

Vertiv™ Liebert® ITA2 UPS



Quick Installation Guide

IMPORTANT: Before installing, connecting to supply or operating your Liebert® ITA2 UPS, please review the Safety and Regulatory Statements sheet. For detailed installation, operating, maintenance and troubleshooting information visit the ITA2 product page for the ITA2 UPS Installer/User Guide available at www.VertivCo.com or use the QR code below.



Unpacking and Inspection

Unpack and inspect the UPS and its accessories. If damage is visible, do not proceed. File a damage claim with the carrier immediately and send a copy to:

Vertiv Corporation
1050 Dearborn Drive
P.O. Box 29186
Columbus, Ohio 43085 USA

Selecting Power Cables

When connecting wiring, follow the local wiring regulations, and take the environment situation into account.

NOTE: The conduit size and wiring method must be in accordance with all local, regional and national codes and regulations, including NEC ANSI/NFPA 70.

The maximum current for operating modes, the recommended wire sizes, and the recommended power cables

and plugs are listed in Tables 1 to 3, below.

Prepare for Connections

For all configurations:

- Remove the conduit box cover to gain access to the input and output terminal blocks.
- Remove the knockout plates and attach the conduits to the rear of the conduit box.

Single-input Configuration Connections

1. Leave the shorting busbars in place on the UPS input terminal block.
2. Referring to the *Single-input Wiring Diagram* on the next page, connect the cables from the upstream feeder panel:
 - Phase A to L1

Table 1 Liebert UPS currents and cables — User and UPS rectifier input

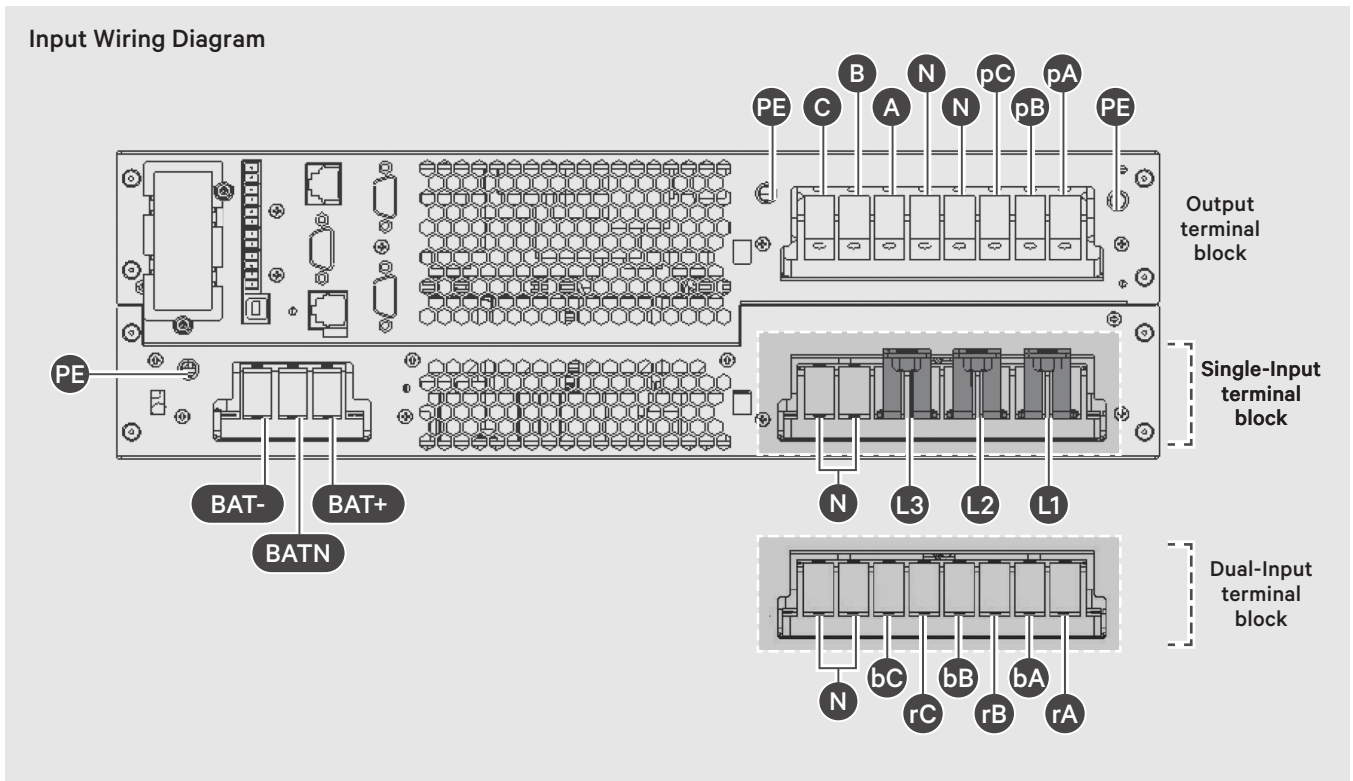
Unit Rating	Maximum Input Current (A)	Recommended OPD	75°C THW Copper Wire (phase) <small>*Number of Cable per phase:1</small>	75°C THW Copper Wire (neutral) <small>* Number of Cable:1</small>	75°C THW Copper Wire (Ground) <small>* Number of Cable: 1</small>	Recommended Torque
8KVA	24	8KVA = 30A	8AWG	8AWG	10AWG	8KVA = 30 lb-in
10KVA	37	10KVA = 50A	6AWG	6AWG	10AWG	10KVA = 30 lb-in

Table 2 Liebert UPS currents and cables — User and UPS bypass input and output

Unit Rating	Maximum Input Current (A)	Recommended OPD	75°C THW Copper Wire (phase)	75°C THW Copper Wire (neutral)	75°C THW Copper Wire (Ground)	Recommended Torque
8KVA	23	8KVA = 30A	10AWG	10AWG	10AWG	8KVA = 30 lb-in
10KVA	28	10KVA = 50A	8AWG	8AWG	10AWG	10KVA = 30 lb-in

Table 3 Ring terminal part numbers

Part Number	10 AWG (5.26 mm ²)	8 AWG (8.36 mm ²)	9 AWG (13.3 mm ²)
	McMaster-Carr: 7113K462	McMaster-Carr: 7113K444	McMaster-Carr: 7113K366
	Thomas & Betts: RC10-14	Thomas & Betts: RDV717	Thomas & Betts: RE6-14
	Tyco Electronics: 1577648-1	Tyco Electronics: 132331-1	—



- Phase B to L2
- Phase C to L3
- Neutral to N
- Ground to PE (next to pA)

Dual-input Configuration Connections

1. Remove the shorting busbars from the terminals labeled L1, L2, and L3 in the Single-input Wiring Diagram, above.
2. For Rectifier input, refer to the *Dual-input Wiring Diagram* below, and connect the cables from the upstream feeder panel:
 - Phase A to rA
 - Phase B to rB
 - Phase C to rC
 - Neutral to N
 - Ground to PE (next to pA).
3. For Bypass input, refer to the *Dual-input Wiring Diagram* on the next page, and connect the cables from the upstream feeder panel:

- Phase A to bA
- Phase B to bB
- Phase C to bC
- Neutral to N
- Ground to PE (next to pA).

Output Connections

NOTE: The UPS has two output terminal-block sections, “always-on” and “programmable/controllable.” The always-on connections are listed first, and the programmable connections are listed inside parentheses.

4. Referring to the *Dual-input Wiring Diagram* below, connect the cables from the UPS to the downstream feeder panel on the panel board main breaker:
 - Phase A from A (pA) to Phase A on panel.
 - Phase B from B (pB) to Phase B on panel.
 - Phase C from C (pC) to Phase C on panel.
 - Neutral N (N) to the neutral bus

on panel.

- Ground from PE (stud next to C to the ground bus on panel.

5. Replace the conduit box cover and secure it.

Powering the UPS

NOTE: Do not start the UPS until after the installation is finished, all UPS wiring is complete, and all access panels removed for installation are replaced and secured on the UPS.

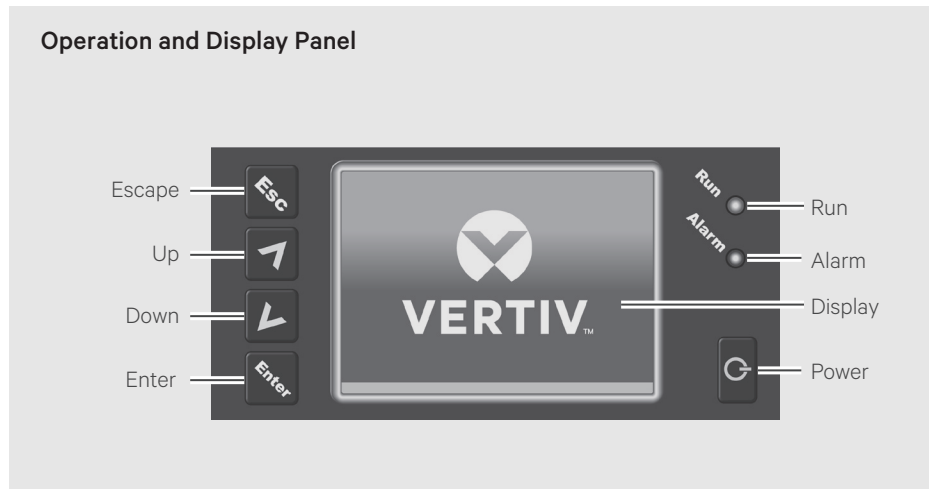
1. Close the upstream feeder breaker for the UPS rectifier and, for dual-input configuration, close the upstream feeder breaker for the UPS bypass.
2. Close all downstream breakers including distribution-panel main breaker and/or branch circuit breakers.

3. If you connected external battery cabinets, close the battery-output breaker(s).
4. Referring to the illustration, *Operation and Display Panel* at the right:
 - Open the maintenance-bypass breaker (MBB) and secure the mechanical interlock near the breaker hand in the lower position.
 - Close the rectifier-input breaker (RIB), bypass-input breaker (BIB), and maintenance-isolation breaker) MIB.

The UPS starts and performs boot-up system checks for 20 to 30 seconds.

5. Power-on the UPS using the Operation and Display Panel by pressing the power button until the confirmation dialog appears. Use the Up/Down arrows to select “YES”, then press Enter.

NOTE: During operation, the UPS may sound an alarm. You may press-and-hold the Esc button for 3 seconds to silence the audible alarm.





To contact Vertiv Technical Support: visit www.Vertiv.com

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