# NORTEK GLOBAL HVAC, LLC

# Flex Match Series Duct Type Indoor Unit (For North America)

Owner's Manual

Heat Pump



Models: GDH09(2.6)FMK4DH GDH12(3.5)FMK4DH GDH18(5.3)FMK4DH GDH21(6.2)FMK4DH GDH24(7.0)FMK4DH

Please read this owner's manual carefully before operation and retain for future reference. Specifications & illustrations subject to change without notice or incurring obligations.

#### **User Notice**

◆ The total capacity of the indoor units connected can not exceed 150% of that of the outdoor units.

◆ Main power to compressor must be turned on 8 hours before air conditioner can be operated.

◆ After receiving the turn off signal, indoor units will continue to run for 20-70 seconds. This clears the unit of conditioned (heated or cooled) air.

◆ When the selected operating mode of the indoor unit conflicts with the operating mode of the outdoor unit, the malfunction light will blink after 5s on the wired controller. The air conditioner will turn off. To restart, the operating modes must be reconciled: The HEAT mode conflicts with of the COOL mode, DRY mode and FAN mode; while the COOL mode, DRY mode and FAN mode are compatible between each other. If there is a power outage when the unit is running, three minutes after power recovery, the indoor unit will send the "start" signal to the outdoor unit.

◆ The communication cable and the power cord must not be twisted together but instead separated with an interval of at least 2cm (3/4 in), otherwise the unit may malfunction.

◆ This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience or knowledge. Children should not play with the appliance.

This product must not be disposed with household waste. Please dispose or recycle responsibly.

Please keep this manual for future reference.

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## **1** Safety Precautions

Please read this manual carefully before using and operating correctly as instructed in this manual.

Please note the following indicators:

 $\Delta$  Warning!: Failure to comply could result in property damage, serious personal injury or death.

Caution! Failure to comply could result in property damage or personal injury.

#### A Warning:

• The installation should be performed by qualified service technician; otherwise it could cause water leakage, electric shock or fire.

• Check the support structure to verify that it has sufficient load-carrying capacity to support the weight of the unit, and it can be securely mounted.

• The drain pipe should be installed as instructed in the manual to guarantee proper drainage. It should be insulated to prevent condensation; otherwise it could leak.

• Do not install unit near any inflammable, combustible or other noxious airborne contaminants..

• If you notice a burning smell or other foul odor, turn off the main power supply immediately.

- ♦ All room should be sufficiently ventilated for better indoor air quality.
- Never insert your finger or any other object into the air outlet/inlet grille.
- Inspect the support structure periodically for any damage that may occur over time.
- Once air conditioner is installed, it should not be removed and installed in a different location.

An all-pole disconnection switch having a contact separation of at least 3mm (1/8 in) in all poles should be connected in fixed wiring.

#### A Caution!

• Before installation, please check if the power supply matches the requirement specified on the nameplate.

• Before using the unit, please check if the piping and wiring are properly installed to avoid water leakage, refrigerant leakage, electric shock, or fire.

• The main power supply must be grounded to avoid electric shock. Do not connect the ground wire to the gas pipe, running water pipe, lightening rod or phone cable.

- ◆ After startup, unit should run for at least 5 minutes.
- Do not allow children operate this unit.
- Do not operate this unit with wet hands.
- Turn off the main power supply before cleaning of the unit or replacing the air filter.
- ◆ If the unit is not to be used for a long time, turn off the main power supply.
- Do not expose the unit to the wet or corrosive conditions.
- ◆ After the electric wiring is complete, check for any short circuit possibilities.

## 2 Installation

The installation of the unit must comply with the national and local safety regulations. The installation quality directly affects air conditioner operation, so the installation and debugging should only be done by qualified technician according to this manual before power is supplied to the unit.

#### 2.1 How to select the Installation Location for the indoor unit

- (1). Away from direct sunlight.
- (2). Check the support structure to verify that it has sufficient load-carrying capacity to support the weight of the unit, and it can be securely mounted.
- (3). Select location where the drain pipe can be easily connected to outside.
- (4). The flow of the air inlet and outlet are not blocked.
- (5). Select location as close as possible with easy access to outdoor unit.
- (6). Do not install in location near flammable or explosive gasses.

(7). Do not install near corrosive gas, heavy dust, salt mist, smog or very high humidity.

#### A CAUTION!

The unit which is installed in the following places is likely to malfunction. If unavoidable, please contact support services for help:

- 1 Location with oil or other pollutants in the air;
- ② Coastal areas;
- ③ Where sulfur gas (like sulfur hot spring) is present;
- ④ Areas near high frequency devices (i.e. wireless devices, electric welding devices, or medical equipment):
  - 5 Other special circumstances.

#### 2.2 Electric Wiring

- (1). The installation must conform to national wiring regulations.
- (2). Only approved power cord with the rated voltage and exclusive circuit for the air conditioning can be used.
- (3). Do not pull on the power cord.
- (4). The electric installation should be performed by a qualified technician as specified by the local laws, regulations and this manual.
- (5). The diameter of the power cord should be sufficiently sized. If damaged, it must be replaced by approved cord.
- (6). The unit should be properly grounded, and the ground wire should be connected to a dedicated device. An approved fuse or circuit breaker must also be supplied by the installer. It should have sufficient capacity and both magnetic and thermal tripping functions in case of the short circuit or overload.

## 2.3 Grounding Requirements

- (1). The air conditioner is classified as a Class I appliances, so its grounding must be reliable.
- (2). The yellow-green line of the air conditioner is the ground line and can not be used for other purpose, cut off or fixed by the tapping screw; otherwise it would cause electric shock.
- (3). The reliable ground terminal should be provided by installer. The ground wire can not be connected to any of the following:
- 1 . Water pipe;
- 2 . Coal gas pipe;
- ③ . Sewage pipe;
- 4 . Other places deemed unsuitable by professional technician.

#### 2.4 Accessories for Installation

Refer to the packing list for the accessories of the indoor and outdoor units respectively.

# **3** Installation Instructions

## 3.1 Outline Dimension Drawings of the Indoor Unit

Note: the unit in the followings figures is mm, unless otherwise specified.

Fig.1 is applicable to GDH09(2.6)FMK4DH, GDH12(3.5)FMK4DH, GDH18(5.3)FMK4DH, GDH21(6.2)FMK4DH, GDH24(7.0)FMK4DHI:

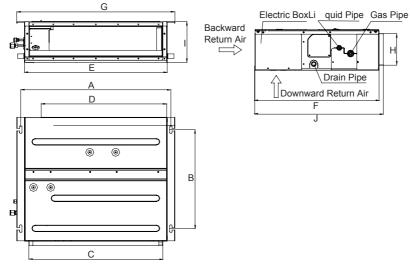


Fig. 1 Table 1: Outline Dimensions: mm (in)

Item Model	A	В	С	D	E	F	G	Н	I	J
GDH09(2.6)FMK4DH	742	491	662	620	700	615	782	156	200	635
GDH12(3.5)FMK4DH	(29-3/16)	(19-5/16)	(26-1/16)	(24-7/16)	(27-9/16)	(24-3/16)	(30-13/16)	(6-1/8)	(7-7/8)	(25)
GDH18(5.3)FMK4DH	942 (37-1/16)	491 (19-5/16)	862 (33-15/16)	820 (32-5/16)	900 (35-7/16)	615 (24-3/16)	982 (38-11/16)	156 (6-1/8)	200 (7-7/8)	635 (25)
GDH21(6.2)FMK4DH	1142	491	1062	1020	1100	615	1182	156	200	635
GDH24(7.0)FMK4DH	(44-15/16)	(19-5/16)	(41-13/16)	(40-3/16)	(43-5/16)	(24-3/16)	(49-9/16)	(6-1/8)	(7-7/8)	(25)

3.2 Required Clearances for Indoor Unit

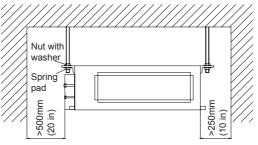


Fig. 2

#### 3.3 Installation of the Indoor Unit

(1). Requirements for Installation Location

1) Check the support structure to verify that it has sufficient load-carrying capacity to support the weight of the unit, and it can be securely mounted.

2) The drainage pipe can be easily connected.

3) No obstacle to the air inlet/outlet and the unit can provide good circulation in the space.

4) Ensure there is appropriate clearances shown in Fig. 2 for access and maintenance.

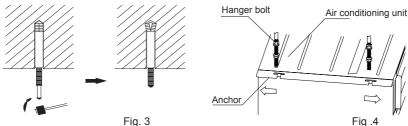
5) Air conditioner should not be installed near heat source; nor areas with flammable or explosive gas, or other airborne contaminants.

6) There is sufficient space in ceiling (for ceiling concealed type units).

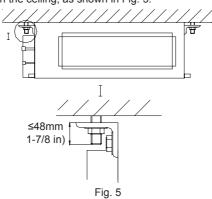
7) The power cords and connection lines of the indoor and outdoor units must be at least 1m (3 ft) away from the TV set or radio to avoid the electromagnetic interference (in case of strong electromagnetic interference, a clearance of more than 1M (3 ft) may be required).

(2). Installation of the Indoor Unit

Insert the M10 expansion bolt into the hole, and then knock the nail into the bolt. Refer to the Outline Dimension Drawings of the Indoor Unit for hole locations and see Fig. 3 for the installation of the expansion bolt.



Install the hanger on the indoor unit, as shown in Fig. 4. Install the indoor unit on the ceiling, as shown in Fig. 5.



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① . BEFORE INSTALLATION, determine where all piping, power supply wiring, and control wiring will be run. Prior planning will make unit installation easier and less time consuming.

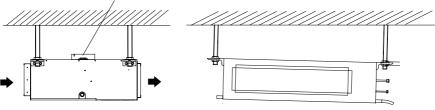
②. If there is an opening in the ceiling, it is best to reinforce it to prevent the unit from vibrating. Consult the user, builder, or building owner for approval.

3 . If the ceiling will not bear the weight of the air conditioner, angle iron can be installed and the unit attached to it.

④. If the indoor unit is installed in the ceiling or other non-air-conditioned area, wrap insulation around the unit to prevent condensation. The thickness of the insulation depends on the installation conditions.

#### 3.4 Level Check of the Indoor Unit

After installing the indoor unit, check to make sure the unit is level, and keep an slope of  $5^{\circ}$  toward the drain pipe right and left, as shown in Fig. 6.





3.5 Installation of the Air Supply Duct

(1). Installation of the Rectangular Air Supply Duct

Horizontality Check Device

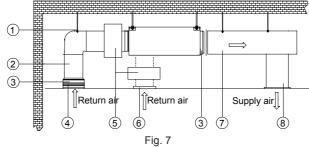


Table 2

No.	Name	No.	Name
1	Hanger	5	Plenum Box
2	Return Air Duct	6	Filter Screen
3	Canvas Duct	7	Main Air Supply Duct
4	Return Air Inlet	8	Air Supply Outlet

(2). Installation of the Round Air Supply Duct

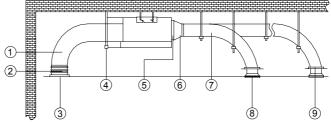


Fig. 8 Table 3

No.	Name	No.	Name
1	Return Air Duct	6	Transition Duct
2	Canvas Duct	7	Air Supply Duct
3	Return Air Louver	8	Diffuser
4	Hanger	9	Diffuser Joint
5	Air Supply Outlet		

(3). Installation Steps of the Round Air Supply Duct

- 1). Pre-install the outlet of the round duct on the transition duct and then secure it with tapping screw.
- 2). Place the transition duct on the air outlet of the unit and secure it with rivet.
- Connect the outlet to the duct and then secure them with tape. Other installation options may be implemented as deemed necessary by qualified professional.

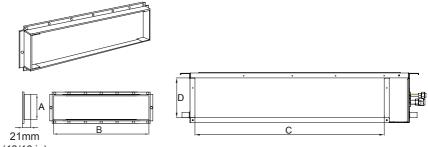
## A CAUTION!

 $(\!\!1\!)$  . The maximum length of the duct is defined as the maximum length of the air supply duct PLUS the maximum length of the return air duct.

② . For units with the auxiliary electric heating, if the round duct is to be used, then the straight length of the transition duct can not be less than 200mm (8 in).

3. The duct is either rectangular or round and connected to the air inlet/outlet of the indoor unit. At least one air supply outlet should be kept open. For round duct: it needs a transition duct which should match the size of the air supply outlet on the unit. After fitting the transition duct, the bend of the round duct should be 10 meters (30 ft) away from the corresponding diffuser. The manufacturer standard accessories is the transition duct 200mm (7-7/8 in) long with round air outlet  $\varphi$ 200 (7-7/8 in).

3.6 Illustrations of the Air Supply Outlet and Return Air Inlet



(13/16 in)

Fig. 10 Return Air Inlet

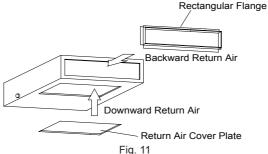
Table 4 Dimensions of the Air Supply Outlet and Return Air Inlet (unit: mm)

	Item	Air Supp	ly Outlet	Return	Air Inlet
Model		А	В	С	D
GDH09(2.6)FM	IK4DH	156mm	662mm	580mm	162mm
GDH12(3.5)FM	IK4DH	(6-1/8 in)	(26-1/16 in)	(22-13/16)	(6-3/8 in)
GDH18(5.3)FM	IK4DH	156mm (6-1/8 in)	862mm (33-15/16 in)	780mm (30-11/16)	162mm (6-3/8 in)
GDH21(6.2)FM	IK4DH	156mm	1062mm	980mm	162mm
GDH24(7.0)FM	IK4DH	(6-1/8 in)	(41-13/16 in)	(38-9/16)	(6-3/8 in)

#### 3.7 Installation of the Return Air Duct

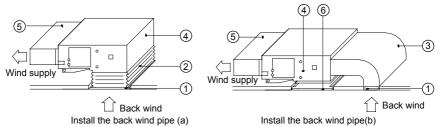
Fig. 9 Air Supply Outlet

(1). The default installation location of the rectangular flange is in the back of the unit (horizontal air flow). A return air cover plate is over the bottom return air opening, as shown in Fig. 11.



- (2). If the bottom return (up flow) air is desired, just switch the rectangular flange and the return air cover plate.
- (3). Connect one end of the return air duct to the return air outlet with rivets and the other to the return air louver. For convenience a cutting of canvas transition duct can be used. It can be reinforced and folded with #8 iron wire.
- (4). More noise is likely to be produced in the bottom return air mode than the back return air mode. A muffler and a plenum box can minimize the noise.

(5). The installation method can be selected based on building conditions and required maintenance, etc. See Fig. 12.

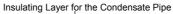


#### Fig. 12

Table 5 Parts and Components of the Return Air Duct

No.	Name	No.	Name
1	Return Air Louver(with the filter screen)	4	Indoor Unit
2	Canvas Duct	5	Air Supply Duct
3	Return Air Duct	6	Access Grille

- 3.8 Installation of the Condensate Pipe
  - (1). The condensate pipe should sloped at angle of  $5 \sim 10^{\circ}$ , to easily drain condensate water. And the joints of the condensate pipe should be insulated to prevent condensation (see Fig. 13).



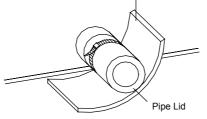


Fig. 13 Thermal Insulation of the Condensate Pipe

- (2). There are two optional condensate connections. One on the left and one on the right side of the unit. The connection not being used should be plugged with a rubber stopper, bundled by the binding wire, and insulated to avoid water leakage.
- (3). The right outlet is plugged with the rubber stopper when the unit leaves the factory.

#### $\Delta$ CAUTION! The joint of the condensate pipe should be sealed to avoid leakage.

#### 3.9 Design of the Drain Pipe

- (1). The drain pipe should always be sloped at a constant angle (1/50  $\sim$  1/100) to avoid water gathering in some certain place.
- (2). During the connection of the drain pipe and device, do not tug too forcefully on the pipe or the device. The pipe should be fixed as close as possible to the device.
- (3). The drain pipe can be the ordinary hard PVC pipe which can be purchased locally. During

the connection, inset the end of the PVC pipe to the drain outlet, then tighten it with the drain hose and binding wire. Do connect the drain outlet to the drain hose with adhesive.

- (4). When the drain pipe is used for multiple air conditioners, the main section of the pipe should be 100mm (4 in) lower than the drain hole of each device. Use thicker pipe for main section.
- 3.10 Installation of the Drain Pipe
  - (1). The diameter of the drain pipe should be larger than or equal to that of the refrigerant pipe (PVC pipe, outer diameter: 25mm (1 in), wall thickness ≥ 1.5mm (1/16 in).
  - (2). The drain pipe should be as short as possible and with at least a 1/100 degree of slope to avoid forming air pockets.
  - (3). If the proper degree of slope of the drain pipe is not allowed, a lift pipe should be installed.
  - (4). A distance 1-1.5m (5 ft) should be kept between the hangers to avoid the drain hose sagging.

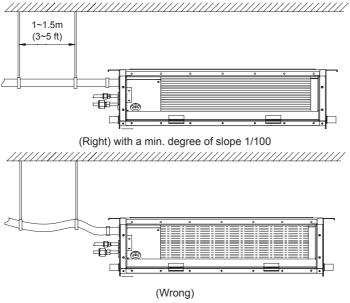
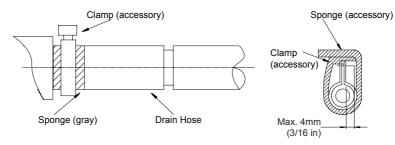


Fig. 14

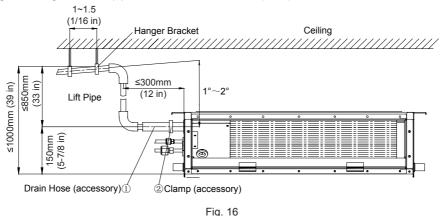
- (5). Insert the drain hose into the drain hole and tighten it with clamps.
- (6). Wrap the clamps with large amount of thermal insulation.
- (7). The drain hose inside the room also should be insulated.





### 3.11 Precautions for the Lift Pipe

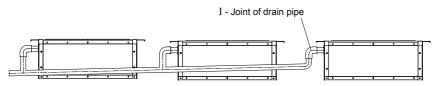
The installation height of the lift pipe should be less than 850mm (33 in). Set a downward slope of  $1^{\circ} \sim 2^{\circ}$  for the lift pipe toward the drainage direction. If the lift pipe and the unit form a right angle, the height of the lift pipe must be less than 800mm (30 in).



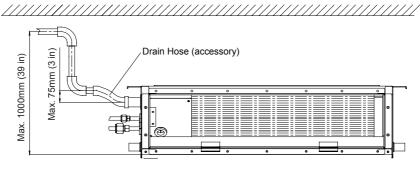
#### Notes:

①. The drain hose rise should be less than 75mm (3 in) for more effective draining.

2. If multiple units are connected to the same drain, please follow the installation steps below.



The specification of the joint of the drain pipe should be suitable to the running capacity of the unit





#### 3.12 Test for the Drainage System

- (1). After the electric connection is complete, please test the drainage system.
- (2). Check if the water flow goes through the pipe correctly making sure the joint doesn't leak. If this unit is installed in the new building, test the drainage system prior to the ceiling decoration.

#### 3.13 Piping

- (1). Align the flare end of the copper pipe with the screw and then tighten the screw by hand.
- (2). Tighten the screw with the torque wrench until it clicks (as shown in Fig. 18).

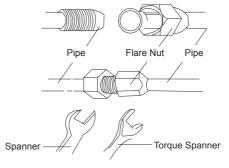


Fig. 18

Diameter of Pipe mm (in)	Moment of Torque (N·m)
φ6.35 (1/4)	15-30
φ9.52 (3/8)	35-40
φ12 (1/2)	45-50
φ15.9 (5/8)	60-65

Table 6 Torque Tightening

(3). Do not make bending angle of the pipe too small; otherwise it will crack. And please use a tube bender.

(4). Wrap the exposed refrigerant pipe and the joints with insulation and then secure them with plastic tape.

## A CAUTION!

① . During the connection of the indoor unit and the refrigerant pipe, never tug on piping; otherwise the pipe or pipe connections may break, which will result in refrigerant leakage.

2 . The refrigerant pipe should be supported by brackets. The unit should not support the weight of the pipes.

If the specification of the outdoor unit pipe joint does not match the indoor unit, then the joint specification of the outlet pipe of the indoor unit takes precedence. A reducing nipple must be installed at the joint of the outdoor unit to make it compatible with that of the indoor unit.

#### 3.14 Insulation for the Refrigerant Pipe

- (1). The refrigerant pipe should be wrapped with insulation and secured with plastic tape in order to prevent condensation and water dripping.
- (2). The joints of the indoor unit should be wrapped with the insulating material with no gaps on the joint of the indoor unit, as shown in Fig. 19.

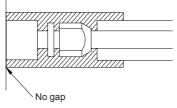


Fig. 19

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After the pipe is insulated, never bend it to form a small angle; otherwise it could break.

- (3). Wrap the pipe with tape.
- 1). Bundle the refrigerant pipe and electric wire together with tape, and separate them from the drain pipe to prevent the condensate water overflowing.
- 2). Wrap the pipe from the bottom of the outdoor unit to the top of the pipe where it enters the wall. Each layer of tape should overlap the previous layer by 1/2 the width of the tape.
- 3). Secure the wrapped pipe on the wall with clamps.

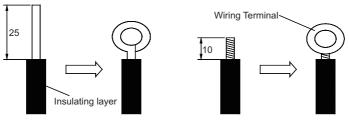
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① . Do not wrap the pipe too tightly; otherwise the insulation effect would be weakened. The drain hose should not be wrapped with refrigerant pipe..

② . Fill the hole in the wall with sealing material to prevent wind and rain from entering.

## 3.15 Wiring between the Wire and the Wiring Terminal

- (1). Wiring of the Single-Core Wire
- 1). Strip the insulating layer at the end of the wire about 25mm (1 in) off with a wire stripper.
- 2). Loosen the screw off on the terminal board of the air conditioning unit.
- 3). Use pliers to shape the end of the wire to a circle matching the size of the screw.
- 4). Lead the screw through the circle of the wire and then attach it to the wiring board.
- (2). Wiring of the Multi-Core Wire
- 1). Strip the insulating layer at the end of the wire about 10mm (3/8 in) off with a wire stripper.
- 2). Loosen the screw off on the terminal board of the air conditioning unit.
- 3). Attach a wiring terminal matching with the size of the screw to the end of the multi-core wire with the crimping tool.
- 4). Lead the screw through the terminal of the multi-core wire and secure it to the wiring board. A.Single-Cored Wire B.Mulit-Cored Wire





# A WARNING!

1 . If the power cord or the signal wire is damaged, they must be replaced with an approved cable.

2 . Prior to the wiring, please check the voltage marked on the nameplate and then proceed as detailed on the wiring diagram.

3 . The dedicated power cord must be used for the air conditioning unit and the circuit breaker and air switch must be installed in case of overload.

4 . The air conditioning unit must be grounded to prevent short circuit.

(5) . A wiring terminal on multi-core wire or single-core wire must be used. Direct wiring with the multi-core wire without wiring terminal may cause fire.

6 . All wiring should be done strictly in accordance with the wiring diagram. Faulty wiring will cause the air conditioning unit malfunction or be damaged.

 $\ensuremath{\overline{\mathbb{O}}}$  . Do not let the electric wires touch the refrigerant pipe, the compressor, the fan or other moving parts.

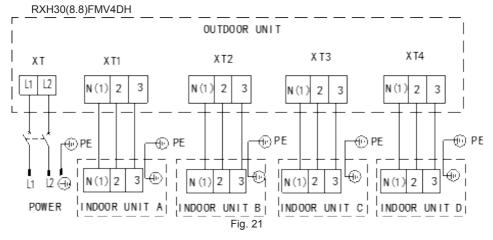
 $\circledast$  . Do not modify the wiring inside the indoor unit. Manufacturer is not responsible for damage or injury resulting from tampering with internal wiring and warranty will be void.

## 3.16 Wiring of the Power Cord (single-phase)

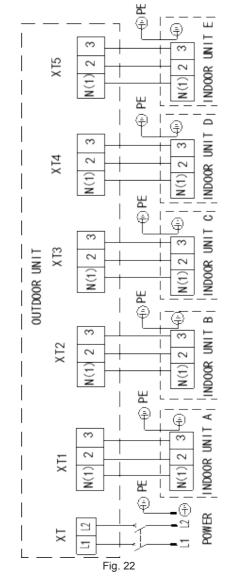
#### A CAUTION!

#### The power supply for each indoor unit must be uniform.

- 1 . Dismantle the cover of the electric box of the indoor unit.
- 2 . Lead the power cord through the rubber ring.
- ③ . Insert the 4-core cable through the hole of the chassis and the bottom of the appliance upward. Connect the power line and the communication line from the outdoor unit to the corresponding terminals N(1), 2, 3, and grounding terminal of the indoor unit. Wiring should follow the wiring diagram. (Note: Be sure the wring terminals A/B/C/D and piping joints A/B/ C/D of the indoor unit match with that of the outdoor unit respectively).
- 4 . Secure the power cord tightly with the binding wire.



RXH36(10.6)FMV4DH & RXH42(12.3)FMV4DH



#### 3.17 Wiring the Wired Controller

- (1). Open the cover of the electric box of the indoor unit.
- (2). Lead the signal line through the rubber ring.
- (3). Insert the signal line to the four-pin socket on the printed circuit board of the indoor unit.
- (4). Secure the signal line with the binding wire.

## 3.18 Electric Installation

Table 7

Indoor Unit		Indoor Unit Power Supply		Input Power(W)		Recommended Power Cord	
Туре	Model		Indoor Fan Motor	Cooling	Heating	(Sectional Area× Pieces)	
	GDH09(2.6)FMK4DH	208/230V~ 60Hz	0.406	75	575	AWG18×4	
Cooling	GDH12(3.5)FMK4DH	208/230V~ 60Hz	0.348	65	865	AWG18×4	
and	GDH18(5.3)FMK4DH	208/230V~ 60Hz	0.428	80	1080	AWG18×4	
Heating	GDH21(6.2)FMK4DH	208/230V~ 60Hz	0.588	110	1610	AWG18×4	
	GDH24(7.0)FMK4DH	208/230V~ 60Hz	0.588	110	1610	AWG18×4	

#### Notes:

The sectional area listed above is applicable to the power cord less than 15 meters (50 feet) long. For the longer cord, its sectional area should be increased to avoid overheating.

# 4 Rated Working Conditions

Table 8 Working Temperature Range

	Indoor side s	tate ℉(℃)	Outdoor side	state °F(°C)
	Dry bulb temp. ℉(℃)	Wet bulb temp. ℉(℃)	Dry bulb temp. ℉(℃)	Wet bulb temp. ℉(℃)
Rated. Cooling	80.0(26.7)	67.0(19.4)	95.0(35.0)	75.0(23.9)
Max. cooling	80.0(26.7)	67.0(19.4)	115.0(46.1)	75.0(23.9)
Min. cooling	67.0(19.4)	57.0(13.9)	67.0(19.4)	57.0(13.9)
Rated. Heating	70.0(21.1)	60.0(15.6)	47.0(8.3)	43.0(6.1)
Max. heating	80.0(26.7)	—	75.0(23.9)	65.0(18.3)
Low Ambient heating	70.0(21.1)	60.0(15.6)	5.0(-15.0)	3.2(-16.0)

# 5 Troubleshooting

If your conditioning unit appears to malfunction, please check the following items before contacting service.

Condition	Possible Causes
Unit fails to startup	Power outage. The circuit breaker has tripped. Voltage is too low.
Unit runs for a short while then stops	The air inlet/outlet of the indoor/outdoor unit is blocked.
Poor cooling effect	The air filter screen is too dirty or clogged. There are other heat sources or too many people in the room. A door or window is open. The air inlet/outlet are blocked. The set temperature is too high.
Poor heating effect	The air filter screen is too dirty or clogged. A door or window is open. The set temperature is too low.
Remote controller isn't working	Do the batteries need to be changed? If the remote controller isn't working even if the batteries have been replaced, please open the back cover and press the button marked "ACL" to reset it. Is the remoter controller within the signal receiving range? Is it blocked by obstacles? For the duct type unit, the remote controller must be pointing at the wired controller.

Table 9

#### Note:

If the air conditioner still malfunctions after the above have been checked, please contact a qualified service center.

## 6 Maintenance

# ▲ CAUTION!

#### Before cleaning or servicing your air conditioner:

- (1). Turn off the main power supply before touching any wiring.
- (2). Turn off main power before cleaning the air conditioner or it could cause an electric shock or injury.
- (3). Do not splash or rinse the unit with water to clean it; or it may cause an electric shock.
- (4). Use a ladder or other stable platform to reach the unit for cleaning.
- (5). Maintenance
- 1). How to clean the filter
- ① . Never dismantle the air filter except for cleaning. Handling the filter too frequently can cause it to weaken.
- ②. If the air conditioning unit is used in a very dusty environment, the air filter should be cleaned more often (generally once every two weeks).
- 2). Preseason maintenance
- 1 . Check if the air inlet/outlet of the indoor unit is blocked.
- $\ensuremath{\textcircled{0}}$  . Check if the grounding is in good condition.
- 3 . Check if the wiring is in good condition.
- $\circledast$  . Check if the indicating lamp of the wired controller blinks after power is turned on.

#### Note: If there is something abnormal, please consult the after-sales serviceman.

- 3). Post-season maintenance
- 0 . Let the air conditioning unit run for half day in fan mode to dry the inside of the unit.
- ② . If the unit is not to be used for a long time, please shut off the main power supply for energy conservation. The power indicating lamp of the wired control will go off.

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