

Project: Malo,

Builder: MPG QLD PTY LTD

## MALO APARTMENTS

# OPERATION AND MAINTENANCE MANUAL



## Mechanical/Air Conditioning

Document Prepared by:

Cold Front Commercial

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## 1.0 Help & Contact

Contact Person and Details	<p>Cold Front Commercial <a href="mailto:commercial@coldfrontac.com.au">commercial@coldfrontac.com.au</a> 0755244439</p> <p>Matthew Clarkson – Commercial Manager 0755244439 <a href="mailto:matt@coldfrontac.com.au">matt@coldfrontac.com.au</a></p> <p>Jack O’Dempsey – Project Coordinator 0755244439 <a href="mailto:jack@coldfrontac.com.au">jack@coldfrontac.com.au</a></p>
Location of Business	3 Davo Court, Burleigh Heads
Post Warranty Contacts	<p>Cold Front Air Conditioning 0755244439 <a href="mailto:commercial@coldfrontac.com.au">commercial@coldfrontac.com.au</a> <a href="mailto:service@coldfrontac.com.au">service@coldfrontac.com.au</a></p>

## 2.0 Maintenance

### 2.1 Apartments and common air conditioning

#### **Recommended Yearly Maintenance program.**

Even the best equipment provides better service when correctly maintained. To ensure reliable service from your equipment please ensure that:

- The return air filter is cleaned regularly
- The outdoor unit is kept clear of debris and garden matter
- Maintain the system annually

To maintain your warranty we recommended a yearly maintenance for the system installed. This should be carried out by a qualified technician. This yearly service is not part of the manufacturer's warranty and is the responsibility of the owner.

Your maintenance would include:

- Check air filters, vacuum, wash clean or replace as necessary
- Check condensate drain for free drainage
- Check compressor compartment for oil stains indication leaks
- Check suction and discharge operation pressures
- Check electrical connections to the compressor
- Check all refrigeration piping for chafing and vibration
- Check air supply to all diffusers
- Check for noise and vibration and correct as necessary
- Check for insulation and duct damage and repair as necessary
- Remove lint and dust accumulation from outdoor coil fans

To book this in please contact [service@coldfrontac.com.au](mailto:service@coldfrontac.com.au)

## 2.2 Stair Pressurisation System & Carpark Ventilation System

We would like to propose a 12 monthly maintenance on your ventilation air fans. This frequency can be increased if your building regulations require more frequent inspections.

Tasks carried out during this maintenance include the following.

- Inspection and cleaning of car park supply and exhaust fans
- Inspection and cleaning of switch board and fire pump room supply air fans
- Inspection of fan motor transitions and rigid ducting
- Inspection of fan motor mounts and bushes
- Inspection of electrical supply circuits
- Manual operational testing of all fan motors listed above\*
- Written report on completion of maintenance
- \*Does not include CO sensor calibration/testing

To book this in please contact [service@coldfrontac.com.au](mailto:service@coldfrontac.com.au)

## 2.3 CO sensor calibration/testing- Carpark

6 monthly preventative maintenance scope of works

- Analyse system fault and alarm log files and investigate recurrent faults or alarms, re-calibrate as necessary and record any faults or alarms.
- Update controller firmware. Back-up database.
- Clean and check of all alarm contacts, relays and similar equipment. Test and verify all alarm system output signals and re-adjust as necessary.
- Review trend logs and investigate abnormal or unstable operation. Adjust control routines as necessary to ensure stable and energy efficient operation.
- Clean, vacuum and check field panel.
- Carry out check on all carbon monoxide sensors, utilising 100PPM carbon monoxide test gas and label pass date on completion.
- Carry out check on all Nitrogen dioxide sensors, utilising test gas and label pass date on completion.

To book this in please contact [paul.minogue@landiscontrolsqld.com.au](mailto:paul.minogue@landiscontrolsqld.com.au)

## 3.0 Cleaning Instructions

### Seasonal Cleaning

At the beginning and end of each season:

#### Check

- the indoor and outdoor unit intake and outlet vents are not blocked
- clean air filters and exterior
- emergency drains

#### Procedure to clean air filters:

**Ducted System:** Pull your return air grill out by pulling on the two tags at the same time, then remove filter, and hose down with cool water gently. Leave it to dry then replace return air grill.

Please note if you repeat this process each season it will help prevent any malfunctions to your air conditioners.

You can also refer to the operation manuals that are supplied with the system

## 4.0 Operations & Tech Data

### 4.1 How to Operate and Use Air Conditioner

**See user manual.**

#### Daikin Controller BRC1E63

Your system is a Daikin VRV system which has an indoor unit and controller in each room. The system can be all on simultaneously or individual rooms. Through the Daikin controller you can select ON/OFF, Fan speed, Cool/Heat(mode) and Temperature. The system can only perform one function at a time – Heating or Cooling. If you are trying to change the settings and you have limited options, please change on the master controller to the setting desired – it will be the only one missing the 3 arrows on the top of the touch pad.

All other features are detailed in the user manual in your hand over pack.

### 4.2 Exhaust Fan Operation (Bathroom and Laundry)

The fans are operated through using the light switch to either the bathroom or laundry.

The bathroom and laundry exhaust fans air either located in the ceiling space or via a ceiling mounted header box fan

Each fan is tested and achieves greater than the required 25 L/S for bathrooms and 45L/S for Laundry's as per the Australian Standards.

### 4.3 Product Handbooks from Third Parties

- Daikin – BRC1E63 Operation Manual
- Warranties

## 5.1 Warranties Register (register of attached Warranties)

PRODUCT	WARRANTOR	WARRANTY PERIOD	WARRANTEE
Air Conditioning system	Daikin	5 years Labour and parts	Owner
Toilet Exhaust Fan	Ideal	1 year Parts only	Owner

## 5.2 Product Warranties (Appendix 1)

## 5.0 Certificates

### 6.1 Certificate Overview

- Proof of purchase – air conditioning
- Form 12 for mechanical and ventilation
- Form 12 for Passive Fire Protection
- Form 12 for Fire Rating/encasement of Mechanical duct

## 6.0 Commissioning Information

### 7.1 Commissioning QA

- Each Air Conditioner has undergone operational testing.
  1. Test 1 – Temperature check of air coming off indoor coil
  2. Test 2 – Drain inspection
  3. Test 3 – Zone and air flow inspection
  4. Test 4 – Exhaust fan reading
- Carpark airflow results
- Co2 carpark commission
- Stair pressurisation commission

## 7.0 As Built Drawings List

Appendix 1 – Copies of Product Warranties  
(attached)

Appendix 2 – Copies of Certificates and Performance Testing  
(attached)

# MALO

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Commercial

## END OF OPERATIONS AND MAINTENANCE MANUAL