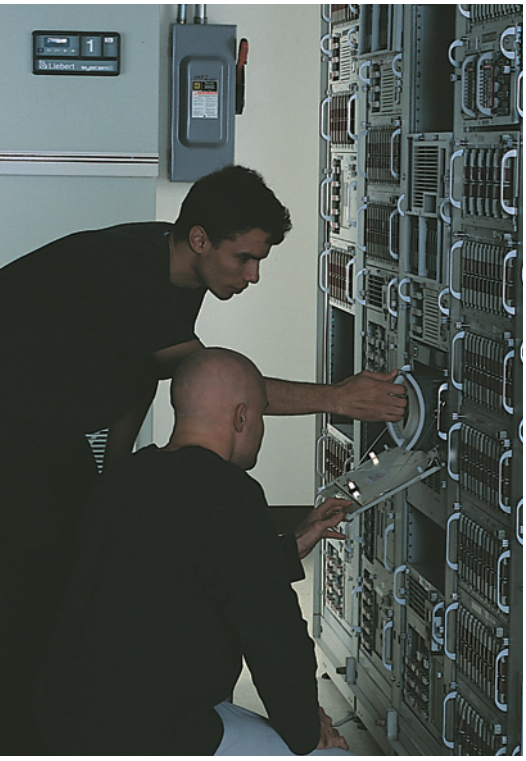
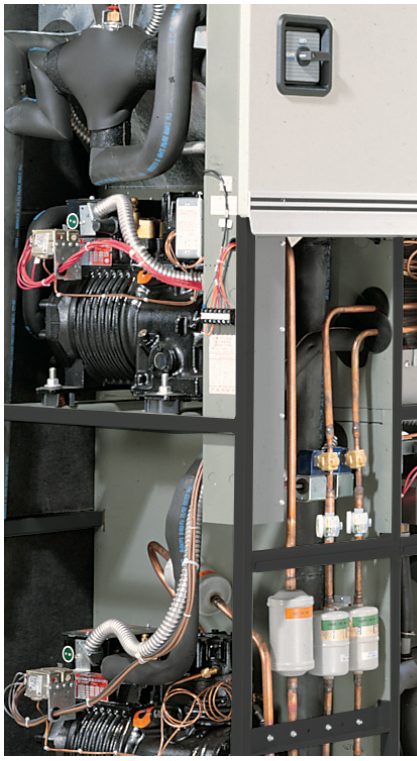
Precision Cooling
for Business-Critical Continuity

Liebert Deluxe System™/3 6 to 30 Tons

Precision Air Conditioning for Sensitive Electronic Equipment





Liebert®

EMERSON™
Network Power

The Cornerstone Of System Availability

From the very beginning of critical computing systems and other sensitive electronics, there has been a need to create a proper environment for operation — including temperature and humidity control. That need is still here and the organization that knows it best is still Liebert.

When You Need To Handle The Most Demanding Conditions Undervoltage Detection

The Liebert Deluxe System/3 is specifically designed to handle the high heat loads generated by computers and other electronic equipment. These units are used to protect the most critical installations around the world. They feature a high sensible heat ratio, assuring that proper humidity levels will be maintained.

When You Need Flexibility In Cooling Configurations

The Liebert Deluxe System/3 provides a complete environmental control package, including both precision air conditioning as well as humidity control — no matter what the temperature is outside. Both upflow and downflow configurations are available to cover raised floor and non-raised applications.

When You Need Dependability

These units have an unmatched record of dependability, providing around-the-clock operation. Standard comfort air conditioning systems simply cannot reach this level of operational reliability.

When You Need Energy Efficiency

The combination of a high-efficiency semi-hermetic compressors and options such as a variable-speed drive on the fan motor help the Liebert Deluxe System/3 to deliver the highest levels of energy efficiency. Air, water, glycol and chilled water cooling configurations are offered, as well as ultra energy efficient GLYCOOL and Dual Cool hybrid models.

When You Need The Peace-Of-Mind That Comes With Knowing You've Made The Right Choice

In a field that sees computing systems become obsolete before they're even installed, Liebert products stand apart. When you purchase from Liebert, you are buying into a company that has a reputation for quality and reliability that is second to none.

Built To Stand The Test Of Time

The Liebert Deluxe System/3 Has A Solution To Meet Your Critical Needs

The Liebert Deluxe System/3 is the latest version of a fundamental design that has been in constant use for over 30 years — a product that has spanned many generations of computers.

Why You Can't Settle For Less

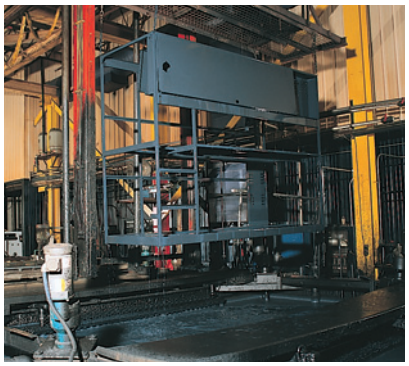
In many cases, your critical systems are only as reliable as the support equipment protecting them. Compromising on a precision cooling system can compromise your operations. Your critical operations demand support equipment that can provide the highest level of reliability.

The Liebert Deluxe System/3 is used in the most demanding, critical applications in the world. From banking to government to corporate computer and communications centers, when it has to be the best — this is the system of choice.

The Standard By Which All Others Are Judged

The number of Liebert Deluxe Systems/3 units that are in the field far exceeds the combined number of all other brands. This didn't just happen by accident. Our ability to provide the most reliable, most capable precision cooling system possible has been recognized by computer professionals around the world.

They are built unlike any other. From raw materials to final installation and start-up, nothing is left to chance. This is the level of performance that has been...and will continue to be the Liebert standard.



Autophorectic frame coating.

Corrosion Resistant Frame And Cabinet

Durability is assured with Autophoretic frame coating and powder coated paint panels. The frame utilizes rugged 14 gauge tubular steel that is heliarc welded to provide a stable, virtually vibrationless platform for compressor and fan operation. The cabinet is fitted with insulated steel panels to minimize air leakage and reduce noise levels.

Our state-of-the-art psychromatic laboratory allows us to test units under a wide variety of temperature and humidity conditions.

Powder coated exterior panels — Solvent-free process provides a durable, high quality, scratch-resistant finish.

Whatever Your Need... The Liebert Deluxe System/3 Has You Covered

No matter what the application or how demanding your needs for precise cooling of critical spaces are, there is a Liebert Deluxe System/3 model that is right for the job.

Built to the highest specifications in the industry with proven components and design, the Liebert Deluxe System/3 is ideal for critical applications including:

- Computer rooms.
- Telecommunications central switching offices.
- Industrial process control centers.
- Laboratories.
- Medical facilities.

More Configurations To Fit The Most Applications

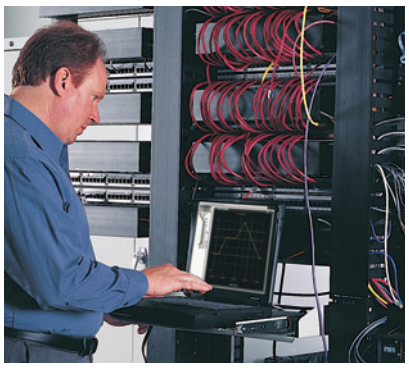
High performance, sensitive electronic equipment requires precise, reliable control of room temperature, humidity, and airflow for proper operation. The Liebert Deluxe System/3 meets these needs for environmental control in computer dependent operations. It is available in capacities ranging from 6 to 30 tons in compressorized systems or 10 to 65 tons in chilled water models, as well as many different configurations to match unique applications.

Flexibility To Create The Tailored Solution

From the beginning, the Liebert Deluxe System/3 family has been designed to cover the widest possible range of application requirements. These include heat rejection options, choice of airflow and many other selections that will create the most effective and efficient system for your facility.

A Choice Of Heat Rejection Types

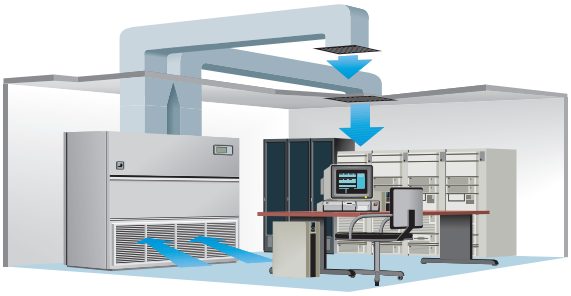
Every critical operation is different. Some are housed in new buildings, some in older, existing structures. Some on the fifth floor...and some on the 50th floor. Outdoor climate plays a big role as well. These factors all affect your choice of heat rejection methods. Central chilled water systems use a single chiller for multiple units, while individual direct expansion systems utilize internal compressors and a remote condenser. Hybrid systems can also be installed — where a conventional air or water cooled direct expansion system adds a second cooling coil which uses a building chiller supply to reduce compressor operation.



A Choice of Configurations

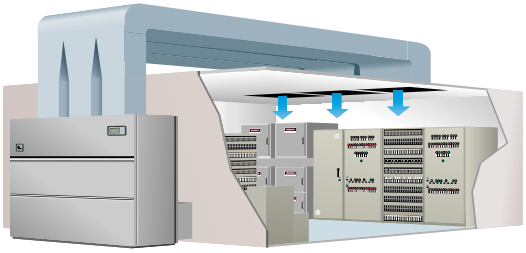
Top Front Supply with Plenum & Grille and Front Return

In-the-space applications without ductwork, such as Telecommunications, Networks and Switching Centers, benefit from this economical configuration. Optional high filtration may be desirable.



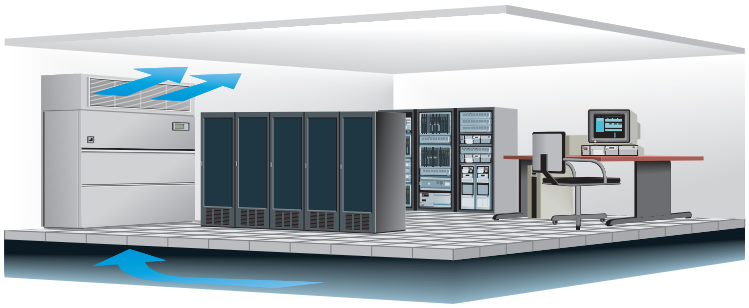
Top Front Supply and Front Return

Engineered for in-the-space applications utilizing duct work, this airflow design is commonly used for Telecommunications or Industrial applications. High static pressure and filtering options may be selected.



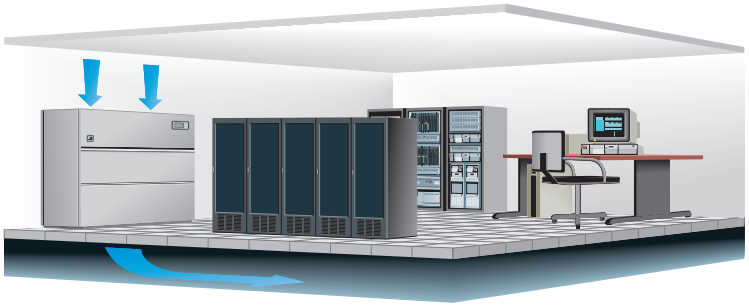
Top Rear Supply and Rear Return

Designed for use in out-of-space applications, this configuration is typical for Industrial Processes such as Control Rooms, and Labs. Many of these sites will select a higher static pressure and optional high efficiency filters. (Customer ducted supply and return)



Top Front Supply with Plenum & Grille and Bottom Return

Specifically designed for use in raised floor, in-the-room applications, this configuration takes advantage of typical computer room construction. Additional filtering may be requested to protect sensitive computers and peripherals.



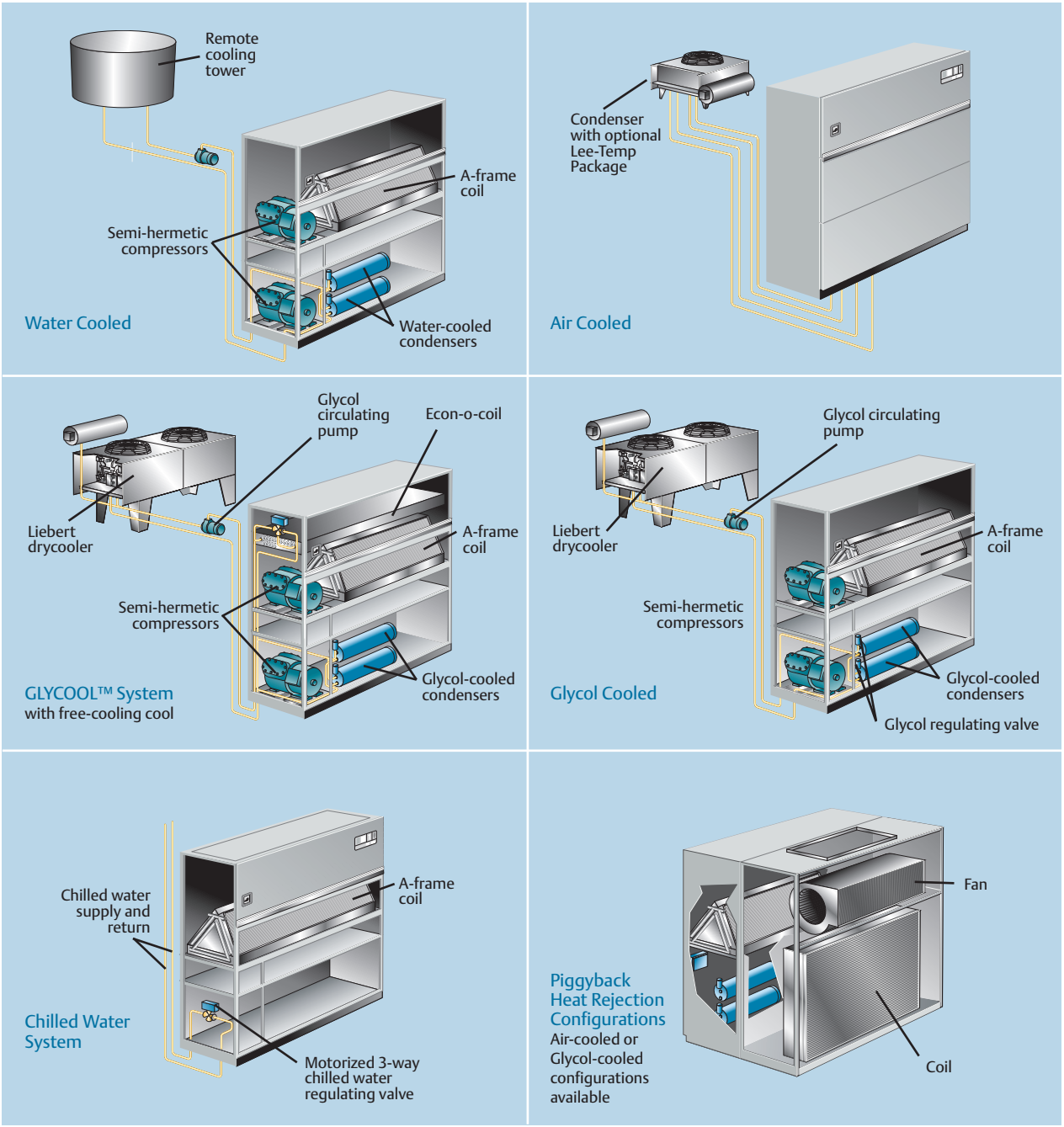
Downflow Supply

Designed for raised-floor applications, the downflow air supply configuration is commonly found in data centers and other similar facilities housing sensitive electronic equipment.

No Other Precision Cooling System Offers This Much Flexibility

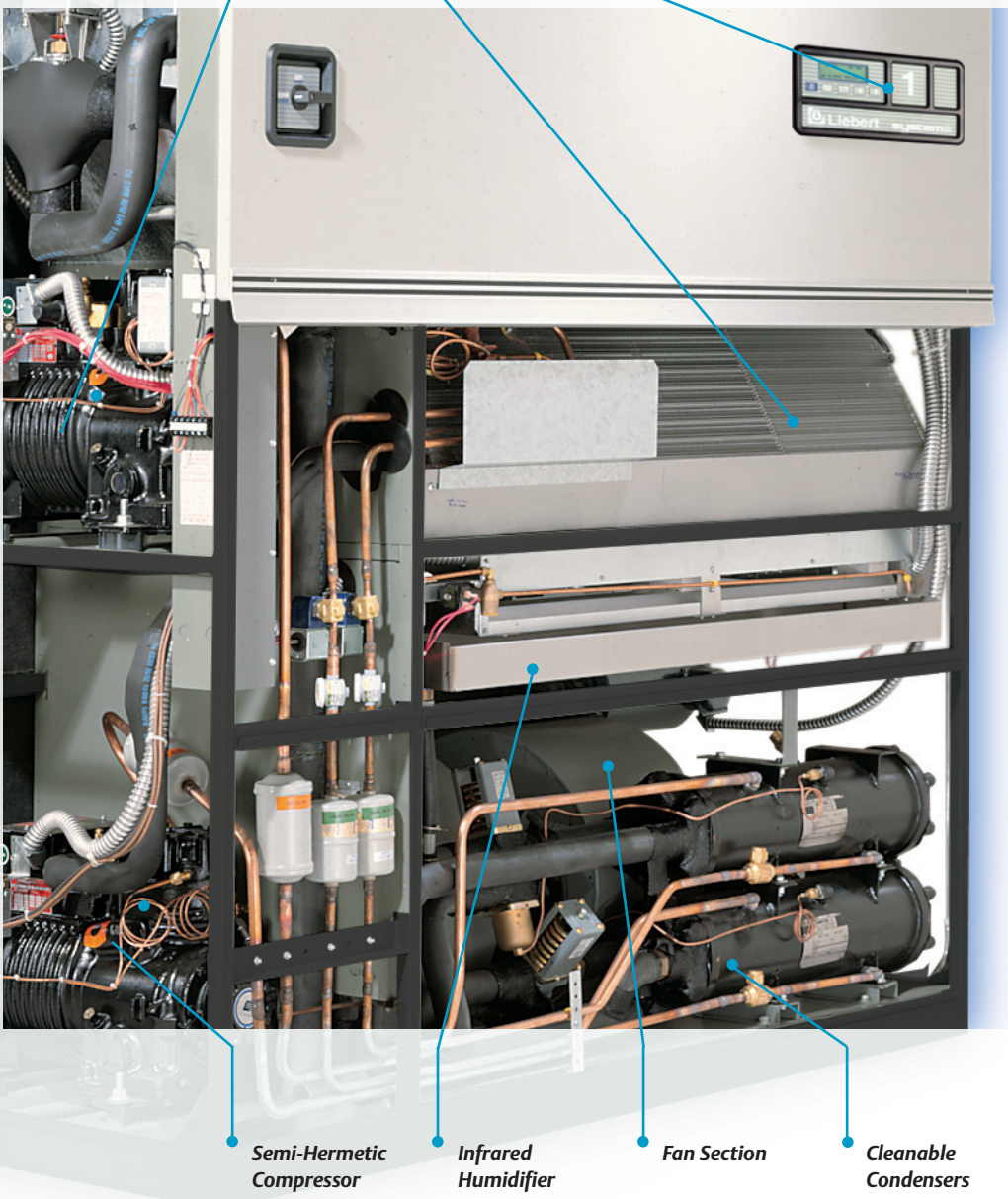
The Liebert Deluxe System/3 Has A Solution To Meet Your Critical Needs

Long recognized as the standard in environmental control systems for data center operations, the Liebert Deluxe System/3 is built to the most demanding specifications in the industry with proven components and design. They feature compressorized direct expansion operation in air cooled, water cooled and glycol cooled configurations, as well as GLYCOOL™ free-cooling models and chilled water systems.



Design Makes The Difference

Everything that goes into the Liebert Deluxe System/3 is the best, most rugged and efficient it can possibly be. There are no weak links that can affect performance reliability.



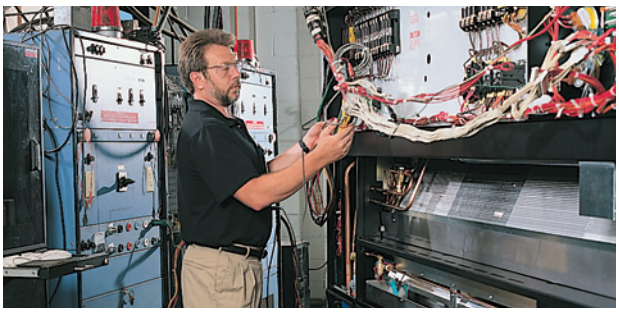
Every Feature Contributes To Absolute Reliability

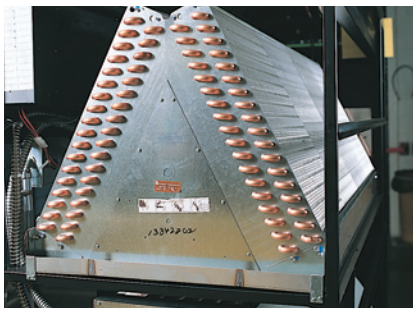
When the demand is for around the clock operation, you simply can't take shortcuts. This is a major factor in the legendary performance record of the Liebert Deluxe System/3. Each feature is there to promote reliability under the most demanding conditions.

Features: All Units

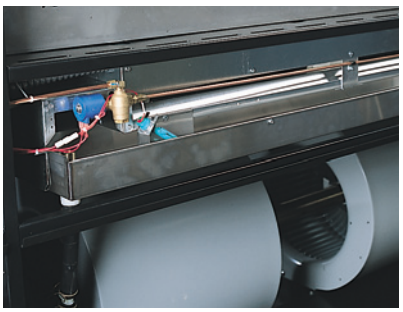
Fans And Motors Clean, even air distribution is supplied by large capacity fans, which are statically and dynamically balanced to minimize vibration. The fans draw filtered air through the system, using less fan motor energy and operating more quietly than forced air blowers.

Draw-Through Airflow The fans draw air evenly and at low velocity through the cooling coil, reheat and humidification systems. The result is far less turbulence with superior efficiencies in heat transfer. Clean air at the right temperature and humidity is fed positively and evenly into the room.





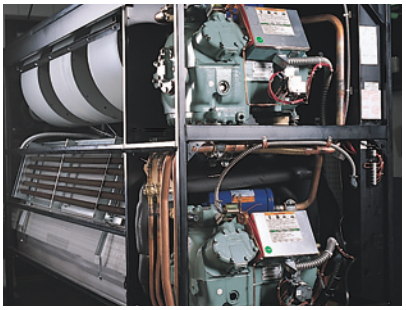
A-Frame Coil This Liebert designed and manufactured A-Frame coil features a large face area/low face velocity design for precise control of cooling and dehumidification.



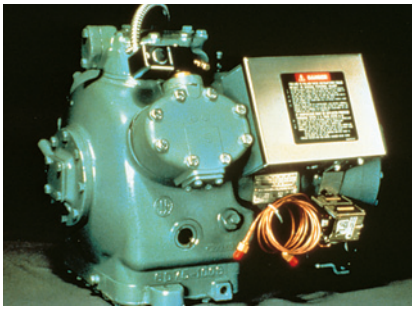
Infrared Humidifier The Liebert Deluxe System/3's infrared humidifier design consists of quartz lamps mounted above a stainless steel water reservoir. The lamps never come in contact with the water. When humidification of room air is required, infrared rays generate water vapor — without impurities or odor, within seconds.

Features: Compressorized Units

Unique Coil Circuitry Delivers Maximum Cooling Liebert's exclusive interwoven circuitry distributes refrigerant from both compressors throughout the entire face area of the A-frame style cooling coil. This assures maximum cooling capacity without over dehumidification whether one or both compressors are running. With this computer selected coil design, low velocity air passes through both circuits of the coil, providing the most effective surface exposure with less turbulence and greater efficiency in the cooling and dehumidification process.



Dual Circuits For Absolute Reliability Dual compressors and refrigeration circuits assure reliability and feature automatic sequencing for even wear of components. Another feature of the dual circuits is pump-down evacuation of refrigerant from the compressor crankcase. This shields the compressors from the "hard starts" that can shorten their life.



High Efficiency Semi-Hermetic Compressors The Liebert Deluxe System/3 utilizes two semi-hermetic compressors. These heavy-duty units operate quietly and efficiently and have been proven to be nearly four times as reliable and considerably more energy efficient than their hermetic counterparts.

Liebert Condensers And Drycoolers
Only Liebert manufactures its own high-efficiency, air cooled condensers and drycoolers that are precisely matched to the heat rejection requirements of our precision air conditioning systems. Constructed with an aluminum cabinet and a copper-tube aluminum-fin coil, these exceptionally dependable units are corrosion resistant and designed to operate for prolonged periods of exposure to the worst weather conditions. Liebert condensers and drycoolers are fully factory wired and tested for easy installation.

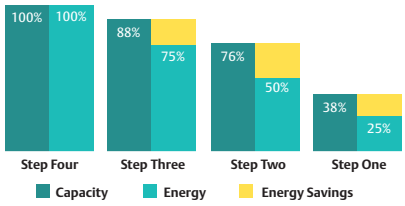
They are offered in a wide range of capacities, as well as horizontal and vertical airflow configurations. Standard units are available in ambient temperature ratings of 85° to 105° F. For colder climates, the exclusive Liebert Lee-Temp option permits operation in climates as low as -30° F.

The Piggy-Back series of condensers and drycoolers is also offered to convert Liebert environmental control units to completely self-contained systems in applications where an outdoor heat rejection location is not practical.

Liebert Gives You More Ways To Get The Most Out Of Your Energy

While precise environmental control is a major requirement of critical electronic systems, energy efficiency is also an important consideration. Liebert's approach to environmental control system design increases efficiency while maintaining the reliability and precision of the unit. This is accomplished by taking advantage of alternate sources of cooling without being dependent on their availability, or by reducing compressor workload when heat load in the conditioned space is lower.

Energy Savings



The Four Step System

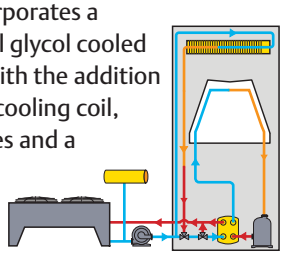
The Liebert Deluxe System/3 Four-Step System achieves higher levels of energy efficiency through the integration of two high-efficiency compressors with capacity control valves, an advanced microprocessor control system and a computer-optimized cooling coil. The Liebert four-step cooling system reduces compressor cooling capacity and energy consumption during periods of low room load conditions. This is accomplished by means of a specially designed control system and cylinder unloaders on one head of each of the two semi-hermetic compressors. As a result, four distinct stages of cooling are activated to more closely respond to changing room conditions. Reliability is enhanced by fewer and less stressful compressor starts for reduced wear.

Hybrid Designs Deliver Maximum Energy Efficiency

For even greater efficiency, Liebert offers energy efficient alternatives such as its GLYCOOL and Dual Cool options, which provide compressorless operation, where climate permits, to substantially reduce energy costs.

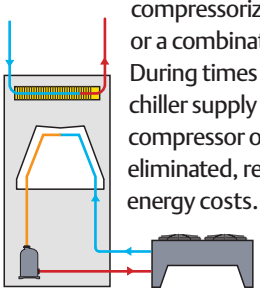
GLYCOOL™ System

The Liebert GLYCOOL free-cooling system incorporates a conventional glycol cooled unit along with the addition of a second cooling coil, control valves and a comparative temperature monitor. This allows the system to take advantage of cooler outdoor temperatures to reduce or eliminate compressor runtime. During colder months, the glycol solution returning from the outdoor drycooler is routed to the second coil by a pre-piped modulating three-way valve. Located upstream of the evaporator coil, the second coil becomes the primary source of cooling for the room. This coil is sufficiently sized to offer the identical cooling capacity as is obtained during the refrigeration cycle of both compressors.



Dual-Cool

With this option, a conventional air or water cooled Liebert Deluxe System/3 is converted to a dual source cooling system by the addition of a second coil that utilizes a central building chiller supply. Using a modulating control valve and a comparative temperature sensor, the unit can function either as a chilled water system, as a compressorized system — or a combination of both. During times when the chiller supply is available, compressor operation is eliminated, reducing energy costs.



Economical Chilled Water Systems

By taking advantage of your existing central air conditioning chiller, the Liebert Deluxe System/3 chilled water system provides thrifty, durable cooling and humidity control around the clock, throughout the year.

The Liebert Deluxe System/3 chilled water system offers rugged, yet affordable cooling and humidity control where a central water chiller is available as a year-round cooling source. In these applications, a single chiller can be used for multiple air conditioning units, providing savings on additional heat rejection components.

The full line of Liebert chilled water systems use microprocessor-based controls to maintain precise temperature and humidity levels, while the cooling hardware is designed and built for continuous, trouble-free operation.

In addition to the many standard and optional features available on all Liebert Deluxe System/3 units, the chilled water models also include these advantages.

Small Footprint — Big Performance

Liebert Deluxe System/3 units offer more cooling capacity per square-foot of floor space than any other chilled water system.

More Cooling Capacities

Available in nine cooling capacities, with either upflow or downflow configurations.

Chilled Water Control Valve

The chilled water valve provides proportional control action in response to room temperature and humidity as sensed by the microprocessor control. It includes operating linkage and electronic motor. Unlike other systems of this nature it requires no over–travel linkage or end switches to be adjusted. The valve can be a 3-way or 2-way to meet the appropriate requirements of the installed system.

Optional Energy Saving Variable Speed Drive Fans

Our larger chilled water models are available with an optional variable speed drive on the fan motor, matching the motor speed to the room cooling requirements. This feature allows the unit to use far less motor energy to move room air. Many utility companies offer a rebate for using this energy efficient feature — check with your local utility company for details.

This drive is controlled by the Advanced Microprocessor Control to match the speed of the blower with the chilled water valve position and consequently the load in the room. This option eliminates excessive energy use due to an oversized design or changing room conditions.

Communicating With Your Precision Environmental System

Whether you use its local or remote monitoring and control capabilities, the Liebert Deluxe System/3 is designed to provide the widest range of monitoring options.

Local Monitoring And Control

Aside from streamlining your operation for peak performance, microprocessor-based controls help the Liebert Deluxe System/3 achieve precise temperature and humidity for your sensitive electronics.

Two levels of microprocessor control systems are available, providing precise control and monitoring of the critical space. The Advanced Microprocessor is standard, while the Advanced Microprocessor w/Graphics is optional. These controls provide unit control, monitoring, diagnostics, alarms and event logging.

Microprocessor Controls

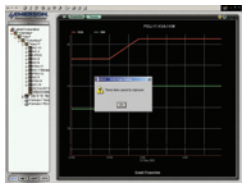
This control system automatically selects the most precise and efficient action based on the environmental trends of your site. The Advanced Microprocessor Control uses an LCD display and a five-key pad to program setpoints and alarms. The menu-driven system monitors a wealth of data — digital and analog — to keep you constantly informed of system operation. Liebert's Advanced Microprocessor Control with Graphics offers the same features and control schemes as the Advanced system. However, this model adds a 240x128 pixel backlit dot matrix display that provides data at-a-glance screens for quick review. Additional features include expanded alarm capabilities and in-depth system operating information.

Advanced Control System w/Graphics

Advanced Control System

When You Need To Know

In addition to local monitoring through the Liebert Deluxe System/3's onboard controls, the unit can also be interfaced with our remote monitoring and control systems, as well as with building management systems. These capabilities include:



Liebert SiteScan® Web

Liebert SiteScan Web is a comprehensive critical systems monitoring solution dedicated to ensuring reliability through graphic event management and data extrapolation. The full-featured graphic Web interface allows users easy access from anywhere at anytime. Designed for single and multi-site applications, Liebert SiteScan Web provides event management, trend and historical data captures and reporting, and full ASHRAE BACnet compatibility.

Liebert OpenComms™ Nform

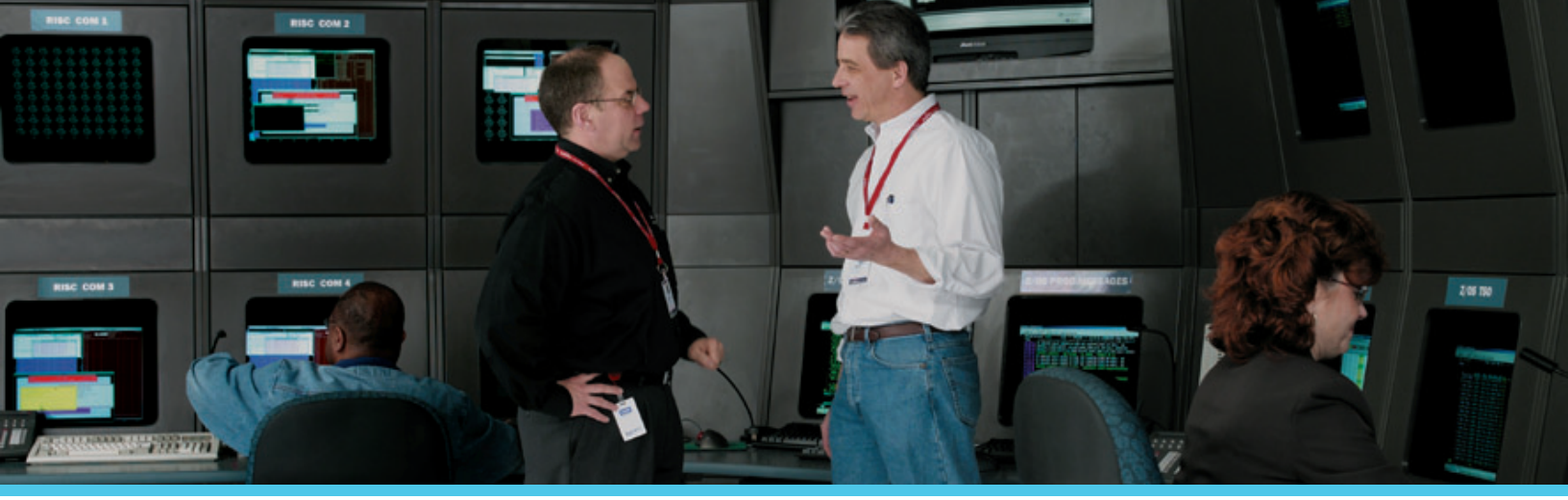
Liebert's OpenComms™ Nform is a network communications system that will enable you to monitor any piece of precision cooling or power protection equipment that can support a network interface, such as the Liebert OpenComms NIC. This software solution combines full-scale monitoring with cost-effective deployment through the use of existing network wiring. OpenComms Nform's graphical user interface enables you to view device status conditions through either a native SNMP interface or an HTML web browser interface.

Liebert OpenComms™ NIC

The OpenComms NIC (network interface card) provides Ethernet connectivity for Liebert equipment. Operating status and alarms are communicated via the network to external systems utilizing industry-standard open protocols including SNMP and HTTP.

Liebert ENV-DO Discrete Output Interface Card

Provides 16 discrete outputs, corresponding to status and major alarm conditions. These form-C contact-closures provide a straightforward means to tie units to a building management system, I/O or alarm panels and autodialer devices.



No one knows more about precision cooling than Liebert. After all, we pioneered it back in 1965. Our precision cooling technology has been proven in thousands of critical data centers around the world. These products are recognized as the world's standard for reliable operation.

The Liebert Difference

Purchasing from Liebert is different from what you might experience with other companies that sell air conditioning products. It starts with your local Liebert Representative or Distributor. We are the only company in this business that maintains such a strong local presence on a national and international basis. Specifying and maintaining a high availability precision cooling system requires someone who is knowledgeable in all phases of environmental control.

This resource, coupled with our broad product line, gives Liebert the ability to create a "tailored solution" that will meet your protection needs precisely and efficiently. We don't have to take the one or two items we happen to have and stretch them to come up with the answer. We give you the best answer every time.

Service Solutions

Liebert's service capabilities can increase the availability of your precision cooling equipment by reducing downtime due to component failure. This is especially valuable to companies who do not have a dedicated technician on-site to troubleshoot equipment.

Field service is provided by a nationwide network of locally-based, factory-trained technicians for installation, support and maintenance of Liebert precision environmental products. The variety of Liebert service offerings includes warranty service, emergency coverage and preventive maintenance. We also offer an environmental equipment site management program that creates a customized service package for your site by offering a single point of contact for your service needs.

A Company-Wide Commitment To Excellence

The Liebert reputation didn't just happen. Since the beginning, Liebert associates have been doing whatever it takes to meet the needs of our customers. It starts with designing and manufacturing the best possible products — over 750 quality checks go into every Liebert Deluxe System/3 unit we manufacture in our ISO 9000 certified production facilities. And it continues right through delivery, installation and service. It is this dedication to being the very best that will give you the confidence that you've made the right decision.

Specifications

Liebert Deluxe System™/3 Compressorized System Specifications

Deluxe System™/3 Capacity Data 60 Hz Compressorized Systems

	6 Ton	8 Ton	10 Ton	15 Ton	20 Ton	22 Ton	30 Ton
Capacity Data BTU/HR (kW) 75°F DB, 62.5°F WB (23.9°C DB, 16.9°C WB) 50% RH (DH/DE = Downflow, VH/VE = Upflow)							
AIR COOLED	**DH/VH 75A**	**DH/VH 114A**	**DH/VH 125A**	**DH/VH 199A**	**DH/VH 245A**	**DH/VH 290A**	**DH/VH 380A**
Total	79,700 (23.3)	114,500 (33.5)	123,800 (36.2)	182,300 (53.4)	229,800 (67.3)	262,200 (76.8)	350,900 (102.7)
Sensible	67,900 (19.9)	93,200 (27.3)	111,200 (32.6)	166,400 (48.7)	202,100 (59.2)	230,900 (67.6)	301,700 (88.3)
WATER COOLED	**DH/VH 86W**	**DH/VH 127W**	**DH/VH 138W**	**DH/VH 219W**	**DH/VH 267W**	**DH/VH 315W**	**DH/VH 412W**
Total	86,100 (25.2)	124,900 (36.6)	136,500 (40.0)	199,800 (58.5)	247,700 (72.6)	286,900 (84.1)	384,200 (112.6)
Sensible	70,500 (20.6)	97,400 (28.5)	116,300 (34.1)	173,300 (50.8)	209,300 (61.3)	240,700 (70.5)	315,00 (92.3)
GLYCOL COOLED	**DH/VH 72G**	**DH/VH 110G**	**DH/VH 116G**	**DH/VH 192G**	**DH/VH 240G**	**DH/VH 265G**	**DH/VH 363G**
Total	76,100 (22.3)	108,200 (31.7)	115,900 (34.0)	173,800 (50.9)	216,100 (63.3)	250,200 (73.3)	340,700 (99.8)
Sensible	66,500 (19.5)	90,600 (26.5)	105,100 (30.8)	163,000 (47.8)	196,700 (57.6)	226,200 (66.3)	297,700 (87.2)
GLYCOOL	**DE/VE 72G**	**DE/VE 110G**	**DE/VE 116G**	**DE/VE 192G**	**DE/VE 240G**		**DE/VE 363G**
Total	76,100 (22.3)	108,200 (31.7)	115,900 (34.0)	173,800 (50.9)	216,100 (63.3)		340,700 (99.8)
Sensible	66,500 (19.5)	90,600 (26.5)	105,100 (30.8)	163,000 (47.8)	196,700 (57.6)		297,700 (87.2)

Deluxe System™/3 Capacity Data 50 Hz Compressorized Systems

	6 Ton	8 Ton	10 Ton	15 Ton	20 Ton	22 Ton	30 Ton
Capacity Data kW/HR (BTH) 23.9°C DB, 16.9°C WB (75°F DB, 62.5°F WB) 50% RH (DH/DE = Downflow, VH/VE = Upflow)							
AIR COOLED	**DH/VH 75A**	**DH/VH 115A**	**DH/VH 130A**	**DH/VH 199A**	**DH/VH 245A**	**DH/VH 290A**	**DH/VH 380A**
Total	19.8 (67,400)	29.8 (101,600)	37.0 (126,200)	47.0 (160,200)	59.7 (203,800)	68.1 (232,200)	91.2 (311,200)
Sensible	17.6 (59,900)	24.9 (85,100)	32.9 (112,200)	47.0 (160,200)	59.7 (203,800)	68.1 (232,200)	83.9 (286,100)
WATER COOLED	**DH/VH 86W**	**DH/VH 128W**	**DH/VH 143W**	**DH/VH 219W**	**DH/VH 267W**	**DH/VH 315W**	**DH/VH 412W**
Total	21.4 (73,000)	31.7 (108,200)	40.7 (138,900)	50.7 (172,900)	63.7 (217,500)	74.0 (252,500)	99.1 (338,200)
Sensible	18.2 (62,100)	25.7 (87,800)	34.4 (117,200)	47.4 (161,600)	57.8 (197,300)	66.5 (227,000)	87.0 (296,700)
GLYCOL COOLED	**DH/VH 72G**	**DH/VH 111G**	**DH/VH 121G**	**DH/VH 192G**	**DH/VH 240G**	**DH/VH 265G**	**DH/VH 363G**
Total	18.8 (64,100)	27.8 (94,800)	34.4 (117,400)	45.7 (155,800)	57.1 (194,900)	66.1 (225,500)	88.3 (301,100)
Sensible	17.2 (58,600)	24.2 (82,500)	31.9 (108,700)	45.7 (155,800)	57.1 (194,900)	66.1 (225,500)	82.7 (282,100)
GLYCOOL	**DE/VE 72G**	**DE/VE 111G**	**DE/VE 116G**	**DE/VE 192G**	**DE/VE 240G**		**DE/VE 363G**
Total	18.8 (64,100)	27.8 (94,800)	34.4 (117,400)	45.7 (155,800)	57.1 (194,900)		88.3 (301,100)
Sensible	17.2 (58,600)	24.2 (82,500)	31.9 (108,700)	45.7 (155,800)	57.1 (194,900)		82.7 (282,100)

Liebert Deluxe System™/3 Chilled Water System Specifications

Deluxe System™/3 Capacity Data 50 Hz and 60 Hz Chilled Water Systems

(DH/DE = Downflow, VH/VE = Upflow)

	FH/UH 147C	FH/UH 200C	FH/UH 248C	FH/UH 302C	FH/UH 376C	FH/UH 422C	FH/UH 529C	FH600C (60 Hz) FH599C (50 Hz)	FH740C (60 Hz) FH739C (50 Hz)
Capacity Data BTU/HR (kW) - BASED ON 45°F (7.2°C) ENTERING WATER									
80°F DB, 67°F WB (26.7°C DB, 19.4°C WB) 50% RH									
Total	135,300 (39.6)	190,000 (55.7)	250,200 (73.3)	281,700 (82.5)	377,200 (110.5)	402,500 (117.9)	535,900 (157.0)	580,800 (170.2)	745,400 (218.4)
Sensible	110,000 (32.2)	145,100 (42.5)	173,500 (50.8)	217,800 (63.8)	263,100 (77.1)	304,500 (89.2)	369,700 (108.3)	432,000 (126.6)	508,400 (149.0)
75°F DB, 62.5°F WB (23.9°C DB, 16.9°C WB) 50% RH									
Total	99,200 (29.1)	142,500 (41.8)	190,000 (55.7)	206,200 (60.4)	285,300 (83.6)	302,900 (88.7)	407,700 (119.5)	436,600 (127.9)	567,600 (166.3)
Sensible	92,900 (27.2)	124,900 (36.6)	149,700 (43.9)	185,200 (54.3)	226,900 (66.5)	262,400 (76.9)	319,300 (93.6)	372,200 (109.1)	438,500 (128.5)
75°F DB, 61°F WB (23.9°C DB, 16.1°C WB) 45% RH									
Total	93,600 (27.4)	134,900 (39.5)	177,000 (51.9)	191,700 (56.2)	265,700 (77.8)	286,500 (83.9)	380,100 (111.4)	413,300 (121.1)	527,500 (154.6)
Sensible	93,600 (27.4)	129,000 (37.8)	154,600 (45.3)	188,900 (55.3)	234,700 (68.8)	271,700 (79.6)	329,900 (96.7)	386,500 (113.2)	451,700 (132.3)
72°F DB, 60°F WB (22.2°C DB, 15.5°C WB) 50% RH									
Total	80,700 (23.6)	118,400 (34.7)	159,500 (46.7)	168,400 (49.3)	263,900 (77.3)	251,100 (73.6)	342,900 (100.5)	366,900 (107.5)	476,900 (139.7)
Sensible	80,300 (23.5)	111,900 (32.8)	136,400 (40.0)	164,500 (48.2)	205,800 (60.3)	235,700 (69.1)	291,200 (85.3)	337,200 (98.8)	399,600 (117.1)
72°F DB, 58.6°F WB (22.2°C DB, 14.8°C WB) 45% RH									
Total	79,600 (23.3)	113,200 (33.2)	152,600 (44.7)	163,900 (48.0)	222,300 (65.1)	239,900 (70.3)	329,100 (96.4)	347,800 (101.9)	456,600 (133.8)
Sensible	79,600 (23.3)	113,200 (33.2)	142,800 (41.8)	163,900 (48.0)	214,100 (62.7)	239,900 (70.3)	305,700 (89.6)	345,000 (101.1)	418,600 (122.6)

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