



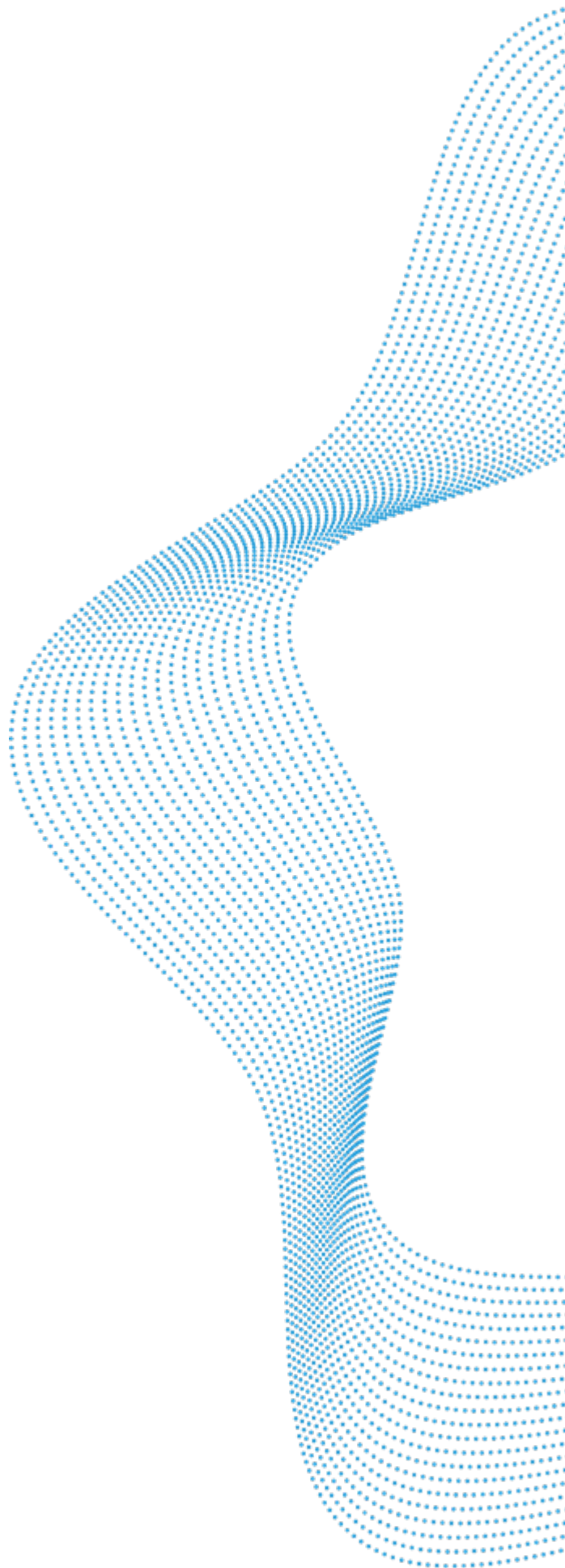
Installation and Operation Manual

INDEC - Indirect Evaporative Cooling
INDEC1500P3 - INDEC12000P3



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Equipment Application

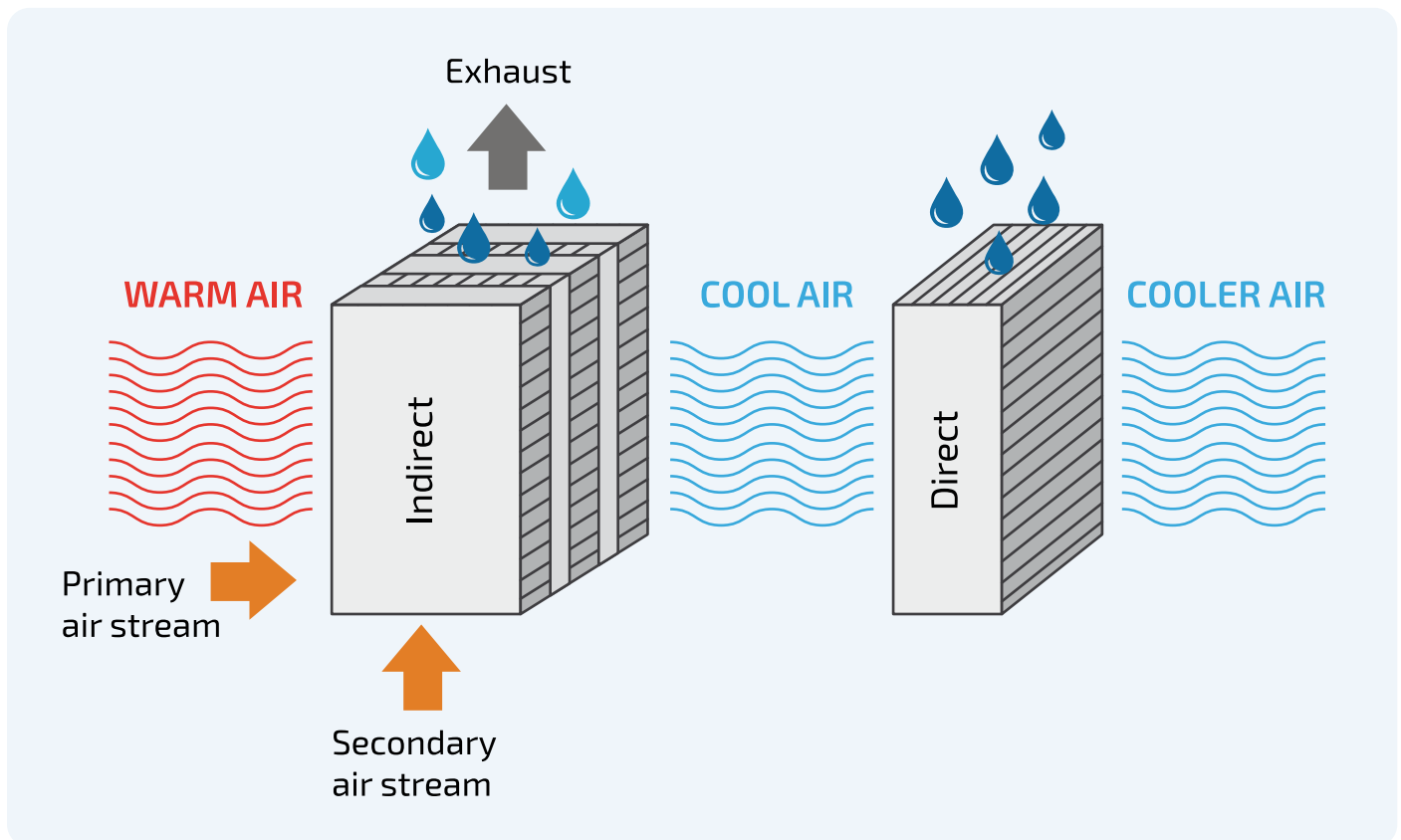
The INDEC® cooling units are designed to provide an economical and practical solution for fresh air cooling. The new generation INDEC® uses a patented indirect polymer heat transfer core that delivers cool, 100% fresh outside air with very low energy consumption.

Incoming fresh air passes through the primary heat exchange core which as a series of wet and dry channels allowing natural evaporation to cool the air. Warm moist air is expelled, while cool air, without added moisture is delivered into the building.

Through this indirect evaporation process, the outlet air temperature can become lower than the air wet bulb temperature of the ambient air.

A secondary direct evaporative pad further reduces the outlet air temperature with minimal added moisture.

Indirect Direct Evaporative Cooling (INDEC)



Safety

Warning

Improper installation, service, maintenance or use can cause explosion, fire, electrical shock or other conditions, which may cause personal injury or property damage and will void the warranty.

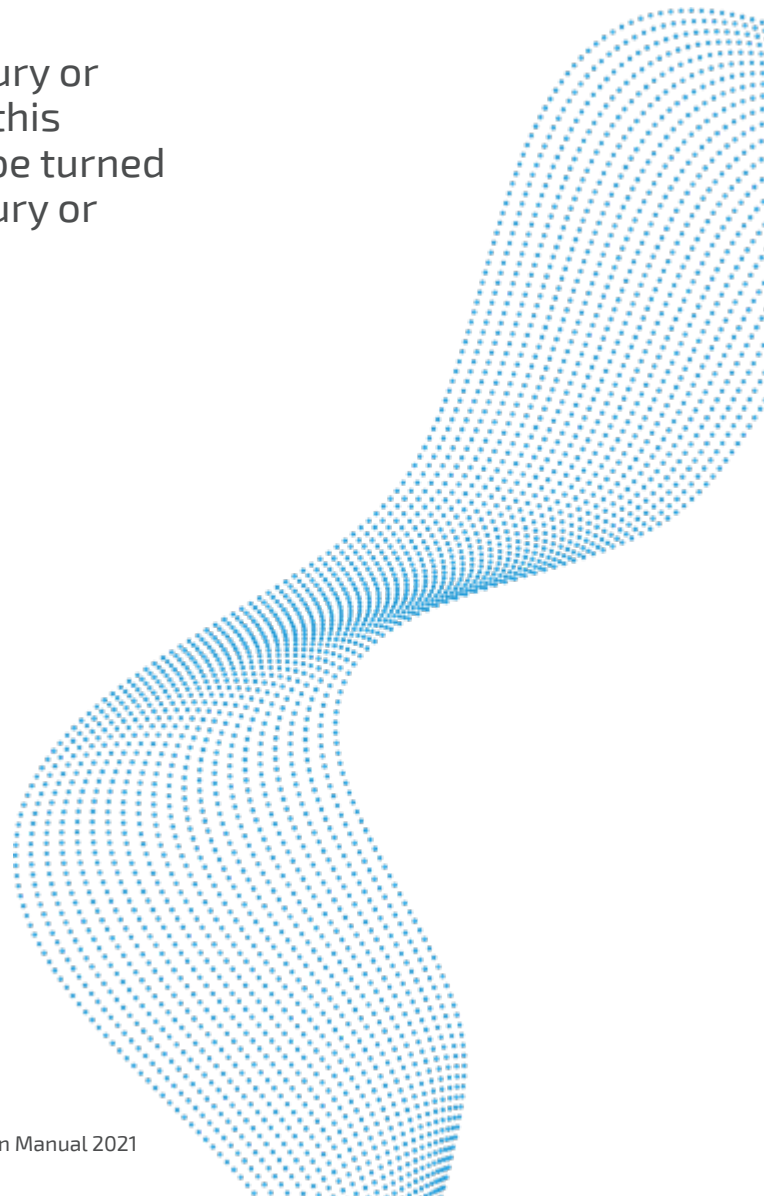
Please read and understand the installation and operating instructions, and if you have any doubt, check with Armcor Air Solutions for any additional information required on this equipment.

Danger

Electrical shock can cause personal injury or death. Before performing any work on this equipment, the electrical supply must be turned off to avoid the possibility of shock, injury or damage to the equipment.

Remember

There may be more than one power supply circuit.



Installation Planning

Installation by Authorised Personnel

- Only trained and qualified personnel should install, repair or service the equipment.
- Installing and servicing equipment can be hazardous due to electrical and mechanical components.
- When working on equipment, observe precautions in all literature, tags and labels attached to or shipped with the unit. Follow all safety codes and guidelines.
- Wear work gloves, safety goggles and protective clothing.
- All work must comply with relevant SAA wiring rules and local authority codes. Installers must ensure that all statutory regulations and by laws have been addressed.
- Installers must ensure that the structures built to support the equipment have been suitably constructed for the purpose, all safety precautions have been applied prior to installation, and all preparation work has been suitably sized and installed for its purpose.

Location of Equipment

- It is important that the selected location for the equipment is suitable and can adequately accommodate the unit physical size, the unit weight and has safe and suitable access for correct operation and future maintenance requirements.
- The unit must be mounted so that sufficient space is allowed for installation and service access.
- Maintenance personnel need to gain access to all parts of the unit and be able to remove components such as fans and filters via access doors as required.
- Unless otherwise specified the following minimum access should be available:
 - 800mm clearance for electrical connections
 - 1200mm for all access doors
 - 800mm on all sides is required.
- For indoor installations, proper exhaust to be provided for the secondary air stream. The ductwork for the exhaust system should not increase the static pressure of the supply fan. Consult an Armcor Engineer if in doubt.
- Any indoor installation **must** include a drip tray under the entire unit. No claims will be accepted for water damage/leakage under any circumstances.

- If the unit is located on an elevated platform a drip tray must be installed under the unit to prevent water dripping below the unit.
- INDEC® always supplies 100% fresh air. Adequate exhaust ventilation must be provided in the conditioned space, so that a minimum of 80% of the supply air is vented out for desired comfort level.
- Do not locate equipment adjacent to sleeping quarters unless background noise levels have been checked and permitted by the appropriate authority.
- The INDEC unit may drip small amounts of water on the ground as part of the normal operation.
- Occupational Health and Safety requirements must be considered, especially where equipment and access doors could be opened by unauthorised persons subjecting them to unsafe conditions.

Vibration Elimination

It is recommended that rubber supporting or vibration absorbing pads be used to support the unit to minimise any vibration being transmitted into the building structure.

We recommend waffle pad as shown below to be used under the base frame and flexible couplings be fitted to the supply and return ducts to reduce any vibration transfer.



Rubber pads to be placed below the unit

Fresh Air Inlet

- The location of the fresh air inlets must adhere to the *Australian Standards 1668.2*.
- The fresh air intake should be positioned clear of any objects which could obstruct the airflow and be a minimum distance of 6 meters from any exhaust discharge ducts from this unit or any other adjacent Equipment. Refer to *Australian Standards AS 1668.2*.
- The fresh air inlet and exhaust air outlet are fitted with weather louvre grilles. Additional weatherproofing may be required in areas subject to severe winds and storms.
- The fresh air intake must have filters.
- INDEC units have inbuilt filters. Equipment must not be operated without filters.

Water Supply

Water Pressure

The water pressure required to operate the INDEC units must be a minimum of 300 Kpa at the water supply inlet pipe. If the mains water pressure is lower than 300 Kpa please consult Armcor Engineering for a solution.

Where the water pressure is above 300 Kpa we recommend the inlet pipe size as follows

Up to INDEC2000P3 15MM Copper pipe
Above INDEC2000P3 19MM Copper pipe

Stop Tap

A suitable stop tap should be used on each unit externally located to isolate the unit from the water supply.

Over Pressure

If the water pressure is over 600Kpa a suitable pressure reducing valve PRV should be installed in the inlet pipework to limit the water pressure to below 600 Kpa.

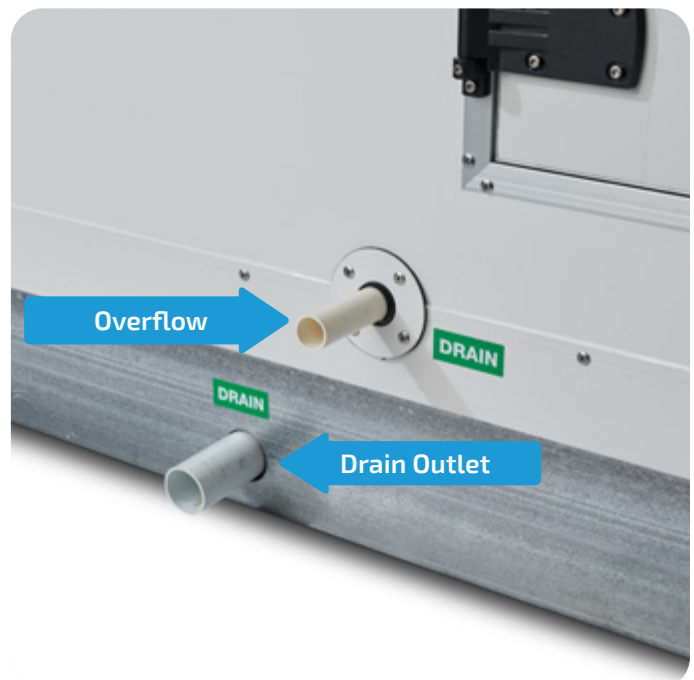
SUMP DUMP

Each unit comes with sump dump valves as standard. The sump dump valve will release the water every time the unit is turn off. This operation keeps the water system clean as the sump will be empty if the unit is not used for long periods of time. Armcor may vary the type of dump valve system according to the size of the unit.

Drainage

- Equipment should be installed level, and outlet drains must have a positive fall to ensure water drains away freely. Drain lines must be as large as, or larger than the fitting to which the line is being connected.
- If drain lines are to be extended from the inside to the outside of the building they must be extended beyond walls of the building to eliminate the possibility of damage caused by drain water running down the exterior surface of the building wall.
- When a drain is exposed to freezing temperatures or subject to the formation of condensation, the drain should be insulated.
- Traps are not required on the INDEC drains.

IMPORTANT: ALL UNITS LOCATED IN PLANT ROOMS MUST HAVE DRAIN TRAYS UNDER THE COMPLETE UNIT.



Each unit is filled with a 25mm overflow outlet. If the sump fills above its intended capacity, water will overflow through this drain outlet rather than into the unit.

This outlet should be piped to terminate in a visible location, so as to initiate attention if it constantly overflows.

Each unit also has a 40mm drain pipe outlet through which the sump reservoir empties when there is no requirement for cooling. This drain is to be connected to the storm water system.

Installation Instructions

Unpacking and Inspection

- Each unit is tested and undergoes a QA inspection prior to packing to ensure they are in perfect condition at the time of despatch.
- The unit should be inspected upon delivery for possible external damage incurred during transport.
- If damage is evident it should be noted on the freight docket and contact is to be made with the Armcor Air Solutions customer service team.
- A claim should be lodged with the shipping company within 3 days if goods are damaged or incomplete. No Claims will be recognised after this date.
- **IF MAJOR DAMAGE IS APPARENT, DO NOT LIFT UNIT ON TO SITE WITHOUT PRIOR APPROVAL FROM ARMCOR.**
- Check unit rating plate to ensure the correct unit matches the job specifications.

Unit Handling

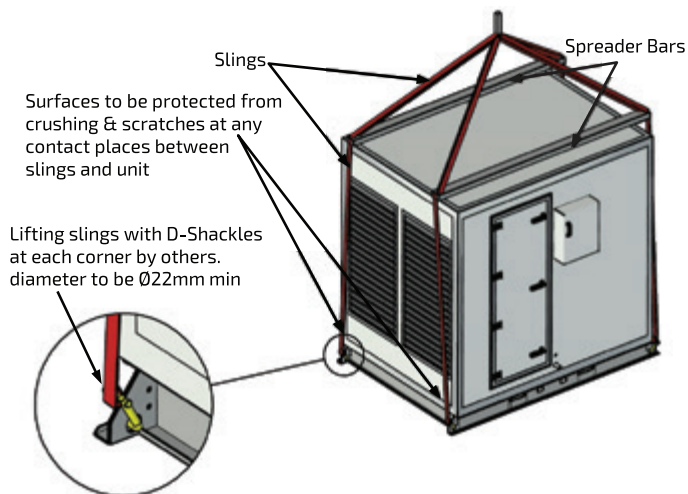
- Protective crating or packaging and the pallets should not be removed until the unit is at the point of installation.
- When removing packaging or crating, be careful not to damage, scratch or dent the unit.
- After removal of packaging, all removable access panels should be opened to inspect for unit internal damage.



Typical packaging for protection during transport

Lifting with Crane

- **SAFETY** – when installing or working on equipment, always adhere to safety codes and guidelines. Wear safety goggles, work gloves, work boots and protective clothing.
- All external units are provided with substantial lifting lugs on each corner at the base frame. **NOTE** – All units should be lifted into position using **SLINGS** and not **CHAINS**. (Chains may damage exterior finish on the fan unit).
- Where units have to be craned into position, installers must check unit weight is within the safe tolerance of the working capacity of the crane.
- Prepare for lifting with spreaders as you would do with lifting air conditioning equipment.
- When lifting equipment never stand under the load.
- Beware of lifting equipment on to roof areas in windy conditions. Only lift when weather conditions are favourable.

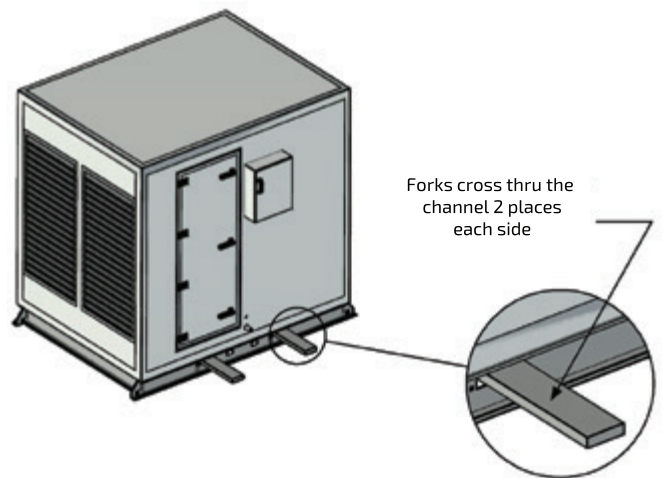


Lifting with a Fork Lift

Exercise extreme caution when lifting with a forklift. Do not exceed the height limit of the forklift and never allow the forklift forks to make contact directly with the bottom panel of the unit.

Make careful consideration of the unit's centre of gravity and distribute the weight equally on both forks.

Test load to see if the weight is equally distributed. Do this by lifting the unit a few centimeters off the ground level and checking stability before lifting any further or before transporting the unit.



Duct Work

- Air distribution ductwork must be designed to allow for the specified air flow without excessive pressure levels.
- The unit should be situated as close as possible to the point of use to prevent unnecessary long runs of ductwork.
- Sheet metal ductwork is recommended for use with all Armcor Air Solutions equipment.
- Ducts should be insulated in accordance with BCA Section J-5.
- Ductwork design can affect the fan performance, particularly where duct bends cause a non-uniform flow and swirl at the inlet.
- To reduce losses due to excessive duct pressure, adequate length of straight duct between any elbow

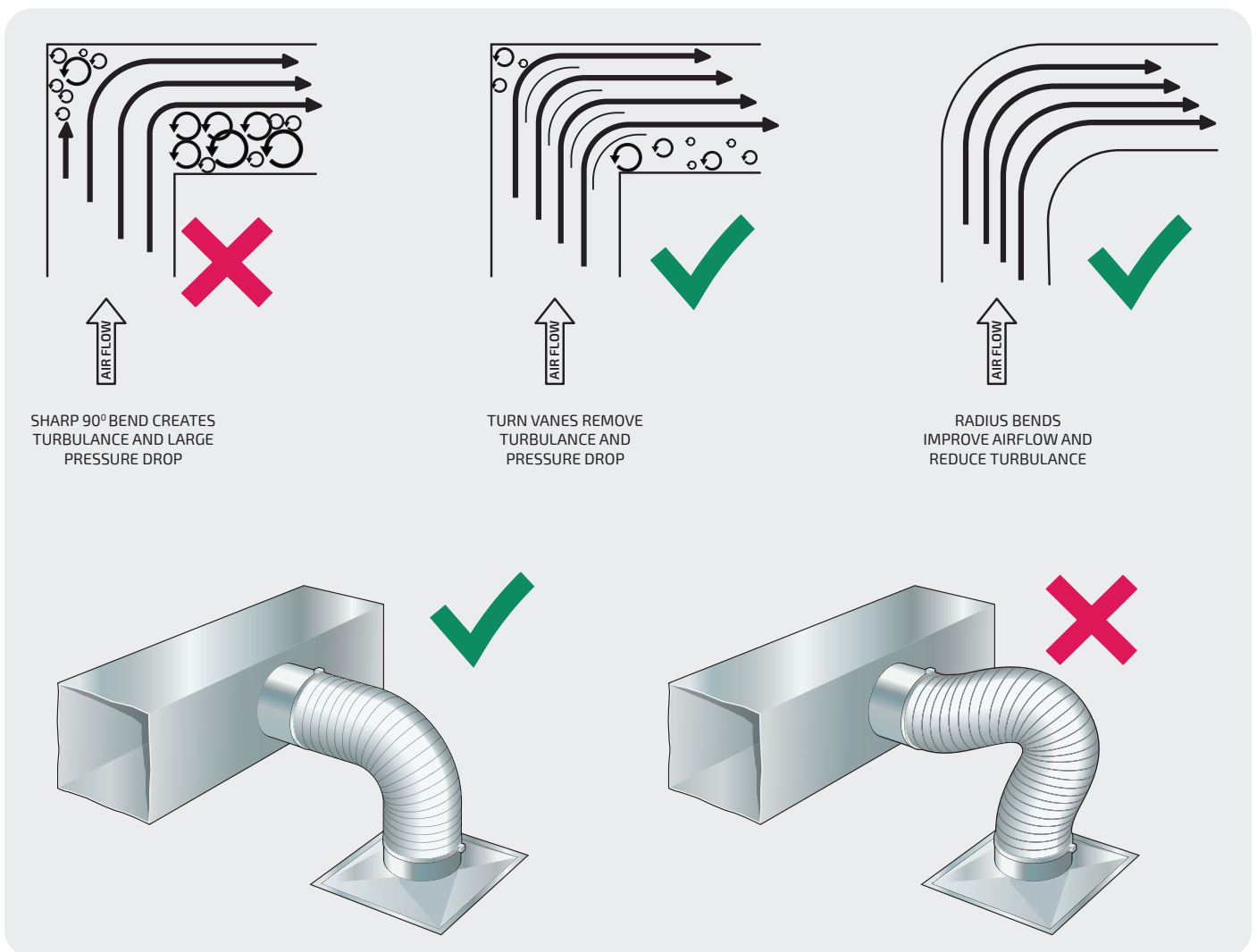
and the equipment inlet/outlet, should be provided or turning vanes used in the elbow.

- We recommend a minimum of 1000mm of straight duct directly from the unit outlet.

Internal Ductwork Access Requirement

We strongly recommend that a access door be installed within 500mm in the supply ductwork for access to the media. If water distribution across the media is incorrect, water can be pulled off the media into the ductwork. If access is available into the ductwork this can be fixed.

ARMCOR cannot take any responsibility for water egress from the unit if ductwork access is NOT provided.



Correct Ductwork Design - using turning vanes in elbows or sweep bends. Eliminate sharp bend in flexible ductwork. It is recommended the supply duct to have an access door to service in front of the media.

Filters

- Filters are incorporated within each INDEC unit. For conditions of severe dust, the installing contractor is responsible to incorporate additional filters external to the unit for added protection.
- 50mm panel filters are a minimum recommendation for all equipment.
- It is recommended that temporary disposable filters are used during construction and commissioning.
- Equipment, warranty is void if filters are not fitted during operation.
- Filters must be removed, cleaned and/or replaced regularly to ensure system performance.

IMPORTANT: NEVER OPERATE A UNIT WITHOUT FILTERS FITTED.



Filter removal and cleaning

Electrical Requirements

- The power requirement and voltage are detailed on the equipment technical specifications (available on our website www.armcor.com.au) and are on the identification/serial no. plate attached to each unit. (See below)
- An electrical diagram is provided and should remain in the electrical box on the unit.
- See "Wiring Diagram" on page 21 in this manual.



Serial number electrical data

Mains Power Supply And Fusing

- A 3 phase power supply rated at 415 volts is required to operate the unit within manufacturer's tolerance.
- Main cables and control circuit wires are to be connected as per wiring diagram given in section 11.
- All wiring must comply with relevant local wiring regulations.
- The units require a main circuit breaker or HRC fuse capable of handling the full load of the unit and selected in accordance with SAA Wiring Rules.
- All wiring is to be independently colour coded.
- All units must be provided with an external power isolator located close to the electrical control panel.



Typical electrical board

Airflow Balancing

For correct efficiencies to be obtained, it is essential that there is an accurate balance of the supply air and exhaust air quantities. This ensures the evaporation process will occur through the indirect media.

On installation, balancing can be done by opening/closing the damper located behind the exhaust grille in conjunction with adjusting the variable speed fan. Depending on the supply air duct pressure drop, there may also be a need for supply air dampers.



Adjust damper to balance exhaust air



Damper located behind exhaust grille

The optimum air balance is:

| | Incoming Fresh Air (L/sec) | Supply Air (L/sec) | Exhaust Air (L/sec) |
|--------------|----------------------------|--------------------|---------------------|
| Model No | 100% | 70% | 30% |
| INDEC1500P3 | 2145 | 1500 | 645 |
| INDEC2000P3 | 2860 | 2000 | 860 |
| INDEC3000P3 | 4285 | 3000 | 1285 |
| INDEC4000P3 | 5715 | 4000 | 1715 |
| INDEC6000P3 | 8570 | 6000 | 2570 |
| INDEC8000P3 | 11430 | 8000 | 3430 |
| INDEC10000P3 | 14285 | 10000 | 4285 |
| INDEC12000P3 | 17140 | 12000 | 5140 |

Water Flow Balancing

For correct evaporation, the water flow to the indirect media and the direct media must be balanced.

Indirect Media Water Flow

The water flow to the indirect media is factory set by means of a balancing in-line valve. This should not need further adjustment at installation.

An even distribution through the water distributor pipework is essential. At installation, remove the internal service panel and visually check that the water distribution from the 4 distribution pipes is relatively even across the indirect media. Balancing valves in the pipework can be manually adjusted to give an even distribution flow.

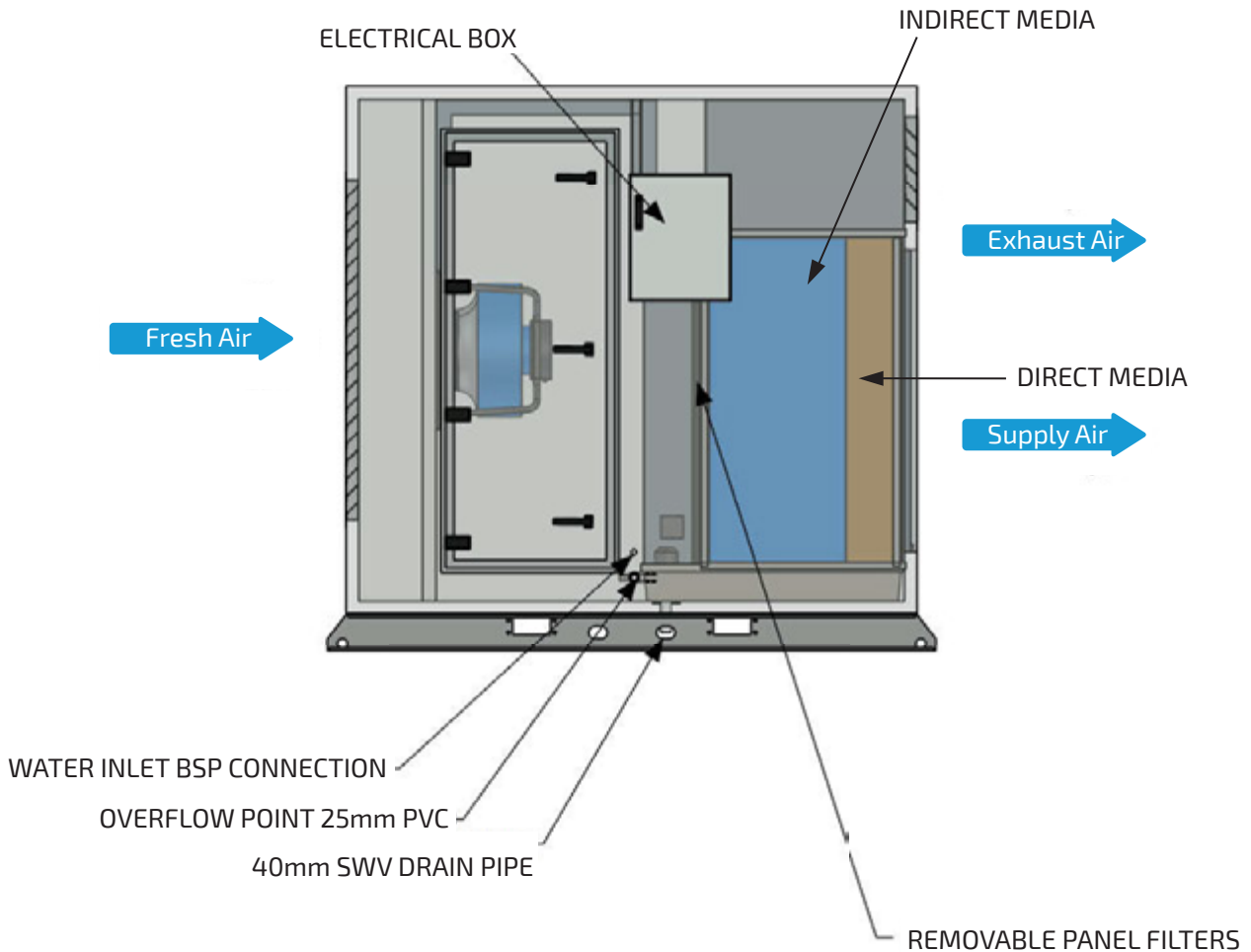
Indirect Media Water Flow

This should not need further adjustment at installation, but it is essential to visually check while the unit is operating that excessive water does not spit out from the media into the ductwork. The direct media pad should be thoroughly wet without evidence of the water running down the pad and without water droplets being carried past the media into the ductwork. If this exists, the water flow should be further reduced by manually adjusting the in-line valve.



Manual balancing of water flow

Equipment Configuration



Attention: Kindly read the user manual before using this product. Failure to follow these instructions may damage and/ or impair its operation and void the warranty.

Technical Specifications

| Model No | INDEC1500P3 | INDEC2000P3 | INDEC3000P3 | INDEC4000P3 |
|-----------------------------|------------------------|------------------------|------------------------|------------------------|
| Supply Air Capacity (l/sec) | 1500 | 2000 | 3000 | 4000 |
| Total Fan Capacity | 2145 | 2860 | 4285 | 5715 |
| Power Requirement | 415V, 50Hz, 3ph | 415V, 50Hz, 3ph | 415V, 50Hz, 3ph | 415V, 50Hz, 3ph |
| Full Load Amperage | 4.3-4.3-4.3 | 6.8-6.8-6.8 | 8.6-8.6-8.6 | 13.6-13.6-13.6 |
| Water Tank Capacity | 65 litre | 65 litre | 2 x 65 litre | 2 x 65 litre |
| Water Circulation Pump | 1 x EBM Submersible | 1 x EBM Submersible | 2 x EBM Submersible | 2 x EBM Submersible |
| Heat Exchanger | 1 x 2 Stage INDEC core | 1 x 2 Stage INDEC core | 2 x 2 Stage INDEC core | 2 x 2 Stage INDEC core |
| Unit Dimensions (LxWxH) | 2270 x 915 x 1950 | 2270 x 915 x 2250 | 2270 x 1730 x 1950 | 2270 x 1730 x 2250 |
| Operating Weight (kg) | 380 | 630 | 750 | 1160 |

| Model No | INDEC6000P3 | INDEC8000P3 | INDEC10000P3 | INDEC12000P3 |
|-----------------------------|------------------------|------------------------|------------------------|------------------------|
| Supply Air Capacity (l/sec) | 6000 | 8000 | 10000 | 12000 |
| Total Fan Capacity | 8570 | 11430 | 14285 | 17140 |
| Power Requirement | 415V, 50Hz, 3ph | 415V, 50Hz, 3ph | 415V, 50Hz, 3ph | 415V, 50Hz, 3ph |
| Full Load Amperage | 20.4-20.4-20.4 | 27.2-27.2-27.2 | 34.0-34.0-34.0 | 40.8-40.8-40.8 |
| Water Tank Capacity | 3 x 65 litre | 4 x 65 litre | 5 x 65 litre | 6 x 65 litre |
| Water Circulation Pump | 3 x EBM Submersible | 4 x EBM Submersible | 5 x EBM Submersible | 6 x EBM Submersible |
| Heat Exchanger | 3 x 2 Stage INDEC core | 4 x 2 Stage INDEC core | 5 x 2 Stage INDEC core | 6 x 2 Stage INDEC core |
| Unit Dimensions (LxWxH) | 2270 x 2545 x 2250 | 2270 x 3360 x 2250 | 2270 x 4175 x 2250 | 2270 x 4990 x 2250 |
| Operating Weight (kg) | 1600 | 2250 | 2750 | 3250 |

Note: Please consult Armcor Air Solutions for current specifications. Specifications subject to change.

Control Details

INDEC® cooling units can be operated by various control applications and are usually configured in conjunction with a Building Management System (BMS) or integrated with other airconditioning equipment.

The unit is not supplied with a controller.

Controls should incorporate provision for the independent operation of:

- Supply Fan – On/Off or 0 - 10 V DC Signal.
- Pump 1 – the 'primary cooling pump' which circulates water through the primary indirect heat exchanger.
- Pump 2 – the 'secondary cooling and humidification pump' which circulates water through the direct evaporative pad.

Typical Sequence of Operation in Indirect Cooling Mode

1. Switch ON the main incoming power supply.
2. Enable the supply fan.
3. Enable Pump 1. A time delay will allow the water to fill the sump. The pump will start after 5 minutes.

Typical Sequence of Operation for Additional Stage 2 Direct Evaporative Cooling

4. Steps 1, 2 and 3 as above.
5. Enable Pump No. 2 which will activate Stage 2 cooling.

Typical Sequence of Operation in Ventilation Mode

1. The sump dump valve will automatically drain all the water from the tank at the end of each cycle.
2. Switch ON the main incoming power supply.
3. Enable the fan from the controller.
4. Supply fan will start automatically.
5. Operate the pumps according to ambient conditions.

General Maintenance

| Maintenance Schedule | Every 30 Days | Every 120 Days | Every 365 Days |
|---|---------------|----------------|----------------|
| Draining and cleaning the water tank | ✓ | | |
| Cleaning or replacement of the air filters | ✓ | | |
| Cleaning the water distribution filter | ✓ | | |
| Check the water distribution pipework | | ✓ | |
| Check all cabinet panels for correct fitting, alignment and seals, and clean cabinets as required | | ✓ | |
| All electrical terminals should be checked for tightness | | ✓ | |
| Check the amperage of each motor against nameplate details | | | ✓ |
| Check cabinet for any paint chips or abrasions and treat accordingly | | | ✓ |
| Clean sump tray | ✓ | | |

Draining And Cleaning The Sump Tray

- Before cleaning the unit, switch OFF the unit at the equipment electrical isolator.
- The sump dump valve will open and allow all water to drain out.
- Use a cloth to wipe the dirt and dust from the surface of the Sump Tray.
- Never use any corrosive elements (acids and base) or any chemicals for cleaning.
- Activate the cooling cycle which will open the water supply solenoid valve.
- Fill the tank with water.
- Check that the float valve maintains the correct level of water.
- Turn off the cooling cycle and turn off the isolator.
- Sump dump valve will open to flush out water from the tank.
- When satisfied that any dirt and contaminants have been removed, turn the equipment on and recheck cooling operation.

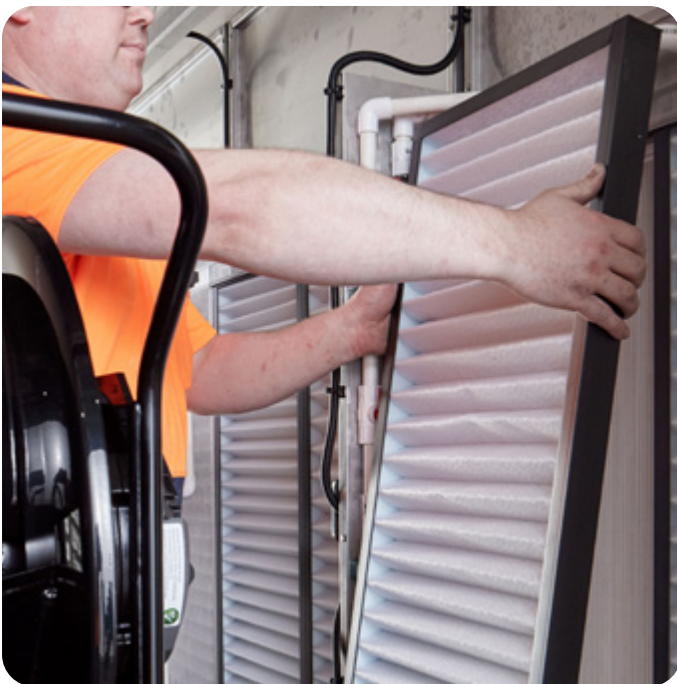
Cleaning The Air Filters

Preparation

- Switch OFF the unit at the electrical isolator before cleaning the filter.
- Locate filters inside the unit.

Cleaning The Filters

- Remove the filter carefully by lifting up and out.
- Take out the filters from the unit.
- Clean filters using a vacuum or replace filters.
- Put the filters back in place.



Filter removal and cleaning

Cleaning The Water Filter

- The inlet supply pipe has an inline water filter.
- Turn OFF the unit at the equipment electrical isolator.
- Locate the inline filters inside the unit.
- Unscrew the filter to reveal the inline filter cartridge.
- Clean the filter cartridge with running water to remove any debris.
- Replace the filter cartridge if required.



Check and clean the water filter

Checking And Cleaning The Water Distribution Pipe

- Turn off power supply to fans to ensure fans do not operate during servicing.
- Remove the access panel above the filters.
- Activate the cooling cycle so that both pumps operate.
- Check that water disperses out from all pipework openings.
- Check there is a constant and even flow of water.
- If necessary remove pipework by undoing the disconnect fitting.
- Clean pipework as needed to remove any blockages or build up of debris.
- Reassemble and check operation.
- Adjust water supply valve as need to provide constant water flow.



Water distribution system

Note: It is recommended to clean the water distribution pipe every 120 days to ensure that it does not get clogged.

Sump Dump Operation Check

- Stop the unit by the controls and ensure the sump dumps open to let out the water in the water reservoir.
- Start the unit again from the controls and the sump dump valve will close.
- Check that the water reservoir full level is approximately 20mm below the overflow outlet.
- Under normal operation there should not be water exiting through the overflow pipe.

Water Quality

Each unit is filled with a UV Water Filter Purifier on the inlet water supply.

It is recommended to replace the UV light every 6000 hours - approximately every 2-3 years.

Water to be supplied to the machine should be free from dirt and suspended solids and should have the following parameters as shown in the following table.

Replaceable UV-C light globe.
Turn off power before removing globe.



| No. | Parameters | Upper Limit | Units |
|-----|-------------------------------------|-------------|-------|
| 1 | Total Dissolved Solids (TDS) | <600 | mg/l |
| 2 | Total Hardness as CaCO ₃ | 300 | mg/l |
| 3 | pH | 7.5-8.5 | — |

If there is any doubt regarding water quality, we recommend you get the water quality checked by an independent water filtration consultant. If the water quality is poor, it is the consultant's responsibility to provide proper external water filtration.

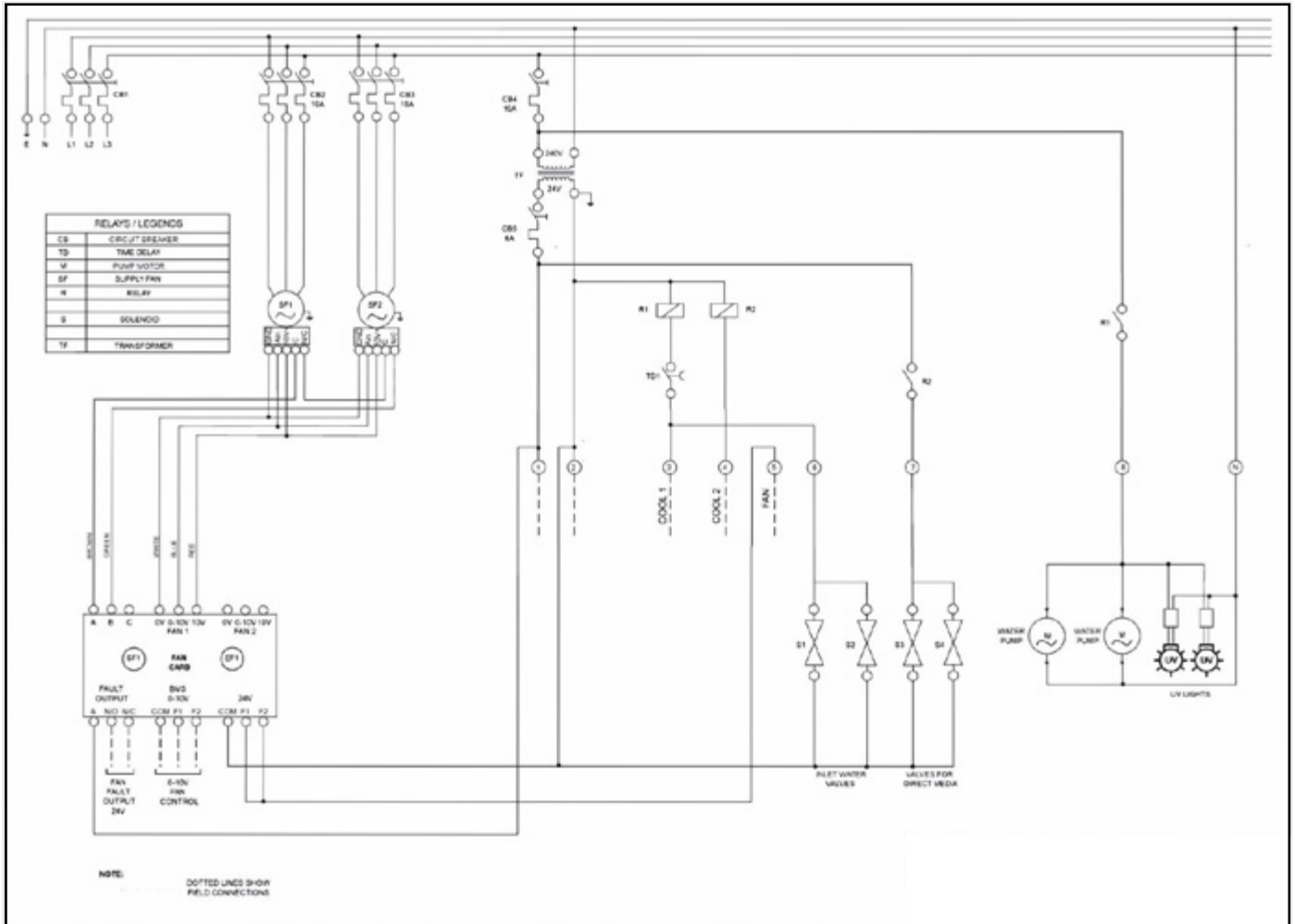
A UV-C LIGHT is factory installed in the water filtration system to provide longer life to the internal components of the INDEC unit.

Spare Parts List

| No. | Spare Part | Part number |
|-----|---------------------|-------------|
| 1 | Submersible pump | |
| 2 | Float valve | |
| 3 | Sump dump valve | |
| 4 | Water filter | |
| 5 | Air filter | |
| 6 | Supply air fan | |
| 7 | UV-C Water Purifier | |

Wiring Diagram

Typical schematic for INDEC2000



Pre-start Checklist

| | |
|--|--------------------------|
| Unit Installation And Connections | |
| Check that equipment is fully installed in accordance with the installation instructions | <input type="checkbox"/> |
| Visually check that air flows will not be obstructed | <input type="checkbox"/> |
| Electrical | |
| Visually check all field wiring | <input type="checkbox"/> |
| Tighten all electrical connections including all factory wiring connections | <input type="checkbox"/> |
| Ensure supply cable is correct size | <input type="checkbox"/> |
| Check the required supply voltage is available on all phases | <input type="checkbox"/> |
| Filters | |
| Check filters are clean and installed correctly | <input type="checkbox"/> |
| Water Supply System | |
| Ensure clean, filtered water is connected | <input type="checkbox"/> |
| Check pump operation | <input type="checkbox"/> |
| Check water dump valve operation | <input type="checkbox"/> |
| Starting Unit | |
| Check Fans and Air Flows | <input type="checkbox"/> |
| Turn on all circuit breakers | <input type="checkbox"/> |
| Make sure all dampers are open | <input type="checkbox"/> |
| Turn on control circuit and activate fans | <input type="checkbox"/> |
| Turn on supply fan, run and conduct an air balance (Fans do not require phase rotation) | <input type="checkbox"/> |
| Turn on water pumps and check operation | <input type="checkbox"/> |
| Check fan current draw for each fan individually | <input type="checkbox"/> |

Commissioning Checklist

| General | |
|--|----------------|
| Air Filters: Overall Size and Number | |
| Drain is Clearing Water Properly | Y / N |
| Check Vibration of Unit | OK / EXCESSIVE |
| Fan Operation without undue vibration | Y / N |
| Paint Finish Checked and Repaired | Y / N |
| Air Flow | |
| Total Supply Air Flow (Total of all supply air outlets) (L/s) | |
| Total System external resistance (Pa) Measured downstream of fan outlets | |
| Total Exhaust Air Flow (L/sec) | |
| Electrical | |
| Supply Voltage | |
| Fan Motor Amps | |
| Total Unit Amps | |
| Thermostat Settings (°C) | |
| Thermostat Operating Correctly | Y / N |
| Contractors & Relays Operating Correctly | Y / N |
| All Terminals Checked for Tightness and Label signed | Y / N |
| Water Supply System | |
| Stop tap fitted | Y / N |
| Quality of water checked | Y / N |
| Available water pressure (300-600 kpa) | Y / N |
| Pumps operating | Y / N |
| Dump valve operating | Y / N |
| Water distribution pipework check (refer 4.10) | Y / N |

Warranty

The standard Armcor warranty policy is a parts only warranty for a 12 month period.

If any defect in your Armcor equipment is caused by FAULTY MATERIALS within the warranty period, starting from the date of original purchase it will be rectified or replaced without cost. Additional labour warranty is available and must be purchased at the time of ordering in accordance with the warranty policy.

What The Warranty Policy Does Not Cover

- Consequential damage.
- Failure to start due to voltage conditions, blown fuses or other damage cause by inadequate or interrupted electricity supply.
- Damage caused by accident, misapplication, abuse, alteration, tampering or servicing by anyone other than an authorized person.
- Damage resulting from incorrect installation, commissioning or use other than in accordance with the installation and operating instructions issued by Armcor Air Solutions.
- Damaged caused by using equipment being located in a corrosive atmosphere or by filter neglect.
- Replacement of any worn drive belts if applicable.
- Costs incurred for regular maintenance services.
- The original service call costs in identifying a warranty claim.
- Freight and travel charges for work performed or parts supplied outside of all capital cities in Australia.
- Field wiring, water pipe line run between units, the drainpipe or other accessories.
- Water damage to property

The Warranty Will Not Apply If;

- Any appliance plate is altered or removed.
- Armcor Air Solutions has not been notified within 48 hours of any fault occurring which may require warranty work.
- Any unauthorized modification has been made to the equipment or any part has been substituted or replaced with non-original items.
- Regular service has not been carried out by an appropriate Armcor approved, licenced installer.
- The unit is used other than for the heating and cooling of air for human comfort – unless approved by Armcor Air Solutions.
- The system is installed in a mobile application (e.g. caravan, boat, crane).
- The unit is inaccessible on any side for maintenance.
- The water pressure is less than 300 Kpa unless authorized by Armcor in writing.

How To Make A Warranty Claim

Complete a warranty form available on our website armcor.com.au and return the Armcor Warranty Request Form to: service@armcor.com.au

Contact us direct by phone on 1800 244 556 or email service@armcor.com.au

ADDITIONAL INFORMATION

Armcor Air Solutions have developed the INDEC range of coolers using a patented indirect polymer heat transfer core that can deliver cool, 100% fresh outdoor air with very low energy consumption.

Read more [here](#).

How Does Indirect Evaporative Cooling Work?

See our product [brochure](#).



Fresh Air Indoors

For more information

W: armcor.com.au

E: sales@armcor.com.au

P: (03) 8301 9200

109–111 Northcorp Blvd
Broadmeadows Vic 3047

armcor
air solutions