

DRYCOOL™ ERV

Desiccant Dehumidifier



Product Description & Advantages

The Munters DryCool™ ERV product combines the benefits of desiccant dehumidification with total energy recovery. The unit supplies 100% make up air utilizing energy recovery from the exhaust air stream. Packaged direct expansion cooling is included to provide a complete conditioning system. The unit provides space neutral leaving temperature. Dehumidification capacity is controlled by a space humidistat.

The DryCool™ ERV's unique desiccant dehumidification process is the most efficient dehumidification method commercially available. It eliminates the inefficient over cool reheat process utilized by the vast majority of dehumidifiers. It also allows for the cooling coil to operate at higher temperatures, increasing refrigeration efficiency and eliminating coil freezing concerns. The result is a very efficient dehumidification cycle that can provide lower delivered dew points.

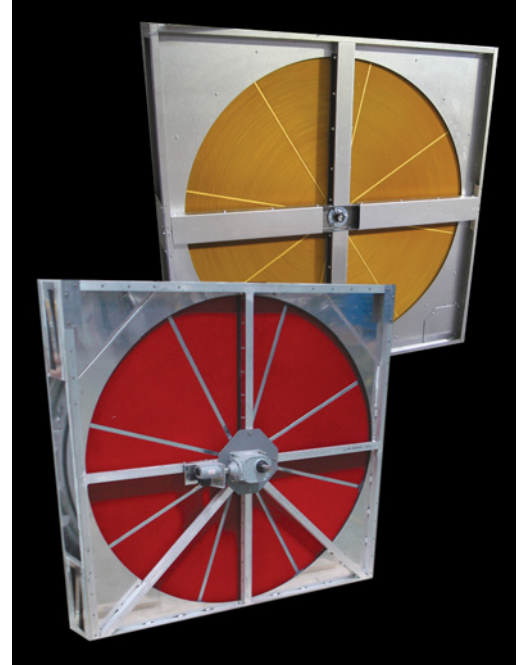
The addition of enthalpy energy recovery to this dehumidification system provides for reduced heating and cooling requirements in the treatment of the delivered outside air. The resultant heating and cooling requirements are significantly lower than otherwise required.

The system includes a direct expansion refrigeration system with cooling coil, integrated condensing package, desiccant wheel, enthalpy wheel, supply fan, and exhaust fan. Heating options include indirect fired gas, electric resistance, hot water, and steam.

The system controls humidity in the space and has optional night setback and remote monitoring. The units can be installed indoor or outdoor with no requirement for split system conditioning, chilled water or condenser water. System sizes range from 1,000 to 16,000 cfm.

PRODUCT INFORMATION

DRYCOOL™ ERV



BENEFITS

- Energy efficient
- Delivers low dew point
- Energy recovery in winter
- Provides make up air
- Avoids cool – reheat
- Dry, healthy duct work
- Increases cooling COP

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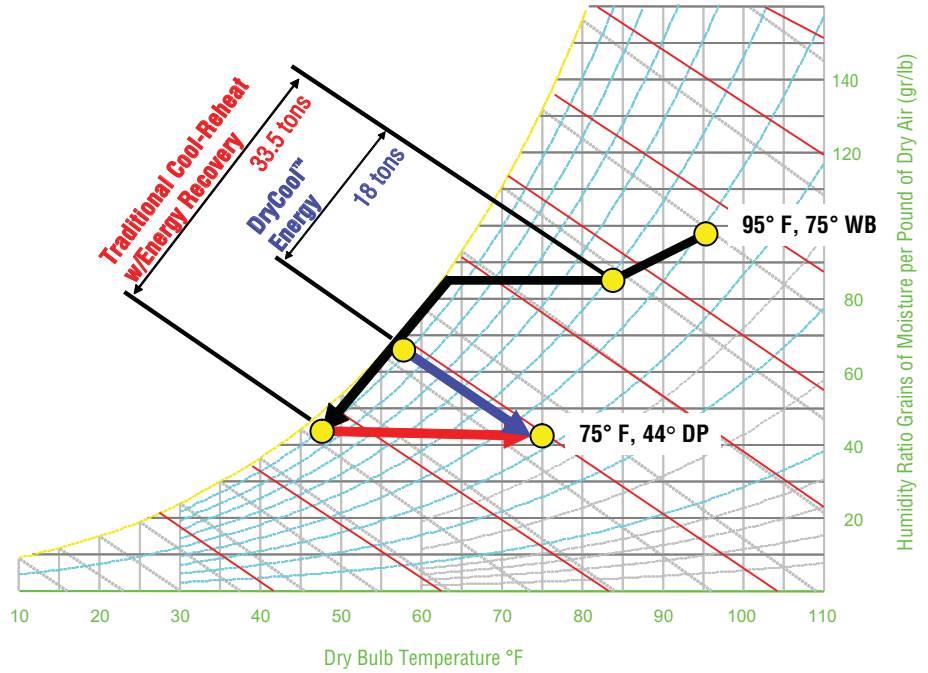
Standard Features

- 100% makeup air operation
- R-410a refrigerant
- CoGel desiccant wheel
- Molecular sieve enthalpy wheel
- Scroll compressors
- Galvalume foam injected double wall construction
- Supply and exhaust fans
- Humidistat controlled
- ETL Listed

Unit Options

- Unoccupied mode/Night setback
- Corrosion resistant coatings
- Gas, electric, hot water, steam heat
- BMS interface
- Extended service plans

The Most Efficient Dedicated Outdoor Air System DryCool™ ERV 6000 Operating Example



6000 cfm entering at 95°F db, 75°F wb, the DryCool™ ERV uses 18 tons to deliver 75°F db at 44°F dp
Traditional cool-reheat with energy recovery uses 33.5 tons to deliver the same conditions

Technical Specifications

Unit	2508	3010	4012	4714	5416	6018	7020	8024	1026	1230	1440	1648
Nominal CFM	2,500	3,000	4,000	4,700	5,400	6,000	7,000	8,000	10,000	12,000	14,000	16,000
Compressor Tons	8	10	12	14	16	18	20	24	26	30	40	48
Total Capacity	172,688	207,225	276,300	324,653	373,005	414,450	483,525	552,600	632,400	734,458	967,050	1,105,200
Latent Capacity	121,388	145,665	194,220	228,209	262,197	291,330	339,885	388,440	441,582	513,976	679,770	776,880
Sensible Capacity	51,300	61,560	82,080	96,444	110,808	123,120	143,640	164,160	190,818	220,482	287,280	328,320
Leaving Conditions	Approximately 76°Fdb, 59.5°F wb, 48°F dp, 50 gr/lb **											
Dimensions (LxWxH)	188x81x57	188x81x57	188x81x72	218x96x72	218x96x72	218x96x72	249x96x88	249x96x88	341x127x102	341x127x102	341x127x102	341x127x102
Weight +/- 10%	4,200	4,200	5,300	7,300	7,300	7,300	8,250	8,250	12,700	12,700	15,500	15,500

* Does not include post heat options

** Leaving conditions are based on 95°Fdb, 78°F wb entering, 75°F, 50% rh exhaust condition



Munters Corporation

Protected by one or more of the following U.S. Patents.
5435958; 5505769; 5423934; 5500402; 6375914; 6557365;
6622508; 6711907; 6875299; 7047751.

U.S. and worldwide Patents Pending.

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