

OPERATION MANUAL

VRV SYSTEM Inverter Air Conditioners

MODELS
Cased Coil Unit

CXTQ24TASBLUA CXTQ36TASBLUA CXTQ48TASBLUA CXTQ60TASBLUA



WARNING

Only personnel that have been trained to install, adjust, service or repair (hereinafter, "service") the equipment specified in this manual should service the equipment. The manufacturer will not be responsible for any injury or property damage arising from improper service or service procedures. If you service this unit, you assume responsibility for any injury or property damage which may result. In addition, in jurisdictions that require one or more licenses to service the equipment specified in this manual, only licensed personnel should service the equipment. Improper installation, adjustment, servicing or repair of the equipment specified in this manual, or attempting to install, adjust, service or repair the equipment specified in this manual without proper training may result in product damage, property damage, personal injury or death.

English

Read these instructions carefully before installation. Keep this manual in a handy place for future reference. This manual should be left with the equipment owner.

Français

Lire soigneusement ces instructions avant l'installation.

Conserver ce manuel à portée de main pour référence ultérieure. Ce manuel doit être donné au propriétaire de l'équipement.

Español

Lea cuidadosamente estas instrucciones antes de instalar. Guarde este manual en un lugar a mano para leer en caso de tener alguna duda.

Este manual debe permanecer con el propietario del equipo.

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1. SAFETY INSTRUCTIONS

Read these "SAFETY INSTRUCTIONS for Operations" carefully before installing. After completing the installation, make sure that the unit operates properly during the start-up operation.

Instruct the customer on how to operate and maintain the unit. Inform customers that they should store this Operation Manual with the Installation Manual for future reference.

Always use a licensed installer or contractor to install this product. Improper installation can result in water or refrigerant leakage, electrical shock, fire, or explosion.

—∕N DANGER -

- Do not place flammable materials in direct proximity of the indoor and outdoor unit. There are risks of a fire resulting in serious injury or death.
- Any abnormalities in the operation of the heat pump such as smoke or fire could result in severe injury or death. If these conditions are present, turn off the power and contact your dealer immediately.
- Refrigerant gas may produce toxic gas if it comes in contact with fire, such as from a fan, heater, stove or cooking device. Exposure to this gas could cause severe injury or death.
- For a refrigerant leakage, consult your dealer. Refrigerant gas is heavier than air and replaces oxygen. A massive leak could lead to oxygen depletion, especially in basements and an asphyxiation hazard could occur leading to serious injury or death.
- If equipment utilizing a burner is used in the same room as the heat pump, there is the danger of oxygen deficiency which could lead to an asphyxiation hazard resulting in serious injury or death. Be sure to ventilate the room sufficiently to avoid this hazard.
- Safely dispose of all packing materials. Packing materials, such as nails and other metal or wooden parts, may cause wounds or other injuries.

 Properly dispose of plastic packaging bags so children will not play with them. Children playing with plastic bags face the danger of death by suffocation.

— ∕N WARNING-

- Contact your dealer for repair and maintenance. Improper repair and maintenance may result in water leakage, electric shock and fire. Only use accessories made by Daikin that are specifically designed for use with this equipment and have them installed by a professional.
- Contact your dealer to move and reinstall the heat pump. Incomplete installation may result in water leakage, electric shock and fire.
- Never let the indoor unit or the remote controller get wet. Water can cause an electric shock or a fire.
- Never use flammable spray such as hair spray, lacquer or paint near the unit. Flammable spray may cause a fire.
- When replacing a fuse, always replace it with one of the same ampere ratings and the same specifications.
 Wires should also be replaced with the same wires as are currently found in the unit.
- Never remove the front panel of the unit. Refrigerant tubing is extremely hot and with the front panel removed, there is a danger of receiving burns.
- Do not inspect or service the unit yourself. Contact a qualified service person to perform this work.
- To avoid the risk of serious electric shock, all electrical power should be turned off before the servicer does any maintenance on the unit. The use of lock out tag out, LOTO, at the point of electrical cutoff is recommended.
- Never place containers with water or spill liquids on the unit. If a spill occurs, this may cause a shock or fire.
- Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
- To prevent injury, children should never play on or around the unit.
- The heat exchanger fins have sharp edges. To avoid injury, wear gloves or cover the fins while working around them. Long sleeves or lower arm protection is recommended.

- Never insert your fingers or other objects into the air inlet or air outlet. The fan is rotating at high speed and will cause injury.
- Check the unit foundation for damage on a continuous basis, especially if it has been installed a long time. If left in a damaged condition, the unit may cause injury.
- Never touch the internal parts of the controller. Do not remove the front panel because some parts inside are dangerous to touch. Checking and adjusting internal parts should only be done by a qualified professional.

—<u></u> CAUTION -

- Do not use the heat pump for any other purposes other than comfort cooling or heating. Do not use the unit for cooling precision instruments, food, plants, animals or works of art.
- Do not place items under the indoor unit as they may be damaged by condensates that may form if the humidity is high or if the drain outlet gets blocked.
- Before cleaning, stop the operation of the unit by turning the power off or by pulling the supply cord out from its receptacle. Otherwise, an electric shock and injury may result.
- Do not wash the heat pump with excessive water. An electric shock or fire may result.
- Avoid placing the controller in a spot splashed with water. Water entering the controller may cause an electric shock or damage the internal electronic parts.
- Do not operate the heat pump when using a room fumigation type of insecticide. Failure to observe this could cause the chemicals to be deposited in the unit and can endanger the health of those who are hypersensitive to chemicals.
- The appliance is not intended for use by young children or infirm persons without supervision.
- The remote controller should be kept away from children so they cannot play with it.
- Consult with the installation contractor for cleaning.
- Incorrect cleaning of the inside of the heat pump could make the plastic parts break and cause water leakage or electric shock.
- Do not touch the air inlet or aluminum fin of the heat pump as they can cut and cause injury.

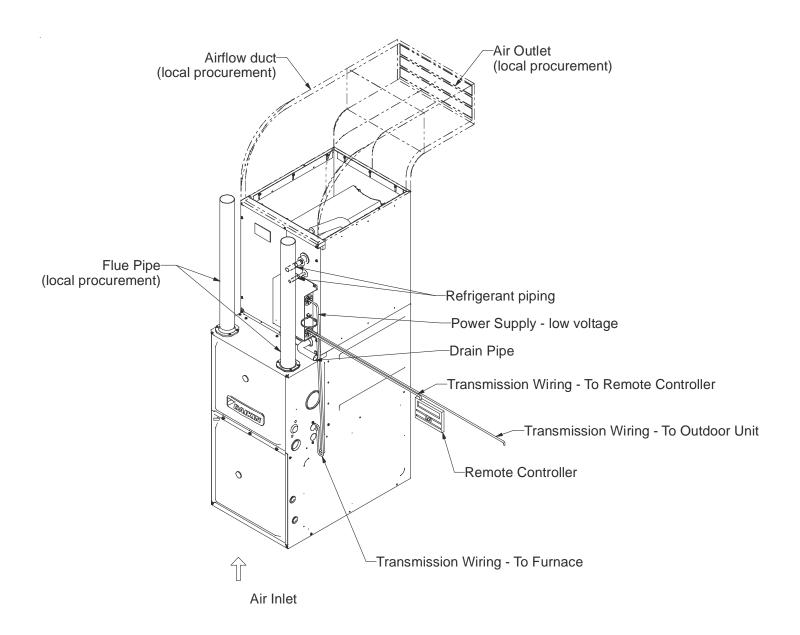
Do not place objects in direct proximity of the outside unit. When leaves and other debris accumulate around the unit, this may provide an area for small animals to inhabit. Animals inside the unit may make contact with electrical parts, causing smoke or fire. They can also make the unit malfunction.

- Never press the button of the remote controller with a hard, pointed object as this can cause damage.
- Never pull or twist the electric wire of the remote controller, as this may make the unit malfunction.
- Do not place appliances that produce open flames (except a gas furnace) in places that are exposed to the air flow of the unit or under the indoor unit. Excessive heat buildup may cause incomplete combustion or deformation of the unit.
- Do not expose the controller to direct sunlight. The LCD display can become discolored and may fail to display the data.
- Do not wipe the controller operation panel with benzene, thinner, chemical dust cloth, etc. The panel may become discolored or cause the coating to peel. If it is extremely dirty, soak a cloth in water-diluted neutral detergent, squeeze it well and wipe the panel clean. Wipe it with another dry cloth.
- Dismantling of the unit, disposal of the refrigerant, oil, and additional parts, should be done in accordance with the relevant local, state, and national regulations.
- Operate the heat pump in a sufficiently ventilated area that is not surrounded by obstacles. Do not use the heat pump in the following places.
 - a. Places with a mist of mineral oil, such as cutting
 - b. Locations such as coastal areas where there is a lot of salt in the air.
 - c. Locations such as hot springs where there is an abundance of sulfur in the air.
 - d. Locations such as factories where the power voltage varies frequently.
 - e. In cars, boats, and other vehicles.
 - f. Locations such as kitchens where oil may splatter or where there is steam in the air.
 - g. Locations where equipment produces electromagnetic waves.
 - h. Places with an acid or alkaline mist.
 - Places where fallen leaves can accumulate or where weeds can grow.

- Do not attempt to do electrical work or grounding work, unless you are licensed to do so. Contact your dealer for electrical work and grounding work.
- Pay attention to operating sound. Use the unit in the following locations:
 - a. Places that can sufficiently withstand the weight of the heat pump yet can suppress the operating sound and vibration of the heat pump.
 - b. Places where warm air from the air outlet of the outside unit or the operating sound of the outside unit does not annoy neighbors.
- Consult your dealer if the heat pump generates unusual noise(s) while in operation.
- Make sure that the drainpipe is installed properly to drain water. If no water is discharged from the drainpipe while the heat pump is in the cooling mode, the drainpipe may be clogged with dust or dirt and water leakage from the indoor unit may occur. Stop operating the heat pump and contact your dealer.

- Replace the filter when one of the following messages is displayed on the bottom of remote controller screen.
 - Time to clean filter & element
 - Time to clean filter
- If using the cased coil in a very dusty environment, increase the frequency of air filter cleaning.
- Reset the filter sign on the main menu of remote controller. Refer to the remote controller operation manual for details.
- Consult your dealer to change filter setting timer to display filter change alarm on the remote controller screen. The time can be set to: 1,250, 2,500, 5,000, or 10,000 hours (The default factory setting is 2,500 hours).

2. PART NOMENCLATURE



3. MAINTENANCE

—∕!\ WARNING-

- Only a licensed professional contractor should perform routine maintenance and service.
- Only a licensed professional contractor is allowed to install optional parts.

Be sure to use the optional parts specified by the manufacturer. Installation of unauthorized parts may result in water leakage, electric shock or fire.

- Do not use flammable material (e.g. hair-spray or insecticide) near the product.
- Do not allow the indoor unit to get wet as it may cause an electric shock or fire.

—<u></u> ∴ CAUTION —

 Clean the unit only after turning it off and disconnecting the power supply.

Failure to do so may result in electric shocks or injury.

Use a stable prep stand.

Pay extra attention when cleaning the cased coil.

(Maintenance and inspection)

- Clean the drain pan periodically. If dust clogs the drainage pipes, water leaks will occur.
- For cleaning, contact your Daikin dealer. (Coils should be cleaned before cooling or heating seasons begin.)
- If the area around the indoor unit is very dusty, use a dust proof cover (local procurement).

(Cleaning the inside of the indoor unit)

It is necessary to clean the inside of the indoor unit periodically.

Cleaning the indoor unit requires a trained professional. Contact your Daikin professional to clean them.

 Wrong cleaning procedures may damage the heat exchanger surfaces, break plastic parts, cause water leakage, or cause electric shock.

(Cleaning the air filter)

 The air filter is an optional accessory for the connected gas furnace.

EXPLANATION:

 Removing the air filter, except when cleaning the cased coil, may result in accidents.

4. BEFORE CONTACTING YOUR DEALER

Since the system has protection controls, you may encounter the following:

Although the room temperature is lower than the set point, hot air doesn't flow into the room when the unit is in heat mode.

 The gas furnace doesn't light when the heat pump is under a particular operation such as: the start up of the compressor, the shut off of the compressor, before defrost or after defrost.

In those cases, the gas furnace will light automatically after finishing the particular operation of the heat pump. This may take from two minutes to more than ten minutes.

The heat pump doesn't switch over to the gas furnace even though the room temperature is much lower than set point.

Or, the gas furnace doesn't switch over to the heat pump even though the room temperature is almost at set point.

- The heat pump and gas furnace will not switch over each other according to room temperature automatically if the outdoor unit is not configured to automatically switch heat sources. But, the system may be able to automatically switch between of heat pump and gas furnace operation according to outside ambient temperature. In that case, the compressor will stop when the gas furnace will operate.
- 2. The field setting of the switch over temperature might not be exact. This setting can be confirmed and changed by only your Daikin dealer.
- 3. In order to protect the system, a prohibition timer is used to prevent frequent switch over between heat pump and gas furnace. Once the gas furnace lights, the system will not switch over until the pre-determined prohibition time has passed. This setting can be confirmed and changed by your Daikin dealer.

The gas furnace doesn't stop combustion heat even when the room temperature has been satisfied.

The gas furnace may not stop during the defrost process of the heat pump to prevent blowing cool air flow.
 After the defrost operation, the gas furnace will stop.
 Turning the remote controller off can shut off the gas furnace. If you don't need combustion heating during defrost operation, it will be achieved by field setting. Ask your Daikin dealer for setting change.

When CXTQ is in heat mode, but is not calling for heat or is set for fan only mode, the indoor blower fan may stop despite the remote controller user settings.

 When the system is in heating mode while operating during low ambient temperatures, the system may stop the indoor blower fan in accordance with the following conditions in order to protect the system components.

AMBIENT TEMPERATURE	BLOWER FAN OPERATION
>20°F	Blower fan can be on/off (depending on user preference)
20°F ~ 5°F	Blower fan may be off (depending on user preference or operating conditions)
<5°F	Fan will be off

Table 1

Note: During heat mode, the factory default settings of the CXTQ coil will not operate the blower fan when there is not a call for heating. This will occur regardless of the ambient temperature as long as the field settings have not been changed.

The indoor blower fan does not obey the user specified fan speed of remote controller.

 In gas combustion heating mode, the air flow rate is dependent upon the gas combustion strength. The indication of the fan speed on the remote controller display will be valid for only heat pump operation.

5. PRECAUTIONS

If the following occurs, contact your dealer.

 Any abnormalities in the operation of the heat pump such as smoke or fire could result in severe injury or death.

Turn off the power and contact your dealer immediately for instructions.

<u>Safety device operation, such as fuses, breaker, GFCI, etc.</u> is often unstable.

Take the following actions before contacting an HVAC contractor.

- 1. Turn off the disconnect switch.
- 2. If the disconnect switch does not work properly, turn off the main power switch.

Water leaks out from the cased coil.

Take the following actions before contacting an HVAC contractor.

1. Stop the operation.

Error message is displayed on the remote controller.

- 1. See the remote controller operation manual and cased coil installation manual for details.
- 2. Inform your Daikin dealer of the details being displayed on the remote controller.

6. GAS FURNACE LOCKOUT RESET

Furnace lockout is characterized by a non-functioning furnace (circulator blower may be running continuously) providing a diagnostic LED code located on the furnace board (contact your Daikin dealer for further assistance). Lockout results when a furnace control detects abnormal conditions. If the furnace is in "lockout," the following methods can be used to clear the error code.

- a. Turn the remote controller off to clear the error. If the error isn't cleared, go to next step.
- b. Set a setting temperature to maximum, then turn the remote controller on.
- c. Turn the remote controller off.
- d. After performing c., turn the remote controller on after approximately 15 seconds.

The procedures b, c, and d will not work during certain outdoor unit operations, i.e. defrost, start-up, stop a compressor, service mode etc.

If the LED of the ON/OFF button is flashing when you turn the remote controller on, you cannot clear the error with this method. In that case, the error must be cleared using the gas furnace. Refer to the gas furnace operation manual for more details.