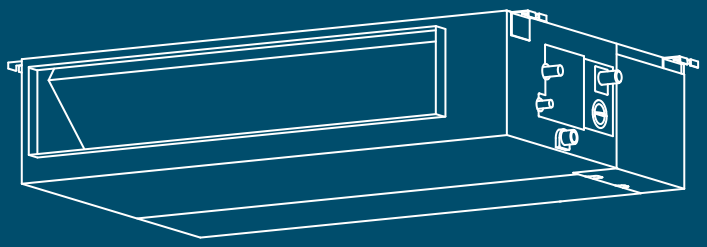
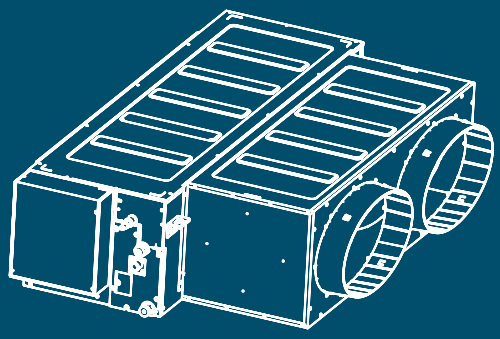
DUCTED AIR CONDITIONER

Owner's Manual

KDI V2 Series

KDI-7.0 I KDI-10.5 I KDI-12.5 I KDI-14.0
KDI-14.0S I KDI-17.0





kaden°™
your perfect climate

Important note

This appliance must be installed in accordance with:

Manufacturer's Installation Instructions

Current AS/NZS 3000, AS/NZS 5149

Local Regulations and Municipal Building Codes including local OH&S requirements

This appliance must be installed, maintained, and removed only by an Authorised Person.

For continued safety of this appliance, it must be installed and maintained in accordance with the manufacturer's Instructions.



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Important note

Read this manual carefully before installing
or operating your new air conditioning unit.
Make sure to save this manual for future reference.

1. Safety precautions

Read safety precautions before installation

Thank you for purchasing this air conditioner. This manual will provide you with information on how to operate, maintain, and troubleshoot your air conditioner. Following the instructions will ensure the proper function and extended lifespan of your unit.

Please pay attention to the following signs:



This symbol is a WARNING, and indicates that ignoring instructions may cause death or serious injury.



This symbol is a CAUTION, and indicates that ignoring instructions may cause moderate injury to your person, or damage to your unit or other property.

WARNING

- Ask an authorised technician to install this air conditioner. Inappropriate installation may cause water leakage, electric shock, or fire.
- The warranty will be voided if the unit is not installed by professionals.
- If abnormal situation arises (like burning smell), turn off the power supply and call an authorised technician for instructions to avoid electric shock, fire or injury.
- **Do not** let the indoor unit or the remote control get wet. It may cause electric shock or fire.
- **Do not** insert fingers, rods or other objects into the air inlet or outlet. This may cause injury, since the fan may be rotating at high speeds.
- **Do not** use a flammable spray such as hair spray, lacquer or paint near the unit. This may cause fire or combustion.

CAUTION

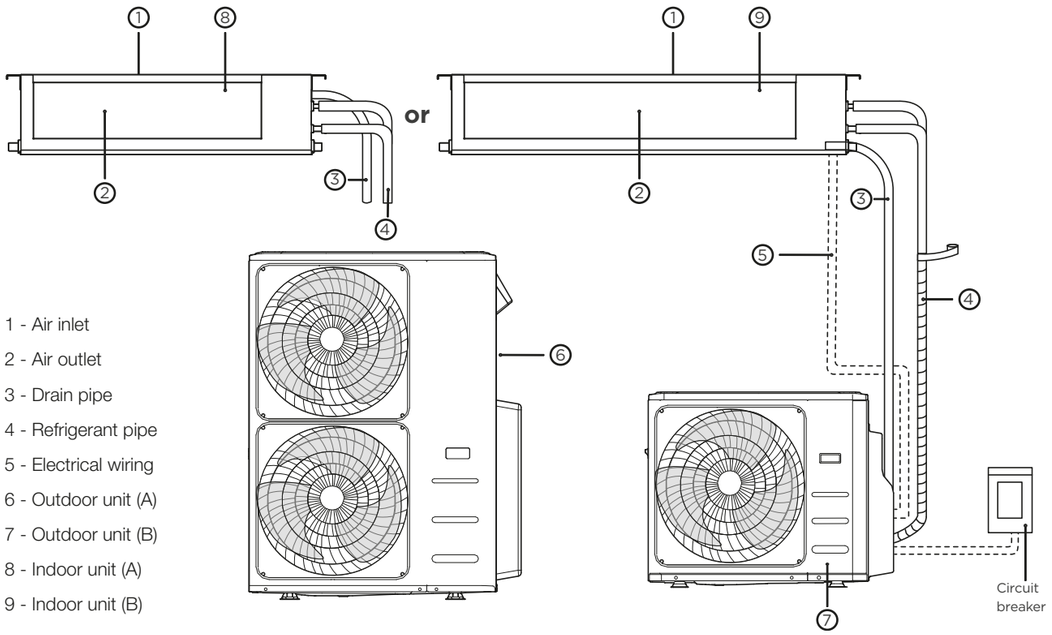
- **Do not** touch the air outlet while the swing flap is in motion. Fingers might get caught or the unit may break down.
- **Do not** inspect the unit by yourself. Ask an authorised technician to perform the inspection.
- To prevent product deterioration, **do not** use the air conditioner for preservation purposes (storage of food, plants, animals, works of art, etc.).
- **Do not** touch the evaporator coils inside the indoor unit. The evaporator coils are sharp and may cause injury.
- **Do not** operate the air conditioner with wet hands. It may cause electric shock.
- **Do not** place items that might be affected by moisture damage under the indoor unit. Condensation can occur at a relative humidity of 80%.
- **Do not** expose heat-producing appliances to cold air or place them under the indoor unit. This may cause incomplete combustion or deformation of the unit due to the heat.
- After long periods of usage, check the indoor unit to see if anything is damaged. If the indoor unit is damaged, it may fall and cause injury.
- If the air conditioner is used together with other heating devices, thoroughly ventilate the room to avoid oxygen deficiency.
- **Do not** climb onto or place objects on top of the outdoor unit.

REFRIGERANT

This appliance uses R32 (difluoromethane) refrigerant, which is a flammable gas class 2.2 according to AS/NZS 5149 and must be handled by a refrigeration mechanic with appropriate Australian refrigerant handling licence.

2. Indoor unit parts and major functions

Unit parts



1 - Air inlet
2 - Air outlet
3 - Drain pipe
4 - Refrigerant pipe
5 - Electrical wiring
6 - Outdoor unit (A)
7 - Outdoor unit (B)
8 - Indoor unit (A)
9 - Indoor unit (B)

Operating conditions

Use the system under the following temperatures for safe and effective operation. If the air conditioner is used under different conditions, it may malfunction or become less efficient.

	COOL mode	HEAT mode	DRY mode
Room temperature	17°C – 32°C	0°C – 30°C	17°C – 32°C
Outdoor temperature	-15°C – 50°C	-15°C – 24°C	0°C – 50°C

Features

Default setting

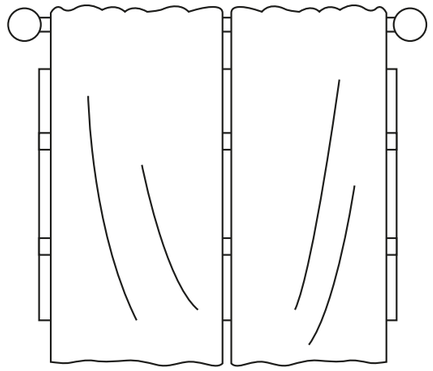
When the air conditioner restarts after a power failure, it will default to the factory settings (AUTO mode, AUTO fan, 24°C). This may cause inconsistencies on the remote control and unit panel. Use your remote control to update the status.

Auto-restart

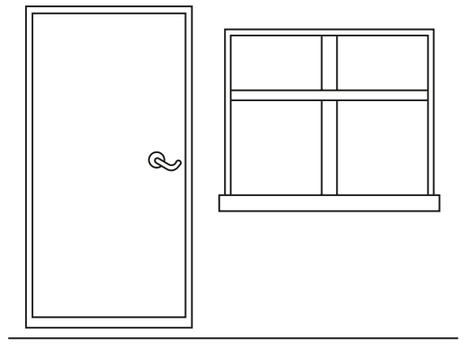
In case of power failure, the system will immediately stop. When power returns, the Operation light on the indoor unit will flash. To restart the unit, press the ON/OFF button on the remote control. If the system has an auto restart function, the unit will restart using the same settings.

Energy saving tips

- **Do not** set the unit to excessive temperature levels.
- While cooling, close the curtains to avoid direct sunlight.
- Doors and windows should be kept closed to keep cool or warm air in the room.
- Set a timer and use the built-in SLEEP/ECONOMY mode if applicable.
- Clean the air filter regularly.



Closing curtains during heating also helps keep the heat in



Doors and windows should be kept closed

3. Installation and service

Installation record – installer details

Company name _____

Company address _____

_____

Telephone _____

Mobile _____

Email _____

Certificate of compliance/certification number _____

Authorised persons license number _____

Installers name _____

Installers signature _____

Installation date _____

Installation record – system details

Model number _____

Serial number indoor unit _____

Serial number outdoor unit _____

Installation address _____

_____

_____

Customer care programme

Service and maintenance in accordance with the Service maintenance schedule is essential in ensuring the prolonged useful life of your system, and help ensure it operates at maximum efficiency. More frequent routine maintenance may be necessary where the air conditioning system is installed in harsh environments, or in non-residential applications.

CAUTION

Service maintenance is not covered under warranty and is a chargeable service. All units must have safe and reasonable access and be installed in compliance with the installation instructions supplied with the unit. Some installations may require two service personnel to attend, in accordance with health and safety requirements.

Also note that all refrigerated air conditioning systems have air filters that require regular inspection and cleaning.

4. Care and maintenance

Safety precautions

- Contact an authorised service technician for repair or maintenance. Improper repair and maintenance may cause water leakage, electrical shock, or fire, and may void your warranty.
- **Do not** substitute a blown fuse with a higher or lower amperage rating fuse, as this may cause circuit a or an electrical fire.
- Make sure the drain hose is set up according to the instructions. Failure to do so could cause leakage and result in personal property damage, fire and electric shock.
- Make sure that all wires are connected properly. Failure to connect wires according to instructions can result in electrical shock or fire.

Unit maintenance

Before cleaning or maintenance

- Always turn off your air conditioning system and disconnect the power supply before cleaning or maintenance.
- **Do not** use chemicals or chemically treated cloths to clean the unit.
- **Do not** use benzene, paint thinner, polishing powder or other solvents to clean the unit. They can cause the plastic surface to crack or deform.
- **Do not** wash the unit under running water. Doing so creates an electrical hazard.

How to clean the air filter

The filter prevents dust and other particles from entering the indoor unit. Dust build-up can reduce the efficiency of the air conditioner. For optimum efficiency, clean the air filter every two weeks or more frequently if you live in a dusty area. Replace the filter with a new one if it's heavily clogged and cannot be cleaned.

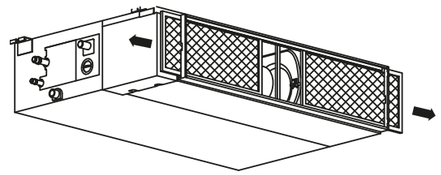
WARNING: DO NOT REMOVE OR CLEAN THE FILTER BY YOURSELF

Removing and cleaning the filter can be dangerous. Removal and maintenance must be performed by a certified technician.

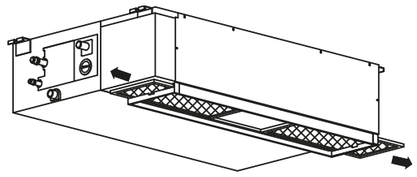
Note

In households with animals, you will have to periodically wipe down the grille to prevent animal hair blocking airflow.

1. If the unit you purchased is a rear ventilated one, take off the filter in the directions indicated by the arrows in the following diagram.

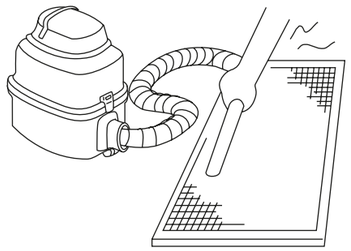


2. If the unit you purchased is a descensional ventilated model, take off the filter in the directions indicated by the arrows in the following diagram.

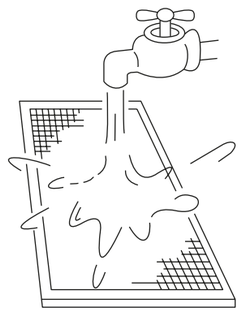


3. Remove the air filter.
4. Clean the air filter by vacuuming the surface or washing it in warm water with mild detergent.

   a. If using a vacuum cleaner, the inlet side should face the vacuum.



   b. If using water, the inlet side should face down and away from the water stream.



5. Rinse the filter with clean water and allow it to air-dry. **Do not** let the filter dry in direct sunlight.
6. Reinstall the filter.

Repairing refrigerant leaks

⚠ WARNING

- If the refrigerant leaks, turn off the air conditioner and any combustible heating devices, ventilate the room and call your dealer immediately. Refrigerant is both toxic and flammable. **Do not** use the air conditioner until the leak is repaired.
- When the air conditioner is installed in a small room, measures must be taken to prevent the refrigerant concentration from exceeding the safety limit in the event of refrigerant leakage. Concentrated refrigerant causes a severe health and safety threat.

Preparation for periods of non-use

Maintenance after extended non-use

1. Remove any obstacles blocking the vents of both the indoor and outdoor units.
2. Turn on the main power switch at least 12 hours prior to operating the unit.

Storing the unit while not in use

1. Run the appliance on FAN mode for 12 hours in a warm room to dry it and prevent mould.
2. Turn off the appliance.
3. Clean air filter according to the instructions in the previous section. Reinstall the clean, dry filter before storing.

5. Troubleshooting

! CAUTION

If one of the following conditions occurs, switch off the power supply immediately and contact a HVAC professional for further assistance.

- The operation light continues to flash rapidly after the unit has been restarted.
- The remote control buttons **do not** work.
- The unit continually trips fuses or circuit breakers.
- A foreign object or water enters the air conditioner.
- Other abnormal situations.

Common problems

The following symptoms are not a malfunction and in most situations will not require repairs.

Issue	Possible causes
Unit does not turn on when pressing ON/OFF button	The unit has a 3-minute protection feature that prevents the unit from overloading. The unit cannot be restarted within three minutes of being turned off.
	Cooling and Heating Models: If the Operation light and PRE-DEF (Pre-heating/Defrost) indicators are lit up, the outdoor temperature is too cold and the unit's defrost cycle is activated in order to defrost the unit.
	In Cooling-only Models: If the "Fan Only" indicator is lit up, the outdoor temperature is too cold and the unit's anti-freeze protection is activated in order to defrost the unit.
The unit changes from COOL mode to FAN mode	The unit changes its setting to prevent frost from forming on the unit. Once the temperature increases, the unit will start operating again.
	The set temperature has been reached, at which point the unit turns off the compressor. The unit will resume operating when the temperature fluctuates again.
The indoor unit emits white mist	In humid regions, a large temperature difference between the room's air and the conditioned air can cause white mist.
Both the indoor and outdoor units emit white mist	When the unit restarts in HEAT mode after defrosting, white mist may be emitted due to moisture generated from the defrosting process.
The indoor unit makes noises	A squeaking sound is heard when the system is OFF or in COOL mode. The noise is also heard when the drain pump is in operation.
	A squeaking sound may occur after running the unit in HEAT mode due to expansion and contraction of the unit's plastic parts.

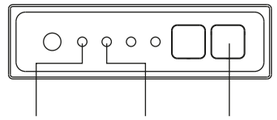
Issue	Possible causes
Both the indoor unit and outdoor unit make noises	A low hissing sound may occur during operation. This is normal and is caused by refrigerant gas flowing through both the indoor and outdoor units.
	A low hissing sound may be heard when the system starts, has just stopped running or is defrosting. This noise is normal and is caused by the refrigerant gas stopping or changing direction.
The outdoor unit makes noises	The unit will make different sounds based on its current operating mode.
Dust is emitted from either the indoor or outdoor unit	The unit may accumulate dust during extended periods of non-use, which will be emitted when the unit is turned on. This can be mitigated by covering the unit during long periods of inactivity.
The unit emits a bad odor	The unit may absorb odors from the environment (such as furniture, cooking, cigarettes, etc.) which will be emitted during operations.
	The filters have become moldy and should be cleaned.
The fan of the outdoor unit does not operate	During operation, the fan speed is controlled to optimize product operation.

Troubleshooting tips

When troubles occur, please check the following points before contacting a repair company.

Issue	Possible causes	Possible causes
The unit is not working	Power failure	Wait for the power to be restored
	The power switch is off	Turn on the power
	The fuse is burned out	Call service agent
	The unit's 3-minute protection has been activated.	Wait three minutes after restarting the unit
Poor cooling performance	Temperature setting may be higher than the ambient room temperature	Lower the temperature setting
	The heat exchanger on the indoor or outdoor unit is dirty	Clean the affected heat exchanger
	The air filter is dirty	Remove the filter and clean it according to instructions
	The air inlet or outlet of either unit is blocked	Call service agent
	Doors and windows are open	Make sure that all doors and windows are closed while operating the unit
	Excessive heat is generated by sunlight	Close windows and curtains during periods of high heat or bright sunshine
	Low refrigerant due to leak	Call service agent
The unit starts and stops frequently	There's too much or too little refrigerant in the system	Call service agent
	The compressor is broken	Replace the compressor
Poor heating performance	The outdoor temperature is lower than 7°C	Call service agent
	Cold air is entering through doors and windows	Make sure that all doors and windows are closed during use
	Low refrigerant due to leak	Call service agent

Error codes



Number	Cause	The number of flashes per second	Timer indicator	Error code
1	Indoor EEPROM (Electrically Erasable Programmable Read-Only Memory) error	1	Off	EH00
2	Indoor and outdoor unit communication malfunction	2	Off	EL01
3	Indoor fan speed malfunction	4	Off	EH03
4	Indoor room temperature sensor error	6	Off	EH60
5	Evaporator coil temperature sensor error	6	Off	EH61
6	Refrigerant leak malfunction	8	Off	EL0C
7	Water level alarm malfunction	13	Off	EH0E
8	Dual indoor unit (twins model only) communication malfunction	9	Off	EH12
9	Outdoor unit malfunction	14	Off	EC0d
10	Communication error between indoor main board chips	9	Off	EH0b
11	Outdoor ambient temperature sensor error	5	Off	EC53
12	Outdoor condenser pipe sensor error	5	Off	EC52
13	Compressor discharge temperature sensor error	5	Off	EC54
14	Outdoor IPM Module temperature sensor error	5	Off	EC55
15	Communication error between master and slave unit (twins system)	11	Off	EL11
16	Outdoor EEPROM (Electrically Erasable Programmable Read-Only Memory) error	5	On	EC51
17	Outdoor fan speed (DC fan motor only) malfunction	12	Off	EC07
18	Inverter module IPM protection	7	Flash	PC00
19	High/Low voltage protection	2	Flash	PC01
20	Compressor top overheating protection	3	Flash	PC02
21	Outdoor high/low pressure protection	4	Flash	PC03
22	Compressor drive error	5	Flash	PC04
23	Outdoor IGBT sensor error	8	Flash	PC07
24	Communication error between indoor unit and indoor external fan modul	N/A	N/A	EHbA
25	Low voltage protection of indoor external fan DC bus	N/A	N/A	EH3A
26	Indoor external fan DC bus voltage is too high fault	N/A	N/A	EH3b
27	Parameters error of indoor external fan	N/A	N/A	EH30
28	Phase failure of indoor external fan	N/A	N/A	EH35
29	Indoor external fan current sampling bias fault	N/A	N/A	EH36
30	Indoor external fan zero speed failure	N/A	N/A	EH37
31	Indoor external fan stall failure	N/A	N/A	EH38
32	Out of step failure of indoor external fan	N/A	N/A	EH39
33	Indoor external fan overcurrent fault	N/A	N/A	EH3E
34	Indoor external fan module protection/hardware overcurrent protection	N/A	N/A	EH3F

Number	Cause	The number of flashes per second	Timer indicator	Error code
35	Outdoor external fan overcurrent fault	N/A	N/A	EC71
36	Outdoor external fan module protection/hardware overcurrent protection	N/A	N/A	EC75
37	Outdoor external fan phase failure	N/A	N/A	EC72
38	Outdoor external fan current sampling bias fault	N/A	N/A	EC74
39	Zero speed failure of outdoor unit DC fan	N/A	N/A	EC73
40	Over low voltage protection	N/A	N/A	PC10
41	Over voltage protection	N/A	N/A	PC11
42	DC voltage protection	N/A	N/A	PC12
43	Communication error between outdoor main chip and compressor driven chip	N/A	N/A	PC40
44	Current Input detection protection	N/A	N/A	PC41
45	Compressor start error	N/A	N/A	PC42
46	Lack of phase (3 phase) protection	N/A	N/A	PC43
47	Outdoor unit zero speed protection	N/A	N/A	PC44
48	341PWM error	N/A	N/A	PC45
49	Compressor speed malfunction	N/A	N/A	PC46
50	Compressor over current protection	N/A	N/A	PC49
51	Compressor discharge temperature protection	N/A	N/A	PC06
52	Outdoor current protection	N/A	N/A	PC08
53	Anti-cold air in heating mode	N/A	N/A	PH09
54	PFC module malfunction	N/A	N/A	PC0F
55	System overpressure protection	N/A	N/A	PC30
56	System pressure is too low protection	N/A	N/A	PC31
57	Outdoor low ambient temperature protection	N/A	N/A	PC0L
58	Evaporator coil temperature over high protection	N/A	N/A	PH90
59	Evaporator coil temperature over low Protection	N/A	N/A	PH91
60	Condenser high temperature protection	N/A	N/A	PC0A
61	Indoor unit humidity sensor failure	N/A	N/A	PH0C
62	Frequency limit caused by T2	N/A	N/A	LH00
63	Indoor external fan current limit	N/A	N/A	LH30
64	Indoor external fan voltage limit	N/A	N/A	LH31
65	Frequency limit caused by T3	N/A	N/A	LC01
66	Frequency limit caused by TP	N/A	N/A	LC02
67	Frequency limit caused by voltage	N/A	N/A	LC05
68	Frequency limit caused by current	N/A	N/A	LC03
69	Frequency limit caused by PFC	N/A	N/A	LC06
70	Frequency limit caused by high pressure	N/A	N/A	LC30
71	Frequency limit caused by low pressure	N/A	N/A	LC31
72	Frequency limit caused by remote controller	N/A	N/A	LH07

6. Disposal guidelines

This appliance contains refrigerant and other potentially hazardous materials. When disposing of this appliance, the law may require special collection and treatment. **Do not** dispose of this product as household waste or unsorted municipal waste.

When disposing of this appliance, you have the following options:

- Dispose of the appliance at designated municipal electronic waste collection facility.
- Sell the appliance to certified scrap metal dealers.

NOTE: Disposing of this appliance in the forest or other natural surroundings endangers your health and is bad for the environment. Hazardous substances may leak into the ground water and enter the food chain.

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