





# **Ducted Evaporative Coolers**

### World's Best Performing Evaporative Air Coolers

- Centrifugal blower
- Highest static and longest throw
- Highest cooling efficiency
- Strongest rust proof metal body





#### Experts in Air Treatment since 1964...

**PRT**, a Pahwa group company, is a global provider of components & systems for Energy Recovery, Indoor Air Quality (IAQ), Fresh Air Treatment, Evaporative Cooling, Desiccant Dehumidification, and Green Buildings.

**ARCTIC<sup>™</sup>** is DRI's Evaporative Cooling Range.

At the Pahwa Group, continuous Innovation is the driving philosophy. Operating within a board framework of 'energy and environment', the group comprises of 4 knowledge based technology driven airgineering companies specializing in technologies, products & services "with desiccants at the core, in relation to air".

And I are the two flag ship companies of the group.

...since 1964, Bry-Air has been offering dehumidification and complete environmental control solution. DRI has been offering innovative air solutions since 1984.

Evaporative cooling based

### Industrial & Commercial Ducted Air Cooling Solutions

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Energy Efficient Lower energy consumption



Cost Effective Lower initial, running and maintenance cost



**Green Air-Conditioning** Conditions the air by evaporative cooling & not mechanical refrigerant cooling based.

Evaporative cooling uses natural resources - air & water. It brings down the dry bulb temperature through evaporation of water. Evaporative cooling systems are:



#### **Evaporative Cooling with Arctic Evaporative Cooler**

- Hot fresh air is taken into the unit through wet EcoCool Cooling Pads.
- This cool humidified air is discharged indoors.





Ventilation using 100% Fresh Air for Healthy and Comfortable spaces

# **Ducted Evaporative Cooler Range**







ADC-25K

ADC-L-100K



ADC-45K



ADC-L-125K

Snap on flitration is available.

Advantages

• Unique 3 side air intake and low face velocity design.

ADC-L-85K

- EcoCool pads of 5mm flute structure and high saturation efficiency.
- Sturdy design with heavy duty skid base for rooftop or side wall installations.
- Proven rust-proof pre-coated steel sheet metal body, nuts and bolts of stainless steel (SS).
- Specially designed leak proof industrial water tank.
- Highest quality components like motor, blower and water pumps.
- 100% water tested prior to packaging and dispatch.
- No outsourcing. In-house factory integrated manufacturing with 3D designing, CNC, powder coating and test labs.
- Complete cooler with starter panel and controls. Plug and Play.
- Centrifugal blower for high static pressure, long duct lengths and throw.
- Duct layout design, installations services and spare parts available.
- Customised solutions available. Largest range in the world.

### Advantages with EcoCool Evaporative Cooling Pads

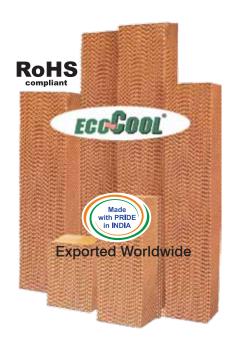
Structural Strength



Strong Adhesion



- Competitive Price
- Fast Deliveries
- 🦻 Technical Support
- 🕖 Easy to Replace





## 100% Fresh & Cool Air

#### City Wise Temperature Drop with Direct Evaporative Cooler (Example)

Description	Outdoor Deei	gn Conditions	Coolor Outl	et Conditions	Temperature Drop
Description					
Location	DBT °C	WBT °C	DBT °C	WBT °C	°C
Ahmedabad	42.1	23.00	24.9	23.0	17.2
Bhopal	41.8	21.6	23.6	21.6	18.2
Hyderabad	40.2	21.8	23.6	21.8	16.6
Jaipur	42.5	21.3	23.4	21.3	19.1
Mumbai	35.9	22.7	24.0	22.7	11.9
Nagpur	43.9	22.5	24.6	22.5	19.3
New Delhi	42.2	22.7	24.7	22.7	17.6
Pune	38.1	19.7	21.5	19.7	16.6
Raipur	43.6	23.3	25.3	23.3	18.3
Indore	40.8	19.7	21.8	19.7	19.0
Surat	37.8	22.5	24.0	22.5	13.8
Riyadh	44.7	19.3	21.8	19.3	22.9
Dubai	46.0	30.0	31.6	30.0	14.4

Design Condition based on Cooling 0.4% of ISHRAE & ASHRAE Handbook 2017

### Free Flow (Spot) Evaporative Coolers (AEC - 20)

- High efficiency long life 60mm four side pads
- CNC fabricated high quality 16G powder coated / painted casing
- Quick and easy removal of cooling pad
- High efficiency fan
- Designed for low RPM to ensure low noise levels & trouble free operation
- High quality submersible pump for longer life
- Over flow, and auto cut arrangement provided for make-up water
- Caster wheels provided for rotation and direction change

### Say NO to Plastic X

#### **Disadvantages of Plastic Coolers:**

- Deformed and lower life span
- Low water tank capacity and lower cooling efficiency
- Cheap & low-quality cooling pads used
- Much lesser air throw
- Not environmental friendly
- Axial fans have lower static pressure & low airflow compared to centrifugal blowers



## **Industry Applications**



Kitchen & Restaurant Cooling



Factory Shop Floors & Assembly Lines



Automobile Industry



Cinemas and Banquet Halls



**Religious Places** 



Schools



Warehouses



Green House / Tea Industry



Textile Industry

# Duct Layout Designs and Installation Services are available.



# **Technical Specification**

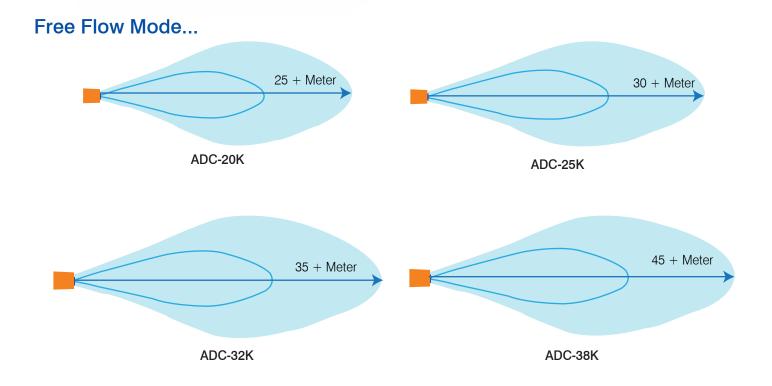
Description	UOM	ADC-20K	ADC-25K	ADC-32K	ADC-38K
Body material		Pre coated galvanised steel			
Minimum Evaporation Efficiency	%	80	90	90	90
Pad Surface Area	m2	1.35	2.17	3.74	4.19
Pad Thickness	mm	75	100	100	100
Connection Load	kw	0.79	1.55	2.39	3.89
Overall Dimensions (L x W x H)	mm	950x950x800	1100x1100x1100	1250x1500x1400	1300x1600x1500
Connection Size	mm	400x400	500x500	650x650	750x750
Fan Type		Centrifugal	Centrifugal	Centrifugal	Centrifugal
Tank Capacity	Litre	60	110	175	200
Dry Weight	Kgs	125	200	280	350

#### Design Guide- SI Units

Air Flow at below ESP	m3/h	8000	11000	22000	30000
Static Pressure	mmWC	19	24	24	22
External Static Pressure	mmWC	5	10	10	10
Air Flow at below ESP	m3/h	5100	6800	12750	17000
Static Pressure	mmWC	22.5	32	32	40
External Static Pressure	mmWC	10	20	20	30

Disclaimer :

- Dimensions and weight may vary in few models.
- Because of our policy of continuous product improvements, specifications are subject to change without notice.



# **Technical Specification**

Description	UOM	ADC-45K	ADC-L-85K	ADC-L-100K	ADC-L-125K
Body material		Pre coated galvanised steel			
Minimum Evaporation Efficiency	%	90	90	90	90
Pad Surface Area	m2	6.06	9.08	13.88	13.88
Pad Thickness	mm	100	100	100	100
Connection Load	kw	5.87	9.67	11.75	15.75
Overall Dimensions (L x W x H)	mm	1750x2150x1650	2300x2400x1850	2300x3300x2400	2300x3300x2400
Connection Size	mm	900x900	1100x1100	1250x1250	1400x1400
Fan Type		Centrifugal	Centrifugal	Centrifugal	Centrifugal
Tank Capacity	Litre	475	715	1000	1000
Dry Weight	Kgs	465	790	910	1010

#### Design Guide- SI Units

Air Flow at below ESP	m3/h	45000	75000	90000	120000
Static Pressure	mmWC	22	22	22	22
External Static Pressure	mmWC	10	10	10	10
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Air Flow at below ESP	m3/h	25500	42500	51000	68000
Static Pressure	mmWC	40	40	40	40
External Static Pressure	mmWC	30	30	30	30

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### ADC-L-125K







### Thousands of satisfied customers across Industries and Applications ...

- Malls
- Health Care
- Villas
- Religious Places
- Warehouses
- Textile Industry
- Assembly Line
- Poultry

- Offices
- Schools
- Cinema Halls
- Wedding Halls
- Government Buildings
- Automobile Industry
- Showrooms
- Laundry

- FactoriesHotels
- Shop Floors
- Tea Fermentation
- Railway Stations
- Restaurants
- Panel Room
- Green House

- Stores
- Canteen
- Kitchen Ventilation
- Food Industry
- Print & Packaging Industry
- Retail
- Gym
- and many more...



Some of our Customers

### Fully Integrated World Class Manufacturing & Testing Facilities





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