ARCTIC®

Made with PRIDE in INDIA

EVAPORATIVE COOLING SOLUTIONS

Portable

Top Discharge

Ducted/Direct

Indirect-Direct

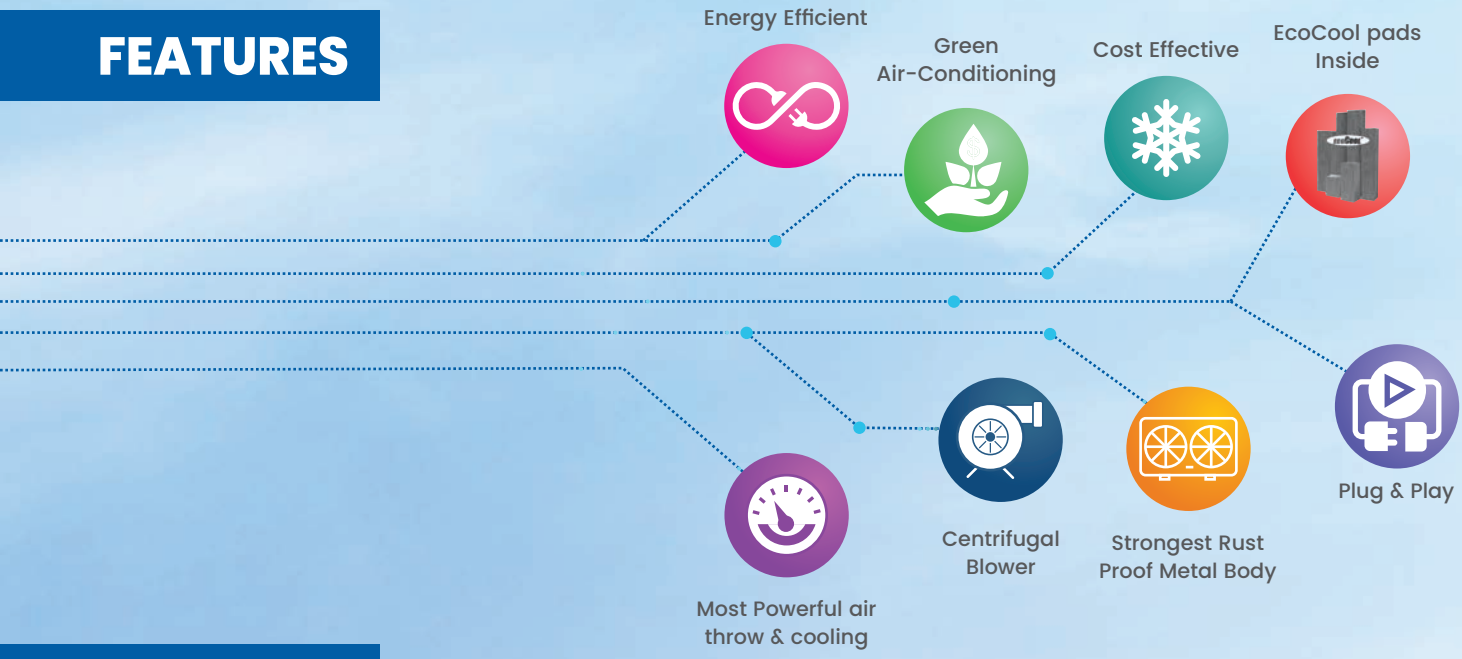
ARCTIC®

WORLD'S BEST PERFORMING EVAPORATIVE AIR COOLERS

ARCTIC™ is **DRI's** Evaporative Cooling Solutions Company. Evaporative cooling uses air & water to down the dry bulb temperature through evaporation of water.

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

FEATURES



BENEFITS

- Lowest power consumption & Highest Cooling
- Provides natural cooling with air and water
- Low Running & maintenance cost
- Resin coated, ROHS Certified & High Saturation Efficiency Pads
- Longest life of cooler in outdoor conditions
- For Powerful air & better air management
- Highest Static for long ducts and Longest Throw
- Completely assembled cooler

OUR PRODUCT RANGE

Comprehensive Evaporating Cooling Solutions

Evaporative Cooling Pads (ECPs)

Portable Coolers

Side Discharge Coolers

Top Discharge Coolers

Ducted/ Direct Evaporative Coolers

Indirect - Direct Coolers

www.yesARCTIC.com

PORTABLE COOLERS

Free Flow with Axial Fan

The Arctic heavy-duty metal body portable air cooler is a free-flow ductless air cooler ideal for industrial and commercial uses. Arctic free-flow coolers come with an Axial Fan for better air management and air spread. Multiple coolers can be installed to cover larger areas. It is a plug and play device and can be installed easily at the site. It is also available in a single-phase multi-speed fan.

Special Features:

- Portable heavy duty cooler on wheels

Technical Specifications

Model	APC
Body material	Special Pre-plasticsized coated galvanised steel
CFM	10594
CMH	18000
ESP	Free
Minimum Evaporation Efficiency (%)	80
Pad Surface Area (m2)	1.14
Pad Thickness (mm)	100
Connection Load (kw)	0.61
Power Supply	230/1Ph/50Hz
Overall Dimensions (L x W x H) (mm)	750x1150x1550
Air Discharge Grill Size (mm)	Free
Fan Type	Axial
Tank Capacity (Liter)	120
Dry Weight* (Kgs)	80

* Industrial long life construction (heavy duty)

Design Guide- SI Units

Model	Air Flow (CMH)	Cooling Space/Area (Sq.Ft.)	Throw (meter)
APC	18000	1250	15

SIDE DISCHARGE COOLER

Side Discharge Coolers with Damper

Arctic side discharge heavy-duty metal-body air coolers are freeflow ductless air coolers, ideal for industrial and commercial use. Arctic Coolers comes with blowers for the most powerful air throw. Multiple coolers can be installed to cover larger areas; it's a plug and play device that can be installed easily at the site.

Special Features:

- Ductless air cooler with damper
- No ducting involved

Technical Specifications

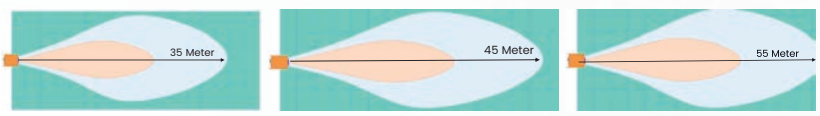
Model	ASD-20K	ASD-25K	ASD-32K
Body material	Special Pre-plasticsized coated galvanised steel		
CFM	3000	4000	7500
CMH	5100	6800	12750
ESP	100	200	200
Minimum Evaporation Efficiency (%)	80	90	90
Pad Surface Area (m2)	1.35	2.17	3.74
Pad Thickness (mm)	75	100	100
Connection Load (kw)	0.79	1.55	2.38
Power Supply	230/1Ph/50Hz	415/3Ph/50Hz	
Overall Dimensions (L x W x H) (mm)	950x950x800	1100x1100x1100	1250x1500x1400
Air Discharge Size (mm)	400x400	400 x 400	650 x 650
Fan Type	Centrifugal DIDW (Double inlet Double Width)		
Tank Capacity (Liter)	60	110	190
Dry Weight* (Kgs)	125	205	300

* Industrial long life construction (heavy duty)

Design Guide- SI Units

Model	Air Flow (CMH)	Cooling Space/Area (Sq.Ft.)	Throw (meter)
ASD-20K	8000	2500	35
ASD-25K	11000	3000	45
ASD-32K	20000	5000	55

Free Flow Mode



ASD-20K ASD-25K ASD-32K

TOP DISCHARGE COOLER

With L Shape Duct

Arctic top discharge heavy-duty metal body air coolers are freeflow ductless air coolers perfect for industrial & commercial uses. They come with a blower for powerful air throws. Multiple coolers can be used to cover larger spaces with ease. It is a plug and play device and can be installed easily at the site.

Special Features:

- Top discharge cooler with a curved scroll & grill
- Ductless air cooler

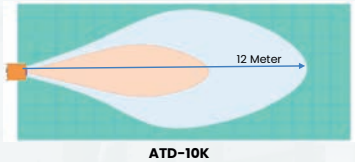
Model	ATD-10K	ATD-20K	ATD-25K	ATD-32K
Body material	Special Pre-plasticsized coated galvanised steel			
CFM	1500	3000	4000	7500
CMH	2500	5100	6800	12750
ESP (Pa)	Free	100	200	200
Minimum Evaporation Efficiency (%)	80	80	90	90
Pad Surface Area (m2)	0.85	1.35	2.17	3.74
Pad Thickness (mm)	60	75	100	100
Connection Load (kw)	0.19	0.79	1.55	2.38
Power Supply	230/1Ph/50Hz		415/3Ph/50Hz	
Overall Dimensions (L x W x H) (mm)	650x650x1200	950x950x1450	1100x1100x1850	1250x1500x2150
Air Discharge Grill Size (mm)	440x240	600x500	800x500	1000x600
Fan Type	Axial	Centrifugal DIDW (Double inlet Double Width)		
Tank Capacity (Liter)	60	60	110	190
Dry Weight* (Kgs)	62	160	225	350

* Industrial long life construction (heavy duty)

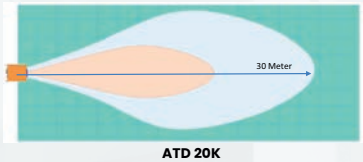
Design Guide- SI Units

Model	Air Flow (CMH in Free Flow)	Cooling Space/Area (Sq.Ft.)	Throw (meter)
ATD-10K	2500	800	12
ATD-20K	8000	2500	30
ATD-25K	11000	3000	40
ATD-32K	20000	5000	50

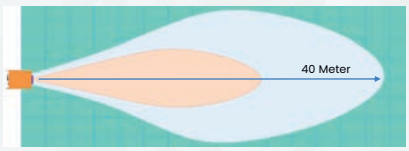
Free Flow Mode



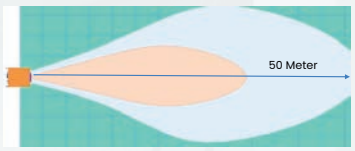
ATD-10K



ATD 20K



ATD 25K



ATD 32K

DUCTED EVAPORATIVE COOLERS

Direct Evaporative Coolers also called Ducted Evaporative Coolers, Industrial Coolers, Commercial Coolers, Air Washers, Swamp Coolers and Industrial Ventilation Coolers, offer a completely natural way of delivering refreshing cool air. Arctic range of Evaporative cooling units have been specifically designed for the cooling of industrial and commercial buildings.

They are capable of lowering the fresh air dry bulb temperature by 7-12°C, e.g- the air-off temperature from the evaporative cooler for an outside temperature of 40-43°C can be as low as 28-30°C. They allow cool fresh air to be introduced throughout a building and also the stale hot air to be displaced out through openings like windows. Unlike mechanical air-conditioning which continuously cools re-circulated air, Arctic coolers introduced 100% cool fresh air into the space.

Arctic Direct Evaporative Coolers use the EcoCool Evaporative Cooling Pads. EcoCool pads are highly efficient, consistent in performance over a very long life, self-supporting, highly absorbent and can be easily cleaned. They allow higher cooling with lower air volume and are over 80% efficient.

Special Features:

- AMCA Certified DIDW Blowers
- Wide Range of models

ARCTIC®

DUCTED EVAPORATIVE COOLERS

Technical Specification

Model	ADC-20K	ADC-25K	ADC-32K	ADC-38K	ADC-45K	ADC-L-85K	ADC-L-100K	ADC-L-125K
Body material	Special Pre-plasticsized coated galvanised steel							
Minimum Evaporation Efficiency (%)	80	90	90	90	90	90	90	90
Pad Surface Area (m2)	1.35	2.17	3.74	4.18	6.06	9.08	9.08	13.88
Pad Thickness (mm)	75	100	100	100	100	100	100	100
Connection Load (kw)	0.79	1.55	2.38	3.88	5.87	9.67	11.75	15.75
Power Supply	230/1PH/50Hz	415/3Ph/50Hz						
Overall Dimensions (L x W x H) (mm)	950x950x800	1100x1100x1100	1250x1500x1400	1300x 1600x1500	1750x2150x1650	2100x2400x2050	2100x2400x2050	2300x3300x2500
Duct Connection size (mm)	400x400	400x400	650x650	750x750	900x900	1100x1100	1250x1250	1400x1400
Fan Type	Centrifugal DIDW (Double inlet Double Width)							
Tank Capacity (Liter)	60	110	190	241	475	715	715	1000
Dry Weight* (Kgs)	125	200	295	350	565	790	910	1010

* Industrial long life construction (heavy duty)
* Skid base Cooler Dimension may change
* Dimensions of Top & Bottom Coolers may Change

Design Guide - SI Units

Model	Air Flow at given ESP	External Static Pressure	Air Flow at below ESP	External Static Pressure
	m3/h	mmWC	m3/h	mmWC
ADC-20K	8000	5	5100	10
ADC-25K	11000	10	6800	20
ADC-32K	20000	10	12750	20
ADC-38K	27200	10	17000	30
ADC-45K	45000	10	25500	30
ADC-L-85K	75000	10	42500	30
ADC-L-100K	90000	10	51000	30
ADC-L-125K	120000	10	68000	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

Ducted Evaporative Cooler Range

ADC-20K ADC-25K ADC-38K ADC-45K

INDIRECT DIRECT EVAPORATIVE COOLER

A single stage Indirect Evaporative Coolers use the advantages of cooling using water evaporation without increasing humidity in the supply air. This is done through our special DRI COOL module.

A 2-stage evaporative cooling system is an advanced cooling system that utilizes indirect evaporative cooling modules followed by a direct cooling section. The overall result is lower dry bulb temperature as compared to a direct only evaporative coolers.

A third stage can be added as a cooling coil which is turned on when the second direct evaporative cooling section is off. This is based on the ambient conditions.

These units are also offered in very large air volumes and with all sensors, controls and electrical packaged on board the unit.

Special Features:

- AHRI Certified Casing
- Fully factory assembled
- Better Indoor Conditions

Technical Specification

Model	Air Flow Capacity		Supply Air Motor	Working Air Motor	Pump	External Static Pressur	Overall Dimensions (L X W X H)				Unit Weight	Appr. Operating Weight
	CMH	CFM	kw	kw	kw	PA	Length	Width	Height	H1	PA	PA
ID-L3-30	5098	3000	2.2	0.75	0.19	250	2440	1350	1850	600	690	860
ID-L3-50	8500	5000	3.7	1.1	0.25 x 2	250	2890	1555	1850	750	1070	1240
ID-L3-75	12700	7500	5.5	1.1	0.25 x 2	250	2890	2100	1850	750	1450	1620
ID-L3-100	17000	10000	7.5	1.5	0.25 x 2	250	3350	2710	1850	860	1670	1840
ID-L3-150	25500	15000	9.3	2.2	0.25 x 2	250	3625	2400	2950	1045	2250	2420
ID-L3-200	34000	20000	15	3.7	0.25 x 2	250	3775	2710	2950	1045	2640	2810
ID-L3-250	42500	25000	18.5	3.7	0.25 x 2	250	3925	3270	3050	1150	3050	3220
ID-L3-300	50977	30000	18.5	5.5	0.25 x 2	250	4075	3765	3100	1390	3500	3670
ID-L3-350	59500	35000	22	3.7x2	0.25 x 2	250	4075	4360	3200	1045	3930	4100
ID-L3-400	68000	40000	15 X 2	3.7x2	0.25 x 2	250	3775	4970	3200	1045	4210	4380

INDIRECT - DIRECT (TWO STAGE) EVAPORATIVE COOLERS

$(\text{Evaporative Cooling})^2$

ARCTIC SuperCool Series are suitable for :

- Large spaces in Warm & Tropical Weather Condition
- **Smart Operation Modes and ventialtion mode available**
- Single Stage Indirect Cooling
- Two Stage Indirect + Direct Cooling

Supercool Series

Advantages

- **Environmently Friendly**
  - Best Possible Indoor Air Quality and 100% Fresh Air
  - No Harmful Refrigerant
- **Think Savings**
  - Small Investment & Low Maintenance cost
  - Low Running cost - Operational Cost (80%) Compared to Conventional Air-conditioning
  - Less Energy consumption
- **Significant Increase in Productivity**
- **Healthy Spaces - Doors and Windows can be left open**
- **5 - 6°C cooler air than Direct Coolers**

Technical Specification

Model	Air Flow Capacity		Air Flow Capacity		
	CMH	CFM	Length	Width	Height
DSC-60	10200	6000	2500	1450	1850+150
DSC-100	17000	10000	3100	2300	1850+150
DSC-150	25500	15000	4000	1900	2575+150

EVAPORATIVE COOLING PADS (ECPs)

EcoCool evaporative cooling pads use the simple principle of cooling by evaporation and humidify the air. They are saturated with water, sprayed onto them through prefixed channels and blown with a fan to produce cool and humidified air. EcoCool evaporative cooling pads are a cost-effective and eco-friendly method of providing cooler air for offices, large areas, homes and other buildings.

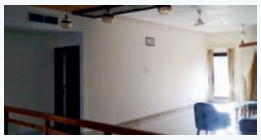
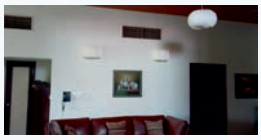
Features:

- Cellulose Base
- Rigid Structure
- Glueing
- Technical Support
- High Surface Area of Pads
- No Edge Build-up
- Retrofits
- ROHS Certified
- No Harmful Chemicals
- Compatible
- Antibacterial Cooling Pads
- Exported Worldwide

ARCTIC APPLICATIONS

- Factory Shop Floors
- Canteen & Kitchen Ventilation
- Warehouses
- Cinema Halls
- Residences
- Green House & Tea Industry
- Schools
- Showrooms
- Religious Places
- Offices
- Shop Floor & Assembly Line
- Hotels & Restaurants
- Gym
- Multipurpose Halls
- Poultry Farm

INSTALLATION EXAMPLES

Commercial Cooling				
Industrial Cooling				
Residential Cooling Installations				

Factory cooling experts

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ARCTIC®

OUR GLOBAL CUSTOMERS

Fully Integrated World Class Manufacturing & Testing Facilities

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