

VRF AIR HANDLER INDOOR UNITS 80DF SERIES

INSTRUCTION MANUAL

WARNING!

Read and follow all safety precautions in Instruction Manual - improper use can cause serious injury.

www.delta-dct.com

USER NOTICES

• When operating, the entire capacity of the running indoor units should not be larger than that of the outdoor unit; otherwise it would cause insufficient cooling (heating) capacity.

◆ Each indoor unit should be equipped with an air switch (or fuse) which capacity should match with the indoor unit's electric parameters, and a general air switch which keeps closed at normal condition is needed for turning off all indoor units in case of short circuit or abnormity. Besides, a general power supply shall be equipped to power on/off all indoor units and it shall be cut off before cleaning the indoor unit.

◆ In order to turn on the indoor unit successfully, please turn the general power switch to "ON" 8 hours before the operation

♦ After receiving the turn-off signal, every indoor unit will continue to work for another 20-70 seconds to make use of the rest cool air or the rest hot air in the heat exchanger for the next operation, which is normal.

◆ When the selected operating mode of the indoor unit clashes with that of the outdoor unit, the error indicating LED will blink after 5 seconds on the indoor unit or the remote controller and then the indoor unit will stop. At this time, change the operation mode of the indoor unit to the one which is compatible with that of the outdoor unit and then the operation returns normal. The cooling modes can goes with the dry mode and the fan mode can goes with any other mode.

• During installation, the communication cord and the power cord are not allowed to twist together but be separated with an interval of at least 2mm; otherwise it would cause a communication error.

Contents

1 Safety Considerations	1
2 Installation Location Selection and Precautions	2
2.1 Checking Product Received	2
2.2 Before Beginning Installation	2
2.3 Precuations	2
2.4 How to Select the Installation Location	2
3 Installation Instruction	3
3.1 Dimension Data	3
3.2 Unit Installation	3
3.3 Piping Work	4
3.4 Ductwork	5
3.5 Wiring	6
3.6 Conversion to Horizontal Application	8
4 DIP Switch	9
5 Wired Controller	12
5.1 Operation of the Signal Receptor of the Wired Controller	12
5.2 Installation of the Wired Controller	13
6 Normal Working Conditions	13
7 Troubleshooting	14
8 Regular Maintenance	14
8.1Cleaning the Air Filter	14
8.2 Maintenance Before the Seasonal Use	14
8.3 Maintenance After the Seasonal Use	14

1 Safety Considerations

Special attention should be drawn on the following symbols.

ANGER!

Immediate hazards which will result in property damage, product damager, severe personal injury or death

WARNING!

Hazards or unsafe practices which could result is property damage, product damager, severe personal injury or death

Hazards or unsafe practices which may result in property damage, product damager, severe personal injury or death

Before serving or installing this equipment, the electric power to this unit must in the "OFF" position. Caution, more than one disconnect may exist. Failure to observe this warning may result in an electric shock that may personal injury.

Due to high system pressure and electrical shock potential, installation and the serving the air conditioning system can be hazardous. Only trained and qualified personnel are permitted to install or service this equipment. Observed all warnings contained in this manual and labels/tags attached to the equipment.

This product is factory shipped for use with A208-230/1/60 electric power supply. This air handler must not be reconfigured to operate with any other power supply.

DANGER!

Carbon Monoxide Poisoning Hazard

Special warning for installation of furnaces or air handling units in enclosed areas such as garages, utility rooms or parking areas

Carbon monoxide producing devices (such as an automobile, space heater, gas water heater, etc.) should not be operated in enclosed areas such as unventilated garages, utility rooms or parking areas because of the danger of carbon monoxide positioning resulting from the exhaust emissions. If a furnace or air handler is installed in an enclosed area such as a garage, utility room or parking area and a carbon monoxide producing device is operated therein, there must be adequate, direct outside ventilation.

This ventilation is necessary to avoid the danger of CO poisoning which can occur if a carbon monoxide producing device continues to operate in the enclosed area. Carbon monoxide emission can be (re)circulated throughout the structure if the furnace or air handler is operating in any mode.

CO can cause serious illness including permanent brain damager or death.

2 Installation Location Selection and Precautions

2.1 Checking Product Received

Upon receiving the product, check any damage from transportation. Shipping damage is the responsibility of the carrier. Verify the model number, specifications and accessories are correct prior to installation. The distributor or manufacturer will not accept claims from dealers for transportation damage or installation of incorrectly shipped units.

2.2 Before Beginning Installation

Carefully read all instructions for the installation prior to installing product. Make sure each step or procedure is understood and any special considerations are taken into account before starting installation. Assemble all tools, hardware and supplies needed to complete the installation. Some items may need to be purchased locally. Make sure everything needed to install the product is on hand before starting.

2.3 Precuations

The installation must accord with the national and local safe criterion.

♦Since the quality of installation would affect the operation directly, the user should contact the seller and have the conditioner installed and tested by the professional installation personnel according to the installation instruction instead of by themselves.

Only connect the power after all the installation works are finished.

2.4 How to Select the Installation Location

WARNING!

This are handler is designed for indoor installation only. Don not install outdoor.

When installing the air handler, considerations to minimize the length of refrigerant tubing have to be given. Do not install the air handler in a location either above or below the condenser that violates the instructions provided with the condenser. The clearance form combustible surface to the unit is "0". However service clearance is to take precedence. Allow a minimum of 24 in front of the unit for service clearance. When installing in an area directly over a finished ceiling (such as an attic), an emergency drain is required directly under the unit. See local and state codes for requirements. When installing the unit in an area that may become wet, elevate the unit with a sturdy, non-porous material. In installation that may lead to physical damage (i.e. a garage) it is advised to install a protective barrier to prevent such damage.

3 Installation Instruction

3.1 Dimension Data



Fig. 1 Dimension Data of the Unit

Unit:mm

MODEL	DIMENSION				
MODEL	A	В	С	D	E
80DF025J24	533	541	270	284	1105
80DF040J24	533	541	305	284	1254
80DF048J24 80DF060J24	622	541	349	284	1254

3.2 Unit Installation

3.2.1 Installation Site

- A place where cool air can be distributed throughout the room.
- A place where condensation water is easily drained out.
- A place that can bear the weight of indoor unit.
- ◆A place which is easy for maintenance.
- A place where easy connection with the outdoor unit is available.

♦A place where is 1m or more away from other electric appliances such as television, audio device, etc.

- Avoid a location where there is heat source, high humidity or inflammable gas.
- ◆Do not place the unit near a laundry, a bath, a shower or a swimming pool.

- Be sure that the installation conforms to the installation dimension diagram.
- The space around the unit is adequate for ventilation

3.2.2 Air Handler

When installing this air handler, focus on consideration to minimize the length of refrigerant pipe. Do not install the air handler in a location either above or below the condenser that violates the instructions provided with the condenser. The clearance form a combustible surface to the unit is "0". However, service clearance is to take precedence. Allow a minimum of 24" in front of the unit for service clearance. When installing in an area directly over a finished ceiling (such as an attic), an emergency drain pan is required directly under the unit. See local and state codes for requirements. When installing this unit in an area that may become wet, elevate the unit with a sturdy, non-porous material. In installations that may lead to physical damage (i.e. a garage) it is advised to install a protective barrier to prevent such damage.



Fig.2 Installation Diagram

3.3 Piping Work

3.3.1 Condensate Drain Pipe

Condensate removal is performed by attaching a 3/4" PVC pipe to the evaporator coil pan and terminated in accordance with local or state Plumbing/HVAC codes. The installation must include a "P" style trap that is located as close as is practical to the evaporator coil. See Fig.3 for details of a typical condensate line "P" trap. To prevent potential sweating and dripping on to finished space, it may be necessary to insulate the condensate drain line located inside the building.



Fig.3 Installation Diagram of the Drain Pipe

3.3.2 Matters of Attention

A.When connecting the indoor unit with the connecting pipe, do not pull the big and small joints

of the indoor unit forcefully, so as to prevent the capillary of the indoor unit and other pipes from breaking and leaking.

B.The connecting pipe shall be supported by proper bracket. The weight of the pipe shall not be withstood by the unit.

C.When brazing the outdoor unit with the connecting pipe, please make sure that the valve are wrapped with wet cloth to cool down.

D.During the installation, we should carry out the heat preservation for two pieces of water drainage pipe.

E.To avoid generation of condensate on the connecting pipe and avoid leakage, the big pipe and the small pipe of the connecting pipe must be covered by thermal insulation materials, be bundled by adhesive tape, and be isolated from air.

F.The joint connecting to the indoor unit must be wrapped by thermal insulation material. There shall be no gap between the connecting pipe joint and the wall of the indoor unit.

G.As there is protective pressure refrigerant in the indoor unit, when loosening the nuts on the installing site, please pay more attention to the pressure, in order to avoid the injury!

Use adhesive tape to wrap the pipes:

a. Use adhesive tape to bundle the connecting pipe and the cables together. To prevent condensate from overflowing out from the drainage pipe, separate the drainage pipe firm the connecting pipe and the cables.

b. Use thermal insulation tape to wrap the pipes from the bottom of the outdoor unit until the upper end of the pipe where the pipe enters the wall. When wrapping thermal insulation tape, the later circle of tape must cover half of the front circle of tape.

c. Wrapped pipe must be fixed to wall using pipe clamps.

d. Do not wrap the protective tape too tight, and otherwise the efficiency of thermal insulation may be decreased. Ensure that the condensate drainage flexible tube is separate from the bundled pipes.

e. After the protective work is completed and the pipes are wrapped, use seal material to block the hole in the wall, so as to prevent rain and wind from entering the room.

3.4 Ductwork

This air handler is designed for a complete supply and return ductwork system.

WARNING!

Do not operate this product without all ductwork attached.

Inadequate ductwork that restricts airflow can result in improper performance and compressor or heater failure. Ductwork is to be constructed in a manner that limits restrictions and maintains suitable air velocity. Ductwork is to be sealed to the unit in a manner that will prevent leakage.

Return Ductwork: Do not terminate the return ductwork in an area that can introduce toxic, or objectionable fumes/odors into the ductwork. The return ductwork is to be introduced into the air handler bottom (upflow configuration).

Return Air Filters: Each installation must include a return air filter. This filtering may be performed at the air handler or externally such as a return air filter grille.

3.5 Wiring

3.5.1 Power Cord

WARNING!

To avoid the risk of fire or equipment damage, use only copper conductors. Before serving or installing this equipment, the electrical power to this unit must be in the 'OFF" position and all power supplies disconnected.

More that once disconnect may exist. Failure to observe this warning may result in an electric shock that can cause personal injury or death.

The unit must have an uninterrupted, unbroken electrical ground to minimize the possibility of personal injury if an electric fault should occur. The electric ground circuit may consist of an appropriately sized electric wire connecting the ground lug in the unit electric box to the building electric service panel.

3.5.1.1 Inspection of the Building Electrical Service

This product is designed for single-phase electrical supply. Do not operate on a three-phase power supply. Measure the power supply to the unit. The supply voltage must be in agreement with the unit nameplate power requirements and within the range shown the following table

Nominal Input	Minimum Voltage	Maximum Voltage
208/230	187	253

3.5.1.2 Electrical Connection-Supply Voltage

User copper conductor only.

A knockout is provided on the air handler top panel or side to allow for the entry of the supply voltage conductors. If the knockouts on the cabinet sides are used for electric conduit, an adaptor ring must be used in order to meet UL 1995 safety requirements. An NEC or CEC approved strain relief is to be used at this entry point. The wire is to be sized in accordance with the "Electrical Wire and MOP" section of this manual. Some areas require the supply wire to be enclosed in conduit. Consult your local codes.

3.5.1.3 Shaping the End of the Power Cord

A.Single-Wire Power Cord

- a. Strip the insulating layer of the power cord at the end by about 25mm.
- b. Loosen the screws on the wiring board of the air conditioner.
- c. Shape the end of the power cord into a ring with the same size of the screw by the pliers.
- d. Let the screw go through the ring and then secure it to the wiring board.
- B.Multi-Wire Power Cord
- a. Strip the insulating layer of the power cord at the end by about 10mm.
- b. Loosen the screws on the wiring board of the air conditioner.

c. Make the end of the power cord into a wiring terminal with the same size of the screw by the crimping pliers.

d. Let the screw go through the terminal and then secure it to the wiring board.

Single-Wire Power Cord

Multi-Wire Power Cord



Fig.4 Shaping the End of the Power Cord

3.5.1.4 Connection of the Power Cord

All indoor units shall be powered uniformly.

- A. Air Conditioners with Singe-Phase Power Supply
- a. Remove the cover plate of the electric box of the indoor unit.
- b. Let the power cord go through the wire eyelet.
- c. Connect the power cord to the terminals L1, L2 and the grounding terminal.
- d. Bundle the power cord and secure it with the wire clamps.
- B Air Conditioners with Three-Phase Power Supply
- a. Let the power cord go through the wire eyelet.
- b. Connect the power cord to the terminals L1, L2 L3 N and the grounding screw.
- c. Bundle the power cord and secure it with the wire clamps.
- 3.5.2 Connection of the Signal Line of the Wired Controller

A.Remove the cover plate of the electric box of the indoor unit.

B.Let the signal line go through the wire eyelet.

C.Plug the single line to the 4-pin socket on the main board of the indoor unit.

D.Bundle the signal line and secure it with the wire clamps.

①. If the power cord or signal line is damaged, they can only be replaced by the special one.

@. Before wiring, take note of the voltage of the components specified on the nameplate, and then perform the wiring in accordance with the wiring diagram.

3 . The air conditioner should be equipped with the power cord designed especially and the circuit breaker and air switch should be installed in case of overload

 \circledast . The air conditioner shall be grounded in case of the insulation failure.

(5) . All wires should be shaped into a wiring terminal, as direct connection of the multi-wire and the wiring board would strike arc.

(6) All wiring should be done in accordance with the wiring diagram, as improper wiring will lead the air conditioner run incorrectly or even damaged.

 $\ensuremath{\overline{\mathbb{O}}}$. Do not let the wire contact the pipeline, compressor, fan or other rotating part.

 \circledast . The manufacturer assumes no responsibility to the damage or abnormity caused by altering the internal wiring of the air conditioner

3.5.3 Connection of the Communication Cord

A.Open the cover of the electric box of the indoor unit.

B.Let the communication cord go across the wire eyelet.

C.Plug the communication cord to CN 17 and CN18 on the wiring board of the indoor unit.

D.Bundle the communication cord tightly and secure it with the wire clamps.

When wiring, pay special attention to the following issues to avoid the air conditioner out of order because of electromagnetic interference.

 ${\rm (I)}$. The single line and the communication cord shall be separated with the power cord and the connection wires between the indoor and outdoor units.

@. If the air conditioner is installed where it is vulnerable to the electromagnetic interference, both the single line and the communication cord should be shielded wires and twist pairs.

③ . If higher static pressure required by the engineering need, please alter the wiring referring to the wiring diagram stuck to the unit.

3.6 Conversion to Horizontal Application

The following describes converting to "Horizontal right-hand". The only field modification required for conversion to "Horizontal left-hand" is the removal of the plastic plug in the horizontal panel drain connection.

As shown in the Fig.5, it is recommended that the conversion to horizontal be performed before the air handler in its final location and in an area that allows ford access to all sides.

A.Remove all air handler access panels

B.Remove the 'J" shaped bracket that retains the evaporator coil.

C.Remove the flowrator from the lower left side access panel and slide out the evaporator coil and horizontal drain pan.

D.Remove the gasket from the horizontal pan drain connections.

E.Remove the oval shaped plastic plug from the right side access panel. Remove the oval shaped rubber gasket seal form the lower left side access panel.

F.Install the plastic plug removed in step 5 to the left side lower access panel and the oval shaped rubber gasket to the lower right access panel.

G.Reinstall the evaporator coil with the horizontal panel on the right side. Note: push the assembly completely to rear to ensure the engagement of the upflow pan with the rear channel bracket.

H.Install the 'J" bracket (removed in step 2) to support the upflow pan to the tie channel

I.Attach all panels and the refrigerant management devices.



Fig.5 Conversion to Horizontal Application

4 DIP Switch

4.1 Function DIP Switch S7

Before energizing the main board, it is necessary to set the 5-position S7 DIP switch which decides how the indoor unit works.

See the following statement for the functions and setting of the DIP switch S7.



Fig.6 Function DIP Switch

The DIP switch should be set correctly and properly. It's not allowed to set the toggle in the middle. (Note: Black part means toggles of DIP switch.)



In the figure, number "4, 3, 2, 1" respectively represents "OFF, OFF, ON, OFF".

The function DIP switch S7 locates on the main board of the indoor unit. The default setting should be maintained and can be modified only when required by the user.

Function DIP Switch S7					
DIP Switch	Description		tting		
DIF Switch	Description	0(ON)	1		
1(S/R)	Memory mode setting	Energize standby (S)	Energized recovery (R)		
2(L/I)	Control method setting	Wired controller (L)	Remote controller (I)		
3(M/S)	Master/slave indoor unit setting	Master indoor unit (I)	Receiver (0)		
4(I/O)	Collection point setting for ambient temperature	Return air Inlet (I)	Receiver (0)		
5(L/H)	High-low static setting of the fan	Low static pressure (L)	High static pressure (H)		

Specific function of each function DIP switch is as follows:

◆ DIP switch 1(S/R)—Memory mode setting: it includes both the energized standby mode and energized recovery mode. Energized standby mode is that: after the unit resumes power supply, the previous setting parameters will be maintained but cannot automatically run and such setting is factory setting (dialing the DIP switch to "ON" position); For example, setting parameters of a indoor unit are high fan speed before de-energization and 24°C and after resuming power supply, the unit will be in standby status; Then manually turn on the unit and its parameters are still high fan speed and 24°C. Energized recovery mode is that: after the unit resumes power supply, not only it will keep the previous setting but also can automatically run; But if the unit is in turnoff status before deenergization, it will still be that status after resuming power supply. ◆ DIP switch 2(L/I)——Control mode: it includes both the wired control mode and remote control mode. Wired control mode is that: control the running of the indoor unit by wired controller, which is factory setting (dialing the DIP switch to "ON" position); When the setting is wired control mode, "Memory mode setting" and "Master/slave indoor unit setting" of S7 are invalid which can be directly set on the wired controller. Remote control mode is that: control the running of indoor unit by remote controller; when the setting is remote control mode, its functional code must be set in S7.

 DIP switch 3(M/S)—Master/slave indoor unit setting: it is master/slave setting of indoor unit running mode, which is mainly used for people' priority requirements (such as leaders, patients, etc.). The factory setting is master indoor unit (dialing the DIP switch to "ON" position). When settings of all indoor units are slave indoor units, outdoor unit will run in the mode of firstly started slave indoor unit. If the mode of later started slave indoor unit and mode of firstly started slave indoor unit conflict, the conflict modes error will be warned by the system and later started indoor unit cannot run. In that case, the running of the unit is decided by firstly started slave indoor unit. When there is only one indoor unit that is set to be the master indoor unit, in that case, no matter if the master indoor unit is firstly started, the conflict mode error will be warned by the slave indoor unit once the mode of slave indoor unit and the mode of master indoor unit conflict (except for turnoff mode of master/slave indoor unit). And the unit will firstly run at the mode of the master indoor unit When there are multi indoor units that are set to be the master indoor units, the unit will run at the mode of the master indoor unit with the min. address code. When the indoor unit with the min. address code changes to the running status from turnoff status, modes of other master indoor units or slave indoor unit should be in the same mode with it, or the conflict mode error will be warned. Therefore, when there are multi master indoor units, set the address code from high to low according to priority.

◆ DIP switch 4(I/O)—Collection point setting of ambient temp.: the setting is mainly used when there is high differential between temperatures of air conditioning area and return air of the unit. The setting is valid only when there is receiver including collection points setting of temperatures of the return air inlet and receiver head. The factory setting is the collection points setting of temperature of return air inlet (set the DIP switch at the "ON" position).

 DIP switch 5(L/H)—High-low static pressure setting of the fan: it includes both the high static pressure setting and low static pressure setting of the fan, which should be adjusted according to the project.





Fig.7 Main Board of the Five-Bit Function DIP Switch

①. Code setting must be under the off state of power.

② . There is 3-bit, 4-bit or 5-bit DIP switch. 4-bit or 5-bit DIP switch is only applicable to the ducted type unit (including Multi VRF ducted type units and ducted type split)

③ . When the control setting is "L", the Master/slave and memory setting on the main board is invalid; when the control setting is "I", the code setting is valid.

4 . The DIP position shall be at ON which means 0 and means 1 at opposite position. The DIP switch at the middle position is prohibited.

5 . After the setting is finished, please record the address code of the unit (\checkmark).

4.2 Address DIP Switch

Binary system is used in the address code setting, and the value is "0" when the switch is dialed to "ON" while the opposite is "1". The four codes 4~1 on the address code, in which No. 4 is high level bit and No. 1 is low level bit. The "4" switch is the first digit while "1" is the last one.

	Address Position				Domorko
Address value	1	2	3	4	Remarks
1	0	0	0	0	
2	1	0	0	0	
3	0	1	0	0	
4	1	1	0	0	
5	0	0	1	0	
6	1	0	1	0	
7	0	1	1	0	
8	1	1	1	0	
9	0	0	0	1	
10	1	0	0	1	
11	0	1	0	1	
12	1	1	0	1	
13	0	0	1	1	
14	1	0	1	1	
15	0	1	1	1	
16	1	1	1	1	

When the switch is set to the "On", it represents "O"; while represents "1" on the other end.

5 Wired Controller

5.1 Operation of the Signal Receptor of the Wired Controller

When the receptor of the remote controller is used, the setting of the DIP switch 2 should be "1" and its connection is shown as Fig.8.

The duct type unit can only work either by the receptor of the remote controller or by the wired controller. Once the former is put into use, then the latter one won't work normally.







Fig.9 Connection of the Power and Communication Lines of the Wired Controller

When connect the main board and the display board, as shown in Fig.9, just insert the fourcore twisted pair line derived from CN19 of the main board to the terminal CN1 on the display board. Prior to the connection, remember that the power supply has been cut off. And after the connection, please check if the connection is in good condition and ensure that there is no short circuit along the power cord. There are totally four lines for the controller: they are the grounding line (GND), communication line A (A), communication line B (B), and power line (+12V) respectively.

5.2 Installation of the Wired Controller



Fig.10 Installation Diagram of the Wired Controller

SN	1	2	3	4
Description	Bottom Case	Soleplate	Bolt M4X25	Front Panel

Pay special attention to the following issues during the installation.

A. Do not install any component until the power supply is cut off. During the whole installation, no operation is allowed with the power supply turned on.

B. Pull out the four-wire twisted pair and let it through the rectangular hole behind the bottom plate of the wired controller.

C. Fix the bottom plate of the wired controller to the wall and secure it with M4X25 screws.

D. At last, plug the four-wire twisted pair into the interface of the wired controller and finally put the front panel and bottom plate together.

6 Normal Working Conditions

	Indoor Side		Outdoor Side	
DB °C WB °C		DB °C	WB °C	
Rated Cooling	27	19	35	24
Rated Heating	20	15	7	6

7 Troubleshooting

In the event that your air condition works improperly, please check the following items before contacting the service center

Faults	Possible Causes
The air conditioner fails to be started.	 The power supply is not turned on. The circuit breaker trips because of the leakage of the air conditioner. The line voltage is too low
The air conditioner works but soon stops	The air inlet/outlet of the indoor/outdoor unit has been clogged.
Insufficient cooling effect	 The air filter is too dirty or even clogged. There are too many heat sources or people. The door or the window is open. There may be obstacle at the air inlet/outlet. The set temperature is too high.
Insufficient heating effect	 The air filter is too dirty or even clogged. The door or window is not closed completely. The set temperature is too low.

Note: If the faults still persist after the above check and handling, pleases turn off the air conditioner immediately and contact the appointed service center for professional service.

8 Regular Maintenance

Disconnect all power supplies before performing any service. Note that there may be more than one power supply. Failure to observe this waning can result in electric shock that can cause personal injury or death.

8.1Cleaning the Air Filter

The item to be maintained one a regular basis by the user is the circulating air filters which should be cleaned or replaced regularly. A certified service technician must be performed all other services.

8.2 Maintenance Before the Seasonal Use

- Check if the inlet/outlet of the indoor/outdoor unit has been clogged.
- Check if the grounding wire is intact
- Check if the wiring are in good condition
- Check if the power indicating LED light up when the wired controlelr is energized.

Note: If there is something abnormal, please contact the after-sales center for guidance.

8.3 Maintenance After the Seasonal Use

• Let the unit run in the FAN mode for half a day when it is sunny to dry the inside of the unit.

• If the unit is not to be used for quite long time, please cut off the main power supply for energy saving with the power indicating LED extinguished on the wired controller.

Model	80DF025J24	80DF040J24	80DF048J24	80DF060J24
Function	Cooling and heating	Cooling and heating	Cooling and heating	Cooling and heating
Cooling Capacity (kBtu/h)	24.2	34 .1	47.7	54.5
Heating Capacity (kBtu/h)	27.3	37.5	51.2	58.0
Air Flow Rate (m^3/h)	1100	1700	2300	2300
Sound Level(dB(A))	46	48	56	56
Input of Motor (kW)	0.15	0.31	0.57	0.57
Power Supply	208-230V/1Phase/60Hz			
Anti-electric Shock Protect Type	I			
Dimensions (mm) (W×D×H)	533x5'	72x1105	622x541x1254	
Net Weight (kg) (Main body/P)	56	64	72	72

• Parameters of air handling type indoor unit

^A/_K The above performance parameter is measured according to the standard of GB/T18837-2002, and its cooling or heating capacity and sound level are tested before leaving factory.

 $\stackrel{\scriptstyle <}{\curvearrowright}$ If the parameters are changed, refer to the data provided on nameplates .

Thank you for Choosing



www.delta-dct.com

