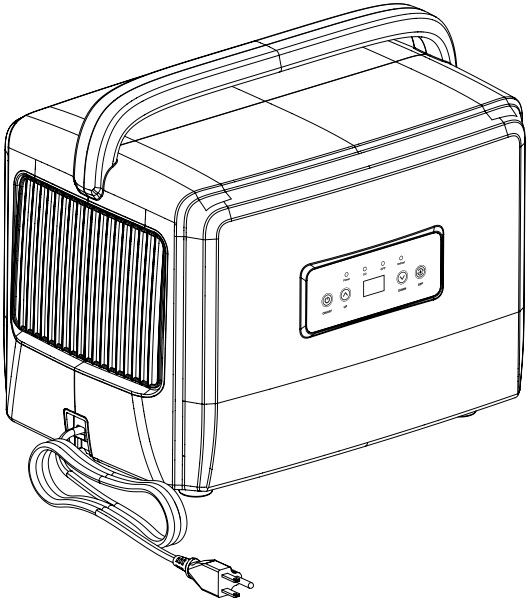
Helios D35

Installation & Operations Manual



AlorAir Solutions INC.

Add: 14752 Yorba Ct Chino CA 91710 US

Tel: (888)-990-7469

E-mail: support@alorair.com

Specifications subject to change without notice.

TABLE OF CONTENTS

IMPORTANT SAFETY INSTRUCTIONS

1. Always use a grounded power source (required for all electrical appliances) when connecting the dehumidifier. Failure to do so will void the warranty.
2. Your dehumidifier should only be repaired by a qualified technician.
3. If the dehumidifier has been exposed to flooding, ensure that it is completely dry before reconnecting the power and resterting.
4. Do not insert objects or fingers into the air inlet or outlet.
5. Do not wash the exterior of the dehumidifier with water. To clean the unit, unplug it and wipe the exterior with a damp cloth.
6. Do not stand on the dehumidifier or place objects on top of it.
7. Do not use an extension cord or plug adapter with the unit.
8. Unless otherwise specified, all maintenance should be performed with the machine powered off.

IDENTIFICATION

Your dehumidifier comes with a limited warranty.

For future reference, please record your dehumidifier's model number, serial number, and purchase date. This information is necessary when seeking assistance and can be found on the data label located on the side of the unit.

Model: Helios D35

Serial Number: _____ **Purchase Date: _____**

For any additional questions regarding your dehumidifier, you have the following options:

- Contact your installation contractor
- Reach out to a local installer or call (888)-990-7469

ELECTRICAL REQUIREMENTS

Power Supply: 115 V, 60 Hz AC, Single Phase

Outlet Requirement: 3-Prong, GFCI

Circuit Protector: 15 Amps

WARNING: 240 Volts AC may cause serious injury from electric shock.

To reduce the risk of injury:

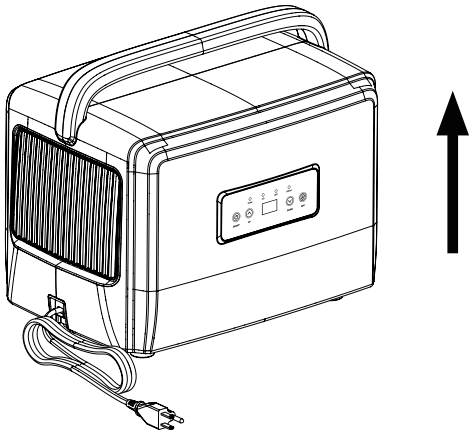
1. Disconnect electrical power before servicing.
2. Only plug unit into grounded electrical circuit.
3. Do not use an extension cord.
4. Do not use a plug adapter.

HOW THE DEHUMIDIFIER WORKS

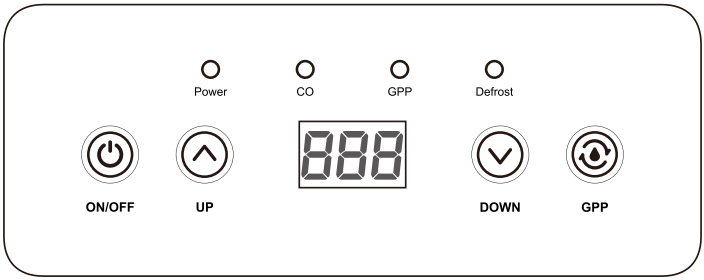
The dehumidifier uses a built-in humidity sensor to continuously monitor the surrounding environment. When the relative humidity rises above your selected setpoint, the unit automatically activates. Moist air is drawn into the system and passed over cold evaporator coils, which cool the air below its dew point. This causes moisture in the air to condense and collect inside the unit. The dry air then passes through a condenser coil, where it is reheated before being released back into the room at a comfortable temperature. This process helps maintain balanced humidity levels for optimal comfort and protection.

INSTALLATION GUIDELINES

1. The dehumidifier should operate in a sealed environment to effectively control humidity.
2. To ensure proper airflow, avoid placing the dehumidifier's air inlet and outlet against a wall. Maintain at least 6 inches of clearance around both.
3. For optimal dehumidification, place the dehumidifier in the center of the room.
4. The dehumidifier is designed for upright operation near the floor. Ensure it remains in this position for proper function.
5. Plug the dehumidifier into a 15-amp grounded circuit.
6. Before first use:
   - Leave the dehumidifier upright and out of the box for 24 hours before plugging it in.
   - The unit may have been tilted or placed upside down during transport. Letting it sit for 24 hours allows the compressor oil to settle, ensuring optimal performance and longevity.



CONTROL PANEL OVERVIEW



Indicator Light Description

1. Power Indicator Light

This green light indicates the power status of the dehumidifier.

- **Steady on:** The dehumidifier is running.
- **Flashing:** The dehumidifier has reached the set humidity or is displaying an error code.
- **Off:** The dehumidifier is turned off.

2. CO Indicator Light

This green light shows if Continuous Mode is turned on.

- **Steady on:** The dehumidifier is running continuously (CO is selected for humidity or GPP).
- **Off:** The dehumidifier is not in continuous operation mode.

3. GPP Indicator Light

This is the GPP Mode indicator light, which is green.

- **Steady on:** The dehumidifier is in GPP mode.
- **Off:** The dehumidifier is not in GPP mode.

4. Defrost Indicator Light

This is the Defrost Mode indicator light, which is green.

- **Steady on:** The dehumidifier is in defrost mode.
- **Off:** The dehumidifier is not in defrost mode.

Button Descriptions

1. Power Button

This button turns the dehumidifier on or off. Each press toggles the power state.

2. UP and DOWN Buttons

These buttons are used to adjust the set humidity value or GPP value.

3. GPP Button

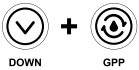
This button toggles the dehumidifier's operating mode between %RH (Relative Humidity) and GPP (Grains Per Pound).

Combination Keys

1. UP Button + DOWN Button

Press and hold the "UP" and "DOWN" buttons simultaneously for 3 seconds. The digital display will show the detected ambient temperature. After flashing, it will automatically return to displaying the set humidity.

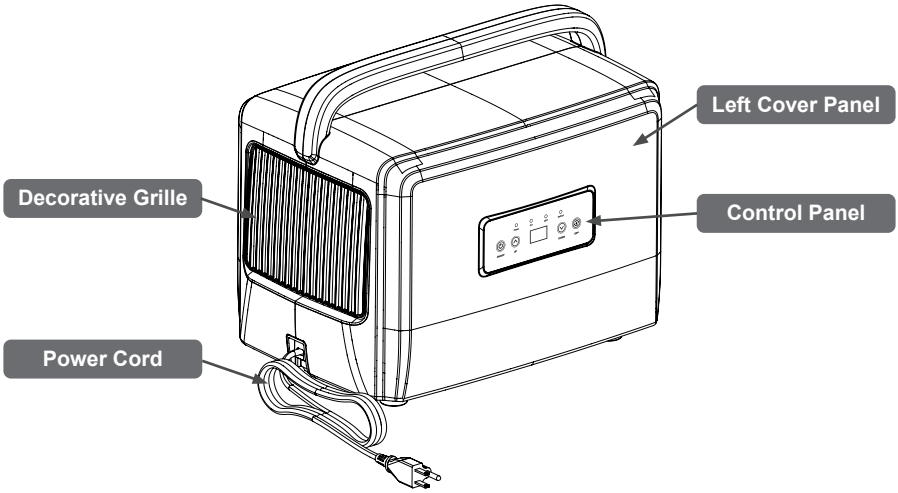
2. DOWN Button + GPP Button



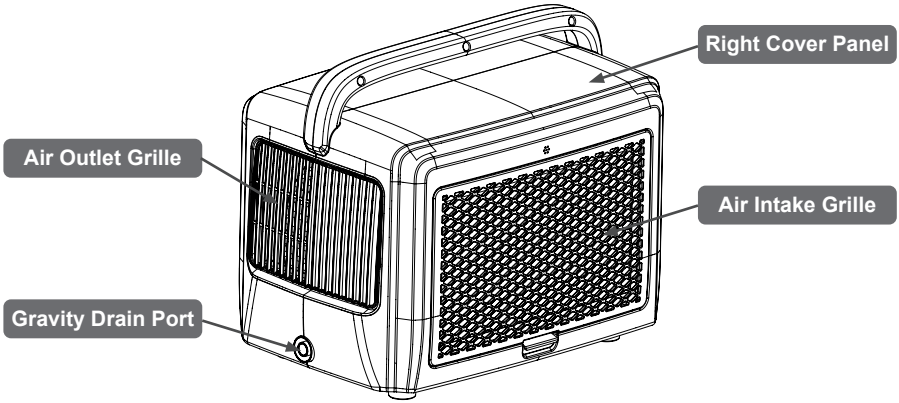
Press and hold the "DOWN" and "GPP" buttons simultaneously for 3 seconds. The digital display will show the detected coil temperature. After flashing, it will automatically return to displaying the set humidity.

OPERATING INSTRUCTIONS

Front View



Back View



When powered on for the first time, the dehumidifier defaults to %RH mode with a preset humidity level of 50%.

The digital display shows the real-time detected humidity by default. After adjusting the desired humidity using the “UP” or “DOWN” button, if no further operation is performed within 3 seconds, the display will revert to showing the real-time humidity.

To check the set humidity, press the “UP” or “DOWN” button once, and the display will flash the last set value. Pressing the “UP” or “DOWN” button again within 3 seconds allows for further adjustment.

1. %RH Mode

When the dehumidifier is turned on:

- Press the “UP” or “DOWN” button, and the digital display will flash, showing the set humidity value.
- Press “UP” or “DOWN” to increase or decrease the setting in 1% increments.
- The available range cycles are as follows: **35% → 36% → 37% … 90% → CO → 35% … (repeats in sequence).**
- Pressing and holding the "UP" or "DOWN" button allows for a quick adjustment of the set value.

2. GPP Mode (Grains Per Pound)

When the dehumidifier is turned on:

- Press the “GPP” button to enter GPP mode, and the digital display will switch from a 2-digit to a 3-digit format.
- In GPP mode, press the “UP” or “DOWN” button, and the display will flash, showing the set GPP value.
- Each press of the “UP” or “DOWN” button increases or decreases the value by 5, cycling through: **25 → 30 … 200 → CO → 25 … (repeats in sequence).**
- Press and hold the “UP” or “DOWN” button for rapid adjustment.
- To exit GPP Mode and return to %RH Mode, press the GPP button again. The display will return to 2-digit format.

3. Continuous Mode (CO Setting)

While in %RH or GPP mode:

- Use the UP or DOWN buttons to scroll through the values until you reach CO.
- After 3 seconds with no additional input, the unit will enter Continuous Dehumidification Mode.
  - The CO indicator light will turn on.
  - The display will switch back to showing real-time humidity.

- To exit Continuous Mode, press UP or DOWN and adjust to a numeric value. After 3 seconds, the dehumidifier will automatically exit CO mode, and the CO indicator light will turn off.

4. Power-Off Memory Function

If the dehumidifier unexpectedly loses power while running and is then reconnected, it will automatically resume operation in the same mode and state as before the power loss.

- Due to the three-minute compressor protection feature, the compressor will start running after three minutes.
- There may be a brief switching delay between the fan turning on and off, which is normal.
- Stored settings include:
  - Set humidity
  - Set moisture content
  - Continuous mode
  - GPP function

5. Drainage Function

When using gravity drainage:

1. Remove the water plug first.
2. Insert the gravity drainage hose and ensure it is securely fastened.
3. Turn on the dehumidifier after securing the hose.
4. Ensure the end of the hose is not higher than the gravity drainage outlet.

MAINTENANCE

Warning: Before performing any maintenance, always unplug the power supply.

1. Cleaning the Unit:

Use a soft, damp cloth to clean the exterior of the machine. Do not use cleaning agents.

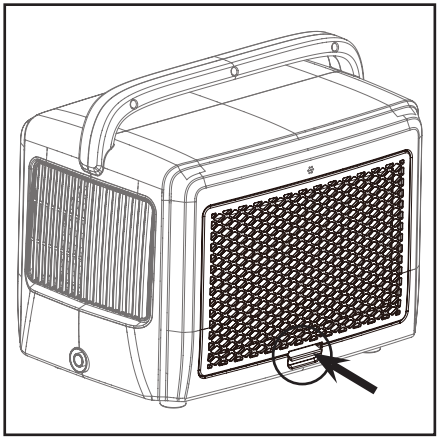
2. Coil Maintenance:

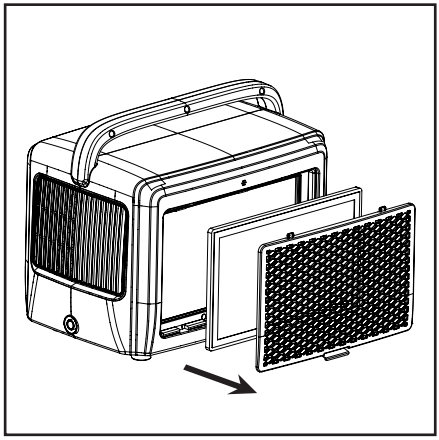
Once a year, clean the coils with an approved coil cleaner.

The coil cleaner should be a self-rinsing, foaming cleaner, such as WEB® coil cleaner.

3. Replacing the Filter:

1. Reference the handle position in the below illustration, remove the intake grille.
2. Take out the filter and replace it with a new one.
3. Reattach the intake grille to the machine.





4. Dehumidifier Storage:

If the device will be stored for an extended period, please complete the following steps:

1. Turn off the machine and allow it to dry completely.
2. Wrap the power cord and secure the drainage hose.
3. Store the unit in a clean, dry area away from moisture.

ERROR CODES

Error Codes	Issues	How to Solve
L0	When the ambient temperature is ≤2°C (35.6°F)	When the detected ambient temperature is >2°C (35.6°F), it will automatically recover.
HI	When the ambient temperature is ≥39°C (102.2°F).	When the ambient temperature is <39°C (102.2°F), it will automatically resume.
E1	Humidity sensor malfunction.	Replace with a new humidity sensor.
E3	Defrost Malfunction.	Check the system for any signs of leakage.
E5	Coil temperature sensor malfunction or refrigerant leak.	Check the system for any signs of leakage. If there is no leakage, inspect whether the sensor is malfunctioning.

WARRANTY COVERAGE

This limited warranty starts from the date of purchase. AlorAir Solutions Inc. Warrants to the original purchaser that this AlorAir product is free from manufacturing defects in material or workmanship for the limited warranty period of:

Six (6) Months parts and labor. This includes the shipment charges for replacement parts or the unit.

One (1) year parts and labor. This does not include the shipment charge to send the defective product back to be repaired or replaced.

Three (3) years parts and labor on Refrigeration System ONLY (Compressor, Condenser, and evaporator). Transportation costs are not included.

Five (5) years parts on Refrigeration System ONLY (Compressor, Condenser, and evaporator). Transportation costs are not included.

This limited warranty is valid only on products purchased from the manufacturer or an AlorAir authorized dealer and operated, installed, and maintained according to the instructions included in this user guide or furnished with the product. AlorAir Solutions Inc will not provide in-home service during or after the warranty period. You may be responsible for the shipping charge to bring the product to the manufacturer for service.

To receive warranty service, the purchaser must contact AlorAir at (888)-990-7469 or *support@alorair.com*. Proof of purchase or order number is required to receive warranty service. During the applicable warranty period, a product will be repaired or replaced at the sole option of AlorAir.

IMPORTANT NOTICE: Keep the item's packaging in the case that warranty service is required. In the event that the product is sent for repair without explicit guidance from our customer service team, AlorAir shall not assume responsibility for any associated repair costs.

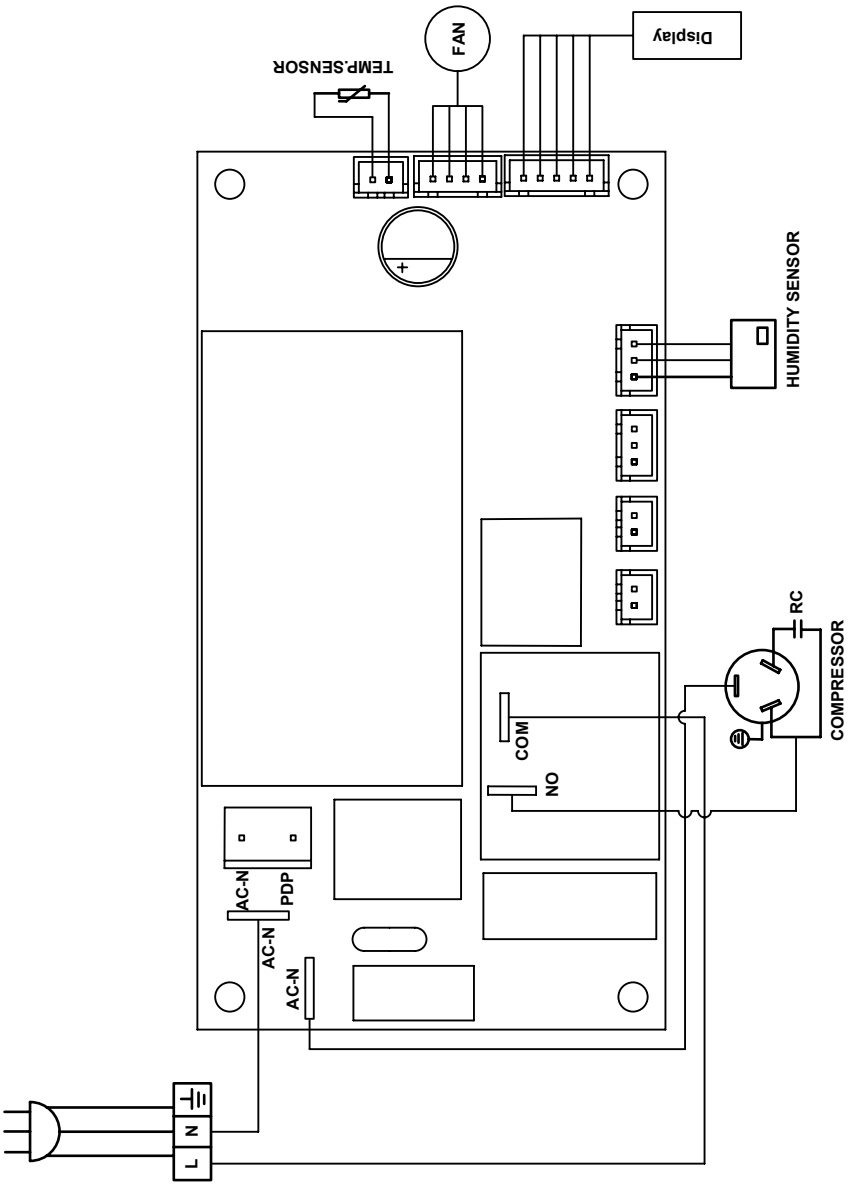
WHAT'S NOT COVERED (EXCLUSIONS)

This limited warranty covers manufacturing defects in materials or workmanship encountered in normal household, commercial or non-commercial use of this product and shall not cover the following:

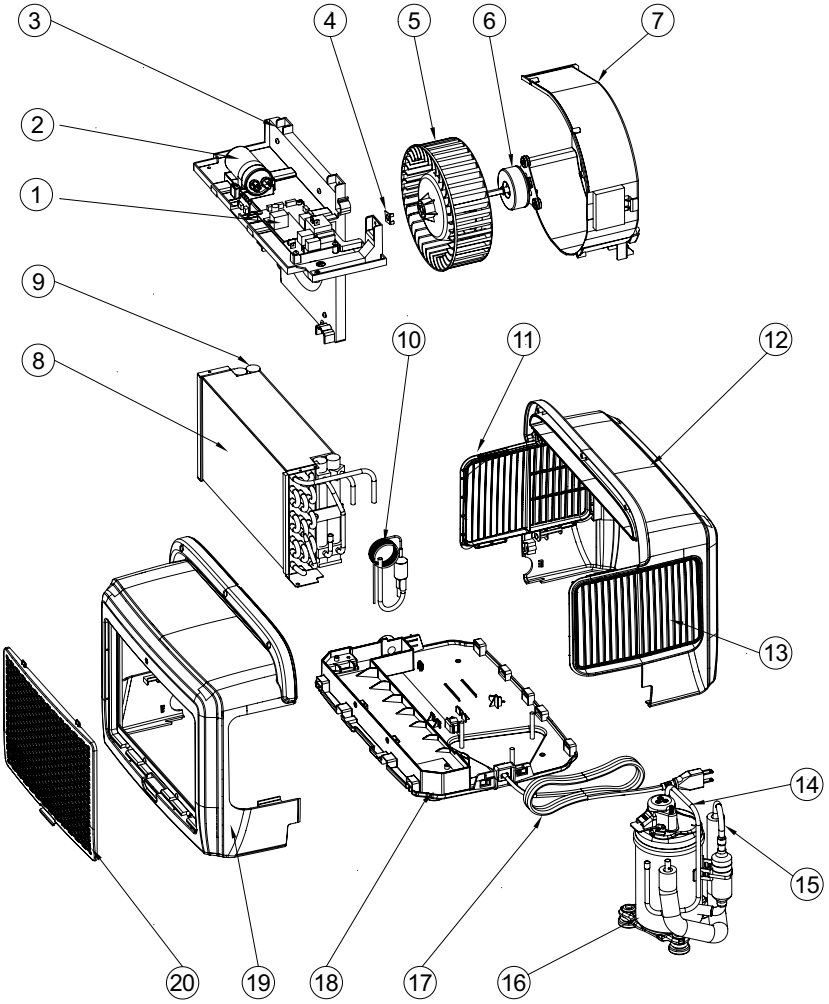
- Damage occurs in uses for which this product was not intended for.
- Damage caused by unauthorized modification or alteration of the product.
- Cosmetic damage including scratches, dents, chips, and other damage to the product's finishes.
- Damage caused by abuse, misuse, pest infestation, accident, fire, floods, or other acts of nature.
- Damage caused by incorrect electrical line current, voltage, fluctuations, and surges.
- Damage caused by failure to perform proper maintenance of the product.

The use of this product in a SPA or in a room with an OUTDOOR POOL invalidates or voids the limited warranty.

WIRING DIAGRAM



PARTS BREAKDOWN



NO.	PART
1	Main Board
2	Compressor Capacitor
3	Fan Bracket
4	Retaining Plate
5	Fan Impeller
6	DC Motor
7	Volute Casing
8	Evaporator
9	Condenser
10	Refrigeration Module

NO.	PART
11	Air Outlet Grille
12	Left Side Cover
13	Decorative Grille
14	High-Pressure Pipe
15	Low-Pressure Pipe
16	Compressor
17	Power Cord
18	Baseplate
19	Right Side Cover
20	Filter Access Cover

ADDITIONAL SAFETY INFORMATION

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

Children should be supervised to ensure that they do not play with the appliance.

The appliance shall be installed in accordance with national wiring regulations.

The installation of the appliance and the refrigerant unit must only be made by the manufacturer's service personnel or suitably qualified person.

The unit must be installed by qualified personnel with a capability certificated for handling R32 refrigerant. Refer to regulation and laws in use on installation location.

Warning:

- Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer.
- 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.
- Do not pierce or burn.
- Be aware that refrigerants may not contain an odour.

Qualification of Workers

Every working procedure that affects safety means shall only be carried out by competent persons.

Examples for such working procedures are:

- breaking into the refrigerating circuit;
- opening of sealed components;
- opening of ventilated enclosures.

Checks to The Area

Prior to beginning work on systems containing FLAMMABLE REFRIGERANTS, safety checks are necessary to ensure that the risk of ignition is minimised.

Work Procedure

Work shall be undertaken under a controlled procedure so as to minimise the risk of a flammable gas or vapour being present while the work is being performed.

General Work Area

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.

Checking for Presence of Refrigerant

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.

Presence of Fire Extinguisher

If any hot work is to be conducted on the refrigerating equipment or any associated parts, appropriate fire extinguishing equipment shall be available to hand. Have a dry powder or CO_2 fire extinguisher adjacent to the charging area.

No Ignition Sources

No person carrying out work in relation to a REFRIGERATING SYSTEM which involves exposing any pipe work shall use any sources of ignition in such a manner that it may 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.

Ventilated Area

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.

Checks to The Refrigerating Equipment

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 actual 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;
- if an indirect refrigerating circuit is being used, the secondary circuit shall be checked for the presence of refrigerant;
- marking to the equipment continues to be visible and legible. Markings and signs that are illegible shall be corrected;
- refrigerating pipe or components are installed in a position where they are unlikely to be exposed to any substance which may corrode refrigerant containing components, unless the components are constructed of materials which are inherently resistant to being corroded or are suitably protected against being so corroded.

Checks to Electrical Devices

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;
- that no live electrical components and wiring are exposed while charging, recovering or purging the system;
- that there is continuity of earth bonding.

Repairs to Sealed Components

Sealed electrical components shall be replaced.

Repair to Intrinsically Safe Components

Intrinsically safe components must be replaced.

Cabling

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.

Detection of Flammable Refrigerants

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.

The following leak detection methods are deemed acceptable for all refrigerant systems. Electronic leak detectors may be used to detect refrigerant leaks but, in the case of FLAMMABLE REFRIGERANTS, the sensitivity may not be adequate, or may 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 also suitable for use with most refrigerants but the use of detergents containing chlorine shall be avoided as the chlorine may react with the refrigerant and corrode the copper pipe-work.

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. Removal of refrigerant shall be according to Removal and evacuation.

Removal and Evacuation

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 be 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 (optional for A2L);
- evacuate (optional for A2L);
- continuously flush or purge with inert gas when using flame to open circuit; and
- open the circuit.

The refrigerant charge shall be recovered into the correct recovery cylinders if venting is not allowed by local and national codes. For appliances containing flammable refrigerants, the system shall be purged with oxygen-free nitrogen to render the appliance safe for flammable refrigerants. This process might need to be repeated several times. Compressed air or oxygen shall not be used for purging refrigerant systems.

For appliances containing flammable refrigerants, refrigerants purging shall be achieved by breaking the vacuum in the system with oxygen-free nitrogen and continuing to fill until the working pressure is achieved, then venting to atmosphere, and finally pulling down to a vacuum (optional for A2L). This process shall be repeated until no refrigerant is within the system (optional for A2L). When the final oxygen-free nitrogen charge is used, the system shall be vented down to atmospheric pressure to enable work to take place.

The outlet for the vacuum pump shall not be close to any potential ignition sources, and ventilation shall be available.

Charging Procedures

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 minimise the amount of refrigerant contained in them.
- Cylinders shall be kept in an appropriate position according to the instructions.
- Ensure that the REFRIGERATING SYSTEM is earthed prior to charging the system with refrigerant.
- Label the system when charging is complete (if not already).
- Extreme care shall be taken not to overfill the REFRIGERATING SYSTEM.
- Prior to recharging the system, it shall be pressure-tested with the appropriate purging gas. The system shall be leak-tested on completion of charging but prior to commissioning. A follow up leak test shall be carried out prior to leaving the site.

Decommissioning

Before carrying out this procedure, it is essential that the technician is completely familiar with the equipment and all its detail. It is recommended good practice that all refrigerants are recovered safely. Prior to the task being carried out, an oil and refrigerant sample shall be taken in case analysis is required prior to re-use of recovered refrigerant. It is essential that electrical power is available before the task is commenced.

a) Become familiar with the equipment and its operation.

b) Isolate system electrically.

c) Before attempting the procedure, ensure that:

- mechanical handling equipment is available, if required, for handling refrigerant cylinders;
- all personal protective equipment is available and being used correctly;
- the recovery process is supervised at all times by a competent person;
- recovery equipment and cylinders conform to the appropriate standards.

d) Pump down refrigerant system, if possible.

e) If a vacuum is not possible, make a manifold so that refrigerant can be removed from various parts of the system.

f) Make sure that cylinder is situated on the scales before recovery takes place.

g) Start the recovery machine and operate in accordance with instructions.

h) Do not overfill cylinders (no more than 80 % volume liquid charge).

i) Do not exceed the maximum working pressure of the cylinder, even temporarily.

j) When the cylinders have been filled correctly and the process completed, make sure that the cylinders and the equipment are removed from site promptly and all isolation valves on the equipment are closed off.

k) Recovered refrigerant shall not be charged into another REFRIGERATING SYSTEM unless it has been cleaned and checked.

Labelling

Equipment shall be labelled stating that it has been de-commissioned and emptied of refrigerant. The label shall be dated and signed. For appliances containing FLAMMABLE REFRIGERANTS, ensure that there are labels on the equipment stating the equipment contains FLAMMABLE REFRIGERANT.

Recovery

When removing refrigerant from a system, either for servicing or decommissioning, it is recommended good practice 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 is 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. If in doubt, the manufacturer should be consulted. 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. When oil is drained from a system, it shall be carried out safely.

ALORAIR

WARRANTY REGISTRATION CARD

Return To:
AlorAir Solutions Inc.

ORDER NUMBER: _____

MODEL: _____ **SERIAL #:** _____

INSTALLER: _____ **INSTALLATION DATE:** _____

NAME: _____

ADDRESS: _____

CITY: _____ **STATE:** _____ **ZIP:** _____

PHONE #: _____ **EMAIL:** _____

- If you have any questions, please feel free to contact us at 888-990-7469 or visit *www.alorair.com*
- Register your unit for warranty using this link: *www.alorair.com/page/Warranty--Warranty-registration*
- Warranty Registration *https:/www.alorair.com* or scan this QR code to direct you to the waranty registration website.


ALORAIR