

UL924 ELEVATOR EMERGENCY BACKUP

WAVE RIDER ASCENT^{UP TO 240KW}

ELEVATOR EMERGENCY BACKUP POWER

Discover Crucial Power's innovative 24/7 monitored backup inverter system for **Elevators**. Revolutionizing emergency preparedness in response to the IBC 1009 & IFC naming Elevators as part of Emergency Evacuation/Life Safety Systems and requiring 2 Hours of emergency backup.



ASCENT BREAKTHROUGHS:

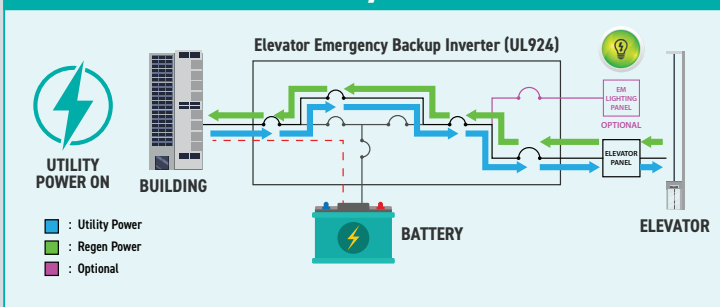
INTRODUCING THE REGEN AGENT:

- Directs Regen Power to the Building (Normal Operation)
- Directs Regen Power to Charge the Batteries (EM Operation)
- No More Need for a Resistor Bank (A.K.A. 'The Toaster')

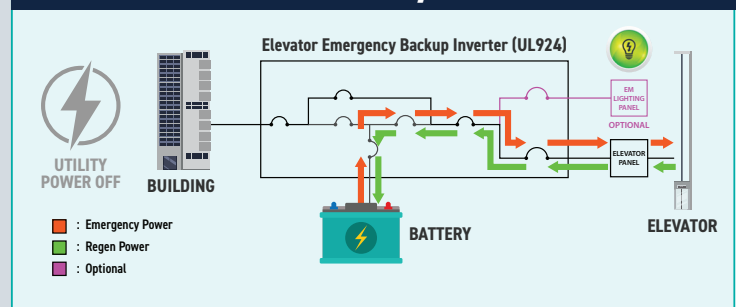
- **Compatible with:**
 - Non-Regenerative Elevators
 - Regenerative Elevators
 - Hydraulic Elevators
- **24/7 Electronics Self-Diagnostic Routines Ensure Unwavering Readiness:**
 - Email and SMS Notifications options available.
- **Combine Egress Lighting for a Single Emergency Egress Solution (optional).**

- **Provides Cost Savings Over Generators by:**
 - Integrating the Automatic Transfer Switch into the Ascent.
 - Reducing Footprint Size.
 - No More Costly On-Site Testing and Maintenance.
- **Automatic Monthly and Annual Self-Testing:** (Remote Monitoring Available)
 - Meet NFPA Standards Effortlessly with Automated Monthly and Annual Self-Testing.
 - Local Data Logging.
- **Aligns with Sustainability Objectives by:**
 - Providing Clean Energy
 - Reducing HVAC Needs
 - Removing Environmentally Damaging Fuel Tanks
- **Monitor Battery Health and Manage Responses to Environmental Conditions (optional).**

UTILITY / REGEN



EMERGENCY / REGEN



Wave Rider™ Ascent SPECIFICATIONS

Power Rating:

24, 32, 40, 50, 64, 80, 96, 128, 160, 192 and 240kW

Input Voltage:

208Y/120V or 480Y/277 VAC
(-15% to +15%)

Output Voltage:

208Y/120V or 480Y/277 VAC

Output Frequency (Inverter Operation):

60Hz ± 7Hz

Voltage Regulation:

±1% at 100% unbalanced load

Output Voltage Wave Form:

Sinusoidal < 2% THD.

Crest Factor: 3:1 Typical

Surge Protection:

The UPS will protect itself and the load against surges as defined in ANSI/IEEE C62.41 Categories A and B.

Isolation: True galvanic isolated

Battery: Sealed, Maintenance-Free, VRLA Standard 10 Year

Recharge Time: Varies per KVA and conforms to UL924

Environmental:

Humidity: 0 - 90% (non-condensing)

Operating Temperature:

UPS: 0° to 40°C. (32° - 104°F)

Battery: 20° to 25°C. (68° - 77°F)

Higher temperature batteries are available for special order.

Storage Temperature:

-20° to 70°C. (-4° - 158°F)

Electronics only.

Altitude: Up to 5,000 ft

Cabinet Sizes:

	(Width")	(Height")	(Depth")
*24-50kW:	34"	75"	31.5"
*64-128kW:	55.5"	75"	31.5"
Battery Cab:	51"	70"	30.5"

* The electronics cabinet unit must be sized to handle system inrush current, while the battery cabinet must provide backup time for steady-state current.

KVA/KW	*INPUT	* OUTPUT	MODEL NUMBERS	DC Voltages	WEIGHTS (LBS) CABINETS	
					UPS	EACH BATTERY (#) OF CAB.
30/24	208Y/120V	208Y/120V	WR030B05ELT3	348	1260 (1)	4535 (1)
	480Y/277V	480Y/277V	WR030H09ELT3			
40/32	208Y/120V	208Y/120V	WR040B05ELT3	348	1414 (1)	3416 (2)
	480Y/277V	480Y/277V	WR040H09ELT3			
50/40	208Y/120V	208Y/120V	WR050B05ELT3	348	1525 (1)	3867 (2)
	480Y/277V	480Y/277V	WR050H09ELT3			
60/50	208Y/120V	208Y/120V	WR060B05ELT3	348	1724 (1)	4923 (2)
	480Y/277V	480Y/277V	WR060H09ELT3			
80/64	208Y/120V	208Y/120V	WR080B05ELT3	348	2276 (1)	3707 (1) 4729 (2)
	480Y/277V	480Y/277V	WR080H05ELT3			
100/80	208Y/120V	208Y/120V	WR100B05ELT3	348	2984 (1)	3416 (2) 4923 (2)
	480Y/277V	480Y/277V	WR100H09ELT3			
120/96	208Y/120V	208Y/120V	WR120B05ELT3	348	3138 (1)	4923 (4)
	480Y/277V	480Y/277V	WR120H09ELT3			
160/128	208Y/120V	208Y/120V	WR160B05ELT3	348	3868 (1)	**
	480Y/277V	480Y/277V	WR160H09ELT3			
200/160	208Y/120V	208Y/120V	WR200B05ELT3	348	5746 (1)	**
	480Y/277V	480Y/277V	WR200H09ELT3			
**240/192	208Y/120V	208Y/120V	WR240B05ELT3	348	6229 (1)	**
	480Y/277V	480Y/277V	WR240H09ELT3			
**300/240	208Y/120V	208Y/120V	WR300B05ELT3	348	7293 (1)	**
	480Y/277V	480Y/277V	WR300H09ELT3			

* For other voltages consult factory.

** For other capacities consult factor.

Specifications are subject to change without prior notification.

Standard Features

- Integrated Automatic Transfer Switch:
 - Send Control Signals to Elevator System:
 - Emergency to Utility Power Time Delay.
- 2-Hour Backup
- Dry Contacts (8 Terminal):
 - INVON, OVL, FAULT, SS BYPASS, BACKUP, BATL, COM (Must select normally open or normally closed not both.)
- Form C Dry Contacts (Normally Closed)
- Independent Phase Control Circuitry:
 - Phase Imbalance Tolerant.
 - Will Operate Completely Unbalanced.
- Pulse Width Modulation Rectifier:
 - 06-Pulse (24kW to 64kW).
 - 12-Pulse (80kW and above).
- Main Input/Output Circuit Breakers.
- Internal Maintenance Bypass.
- Transient Voltage Surge Suppression (TVSS).
- LCD Display for Viewing Unit Status and Events.
- Modular Design for Ease of Service.
- Multiple CPU Design:
 - Individual CPUs for Control Circuit Functions.
 - Parallel Redundancy for Critical Circuits.
- Intelligent Charger w/ Temperature Compensation.
- Redundant Power Supply.
- Integral Protection Against Operator Error.
- Power Conditioning Using PWM Methodology.
- Output Isolation Transformer for True Galvanic Isolation on the Load Side of the Inverter.
- Cold Start Function:
 - Power Up the Unit Using Its Batteries.

Options

- Regen Agent™ (Regen Management System)
 - Redirects Regenerative Power to:
 - The Building (Normal Operation)
 - Charge the Batteries (Emergency Operation)
- Integral Auxiliary Output Circuit Breakers (Consult Factory)
- Delta Input
- RS-232 / RS-485 Connectors for External Modules:
 - Remote Status Panel UPSCAN™
 - Software for PC Monitoring UPSCOM™
 - Auto Dialing Module UPSCALL™
 - Battery Monitoring Module DCMAN™
- Event Logging up to 500 Events
- WiFi Monitoring (GMS)
- Wireless Battery Monitoring System: (Monitors Battery Health, Including Impedance)
 - String Monitoring
 - Individual Battery Monitoring
- Thermal Runaway Control (IFC 1206.2)
- Battery Cabinet Exhaust Fan (IFC 1206.2)
- Battery Cabinet Exhaust Fan Dry Contact & Audible Alarm (IFC 1206.2)
- Integral Emergency Egress Lighting Backup
- Independent Elevator/Egress Lighting Sub-feed Breakers

Consult Factory for more features and choices of remote communication.