



Liebert XDF is a secured enclosure with integrated high heat density cooling, providing the benefits of big room support in a cost-effective package. Optimized horizontal air circulation cools the protected equipment, both in standard mode and in the backup ventilation mode

Frequently Asked Questions

Question	Resolution
<p>What makes the Liebert XDF the right choice?</p>	<ul style="list-style-type: none"> ▪ Innovative Design - The Liebert XDF includes advanced features not found in competing systems, including Digital Scroll cooling technology, adaptive controls, the broadest selection of heat rejection methods – air, water, glycol. ▪ A Total Solution - Because the Liebert XDF is designed as an integrated system, it has more flexibility for installation and reconfiguration than a traditional ceiling mounted cooling system with the associated rack and ductwork. ▪ Sized Right — Liebert XDF capacity of 14.4 kW is sufficient for most rack equipment being deployed.
<p>What are some of the best places to consider using the Liebert XDF?</p>	<ul style="list-style-type: none"> ▪ Network closets with high-density servers and switches. ▪ Small data centers with high-density server deployments, including IDFs and MDFs. ▪ Wiring closets housing VoIP systems and other sensitive equipment. ▪ Telecom shelters. ▪ Manufacturing facilities with remote mission-critical IT equipment. ▪ Warehouses with RFID installations
<p>How difficult is installation?</p>	<ul style="list-style-type: none"> ▪ Eliminates high heat up to 14kW per rack. ▪ Includes emergency ventilation in the event of an unplanned shutdown. ▪ Lower energy costs through the use of a Digital Scroll compressor for continual and precise adjustments in cooling. ▪ Multiple coolant options - air, water or glycol. Water or glycol-cooled units use remote heat rejection to support the in-rack cooling system and protect up to 42U of equipment. Air-cooled systems have 36U of space. ▪ Network control and monitoring. ▪ Easily adaptable, plug-and-play installation. Self-contained. ▪ Air-cooled model requires only an AC power connection.

Liebert XDF Features & Benefits

Feature:	Flexibility:	Higher Availability:	Lowest Total Cost Of Ownership:
<ul style="list-style-type: none"> Standard integrated unit includes rack with extreme density cooling system with built-in monitoring and control 	<ul style="list-style-type: none"> All integrated cooling, power, monitoring and other accessories are designed for optimum compatibility and factory tested to ensure operational integrity upon installation. 	<ul style="list-style-type: none"> Integrated unit is plug-and-play and requires no on-site assembly. 	<ul style="list-style-type: none"> Standard features reduce installation and maintenance costs, and increase uptime.
<ul style="list-style-type: none"> Digital Scroll compressor 	<ul style="list-style-type: none"> Allows for continual and precise adjustments in cooling to optimize environmental control and reduce threats to the integrity of network equipment. 	<ul style="list-style-type: none"> Responds automatically to fluctuations in heat output from rack equipment. 	<ul style="list-style-type: none"> More cost-effective than traditional cooling systems, with lower energy consumption and less wear and tear.
<ul style="list-style-type: none"> Automatic “back up” ventilation 	<ul style="list-style-type: none"> Uses room air for emergencies to provide greater ride-through with greater cooling capacity. 	<ul style="list-style-type: none"> Can be installed without power backup for cooling. 	<ul style="list-style-type: none"> Increased availability eliminates costly downtime.
<ul style="list-style-type: none"> Comes with casters 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Can be easily moved for initial installation. 	<ul style="list-style-type: none"> Lower installation and maintenance costs.
<ul style="list-style-type: none"> Standard height and depth 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> 35" width and 82" height allow the unit to fit through standard-sized doorways. 	<ul style="list-style-type: none"> Standard size eliminates the need for special installation work.
<ul style="list-style-type: none"> Intelligent controls 	<ul style="list-style-type: none"> Liebert iCOM control system ensures system maintenance and wellness by monitoring the cooling system and environmental conditions. 	<ul style="list-style-type: none"> iCOM can be monitored locally and via remote access. 	<ul style="list-style-type: none"> The ability to anticipate and detect system status helps to ensure uptime and reduce the cost of system administration.
<ul style="list-style-type: none"> Horizontal air circulation 	<ul style="list-style-type: none"> Provides uniform airflow throughout the cabinet to ensure better cooling for all equipment within the rack. 	<ul style="list-style-type: none"> Enables servers to be installed anywhere within the rack and still receive uniform cooling. 	<ul style="list-style-type: none"> Reduces operating costs through increased uptime and less likelihood of equipment damage.
<ul style="list-style-type: none"> Optional integrated power distribution 	<ul style="list-style-type: none"> Liebert Managed Power Advanced Power Strips are also available as an installed option for improved equipment power control. 	<ul style="list-style-type: none"> Provides the ability to monitor and control power at the receptacle level. 	<ul style="list-style-type: none"> More efficient control of equipment saves energy costs and increases system uptime.
<ul style="list-style-type: none"> Built-in monitoring capability 	<ul style="list-style-type: none"> Greater visibility and control of systems and conditions within the enclosure ensure rapid notifications of potential problems affecting availability. 	<ul style="list-style-type: none"> Options are available for connecting to Liebert remote monitoring devices or for standard Building Management System interfaces via MODbus or SNMP. 	<ul style="list-style-type: none"> Reduces the risk and associated costs of unplanned downtime.
<ul style="list-style-type: none"> Optional UPS system 	<ul style="list-style-type: none"> An optional Liebert GXT rack-mounted UPS features online power protection, remote monitoring, an external maintenance bypass and extended battery runtimes. 	<ul style="list-style-type: none"> Offers compact, high availability power protection within the enclosure itself. 	<ul style="list-style-type: none"> Ensures continuous system availability; reduces downtime and associated costs.
<ul style="list-style-type: none"> Multiple cooling options 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Choose between air-cooled (integrated condenser or remote condenser) or water/glycol-cooled systems to accommodate existing infrastructure conditions. 	<ul style="list-style-type: none"> Ensures lower installation costs compared to systems offering just one type of cooling.
<ul style="list-style-type: none"> Two power cords 	<ul style="list-style-type: none"> Allows for separate power (with low-amp draw) to backup fans and controls in the event of an outage to the primary cooling system. 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Greater uptime due to backup power availability, and lower installation costs as a result of flexible plug-and-play implementation.



Competitive Comparison

Feature	Liebert XDF	Liebert Advantages
Complete, self-contained unit	Includes rack, cooling, monitoring and control.	The self-contained Liebert unit provides plug-and-play installation with no on-site assembly or mechanical connections required.
Cooling method	Three options: 1. Self-contained air cooled 2. Air cooled with remote condenser. 3. Water/ glycol-cooled.	Multiple options on the Liebert XDF provide greater installation flexibility and lower cost of ownership by allowing customers to accommodate existing infrastructure conditions. The self-contained and remote air-cooled condenser versions do not introduce water piping into the room or in the rack with equipment..
Backup ventilation capability	Has emergency ventilation in case of unplanned shutdown, as effective as the primary cooling system.	Backup ventilation of the Liebert XDF supports greater ride-through for higher availability without the use of spring-loaded doors that require additional space clearances and may conflict with safety codes or practices. Liebert XDF is designed to fit through standard-sized doorways.
Fits through standard-sized doorways	35" W x 48" D x 82" H	Liebert XDF is designed to fit through standard-sized doorways.
Fan location	Side of cabinet.	Liebert XDF provides its air circulation/cooling function even when the rear door is open for service access.
Airflow type	Side of unit	The horizontal airflow pattern in the Liebert XDF provides a more uniform airflow throughout the cabinet.
Nominal cooling capacity	14.4 kW	The Liebert XDF capacity is sufficient for most rack equipment being deployed.

Specifications		
Liebert XDF	XDFS141 Air Cooled, Self Contained	XDFW141 Water/Glycol Cooled
Height, In. (mm)		
Overall	82-1/4 (2089)	80-3/4 (2051)
Cabinet Only	79-3/4 (2026)	79-3/4 (2026)
Fan Guard	2-1/2 (57)	N/A
Equipment Rack Area	36U	42U
Width, In. (mm)		
Overall	34-1/8 (867)	
EIA Nominal	19 (483)	
Inside Dimension	17-13/16 (452)	
Depth, In. (mm)		
Overall	49-1/2 (1257)	
Mounting Depth, adjustable, minimum	49-1/2 (1257)	
Mounting Depth, adjustable, maximum	32-11/32 (821)	
Weight, Lb (kg)		
Cabinet Only	710 (322)	668 (303)
Equipment Capacity	1200 (544)	

Electrical Data	XDFS141 Air Cooled, Self Contained	XDFW141 Water/Glycol Cooled
Control & Fan Supply		
Voltage	120	120
Ph	1	1
Hz	60	60
Unit FLA	8.3	5.0
Max Fuse or Circuit Breaker Amps	15	15
Min. Supply Circuit Ampacity	9.2	5.2
Receptacle required	NEMA 5-15R	NEMA 5-15R
Compressor Supply		
Voltage	208	208
Ph	3	3
Hz	60	60
Unit FLA	15.7	15.7
Max Fuse or Circuit Breaker Amps	35	35
Min. Supply Circuit Ampacity	19.6	19.6
Receptacle required	NEMA L21-30R	NEMA L21-30R
Condensate Pump Amps (Optional)	0.72	0.72

Total Heat Rejection	
Rating Point, Ambient °F (°C)	95 (35)
Supply Air Temperature, °F (°C)	77 (25)
Load, kW	14.1
Total Heat Rejection, kW	20