Installation Manual

Version-1.0

Daikeen Product Warranty: 24 months from the date of Installation, effective upon warranty registration.

MODEL: RDA-1.0-25/RDA-1.5-25

Made in Malaysia

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

Use only for non-inverter air-conditioning systems 2 Wire + Earth

Safety Precautions

Incorrect installation or failure to follow instructions may cause serious injury or damage. The seriousness of potential hazards is classified as either a WARNING or a CAUTION.

⚠ WARNING

This symbol indicates the possibility of personnel injury or loss of life.

⚠ CAUTION

This symbol indicates the possibility of property damage or serious consequences.

⚠ WARNING

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 the use of the appliance by a person responsible for their safety. Children must be supervised to ensure they do not play with the appliance.

⚠ WARNINGS FOR PRODUCT USE

- If an abnormal situation arises (like a burning smell), immediately turn off the unit and disconnect the power. Call your dealer for instructions to avoid electric shock, fire or injury.
- 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 flammable sprays such as hair spray, lacquer or paint near the unit. This may cause fire or combustion.
- Do not install this device on air conditioners located near or around combustible gases or in wet areas. Accumulated gas around the unit may ignite or cause an explosion
- Do not operate your device in a wet room such as a bathroom or laundry room. Too much exposure to water can cause electrical components to short circuit.
- Do not allow children to play with the device or air conditioner. Children must be supervised around the unit at all times.

⚠ Cleaning and Maintenance Warnings

- Turn off the device and disconnect the power before cleaning. Failure to do so can cause electrical shock.
- Do not clean the device with excessive amounts of water.
- Do not clean the device with combustible cleaning agents. Combustible cleaning agents can cause fire or deformation.
- Do not operate the device with wet hands. This may cause electric shock.
- Do not use device for any other purpose than its intended use.

⚠ ELECTRICAL WARNINGS

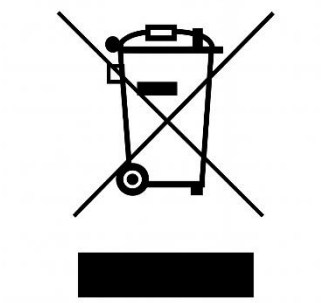
- Only use the specified power cable and size. If the power cable is damaged, it must be replaced by the installer, its service agent, or a similarly qualified person to avoid a hazard.
- Keep the power plug clean. Remove any dust or dirt that accumulates around the plug. Dirty plugs may cause fire or electric shock.
- Do not share the electrical outlet with other appliances. Improper or insufficient power supply can cause fire or electric shock.
- The product must be properly grounded during installation. Failure to ground the unit may cause electrical shock.
- All electrical work must be performed according to the Electrical Connection Diagram located on the indoor and outdoor units.
- All terminals must be securely connected so the control board cover can close properly. If the cover is not properly closed, corrosion may occur, leading to overheating, fire, or electrical shock.
- Electrical installation must comply with applicable national and local wiring regulations.

⚠ WARNINGS FOR PRODUCT INSTALLATION

1. Installation must be performed by an authorized installer or qualified technician. Incorrect installation may damage the unit.
2. Installation must strictly follow the provided instructions. Improper installation may cause electric shock, fire, or water leakage.
3. Contact an authorized service technician for maintenance or repair. The appliance must be installed in accordance with national wiring regulations. Use only the included accessories, parts, and specified components for installation. Using non-standard parts may cause electrical shock, fire, or damage to the unit.
4. Use only the supplied accessories, parts, and specified components for installation. Using non-standard parts may cause electric shock, fire, or damage to the unit. Incorrect installation may cause the unit to drop and result in serious injury or damage.
5. Install the unit on a firm, level surface in a dry location that can support the unit's weight. If the selected location cannot support the unit, relocate the installation point. Incorrect installation may cause the unit to fall, resulting in serious injury or damage.
6. Do not install the unit in areas where combustible gas may leak. Accumulated gas around the unit may cause fire.
7. Do not turn on the power until all installation work has been fully completed.
8. When moving or reinstalling the air conditioner, consult experienced service technicians. Incorrect disconnection or reconnection may cause damage.
9. To correctly mount the appliance, refer to the "Indoor Unit Installation" and "Outdoor Unit Installation" sections.

European Disposal Guidelines

This marking shown on the product or its literature, indicates that waste electrical and electrical equipment should not be mixed with general household waste.



Correct Disposal of This Product
(Waste Electrical & Electronic Equipment)

This appliance contains refrigerant and other potentially hazardous materials. When disposing of this appliance, the law requires 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.
- When buying a new appliance, the retailer will take back the old appliance free of charge.
- The manufacturer will take back the old appliance free of charge.
- Sell the appliance to certified scrap metal dealers.

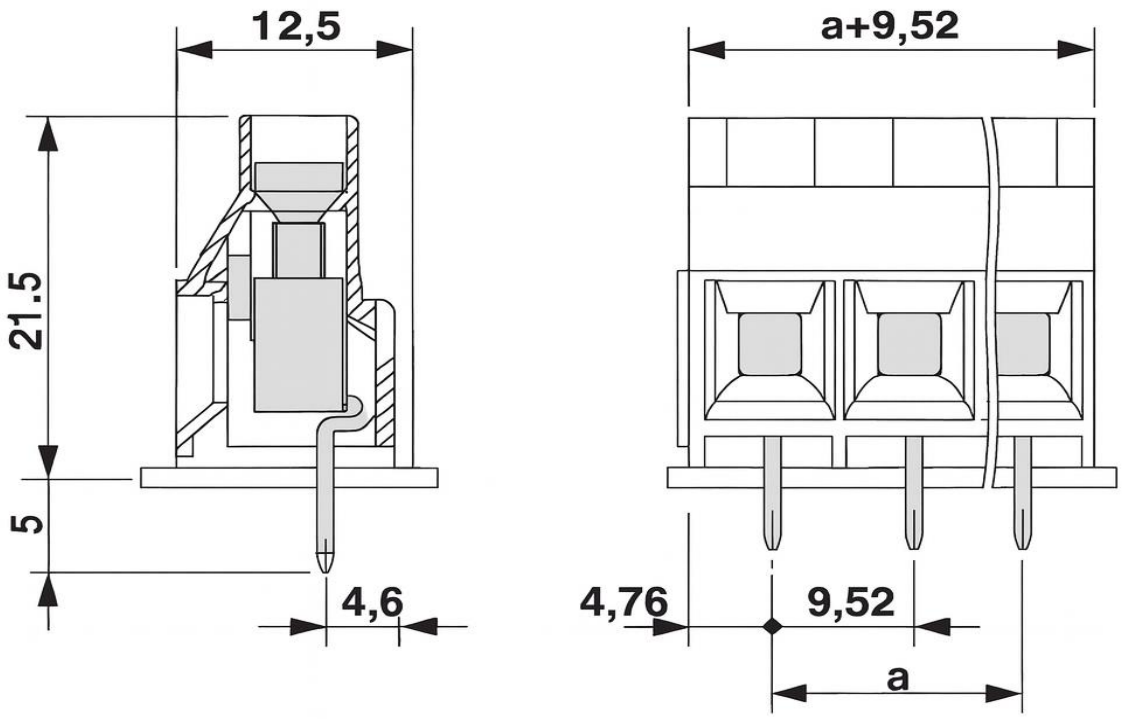
Special notice

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.

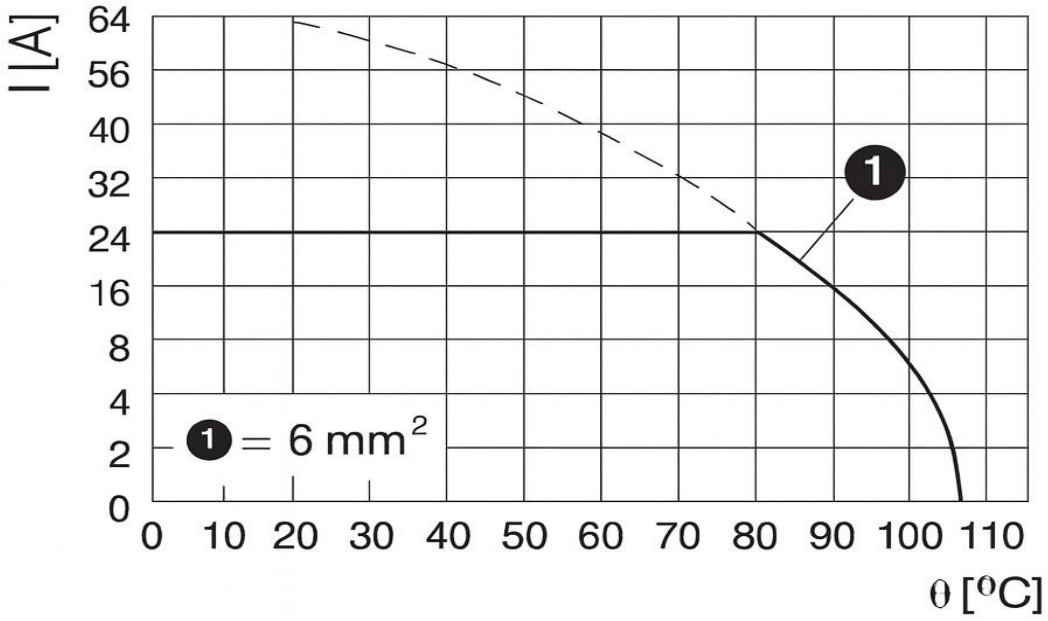
(Waste Electrical & Electronic Equipment – WEEE)

Drawings

Dimensional drawing



Diagram



2 conductors with the same cross section, flexible, with I'WIN ferrula with plastic sleeve	0.5 mm² ... 2.5 mm²
Stripping lerngth	8 mm
Drive form screw head	Siotted (L)
Tightening ferque	0.5 Nm ... 0.6 Nm

Mounting

Mounting type	Wave soldering
Pin layout	Liirear pinning

Material specifications

Material data - contact	WELE/RoHS comptlant, free of whisketes according to IEE-60046-D 621
Contact material	Cu alloy
Surface charactenstics	Tin plated
Metal surface terminat point (top layer)	Tin (4 - 8 um 5n)
Metal surface soldering area (top layer)	Tin (4 - 8 µm 5n)

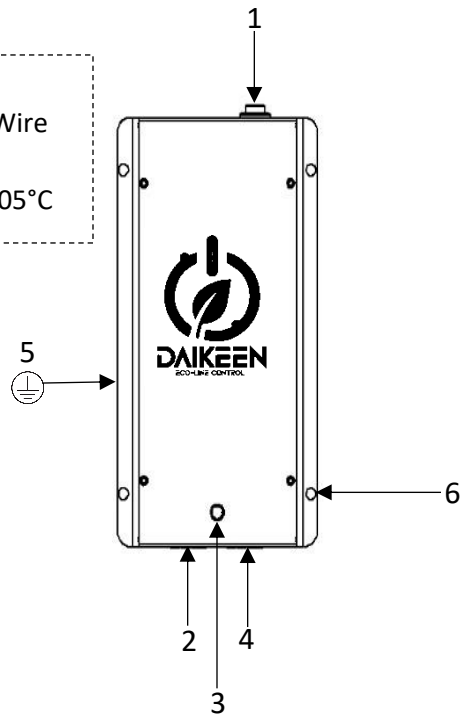
Material data - housing

Color (Housing)	green (8021)
Insulating material	PA
Insulsting material group	I
CTI according to iEC 00 (12	600
Glow wire flammability ratling to UL 34	800
Glow wire flammability index GWFI according to EN 60995-2-12	850
Temperature for the ball pressure test according to EN 60695-10-2	125 °C

Unit Specifications and Features

Note 1:

1. Power Terminal Torque: 0.5Nm – 0.6Nm Wire
2. Gauge: 14-AWG / 2.5 mm²
3. Wire Type: Stranded Copper only, 75°C -105°C



Input Supply: 220/240 V 50/60 Hz (Single-Phase)

Note 2:

When wiring up, and that the wiring route specifications are settled, please conduct the wiring following the electrician regulations.

Unit Overview and Key Features

Product Function Table

No	Description	Functions of System
1	By-Pass Switch	Press to activate Bypass Mode (default operation) Blue/Green/Red Release to enable ECO-Line Control Mode (ES)
2	CN2 – Compressor Output	Output terminal from ECO-Line Control to the Outdoor Compressor Unit (PL2/PN2/PE).
3	LED Indicator	Displays system status (Power ON, Comp Running, Bypass Mode)
4	CN1 – Indoor Unit Input	Input terminal from the Indoor Control Board (PL1 /PN1/PE). Supplies power and control signals.
5	GND (PE)	Ground / Earth connection. Must be bonded to indoor and outdoor unit chassis.
6	Mounting Holes	Four (4) × Ø4 mm mounting holes for wall installation.

Note: If none of the LEDs (Red / Green / Blue) are illuminated, the system may be malfunctioning or faulty.

Installation Notes:

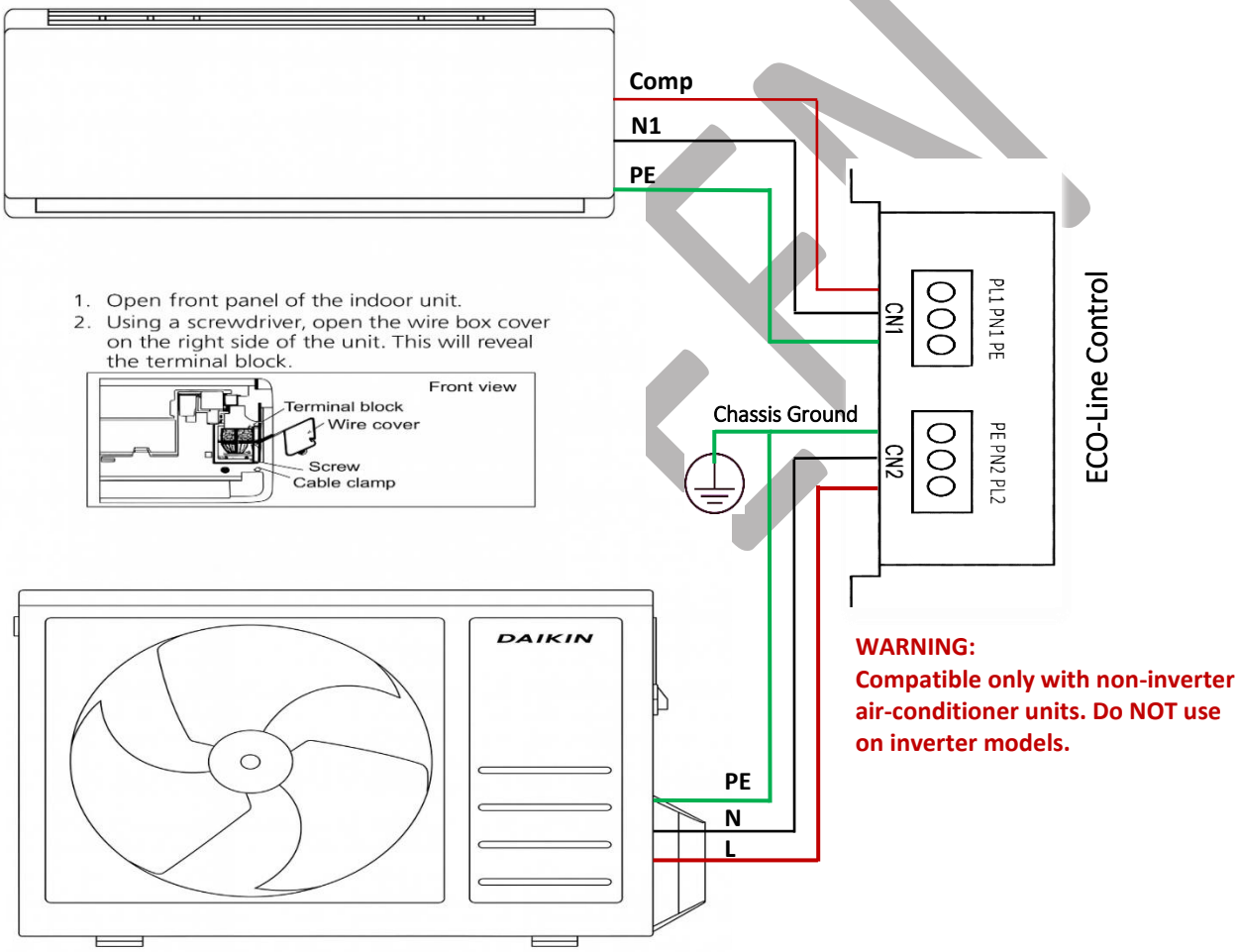
1. Mount the unit vertically on a dry, solid surface with adequate air ventilation.
2. Ensure the power supply is OFF before starting any wiring work.
3. Connect the terminals as labeled
   – INDOOR (PL1/PN1/PE) → From the indoor control board.
   – OUTDOOR (PL2/PN2/PE) → To the outdoor compressor unit.
4. Ensure proper Earth (PE) continuity between the indoor unit, outdoor unit, and this device.
5. After completing all wiring, recheck the terminal tightening torque (approximately 0.5–0.6 Nm)
6. Blue LED — ON indicates the system is operating in optimum energy-saving mode based on detected compressor behavior
7. Red LED — ON indicates the compressor is running; OFF indicates the compressor is stopped.
8. Blue LED — ON indicates the system is in optimum energy-saving mode, based on detected compressor behavior.
9. Red LED — ON indicates the compressor is running. OFF indicates the compressor is stopped
10. Green LED — Blinks once per second (5 times) → Indicates compressor signal reading and operational behavior monitoring

Maintenance

1. Clean the exterior using a dry cloth only **(do not use water or solvents).**
2. Visually inspect the terminals annually for signs of corrosion or looseness.
3. If the LEDs fail to light during normal operation, contact authorized service personnel

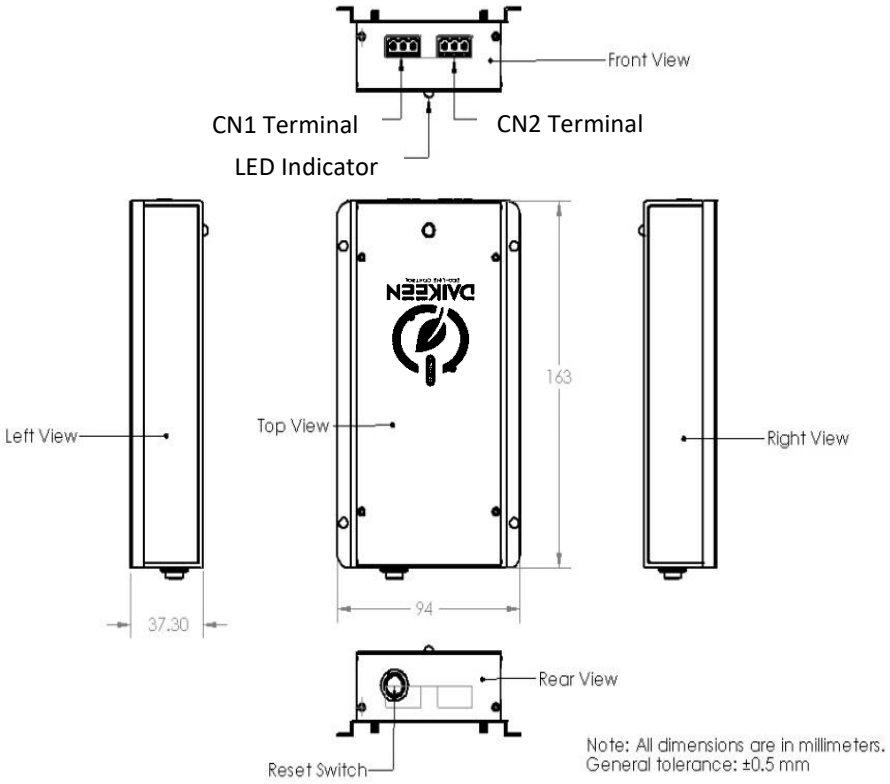
Final Check Before Power-On

- Double-check all terminals are correctly matched (CN1→ CN2 → PE).
- Make sure the ECO-Line Control unit correctly wiring from CN1 to Indoor and CN2 to Outdoor Compressor.
- Switch on the power and verify that **PWR (green LED)** lights up after 12 sec.



Important Notes:

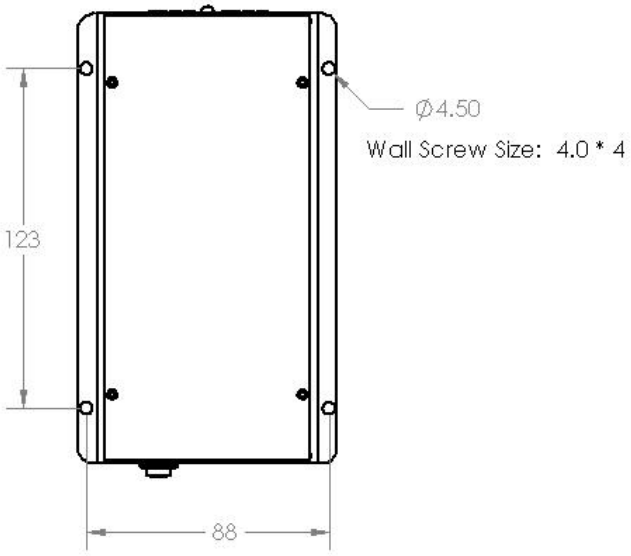
- Use a **3-core copper cable** (minimum **2.5 mm²**) for indoor–outdoor connections.
- Maintain **correct polarity** between the indoor unit, outdoor unit, and this device.
- Always ensure the **Earth (PE) connection** is continuous and securely connected.
- Do not install the unit near **water, steam, or flammable gases**.
- Recommended tightening torque: **0.5–0.6 Nm per terminal**.



Warning: Do not drill or modify the enclosure.
Ensure a minimum of 50 mm clearance around the unit for proper ventilation and wiring access.

Important:
The air-conditioner temperature **must be set to 16 °C** during operation.
Do not change this setting. Keep the unit **ON** at all times during normal operation to ensure proper ECO-LINE

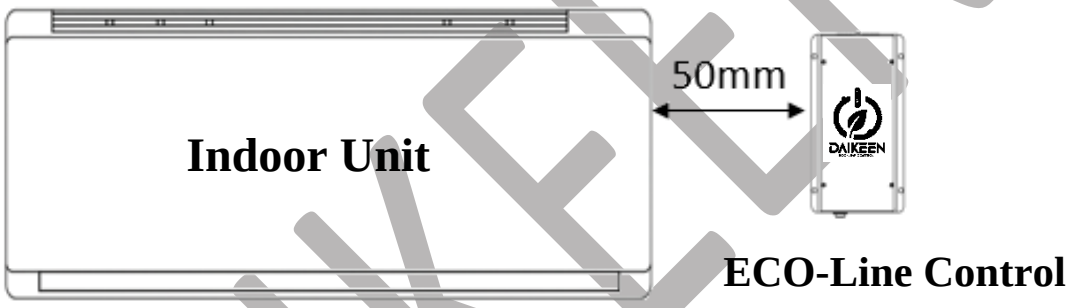
Wall Mount Installation



Wall Mounting Installation Dimensions (Unit: mm) +/- 0.5%
Notes:
Ensure the wall surface is flat, solid, and vibration-free.
Use M4 wall screws with appropriate wall plugs or anchors according to the wall type (concrete, brick, or wood).
Recommended mounting hole spacing: 61.5 mm (center-to-center), with 30 mm side clearance on both ends.
Keep at least 50 mm clearance around the device for ventilation and wiring access.
Tighten mounting screws evenly to avoid twisting or bending the enclosure.
The mounting holes shown above correspond to the bottom view of the unit.
Do not install the device near heat sources, moisture, or flammable gases.
Mounting holes: Ø 4.5 mm (×4) — designed for M4 screw mounting.

The ECO-Line Control must be mounted on the wall directly beside the indoor air-conditioning unit, with a recommended spacing of 50 mm. Do not install the unit behind, above, or below the indoor unit

Mounting Position



⚠ WARNING

The ECO-Line Control must be installed in a dry area, away from water leakage, dripping pipes, condensation, or any form of moisture. Installation in a wet or leaking location may cause electric shock, fire hazards, or product malfunction.