



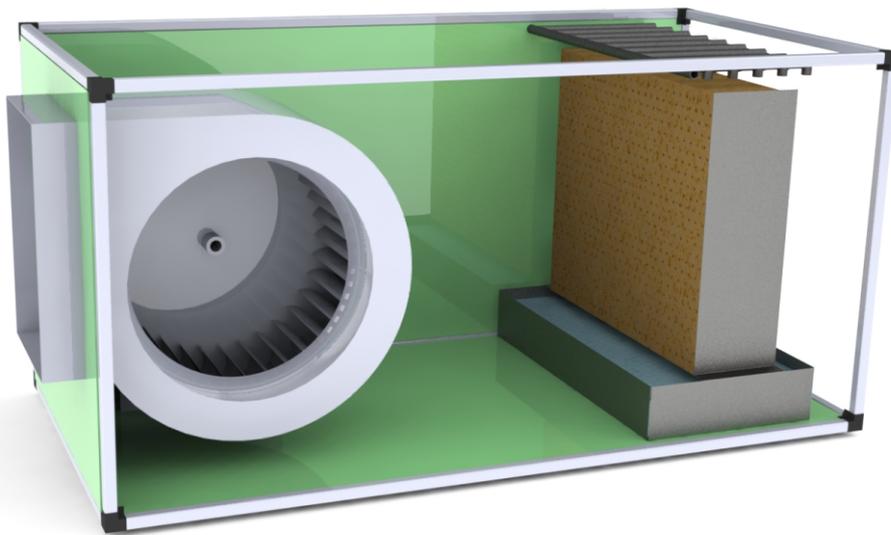
GLENSTORMS

EVAPORATIVE COOLER

Model : GL-SC-EC

Introduction

An evaporative cooler (also swamp cooler, desert cooler and wet air cooler) is a device that cools air through the evaporation of water. Evaporative cooling differs from typical air conditioning systems, which use vapour-compression or absorption refrigeration cycles. Evaporative cooling works by exploiting water's large enthalpy of vaporization. The temperature of dry air can be dropped significantly through the phase transition of liquid water to water vapor (evaporation). This can cool air using much less energy than refrigeration. In extremely dry climates, evaporative cooling of air has the added benefit of conditioning the air with more moisture for the comfort of building occupants.



The cooling potential for evaporative cooling is dependent on the wet-bulb depression, the difference between dry-bulb temperature and wet-bulb temperature. In arid climates, evaporative cooling can reduce energy consumption and total equipment for conditioning as an alternative to compressor-based cooling. In climates not considered arid, indirect evaporative cooling can still take advantage of the evaporative cooling process without increasing humidity. Passive evaporative cooling strategies offer the same benefits of mechanical evaporative cooling systems without the complexity of equipment and ductwork.

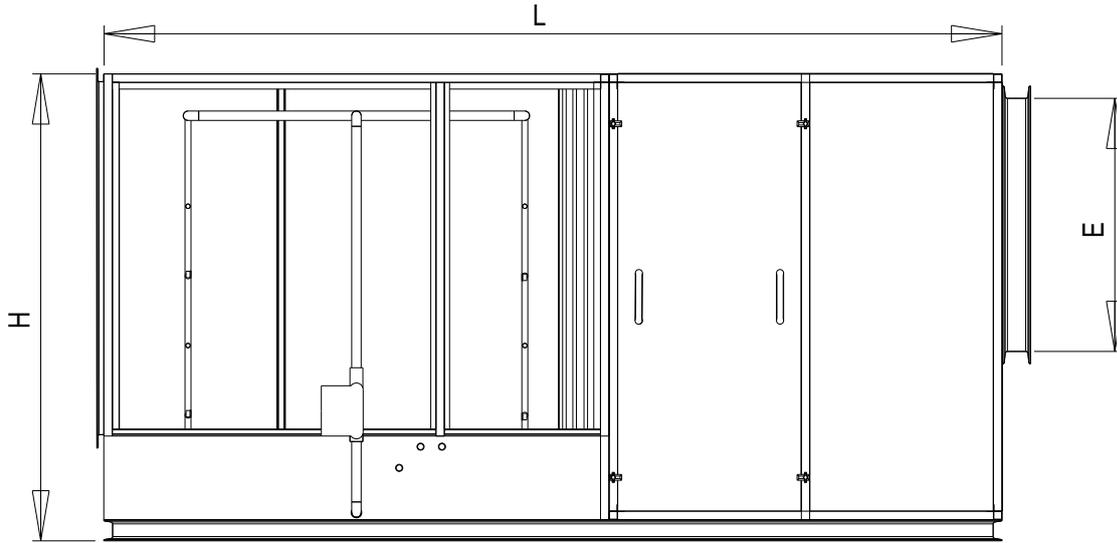


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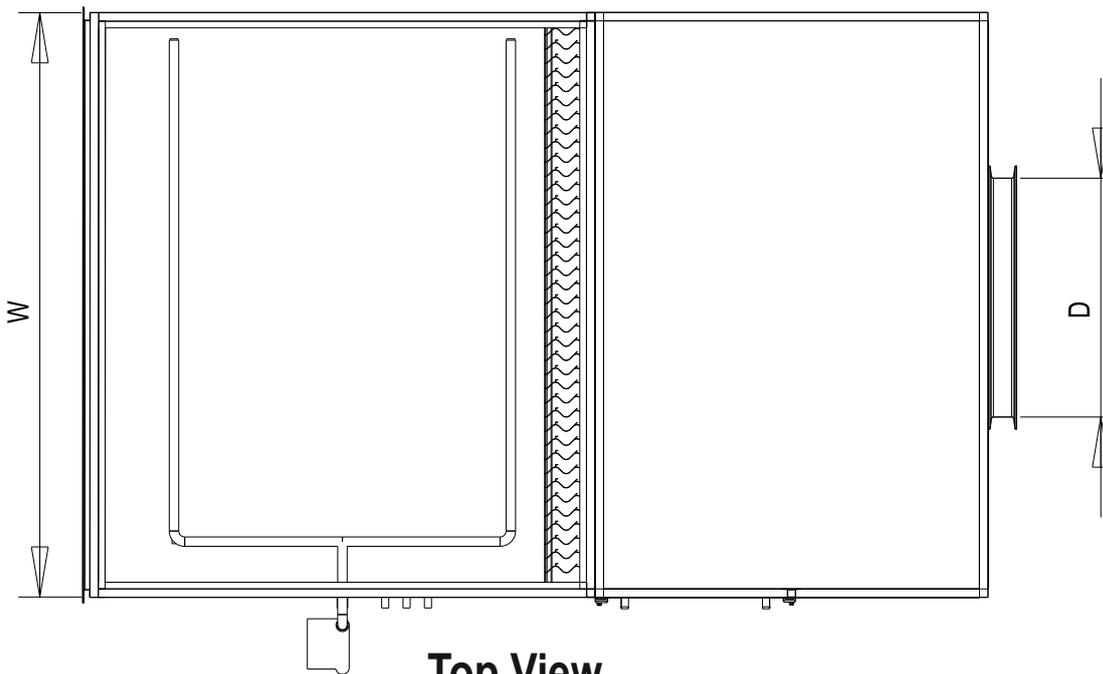
EVAPORATIVE COOLER

Dimensional Data and Construction.

Model : GL-SC-EC



Side View



Top View



Model : GL-SC-EC

Cynor Air washer made in double skin cabinets/housings consist of:-

1. Base-

The total assembly is mounted on a horizontal member of heavy galvanised steel channel with die cast Aluminium Corners for joining them together with lifting holes on all corners.

2. Panels-

The panels are fixed to the rugged frame work made of aluminium section/GI section. The cabinet is airtight using self adhesive tapes and gaskets.

3. Inspection Windows/Doors-

The panels are fixed to the rugged frame work made of aluminium section/GI section. The cabinet is airtight using self adhesive tapes and gaskets.

4. Filters-

The standard pre-filters are made of G.I/ Aluminium construction having efficiency 90% down to 70 micron. Depends on application the fine filters of various efficiencies also can be provided.

5. Cellulose Pad-

The cellulose pads are designed for maximum saturation efficiencies.

6. Water Tank-

The water tank is made of mild steel (MS) or stainless steel (SS) with anti corrosive coating (FRP/EPOXY) and are designed for easy access for periodic cleaning.

7. Pipe & Pipe fittings-

The Pipe and other fittings like gate valve, Y-strainers, float valve are of reputed make.

8. The Fan Motor & Drive set-

The fan & motors are mounted on aluminium section/GI fabricated rails with provision of easy belt tensioning. The complete assembly is mounted on spring/rubber vibration isolators for smooth performance.

The fan is connected to the main casing, using fire and moisture resistant flexible canvas connection, ensuring low operating noise and vibration. The Driver pulleys are taper bushed duly balanced with proper sized 'v' belts.

Accessories

- Intake Louvre with bird screen.
- Fan outlet dampers.
- Fine Filter.
- The Safety switches and indicators.



Model : GL-SC-EC

Standard Construction:

Corner : PVC

Sheet Metal : 24 G,GI Pre-coated
sheet outside.
24 G,GI sheet inside.

Insulation : Puf Insulation CFC Free.

Base : 100 mm C Channel.

Tank : MS/SS

Filter Frame : GI/Aluminium.

Vibration

Isolator : Cushy Foot Mounting.

Fan : Centrifugal Fan-forward
Curved/Backward Curved.

Cooling Media : Cellulose Pad.

Air Discharge : Horizontal/Vertical.

Technical details of air washer with single blower

S.No.	CAPACITY CFM	DIMENSION(mm)			FAN SIZE	STATIC PRESSURE 40 mm			PUMP RATING
		L	W	H		RPM	BHP	HP	
1.	5000	1900	1500	1200	400	792	2.29	3.0	0.25HP
2.	10000	2200	1500	1800	560	573	4.24	7.5	0.5 HP
3.	15000	2450	1800	2100	710	456	6.21	7.5	1.0 HP
4.	20000	2700	2400	2100	800	394	8.81	10	1.0 HP
5.	25000	2900	2550	2400	900	353	10.99	12.5	1.0 HP
6.	30000	3000	3000	2400	1000	318	13.02	15	1.0 HP
7.	35000	3000	3000	2400	1000	318	15.55	20	1.0 HP
8.	40000	3000	3300	2850	1000	324	18.97	20	1.0 HP