

## BENEFITS

### Highest efficiency system

- Economizer system with mechanical PUE as low as 1.05
- 26-53% higher SCOP at full load than ASHRAE 90.1 standard
- Variable capacity system matches IT load and optimizes energy consumption at partial loads

### State-of-the-art mechanical components

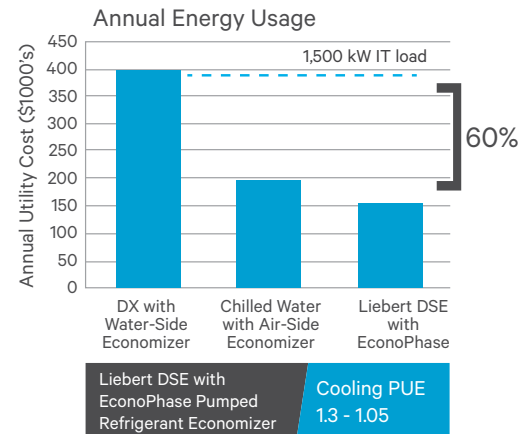
- Variable-capacity Digital Scroll compressors and variable-speed direct-drive EC fans controlled to match IT load and provide high efficiency operation at partial load conditions
- Electronic expansion valves increase DX efficiency at lower ambient temperatures
- Industry-first, EconoPhase™ pumped refrigerant economizer
- Liebert MC™ condenser with advanced controls and variable speed components

### First ever pumped refrigerant economizer

- No water and no water treatment
- No outside air contamination, and no dampers and louvers to maintain
- Instant changeover to economizer mode, even for short time periods

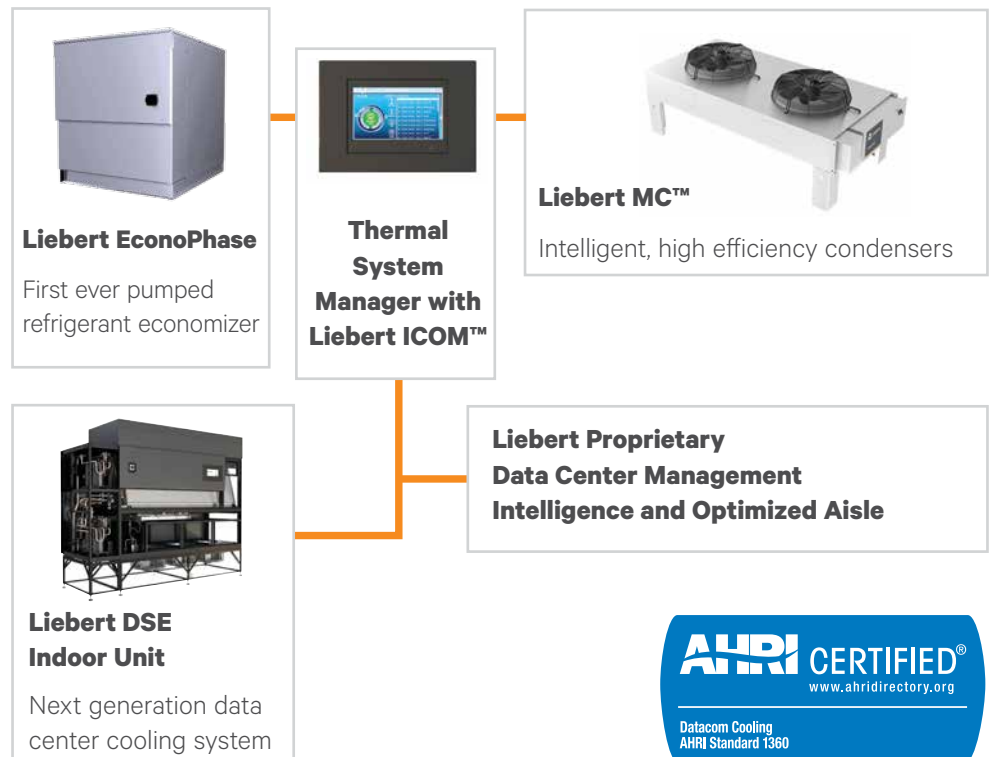
## The Liebert® DSE provides free-cooling economization without using water.

- Highest efficiency system with state of the art mechanical components
- First ever pumped refrigerant economizer - highest efficiency, hassle-free
- Next generation Liebert ICOM™ system controls with auto-economization mode-switching



## Next Generation Liebert iCOM System Controls

- Seamless, automatic changeover between DX mode and economizer mode
- Constantly monitors load, room and outdoor conditions to adjust system operation to most efficient operating mode
- Mechanical systems networked together to optimize component performance and increase system reliability



## Liebert® DSE™ performance and dimensional data

DA125 EFFICIENCY PERFORMANCE			
Cooling Mode	Outdoor Temp	Cooling PUE	SCOP kW/kW
Full Compressor	95°F	1.28	3.6
Partial EconoPhase™	65°F	1.17	5.9
Full EconoPhase	45°F	1.09	11.1
Full EconoPhase	< 30°F	1.05	18.6

Based on 85 °F return air, 80% load

### Technical data

		MODEL					
		DA050	DA080	DA085	DA125	DA150	DA165
95°F DB, 52.3 DP	Total Capacity kW (net)	55	88	100	146	170	181
	Sensible Capacity kW (net)	55	84	94	146	170	181
	Full-load SCOP @ 95°F ambient	2.9	3.2	3.1	3.8	3.2	3.2
	SCOP @ 35°F ambient (kW/kW)*	10.1	10.5	10.1	17.5	13.0	13.0
85°F DB, 52.3 DP	Total Capacity kW (net)	50	85	92	130	153	163
	Sensible Capacity kW (net)	50	77	83	130	153	162
	Full-load SCOP @ 95°F ambient	2.7	3	2.7	3.4	2.9	2.9
	SCOP @ 35°F ambient (kW/kW)*	8.6	9.1	8.7	12.2	12.0	12.0

\*Economizer mode operating at 100% of DX capacity

Note: Capacity data is rated and factory-certified per ASHRAE 127-2012 with a 5% tolerance



BASIC DIMENSIONS			
Model	Length (A)	Width (B)	Height (C)
DA050	77"	35"	76"
DA080	100"	35"	76"
DA085	100"	35"	76"
DA125	144"	47"	76**
DA150	144"	47"	76**
DA165	144"	47"	76"

\*\*Add minimum 18" height for separate filter plenum, plus floorstand height