



**Air<sub>2</sub>O** is the next generation hybrid air conditioning system, utilizing a unique combination of indirect and direct evaporative cooling to achieve **80% energy saving**.

# HYBRID CRS



## HYBRID CRS System Operation

**Air<sub>2</sub>O Hybrid IDEC technology** combines a two stage evaporative cooling solution with an integrated Dx system. Utilizing Air<sub>2</sub>O's equally unique intelligent control system, **ACESS**, automatically responds to external weather conditions, continuously adapting its cooling strategy to run only the most efficient cooling systems for the ambient condition of the moment. This means that the higher energy systems are only used when needed, ensuring consistent performance, **high efficiency and significant energy savings.**

Conditioning the ambient supply air with the indirect coil as the first stage of cooling significantly reduces the size of the evaporator coil, saving energy and increasing efficiency. The condenser coils, located within the heat rejecter section of the unit, ensure the air onto the coil is always pre cooled to the WB temperature of the ambient, dramatically increasing their efficiency when compared to traditional condenser systems.

**The combination of these innovations deliver the highest performing Hybrid Evaporative Cooling system in the world today.**

- ❑ Up to 130% Wet Bulb Efficiency (70% Dew Point Efficiency).
- ❑ Double wall insulated construction.
- ❑ Integral Automated Control / ACESS system BACnet optional.
- ❑ Single Point Power Connection, Single Point Water Supply Connection, Single Point Drain Connection.
- ❑ Automatic Water Quality Management System.
- ❑ Supply Air Section:
  - Intake filters.
  - High Efficiency Direct drive supply fan c/w VFD.
  - Indirect Cooling Coil & Pump.
  - DX Cooling Coil.
  - Direct Evaporative Cooling Pads c/w Stainlessump & circ pump.
  - Mixing box option available.
- ❑ Indirect Heat Rejection Section:
  - Evaporative Cooling Pads c/w Stainlessump.
  - Condenser Coil & R410A Scroll Compressor.
  - Direct drive heat rejection fan.
- ❑ Gas Heating Option Available.

	Volume (CFM)	Volume (m <sup>3</sup> /s)	Volume (m <sup>3</sup> /h)	Cooling Capacity* Room (Ton)	Cooling Capacity* Nominal (Ton)
H-CRS-2500	2500	1.18	4230	10	17
H-CRS-5000	5000	2.35	8460	20	34
H-CRS-7500	7500	3.53	12690	30	51
H-CRS-10000	10000	4.70	16920	40	68
H-CRS-12500	12500	5.88	21150	50	85
H-CRS-15000	15000	7.05	25380	60	102
H-CRS-20000	20000	9.40	33840	70	119
H-CRS-25000	25000	11.75	42300	80	136
H-CRS-30000	30000	14.10	50760	90	153
H-CRS-35000	35000	16.45	59220	100	170
H-CRS-40000	40000	18.80	67680	110	187
H-CRS-45000	45000	21.15	76140	120	204
H-CRS-50000	50000	23.50	84600	130	221

\*Cooling capacity measured considering outdoor conditions 100°F (37°C) DBT and 70°F (21°C) WBT - Room Temperature 78°F (25°C).

