

■ AC Power
For *Business-Critical Continuity™*

Liebert® FDC
A Better Way To Power Up Your Data Center





Power Distribution Solutions For Growing IT Operations

Creating high quality power is a major step towards protecting the operation of a critical facility. But don't stop there. Once you've created a better level of power, you need to make sure that it can be distributed properly to each and every piece of important equipment.

Providing Proper Power To Each Plug

Power distribution is an ever-important function in data center and IT environments. Whereas in the past it was considered a simplistic solution, the exploding number of dynamic devices and dual-corded loads has elevated the criticality and visibility of power distribution.

The proper distribution of power from the UPS system to your critical load equipment is a key element of system availability. Studies show that 80% of all power-related downtime is caused by disruptions between the UPS and the critical load.

As your rack-based systems grow in number, complexity and criticality — so must your power distribution system. To meet this challenge Liebert has created a product designed to optimize power distribution at the rack level with the “plug and play” flexibility that today's IT managers demand from their systems.

The **Liebert FDC** distribution cabinet extends the functionality of the PDU by packaging 168 poles (four panelboards) on 208V and 380-415V models and 84 poles (two panelboards) on 480V models in a stand-alone cabinet with a rack footprint.

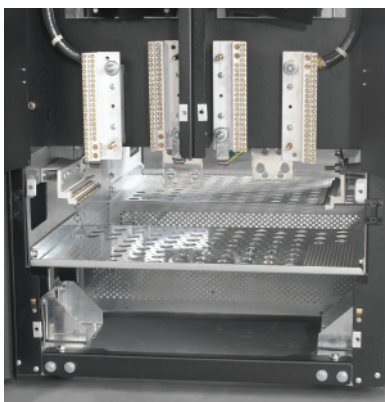
Critical Power Distribution Made Easy

The Liebert FDC provides additional distribution capacity for a high number of critical loads. It can be used in conjunction with the Liebert FPC power center to provide expanded panelboard connections closer to the load.

The Liebert FDC utilizes the standard size and appearance of the Liebert Foundation™ enclosure to address the needs of today's IT requirements. The Foundation style enclosure enables these units to be used as part of a rack enclosure grouping as well as in standalone applications. The use of a standard size rack enclosure also enables these units to be placed at various locations within a row of racks.

Managed Power Solutions

The Liebert FDC distribution cabinet is part of the Liebert MP Product Family—a group of power distribution and switching systems designed to manage power from the UPS all the way to each individual piece of computing and communications hardware. Liebert believes you can't get to “high 9's” reliability with a good UPS alone. You need a total high availability power distribution solution to reach that level of performance.



Ground and neutral output connections are conveniently located in the bottom of the unit for easy wiring. Conduit-landing plate provided with plugged holes — no knock-outs.



Optional Maintenance Tie-Breakers allow connection to different inputs without shutting down the load.

The Enhanced Monitor with Modbus RTU communications is one of several monitoring options available.



The Liebert FDC

The influx of client/server rack equipment is changing the content of data centers. There are more devices than before, and with 2, 3, and 4 input power cords most power distribution units (PDUs) run out of circuit breaker poles before they run out of rated capacity.

The Liebert FDC extends the functionality of the PDU by packaging 168 poles (four panelboards) on 208V and 380-415V models and 84 poles (two panelboards) on 480V models in a cabinet that can integrate with rack enclosures or function as a standalone unit.

Unlike standard Liebert Precision Power Centers or the Liebert FPC, the Liebert FDC has no internal isolation transformer and requires 4-wire-plus-ground input from a PPC, FPC or other transformer.

By separating the transformer from the panelboard function, Liebert was able to create an extremely compact package. It fits the same area as a

standard 19" rack. This conserves precious floor space and allows maximum installation flexibility.

Accessibility And Electrical Isolation

The Liebert FDC 208V and 380-415V models use inline 42-pole panelboards with wide-open access channels. The four panelboards are separated into vertical compartments with individual hinged access covers. Any compartment can be serviced or reconfigured without exposing the wiring of the other three panelboards. The Liebert FDC 480V unit uses standard side-by-side 42-pole 400A panelboards, for more capacity at a higher voltage. With one panelboard in the front and one in the rear, there is plenty of space in each compartment for wiring. Hinged access covers allow easy access for service and reconfiguring.



Input power connections with provisions for 2 hole lugs are standard on the Liebert FDC. (208V and 380-415V model shown)

The Standard Liebert FDC

208V, 380V, 400V and 415V models include:

- 4 panelboards with main breaker.
- Front and rear access only.
- Bottom cable exit.

480V Models Include:

- 2 panelboards with main breaker.
- Front and rear access only.
- Bottom cable exit.

Optional Features Include:

- Top cable exit.
- 22kAIC main panelboard breakers (208V models).
- 65kAIC main panelboard breaker (480V models).
- Enhanced Monitoring with remote communications — Modbus output.
- Current monitoring panel.
- Isolated ground bus bars. (Not available on 480V models).
- EZ-view doors to enable visual inspection of the breakers without unlocking the cabinet.
- Square D or GE panelboards in bolt-in or plug-in styles.
- Maintenance Tie-breakers to allow connection of the panelboards to different inputs (requires side access). Inputs must be fed from the same source so they can be tied together. (Not available on 480V models).
- Plug-in main panelboard breakers. (Not available on 480V models).
- Liebert Distribution Monitoring (LDM) to monitor main and branch circuits.

Ensuring The High Availability Of Mission-Critical Data And Applications.

Liebert FDC Specifications — Model Number Designation

FD	C	44	4	4	SB	1	0
	Input Voltage	Frame	No. of Inputs	No. of Panelboards	Panelboard Type ¹	Panelboard Main Breaker ²	Monitoring
FD	C-208V	44 - 2 Door	1 - One	1 - One	SB - Sq D	1 - 10kAIC	0 - No
	A-480V	Bottom	2 - Two	2 - Two	Bolt-in	2 - 22kAIC	Monitoring
	F-380V	Cable Exit	4 - Four	3 - Three	SP - Sq D	3 - 35kAIC	1 - Current
	U-400V	54 - 3 Door		4 - Four	Plug-in	6 - 65kAIC	Monitoring
	G-415V	Bottom		5 - One w/IG	GB - GE	0 - None	2 - Enhanced
		Cable Exit, w/Tie Breakers		6 - Two w/IG	Bolt-in	P - Plug-in	Monitoring w/Modbus
		64 - 2 Door Top Cable Entry		7 - Three w/IG	GP - GE		3 - LDM
		74 - 3 Door Top Cable Exit, w/Tie Breakers		8 - Four w/IG	Plug-in		4 - Current Monitoring w/LDM
							5 - Enhanced Monitoring w/LDM

¹ GE panelboards not available at 380-415V.

² High AIC main breakers not available at 380-415V.

Physical Data — Liebert FDC

	Width		Depth		Height		Weight	
	in.	cm.	in.	cm.	in.	cm.	lbs.	Kg.
Uncrated	23.5	60	38	97	78.5	199	825	374
Domestic Packing	48	122	48	122	83	211	850	385
Export Packing	50	127	50	127	85	216	1000	454

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SL-20400 (R02/08) Printed in USA

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-  Embedded Power
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-  Services
-  DC Power
-  Monitoring
-  Precision Cooling
-  Surge Protection

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