



## *Liebert® TFX PDU*

150 – 300 kVA

Efficient and reliable power distribution for your mission-critical applications



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The Liebert® TFX is a floor-mounted power distribution unit (PDU) for enterprise companies and multi-tenant colocation providers. Offering customized configuration and a compact footprint, the Liebert TFX provides reliable uninterrupted single- or two-stage power distribution in small-to mid-sized data centers, network and server rooms, edge applications, and remote mission-critical facilities.

For companies that require custom distribution to meet the specific needs of their facilities, the Liebert TFX offers flexible power options. The unit is made-to-order, and is shipped to you with panelboards and subfeeds configured according to your specifications. Also, as power demands grow, you can add Liebert® FLX expansion cabinets to supplement the base transformer with additional capacity.

The Liebert TFX helps to solve the problems of limited space and mobility for PDUs in data center facilities. The compact transformer cabinet can easily be moved through doorways and installed in corners, enabling you to make better use of floorspace for IT equipment. The unit's modular design features isolated panelboards, making it safe for engineers to do onsite maintenance on individual low-voltage monitoring components while the rest of the unit is live. An intuitive power monitoring system keeps you informed of operating status, equipment loads, and potential overloads.

### Ideally suited for:

- Local and remote computing
- Small to mid-sized data centers
- Server rooms
- Network closets
- Edge facilities
- Distributed computer networks
- Containerized and micro data centers

## Features of the Liebert® TFX

Flexible Power Distribution	Compact, Modular Design	Intelligent Power Monitoring and System Control
Customized distribution according to your power needs and applications	Compact unit minimizes space requirements	9-inch color touchscreen display
Supports multiple input/output configurations	Easy mobility and installation	Easily program the system and manage equipment loads using the touchscreen display's navigation menu
Customized unit includes up to 3x42P panelboards, and 5x600AF or 12x250AF subfeeds	Top and bottom wire input and exit	On-screen display offers one-line system and individual breaker status, and equipment load levels
Available in 150 kVA, 200 kVA, 225 kVA, 250 kVA, and 300 kVA models	Subfeed breakers include pre-wired circuit transformers	Voltage, current, power, & energy metering
Single / Dual-stage distribution options	Front-serviceable	Import or export site-specific settings to or from other PDUs
High power capacity	Isolated high-voltage and low voltage printed circuit boards for safe and easy maintenance	Automatic notifications of potential overloads and other emergencies
Copper (Cu) and Aluminum (Al) transformer options	Compliant with UL60950 & UL62368-1	Event and audit logs
Vendor agnostic		Four-level security access control
Operates at up to 40C		Local and remote emergency power-off
Easy coordination between Vertiv UPS and STS units		Easily integrate with your BMS to monitor and manage local and remote power distribution
DOE2016 compliant transformers		
Up to ANSI/IEEE C62.41		
Liebert® FLX expansion cabinets available for additional power distribution		



Depth = 35.1" without front door

\* Top conduit plate adds 4" to overall installed height

**Compact design:** Space-saving unit requires minimal floor space, and can fit through any doorway or into freight elevators.

**Touchscreen control:** 9-inch color LCD touchscreen for system programming and power monitoring.

**Easy maintenance access:** Front access only for service, side access recommended for installation.

**Custom configurations:** Power configurations are made-to-order, according to your application demands.

**Panelboards and subfeeds:** Each unit includes up to 3 x 42P panelboards, and 5 x 600AF or 12 x 250AF subfeeds.

**Isolated PCBs:** Engineers can safely service or replace low voltage printed circuit boards while high-voltage breakers are live.

**Product warranty:** Comprehensive coverage through a standard exchange warranty. (One year after product startup, or 18 months after shipment.)

## Distribution Topology

Up to 12x250AF or 5x600AF SF's or up to 3x42P PB's

## Monitoring

DPM with internally or externally monitored breaker accessories

## Breaker Accessories

Auxiliary Switch(s), Alarm Switch

## Access

Front access only for service, side access recommended for installation

# How You Benefit from the Liebert® TFX PDU

## Consistent and Reliable Power Distribution

- Reliable PDU ensures uninterrupted power to your mission-critical IT equipment
- Transforms voltage from your UPS into standard voltage, for distribution throughout your IT environment
- Energy levels between 150-300 kVA make it suitable for small to mid-sized facilities
- Single-stage option lets you distribute power directly to IT rack PDUs
- Dual-stage option lets you distribute power to Remote Power Panels (RPPs) or busways, for distribution to server racks or cabinet rows
- Manufactured for high energy efficiency
- Custom Configurations
- Each unit is configured to handle your facility's specific power requirements
- Units are made to order, with the right combination of panelboards, subfeeds, or both (For example, your custom PDU may include one 42P panelboard and seven 250AF subfeeds)
- Limited onsite customization of subfeed breakers and branch circuit breakers can be performed at your facility after installation
- Optional Liebert® FLX expansion cabinets provide additional distribution as power needs grow

## Easy Installation with Better Use of Space

- Compact PDUs allows you to maximize floorspace for IT equipment
- Ideal for small data centers, network closets, server rooms, and containerized/micro data centers with limited space issues
- Caster wheels make it easy to move the unit into place
- Front-serviceable unit can be installed next to walls, in corners or alcoves
- 36-inch depth allows unit to fit through doorways and on freight elevators
- Top and bottom wire input/exit accommodates both overhead and underfloor electrical conduit runs
- Subfeed breakers come with pre-wired circuit transformers on the phases
- On-screen display lets you program system and breaker configurations, and export or import those configurations to other PDUs in the data center

## Easy Maintenance

- Isolated printed circuit boards allow service personnel to replace or troubleshoot high- and low-voltage PCBs without powering down the unit
- Modular design of the unit minimizes downtime to critical power path during maintenance
- Unit reduces potential for downstream short circuit fault currents
- Accessible and knowledgeable tech support and field service engineers

## Intelligent Power Monitoring

- 9-inch color touchscreen lets you check system/breaker status and manage equipment loads
- Accurate voltage, current, power, and energy metering
- Unit monitors power usage for billing or cost allocation
- Easily identify root cause of power quality issues or outages
- Automatic warnings of near overload conditions
- Local and remote Emergency Power-Off
- Integration with your BMS allows you to manage and monitor offsite PDUs in remote data centers and edge facilities

## PDU Specifications

### Electrical

kVA Rating	150kVA, 200kVA, 225kVA, 250kVA, 300kVA
Input	3-phase, 3-wire plus ground
Input Voltage	@50Hz, 380V-415V @60Hz, 480V
Output	3-phase, 4-wire plus ground
Output Voltage	@50Hz: 380/230V, 415/240V @60Hz: 415/240V, 208/120V
Agency listed to	UL-60950-1, UL-62368-1, FCC Part 15, and ANSI/IEEE C62.41 for Category B1 locations

### Operating Conditions

Operating Temperature	0 to 40°C
Storage Temperature	-20 to 55°C
Audible Noise	Meets NEMA ST-20 standard
Relative Humidity	0 to 90% non-condensing
Altitude	up to 6,600ft

### Transformer

Meets DOE2016 standard	
Transformer Ratings available in	K4, K13, K20
Transformer Material Type	Copper (Cu) and Aluminum (Al)
Neutral conductor rating	200%
Temp Rise options	150°C (Standard), 115°C, 80°C
Vertiv transformers have been designed and built by Vertiv in our world-class manufacturing facility for over 40 years	

### Monitoring

Monitoring Configurations	Monitoring at the System level (Input and Output) Monitoring down to the branch circuit level (BCMS)
Display	9.0" Color touchscreen
Measured Values	Voltage, Current, Power Factor, Energy, Harmonics
Protocols	Modbus TCP, SNMP, BACnet IP or MSTP, Modbus/RTU, SMS, Email, HTTP/HTTPS and Vertiv Protocol
Environmental sensor enabled through same protocols	

## Additional Expansion Cabinets

If your facility requires additional power configurations, the following expansion cabinets are used to supplement the Liebert® TFX.



### Liebert® FLX12A Front-Facing Subfeed Distribution Cabinet

- Features 4x250AF or 3x600AF subfeed breakers
- 12-inch width



### Liebert® FLX12D Side-Facing Panelboard Distribution Cabinet

- Featuring 250A and/or 400A panelboards
- 12-inch width



### Liebert® FLX18E Side-Facing I-Line Panelboard Distribution Cabinet

- Features 800A I-Line panelboard, 800A back-fed main breaker (100% rated)
- 18-inch width

## About Vertiv

Vertiv brings together hardware, software, analytics and ongoing services to ensure its customers' vital applications run continuously, perform optimally and grow with their business needs. Vertiv solves the most important challenges facing today's data centers, communication networks and commercial and industrial facilities with a portfolio of power, cooling and IT infrastructure solutions and services that extends from the cloud to the edge of the network. Headquartered in Columbus, Ohio, USA, Vertiv employs around 20,000 people and does business in more than 130 countries. For more information, and for the latest news and content from Vertiv, visit [Vertiv.com](http://Vertiv.com).

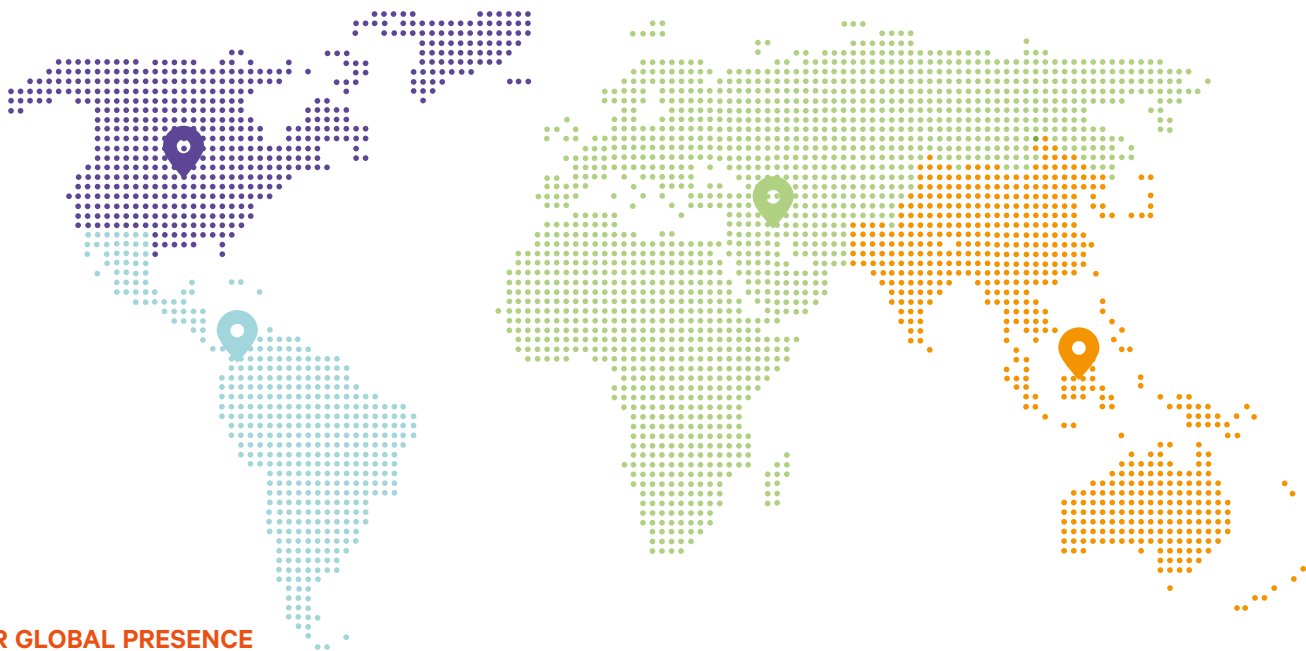
## Warranty Information

Liebert Three-Phase AC Power Products: A period of one (1) year from product start-up and commissioning performed by Vertiv personnel, which period shall expire no later than eighteen (18) months from the Product shipment date. Product shipment date is determined only from the bill of lading.

If any part or portion of the Vertiv product fails to conform to the warranty within the warranty period, vertiv, at its option, will furnish new or factory remanufactured products for repair or replacement of that failed portion or part. Repair or replacement of a defective product or part thereof does not extend or restart the original warranty period. Vertiv does not control the use of any product and, accordingly, materials classified as "descriptions" are not warranties of performance and not warranties of fitness for a particular purpose.

## OUR PURPOSE

We believe there is a better way to meet the world's accelerating demand for data - one driven by passion and innovation.



## OUR GLOBAL PRESENCE

Manuf. and Assembly Locations **28**  
Service Centers **250+**  
Service Field Engineers **2,650+**  
Technical Support/Response **300+**  
Customer Experience Centers/Labs **16**



### US AND CANADA

Manuf. and Assembly Locations **13**  
Service Centers **100+**  
Service Field Engineers **850+**  
Technical Support/Response **120+**  
Customer Experience Centers/Labs **4**



### LATIN AMERICA

Manuf. and Assembly Locations **1**  
Service Centers **20+**  
Service Field Engineers **240+**  
Technical Support/Response **20+**  
Customer Experience Centers/Labs **2**



### EUROPE, MIDDLE EAST AND AFRICA

Manuf. and Assembly Locations **9**  
Service Centers **70+**  
Service Field Engineers **590+**  
Technical Support/Response **90+**  
Customer Experience Centers/Labs **5**



### ASIA PACIFIC

Manuf. and Assembly Locations **5**  
Service Centers **60+**  
Service Field Engineers **970+**  
Technical Support/Response **80+**  
Customer Experience Centers/Labs **5**



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