

Will your chiller handle the heat this summer ... ?



Or will extreme temperatures create havoc with nuisance trips and breakdown calls?

Roof temp reaching 45 - 55 °C



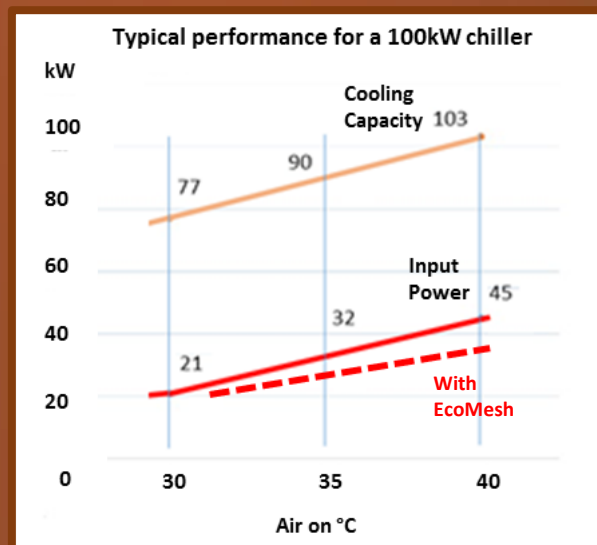
Higher discharge pressure



A spike in input power and head pressure trips

Avoid damaging your coils with direct spraying!

EcoMesh is an economical solution to cool the air on coil, shade from solar radiation, improve HVAC efficiency AND still allow free air flow into the coil when not in use.



Reduce air temperature during high ambient to lower input power by 5-15%

EcoMesh: Periodic water spray to cool air entering the coil

Water sprayed onto mesh for 2 to 10 secs every minute (user adjustable)

Evaporation between spray cycles cools incoming air

Free flowing air has negligible impact on static pressure and fan speed !!

Low water consumption - each mesh panel consumes an average of 40 litres per hour



Average cooling across all coils

Ambient Air On	Average Cooling	Typical Humidity
30	1-3 °C	40%
35	2-5 °C	30%
40	4-7 °C	20%
45	6-10 °C	15%

(Actual cooling will depend on chiller and site characteristics)

Case Study: Emicon chillers in Adelaide, Jan. 17, 2017

At 4 PM, BOM data for Adelaide was 40.3 °C, RH of 9 % and ΔT of 20.3 °C

Actual ambient temperature on rooftop \rightarrow 40 °C

Cooling varies across the coil \rightarrow Middle coils 26.2 °C; Outer coils 32.5 °C

Average EcoMesh cooling across all the coils \rightarrow 10 °C

Mesh efficiency at 40 °C \rightarrow approx. 50% of the ΔT value

EcoMesh Solution

Before: Manually operated soaker hose wetting coil

EcoMesh automatic system installed March, 2016



Emicon Performance Comparison

March 1, 2016
Ambient: 32 °C
No EcoMesh

Site tests: January 17, 2017
Ambient: 40 °C
EcoMesh ON
Air on coil: Middle 26 °C, Outer 32 °C



No EcoMesh, Ambient 32 °C
Discharge pressure ... 21 bar

EcoMesh ON, Ambient 40 °C
Discharge pressure ... 21 bar



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