



Vertiv™ Liebert® RXV

Remote Power Panel



The Vertiv™ Liebert® RXV remote power panel helps meet high density power demands, with an intelligent monitoring system. The unit's compact footprint saves valuable floor space, reduces time to implement and enables flexible expansion of your distribution system for the future.

The Liebert® RXV offers continuous power to critical applications in a reliable and safe manner, and dramatically reduces the time associated with distribution deployment. With Vertiv™ Liebert® DPM intelligent monitoring, data center and facility managers get a complete overview of all circuits and consumption, allowing users to capture, for example, Power Usage Effectiveness (PUE) values, optimise load distribution and ultimately, increase cost efficiency and energy efficiency within the data center.

The Right Solution

Entirely preconfigured, certified and tested, the Vertiv™ Liebert® RXV is the ideal solution for data center engineers, saving on valuable time for planning. With the Vertiv™ Liebert® DPM, you can easily monitor energy consumption at IT branch level, detect phase imbalances, as well as thresholds with visible and audible alarm notifications.

Vertiv™ Liebert® RXV also delivers user safety and serviceability. Multiple PCB access sections, and optional EZ-View door provide safe operational interface. Optional finger-safe panel boards provide an additional layer of user security.

Adding Value

The Vertiv™ Liebert® RXV features intelligent power monitoring at input and branch circuit level, with a 9" touchscreen color display, providing a one-line system, input breaker status, as well as equipment load level and power quality.

A navigation menu allows for easy system programming and equipment load management, along with the ability to import or export site-specific configurations to or from other units. The monitoring system offers voltage, current, power and energy metering with 0.5% accuracy, further integrating with your BMS systems to provide management of local and remote power distribution using automatic notifications of potential overloads, as well as local or remote emergency power-off.



Vertiv™ Liebert® RXV

Benefits

Suitable For Any IT Space

The Vertiv™ Liebert® RXV is a remote power panel ideal for small to large data centers, server rooms, network closets and remote facilities.

The unit offers flexibility for enterprise and colocation companies that require specific server distribution needs within a compact footprint.

With features like easy installation and serviceability, it is ideally suited for edge support environments and facilities with limited space.

Key Features:

- **Reliable uninterrupted power** distribution for your IT infrastructure
- **High accuracy** 0.5% monitoring for reliable load management
- **Load Loss Detection** indicates branch breaker status for quick insights to system performance.
- **High power density:**
 - 400 Amps 84 Poles in 24" x 12"
- **Available in two ratings:** 250 Amps or 400 Amps
- **Broad Configurations Range** 84, 54 and 42 pole panelboards Top &/or Bottom landing 208/120; 415/240 & 480/277 Vac
- **Intelligent oversight** with Vertiv™ Liebert® DPM monitoring system
- **Sustainable packaging** with multi-unit per skid shipping standard

Vertiv™ Liebert® RXV Specifications

	Model / Ratings / Version	Model / Ratings / Version
Technical Characteristics	Liebert® RXV 250 A	Liebert® RXV 400 A
Rated current of the assembly	250 A	400 A
Rated and operational voltage	208/120, 415/240, 480/277 Vac	
Rated frequency (fn)	60 Hz	
Number of poles**	84, 54, 42	
Operating temperature	0 to 40°C	
Storage temperature	-25 to 70°C	
Display*	Integrated 9" color touchscreen display	
Standards		
Environmental	REACH; RoHS	
Regulatory	UL 62368-1	
Mechanical Characteristics		
Height	79" / 2000 mm	
Width	24" / 600 mm	
Depth	12" / 305 mm	
Cables Access	Top and/or Bottom	
Communication/Monitoring*		
Communication protocols	Modbus TCP, SNMP, BACnet IP or MSTP, Modbus/RTU, SMS, Email, HTTP/HTTPS and Vertiv Protocol	
Communications card	Vertiv™ Liebert® IntelliSlot™ RDU101	

*Optional

** 42 and 84 Poles Available in 208V only



Figure 1. Vertiv™ Liebert® RXV
(second access door view)



Figure 2. Vertiv™ Liebert® RXV
(internal view - fingersafe option)



Figure 3. Vertiv™ Liebert® RXV with
optional viewing window door

Power Monitoring System

The Vertiv™ Liebert® DPM is an advanced monitoring system from Vertiv that provides remote access to energy readings and facilitates data integration for data center intensive industries, facilities working to optimise server capacity, and businesses with a critical need to maintain uptime. This embedded system provides real time views of electrical capacity, as well as power usage on branch circuits and mains. It sends visible and audible threshold alerts on power and environmental conditions, thereby helping to prevent downtime.

The Vertiv™ Liebert® DPM consists of a two-level system monitoring:

Input Monitoring Level

shows the data from the Main Input Circuit Breaker:

- Phase, Neutral, and Ground Current
- Current Load Percentage
- Voltage Line-to-Line
- Voltage Line-to-Neutral
- Frequency
- Real Power (kW)
- Apparent Power (kVA)
- Power Factor
- Energy (kW-Hours)
- Peak Current (A)
- Peak Demand (kW)
- Current Crest Factor
- Current and Voltage Total Harmonic Distortion (THD) in total THD - includes 3rd, 5th, 7th and 9th Harmonics
- Circuit identification and status of the MICB

Branch Circuit Monitoring Level

shows the data for each outgoing circuit from the unit, either for single phase or three phase loads:

- Phase Current
- Percent Load
- Real Power (kW)
- Power Factor
- Energy (kW-Hours)
- Peak Current (A)
- Peak Demand (kW)
- Circuit identification of each breaker



Figure 1. Front 9" touch screen coloured display with visible and audible alarms to prevent downtime

The display's frame includes LED and speakers with easily programmable alarms for faults or warnings:

- Output Overvoltage
- Output Undervoltage
- Output Overcurrent
- Neutral Overcurrent
- Ground Overcurrent
- Summary Alarm

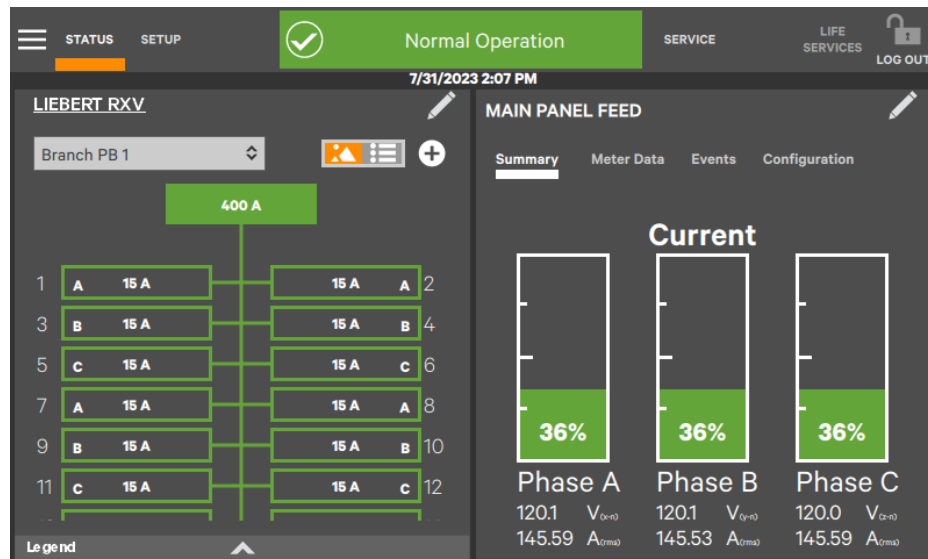
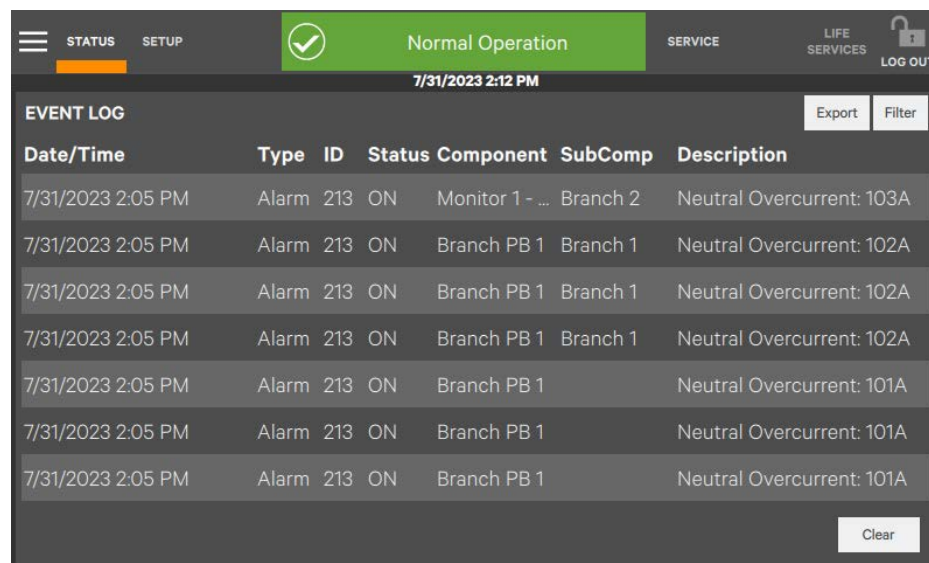


Figure 2. The Vertiv™ Liebert® RXV unit's One-line electrical diagram displays the current status of the main and branch panel breakers. The Summary panel displays the unit's total load and individual phase currents.



The screenshot displays the 'Event Log' section of the unit's interface. It shows a table of events with columns for Date/Time, Type, ID, Status, Component, SubComp, and Description. The events are all 'Alarm' type, 'ON' status, and 'Neutral Overcurrent' description. The table is filtered by 'Export' and 'Filter' buttons. A 'Clear' button is located at the bottom right.

Date/Time	Type	ID	Status	Component	SubComp	Description
7/31/2023 2:05 PM	Alarm	213	ON	Monitor 1 - ...	Branch 2	Neutral Overcurrent: 103A
7/31/2023 2:05 PM	Alarm	213	ON	Branch PB 1	Branch 1	Neutral Overcurrent: 102A
7/31/2023 2:05 PM	Alarm	213	ON	Branch PB 1	Branch 1	Neutral Overcurrent: 102A
7/31/2023 2:05 PM	Alarm	213	ON	Branch PB 1	Branch 1	Neutral Overcurrent: 102A
7/31/2023 2:05 PM	Alarm	213	ON	Branch PB 1		Neutral Overcurrent: 101A
7/31/2023 2:05 PM	Alarm	213	ON	Branch PB 1		Neutral Overcurrent: 101A
7/31/2023 2:05 PM	Alarm	213	ON	Branch PB 1		Neutral Overcurrent: 101A

Figure 3. The display's Event Log summarizes faults, warnings, and other events chronologically for troubleshooting and checking for operational trends.

