

# Nortek Global HVAC, LLC

## **Flex Match Series** **System Outdoor Unit**



### **Model:**

GXH18(5.3)FMK4DH

GXH24(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

In line with the company’s policy of continual product improvement, the aesthetic and dimensional characteristics, technical data and accessories of this appliance may be changed without notice.

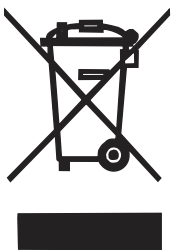
CONTENTS

GENERAL INFORMATION

GENERAL INFORMATION	Conformity And Range	1
	The Instructions Before Use	2
	Name of Parts	3
	Technical Data	4
	Outdoor Unit Working Temperature Range	4
INSTALLER	Electrical Connections	5
	Installing The Outdoor Unit	8
	Bleeding	6
	Maintenance	7
	Installation Dimension Diagram	7
	Check After Installation	8

Illustrations in this manual are for reference only. Actual equipment may look slightly different based on model and size.

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



This marking indicates that this product should not be disposed with other household wastes . To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources.

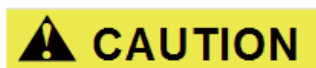
# Explanation of Symbols



**DANGER:** Failure to comply will result in severe personal injury, property damage and/or death.



**WARNING:** Failure to comply may result in severe personal injury, property damage and/or death.





**CAUTION:** Failure to comply may result in personal injury and/or property damage.



Indicates important but not hazard-related information, used to indicate risk of property damage.

## CONFORMITY AND RANGE

## GENERAL INFORMATION

-  Please read this owner's manual carefully before operating the unit and keep it for future reference. installation and use of this product are provided by the manufacturer.
-  Only use the air conditioner as instructed in this booklet. These instructions are not intended to cover every possible condition or situation. As with any electrical household appliance, common sense and caution are therefore always recommended for installation, operation and maintenance.

## WARNING

- ★ When a burning smell or smoke is detected ,please turn off the power supply and contact with the ser-vice center.



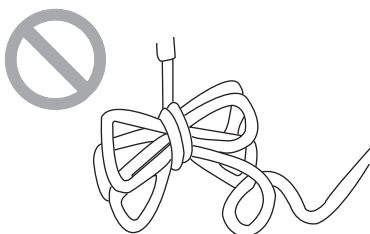
If the unit is not stopped, it may be damaged,and may cause electric shock or fire.

- ★ The power supply must use a dedicated power supply with sufficiently sized circuit breaker ,please do not turn on or turn off the unit freque-ntly,otherwise the unit could malfunction or be damaged.

- ★ Never cut or damage power cables and control wires. If the power cable and signal control wire are damaged, have a professional technician replace them.



- ★ Power supply must be on a dedicated circuit .



Otherwise, it can cause electric shock or fire.

- ★ Disconnect the power supply if air conditioner will not be used for an extended.



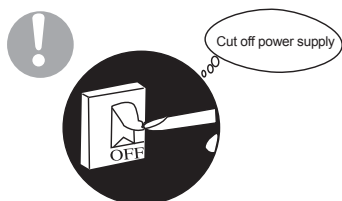
Otherwise,the accumulated dusts may cause overheating or fire.

- ★ Never pull unit by power cord. Only use approved power cord.



Otherwise,it will cause overheating or fire.

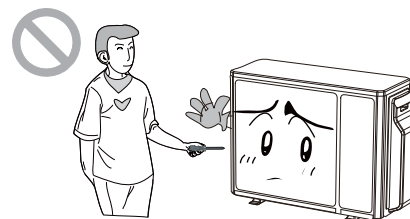
- ★ Turn off power supply before cleaning or servicing the air conditioner.



Otherwise,it may cause electric shock or damage.

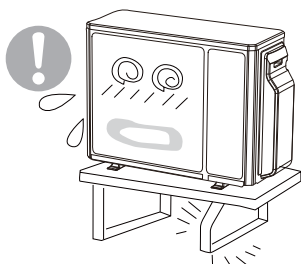
- ★ Rated voltage of this air conditioner 208/230V,60HZ, The compressor will vibrate sharply if the voltage is too low, causing damage to refrigerating system. Electrical component are easy to damage if the voltage is too high.

- ★ Don't attempt to repair the air conditioner by yourself.



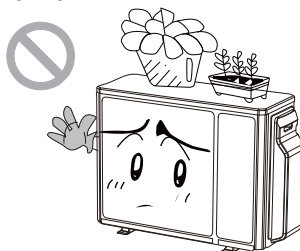
Faulty repair will lead to an electric shock or fire. Contact a qualified technician for repair.

- ★ Make sure unit is securely mounted.



Otherwise, the unit could fall causing damage or personal injury.

- ★ Don't stand on the top of the outdoor unit or place anything on it.



Objects could fall causing damage.

- ★ Grounded : The unit must be reli-ably grounded.The grounding cable shall be connected to approved grounding device in the const-ru-ction.



## GXH18(5.3)FMK4DH

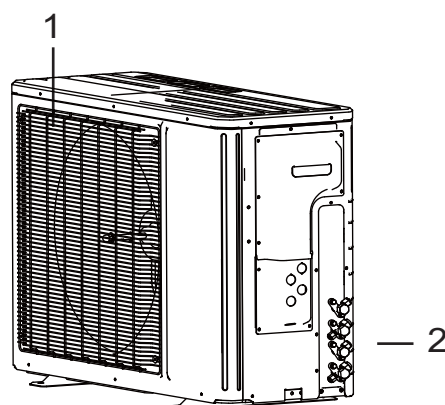
## WARNING

- Be sure to turn off the power supply before cleaning the air conditioner; otherwise electric shock may occur.
- Do not wash or rinse air conditioner with water to avoid electric shock.
- Volatile liquids such as paint thinner or gasoline will cause damage to the appearance of air conditioner. (Only use soft dry cloth or damp cloth with mild detergent to clean the air conditioner cabinet).
- This product must not be disposed with household waste. Please dispose or recycle responsibly.
- The refrigerant circuit will be hot, please keep the communication and power cables away from the copper tube.



OUTDOOR UNIT	
No.	Description
1	Air outlet grille
2	Valve

Note: This illustration is for reference only. Actual air conditioner may look different.



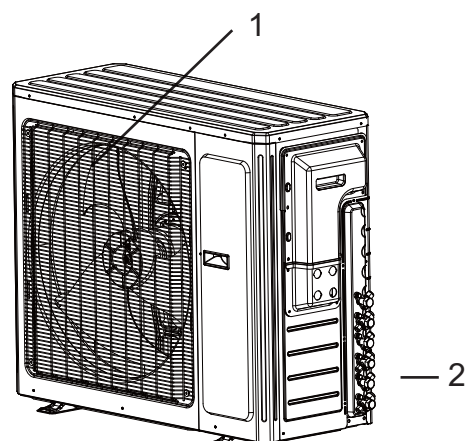
## GXH24(7.0)FMK4DH ;

## WARNING

- If the supply cord is damaged, it must be replaced by qualified person in order to avoid a hazard.
- Be sure to turn off the power supply before cleaning the air conditioner; otherwise electric shock may occur.
- Do not wash or rinse air conditioner with water to avoid electric shock.
- Volatile liquids such as with mild detergent to thinner or gasoline will cause damage to the appearance of air conditioner. (Only use soft dry cloth or damp cloth with mild detergent to clean the air conditioner cabinet).
- Do not dispose this product with household waste. Please dispose or recycle responsibly.
- The refrigerant circuit will be hot, please keep the communication and power cables away from the copper tube.

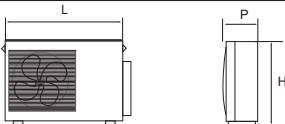
OUTDOOR UNIT	
No.	Description
1	Air outlet grille
2	Valve

Note: This is illustration is for reference only. Actual air conditioner may look different.



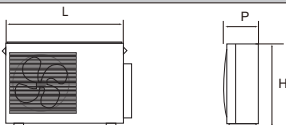
## TECHNICAL DATA

## GENERAL INFORMATION

MODE	GXH18(5.3)FMK4DH			
Electrical data				
Electricity supply	208/230V,60HZ			
Circuit Breaker	20			
Power Cord	AWG 14			
Size and clearance				
	L	890mm (35-1/16 in)		
	P	362mm (14-1/4 in)		
	H	700mm (27-9/16 in)		

## TECHNICAL DATA

## GENERAL INFORMATION

MODE		GXH24(7.0)FMK4DH		
Electrical data				
Electricity supply		208/230V,60HZ		
Circuit Breaker		25		
Power Cord		AWG 14		
Size and clearance				
	L	920mm (36-1/4 in)		
	P	380mm (14-15/16 in)		
	H	790mm (31-1/8 in)		

## OUTDOOR UNIT WORKING TEMPERATURE RANGE

## GENERAL INFORMATION

	Outdoor sideDB/WB°C (°F)
Maximum cooling	48/-(118/-)
Maximum heating	27/-(81/-)

## GXH18(5.3)FMK4DH GXH24(7.0)FMK4DH

1. Remove the handle at the right side plate of the outdoor unit (one screw).
2. Remove the cable clamp, connect the power cable to the terminal. Wiring should match that of indoor unit.
3. Secure power connection wire with the wire clamp.
4. Make sure the cable has been connected correctly.
5. Reinstall the handle.

**!** Install a circuit breaker with appropriate capacity as listed in the table below. Circuit breaker should include magnet buckle and heating buckle function, it should be able to provide short-circuit and overload protection. (Caution: please do not use a fuse only to protect the circuit)

Air-conditioner	Air switch capacity
GXH18(5.3)FMK4DH	25A
GXH24(7.0)FMK4DH	35A

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

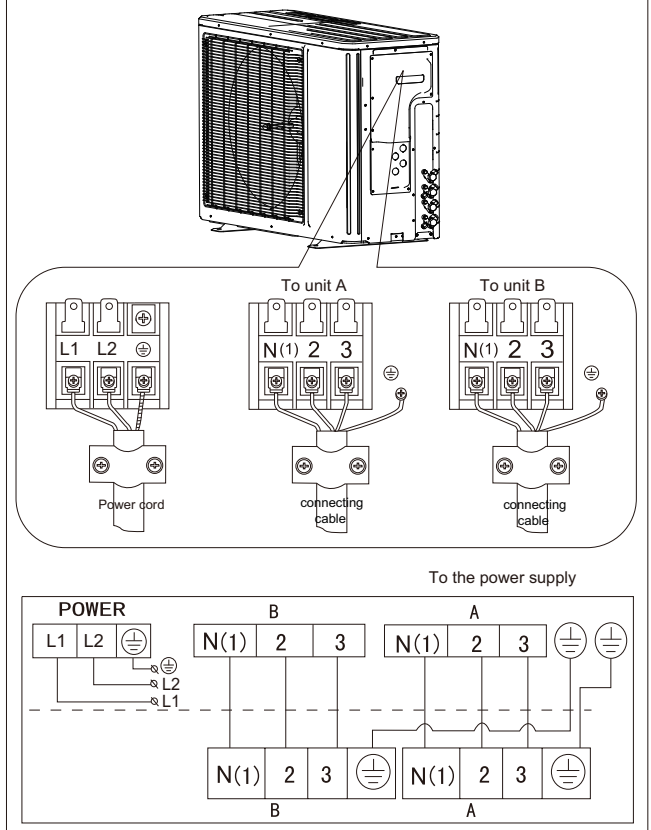
**!** Faulty wire connection may cause malfunction of some electric components. After securing cable, ensure that leads between connection to fixed point have some slack.

**!** The pipe connections for units A/B must match the wiring connections for units A/B.

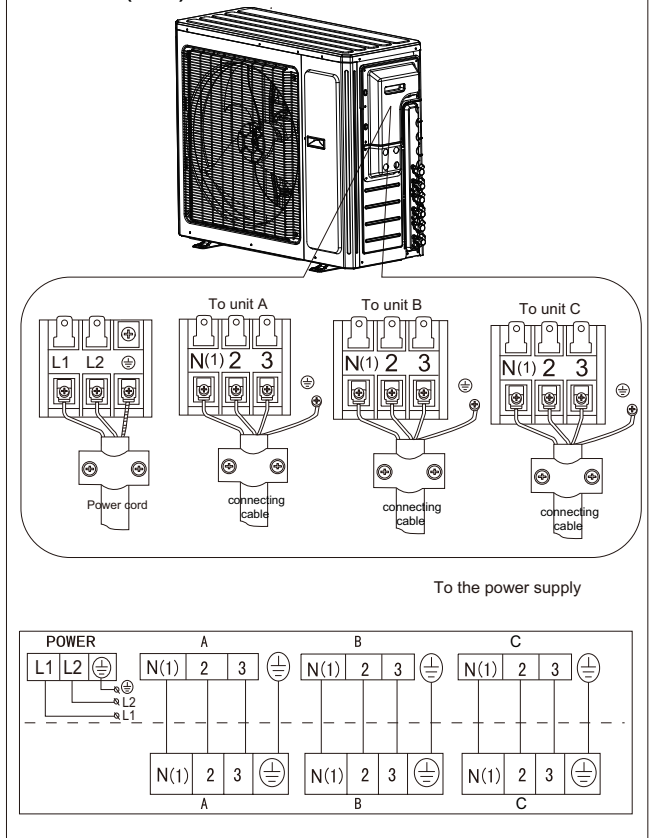
**!** The appliance shall be installed in accordance with national wiring regulations.

Note: These illustrations are for reference only. Actual air conditioner may look different.

## GXH18(5.3)FMK4DH



## GXH24(7.0)FMK4DH



## INSTALLING THE OUTDOOR UNIT

## INSTALLER

### Location

- ⚠ Use bolts to secure the unit to a flat, solid floor. When mounting the unit on a wall or the roof, make sure it is firmly secured so that it cannot move in the event of intense vibrations or strong wind.
- Do not install the outdoor unit in pits or air vents

### Installing the pipes

- ⚠ Use suitable connecting pipes and equipment for R410a refrigerant.

Dimension shown in m (ft)		ODU Size BTUH	
		18K	24K
Max pipe length to each IDU		10 (30)	20 (65)
Total system max pipe length	w/2 IDUs	20 (65)	40 (130)
	w/3 IDUs	--	60 (195)
Max vertical pipe run		10 (30)	10 (30)

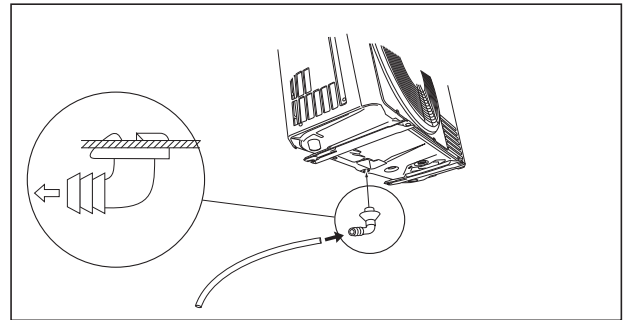
- ⚠ Wrap all the refrigerant pipes and joints.

- ⚠ Tighten the connections using two wrenches working in opposite directions.

**Caution: Installation Must be Performed in Accordance with the NEC/CEC by Authorized Personnel Only.**

### Install the drain fitting and the drain hose (for models with heat pump only)

Condensation is produced and flows from the outdoor unit when the appliance is operating in heating mode. Install a drain fitting and a drain hose to channel the condensate water. Install the drain fitting and rubber washer on the outdoor unit chassis and connect a drain hose to it as shown in the figure.



## EVACUATION

## INSTALLER

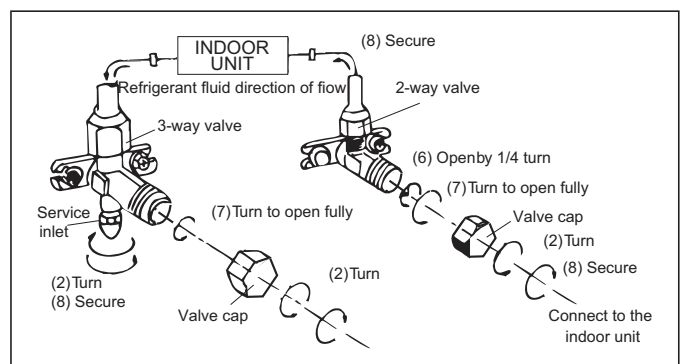
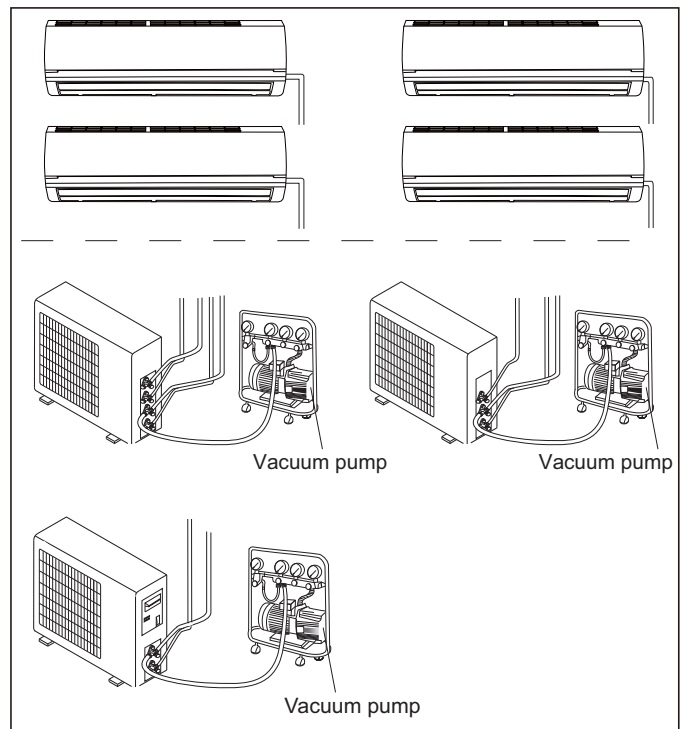
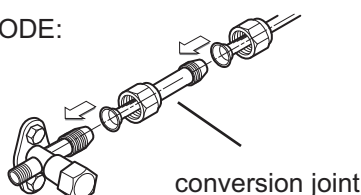
Oxygen and moisture trapped in the refrigerant line piping could potentially cause damage to the compressor. After having connected the indoor and outdoor units, attach a vacuum pump and micron gauge to remove oxygen, moisture and other potential contaminants.

- (1) Unscrew and remove the caps from the 2-way and 3-way valves.
- (2) Unscrew and remove the cap from the service valve.
- (3) Connect the vacuum pump hose to the service valve.
- (4) Operate the vacuum pump for 10-15 minutes until an absolute vacuum of 10mm Hg (0.039 inches) of mercury has been reached.
- (5) With the vacuum pump still in operation, close the low-pressure knob on the vacuum pump coupling. Stop the vacuum pump.
- (6) Open the 2-way valve by 1/4 turn and then close it after 10 seconds. Check all the joints for leaks using soapy water or an electronic leak device.
- (7) Turn the body of the 2-way and 3-way valves. Disconnect the vacuum pump hose.
- (8) Replace and tighten all the caps on the valves.

Diameter	Torque Spec.(N.m)
Φ6mm (1/47 in)	15-20
Φ9.52mm (3/8 in)	35-40
Φ12mm (1/5 in)	60-65
Φ16mm (5/8 in)	45-50
Φ19mm (3/4 in)	70-75

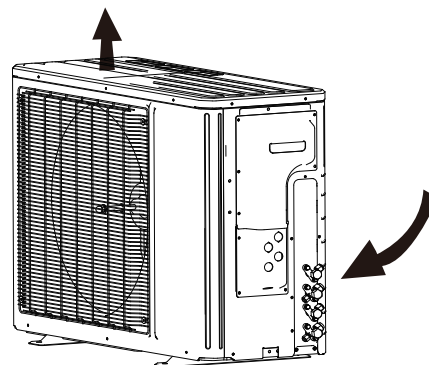
18K unit need to be installed the indoor unit

18K MODE:





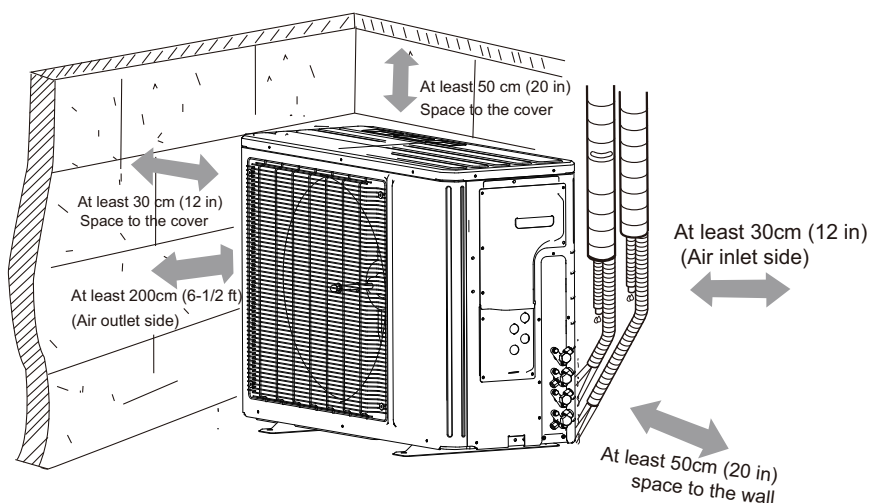
- ⚠ Use suitable instruments for R410a refrigerant.
- Do not use any other refrigerant than R410A.
- ⚠ Do not use mineral oils to clean the unit.



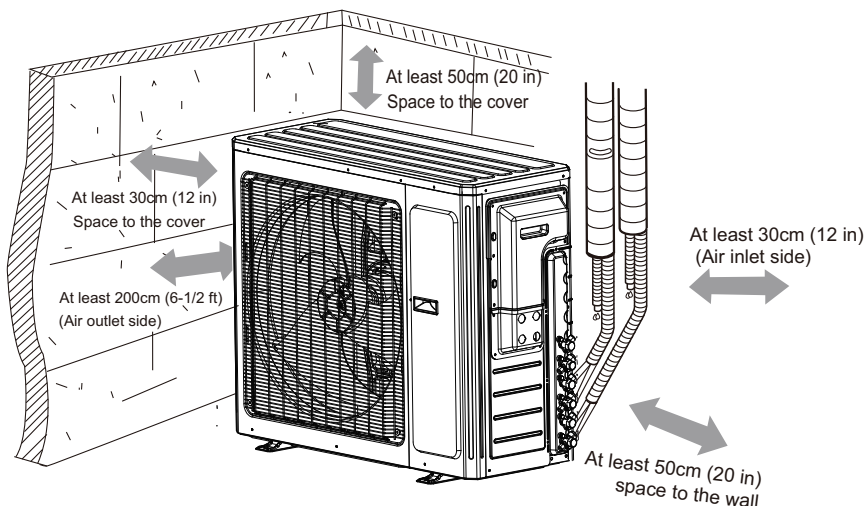
## INSTALLATION DIMENSION DIAGRAM

- ⚠ The installation must be done by trained and qualified service personnel according to this manual.
- ⚠ Contact service center to avoid the malfunction due to faulty installation.
- ⚠ Only trained professionals should lift or move unit to avoid damage.
- ⚠ Ensure that the recommended clearance is left around the appliance.

GXH18(5.3)FMK4DH



GXH24(7.0)FMK4DH



Check Items	Possible Issues Due to Faulty Installation
Is the unit mounted securely?	The unit may fall, vibrate or make noises
Has the gas leakage been checked?	May cause poor cooling (heating) effect
Is there sufficient thermal insulation?	May cause condensation and water dripping
Will water drain smoothly?	May cause condensation and water dripping
Does the power supply voltage match with the rated voltage specified on the nameplate?	The unit may malfunction for the components may burn out
Are the cords and pipelines correctly installed?	The unit may bread down or the components may short circuit out
Has the unit been safely grounded?	Risk of short circuit
Are the power lines and refrigerant piping of each model installed as per requirements?	The unit may malfunction or the components may be burned out
Are the power lines and refrigerant piping of each model installed as per requirements?	The unit may malfunction or the components may burn out
Have the length of refrigerating pipe and refrigerant charge amount been recorded?	This will be required for future reference by those that service the equipment.



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