

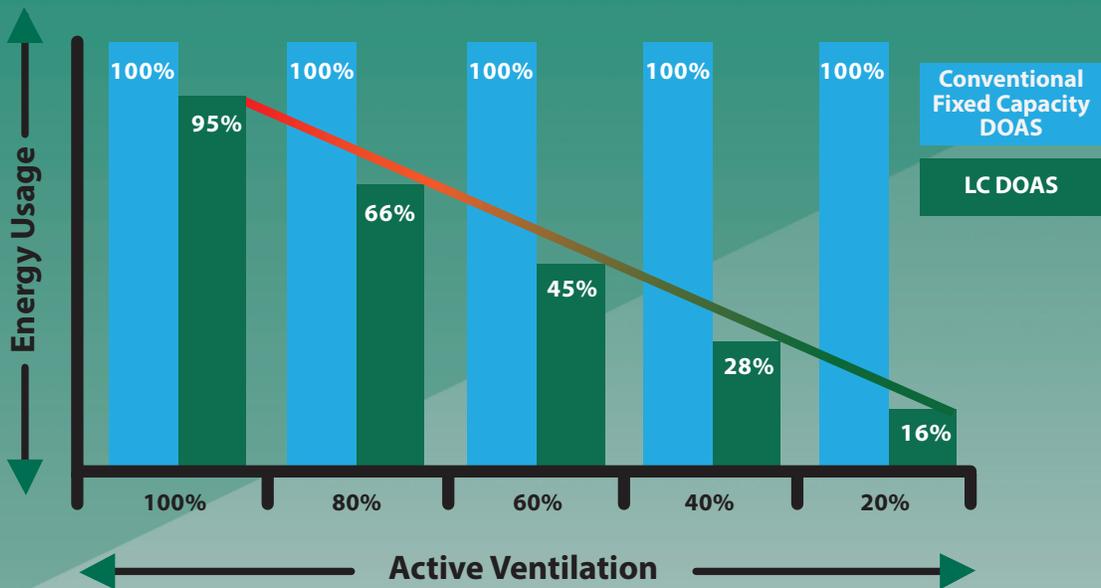
LC Linear Capacity™

DEDICATED OUTDOOR AIR SYSTEM



Application Range from
300 - 7,500 CFM of Outdoor Air

Greater Than 50% Energy Savings* Versus Conventional Fixed Capacity DOAS



*Source: Florida Solar Energy Center®, Report FSEC-CR-2044-16.

ADDISON®

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Innovative ventilation technology that simultaneously delivers breakthrough energy efficiency, indoor air quality and comfort

Linear Capacity™, equipped with a geometrically varying exposure device (Active Coil Exposure™), allows only the active evaporator coils to be exposed to the air flow path. Ventilation can be scheduled to meet demand in different zones based on occupancy levels throughout the ambient operating range.

ADVANTAGES

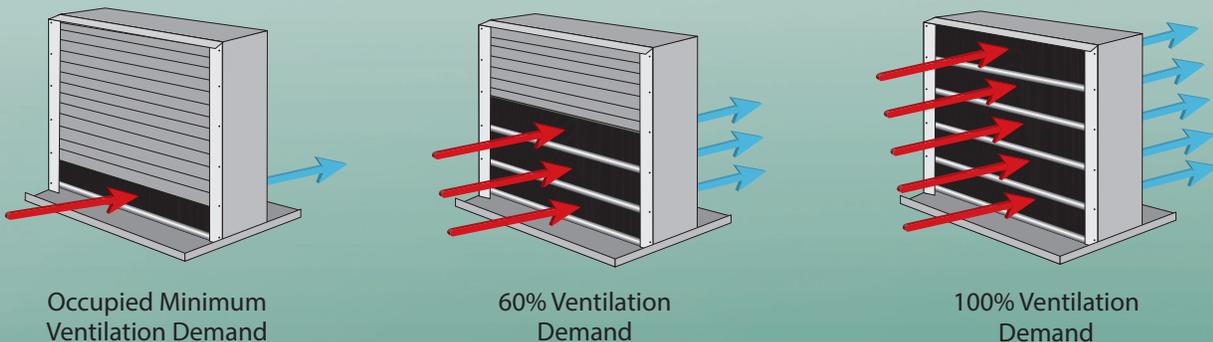
- ▶ Greater than 50% reduction in energy cost versus conventional fixed capacity DOAS
- ▶ Optimized linear performance from 100% down to 20% of ventilation load
- ▶ Active ventilation is adaptable for IAQA flush-out per LEED EQc4
- ▶ Enhanced IAQ by managing moisture content of the outdoor air throughout the ventilation range
- ▶ Demand based ventilation through Active Coil Exposure™, variable refrigerant capacity and air flow modulation
- ▶ Optimal for both retrofit and new construction
 - ▶ Based on building occupancy, activity and/or desired VOC levels
 - ▶ Configurable for current or future tenant build out



LINEAR CAPACITY™ OPERATION

- ▶ During Occupied Mode supply fan modulates to meet the ventilation demand
- ▶ Active Coil Exposure™ positions to maintain designed leaving dew point
- ▶ Based on cooling demand, brushless permanent magnet variable speed scroll compressor modulates to meet required refrigerant mass flow
- ▶ Modulating condenser fans maintain precise head pressure control throughout the entire operating range
- ▶ Integrated controls platform provides demand based ventilation through Active Coil Exposure™, variable refrigerant capacity and air flow modulation

ACTIVE COIL EXPOSURE™ MAINTAINS LEAVING DEWPOINT



PHYSICAL DATA

MODEL	NOMINAL CAPACITY (TON)	NOMINAL AIRFLOW CFM (MIN-MAX) ¹		DIMENSIONS (L X W X H) ²
		OA Condition 95°/78°	OA Condition 90°/74°	
120	10	300 - 1,500	500 - 2,500	126 5/8" x 77 3/8" x 66 3/8"
180	15	460 - 2,300	750 - 3,750	180 7/8" x 87 1/8" x 80 3/4"
240	20	660 - 3,300	1,000 - 5,000	180 7/8" x 87 1/8" x 80 3/4"
300	25	800 - 4,000	1,250 - 6,250	254 1/8" x 89 5/8" x 91"
360	30	1,000 - 5,000	1,500 - 7,500	254 1/8" x 89 5/8" x 91"

¹ Maximum airflow at 95°/78° design, with 52° leaving dew point or lower and maximum airflow at 90°/74° design, with 52° leaving dew point or lower.

² Dimensions do not include the OA hoods

CONTROL STRATEGIES

- ▶ Unit controller allows multiple functions based on zone and building occupancy
- ▶ Schedule-based DCV
- ▶ Zone ventilation based on occupancy with CO2 level override
- ▶ Combination schedule & CO2 DCV
- ▶ Volatile Organic Compounds (VOC) DCV
 - ▶ Paints and Coating
 - ▶ Carpets
 - ▶ Cleaning Agents
 - ▶ Formaldehyde
- ▶ DPT controlled DCV
- ▶ Communication interface with BACnet, Modbus, N2 and LonWorks

OPTIONS

- ▶ Horizontal airflow configuration
- ▶ Liquid sub-cooling coil, switchable
- ▶ Modulating gas or electric heat
- ▶ Plenum supply fan with EC motor
- ▶ Corrosion protection for entire cabinet, components and coils
- ▶ Convenience outlet
- ▶ Disconnects
- ▶ Filters
 - ▶ 2", 4" or 2" + 4" MERV 8, 11 or 14
 - ▶ 2" Metal mesh

FEATURES AND BENEFITS



2" double wall construction, R-13 closed cell foam insulation with thermal break hinged access doors and easy access to all components

BI plenum supply fan with integral variable speed control and air flow measurement



Integrated control platform provides seamless communication to BMS



Individual electronic expansion valves (EXV) for each coil segment allows for control of refrigerant while maintaining leaving air temperature



Active Coil Exposure™ with laser positioning system



Brushless permanent magnet variable speed scroll compressor



Variable speed EC condenser fans with sickle blade and acoustical design



Variable frequency drive (VFD) for precise modulating control



MARKET APPLICATIONS

EDUCATION



THEATERS



OFFICES



LABS



HEALTH CARE



FITNESS CENTERS



HOSPITALITY



MUSEUMS



... AND MANY MORE



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