Precision Cooling for
Business-Critical Continuity™

Liebert® HPC-S

Designed for the Efficient Cooling of Small Data Centers

EMERSON
Network Power

Liebert® HPC-S: Enhanced Efficiency Freecooling Chiller

Higher energy costs, limited resources and increasing regulatory measures are driving organizations to operate more efficiently.

The Liebert® HPC-S freecooling chiller meets today's demands by enabling businesses to operate with confidence and more efficiently while ensuring the continuous availability of IT infrastructure.

Liebert® HPC-S delivers energy savings of up to 55% and comes complete with a control system which uses the best electronic technology, EC Fans and an electronic thermostatic valve allowing customers to efficiently meet their business goals regardless of the dimensions of their data center.

Liebert® HPC-S Features:

Standard options

- Electronic expansion valve
- Water flow switch
- Double set point
- Shifting set point
- Auto Delta T setting
- Advanced low condensing pressure control
- Intelligent fan control based on external temperature or time-frame
- Remote on/off relay
- Voltage free contact:
  - chiller/pump operation
  - compressor operation
  - general alarm
  - general warning
  - freecooling status (configurable)
- EC Fans (on "G" model)

Additional options

- *"Soft starter"* starting mode
- Built-in pump group - Inverter pumps
- Hydraulic kit
- Double power supply and Fast Start Ramp
- Evaporator-pipe-pump trace heating
- No-Glycol
- Heat recovery
- Electrical panel heaters
- Condensing coil filters
- Compressor power factor correction
- Anti vibration mounting kit (rubber or spring)
- Monitoring: web card, Modbus card, Liebert® SiteScan card
- BMS communication: Modbus, BACnet, Lon Works, SNMP

SCROLL COMPRESSOR
Liebert® HPC-S is equipped with scroll compressors to improve efficiency and reliability of performance.

FAST START RAMP
Liebert® HPC-S, Fast Start Ramp ensures full restoration of chiller capacity after 100 seconds from power re-start.

HIGH EFFICIENCY
Maximized efficiency, even when working in tropical environments. Up to 60% energy saving with Liebert® HPC-S "G" model.

EXTREMELY LOW NOISE
Audible noise is reduced to a minimum as a result of HyBlade EC Fans and special acoustic insulation.

iCOM
Advanced unit and teamwork control to maximize energy efficiency. It operates at extreme ambient and water temperature conditions.

FREECOOLING
Integrated freecooling section, delivers additional energy savings and greater reliability.

REFRIGERANT
Optimized for R410A refrigerant.

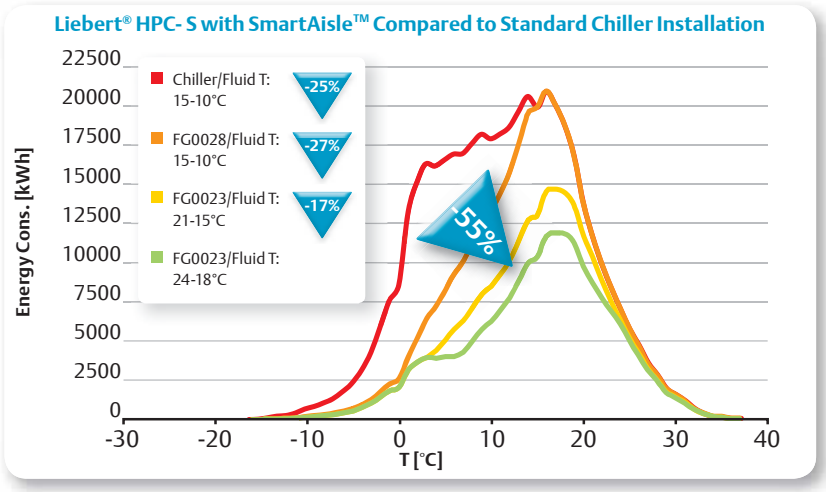
EC FANS
High efficiency motors guarantee a 25% reduction in energy consumption compared to traditional AC motors.

ELECTRONIC EXPANSION VALVE
Stability and efficiency guaranteed in all conditions.

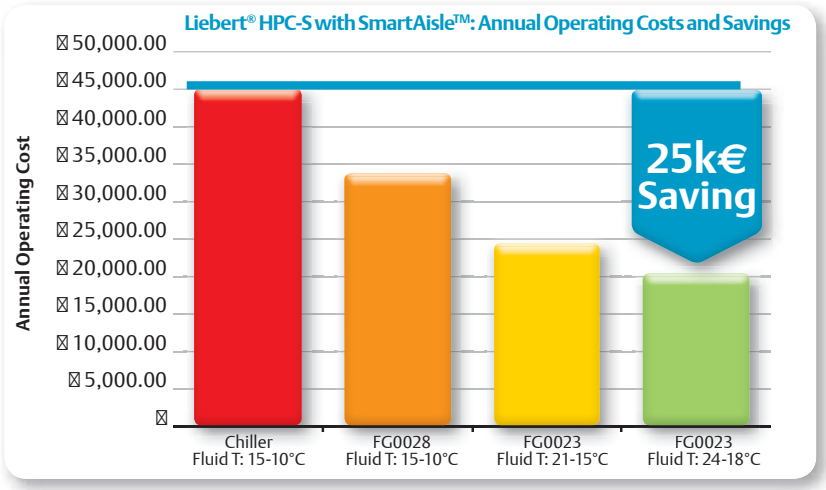
Liebert® HPC-S delivers up to 55% in energy savings and comes complete with the best electronic technology.

Liebert® HPC-S: Achieve Business Goals Respecting The Environment

Today, environmental responsibility is becoming increasingly fundamental for many organizations.
Liebert® HPC-S guarantees our customers increased efficiency while reducing environmental impact and allowing them to meet their business goals successfully. Furthermore Liebert HPC-S has the flexibility of working in freecooling mode by exploiting the external environment conditions to cool water rather than cooling the compressors, a method significantly increasing energy savings. In addition, the chiller's iCOM controls the fan, compressor and regulation valve components whilst operating modes, mechanical and/or freecooling, together with the compressors' continuous modulation, ensure energy savings up to 55% in yearly operations.



Frankfurt profile 250 kW Load



Energy cost considered is € 0.1/kWh

Liebert® HPC-S Range — *Freecooling Aircooled Scroll Chiller*

G Model		FG0017	FG0020	FG0023	FG0025	FG0028	FG0030
High Efficiency Configuration							
Cooling Capacity[1]	kW	171.8	189.4	224.4	242.7	281.5	312.9
Freecooling Capacity[2]	kW	105.5	102.1	139.6	134.6	179.5	173.5
Total Power Input[1]	kW	59.1	67.3	76.8	84.8	95.2	108.4
Unit EER[1]	---	2.91	2.81	2,92	2.86	2.96	2.89
SPL (Sound Pressure Level)[3]	dB(A)	78.5	78.5	79	79	79.5	79.5
PWL (Sound Power Level)[4]	dB(A)	97.5	97.5	98.5	98.5	99.5	99.5
Quiet Configuration							
Cooling Capacity[1]	kW	157.7	174.4	206.8	224.7	259.5	288.5
Freecooling Capacity[2]	kW	81.2	81.4	107.6	107.6	137.7	137.9
Total Power Input[1]	kW	59.5	69.2	77.1	86.1	95.6	110.5
Unit EER[1]	---	2.65	2.52	2.68	2.61	2.71	2.61
SPL (Sound Pressure Level)[3]	dB(A)	65	65	65.5	65.5	66	66
PWL (Sound Power Level)[4]	dB(A)	84	84	85	85	86	86
Dimensions	mm	3750x1300x2500		4750x1300x2499		5750x1300x2499	

B Model		FB0017	FB0020	FB0023	FB0025	FB0028	FB0030	FB0032
Base Configuration								
Cooling Capacity[1]	kW	168.5	183.6	209.8	235.8	268.0	303.6	341.1
Freecooling Capacity[2]	kW	98.8	101.0	100.0	133.1	132.1	171.6	169.3
Total Power Input[1]	kW	59.5	69.3	80.0	86.9	97.4	111.3	125.6
Unit EER[1]	---	2.83	2.65	2.62	2.71	2.75	2.73	2.72
SPL (Sound Pressure Level)[3]	dB(A)	76	76	76	76.5	76.5	77	77
PWL (Sound Power Level)[4]	dB(A)	95	95	95	96	96	97	97
Low Noise Configuration								
Cooling Capacity[1]	kW	165.5	179.9	205.5	231.1	262.7	297.4	334.5
Freecooling Capacity[2]	kW	93.0	94.7	94.9	125.1	125.4	160.8	160.4
Total Power Input[1]	kW	59.0	69.3	80.1	86.7	97.3	111.2	125.8
Unit EER[1]	---	2.80	2.59	2.56	2.66	2.70	2.67	2.66
SPL (Sound Pressure Level)[3]	dB(A)	70.5	70.5	70.5	71	71	71.5	71.5
PWL (Sound Power Level)[4]	dB(A)	89.5	89.5	89.5	90.5	90.5	91.5	91.5
Dimensions	mm	3750x1300x2500			4750x1300x2500		5750x1300x2500	

1 At the following standard conditions: power supply 400V/3ph/50Hz; outdoor temperature 35°C; water inlet/outlet temperature 15/10°C; ethylene glycol 30%
2 At the following standard conditions: power supply 400V/3ph/50Hz; outdoor temperature 5°C; coolant inlet temperature 15°C; ethylene glycol 30%
3 Measured at outdoor temperature of 35 °C; 1m from the unit; free field conditions; according to ISO 3744
4 At outdoor temperature of 35°C; calculated according to ISO 3744

Liebert® HPC-S Range — *Aircooled Scroll Chiller*

G Model		CG0017	CG0020	CG0023	CG0025	CG0028	CG0030
High Efficiency Configuration							
Cooling Capacity[1]	kW	165.7	185.5	216.4	237.2	270.8	305.9
Total Power Input[1]	kW	56.9	63.7	74.1	80.5	91.8	102.8
Unit EER[1]	---	2.91	2.91	2.92	2.95	2.95	2.98
SPL (Sound Pressure Level)[2]	dB(A)	78.5	78.5	79	79	79.5	79.5
PWL (Sound Power Level)[3]	dB(A)	97.5	97.5	98.5	98.5	99.5	99.5
Quiet Configuration							
Cooling Capacity[1]	kW	153.2	170.1	200.8	218.8	251.3	281.1
Total Power Input[1]	kW	56.8	65.6	73.7	81.8	91.3	105.0
Unit EER[1]	---	2.70	2.59	2.72	2.67	2.75	2.68
SPL (Sound Pressure Level)[2]	dB(A)	65	65	65.5	65.5	66	66
PWL (Sound Power Level)[3]	dB(A)	84	84	85	85	86	86
Dimensions	mm	3750x1300x2500		4750x1300x2499		5750x1300x2499	

B Model		CB0017	CB0020	CB0023	CB0025	CB0028	CB0030	CB0032
Base Configuration								
Cooling Capacity[1]	kW	163.3	178.5	205.8	228.9	261.4	294.6	333.6
Total Power Input[1]	kW	57.0	66.1	75.5	83.2	92.2	106.5	118.6
Unit EER[1]	---	2.86	2.70	2.72	2.75	2.83	2.77	2.81
SPL (Sound Pressure Level)[2]	dB(A)	76	76	76	76.5	76.5	77	77
PWL (Sound Power Level)[3]	dB(A)	95	95	95	96	96	97	97
Low Noise Configuration								
Cooling Capacity[1]	kW	159.9	174.4	200.5	224.0	255.4	287.9	325.4
Total Power Input[1]	kW	56.7	66.3	76.1	83.2	92.6	106.5	119.3
Unit EER[1]	---	2.82	2.63	2.63	2.69	2.76	2.70	2.73
SPL (Sound Pressure Level)[2]	dB(A)	70.5	70.5	70.5	71	71	71.5	71.5
PWL (Sound Power Level)[3]	dB(A)	89.5	89.5	89.5	90.5	90.5	91.5	91.5
Dimensions	mm	3750x1300x2500			4750x1300x2500		5750x1300x2500	

1 At the following standard conditions: power supply 400V/3ph/50Hz; outdoor temperature 35°C; water inlet/outlet temperature 12/7 °C; ethylene glycol 0%
2 Measured at outdoor temperature of 35 °C; 1m from the unit; free field conditions; according to ISO 3744
3 At outdoor temperature of 35°C; calculated according to ISO 3744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Ensuring The High Availability Of Mission-Critical Data And Applications.

About Emerson Network Power

Emerson Network Power, a business of Emerson (NYSE:EMR), delivers software, hardware and services that maximize availability, capacity and efficiency for data centers, healthcare and industrial facilities. A trusted industry leader in smart infrastructure technologies, Emerson Network Power provides innovative data center infrastructure management solutions that bridge the gap between IT and facility management and deliver efficiency and uncompromised availability regardless of capacity demands. Our solutions are supported globally by local Emerson Network Power service technicians.

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Emerson Network Power

The global leader in enabling Business-Critical Continuity™

- AC Power
- Connectivity
- DC Power
- Embedded Computing
- Embedded Power
- Infrastructure Management & Monitoring
- Outside Plant
- Power Switching & Controls
- Precision Cooling
- Racks & Integrated Cabinets
- Services
- Surge Protection