

## Indian Standard IS 3315:2024- Direct Evaporative Air Cooler –

A guide to purchase and use Safe and Effective Directive Evaporative cooler (commonly known as Desert Air Cooler)

The Evaporative Air Cooler is being widely used to cool the room air using the principle of evaporative cooling. In the evaporative cooling outside air passed through the wet filter pad and losses their heat due to evaporation of moisture/water present in the filter pad and enters into room with low temperature and creates cooling effect. Due to very low power consumption in comparison of Air Conditioners and not using any refrigerant, it is helping in energy and environment conservation, which may help to maintain Sustainability.

The key parameters to ensure a good quality Air cooler are **Air delivery Capacity, Cooling efficiency, Power Consumption and energy efficiency, Noise level, Quality of Enclosure and cooling pads, Electrical Safety, Life of Fan/Blower, Water Sump Capacity, Robustness of Enclosures and other accessories, Length and quality of connecting cable, quality of operating switches, Quality of pumpset, Important information and Traceability of manufacturer in case of any problem related to quality etc.**

The IS 3315:2024 is addresses all above quality parameters through various provisions, given as below:

Sl.no	Quality Parameter	Clause no.
(a)	Quality of Enclosure	Clause 5.1,5.2
(b)	Water Sump Tank Capacity	Clause 5.3
(c)	Quality and reliability of Fan/Blower	Clause 5.4,8.8
(d)	Quality of water circulating pumpset	Clause 5.5
(e)	Quality and length of connecting cable, Quality of operating switches	Clause 5.6,5.7
(f)	Air Delivery, Noise Level, Power Consumption and Energy Efficiency	Clause 8.1,8.2,8.3,8.4,8.5, 8.6, 9, 10 and 11
(g)	Robustness of Enclosures and other accessories	Clause 8.7 (Drop Test)
(h)	Electrical Safety	Clause 12
(i)	Important information and Traceability of manufacturer in case of any problem related to quality	Clause 15

To ensure the compliance to the above quality parameters products are checked in BIS Laboratory / BIS approved laboratories before Grant of License to a manufacturer. Further during operation of license also products are checked through a robust Surveillance Mechanism, to continue the license.

It is always advisable to buy/purchase BIS standard mark (ISI) marked Evaporative Air Cooler to ensure quality, safety and reliability.