**

- MCA: Minimum Circuit Amperes (A)
- MOP: Maximum rating over current protective device
- MFA: Maximum Fuse Amperes (A)
- MSC: Maximum Starting Current
- RLA: Rated Load Amperes (A)
- IFM: Indoor Fan Motor
- OFM: Outdoor Fan Motor
- FLA: Full Load Amperes (A)
- Either a circuit breaker or a fuse is acceptable

# Functions of Controller

## LCD Wired Remote Controller KJR-120C1



### 1. POWER button

Turn on or turn off the unit

### 2. MODE button

Used to select the operation mode: Auto / Cooling / Drying / Heating / Fan;  
Hold to activate the operation of auto-lifting panel when off

### 3. Adjust button

To set temperature, time and timer; set up or down the auto-lifting panel

### 4. FAN SPEED button

To select the fan speed.

### 5. 6 Vertical and horizontal swing Button

Press to active vertical swing, hold for horizontal swing

### 7. FOLLOW ME button

To active the follow me function while in normal

### 8. TIMER button

To set timer on and timer off time of one day

### 9. DELAY/DAY OFF button

To set 1 to 2 hours delay off for each day or a whole day off in a weekly timer schedule

### 10. CONFIRM button

To confirm an setting or call up the superior menu

### 11. BACK/TURBO button

Back to previous operation or superior menu  
To active turbo mode while in normal operation

### 12. COPY button

To copy timer setting of one day to another in weekly schedule setting;

### Feature:

1. Constant airflow control
2. Malfunction display
3. LED display
4. Room temperature display
5. Weekly timer:

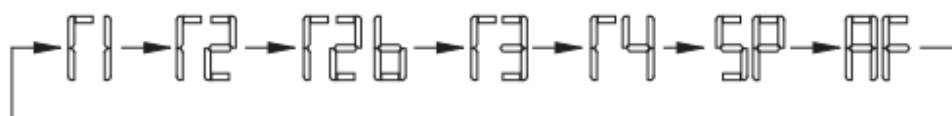


# Installation

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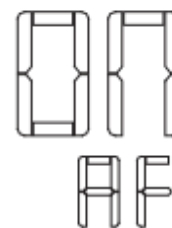
## Using the wire controller to set external static pressure

1. You can use the unit's automatic airflow adjustment function to set external static pressure.
  2. Automatic airflow adjustment is the volume of blow-off air that has been automatically adjusted to the quantity rated.
- Make sure the test run is done with a dry coil. If the coil is not dry, run the unit for 2 hours in FAN ONLY mode to dry the coil.
  - Check that both power supply wiring and duct installation have been completed. Check that any closing dampers are open. Check that the air filter is properly attached to the air suction side passage of the unit
  - If there is more than one air inlet and outlet, adjust the dampers so that the airflow rate of each air inlet and outlet conforms with the designed airflow rate. Make sure the unit is in FAN ONLY mode. Press and set the airflow adjustment button on the remote control to change the airflow rate from H or L.
  - Set the parameters for automatic airflow adjustment. When the air conditioning unit is off, perform the following steps:
    - Press "COPY".
    - Press "+" or "-" to select the AF.



- Press "CONFIRM". The air conditioning unit will then start the fan for airflow automatic adjustment.

ON will flash during when the fan is on during automatic airflow adjustment.



# Installation

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## CAUTION

- **DO NOT** adjust the dampers when automatic airflow adjustment is active. After 3 to 6 minutes, the air conditioning unit stops operating once automatic airflow adjustment has finished.



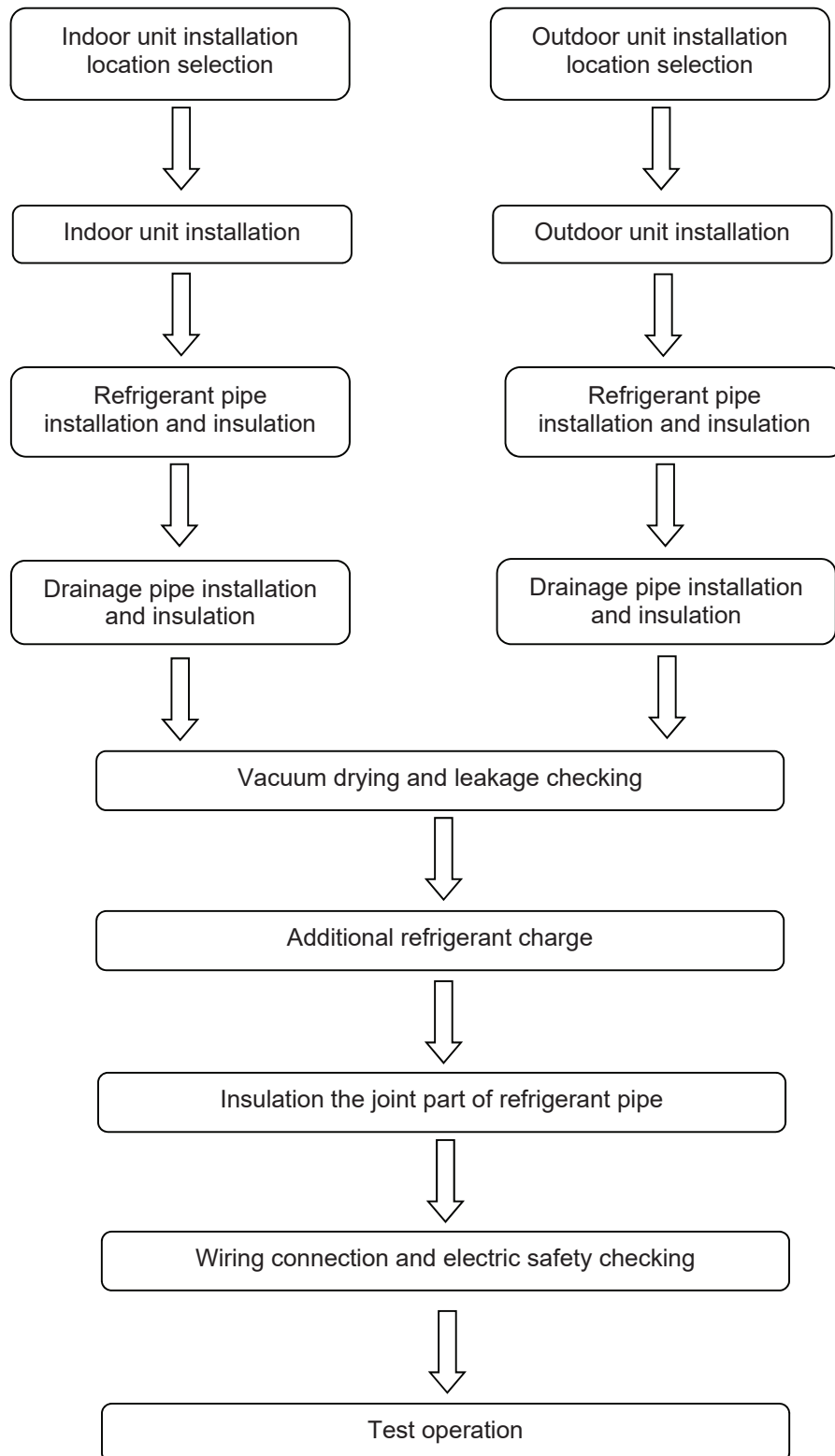
## CAUTION

- If there is no change after airflow adjustment in the ventilation paths, be sure to reset automatic airflow adjustment.
- If there is no change to ventilation paths after airflow adjustment, contact your dealer, especially if this occurs after testing the outdoor unit or if the unit has been moved to a different location.
- Do not use automatic airflow adjustment with remote control, if you are using booster fans, outdoor air processing unit, or a HRV via duct.
- If the ventilation paths have been changed, reset airflow automatic adjustment as described from step 3 onwards.

# Installation

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## 1. Installation Procedure



# Installation

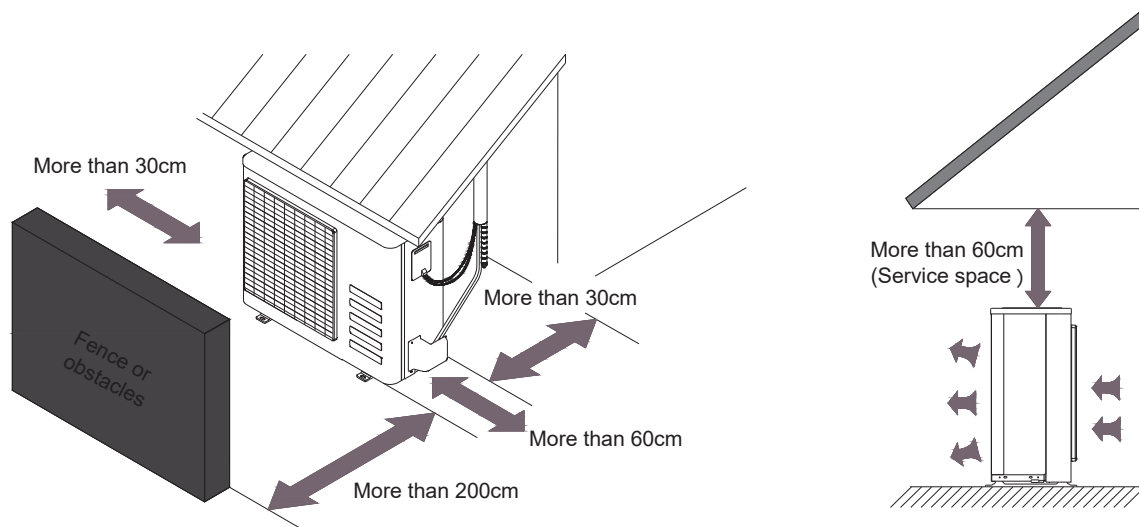
## 2 Location selection

### 2.1 Indoor unit location selection

- The place shall easily support the indoor unit's weight.
- The place can ensure the indoor unit installation and inspection.
- The place can ensure the indoor unit horizontally installed.
- The place shall allow easy water drainage.
- The place shall easily connect with the outdoor unit.
- The place where air circulation in the room should be good.
- There should not be any heat source or steam near the unit.
- There should not be any oil gas near the unit
- There should not be any corrosive gas near the unit
- There should not be any salty air near the unit
- There should not be strong electromagnetic wave near the unit
- There should not be inflammable materials or gas near the unit
- There should not be strong voltage vibration.

### 2.2 Outdoor unit location selection

- The place shall easily support the outdoor unit's weight.
- Locate the outdoor unit as close to indoor unit as possible
- The piping length and height drop cannot exceed the allowable value.
- The place where the noise, vibration and outlet air do not disturb the neighbors.
- There is enough room for installation and maintenance.
- The air outlet and the air inlet are not impeded, and not face the strong wind.
- It is easy to install the connecting pipes and cables.
- There is no danger of fire due to leakage of inflammable gas.
- It should be a dry and well ventilation place
- The support should be flat and horizontal
- Do not install the outdoor unit in a dirty or severely polluted place, so as to avoid blockage of the heat exchanger in the outdoor unit.
- If is built over the unit to prevent direct sunlight, rain exposure, direct strong wind, snow and other scraps accumulation, make sure that heat radiation from the condenser is not restricted.

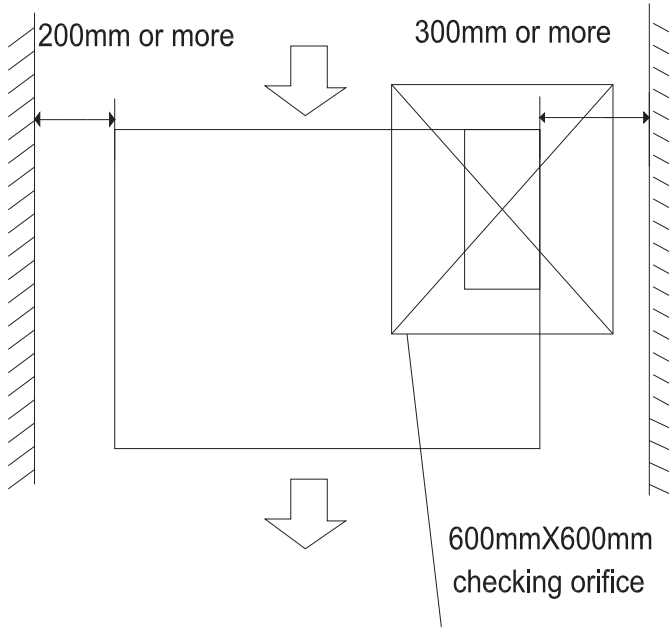


# Installation

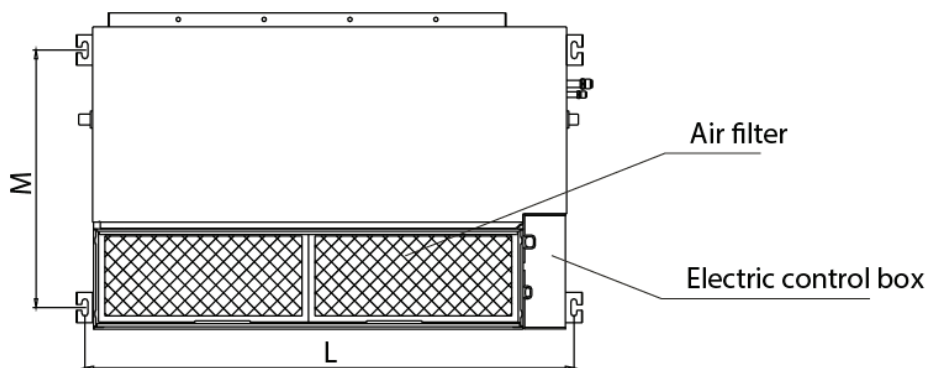
## 3. Indoor unit installation

### 3.1 Duct indoor unit installation

#### 3.1.1 Service space for indoor unit



#### 3.1.2 Bolt pitch



Capacity(KBtu)	Size of outline dimension mounted plug	
	L	M
18	920	508
24	1140	598
30	1400	598
36	1240	697

#### 3.1.3 Hang indoor unit

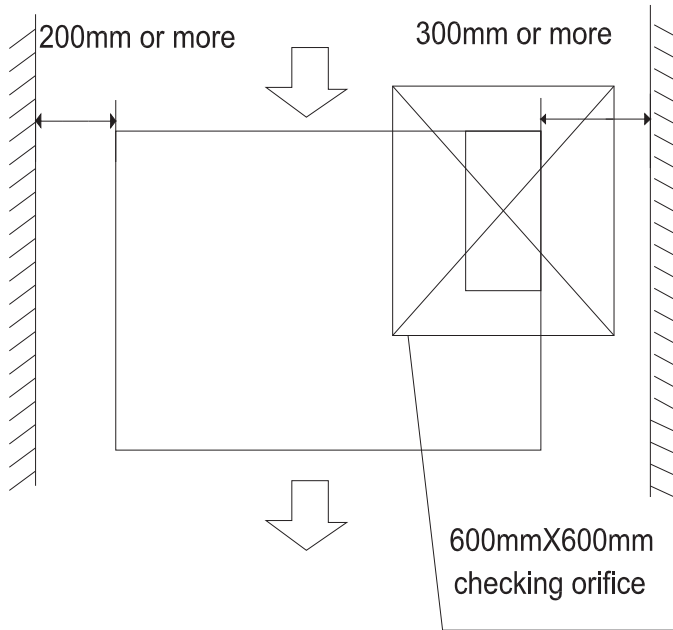
1. Please refer to the upper data to locate the four positioning screw bolt hole on the ceiling. Be sure to mark the areas where ceiling hook holes will be drilled.

# Installation

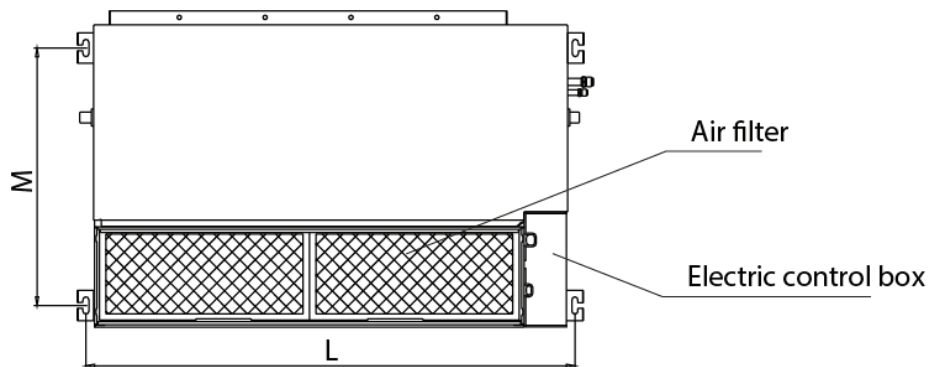
## 3. Indoor unit installation

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Capacity(KBtu)	Size of outline dimension mounted plug	
	L	M
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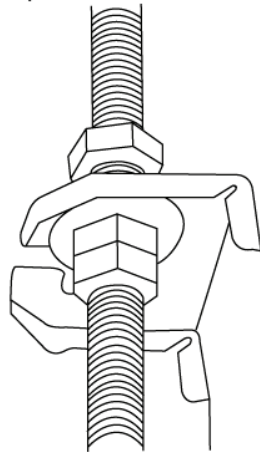
#### 3.1.3 Hang indoor unit

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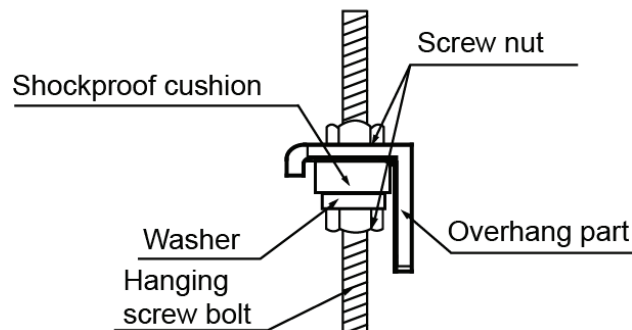
# Installation

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2. Carry out the pipe and line operation in the ceiling after finishing the installation of the main body. While choosing where to start the operation, determine the direction of the pipes to be drawn out. Especially in case there is a ceiling, position the refrigerant pipes, drain pipes, indoor & outdoor lines to the connection places before hanging up the machine.
3. The installation of hanging screw bolts.
  - Cut off the roof beam.
  - Strengthen the place that has been cut off, and consolidate the roof beam.
4. After the selection of installation location position the refrigerant pipes, drain pipes, indoor & outdoor wires to the connection places before hanging up the machine.
5. Drill 4 holes 10cm (4") deep at the ceiling hook positions in the internal ceiling. Be sure to hold the drill at a 90° angle to the ceiling.
6. Secure the bolt using the included washers and nuts.
7. Install the four suspension bolts.
8. Mount the indoor unit. You will need two people to lift and secure it. Insert suspension bolts into the unit's hanging holes. Fasten them using the included washers and nuts



9. Overhang the indoor unit onto the hanging screw bolts with block. Position the indoor unit in a flat level by using the level indicator, unless it may cause leakage.

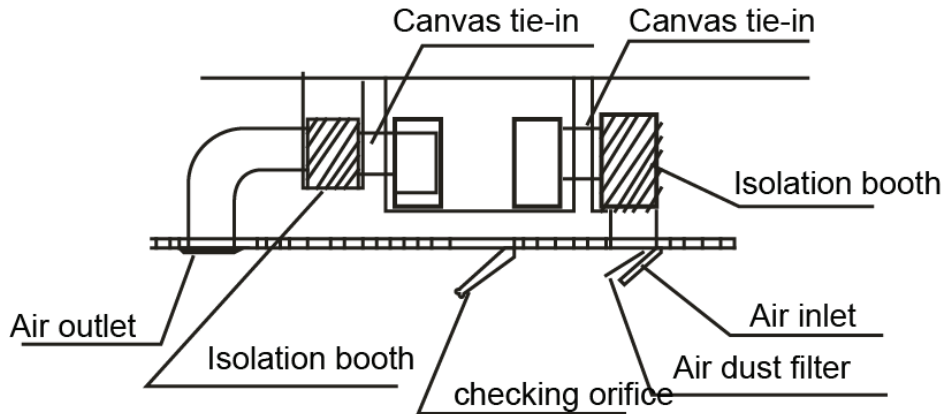


Note: Confirm the minimum drain tilt is 1/100 or more.

### 3.1.4 Duct and accessories installation

1. Install the filter(optional) according to air inlet size.
2. Install the canvas tie-in between the body and duct.
3. Air inlet and air outlet duct should be apart far enough to avoid air passage short-circuit.
4. Recommended duct connection.

# Installation



5. Please refer to the following static pressure to install..

Model(KBtu/h)	Static Pressure(Pa)
18	0-80
24	0-100
30~36	0-120

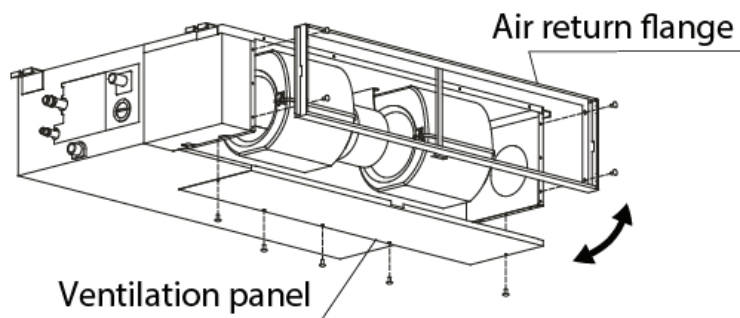
Change the fan motor static pressure corresponding to external duct static pressure.

**NOTE:**

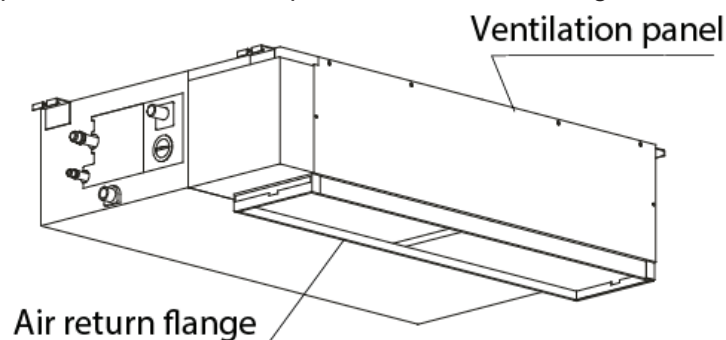
1. Do not put the connecting duct weight on the indoor unit.
2. When connecting duct, use inflammable canvas tie-in to prevent vibrating.
3. Insulation foam should be wrapped outside the duct to avoid condensate and internal duct underlayer shall be added to reduce the noise for special requirement.

**3.2.7 Adjust the air inlet direction(From rear side to under-side.)**

- ① Take off ventilation panel and flange,



- ② Change the mounting positions of ventilation panel and air return flange .

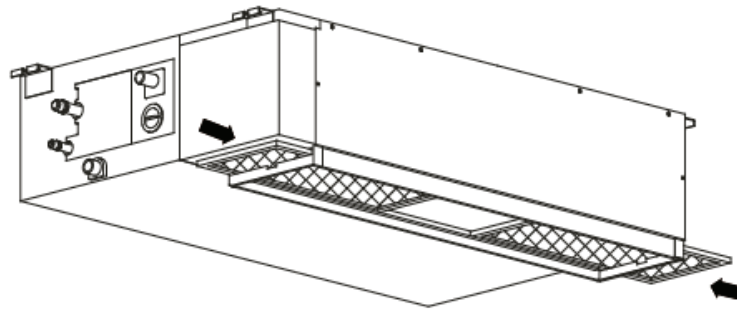




# Installation

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③ When install the filter mesh, please plug it into flange as shown in figure below.



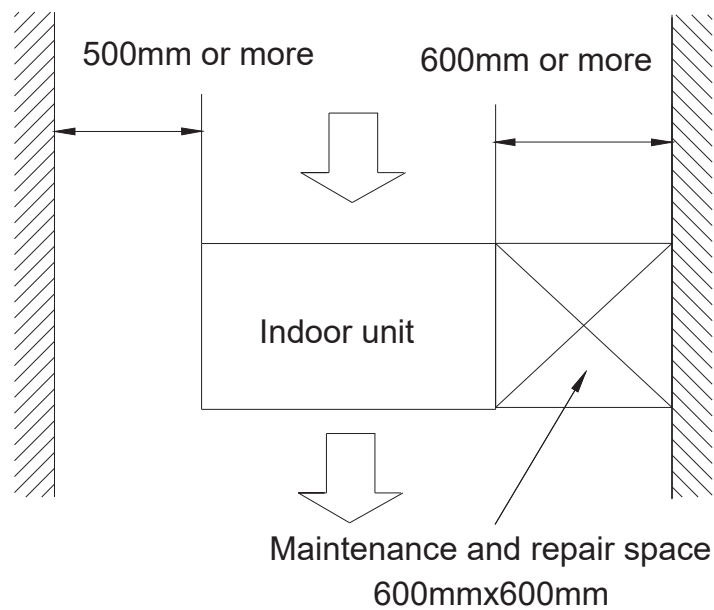
**NOTE:**

All the figures in this manual are for explanation purpose only. They may be slightly different from the air conditioner you purchased.

The actual unit shall prevail.

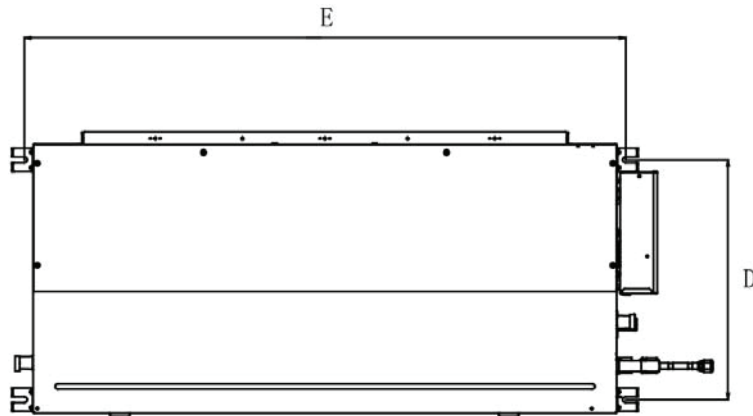
### 3.2 HESP duct indoor unit installation

#### 3.2.1 Service space for indoor unit



# Installation

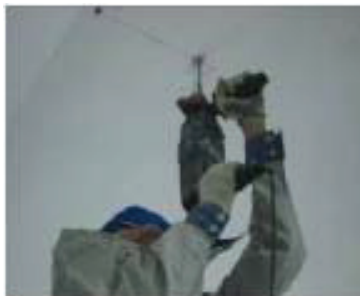
## 3.2.2 Bolt pitch



Capacity (KBtu)	Size of mounted lug	
	D	E
48~60	495	1236

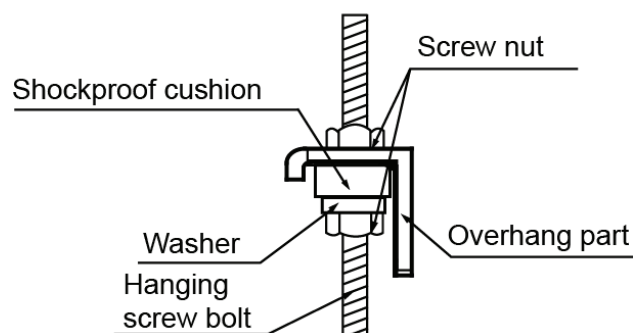
## 3.2.2 Install the pendant bolt

Select the position of installation hooks according to the hook holes positions showed in upper picture. Drill four holes of  $\varnothing 12\text{mm}$ , 45~50mm deep at the selected positions on the ceiling. Then embed the expansible hooks (fittings).



## 3.2.3 Install the main body

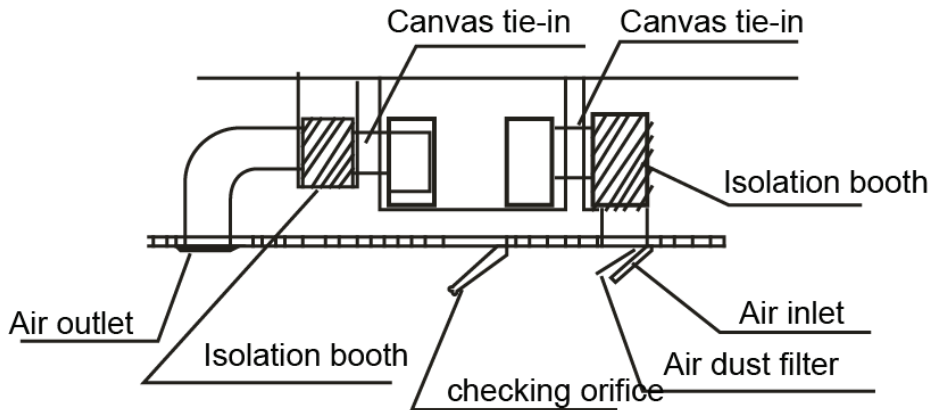
Make the 4 suspender through the 4 hanger of the main body to suspend it. Adjust the hexangular nuts on the four installation hooks evenly, to ensure the balance of the body. Use a leveling instrument to make sure the levelness of the main body is within  $\pm 1^\circ$ .



# Installation

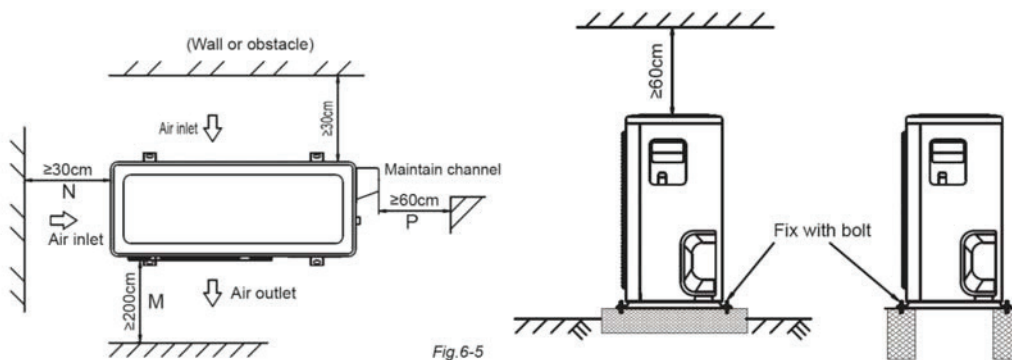
### 3.2.4 Install the air duct

Please design the air duct as below recommended picture

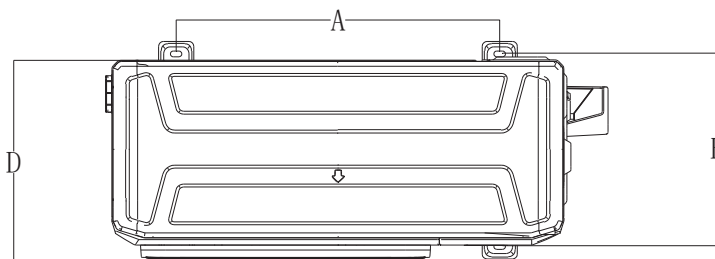


## 4. Outdoor unit installation (Side Discharge Unit)

### 4.1 Service space for outdoor unit



### 4.2 Bolt pitch



For the value of A,B and D, please refer to the dimension part.

### 4.3 Install the Unit

Since the gravity center of the unit is not at its physical center, so please be careful when lifting it with a sling.

Never hold the inlet of the outdoor unit to prevent it from deforming.

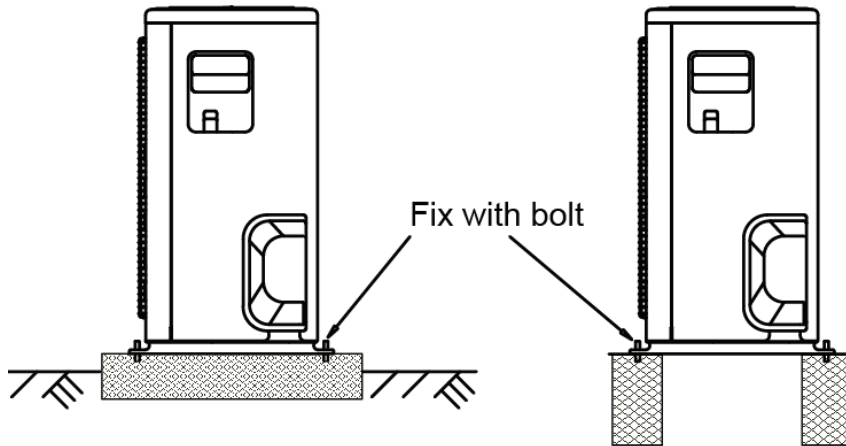
Do not touch the fan with hands or other objects.

Do not lean it more than 45°, and do not lay it sidelong.

Make concrete foundation according to the specifications of the outdoor units.

# Installation

Fasten the feet of this unit with bolts firmly to prevent it from collapsing in case of earthquake or strong wind.



## 5. Refrigerant pipe installation

### 5.1 Maximum pipe length and height drop

Considering the allowable pipe length and height drop to decide the installation position. Make sure the distance and height drop between indoor and outdoor unit not exceeded the data in the following table.

Model	Max. Length	Max. Elevation
18,000Btu/h-24,000Btu/h	25m	15m
30,000Btu/h-36,000Btu/h	30m	20m
>36,000Btu/h	50m	30m

### 5.2 The procedure of connecting pipes

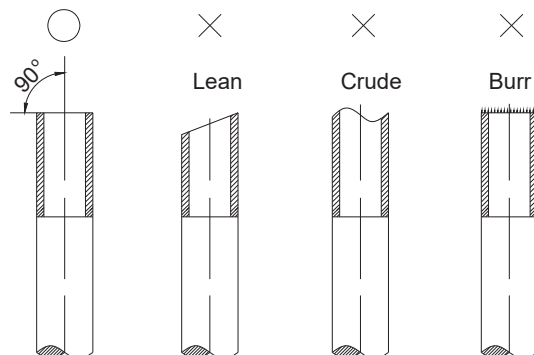
5.2.1 Choose the pipe size according to the specification table.

5.2.2 Confirm the cross way of the pipes.

5.2.3 Measure the necessary pipe length.

5.2.4 Cut the selected pipe with pipe cutter

- Make the section flat and smooth.



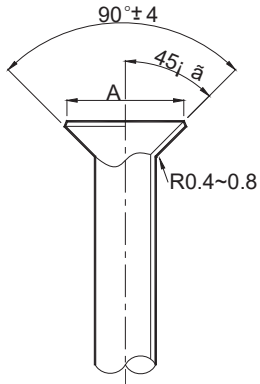
### 5.2.5 Insulate the copper pipe

- Before test operation, the joint parts should not be heat insulated.

### 5.2.6 Flare the pipe

- Insert a flare nut into the pipe before flaring the pipe
- According to the following table to flare the pipe

# Installation

Pipe diameter	Flare dimension A (mm)		Flare shape
	Min	Max	
1/4" (6.35)	8.3	8.7	
3/8" (9.52)	12.0	12.4	
1/2" (12.7)	15.4	15.8	
5/8" (15.9)	18.6	19.1	
3/4" (19)	22.9	23.3	

- After flared the pipe, the opening part must be seal by end cover or adhesive tape to avoid duct or exogenous impurity come into the pipe.

### 5.2.7 Drill holes if the pipes need to pass the wall.

### 5.2.8 According to the field condition to bend the pipes so that it can pass the wall smoothly.

### 5.2.9 Bind and wrap the wire together with the insulated pipe if necessary.

### 5.2.10 Set the wall conduit

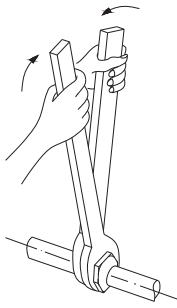
### 5.2.11 Set the supporter for the pipe.

### 5.2.12 Locate the pipe and fix it by supporter

- For horizontal refrigerant pipe, the distance between supporters should not be exceed 1m.
- For vertical refrigerant pipe, the distance between supporters should not be exceed 1.5m.

### 5.2.13 Connect the pipe to indoor unit and outdoor unit by using two spanners.

- Be sure to use two spanners and proper torque to fasten the nut, too large torque will damage the bellmouthing, and too small torque may cause leakage. Refer the following table for different pipe connection.

Pipe Diameter	Torque		Sketch map
	(kgf.cm)	(N.cm)	
1/4" (6.35)	144~176	1420~1720	
3/8" (9.52)	333~407	3270~3990	
1/2" (12.7)	504~616	4950~6030	
5/8" (15.9)	630~770	6180~7540	
3/4" (19)	990~1210	9270~11860	

# Installation

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## 6. Drainage pipe installation

Install the drainage pipe as shown below and take measures against condensation. Improperly installation could lead to leakage and eventually wet furniture and belongings.

### 6.1 Installation principle

- Ensure at least 1/100 slope of the drainage pipe
- Adopt suitable pipe diameter
- Adopt nearby condensate water discharge

### 6.2 Key points of drainage water pipe installation

#### 6.2.1 Considering the pipeline route and elevation

- Before installing condensate water pipeline, determine its route and elevation to avoid intersection with other pipelines and ensure slope is straight.

#### 6.2.2 Drainage pipe selection

- The drainage pipe diameter shall not small than the drain hose of indoor unit
- According to the water flowrate and drainage pipe slope to choose the suitable pipe, the water flowrate is decided by the capacity of indoor unit.

#### Relationship between water flowrate and capacity of indoor unit

Capacity (x1000Btu)	Water flowrate (l/h)
12	2.4
18	4
24	6
30	7
36	8
42	10
48	12
60	14

According to the above table to calculate the total water flowrate for the confluence pipe selection.

#### For horizontal drainage pipe (The following table is for reference)

PVC pipe	Reference value of inner diameter of pipe (mm)	Allowable maximum water flowrate (l/h)		Remark
		Slope 1/50	Slope 1/100	
PVC25	20	39	27	For branch pipe
PVC32	25	70	50	
PVC40	31	125	88	
PVC50	40	247	175	Could be used for confluence pipe
PVC63	51	473	334	

Attention: Adopt PVC40 or bigger pipe to be the main pipe.

#### For Vertical drainage pipe (The following table is for reference)

PVC pipe	Reference value of inner diameter of pipe (mm)	Allowable maximum water flowrate (l/h)	Remark
PVC25	20	220	For branch pipe
PVC32	25	410	
PVC40	31	730	
PVC50	40	1440	Could be used for confluence pipe
PVC63	51	2760	
PVC75	67	5710	
PVC90	77	8280	

# Installation

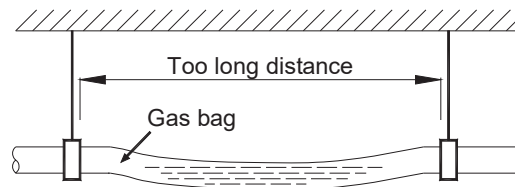
Attention: Adopt PVC40 or bigger pipe to be the main pipe.

## 6.2.3 Individual design of drainage pipe system

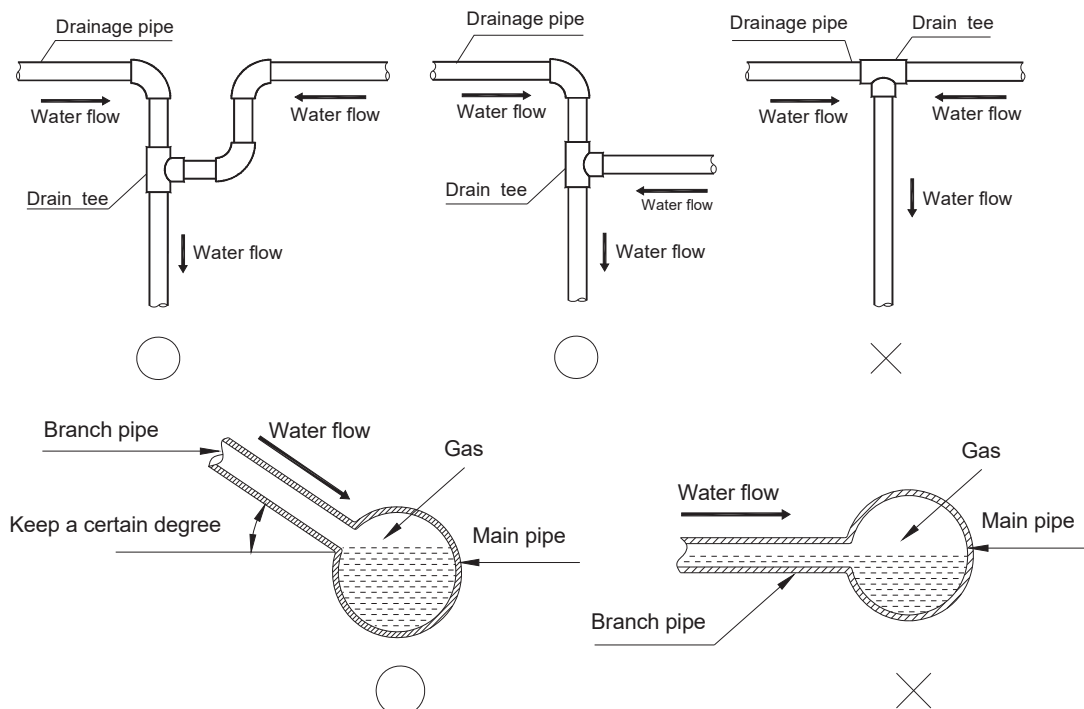
- The drainage pipe of air conditioner shall be installed separately with other sewage pipe, rainwater pipe and drainage pipe in building.
- The drainage pipe of the indoor unit with water pump should be apart from the one without water pump.

## 6.2.4 Supporter gap of drainage pipe

- In general, the supporter gap of the drainage pipe horizontal pipe and vertical pipe is respectively 1m~1.5m and 1.5m~2.0m.
- Each vertical pipe shall be equipped with not less than two hangers.
- Overlarge hanger gap for horizontal pipe shall create bending, thus leading to air block.



## 6.2.5 The horizontal pipe layout should avoid converse flow or bad flow



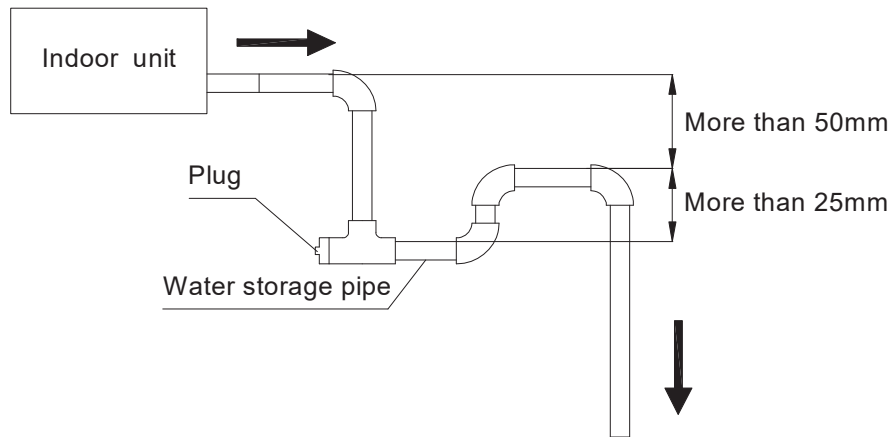
- The correct installation will not cause converse water flow and the slope of the branch pipes can be adjusted freely
- The false installation will cause converse water flow and the slope of the branch pipe can not be adjusted.

## 6.2.6 Water storage pipe setting

- If the indoor unit has high extra static pressure and without water pump to elevate the condensate water, such as high extra static pressure duct unit, the water storage pipe should be set to avoid converse flow or blow water phenomena.

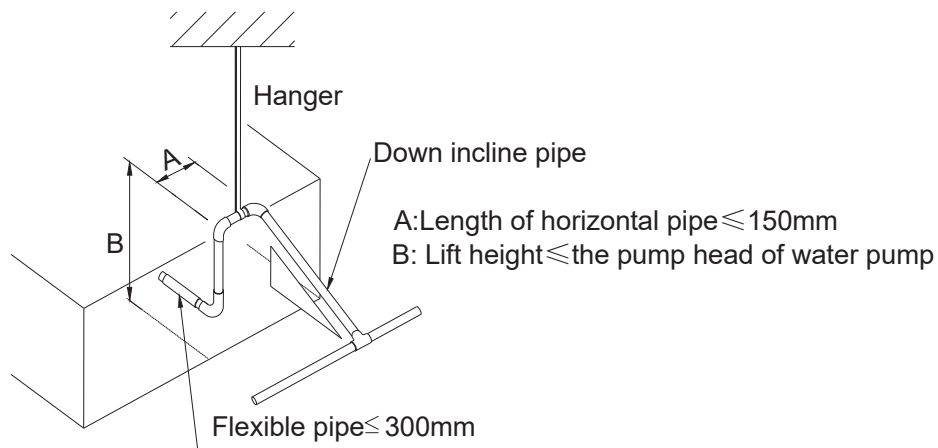
# Installation

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## 6.2.7 Lifting pipe setting of indoor unit with water pump

- The length of lifting pipe should not exceed the pump head of indoor unit water pump.  
Pump head of big four way cassette: 750mm  
Pump head of compact four way cassette: 500mm
- The drainage pipe should be set down inclined after the lifting pipe immediately to avoid wrong operation of water level switch.
- Refer the following picture for installation reference.

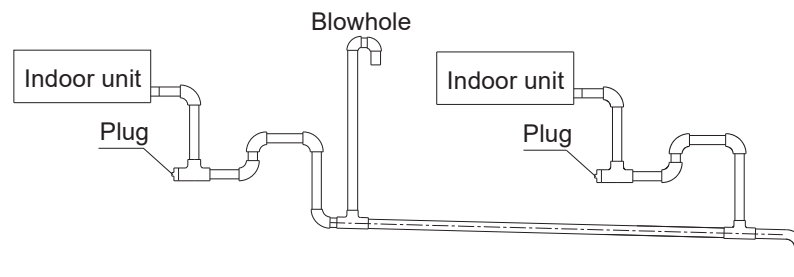


## 6.2.8 Blowhole setting

- For the concentrated drainage pipe system, there should design a blowhole at the highest point of main pipe to ensure the condensate water discharge smoothly.
- The air outlet shall face down to prevent dirt entering pipe.
- Each indoor unit of the system should be installed it.
- The installation should be considering the convenience for future cleaning.



# Installation



**6.2.9 The end of drainage pipe shall not contact with ground directly.**

## 6.3 Drainage test

### 6.3.1 Water leakage test

After finishing the construction of drainage pipe system, fill the pipe with water and keep it for 24 hours to check whether there is leakage at joint section.

### 6.3.2 Water discharge test

1. Natural drainage mode(the indoor unit with outdoor drainage pump)
 

Infuse above 600ml water through water test hole slowly into the water collector, observe whether the water can discharge through the transparent hard pipe at drainage outlet.
2. Pump drainage mode
  - 2.1 Disconnect the plug of water level switch, remove the cover of water test hole and slowly infuse about 2000ml water through the water test hole, be sure that the water will not touch the motor of drainage pump.
  - 2.2 Power on and let the air conditioner operate for cooling. Check operation status of drainage pump, and then connect the plug of water level switch, check the operation sound of water pump and observe whether the water can discharge through the transparent hard pipe at drainage outlet. (In light of the length of drainage pipe, water shall be discharged about 1 minute delayed)
  - 2.3 Stop the operation of air conditioner, power off the power supply and put the cover of water test hole back to the original place.
    - a. After stopped the air conditioner 3 minutes, check whether there is anything abnormal. If drainage pipes have not been distributed properly, over back-flow water shall cause the flashing of alarm indicator at remote-controlled receiving board and even water shall run over the water collector.
    - b. Continuously infusing water until water level alarmed, check whether the drainage pump could discharge water at once. If water level does not decline under warning water level 3 minutes later, it shall cause shutdown of unit. When this situation happens, the normal startup only can be recovered by turning down power supply and eliminating accumulated water.

**Note:** Drain plug at the main water-containing plate is used for eliminating accumulated water in water-containing plate when maintaining air conditioner fault. During normal operation, the plug shall be filled in to prevent leakage.

## 6.4 Insulation work of drainage pipe

Refer the introduction to the insulation engineering parts.

## 7. Vacuum Drying and Leakage Checking

### 7.1 Purpose of vacuum drying

- Eliminating moisture in system to prevent the phenomena of ice-blockage and copper oxidation. Ice-blockage shall cause abnormal operation of system, while copper oxide shall damage compressor.

# Installation

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- Eliminating the non-condensable gas (air) in system to prevent the components oxidizing, pressure fluctuation and bad heat exchange during the operation of system.

## 7.2 Selection of vacuum pump

- The ultimate vacuum degree of vacuum pump shall be -756mmHg or above.
- Precision of vacuum pump shall reach 0.02mmHg or above.

## 7.3 Operation procedure for vacuum drying

Due to different construction environment, two kinds of vacuum drying ways could be chosen, namely ordinary vacuum drying and special vacuum drying.

### 7.3.1 Ordinary vacuum drying

1. When conduct first vacuum drying, connect pressure gauge to the infusing mouth of gas pipe and liquid pipe, and keep vacuum pump running for 1hour (vacuum degree of vacuum pump shall be reached -755mmHg).
2. If the vacuum degree of vacuum pump could not reach -755mmHg after 1 hour of drying, it indicates that there is moisture or leakage in pipeline system and need to go on with drying for half an hour.
3. If the vacuum degree of vacuum pump still could not reach -755mmHg after 1.5 hours of drying, check whether there is leakage source.
4. Leakage test: After the vacuum degree reaches -755mmHg, stop vacuum drying and keep the pressure for 1 hour. If the indicator of vacuum gauge does not go up, it is qualified. If going up, it indicates that there is moisture or leak source.

### 7.3.2 Special vacuum drying

The special vacuum drying method shall be adopted when:

1. Finding moisture during flushing refrigerant pipe.
2. Conducting construction on rainy day, because rain water might penetrated into pipeline.
3. Construction period is long, and rain water might penetrated into pipeline.
4. Rain water might penetrate into pipeline during construction.

Procedures of special vacuum drying are as follows:

1. Vacuum drying for 1 hour.
2. Vacuum damage, filling nitrogen to reach 0.5Kgf/cm<sup>2</sup> .  
Because nitrogen is dry gas, vacuum damage could achieve the effect of vacuum drying, but this method could not achieve drying thoroughly when there is too much moisture. Therefore, special attention shall be drawn to prevent the entering of water and the formation of condensate water.
3. Vacuum drying again for half an hour.  
If the pressure reached -755mmHg, start to pressure leakage test. If it can not reached the value, repeat vacuum damage and vacuum drying again for 1 hour.
4. Leakage test: After the vacuum degree reaches -755mmHg, stop vacuum drying and keep the pressure for 1 hour. If the indicator of vacuum gauge does not go up, it is qualified. If going up, it indicates that there is moisture or leak source.

## 8. Additional refrigerant charge

- After the vacuum drying process is carried out, the additional refrigerant charge process need to be performed.

# Installation

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- The outdoor unit is factory charged with refrigerant. The additional refrigerant charge volume is decided by the diameter and length of the liquid pipe between indoor and outdoor unit. Refer the following formula to calculate the charge volume.

Diameter of liquid pipe (mm)	Φ6.35	Φ9.52
Formula	$V=15g/m \times (L-5)$	$V=30g/m \times (L-5)$

V: Additional refrigerant charge volume (g).

L : The length of the liquid pipe (m).

## Note:

- Refrigerant may only be charged after performed the vacuum drying process.
- Always use gloves and glasses to protect your hands and eyes during the charge work.
- Use electronic scale or fluid infusion apparatus to weight refrigerant to be recharged. Be sure to avoid extra refrigerant charged, it may cause liquid hammer of the compressor or protections.
- Use supplementing flexible pipe to connect refrigerant cylinder, pressure gauge and outdoor unit. And The refrigerant should be charged in liquid state. Before recharging, The air in the flexible pipe and manifold gauge should be exhausted.
- After finished refrigerant recharge process, check whether there is refrigerant leakage at the connection joint part.(Using gas leakage detector or soap water to detect).

## 9. Engineering of insulation

### 9.1 Insulation of refrigerant pipe

#### 9.1.1 Operational procedure of refrigerant pipe insulation

Cut the suitable pipe → insulation (except joint section) → flare the pipe → piping layout and connection → vacuum drying → insulate the joint parts

#### 9.1.2 Purpose of refrigerant pipe insulation

- During operation, temperature of gas pipe and liquid pipe shall be over-heating or over-cooling extremely. Therefore, it is necessary to carry out insulation; otherwise it shall debase the performance of unit and burn compressor.
- Gas pipe temperature is very low during cooling. If insulation is not enough, it shall form dew and cause leakage.
- Temperature of gas pipe is very high (generally 50-100°C) during heating. Insulation work must be carried out to prevent hurt by carelessness touching.

#### 9.1.3 Insulation material selection for refrigerant pipe

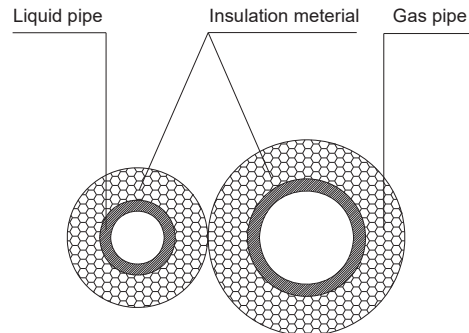
- The burning performance should over 120°C
- According to the local law to choose insulation materials
- The thickness of insulation layer shall be above 10mm.If in hot or wet environment place, the layer of insulation should be thicker accordingly.

#### 9.1.4 Installation highlights of insulation construction

- Gas pipe and liquid pipe shall be insulated separately, if the gas pipe and liquid pipe were insulated together; it will decrease the performance of air conditioner.

# Installation

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- The insulation material at the joint pipe shall be 5~10cm longer than the gap of the insulation material.
- The insulation material at the joint pipe shall be inserted into the gap of the insulation material.
- The insulation material at the joint pipe shall be banded to the gap pipe and liquid pipe tightly.
- The linking part should be use glue to paste together
- Be sure not bind the insulation material over-tight, it may extrude out the air in the material to cause bad insulation and cause easy aging of the material.

## 9.2 Insulation of drainage pipe

### 9.2.1 Operational procedure of refrigerant pipe insulation

Select the suitable pipe → insulation (except joint section) → piping layout and connection → drainage test → insulate the joint parts

### 9.2.2 Purpose of drainage pipe insulation

The temperature of condensate drainage water is very low. If insulation is not enough, it shall form dew and cause leakage to damage the house decoration.

### 9.2.3 Insulation material selection for drainage pipe

- The insulation material should be flame retardant material, the flame retardancy of the material should be selected according to the local law.
- Thickness of insulation layer is usually above 10mm.
- Use specific glue to paste the seam of insulation material, and then bind with adhesive tape. The width of tape shall not be less than 5cm. Make sure it is firm and avoid dew.

### 9.2.4 Installation and highlights of insulation construction

- The single pipe should be insulated before connecting to another pipe, the joint part should be insulated after the drainage test.

There should be no insulation gap between the insulation material.

## 10. Engineering of electrical wiring

### 10.1 Highlights of electrical wiring installation

- All field wiring construction should be finished by qualified electrician.
- Air conditioning equipment should be grounded according to the local electrical regulations.
- Current leakage protection switch should be installed.
- Do not connect the power wire to the terminal of signal wire.
- When power wire is parallel with signal wire, put wires to their own wire tube and remain at least 300mm gap.
- According to table in indoor part named “the specification of the power” to choose the wiring, make sure the selected wiring not small than the date showing in the table.

# Installation

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- Select different colors for different wire according to relevant regulations.
- Do not use metal wire tube at the place with acid or alkali corrosion, adopt plastic wire tube to replace it.
- There must be not wire connect joint in the wire tube If joint is a must, set a connection box at the place.
- The wiring with different voltage should not be in one wire tube.
- Ensure that the color of the wires of outdoor and the terminal No. are same as those of indoor unit respectively.

## 11. Test operation

**11.1 The test operation must be carried out after the entire installation has been completed.**

**11.2 Please confirm the following points before the test operation.**

The indoor unit and outdoor unit are installed properly.

- Tubing and wiring are correctly completed.
- The refrigerant pipe system is leakage-checked.
- The drainage is unimpeded.
- The ground wiring is connected correctly.
- The length of the tubing and the added stow capacity of the refrigerant have been recorded.
- The power voltage fits the rated voltage of the air conditioner.
- There is no obstacle at the outlet and inlet of the outdoor and indoor units.
- The gas-side and liquid-side stop valves are both opened.
- The air conditioner is pre-heated by turning on the power.

**11.3 Test operation**

Set the air conditioner under the mode of "COOLING" by remote controller, and check the following points.

### Indoor unit

- Whether the switch on the remote controller works well.
- Whether the buttons on the remote controller works well.
- Whether the air flow louver moves normally.
- Whether the room temperature is adjusted well.
- Whether the indicator lights normally.
- Whether the temporary buttons works well.
- Whether the drainage is normal.
- Whether there is vibration or abnormal noise during operation.

### Outdoor unit

- Whether there is vibration or abnormal noise during operation.
- Whether the generated wind, noise, or condensed of by the air conditioner have influenced your neighborhood.
- Whether any of the refrigerant is leaked.

# Appendix

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## Unit Conversion

### Cooling Capacity

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

### Volume

CMM	CFM	l/s
1	35.3	16.67

### Length

m	cm	mm	inch
1	100	1000	39.37

### Power

HP	W	kW
1	746	0.746

### Temperature

C	F
$5(F-32)/9$	1





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