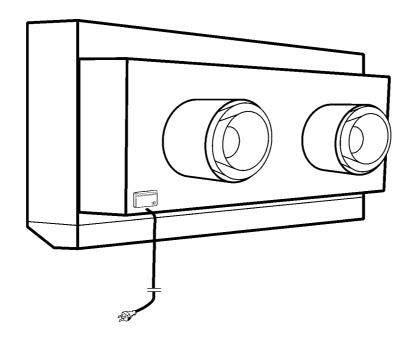
# **Commercial Ducted Evaporative Air Conditioners**



## Season Maker

## Owner's Manual



**DF Series**Ducted Fresh Air Conditioning





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#### **INTRODUCTION**

Your ducted evaporative air conditioner is engineered to meet the rigours of our harsh Australian environment. Operated and maintained in accordance with this manual, it will provide you with years of cool and environmentally friendly operation. Please take the time to read this manual.

The principal of your unit is to introduce fresh air, which is washed through the filter pads to provided cool fresh air. The air is exhausted taking with it any heat loadings in the environment.

#### Exhaust

It is essential for successful operation of evaporative air-conditioning that there be sufficient exhaust openings in the area to be ventilated. Open doors on the side of the building where there is no incoming breeze to provide this.

It is recommended that roof vents or exhaust fans be used where there is any doubt about there being sufficient exhaust area available.

#### Bleed-off

All evaporative air conditioners need some water bleed-off to prevent build-up of mineral deposits in the system. The correct setting of the bleed rate will ultimately govern the life of the unit.

With normal town water supply, bleed rate should be adjusted so that the discharge is not less than approximately 10 litres per hour. Increased water hardness may require a higher bleed rate and increased maintenance.

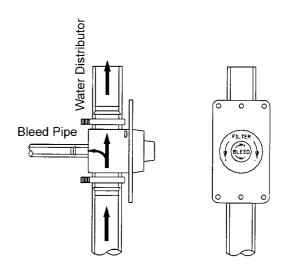
The method for setting the bleed rate is to adjust the patented DIALFLO unit located externally on the unit.

It is recommended to plumb the overflow / bleed-off water away from the unit to waste.

Setting the Flow / Bleed Rate.

- Set the flow rate to the filters by turning the large knob marked filter ensuring there is sufficient water to fully saturate the celdek filters.
- 2. Hold the large knob and set the bleed rate by turning the small knob marked Bleed. Set the bleed rate subject to water hardness.

Note: To control water volume to filter pad rotate filter anti-clockwise for more water and clockwise for less water. To control bleed-off rate rotate bleed dial clockwise for more water and anti-clockwise for less water.





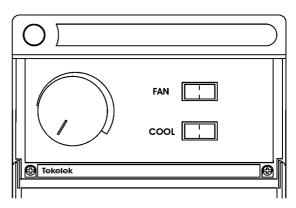
#### OPERATING YOUR DUCTED EVAPORATIVE AIR CONDITIONER

Your DF unit can be simply operated by to turning the power at the power point ON or OFF where the unit has been connect and set.

To operate the wall control use the following steps.

- Turning the Pump ON or OFF. Using the COOL switch turn the pump ON or OFF. It is good practice to leave the pump running for 5 minutes to saturate the pads before turning the fan on.
- 2. Turning the Fan ON or OFF. Using the fan switch, turn the unit fan ON or OFF.
- Varying the Fan Speed. Using the dial knob, rotate clockwise to increase the fan speed or anti clockwise to decrease the fan speed.

**Note:** On humid days the operation of the unit may operate more efficiently with the pump turned off.



### **DUCTED EVAPORATIVE AIR CONDITIONER MAINTENANCE**

#### General.

All Ducted Evaporative Air Conditioners benefit from some general maintenance to ensure continued cooling efficiency and a long life. Maintenance is carried out at the beginning and end of summer to start up and close down your unit.

We recommend that all maintenance work be undertaken by our fully trained and accredited Service Technicians or an authorised Climate Technologies Service Provider.

The frequency of general maintenance will depend on local operating conditions such as water quality, air borne dust and pollen.

It is essential that your evaporative air conditioner is maintained in accordance with this manual. Failure to do so will effect the life of the product and reduce the level of efficiency.

For service Australia wide refer to the details on the rear of the manual.

NOTE: The manufacturer and it's agents reserve the right to refuse service unless safety and accessibility to the unit can be guaranteed. The cost of any extra equipment required to provide access to the unit for servicing is the responsibility of the owner.

SAFETY: Prior to commencing any maintenance isolate the unit at the power source. Ensure the area is safe to access, your ladder is securely positioned and you're wearing suitable, sturdy non-slip footwear.



#### Filter Pads

Visually check CELDEK pads for damage or blockage. Hose down pads from both sides to remove any build up of salts, dust and pollen. In dusty areas more regular cleaning is recommended. Check the water distributor, making sure it is clear and free from blockage. Failure to do so may lead to uneven water distribution and therefore less efficient operation.

#### Water Tank

It is important to keep the water tank clean and free from sediment and algae growth. To clean the tank, use a soft brush or similar. Wipe all surfaces in the tank while it is full of water (DO NOT FORGET THE PUMP STRAINER). Turn off the water inlet to the unit (an Isolation Valve should be fitted to the water inlet before the Float Valve). Drain the tank by removing the 40mm standpipe. It may be necessary to repeat this procedure if the tank is very dirty.

#### Water Level / Float Valve

The water level should be set at nominal 30-35mm from the top of the overflow before filter pads are saturated. The float valve is a mechanical type and is factory set. If it requires adjustment keep bends tight. If the valve is leaking the seal may require cleaning or replacing. Turn off the water. Remove the split pin and then float arm. Remove piston and clean or turn seal. Flush system and replace piston, float arm and split pin.

Note: Water supply line to float valve must be flushed before connecting.

Note: Some discharge from the overflow may be experienced after shut down due to water draining back from the Celdek pads. This is normal.

#### Motor and Fan

Check that the fan spins freely and that there is no build up on the blades.

#### **Electrical**

No general maintenance is required to the electrical system.

A Qualified Electrician should only carry out electrical connections and maintenance.

#### Bleed Off

The bleed rate should be checked to ensure it is adequate and that there is no build up of mineral deposits in or on your air conditioner. White deposits indicate high mineral content and the Bleed Rate should be increased. If it is at maximum and the deposits are still forming, then more regular maintenance is required.

#### Pump

Check the pump spins freely and that the strainer is clean.

#### Water Distribution

Check the water distribution system for blockage. Check the delivery tube for kinks or holes. Check that the clamps are secure and in place.



## **COMMISSIONING CHECK LIST**

Gei	neral experience of the second
	All equipment ordered by the customer is installed.
	The unit is level and secure.
	The circuit breaker and GPO are turned ON.
	The control box isolator (located on the side of the control box) is turned on.
	All Controller functions for the appliance operate.
Uni	it - Evaporative Air Conditioner
	The water supply line has been flushed to clear swarf and debris and is free of leaks.
	The tank is free of foreign matter and debris and the water isolating tap is turned ON.
	Water drainpipe work is completed and sealed.
	The water basin fills with water and the float valve closes correctly when the water level is 30-35mm below the overflow level.
	The water pump operates correctly when turned ON at the controller.
	The Dialflo water bleed rate is adjusted to suit local water conditions.
	The fan deck is correctly located and the fan blade spins freely.
	The fan operates through the entire speed range.
	Water distribution is even with the filter pads fitted and the air conditioner operating pump and fan.
	All Wall penetrations are fully flashed and watertight.
Site	2
	All rubbish has been removed from the work site.
Cus	stomer Hand Over
	The operation of the Controller.
	The need to open windows and doors for the correct operation of Fresh Air Conditioning
	The operation of the bleed system and it's importance to operate all the time in ducted fresh air conditioning
	Maintenance Requirements



#### Warranty - Australia Only

Subject to the following conditions we provide, from the date of purchase, the following warranty:

Any part found to be defective in workmanship or material within the period of warranty will be replaced free of charge.

The structural warranty covers any structural components within the unit, which fail to perform their intended function due to faulty manufacture or deterioration within the warranty period.

#### **Conditions And Exclusions**

- Travelling time and mileage are included within the metropolitan areas of Australian capital cities (those areas not on STD phone numbers) or within 25km of the service provider's premises in other cases. Customers in areas other than the above are responsible for any travelling time and mileage required to carry out warranty repairs.
- The product must have been installed in the manner prescribed by local statutory regulations and to the manufacturer's specifications by a qualified person.
- Service within the terms of this warranty will be recognised where we are satisfied that the appliance
  or part was supplied within the relevant time limits. Documents of purchase and Dealer/Installer
  information will assist in this process.
- A charge will be made for work or a service call where there is nothing wrong with the appliance or
  where the defective operation of the appliance is due to failure of electricity or water supply, or where
  defects are caused by neglect, incorrect application, abuse or by accidental damage of the appliance,
  or by an unauthorised person attempting to repair the appliance.
- No responsibility will be accepted for outside elements such as storms, pests, animals, birds and vermin that may cause damage to the unit.
- No responsibility will be accepted for damage contributed by electrical surges or brown outs or any other consequential damages.
- Harsh or corrosive environmental situations such as salt air that may cause cabinet or electronic damage can not be considered warranty.
- No responsibility will be accepted for any loss or damage, direct or indirect, arising from the incorrect installation or operation of the unit. This does not preclude you from your statutory rights as a customer.

**NOTE:** In addition to this warranty, the Trade Practices Act and similar laws in each state provide the owner, under certain circumstances, with minimum statutory rights in relation to the product.

This warranty must be read subject to that legislation and nothing in this warranty has the effect of excluding, restricting or modifying those rights.



#### **PERIODS OF WARRANTY - YEARS**

Unit Components	COMMERCIAL	
	Parts	Labour
Cabinet Structure	2	2
Cabinet Corrosion	2	2
All Electrical Components	2	2
All other components	2	2

<sup>\*\*</sup> Filter pads and float valve seals are a consumable item and therefore are not covered by the above warranty periods.

### **PROOF OF PURCHASE**

It is important that the name of the Dealer or Retailer from whom you purchased your product and the name of the installer is recorded on the next page. The installer is responsible for the correct installation, start up and demonstrating the operation of this product. He is also responsible for issuing the relevant certificates of compliance for the electrical connections. (These may differ from state to state)

Please attach your proof of purchase here. Your receipt is your warranty will be required to validate any warranty.

#### **DEALER / PRODUCT INFORMATION**

Dealer/Retailer:	
Dealer Address:	
Dealer Phone Number:	
Unit Model Number:	
Serial No:	
Date Installed:	
Installed by:	



#### **SERVICE**

A qualified service technician should conduct any service work carried out on your cooling product. It is important that periodical service is carried out on your product to ensure your will receive the efficiency benefits the product provides.

An authorised Climate Technologies service provider must carry out warranty service.

For Metro Service only ring the numbers below.

South Australia	(08) 8307 5230
NSW / ACT	(02) 6953 5968
Western Australia	(08) 9358 4755
Victoria	(03) 9763 5988

or (02) 6953 5968

Outside Metro area's please contact your nearest Climate Technologies Service Provider.

E.&O.E. Issue 020523A



Leeton Site 9-11 McKay Avenue LEETON NSW 2705 Phone (02) 6953 6444 Fax (02) 6953 6266 Adelaide Site 26 Nylex Avenue SALISBURY SA 5108 Phone (08) 8307 5100 Fax (08) 8283 0401