

Operating Instructions Air Conditioner



Model No.

Indoor Unit

CS-U50TKR

CS-U71TKR

CS-U80TKR

Outdoor Unit

CU-U50TKR

CU-U71TKR

CU-U80TKR

Operating Instructions Air Conditioner

Before operating the unit, please read these operating instructions thoroughly and keep them for future reference. The included Installation Instructions should be kept and read by the installer before installation. Remote control is packaged in the indoor unit and removed by the installer before installation.



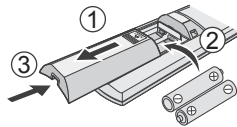
Provides maximum comfort and clean air with optimal energy saving methods.

Use remote control within 8 m from the remote control receiver of the indoor unit.

* Remote control display and functions may vary depending on the model.

Quick Guide

Inserting the batteries

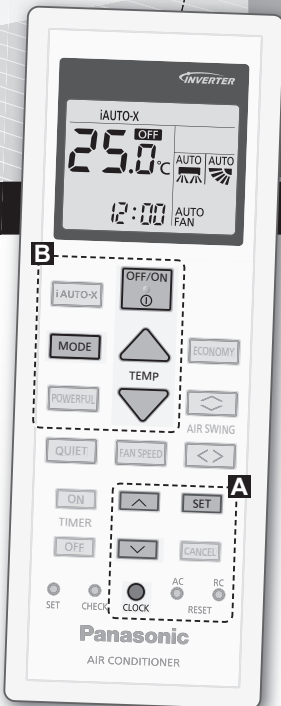


- ① Pull out the back cover of remote control.
- ② Insert AAA or R03 batteries.
- ③ Close the cover.

Clock setting








- ① Press **CLOCK** and set the time **▲** **▼**.
 - Press **CLOCK** and hold for approximately 5 seconds to show time in 12-hour (am/pm) or 24 hour indication.
- ② Confirm **SET**.



Thank you for purchasing
Panasonic Air Conditioner.

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 WARNING	This symbol shows that this equipment uses a flammable refrigerant. If the refrigerant is leaked, together with an external ignition source, there is a possibility of ignition.
 CAUTION	This symbol shows type of flammable refrigerant contained in the system.
 CAUTION	This symbol shows that the Operation Instructions should be read carefully.
 CAUTION	This symbol shows that a service personnel should be handling this equipment with reference to the Installation Instructions.
 CAUTION	This symbol shows that there is information included in the Operation Instructions and/or Installation Instructions.

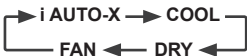
Accessories

- Remote control
- AAA or R03 batteries × 2
- Remote control holder
- Screws for remote control holder × 2

The illustrations in this manual are for explanation purposes only and may differ from the actual unit. They are subject to change without notice for future improvement.

B Basic operation

- ① Press **MODE** to select the desired mode.

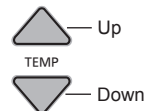


- ② Press **OFF/ON** to start/stop the operation.



- Please note that the **OFF** indication is on display to start the unit.

- ③ Select the desired temperature.




Selection range:
16.0 °C ~ 30.0 °C /
60 °F ~ 86 °F.

- Press and hold **▼** for approximately 10 seconds to switch the temperature indication in °C or °F.

Safety precautions


To prevent personal injury, injury to others or property damage, please comply with the following:
Incorrect operation due to failure to follow instructions below may cause harm or damage, the seriousness of which is classified as below:
This appliance is not intended for accessibility by the general public.


	For appliance filled with R32 (mild flammable refrigerant). If the refrigerant is leaked and exposed to an external ignition source, there is a risk of fire.
--	---

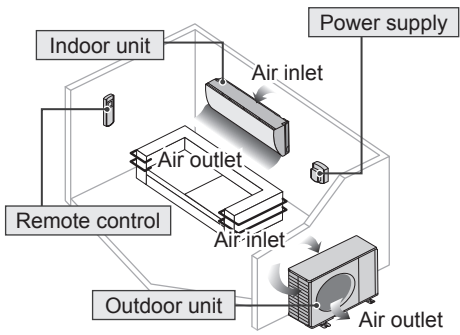
	WARNING This sign warns of death or serious injury.
---	---

	CAUTION This sign warns of injury or damage to property.
---	--

The instructions to be followed are classified by the following symbols:


	This symbol denotes an action that is PROHIBITED .
--	---

	These symbols denote actions COMPULSORY .
---	--



WARNING

Indoor unit and outdoor unit

 This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

The appliance shall be installed and operated in a room with floor area larger than 2.06m² and keep away from ignition sources (such as heat/sparks/open-flame) or, hazardous areas (such as gas appliances, gas cooking, reticulated gas supply systems, or electric cooling appliance, etc.

Be aware that refrigerant may not contain an odour, highly recommended to ensure suitable flammable refrigerant gas detectors are present, operating and able to warn of a leak.

Please consult authorised dealer or specialist to clean the internal parts, repair, install, remove and reinstall the unit. Improper installation and handling will cause leakage, electric shock or fire.

Confirm with authorised dealer or specialist on usage of any specified refrigerant type. Using refrigerant type other than the specified may cause product damage, burst and injury etc.



Do not use means to accelerate the defrosting process or to clean, other than those recommended by manufacturer. Any unfit method or using incompatible material may cause product damage, burst and serious injury.

Do not pierce or burn as the appliance is pressurized. Do not expose the appliance to heat, flame, sparks, or other sources of ignition. Else it may explode and cause injury or death.

Do not install the unit in a potentially explosive or flammable atmosphere. Failure to do so could result in fire.

Do not insert your fingers or other objects into the air conditioner indoor or outdoor unit, rotating parts may cause injury.



Do not touch the outdoor unit during lightning, it may cause electric shock.

Do not expose yourself directly to cold air for a long period to avoid excess cooling.

Do not sit or step on the unit, you may fall down accidentally.



Remote control



Do not allow infants and small children to play with the remote control to prevent them from accidentally swallowing the batteries.

Power supply



Do not use a modified cord, joint cord, extension cord or unspecified cord to prevent overheating and fire.



To prevent overheating, fire or electric shock:

- Do not share the same power outlet with other equipment.
- Do not operate with wet hands.
- Do not over bend the power supply cord.
- Do not operate or stop the unit by inserting or pulling out the power plug.



If the supply cord is damaged, it must be replaced by the manufacturer, service agent or similarly qualified persons in order to avoid a hazard.

It is strongly recommended to be installed with Earth Leakage Circuit Breaker (ELCB) or Residual Current Device (RCD) to prevent electric shock or fire.

To prevent overheating, fire or electric shock:

- Insert the power plug properly.
- Dust on the power plug should be periodically wiped with a dry cloth.

Stop using the product if any abnormality/failure occurs and disconnect the power plug or turn off the power switch and breaker.

(Risk of smoke/fire/electric shock)

Examples of abnormality/failure

- The ELCB trips frequently.
 - Burning smell is observed.
 - Abnormal noise or vibration of the unit is observed.
 - Water leaks from the indoor unit.
 - Power cord or plug becomes abnormally hot.
 - Fan speed cannot be controlled.
 - The unit stops running immediately even if it is switched on for operation.
 - The fan does not stop even if the operation is stopped.
- Contact your local dealer immediately for maintenance/repair.

Safety precautions



This equipment must be earthed to prevent electrical shock or fire.



Prevent electric shock by switching off the power supply and unplug:



- Before cleaning or servicing,
- When extended non-use, or
- During abnormally strong lightning activity.



WARNING

Precaution for appliance filled with R32

Pay careful attention to the following points when operating the appliances and dealing with different refrigerants.



The appliance shall be installed, and/or operated in a room with floor area larger than A_{min} (m^2) and keep away from ignition sources, such as heat/sparks/open flame or hazardous areas such as gas appliances, gas cooking, reticulated gas supply systems or electric cooking appliances, etc. (Refer to Table A of Installation instructions table for A_{min} (m^2))

Be aware that refrigerant may not contain an odour, highly recommended to ensure suitable flammable refrigerant gas detectors are present, operating and able to warn of a leak.



Since the working pressure is higher than that of refrigerant R22 models, some of the piping and installation and service tools are special.

Especially, when replacing a refrigerant R22 model with a new refrigerant R32 model, always replace the conventional piping and flare nuts with the R32 and R410A piping and flare nuts on the outdoor unit side.

The R32 flare nut and pipe on the outdoor unit side can also be used for a R410A model.

Models that use refrigerant R32 and R410A have a different charging port thread diameter to prevent erroneous charging with refrigerant R22 and for safety. Therefore, check beforehand.

[The charging port thread diameter for R32 and R410A is 12.7 mm (1/2 inch).]

Be extra careful so that foreign matter (oil, water, etc.) does not enter the piping.

Also, when storing the piping, securely seal the opening by pinching, taping, etc. (Handling of R32 is similar to R410A.)


This appliance shall be stored in a well ventilated area.

This appliance shall be stored in a room without continuously operating open flames and ignition sources.

This appliance shall be stored so as to prevent mechanical damage from occurring.




Do not use means to accelerate the defrosting process or to clean, other than those recommended by manufacturer. Any unfit method or using incompatible material may cause product damage, burst and serious injury.

 Do not pierce or burn as the appliance is pressurized. Do not expose the appliance to heat, flame, sparks, or other sources of ignition. Else it may explode and cause injury or death.



CAUTION


Indoor unit and outdoor unit

 Do not wash the indoor unit with water, benzene, thinner or scouring powder to avoid damage or corrosion at the unit.

Do not use for preservation of precise equipment, food, animals, plants, artwork or other objects. This may cause quality deterioration, etc.

Do not use any combustible equipment in front of the airflow outlet to avoid fire propagation.

Do not expose plants or pet directly to airflow to avoid injury, etc.


Do not touch the sharp aluminium fin, sharp parts  may cause injury.

Do not switch ON the indoor unit when waxing the floor. After waxing, aerate the room properly before operating the unit.


Do not install the unit in oily and smoky areas to prevent damage to the unit.

Do not dismantle the unit for cleaning purpose to avoid injury.

Do not step onto an unstable bench when cleaning the unit to avoid injury.

 Do not place a vase or water container on the unit. Water may enter the unit and degrade the insulation. This may cause an electric shock.


Do not open window or door for long time during operation, it may lead to inefficient power usage and uncomfortable temperature changes.


 Prevent water leakage by ensuring drainage pipe is:
- Connected properly,
- Kept clear of gutters and containers, or
- Not immersed in water

After a long period of use or use with any combustible equipment, aerate the room regularly.


After a long period of use, make sure the installation rack does not deteriorate to prevent the unit from falling down.

Remote control

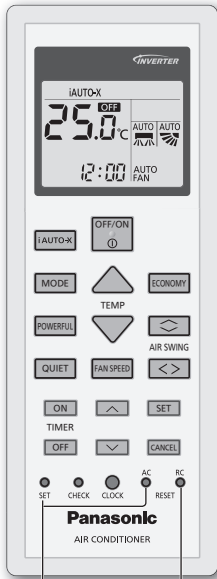
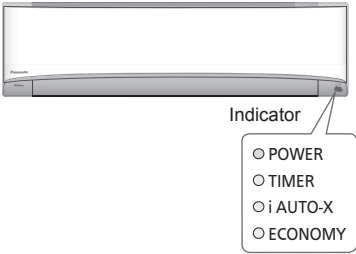
 Do not use rechargeable (Ni-Cd) batteries. It may damage the remote control.

 To prevent malfunction or damage of the remote control:
• Remove the batteries if the unit is not going to be used for a long period of time.
• New batteries of the same type must be inserted following the polarity stated.

Power supply

 Do not disconnect the plug by pulling the cord to prevent electric shock.

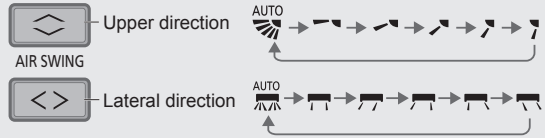
How to use



Not used in normal operations.

Press to restore the remote control to default setting.

To adjust airflow direction



- Do not adjust the flap by hand.

To adjust fan speed



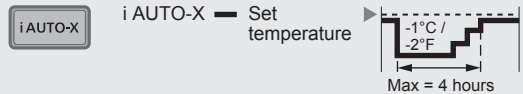
- For AUTO, the indoor fan speed is automatically adjusted according to the operation mode.
- If i AUTO-X mode is set, fan speed is fixed to AUTO. To adjust fan speed, cancel i AUTO-X mode.

To save electrical power consumption



- Save power consumption at unoccupied room by adjust set temperature up to 3°C automatically.
- Brightness of all indicators will be dimmed.

To reach temperature quickly



- The unit controls set temperature according to room temperature to accelerate room cooling.
- After max 4 hours, the set temperature follows the last set temperature setting.
- Fan speed is fixed at AUTO, fan speed selection is prohibited.
- During unit is off, press **i AUTO-X** will turn on the unit with i AUTO-X mode.
- i AUTO-X mode can be cancelled by pressing the respective button again.

To reach the preset temperature quickly



- This operation stops automatically after 20 minutes.

To enjoy quiet operation



- This operation reduces airflow noise.

To set the timer

2 sets of ON and OFF timers are available to turn ON or OFF the unit at different preset times.

① **Select ON or OFF timer**
 • Each time pressed:
 → ① → ② → Cancel

② **Set the time**

③ **Confirm**

Example:
 OFF at 22:00

OFF OFF ① 0:00

OFF ① 22:00

SET OFF ① 22:00

- To cancel ON or OFF timer, press **ON** or **OFF** to select respective ① or ② then press **CANCEL**.
- If timer is cancelled manually or due to power failure, you can restore the timer again by pressing **ON** or **OFF** to select respective ① or ② then press **SET**.
- The nearest timer setting will be displayed and will activate in sequence.
- Timer operation is based on the clock set in the remote control and repeats daily once set. For clock setting, please refer to Quick Guide.

Note



- Can be activated in all modes and can be cancelled by pressing the respective button again.



- Cannot be selected at the same time.

To learn more...

Operation mode

- i AUTO-X** : The fast cooling is ideal when you come home on a hot day.
- COOL** : Provides efficient comfort cooling to suit your needs.
- DRY** : Unit operates at low fan speed to give a gentle cooling operation.
- FAN** : To circulate air in the room.

Energy saving temperature setting

Operating the unit within the recommended temperature range may save energy.

COOL: 26.0 °C ~ 28.0 °C / 79 °F ~ 82 °F.

Air flow direction

In COOL/DRY mode:

If AUTO is set, the flaps swings left/right and up/down automatically.

In i AUTO-X mode:

If AUTO is set, the horizontal flap is fixed at the lower position and shift to the upper position after reaches set temperature. If manual is set, the horizontal flap are fixed at the predetermined position.

Auto restart control

If power is resumed after a power failure, the operation will restart automatically after a period of time with previous operation mode and airflow direction.

- This control is not applicable when TIMER is set.

Operating conditions

Use this air conditioner in the temperature range indicated in the table.

Temperature °C (°F)		Indoor		Outdoor	
		DBT	WBT	DBT	WBT
COOL	Max.	32 (89.6)	23 (73.4)	46 (114.8)	26 (78.8)
	Min.	16 (60.8)	11 (51.8)	5 (41.0)	-

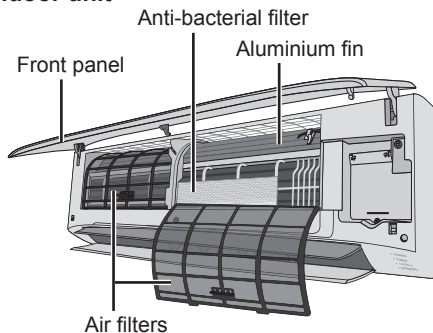
DBT: Dry bulb temperature, WBT: Wet bulb temperature

Cleaning instructions

To ensure optimal performance of the unit, cleaning has to be carried out at regular intervals. Dirty unit may cause malfunction and you may see error code "H99". Please consult authorised dealer.

- Switch off the power supply and unplug before cleaning.
- Do not touch the aluminium fin, sharp parts may cause injury.
- Do not use benzine, thinner or scouring powder.
- Use only soap (\approx pH 7) or neutral household detergent.
- Do not use water hotter than 40 °C / 104 °F.

Indoor unit



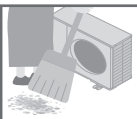
Indoor unit

Wipe the unit gently with a soft, dry cloth. Coils and fans should be clean for at least every 6 months by authorised dealer.



Outdoor unit

Clear debris that surround the unit. Clear any blockage from drain pipe.



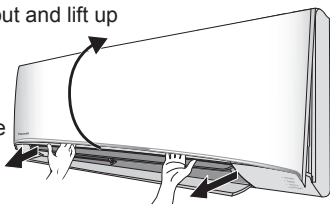
Front panel

Wash gently and dry.

Remove the front panel

② Pull out and lift up

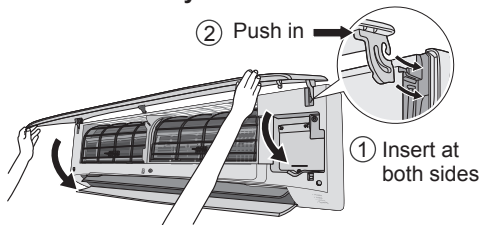
① Release the hooks at both ends



Close it securely

② Push in

① Insert at both sides



③ Close down

④ Press both ends and center of the front panel

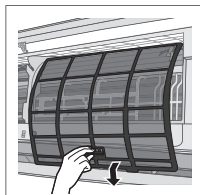
Air filters

Once every 2 weeks

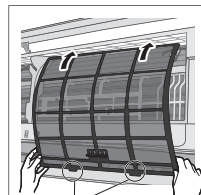
- Wash/rinse the filters gently with water to avoid damage to the filter surface.
- Dry the filters thoroughly under shade, away from fire or direct sunlight.
- Replace any damaged filters.



Remove air filter

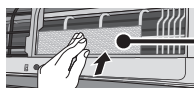


Attach air filter



Insert into the unit

Anti-bacterial filter



Anti-bacterial filter.

- Clean the filter whenever necessary.
- Wash/rinse the filter gently with water to avoid damage to the filter.
- Dry the filter thoroughly under the shade, away from fire or direct sunlight.
- Replace the filter every 10 years or replace any damaged filter. Part no.: CZ-SA22P

Troubleshooting

The following symptoms do not indicate malfunction.

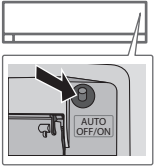
Symptom	Cause
POWER indicator blinks before the unit is switched on.	<ul style="list-style-type: none"> • This is a preliminary step in preparation for the operation when the ON timer has been set. When ON Timer is set, the unit may start earlier (up to 15 minutes) before the actual set time in order to achieve the desired temperature on time.
TIMER indicator is always on.	<ul style="list-style-type: none"> • The timer setting repeats daily once set.
Operation is delayed a few minutes after restarting.	<ul style="list-style-type: none"> • The delay is a protection to the unit's compressor.
Indoor fan stops occasionally during automatic fan speed setting.	<ul style="list-style-type: none"> • This helps to remove the surrounding odour.
The room has a peculiar odour.	<ul style="list-style-type: none"> • This may be due to damp smell emitted by the wall, carpet, furniture or clothing.
Cracking sound during operation.	<ul style="list-style-type: none"> • Changes of temperature caused the expansion/contraction of the unit.
Water flowing sound during operation.	<ul style="list-style-type: none"> • Refrigerant flow inside the unit.
Mist emerges from indoor unit.	<ul style="list-style-type: none"> • Condensation effect due to cooling process.
Outdoor unit emits water/steam.	<ul style="list-style-type: none"> • Condensation or evaporation occurs on pipes.
Louder noise at outdoor unit during early operation of i AUTO-X.	<ul style="list-style-type: none"> • The compressor and fan rotate at higher speed to boost cooling performance during initial operation.
Discoloration of some plastic parts.	<ul style="list-style-type: none"> • Discoloration is subject to material types used in plastic parts, accelerated when exposed to heat, sun light, UV light or environmental factor.

Check the following before calling for servicing.

Symptom	Check
Operation in COOL mode is not working efficiently.	<ul style="list-style-type: none"> • Set the temperature correctly. • Close all doors and windows. • Clean or replace the filters. • Clear any obstruction at the air inlet and air outlet vents.
Noisy during operation.	<ul style="list-style-type: none"> • Check if the unit has been installed at an incline. • Close the front panel properly.
Remote control does not work. (Display is dim or transmission signal is weak.)	<ul style="list-style-type: none"> • Insert the batteries correctly. • Replace weak batteries.
The unit does not work.	<ul style="list-style-type: none"> • Check if the circuit breaker is tripped. • Check if timers have been set.
The unit does not receive the signal from the remote control.	<ul style="list-style-type: none"> • Make sure the receiver is not obstructed. • Certain fluorescent lights may interfere with signal transmitter. Please consult authorised dealer.

When...

■The remote control is missing or a malfunction has occurred



1. Raise the front panel.
2. Press the button once to use in i AUTO-X mode.
3. Press and hold the button until you hear 1 beep, then release to use in forced COOL mode.
4. Press the button again to turn off.

■The indicators are too bright

- To dim or restore the unit's indicator brightness, press  and hold for 5 seconds.

■Conducting a seasonal inspection after extended non-use

- Check the remote control batteries.
- Check that there is no obstruction around the air inlet and outlet vents.
- Use Auto OFF/ON button to select COOL operation. After 15 minutes of operation, it is normal to have the following temperature difference between the air inlet and outlet vents:

COOL: $\geq 8^{\circ}\text{C} / 14.4^{\circ}\text{F}$

■The units are not going to be used for a long period of time

- Turn off the power supply and unplug.
- Remove the remote control batteries.

NON SERVICEABLE CRITERIAS

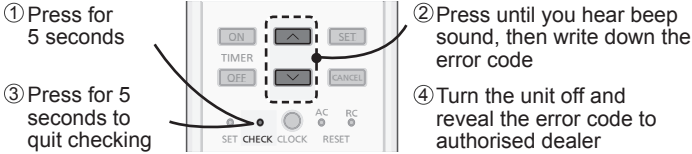
TURN OFF THE POWER SUPPLY AND UNPLUG then please consult an authorised dealer when in following conditions:

- Abnormal noise during operation.
- Water/foreign particles have entered the remote control.
- Water leaks from Indoor unit.
- Circuit breaker switches off frequently.
- Power cord becomes unnaturally warm.
- Switches or buttons are not functioning properly.

Troubleshooting

How to retrieve error codes

If the unit stops and the TIMER indicator blinks, use the remote control to retrieve the error code.



• For certain errors, you may restart the unit for limited operation if there are 4 beeps when operation starts.

Diagnostic display	Abnormality/Protection control
H 00	No memory of failure
H 11	Indoor/outdoor abnormal communication
H 12	Indoor unit capacity unmatched
H 14	Indoor intake air temperature sensor abnormality
H 15	Outdoor compressor temperature sensor abnormality
H 16	Outdoor current transformer (CT) abnormality
H 17	Outdoor suction temperature sensor abnormality
H 19	Indoor fan motor mechanism lock
H 21	Indoor float switch operation abnormality
H 23	Indoor heat exchanger temperature sensor 1 abnormality
H 24	Indoor heat exchanger temperature sensor 2 abnormality
H 25	Indoor ion device abnormality
H 26	Minus ION abnormality
H 27	Outdoor air temperature sensor abnormality
H 28	Outdoor heat exchanger temperature sensor abnormality
H 30	Outdoor discharge pipe temperature sensor abnormality
H 31	Abnormal swimming pool sensor
H 32	Outdoor heat exchanger temperature sensor 2 abnormality
H 33	Indoor/outdoor misconnection abnormality
H 34	Outdoor heat sink temperature sensor abnormality
H 35	Indoor/outdoor water adverse current abnormality
H 36	Outdoor gas pipe temperature sensor abnormality
H 37	Outdoor liquid pipe temperature sensor abnormality
H 38	Indoor/outdoor mismatch (brand code)

Diagnostic display	Abnormality/Protection control
H 39	Abnormal indoor operating unit or standby units
H 41	Abnormal wiring or piping connection
H 50	Ventilation fan motor locked
H 51	Ventilation fan motor locked
H 52	Left-right limit switch fixing abnormality
H 58	Indoor gas sensor abnormality
H 59	Eco sensor abnormality
H 64	Outdoor high pressure sensor abnormality
H 67	nanoe abnormality
H 70	Light sensor abnormality
H 71	DC cooling fan inside control board abnormality
H 72	Abnormality tank temperature sensor
H 97	Outdoor fan motor mechanism lock
H 98	Indoor high pressure protection
H 99	Indoor operating unit freeze protection
F 11	4-way valve switching abnormality
F 16	Total running current protection
F 17	Indoor standby units freezing abnormality
F 18	Dry circuit blocked abnormality
F 87	Control box overheat protection
F 90	Power factor correction (PFC) circuit protection
F 91	Refrigeration cycle abnormality
F 93	Outdoor compressor abnormal revolution
F 94	Compressor discharge pressure overshoot protection
F 95	Outdoor cooling high pressure protection
F 96	Power transistor module overheating protection
F 97	Compressor overheating protection
F 98	Total running current protection
F 99	Outdoor direct current (DC) peak detection

* Some error code may not be applicable to your model. Consult authorised dealer for clarification.

Information

Information for Users on Collection and Disposal of Old Equipment and used Batteries



[Information on Disposal in other Countries outside the European Union]

These symbols are only valid in the European Union. If you wish to discard these items, please contact your local authorities or dealer and ask for the correct method of disposal.



Pb

Note for the battery symbol (bottom two symbol examples):

This symbol might be used in combination with a chemical symbol. In this case it complies with the requirement set by the Directive for the chemical involved.

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