

LIEBERT® FDC POWER DISTRIBUTION CABINET

A Better Way To Power Up Your Data Center



OVERVIEW

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 system utilizes the standard size and appearance of a rack enclosure to address the physical needs of today's IT requirements. This enables these units to be used as part of a rack enclosure grouping, as well as in standalone applications.

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, 50Hz models and 84 poles (two panelboards) on 380-480V, 60 Hz models in a stand-alone cabinet with a rack footprint.



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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, 50 Hz models and 84 poles (two panelboards) on 380-480V, 60 Hz 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

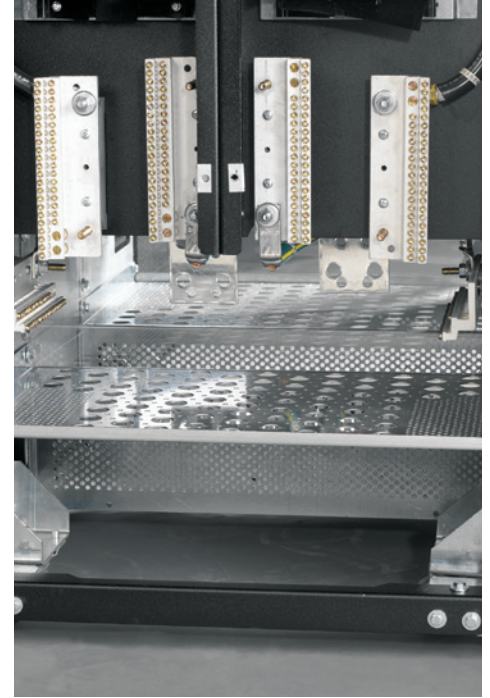
The Liebert FDC 208V and 380-415V, 50 Hz models use inline 42-pole panelboards with wide-open access channels. The four panelboards are separated into vertical compartments with individual hinged access covers. The Liebert FDC 380-480V, 60 Hz unit uses standard side-by-side 42-pole 400A panelboards, 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, 50 Hz model shown)



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



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.

**The Standard Liebert® FDC
208V, 50/60 Hz 380V, 400V and
415V 50 Hz models include:**

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

**380-480V, 60 Hz
Models Include:**

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

Optional Features Include:

- Top cable exit.
- 22kAIC main panelboard breakers (208V models).
- 65kAIC main panelboard breaker (380-480V, 60 Hz models).
- Current Plus Monitoring.
- Current monitoring panel.
- Isolated ground bus bars. (Not available on 380-480V, 60 Hz 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 380-480V, 60 Hz models).
- Plug-in main panelboard breakers. (Not available on 380-480V, 60 Hz models).
- Liebert Distribution Monitoring (LDM) to monitor main and branch circuits.
- Liebert IntelliSlot Unity card enables monitoring via BMS or network systems, offering SNMP, Modbus and BACnet protocols in one card.



Liebert® FDC Specifications — Model Number Designation

FD	C	44	4	4	SB	7	0
Product	Input Voltage	Frame	No. of Inputs	No. of Panelboards	Panelboard Type ¹	Panelboard Main Breaker ²	Monitoring
FD	C= 208V	44=2 Door Bottom Cable Exit	1=One	1=One	SB=Sq D Bolt-in	3=35kAIC	0=No Monitoring
	A= 480V	54=3 Door Bottom Cable w/Tie Breakers	2=Two	2=Two	SP=Sq D Plug-in	6=65kAIC	1=Current Monitoring
	F=380V, 50 hz	64=2 Door Top Cable Entry	4= Four	3=Three	GB=GE Bolt-in	0=None	6=LDMF
	U=400V, 50 hz	74=3 Door Top Cable Exit w/Tie Breakers		4=Four	GP=GE Plug-in	A=Plug-in	7=LDMF w/Display
	G=415V, 50 hz			5=One w /IG		7=ABB	8=LDMF w/SiteScan Interface
	M=380V, 60 Hz			6=Two w /IG			9=LDMF w/Display & SiteScan Interface
	T=400V, 60 Hz			7=Three w /IG			C=Current Plus Monitoring
	E=415V, 60 Hz			8=Four w /IG			

¹GE panelboards not available at 380-415V 50 Hz.
²High AIC main breakers not available at 380-415V 50 Hz.

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