Munters

Munters CoVAP®

Adiabatic evaporative pre-cooling system

Munters CoVAP adiabatic evaporative pre-cooling system increases the cooling efficiency of air-cooled condensers, cO2 gas coolers, and fluid coolers while significantly reducing the energy consumption of the refrigeration system. The CoVAP system is designed to provide a quick and repeatable retrofit solution for transforming a standard air-cooled system into a adiabatic evaporative hybrid design.

Advantages

- Reduces energy consumption
- Prolongs compressor life
- Eliminates service calls associated with high head pressure
- Average ROI less than 20 operational months

Each CoVAP system is equipped with a programmable logic controller that will activate the unit as climate conditions warrant (these "activation" conditions are determined by the needs of each end user's application). CoVAP operates by trickling water down Munters' direct evaporative cooling media, CELdek[®] with MI-T-edge[™], while the condenser fan is pulling air through the flutes of the media, resulting in cooled air which is then delivered to the air-cooled condenser/gas cooler/fluid cooler.



Patented modular "by-fan-bank" design concept has one CoVAP per condenser fan.



Multiple condensers require multiple CoVAP units (one CoVAP unit per condenser fan).



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The CoVap Direct Evaporative Cooling System is designed to reduce the refrigeration system's head pressure during high ambient conditions. Traditional solutions to mitigate existing high head pressure issues, such as sprinkling/misting, decrease the service life of the condenser, increase labor costs, and generate a significant cost in water usage. CoVAP eliminates all of these issues while reducing the refrigeration system's energy consumption.

Designed as the ultimate retrofit pre-cooling system, CoVAP accommodates applications for all North American manufacturers of horizontally configured air-cooled condensers, gas cooler and fluid cooling designs. Operations will immediately realize significant EER (Energy Efficiency Rating) benefits after installing a CoVAP retrofit system. Modules are designed to accommodate a simple retrofit solution providing a quick return on investment of 20 months or less. Munters patented CELdek® evaporative cooling media with MI-T-edge" protective coating Corrosion resistant, long-lasting galvalume body

Patented direct evaporative cooling module with plenum allows for simple installation.

Direct evaporative cooling module with optional Munters filter screen keeps condenser coils clean.

Before



After





Adiabatic evaporative pre-cooling system





	Weights (lbs)		Maltana
	Dry	Wet	voltage
CoVAP module	164	228	12 VDC
IntelliVAP panel	34	•	115 VAC
Transformer	23	•	115 VAC
Plumbing assembly	24	•	24 VAC

