Liebert® MCTM Microchannel Coil Condenser High Efficiency, Quiet Operation Air Cooled Condenser







The Liebert® MC™ Microchannel Coil Condenser Efficient, Quiet Air Cooled Condenser

As IT budgets constrict, data center managers require new, higher levels of energy efficiency to provide the innovations and technologies that today's critical business needs demand.

The Liebert MC Condenser from Emerson Network Power is an air-cooled condenser designed to deliver energy efficiency. With an exclusive microchannel coil design, this condenser offers a highly efficient, system-matched heat rejection solution that reduces energy costs and operational expenses.

The Liebert MC Condenser:

- Improves unit and system efficiency at full and partial loads
- Increases condenser full load energy efficiency by 30-50%
- Reduces refrigerant volumes and decreases refrigerant charge levels in matched condensers – by more than 50% on condensers without flooded receiver systems and more than 20% on condensers equipped with flooded receiver systems
- Is compatible with Copeland® Digital Scroll™ Technology compressors

Lowest Total Cost of Ownership:

- Electrically Commutated (EC) Fans reduce annual condenser energy requirements 50-95% over traditional condensers
- Liebert MC condenser reduces annual energy requirements of Computer Room Air Conditioning (CRAC) systems by 5-10% (15-25% for flooded receiver systems)
- Reduced refrigerant requirements lower installation cost
- Microchannel coil provides enhanced energy efficiency and 20-50% lighter installed weight

Ideally Suited For Use With:

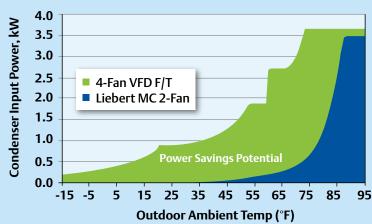
- Liebert CRV™
- Liebert Challenger™ 3000
- Liebert DS™
- Liebert DSE™

Liebert MC Condenser Energy Savings – Reduced Operating Expenses

Liebert MC condenser operates with higher efficiency than fin and tube condensers, with an annual savings of up to 85%. The savings are even greater when the flooded receiver system winter operation option is applied.

Standard Ambient Systems

30 Ton Liebert DS @ 100% Load



Low Ambient Systems (Flooded Receiver)

30 Ton Liebert DS @ 100% Load 4.5 Condenser Input Power, kW 4.0 3.5 4-Fan F/T with Receivers 3.0 Liebert MC 2-Fan with Receivers 2.5 2.0 1.5 1.0 **Power Savings Potential** 0.5 -15 -5 5 15 25 35 45 55 65 75 85 95 Outdoor Ambient Temp (°F)

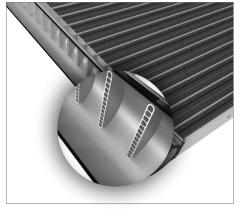


Flexibility:

- Multiple voltage configurations available to match electrical needs
- 2.5 -5.5 dBA lower sound level than alternative condensers, allowing installation in regulated environments
- Condenser is compatible with R-410A, R-407C and R-22 refrigerants
- Quietline mode of operation automatically controlled by the Liebert® iCOM™ indoor unit to operate fans at reduced speeds resulting in reduced sound levels

Higher Availability:

- Liebert iCOM from indoor cooling system to condenser communications improve condenser control, and offer enhanced monitoring capability both at the Liebert iCOM local display and at a BMS interface
- Highly reliable and efficient fan motor and controls
- Helps systems meet government energy efficiency standards, seismic and wind load regulations to IBC2007, and OSHPD compliance
- Industry's largest factory-trained service organization provides scheduled maintenance, 24 x 7 support, local parts, and an average 4 hour response time for service



Microchannel Aluminum Coils

The Liebert MC™ Condenser leverages cutting-edge technologies such as a microchannel coil and EC fans, to deliver unmatched levels of operational efficiency.



Liebert MC is compatible with indoor cooling units equipped with Copeland® Digital Scroll™ Technology compressors and Liebert iCOM controls, allowing variable speed operation for cooling efficiency and reduced operating costs.

Liebert MC Condenser – Technical Specifications

Liebert MC model	Refrigerant type	# of Fans	Refrigerant Charge, lb	Liebert MC Sound Pressure, dBA	Weight, lb
MCS028	R-407C or R-410A	1	2.5	60	154
MCS056		2	5	63	288
MCM040		1	3.5	65	231
MCM080		2	8.5	68	441
MCM160		4	17	71	860
MCL055		1	5	68	344
MCL110		2	10	71	602
MCL165		3	Liebert DSE Only	73	891
MCL220		4	25	74	1186

Note: Standard (Non flooded receiver systems), Sound @ 10'

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