MITSUBISHI ELECTRIC

Air to Water Heat Pump
PUZ-WZ • AAH-SC series

INSTALLATION MANUAL
FOR INSTALLER

For safe and correct use, read this manual and the indoor unit installation manual thoroughly before installing the outdoor unit. English is original. The other languages versions are translation of the original.

English

INSTALLATIONSMANUAL
TIL INSTALLATØREN

Læs af sikkerhedshensyn denne manual samt manualen til installation af indendørsenheden grundigt, før du installerer udendørsenheden. Engelsk er originalsproget. De andre sprogversioner er oversættelser af originalen.

Dansk

INSTALLATIONSMANUAL
FÖR INSTALLATÖREN

Läs bruksanvisningen och inomhusenhetens installationshandbok noga innan du installerar utomhusenhet för säker och korrekt användning. Engelska är originalspråket. De övriga språkversionerna är översättningar av originalet.

Svenska

INSTALLASJONSHÅNDBOK
FOR MONTØR

For å sikre trygg og riktig bruk skal denne håndboken samt installasjonshåndboken for innendørsenheten leses grundig igjennom før enheten installeres. Engelsk er originalspråket. De andre språkversjonene er oversettelser av originalen.

Norsk

ASENNUSOPAS
ASENTAJALLE

Turvallisen ja asianmukaisen käytön varmistamiseksi lue tämä opas sekä sisäyksikön asennusopas huolellisesti ennen ulkoyksikön asentamista. Alkuperäiskieli on englanti. Muut kieliversiot ovat alkuperäisen käännöksiä.

Suomi

PAIGALDUSJUHEND
PAIGALDAJALE

Ohutu ja õige kasutuse tagamiseks lugege see juhend ja siseruumides kasutatava seadme paigaldusjuhend enne välisseadme paigaldamist põhjalikult läbi. Originaaljuhend on ingliskeelne. Muudes keeltes versioonid on originaali tõlked.

Eesti

MONTĀŽAS ROKASGRĀMATA
UZSTĀDĪŠANAS SPECIĀLISTAM

Lai nodrošinātu pareizu un drošu iekārtas lietošanu, pirms ārējās iekārtas uzstādīšanas rūpīgi izlasiet šo rokasgrāmatu un iekšējās iekārtas montāžas rokasgrāmatu. Oriģināls ir angļu valodā. Versijas citās valodās ir oriģināla tulkojums.

Latviski

MONTAVIMO VADOVAS
SKIRTA MONTUOTOJUI

Prieš montuodami išorinį įrenginį, saugiam ir tinkamam naudojimui užtikrinti atidžiai perskaitykite šį vadovą ir vidinio įrenginio montavimo vadovą. Originalas yra anglų k. Versijos kitomis kalbomis yra originalo vertimas.

Lietuviškai

Manual Download

http://www.mitsubishielectric.com/ldg/ibim/

en Go to the above website to download manuals, select model name, then choose language.

da Gå til ovenstående websted for at downloade manualer og vælge modelnavn, og vælg derefter sprog.

sv Gå till ovanstående webbplats för att ladda ner anvisningar, välj modellnamn och välj sedan språk.

no Gå til nettstedet over for å laste ned håndbøker og velg modellnavn, og velg deretter språk.

fi Mene yllä mainitulle verkkosivulle ladataksesi oppaat, valitse mallin nimi ja valitse sitten kieli.

et Kasutusjuhendite allalaadimiseks minge ülaltoodud veebilehele, valige mudeli nimi ja seejärel keel.

lv Dodieties uz iepriekš norādīto tīmekļa vietni, lai lejupielādētu rokasgrāmatas; tad izvēlieties modeļa nosaukumu un valodu.

lt Norėdami atsisiųsti vadovus, apsilankykite pirmiau nurodytoje žiniatinklio svetainėje, pasirinkite modelio pavadinimą, tada – kalbą.

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Note: This symbol mark is for EU countries only.
This symbol mark is according to the directive 2012/19/EU Article 14 Information for users and Annex IX.
Your MITSUBISHI ELECTRIC product is designed and manufactured with high quality materials and components which can be recycled and reused.
This symbol means that electrical and electronic equipment, at their end-of-life, should be disposed of separately from your household waste.
Please, dispose of this equipment at your local community waste collection/recycling centre.
In the European Union there are separate collection systems for used electrical and electronic product.
Please, help us to conserve the environment we live in!

en

1. Safety precautions

- ►**Before installing the unit, make sure you read all the "Safety precautions".**
- ►**Please report to or take consent by the supply authority before connection to the system.**
- ►**Equipment complying with IEC/EN 61000-3-12 (PUZ-WZ·VAAH-SC)**

After installation work has been completed, explain the "Safety precautions," use, and maintenance of the unit to the customer/user according to the information in the Operation Manual and perform the test run to demonstrate operation. Both the Installation Manual and Operation Manual must be retained by the user. The Installation Manual and Operation Manual must be passed by the user to subsequent users.

⚠ WARNING:

Describes precautions that must be observed to prevent danger of injury or death to the user.

⚠ CAUTION:

Describes precautions that must be observed to prevent damage to the unit.

MEANINGS OF SYMBOLS DISPLAYED ON THE UNIT

A3	**WARNING** (Risk of fire)	This unit uses R290, a highly flammable refrigerant. If any refrigerant leaks or comes in contact with fire or a heated surface or environment, there is a risk of fire or explosion, and the installer and/or user is warned to take all possible safety precautions when handling the unit and R290, being sure to keep a safe distance at all times to any related fire or explosion and to notify the fire department immediately on becoming aware of such an outcome.
	Read the OPERATION MANUAL carefully before operation.	
	Service personnel are required to carefully read the OPERATION MANUAL and INSTALLATION MANUAL before operation.	

1. Safety precautions

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1.1. General

- **Carefully read the labels affixed to the main unit.**
- **This appliance is intended to be used by expert or trained users in shops, in light industry and on farms, or for commercial use by lay persons.**
- **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.**
- **Compliance with national gas regulations shall be observed.**
- **The appliance shall be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater).**
- **The appliance shall be stored in a well-ventilated area where the room size corresponds to the room area as specified for operation.**

⚠ WARNING:

- **The unit must only be installed/serviced/relocated/repaired/disposed, including any work undertaken on a related refrigerant circuit, by a competent electrician, with the requisite professional qualifications to install this unit and perform electrical works in your jurisdiction. Please contact your dealer for them.**
  Failure to conduct electric work, deal with the refrigerant circuit(s) and install/service/relocate/repair or dispose the unit correctly in accordance with the foregoing and all laws and regulations may lead to prosecution, water leakage, electric shock or fire. Mitsubishi Electric does not accept responsibility for any direct, indirect, special or consequential loss, damage, liability or expense incurred or suffered which results from any works undertaken by an unqualified or third party installer, or any failure, claim, damage or deficiency caused to a unit by improper installation, servicing, relocation, repair or disposing.
- **Ventilate the room if refrigerant leaks during operation. If refrigerant comes into contact with a flame, there is risk of fire or explosion.**
  In the event of refrigerant leakage, to do as follows:
  - Evacuate any people from the danger zone.
  - From a safe position, switch off the electricity supply for all system components.
  - Remove ignition sources from the danger zone.
  - Do not operate the unit until repairs are completed.
- **Do not pierce or burn.**
- **Be aware that refrigerants might not contain an odour.**
- **Do not clean the outdoor unit with water. Electric shock may result.**

⚠ CAUTION:

- **Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer.**

1.2. General during work

⚠ WARNING:

- **Keep gas-burning appliances, electric heaters, and other fire sources (ignition sources) away from the location where installation, repair, and other outdoor unit work will be performed.**
  If refrigerant comes into contact with a flame, a fire or explosion will occur.
- **Do not smoke during work and transportation.**
- **Under no circumstances shall potential sources of ignition be used in the searching for or detection of refrigerant leaks.**
  A halide torch (or any other detector using a naked flame) shall not be used.

⚠ CAUTION:

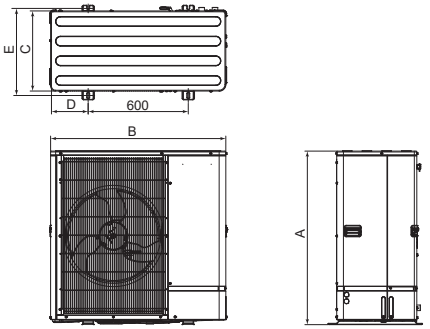
- **When carrying out work on the refrigerant circuit or working in the protected area, a competent electrician with the requisite professional qualifications must use only the specified and appropriate tools. The following tools are necessary to use R290 refrigerant.**

Tools (for R290)	
Gauge manifold	Vacuum pump
Charge hose	Vacuum pump adapter
Gas leak detector	Electronic refrigerant charging scale

- **When carrying out work on the refrigerant circuit, take protective measures to prevent static discharges.**
- **Do not use refrigerant other than R290 refrigerant. If another refrigerant is used, the chlorine will cause the oil to deteriorate.**
- **Work shall be undertaken under a controlled procedure so as to minimize the risk of a flammable gas or vapor being present while the work is being performed.**
- **Prior to beginning work on systems containing flammable refrigerants, safety checks are necessary to ensure that the risk of ignition is minimized. For repair to the refrigerating systems, (1) to (5) shall be completed prior to conducting work on the systems.**
  (1) All maintenance staff and others working in the local area shall be instructed on the nature of work being carried out.
  Work in confined spaces shall be avoided. The area around the workspace shall be sectioned off. Ensure that the conditions within the area have been made safe by control of flammable material.
  (2) The area shall be checked with an appropriate refrigerant detector prior to and during work, to ensure the technician is aware of potentially toxic or flammable atmospheres. Ensure that the leak detection equipment being used is suitable for use with all applicable refrigerants, i.e. non-sparking, adequately sealed or intrinsically safe.
  (3) If any hot work is to be conducted on the refrigeration equipment or any associated parts, appropriate fire extinguishing equipment shall be available to hand. Have a dry powder or CO2 fire extinguisher adjacent to the charging area.
  (4) No person carrying out work in relation to a refrigeration system which involves exposing any pipe work shall use any sources of ignition in such a manner that it can lead to the risk of fire or explosion. All possible ignition sources, including cigarette smoking, should be kept sufficiently far away from the site of installation, repairing, removing and disposal, during which refrigerant can possibly be released to the surrounding space. Prior to work taking place, the area around the equipment is to be surveyed to make sure that there are no flammable hazards or ignition risks. “No Smoking” signs shall be displayed.
  (5) Ensure that the area is in the open or that it is adequately ventilated before breaking into the system or conducting any hot work. A degree of ventilation shall continue during the period that the work is carried out. The ventilation should safely disperse any released refrigerant and preferably expel it externally into the atmosphere.
- **Electronic leak detectors may be used to detect refrigerant leaks but, in the case of flammable refrigerants, the sensitivity can be inadequate, or can need re-calibration. (Detection equipment shall be calibrated in a refrigerant-free area.)**
  Ensure that the detector is not a potential source of ignition and is suitable for the refrigerant used. Leak detection equipment shall be set at a percentage of the LFL of the refrigerant and shall be calibrated to the refrigerant employed, and the appropriate percentage of gas (25% maximum) is confirmed.
  Leak detection fluids are suitable for use with most refrigerants but the use of detergents containing chlorine shall be avoided as the chlorine can react with the refrigerant and corrode the copper pipework.
  If a leak is suspected, all naked flames shall be removed/extinguished.
  If a leakage of refrigerant is found which requires brazing, all of the refrigerant shall be recovered from the system, or isolated (by means of shut off valves) in a part of the system remote from the leak. For appliances containing flammable refrigerants, oxygen free nitrogen (OFN) shall then be purged through the system both before and during the brazing process.
- **Steel pipes and components shall be protected against corrosion with a rustproof coating before applying any insulation.**

2. Installation location

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(mm)

Models	A	B	C	D	E
85/100/120	1040	1050	480	225	520

Fig. 2-1

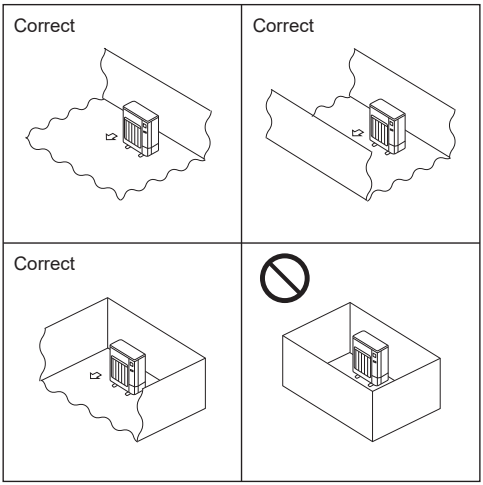


Fig. 2-2

2.1. Outline dimensions (Outdoor unit) (Fig. 2-1)

2.2. Choosing the outdoor unit installation location

- Select a location from which noise emitted by the unit will not inconvenience neighbors.
- Select a location permitting easy wiring and pipe access to the power source and indoor unit.
- Select a level location that can bear the weight and vibration of the unit.
- Refrigerant pipes connection shall be accessible for maintenance purposes.
- Install outdoor units in a place where at least one of the four sides is open, and in a sufficiently large space without depressions. (Fig. 2-2)
- Note that water may drain from the unit during operation.

⚠ WARNING:

- **R290 is heavier than air—as well as other refrigerants—so tends to accumulate at the base (in the vicinity of the floor). If R290 accumulates around base, it may reach a flammable concentration in case room is small. To avoid ignition, maintaining a safe work environment is required by ensuring appropriate ventilation. If a refrigerant leak is confirmed in a room or an area where there is insufficient ventilation, refrain from using of flames until the work environment can be improved by ensuring appropriate ventilation.**
- **Do not install the unit where combustible gases may leak, be produced, flow, or accumulate. If combustible gas accumulates around the unit, fire or explosion may result.**
- **If the outdoor unit is installed in a small room, measures must be taken to prevent the refrigerant concentration in the room from exceeding the safety limit in the event of refrigerant leakage. Consult a installer regarding the appropriate measures to prevent the allowable concentration from being exceeded. Should the refrigerant leak and cause the concentration limit to be exceeded, hazards due to lack of oxygen in the room may result.**

⚠ CAUTION:

- **Avoid locations exposed to direct sunlight or other sources of heat.**
- **Keep any required ventilation openings clear of obstruction.**
- **Avoid locations exposed to oil, steam, sulfuric gas, and salty places such as the seaside.**
- **Avoid locations where the unit can be covered by snow. In areas where heavy snow fall is anticipated, special precautions such as raising the installation location or installing a hood on the air intake must be taken to prevent the snow from blocking the air intake or blowing directly against it. This can reduce the airflow and a malfunction may result.**

2. Installation location

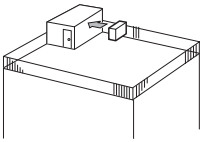


Fig. 2-3

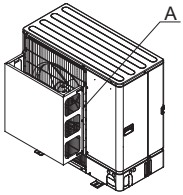


Fig. 2-4

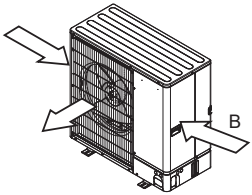


Fig. 2-5

2.2.1. Windy location installation

When installing the outdoor unit on a rooftop or other location unprotected from the wind, situate the air outlet of the unit so that it is not directly exposed to strong winds. Strong wind entering the air outlet may impede the normal airflow and a malfunction may result.

The following shows three examples of precautions against strong winds.

(1) Face the air outlet towards the nearest available wall 35 cm away from the wall. (Fig. 2-3)

(2) Install an air guide if the unit is installed in a location where strong winds from a typhoon, etc. may directly enter the air outlet. (Fig. 2-4)
A: Air Protect Guide

(3) Position the unit so that the air outlet blows perpendicularly to the direction of the wind. (Fig. 2-5)
B: Wind direction

en

2. Installation location

2.2.2. An enclosed installation space

If despite the instructions delineated in section “1. Safety precautions” of this Installation Manual you elect to install a unit in a space where all four sides are blocked and/or there are obstructions, you do so of your own risk and volition. Mitsubishi Electric does not warrant or represent the functionality; specification; quality; accuracy; or output deriving from any such unit installed in such a way and shall not be liable for any resulting cost or damage. In the event you still choose to install the unit(s) in such a space, we recommend that you accord with one of the following situations (A, B or C) below, to increase the likelihood of the unit’s function in accordance with its specification.

Note: The following recommended Situations are provided solely for the installer to consider safe operations, and do not warrant or guarantee the unit performance against its specification.

A) Secure sufficient installation space (minimum installation area A_{min}).
Install in a space with an installation area of A_{min} or more, corresponding to refrigerant quantity M (factory-charged refrigerant + locally added refrigerant).

M [kg]	A_{min} [m²]
0.6	44
0.8	58
1.0	72
1.5	108
2.0	143

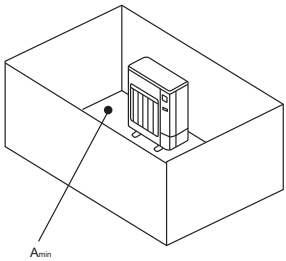
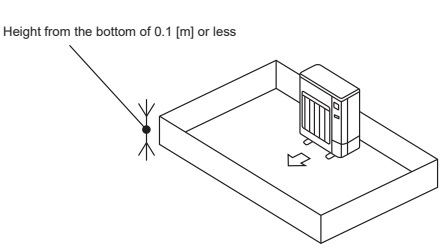


Fig. 2-6

B) Install in a space with a depression height of ≤ 0.1 [m].



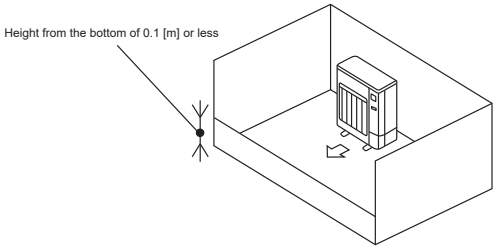


Fig. 2-7

C) Create an opening in the closed face in front of the unit to enable ventilation in the area, ensuring to follow all professional safety instructions and equipment requirements when making the opening through drilling or otherwise.
Make sure that the width of the open area is 0.9 [m] or more and the height of the open area is 0.15 [m] or more.
However, the height from the bottom of the installation space to the bottom edge of the open area should be 0.1 [m] or less.
Open area should be 75% or more opening.

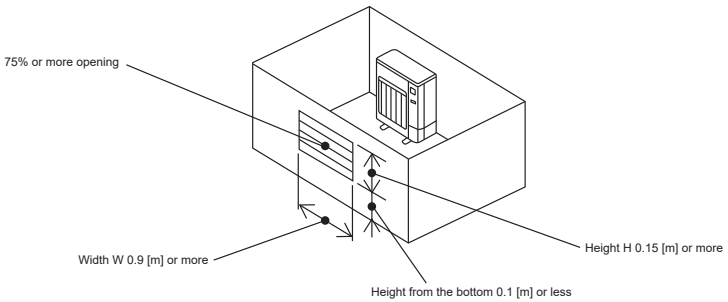


Fig. 2-8

Note: This countermeasure is for keeping safety and specification is not guaranteed.

2. Installation location

2.3. Number of installed units

2.3.1. When installing a single outdoor unit

Minimum dimensions are as follows, except for Max., meaning Maximum dimensions, indicated.

Refer to the figures for each case.

(1) Obstruction or closed surface at rear only (Fig. 2-9)

(2) Obstructions or closed surfaces at rear and above only (Fig. 2-10)

- Do not install an air outlet guide for upward airflow.

(3) Obstructions or closed surfaces at rear and sides only (Fig. 2-11)

(4) Obstruction or closed surface at front only (Fig. 2-12)

(5) Obstructions or closed surfaces at front and rear only (Fig. 2-13)

(6) Obstructions or closed surfaces at rear, sides, and above only (Fig. 2-14)

- Do not install an air outlet guide for upward airflow.

2.3.2. When installing multiple outdoor units

Leave a space of no less than 50 mm between the units.

Refer to the figures for each case.

(1) Obstruction or closed surface at rear only (Fig. 2-15)

(2) Obstructions or closed surfaces at rear and above only (Fig. 2-16)

- No more than 3 units must be installed side by side. In addition, leave space as shown.

C: Space (Fig. 2-16)

- Do not install air outlet guides for upward airflow.

(3) Obstruction or closed surface at front only (Fig. 2-17)

(4) Obstructions or closed surfaces at front and rear only (Fig. 2-18)

(5) Single parallel unit arrangement (Fig. 2-19)

- When using air outlet guides installed for upward airflow, the distance between the frontal faces of the units should be no less than 500 mm.

(6) Multiple parallel unit arrangement (Fig. 2-20)

- When using air outlet guides installed for upward airflow, the distance between the frontal faces of the units should be no less than 1000 mm.

(7) Stacked unit arrangement (Fig. 2-21)

- The units can be stacked up to two units high.
- No more than 2 stacked units must be installed side by side. In addition, leave space as shown.

D: Space (Fig. 2-21)

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UNIT : mm

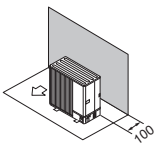


Fig. 2-9

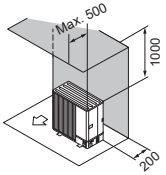


Fig. 2-10

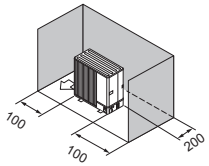


Fig. 2-11

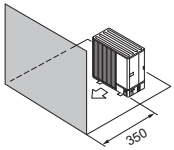


Fig. 2-12

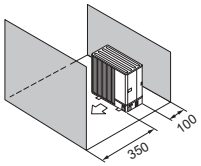


Fig. 2-13

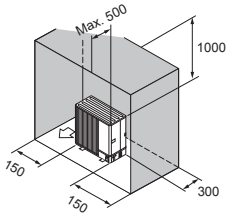


Fig. 2-14

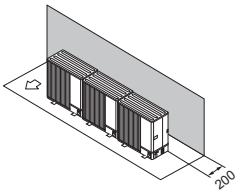


Fig. 2-15

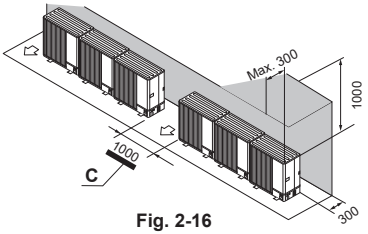


Fig. 2-16

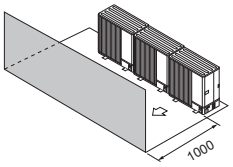


Fig. 2-17

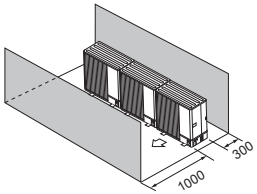


Fig. 2-18

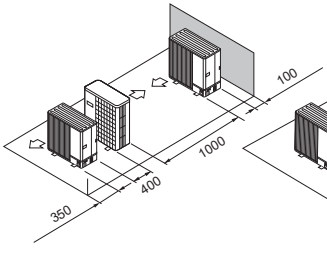


Fig. 2-19

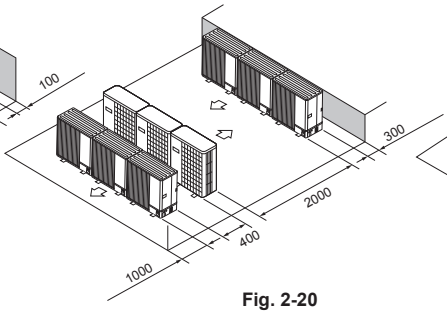


Fig. 2-20

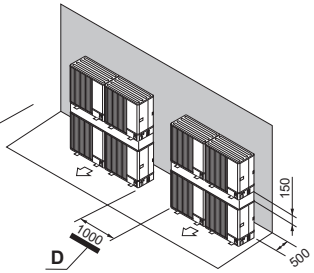


Fig. 2-21

3. Protective zone

The unit contains R290 refrigerant which is highly flammable. Great care must be taken when installing and servicing the unit which must be installed/serviced by a competent electrician, with the requisite professional qualifications to install this unit in your jurisdiction. In the event of a refrigerant leak, the installer and/or person in possession of the unit must ensure that no person is endangered outdoors or in adjacent buildings and no refrigerant has the potential to travel from the unit into the building and drainage systems. If you are concerned about a possible refrigerant leak from your unit, please contact your installer/supplier immediately or contact Mitsubishi Electric in your region directly for more information.

A protective zone must be maintained around the area closest to the unit. See shaded in Fig. 3-1.

en

⚠ CAUTION:

- **There must not be any building openings, entrance to the basement, grooves or entrance into the waste-water system. (such as windows, doors, ventilation openings or similar opening, flat-roof windows, light shafts, subsidence or depressions in the ground, pump shafts, inlets in sewers and waste water shafts, downpipes etc.)**
- **The protective zone must not extend to adjacent buildings or public traffic areas. (such as property boundaries or neighboring properties, footpaths and driveways)**
- **Ignition sources must not be present in the protective zone, either permanently or for a short period of time. (such as open flame, electrical systems, sockets, lamps, light switches, electrical connections, sparking tools, objects with high surface temperatures of 470°C or higher)**

Protective zone

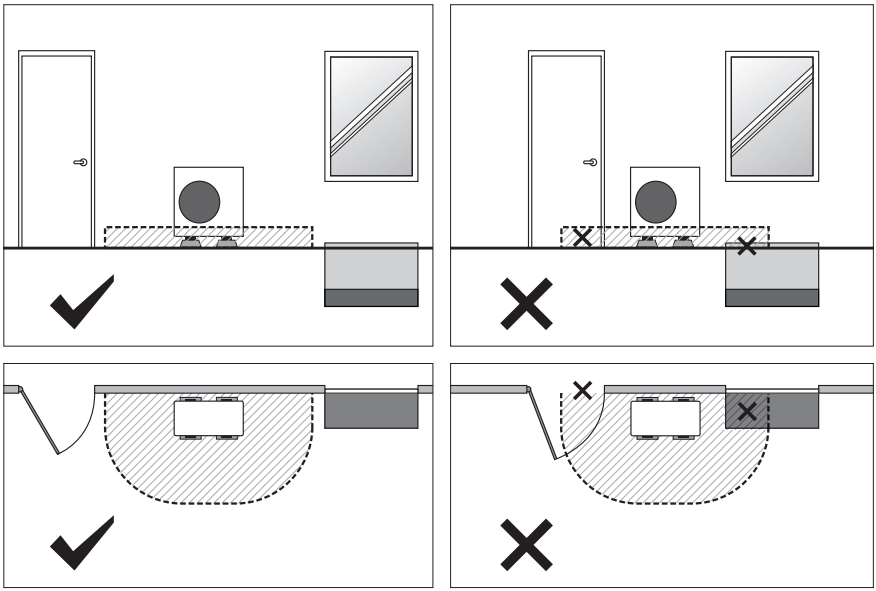


Fig. 3-1

3. Protective zone

- **Specific dimensions of the protective zone are specified for each installation condition. Refer to the figures for each case.**

(1) When installed in a location with an open around (Fig. 3-2)

Define the protective zone as follows:

- 1 m around of the unit
- 0.3 m from the ground.

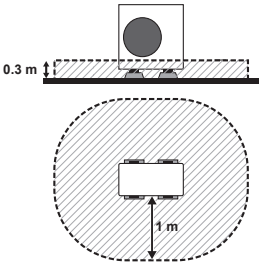


Fig. 3-2

(2) When installed in a location with 3 surfaces opened (in front of a building wall) (Fig. 3-3)

Define the protective zone as follows:

- 1 m to the sides and to the front of the unit
- the rear of the unit to the wall
- 0.3 m from the ground.

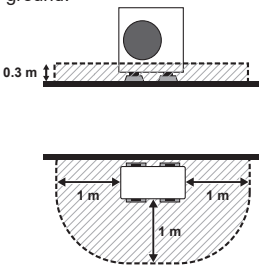


Fig. 3-3

(3) When installed in a location with 2 surfaces opened (where the distance between one side of the unit and the wall is less than 1 m, e.g. at the corner of a building wall) (Fig. 3-4)

Define the protective zone as follows:

- 1 m to the open side of the unit (A)
- 2.5 m to the front of the unit
- from the side of the unit to the wall (B)
- the rear of the unit to the wall
- 0.3 m from the ground.

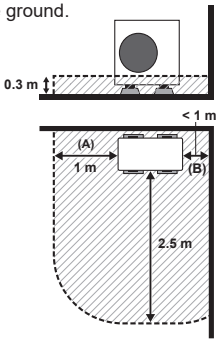


Fig. 3-4

(4) When installed in a location where only the front opened (building walls on both sides)
Where the distance between both sides of the unit and the wall is more than 1 m, define the protective zone as follows: (Fig. 3-5)
- 1 m to the sides and to the front of the unit
- the rear of the unit to the wall
- 0.3 m from the ground.

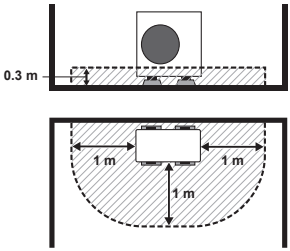


Fig. 3-5

Where the distance between both sides of the unit and the wall is less than 1 m, define the protective zone as follows: (Fig. 3-6)
- from the both sides of the unit to the wall
- 2.5 m to the front of the unit
- the rear of the unit to the wall
- 0.3 m from the ground.

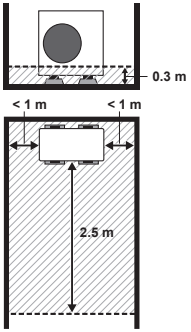


Fig. 3-6

Where the distance between one side of the unit and the wall is less than 1 m, same conditions as shown in Fig. 3-4 apply.

4. Installing the outdoor unit

(mm)

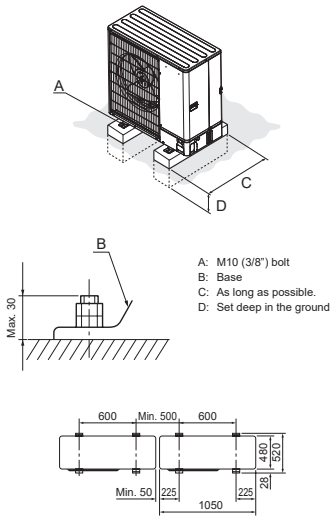


Fig. 4-1

- For installation and relocation work, follow the instructions in the Installation Manual and use tools and pipe components specifically made for use with R290 refrigerant.
- Be sure to install it in an appropriate place according to section “2. Installation location and 3. Protective zone”.
- Install be unit on a rigid structure to prevent excessive operation sound or vibration. (Fig. 4-1)

<Foundation specifications>

Foundation bolt	M10 (3/8")
Thickness of concrete	120 mm
Length of bolt	70 mm
Weight-bearing capacity	320 kg

- Make sure that the length of the foundation bolt is within 30 mm of the bottom surface of the base.
- Secure the base of the unit firmly with four-M10 foundation bolts in sturdy locations.
- In addition to the unit base, use the installation holes on the back of the unit to attach wires, etc., if necessary to install the unit. Use self-tapping screws (ø5 × 15 mm or less) and install on site.

⚠ WARNING:

- **The unit must be securely installed on a structure that can sustain its weight. If the unit is mounted on an unstable structure, it may fall down and cause damage or injuries.**
- **When installing the unit, use appropriate protective equipment and tools for safety.**
  Failure to do so could cause injuries.
- **Use the transportation handles of the outdoor unit to transport the unit. If the unit is carried from the bottom, hands or fingers may be pinched.**
- **Be extremely careful when transporting or installing the units. Two or more persons are needed to handle the unit, as it weighs 20 kg or more. Do not grasp the packaging bands. Wear protective gloves to remove the unit from the packaging and to move it, as you can injure your hands on the fins or the edge of other parts.**
- **Wear protective equipment when touching the bottom of the outdoor unit.**
  Failure to do so could cause injuries.
- **The unit must be installed according to the Installation Manual in order to minimize the risk of damage from earthquakes, typhoons, or strong winds. An incorrectly installed unit may fall down and cause damage or injuries.**
- **The base and attachments of the outdoor unit must be periodically checked for looseness, cracks or other damage. If such defects are left uncorrected, the unit may fall down and cause damage or injuries.**
- **After installation has been completed, the installer must check for refrigerant leaks by using a professional leak detector tool. If refrigerant leaks into the room and comes into contact with the flame of a heater, or portable cooking range, sparks, static electricity or objects with high surface temperature (>470°C), a fire or explosion will occur, and all persons in close or adjacent vicinity of the leak must be immediately advised to move away to a safe distance in order for the area to be checked by a professional.**

⚠ CAUTION:

- **When installing the unit in a hospital or communications office, be prepared for noise and electronic interference. Inverters, home appliances, highfrequency medical equipment, and radio communications equipment can cause the outdoor unit to malfunction or breakdown. The outdoor unit may also affect medical equipment, disturbing medical care, and communications equipment, harming the screen display quality.**

5. Drainage piping work

Outdoor unit drainage pipe connection
To avoid the risk of drainage freezing, do not use the optional drain socket or drain pan.

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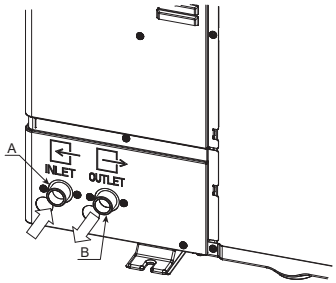
⚠ CAUTION:

- **When drain piping is necessary, the condensate drain must not be connected directly, but e.g. via a siphon to the waste water, rainwater or drainage system.**
- **The outdoor unit produces condensation during the heating operation. Make sure to provide drainage around the outdoor unit if such condensation is likely to cause damage.**
- **Perform the drainage/piping work securely according to the Installation Manual.**
  If there is a defect in the drainage/piping work, water could drop from the unit and household goods could be wet and damaged.

6. Water piping work

6.1. Water piping connection (Fig. 6-1)

- Connect the water pipes to the outlet and inlet pipes.
  (Parallel male screw for 1-inch water pipe (ISO 228/1-G1B))
- Inlet and outlet pipes position is shown on the Fig. 6-1.
- Install the hydraulic filter at the water intake.
- Maximum allowable torque at the water piping connection is 50 N•m.
- Use 2 spanners to tighten piping connections.
- Check if water leaks after installation.
- Inlet water gauge pressure must be between 0-0.3 MPa.



A: Water inlet
B: Water outlet

Fig. 6-1

6.2. Water quality condition

- The water in a system should be clean and with a pH value of 6.5-8.0.
- The followings are the maximum values;
  Calcium : 100 mg/L
  Chlorine : 100 mg/L
  Iron/manganese : 0.5 mg/L

6.3. Minimum water quantity

Refer to the indoor unit Installation Manual.

⚠ WARNING:

As the outlet water temperature can reach 75°C at maximum, do not touch the water piping directly with a bare hand, otherwise you will get burned.

⚠ CAUTION:

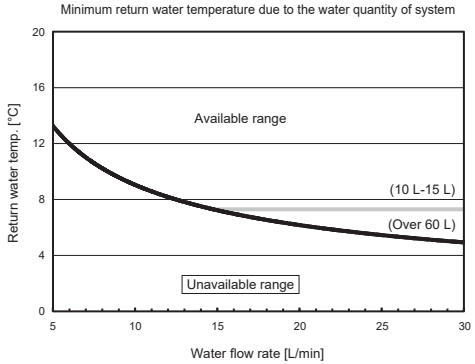
- **Pipe-work shall be securely mounted and guarded from physical damage.**
- **The installation of pipe-work shall be kept to a minimum.**
- **When the unit is running, vibrations or the noise of refrigerant running may be heard from the extension piping. Try to avoid installing the piping to thin walls, etc. as much as possible and provide sound insulation with the piping cover, etc.**
- **Make sure to perform the frozen prevention measure for water pipe system. (Water piping insulation, back-up pump system, using of a certain % ethylene glycol instead of normal water)**
  Insulate the water piping properly. The performance can be poor if the insulation is insufficient.
- **When using brine, take measures to prevent brine from scattering onto refrigerant circuit parts or electrical parts.**
- **The water velocity in pipes should be kept within certain limits of material to avoid erosion, corrosion and excessive noise generation.**
  Be aware, and take care of, that local velocities in small pipes, bends and similar obstructions can exceed the values above.
  e.g.) Copper : 1.5 m/s
- **When connecting metal pipes made of different materials, be sure to insulate the joint to prevent electrolytic etching.**

6. Water piping work

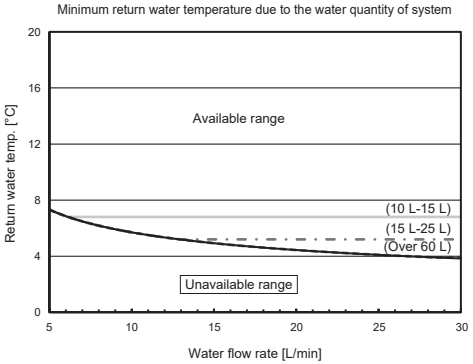
6.4. Available range (Water flow rate, return water temp.)

PUZ-WZ85VAAH-SC, PUZ-WZ85YAAH-SC

■ Heating

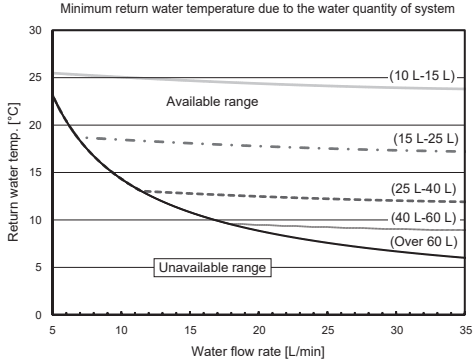


■ Cooling

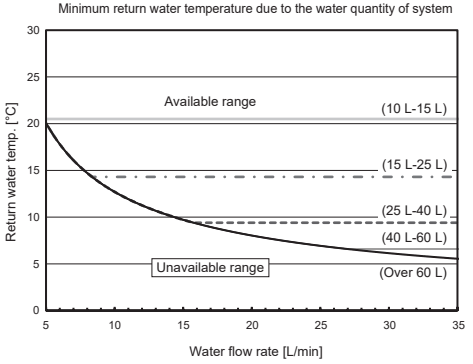


PUZ-WZ100VAAH-SC, PUZ-WZ100YAAH-SC
PUZ-WZ120VAAH-SC, PUZ-WZ120YAAH-SC

■ Heating



■ Cooling



⚠ CAUTION:

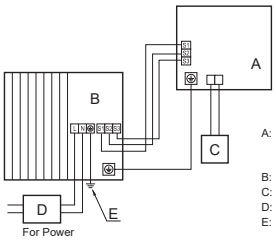
- **Set up a field system so that the inlet water temperature and water flow rate can be within the allowable range specified in our technical data, etc.**
  If the unit is used out of the allowable range, the parts of unit might be damaged.
- **Be sure to avoid the unavailable range during defrosting.**
  Otherwise, the outdoor unit is insufficiently defrosted and/or the heat exchanger of the indoor unit may freeze.

7. Electrical work

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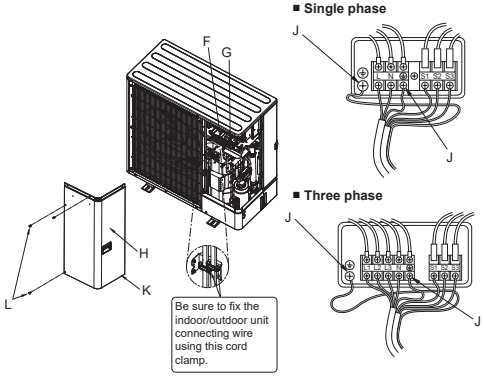
7.1. Outdoor unit (Fig. 7-1, Fig. 7-2)

(1) Remove the service panel.
(2) Wire the cables referring to the Fig. 7-1 and the Fig. 7-2.



A: Indoor unit
(Interface unit/
Flow temp. controller)
B: Outdoor unit
C: Remote controller
D: Main switch (Earth leakage breaker)
E: Earth

Fig. 7-1



F: Terminal block
G: Indoor/Outdoor connection terminal block (S1, S2, S3)
H: Service panel
J: Earth terminal
K: Wire the cables so that they do not contact the center of the service panel.
L: Hexalobular internal screws

Fig. 7-2

Note:

⏚ : Indicates a part which must be grounded.

This appliance incorporates an earth connection for functional purposes.

⚠ WARNING:

- **Do not damage the refrigerant circuit otherwise refrigerant may leak.**
- **Be sure to check for refrigerant leakage with a detector before turning on the power. Never turn on the power if there is a refrigerant leak.**
- **The terminal block cover panel of the outdoor unit must be firmly attached. If the cover panel is mounted incorrectly and dust and moisture enter the unit, electric shock or fire may result.**
- **Be sure to install circuit breakers. If not installed, electric shock may result.**
- **For the power lines, use standard cables of sufficient capacity. Otherwise, a short circuit, overheating, or fire may result.**
- **When installing the power lines, do not apply tension to the cables. If the connections are loosened, the cables can snap or break and overheating or fire may result.**
- **Be sure to ground the unit. Do not connect the ground wire to gas or water pipes, lightning rods, or telephone grounding lines. If the unit is not properly grounded, electric shock may result.**
- **Install a ground leakage breaker depending on the installation place (where it is humid).**
  If a ground leakage breaker is not installed, it could cause an electric shock.

⚠ CAUTION:

- **Be sure to install N-Line. Without N-Line, it could cause damage to unit.**
- **Routing wires should be carried out carefully so that the joint clips securing water pipes are not detached.**
- **Make sure to fill the gaps between the holes and wires with putty when taking out wires through the holes in the panels.**
  (Flame may spread through the gaps when a fire breaks out.)
- **If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid hazard.**
- **The appliance shall be installed in accordance with national wiring regulations.**
- **Check that cabling will not be subject to wear, corrosion, excessive pressure, vibration, sharp edges or any other adverse environmental effects. The check shall also take into account the effects of aging or continual vibration from sources such as compressors or fans.**

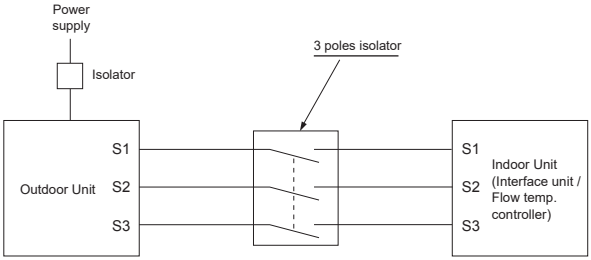
7. Electrical work

7.2. Field electrical wiring

Outdoor unit model			WZ85V	WZ100V	WZ120V	WZ85 - 120Y
Outdoor unit power supply			~/N (single), 50 Hz, 230 V	~/N (single), 50 Hz, 230 V	~/N (single), 50 Hz, 230 V	3N~ (3 ph 4-wires), 50 Hz, 400 V
Outdoor unit input capacity Main switch (Breaker)		*1	25 A	32 A	40 A	16 A
Wiring Wire No. × size (mm²)	Outdoor unit power supply		3 × Min. 2.5	3 × Min. 4	3 × Min. 6	5 × Min. 1.5
	Indoor unit-Outdoor unit	*2	3 × 1.5 (Polar)	3 × 1.5 (Polar)	3 × 1.5 (Polar)	3 × 1.5 (Polar)
	Indoor unit-Outdoor unit earth	*2	1 × Min. 1.5	1 × Min. 1.5	1 × Min. 1.5	1 × Min. 1.5
	Remote controller-Indoor unit	*3	2 × 0.3 (Non-polar)	2 × 0.3 (Non-polar)	2 × 0.3 (Non-polar)	2 × 0.3 (Non-polar)
Circuit rating	Outdoor unit L-N (single) Outdoor unit L1-N, L2-N, L3-N (3 phase)	*4	230 VAC	230 VAC	230 VAC	230 VAC
	Indoor unit-Outdoor unit S1-S2	*4	230 VAC	230 VAC	230 VAC	230 VAC
	Indoor unit-Outdoor unit S2-S3	*4	28 VDC	28 VDC	28 VDC	28 VDC
	Remote controller-Indoor unit	*4	12 VDC	12 VDC	12 VDC	12 VDC

*1. A breaker with at least 3.0 mm contact separation in each poles shall be provided. Use earth leakage breaker (NV).
Make sure that the current leakage breaker is one compatible with higher harmonics.
Always use a current leakage breaker that is compatible with higher harmonics as this unit is equipped with an inverter.
The use of an inadequate breaker can cause the incorrect operation of inverter.
*2. Max. 45 m
If 2.5 mm² used, Max. 50 m
If 2.5 mm² used and S3 separated, Max. 80 m
*3. The 10 m wire is attached in the remote controller accessory.
*4. The figures are NOT always against the ground.
S3 terminal has 28 VDC against S2 terminal. However between S3 and S1, these terminals are NOT electrically insulated by the transformer or other device.

Notes:
1. **Wiring size must comply with the applicable local and national codes.**
2. **Power supply cables and the cables between Interface unit/Flow temp. controller and outdoor unit shall not be lighter than polychloroprene sheathed flexible cables. (Design 60245 IEC 57)**
3. **Be sure to connect the cables between Interface unit/Flow temp. controller and outdoor unit directly to the units (no intermediate connections are allowed).**
   Intermediate connections may result in communication errors. If water enters at the intermediate connection point, it may cause insufficient insulation to ground or a poor electrical contact.
   (If an intermediate connection is necessary, be sure to take measures to prevent water from entering the cables.)
4. **Install an earth longer than other cables.**
5. **Do not construct a system with a power supply that is turned ON and OFF frequently.**
6. **Use self-extinguishing distribution cables for power supply wiring.**
7. **Properly route wiring so as not to contact the sheet metal edge or a screw tip.**



⚠ WARNING:

- **In case of A-control wiring, there is high voltage potential on the S3 terminal caused by electrical circuit design that has no electrical insulation between power line and communication signal line. Therefore, please turn off the main power supply when servicing. And do not touch the S1, S2, S3 terminals when the power is energized. If isolator should be used between indoor unit and outdoor unit, please use 3-pole type.**
- **Never splice the power cable or the indoor-outdoor connection cable, otherwise it may result in a smoke, a fire or communication failure.**
- **The units must be powered by dedicated power lines and the correct voltage and circuit breakers must be used. Power lines with insufficient capacity or incorrect electrical work may result in electric shock or fire.**
- **Use only specified cables for wiring. The wiring connections must be made securely with no tension applied on the terminal connections. Also, never splice the cables for wiring (unless otherwise indicated in the Installation Manual).**
  Failure to observe these instructions may result in overheating or a fire.
- **Use circuit breakers (ground fault interrupter, isolating switch (+B fuse), and molded case circuit breaker) with the specified capacity. If the circuit breaker capacity is larger than the specified capacity, breakdown or fire may result.**

8. Test run

8.1. Before test run

► After completing installation and the wiring and piping of the indoor and outdoor units, check for refrigerant leakage, looseness in the power supply or control wiring, wrong polarity, and no disconnection of one phase in the supply.

► Use a 500-volt megohmmeter to check that the resistance between the power supply terminals and ground is at least 1 MΩ.

► Do not carry out this test on the control wiring (low voltage circuit) terminals.

► Turn on the power at least 12 hours before starting operation.

► The compressor will not operate unless the power supply phase connection is correct.

► The followings must be checked as well.

- The outdoor unit is not faulty. LED1 and LED2 on the control board of the outdoor unit flash when the outdoor unit is faulty.

Insulation resistance

After installation or after the power source to the unit has been cut for an extended period, the insulation resistance will drop below 1 MΩ due to refrigerant accumulating in the compressor. This is not a malfunction. Perform the following procedures.

1. Remove the wires from the compressor and measure the insulation resistance of the compressor.
2. If the insulation resistance is below 1 MΩ, the compressor is faulty or the resistance dropped due the accumulation of refrigerant in the compressor.
3. After connecting the wires to the compressor, the compressor will start to warm up after power is supplied. After supplying power for the times indicated below, measure the insulation resistance again.
   - The insulation resistance drops due to accumulation of refrigerant in the compressor. The resistance will rise above 1 MΩ after the compressor is warmed up for 4 hours.
     (The time necessary to warm up the compressor varies according to atmospheric conditions and refrigerant accumulation.)
   - To operate the compressor with refrigerant accumulated in the compressor, the compressor must be warmed up at least 12 hours to prevent breakdown.
4. If the insulation resistance rises above 1 MΩ, the compressor is not faulty.

⚠ WARNING:

- **Before starting operation, check that all panels, guards and other protective parts are correctly installed. Rotating, hot, or high voltage parts can cause injuries.**
- **Do not touch any switch with wet hands. Electric shock may result.**

⚠ CAUTION:

- **Do not use the outdoor unit if the insulation resistance is less than 1 MΩ.**
- **Turn on the main power switch more than 12 hours before starting operation. Starting operation just after turning on the power switch can severely damage the internal parts. Keep the main power switch turned on during the operation season.**

8.2. Test run

Use a remote controller.

Refer to the indoor unit Installation Manual.

⚠ WARNING:

- **Do not touch the refrigerant pipes with bare hands during operation. The refrigerant pipes are hot or cold depending on the condition of the flowing refrigerant. If you touch the pipes, burns or frostbite may result.**

⚠ CAUTION:

- **All automatic air vents installed in indoor water circuits MUST be closed after the air is removed from the water circuit during commissioning.**
- **After stopping operation, be sure to wait at least five minutes before turning off the main power switch. Otherwise, water leakage or breakdown may result.**

Note :
Occasionally, vapor that is made by the defrost operation may seem as if smoke come up from the outdoor unit.

9. System control

Set the refrigerant address using the DIP switch of the outdoor unit.

SW1 Function Setting

SW1 Setting	Refrigerant address
ON OFF 3 4 5 6 7	00
ON OFF 3 4 5 6 7	01
ON OFF 3 4 5 6 7	02
ON OFF 3 4 5 6 7	03
ON OFF 3 4 5 6 7	04
ON OFF 3 4 5 6 7	05

Note:
a) Up to 6 units can be connected.
b) Select one single model for all units.
c) For Dip switch setting for indoor unit, refer to the indoor unit's Installation Manual.

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10. Handing over to the user

- Explain the following items to the end user.
- How the unit operates.
- The particular risks, the protective zone and rules of conduct that are associated with R290 refrigerant.
- How the unit is avoided from frozen damage when stopping the unit.
- Ask a dealer or an authorized technician to carry out work on the unit.
- Keep the Installation Manual and Operation Manual so that don't lose them.
- Recommend that regular maintenance be performed.
  Ask a dealer to perform it.

11. Inspection and maintenance

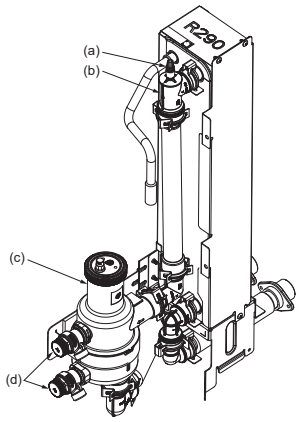
Refer to the Service Manual for maintenance.

⚠ CAUTION:

In addition to annual servicing it is necessary to replace or inspect some parts after a certain period of system operation. Please see tables below for detailed instructions. Replacement and inspection of parts should always be done by a competent person with relevant training and qualifications.

Note:
Parts which require regular inspection

No.	Genre	Parts	Figure	Period	How	Possible failures	Applied models
1	Inspection	Pressure relief valve (3 bar)	Fig. 11-1 (d)	Every 1 year	Turning the knob manually.	PRV would be fixed and expansion vessel would burst.	All models
2	Maintenance	Air vent (Top cap)	Fig. 11-1 (a) / (b)	If necessary	Open top cap for air vent but surely close it after its opening.	Water flow would be lost and performance would be degraded.	All models



(a) Top cap
(b) Air vent
(c) Air separator
(d) Pressure relief valve

Fig. 11-1

12. Repair and service

Repairs must be carried out in accordance with the Service Manual.

- Work on the refrigerant circuit with flammable refrigerant in safety group A3 may only be carried out by authorised heating contractors. These heating contractors must be trained in accordance with EN 378 Part 4 or IEC 60335-2-40 Annex HH.
- Work on electrical equipment may only be carried out by a qualified electrician.
- Use only spare parts authorized by the manufacturer. In order to not invalidate unit warranty and maintain the correct and safe functioning of the unit, please use only parts and accessories recommended by Mitsubishi Electric, to be installed by a competent electrician with the requisite professional qualifications in your jurisdiction. We accepts no liability for damage or expenses caused by the incorrect installation of the unit and/or third party accessories, parts or components, which may result in water leakage, electric shock or fire.

- **When breaking into the refrigerant circuit to make repairs – or for any other purpose conventional procedures shall be used. However, for flammable refrigerants it is important that best practice is followed since flammability is a consideration. The following procedure shall be adhered to:**
  - safely remove refrigerant following local and national regulations
  - evacuate
  - purge the circuit with inert gas
  - evacuate
  - continuously flush with inert gas when using flame to open circuit
  - open the circuit.

  The refrigerant charge shall be recovered into the correct recovery cylinders. An example of an inert gas is oxygen free nitrogen (OFN).

  Compressed air or oxygen shall not be used for purging refrigerant systems.

  Purging of the refrigerant circuit shall be achieved by breaking the vacuum in the system with inert gas and continuing to fill until the working pressure is achieved, then venting to atmosphere, and finally pulling down to a vacuum. This process shall be repeated until no refrigerant is within the system.

  The system shall be vented down to atmospheric pressure to enable work to take place.

  Ensure that the outlet of the vacuum pump is not close to any ignition sources and that ventilation is available.
- **When removing refrigerant from a system for servicing, it is required to follow good practice so that all refrigerants are removed safely. When transferring refrigerant into cylinders, ensure that only appropriate refrigerant recovery cylinders are employed. Ensure that the correct number of cylinders for holding the total system charge are available. All cylinders to be used are designated for the recovered refrigerant and labelled for that refrigerant (i.e. special cylinders for the recovery of refrigerant). Cylinders shall be complete with pressure-relief valve and associated shut-off valves in good working order. Empty recovery cylinders are evacuated and, if possible, cooled before recovery occurs.**

  The recovery equipment shall be in good working order with a set of instructions concerning the equipment that is at hand and shall be suitable for the recovery of the flammable refrigerant. Consult manufacturer if in doubt. In addition, a set of calibrated weighing scales shall be available and in good working order.

  Hoses shall be complete with leak-free disconnect couplings and in good condition.

  The recovered refrigerant shall be processed according to local legislation in the correct recovery cylinder, and the relevant waste transfer note arranged. Do not mix refrigerants in recovery units and especially not in cylinders. If compressors or compressor oils are to be removed, ensure that they have been evacuated to an acceptable level to make certain that flammable refrigerant does not remain within the lubricant. The compressor body shall not be heated by an open flame or other ignition sources to accelerate this process. Draining of oil from a system shall be carried out safely.
- **Where electrical components are being changed, they shall be fit for the purpose and to the correct specification. At all times the manufacturer's maintenance and service guidelines shall be followed. If in doubt, consult the manufacturer's technical department for assistance.**

  The following checks shall be applied to installations using flammable refrigerants:
  - The refrigerant charge is in accordance with the room size within which the refrigerant containing parts are installed.
  - The ventilation machinery and outlets are operating adequately and are not obstructed.
  - Marking to the equipment continues to be visible and legible. Markings and signs that are illegible shall be corrected.
  - Refrigeration pipe or components are installed in a position where they are unlikely to be exposed to any substance which can corrode refrigerant containing components, unless the components are constructed of materials which are inherently resistant to being corroded or are suitably protected against being corroded.
- **Repair and maintenance to electrical components shall include initial safety checks and component inspection procedures. If a fault exists that could compromise safety, then no electrical supply shall be connected to the circuit until it is satisfactorily dealt with. If the fault cannot be corrected immediately but it is necessary to continue operation, an adequate temporary solution shall be used. This shall be reported to the owner of the equipment so all parties are advised.**

  Initial safety checks shall include that:
  - capacitors are discharged: this shall be done in a safe manner to avoid possibility of sparking;
  - no live electrical components and wiring are exposed while charging, recovering or purging the system;
  - there is continuity of earth bonding.
- **Sealed electrical components shall not be repaired.**
- **In addition to conventional charging procedures, the following requirements shall be followed:**
  - Ensure that contamination of different refrigerants does not occur when using charging equipment. Hoses or lines shall be as short as possible to minimize the amount of refrigerant contained in them.
  - Cylinders shall be kept upright.
  - Ensure that the refrigeration system is earthed prior to charging the system with refrigerant.
  - Label the system when charging is complete (if not already labelled).
  - Extreme care shall be taken not to overfill the refrigeration system.

  Prior to recharging the system, it shall be pressuretested with the appropriate purging gas. The system shall be leaktested on completion of charging but prior to commissioning. A follow up leak test shall be carried out prior to leaving the site.

12. Repair and service

⚠ WARNING:

- **When the installer is performing brazing work, be sure to ventilate the room sufficiently.**
  Make sure that there are no hazardous or flammable materials nearby.
  When performing the work in a closed room, small room, or similar location, make sure that there are no refrigerant leaks before performing the work.
  If refrigerant leaks and accumulates, it may ignite.
- **When servicing the outdoor unit, use only the specified refrigerant (R290) to charge the refrigerant lines. Do not mix it with any other refrigerant and do not allow air to remain in the lines.**
  If air is mixed with the refrigerant, then it can be the cause of abnormal high pressure in the refrigerant line, and may result in an explosion and other hazards. The use of any refrigerant other than that specified for the system will cause mechanical failure or system malfunction or unit breakdown. In the worst case, this could lead to a serious impediment to securing product safety.
- **Do not fill the unit with more refrigerant than the specified amount.**
  Failure to follow this instruction may result in unit failure or fire hazard.

⚠ CAUTION:

- **Do not use low temperature solder alloy in case of brazing the refrigerant pipes.**

13. Decommissioning

13.1. Temporarily decommissioning the unit

1. Switch off all of the isolators to which the unit is connected in the building.
2. Disconnect the unit from the power supply.
3. If there is a risk of frost damage, drain the heating water from the unit.

13.2. Permanently decommissioning the unit

Have a authorised heating contractor permanently decommission the unit.

14. Recycling and disposal

14.1. Disposing of the packaging

- The competent person who installed the unit is responsible for the disposal of the packaging.
- Dispose of the packaging correctly.
- Observe all relevant regulations.

Note:

- **Be sure to safely dispose of the packaging materials. Packaging materials, such as nails and other metal or wooden parts may cause stabs or other injuries.**

14.2. Disposing of the unit

- Refrigerant must only be released, recovered and disposed properly by an authorised competent person.
- The unit needs to be treated according to WEEE.
- Do not dispose of the unit with the household waste.
- According to the laws and ordinances of each country, hand in the unit to a collection center for waste electrical or electronic equipment or to a recycler authorised by manufacturer.

14.3. Transportation of the unit for disposal

⚠ WARNING:

- **Be sure to observe the following safety requirements when transporting the unit. Failure to follow this instruction may result in unit failure or fire hazard.**

(1) Do not use a source of ignition during transportation, which includes: naked flames, sparks, static electricity, objects with high surface temperature (>470°C).

- Do not smoke.
- Do not use the electric devices, heater, lights, etc.



Fig. 14-1

(2) Vehicles with ventilation in the cargo area should be used.

- Like below image.

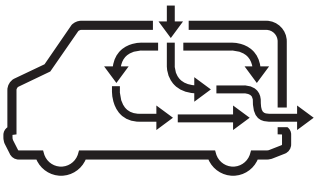


Fig. 14-2

- If vehicles are not equipped with a special ventilation system, fresh outside air intake mode and MAX fan volume operation are mandatory.

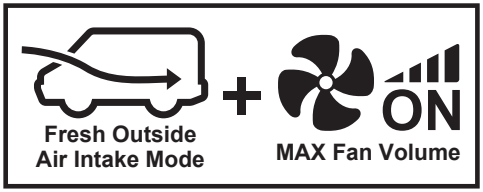


Fig. 14-3

(3) Be sure to carry the R290 detector and keep it working properly.

15. Specifications

Outdoor model		PUZ-WZ85VAAH-SC	PUZ-WZ100VAAH-SC	PUZ-WZ120VAAH-SC
Power supply	V / Phase / Hz	230 / Single / 50		
Dimensions (W × H × D)	mm	1050 × 1040 × 480		
Sound Power Level *1 (Heating)	dB(A)	54	55	55
Outdoor temperature *2	Heating (°C)	-25 ~ 24		
	Cooling (°C)	10 ~ 46		
	DHW (°C)	-25 ~ 46		

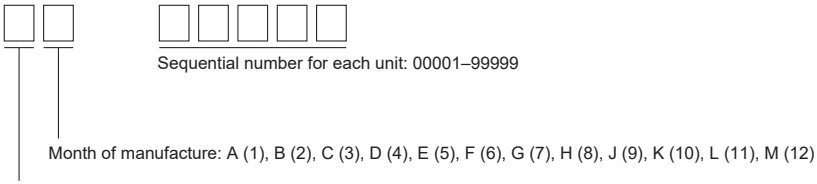
Outdoor model		PUZ-WZ85YAAH-SC	PUZ-WZ100YAAH-SC	PUZ-WZ120YAAH-SC
Power supply	V / Phase / Hz	400 / 3-Phase / 50		
Dimensions (W × H × D)	mm	1050 × 1040 × 480		
Sound Power Level *1 (Heating)	dB(A)	54	55	55
Outdoor temperature *2	Heating (°C)	-25 ~ 24		
	Cooling (°C)	10 ~ 46		
	DHW (°C)	-25 ~ 46		

*1 Measured under EN12102-1-2022.

*2 Use the system within the operating temperature ranges shown in the table.

16. Serial number

■ The serial number is indicated on the SPEC NAME PLATE.



en

EU DECLARATION OF CONFORMITY
EU-OVERENSSTEMMELSESERKLÆRING
EU-FÖRSÄKRAN OM ÖVERENSSTÄMMELSE

EU-ERKLÆRING OM SAMSVAR
EU-VAATIMUSTENMUKAISUUSVAKUUTUS
EL-I VASTAVUSDEKLARATSIOON

ES ATBILSTĪBAS DEKLARĀCIJA
ES ATITIKTIES DEKLARACIJA

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS EUROPE LTD.
NETTLEHILL ROAD, HOUSTOUN INDUSTRIAL ESTATE, LIVINGSTON, EH54 5EQ, SCOTLAND, UNITED KINGDOM

hereby declares under its sole responsibility that the air conditioner(s) and heat pump(s) for use in residential, commercial, and light-industrial environments described below:
erklærer hermed under eneansvar, at det/de herunder beskrevne airconditionanlæg og varmepumpe(r) til brug i beboelses- og erhvervsmiljøer samt i miljøer med let industri:
intygar härmed att luftkonditioneringarna och värmepumparna som beskrivs nedan för användning i bostäder, kommersiella miljöer och lätta industriella miljöer:
erklærer et fullstendig ansvar for undernevnte klimaanlegg og varmepumper ved bruk i boliger, samt kommersielle og lettindustrielle miljøer:
vakuuttaa täten yksinomaisella vastuullaan, että jäljempänä kuvatut asuinrakennuksiin, pienteollisuuskäyttöön ja kaupalliseen käyttöön tarkoitetut ilmastointilaitteet ja lämpöpumput:
kinnitab oma ainuvastutusel, et allpool toodud elu-, äri- ja kergtööstuskeskkondades kasutamiseks mõeldud kliimaseadmed ja soojuspumbad:
ar šo, vienpersoniski uzņemoties atbildību, paziņo, ka tālāk aprakstītais(-ītie) gaisa kondicionētājs(-i) un siltumsūknis(-ņi) ir paredzēti lietošanai dzīvojamajās, komercdarbības un vieglās rūpniecības telpās, kas aprakstītas tālāk:
šiuo vien tik savo atsakomybe pareiškia, kad toliau apibūdintas (-i) oro kondicionierius (-iai) ir šilumos siurblys (-iai), skirtas (-i) naudoti toliau apibūdintose gyvenamosiose, komercinėse ir lengvosios pramonės aplinkose:

MITSUBISHI ELECTRIC, PUZ-WZ85VAAH-SC*, PUZ-WZ100VAAH-SC*, PUZ-WZ120VAAH-SC*
PUZ-WZ85YAAH-SC*, PUZ-WZ100YAAH-SC*, PUZ-WZ120YAAH-SC*
*** : , , 1, 2, 3, · · · , 9**

is/are in conformity with provisions of the following Union harmonisation legislation.
er i overensstemmelse med bestemmelserne i følgende harmoniserede EU-lovgivning.
uppfyller villkoren i följande harmoniserade föreskrifter inom unionen.
er i samsvar med forskriftene til følgende EU-lovgivning om harmonisering.

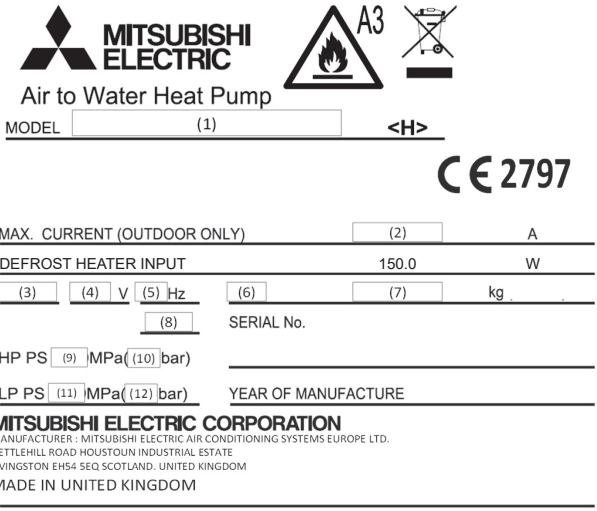
ovat unionin seuraavan yhdenmukaistamislainsäädännön säännösten mukaisia.
vastavad järgmiste Euroopa Liidu ühtlustatud õigusaktide sätetele.
atbilst šādiem ES harmonizētajiem tiesību aktu noteikumiem.
taip pat atitinka kitų toliau išvardytų suderintųjų Sąjungos direktyvų nuostatas.

2014/35/EU: Low Voltage Directive
2006/42/EC: Machinery Directive
2014/30/EU: Electromagnetic Compatibility Directive
2009/125/EC: Energy-related Products Directive and Regulation (EU) No 813/2013
2011/65/EU, (EU) 2015/863 and (EU) 2017/2102: RoHS Directive
2014/68/EU: Pressure Equipment Directive

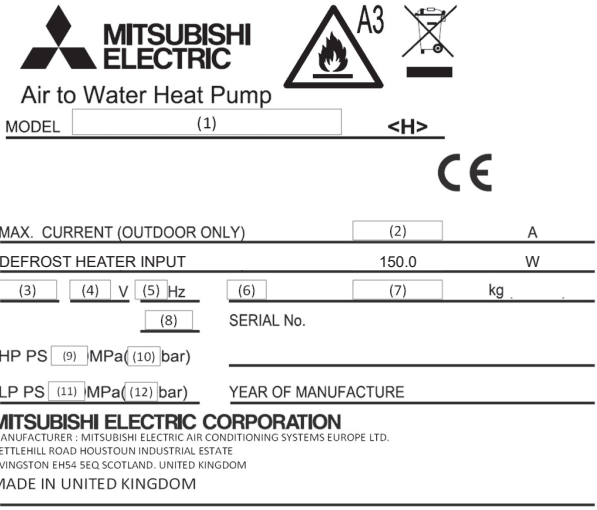
Issued: **1 November 2024**
UNITED KINGDOM

Kengo TAKAHASHI
Manager, Quality Assurance Department

Information of spec name plate



(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
PUZ-WZ100VAAH-SC	30.0	~/N	230	50	R290	0.82	IP24	3.35	33.5	1.50	15.0
PUZ-WZ100YAAH-SC	12.0	3N~	400	50	R290	0.82	IP24	3.35	33.5	1.50	15.0
PUZ-WZ120VAAH-SC	37.0	~/N	230	50	R290	0.82	IP24	3.35	33.5	1.50	15.0
PUZ-WZ120YAAH-SC	12.0	3N~	400	50	R290	0.82	IP24	3.35	33.5	1.50	15.0



(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
PUZ-WZ85VAAH-SC	23.0	~/N	230	50	R290	0.60	IP24	3.35	33.5	1.50	15.0
PUZ-WZ85YAAH-SC	12.0	3N~	400	50	R290	0.60	IP24	3.35	33.5	1.50	15.0

<ENGLISH>
English is original. The other languages versions are translation of the original.

⚠ CAUTION

- Refrigerant leakage may cause suffocation. Provide ventilation in accordance with EN378-1.
- Be sure to wrap insulation around the piping. Direct contact with the bare piping may result in burns or frostbite.
- Never put batteries in your mouth for any reason to avoid accidental ingestion.
- Battery ingestion may cause choking and/or poisoning.
- Install the unit on a rigid structure to prevent excessive operation sound or vibration.
- The A-weighted sound pressure level is below 70dB.
- This appliance is intended to be used by expert or trained users in shops, in light industry and on farms, or for commercial use by lay persons.

<NORSK>
Originalspråket er engelsk. De andre språkversjonene er oversettelser av originalen.

⚠ FORSIKTIG

- Kjølemiddellekkasje kan forårsake kvelning. Sørg for ventilering i samsvar med EN378-1.
- Pass på at isoleringen pakkes godt rundt røret. Direkte kontakt med ukledte rør kan forårsake brannskader eller forfrysninger.
- Aldri plasser batteri i munnen, da dette kan medføre en risiko for at du svelger batteriet ved et uhell.
- Hvis du svelger et batteri, kan du risikere kvelning og/eller forgiftning.
- Installer enheten på en stabil struktur for å forhindre unødvendig mye driftsstøy eller vibrering.
- Det A-vektede lydtrykknivået er under 70 dB.
- Dette apparatet er ment for bruk av eksperter eller faglært personell i butikker, lettindustri og på gårder, eller for kommersielt bruk av ikke-fagmenn.

<DANSK>
Engelsk er originalen. De andre sprogversioner er oversættelser af originalen.

⚠ FORSIGTIG

- Lækage af kølemiddel kan forårsage kvælning. Sørg for udluftning i overensstemmelse med EN378-1.
- Sørg for at pakke rørene ind i isolering. Direkte kontakt med ubeklædte rør kan forårsage forbrændinger eller forfrysninger.
- Batterier må under ingen omstændigheder tages i munden for at forhindre utilsigtet indtagelse.
- Indtagelse af batterier kan forårsage kvælning og/eller forgiftning.
- Installér enheden på en fast struktur for at forhindre for høje driftslyde eller vibrationer.
- Det A-vægtede lydtrykniveau er under 70dB.
- Dette apparat er beregnet til at blive brugt af eksperter eller udlærte brugere i butikker, inden for let industri og på gårde eller til kommerciel anvendelse af lægmænd.

<SUOMI>
Englanninkielinen asiakirja on alkuperäinen. Muunkieliset versiot ovat alkuperäisen käännöksiä.

⚠ HUOMIO

- Kylmäaineen vuoto voi aiheuttaa tukehtumisen. Järjestä tuuletus standardin EN378-1 mukaisesti.
- Putkisto pitää eristää. Suora kosketus paljaaseen putkeen voi aiheuttaa palovamman tai paleltuman.
- Älä koskaan laita paristoja suuhun mistään syystä, jotta vältät tahattoman nielemisen.
- Pariston nieleminen voi aiheuttaa tukehtumisen ja/tai myrkytyksen.
- Asenna yksikkö tukevaan rakenteeseen estääksesi liiallisen, toiminnasta aiheutuvan, äänen tai tärinän.
- A-painotettu äänenpainetaso on alle 70 dB.
- Tämä laite on tarkoitettu asiantuntijoiden tai koulutettujen käyttäjien käytettäväksi liikehuoneistoissa, kevyen teollisuuden tiloissa ja maatiloilla tai maallikkojen kaupalliseen käyttöön.

<SVENSKA>
Engelska är originalspråket. De övriga språkversionerna är översättningar av originalet.

⚠ FÖRSIKTIGHET

- Köldmedelsläckage kan leda till kvävning. Tillhandahåll ventilation i enlighet med EN378-1.
- Kom ihåg att linda isolering runt rören. Direktkontakt med bara rör kan leda till brännskador eller köldskador.
- Stoppa aldrig batterier i munnen, de kan sväljas av misstag.
- Om ett batteri sväljs kan det leda till kvävning och/eller förgiftning.
- Montera enheten på ett stadigt underlag för att förhindra höga driftljud och vibrationer.
- Den A-vägda ljudtrycksnivån är under 70dB.
- Denna apparat är ämnad för användning av experter eller utbildade användare i affärer, inom lätt industri och på lantbruk, eller för kommersiell användning av lekmän.

<EESTI>
Originaaljuhend on ingliskeelne. Muudes keeltes versioonid on originaali tõlked.

⚠ ETTEVAATUST!

- Külmaaine leke võib põhjustada lämbumist. Tuulutamine standardi EN378-1 kohaselt.
- Mähkige torude ümber kindlasti isolatsiooni. Vahetu kontakt paljaste torudega võib põhjustada põletusi või külmakahjustusi.
- Hoiduge patareide tahtmatust allaneelamisest, ärge kunagi pange ühelgi põhjusel patareisid suhu.
- Patarei allaneelamine võib põhjustada lämbumist ja/või mürgitust.
- Paigaldage seade jäigale struktuurile, et vältida ülemäärast tööheli ja vibreerimist.
- A-filtriga helirõhu tase on madalam kui 70 dB.
- Seade on mõeldud kasutamiseks asjatundjatele ja väljaõppe läbinud kasutajatele poodides, kergtööstuses ja taludes ning kommertskasutuseks tavaisikute poolt.

<LATVISKI>
Oriģināls ir angļu valodā. Versijas citās valodās ir oriģināla tulkojums.

⚠ UZMANĪBU

- Aukstumaģenta noplūdes gadījumā pastāv nosmakšanas risks. Ir jānodrošina standartam EN378-1 atbilstoša ventilēšana.
- Aptiniet caurules ar izolējošu materiālu. Pieskaroties neaptītām caurulēm, var gūt apdegumus vai apsaldējumus.
- Aizliegts ievietot baterijas mutē; pastāv norīšanas risks.
- Bateriju norīšana var izraisīt aizrīšanos un/vai saindēšanos.
- Uzstādiet iekārtu uz izturīgas struktūras, lai izvairītos no pārlieku liela darbības trokšņa vai vibrācijas.
- A — izsvarotais skaņas spiediena līmenis ir mazāks par 70 dB.
- Šo iekārtu paredzēts lietot speciālistiem vai apmācītiem lietotājiem veikalos, vieglās rūpniecības telpās un lauksaimniecības fermās, kā arī to var lietot nespeciālisti komerciālām vajadzībām.

<LIETUVIŠKAI>
Originalas yra anglų k. Versijos kitomis kalbomis yra originalo vertimas.

⚠ ATSARGIAI

- Dėl šaltnešio nuotėkio galima uždusti. Išvėdinkite patalpas pagal EN378-1.
- Būtinai vamzdelius apvyniokite izoliacija. Prisilietus prie plikų vamzdelių galima nusideginti arba nušalti.
- Siekdami išvengti atsitiktinio prarijimo, niekada nedėkite baterijų į burną.
- Prarijus bateriją galima užspringti ir / arba apsinuodyti.
- Įrenginį sumontuokite ant tvirtos struktūros, kad nesigirdėtų pernelyg didelio veikimo triukšmo ar vibracijos.
- A svertinis garso slėgio lygis nesiekia 70 dB;
- šis prietaisas skirtas naudoti specialistui ar išmokytiems naudotojams dirbtuvėse, lengvojoje pramonėje ar ūkiuose arba komerciniam naudojimui nespecialistams.

Please be sure to put the contact address/telephone number on this manual before handing it to the customer.

MITSUBISHI ELECTRIC CORPORATION
HEAD OFFICE: TOKYO BUILDING, 2-7-3, MARUNOUCHI, CHIYODA-KU, TOKYO 100-8310, JAPAN

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