

# THE ALL-IN-ONE ELEVATOR BACKUP SOLUTION

Designed to adhere to strict regulations, the Power Wave Elevate safeguards against downtime during emergencies. Complying with IBC 1009, IFC, NEC 700 & NEC 701 guidelines, it ensures 2 hours of uninterrupted elevator functionality during emergencies and can support non-regen and regen elevators. Specifically tailored for elevator systems, its versatile design and exceptional reliability make it the ultimate solution to meet all emergency backup needs. Additionally, it's designed to help building owners meet ICC 1009.2.1 requirements.



OnLine rower

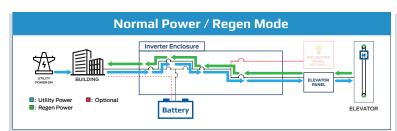
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## BENEFITS OF POWER WAVE ELEVATE

- ✓ Designed to meet IBC 1009 and IFC Compliance
- Use Elevator Regenerative Power to Recharge Backup Power and Extend Backup
- **Standard 2 Hours of Backup Power for Elevators** ■
- ☑ Can be Combined with Emergency Lighting (optional) for Cost & Space Savings
- **☑** No ATS Switch Needed

- Compatible with Regenerative, Non-Regenerative and Hydraulic Elevators
- Local Accessible Event Logger with Unit Audible Alarm (Standard) Remote Monitoring (optional)
- ✓ Automatic Self-Testing with Report Logs
- Battery Health Monitoring
- ☑ Resistor Bank Not Required
- Normally Closed Dry Contacts Standard for Elevator Communication



# Emergency Power / Regen Mode Inverter Enclosure UTLITY POWNER OF BUILDING ELEVATOR ELEVATOR Battery ELEVATOR

## **MEET IBC 1009 & IFC COMPLIANCE**



# COMPATIBLE W/ VARIOUS ELEVATOR TYPES:

- REGENERATIVE
- NON-REGENERATIVE
- HYDRAULIC



#### **REGEN MANAGER**

Efficiently directs regenerative power to building or battery charging, depending on utility status, eliminating the need for a resistor bank.





# **SPECIFICATIONS**

# Power Wave Elevate

**Elevator Backup System** 

Three Phase, up to 240kW / 300kVA

#### **SAFETY STANDARDS**

UL924, UL1778, NFPA101, NFPA70, NEC 700, NEC 701 Listed to UL924 and UL1778 Standards

INPLIT

AC Voltage: ±15% Frequency: 50/60Hz ±7

OUTPUT

AC Voltage Regulation: 1-3% typically

Wave Form: Sinusoidal

Harmonic Distortion: Less than 2% THD

Frequency Tolerance: ±0.1 Hz

**PROTECTION** 

**Overload:** Less than 110% Load: Continuous, 125-150%: 5 min, Higher than 150%: 30 sec

**BATTERY** 

**Battery:** Sealed, Maintenance-free, Lead-Acid, VRLA (Standard) 10 years. Long Life 20 years (optional) **Recharge Time:** Varies per kVA, conforms to UL924

**NOISE ISOLATION** 

**Isolation:** True Galvanic Isolated

**ENVIRONMENT (Electronics)** 

Operating Temperature: 0° to 40°C (32° - 104°F) Storage Temperature: -20° to 70°C (-4° - 158°F) Humidity: 0% to 90% (non-condensation)

Altitude: Up to 5,000 ft

Audible Noise: Less than 65dBA at 1 meter/39.4 in.

# **Cabinet Dimensions**

(Inches) Width x Height x Depth

#### Cabinet I

34"W x 75"H x 31.5"D

#### Cabinet II

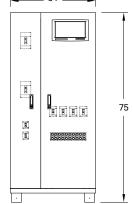
55.5"W x 75"H x 31.5"D

#### **Battery Cabinet**

51"W x 70"H x 30.5"D

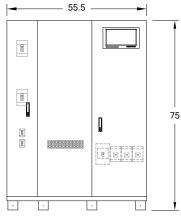
Each model comes with both inverter and battery cabinets. Larger capacity will require additional battery cabinets. Size and weight will vary depending on capacity. For units requiring larger capacities, please consult the factory.

# CABINET I \_\_\_ 34 \_\_\_\_



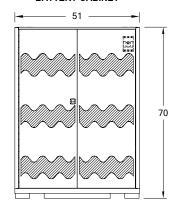
24KW - 50KW INVERTER CABINET

#### CABINET II



64KW - 128KW INVERTER CABINET

#### **BATTERY CABINET**



# **Model Numbers**

Unit Name	Capacity	Input	Output
	KVA/KW	(VOLTS)	(VOLTS)
PW Power Wave Elevate	030 30/24 040 40/32 050 50/40 060 60/50 080 80/64 100 100/80 120 120/96 160 160/128 200 200/16 240 240/192 300 300/24	2	<b>05ELT3</b> 208Y/120 <b>09ELT3</b> 480Y/277

kW equates to real power.

# **BTU / Weight**

				STANDARD	)			
Capacity	BTU/HR		*Cabinets - 120MIN (LBS) (# OF CABINETS)			*Cabinets - 90MIN (LBS) (# OF CABINETS)		
KVA/KW	STANDARD	GREEN	INVERTER	TOP	FRONT	INVERTER	TOP	FRONT
30/24	10120	4310	1260 (1)	4535 (1)	5034 (1)	1260 (1)	4361 (1)	4135 (1)
40/32	12131	5747	1414 (1)	3416 (2)	3990 (2)	1414 (1)	3213 (2)	5034 (1)
50/40	15164	5687	1525 (1)	3867 (2)	4153 (2)	1525 (1)	3427 (2)	3990 (2)
60/50	18197	6824	1724 (1)	4923 (2)	5034 (2)	1724 (1)	3867 (2)	4135 (2)
80/64	24263	9099	2276 (1)	3707 (1) 4729 (2)	5034 (3)	2276 (1)	4615 (2)	5034 (2)
100/80	30329	11373	2984 (1)	3416 (2) 4923 (2)	5034 (3)	2984 (1)	3707 (1) 4729 (2)	5034 (3)
120/96	32395	10130	3138 (1)	4923 (4)	5034 (4)	3138 (1)	3416 (2) 4923 (2)	5034 (3)
160/128	43193	13507	3868 (1)	* *	5060 (5)	3868 (1)	* *	5060 (4)
200/160	53992	16884	5746 (1)	* *	5060 (6)	5746 (1)	* *	5060 (5)
240/192	64790	20206	6229 (1)	* *	*	6229(1)	* *	5060 (6)
300/240	80988	25326	7293 (1)	* *	*	7293 (1)	* *	*

 $<sup>\</sup>label{thm:continuity} The \ approximation \ is \ worst \ case \ BTU \ output, \ measured \ during \ recharge \ following \ a \ discharge.$ 

# **Warranty**

Standard warranty is eighteen (18) months from ship date or twelve (12) months from start up, whichever occurs first. Optional second year warranty with factory performed preventative maintenance available.









<sup>\*</sup> To accommodate system inrush current, the electronics cabinet unit must be properly sized, and the battery cabinet should ensure backup time for steady-state current.

# **ORDERING GUIDE**

PROJECT NAME :	
REP / DISTRIBUTOR :	

ORDER NUMBER DOES NOT REFLECT MODEL NUMBER. PLEASE CONSULT FACTORY.

# **Power Wave Elevate**

Example: PW-EL-R-50-B05-S120-N08A40-SFB1(20)-FC-GMS3-PM2

**ELECTRICAL DESIGNER / ENGINEER:** DATE:

PM<sub>2</sub>

WARRANTY

& SERVICES

Blank: Standard Onsite

Startup and Warranty

**EXT:** Additional One

(Includes First Year

PM (2-3): Onsite

Years)

Year Extended Warranty

Preventative Maintenance)

Preventative Maintenance

Training at Time of Start Up

T2: Additional Training day

(Once Per Year, up to 3

T1: Additional 4 Hour

up to 8 hours

**PICK ANY:** 

ADDITIONAL:

# **PW-EL** MODEL

# **SERIES** PW-EL:

Power Wave Elevate

# **ELEVATOR TYPE**

R: Regen Elevator NR: Non-Regen Elevator H: Hydraulic Elevator

CAPACITY KW/KVA

50

24/30 24: 32: 32/40 40: 40/50

50: 50/60 64/80 64: 80: 80/100

96/120 96: **128:** 128/160 **160:** 160/200

**192:** 192/240 **240**: 240/300 **B**05

PW-EL

#### **VOLTAGE** INPUT/OUTPUT

**INPUT** 

**B** - 208Y/120 **05** - 208Y/120 **H** - 480Y/277 **09** - 480Y/277

OUTPUT

\*Input 'B' not compatible with Output '09'

# **S120**

**BATTERY TYPE \$120:** Standard @ 120min

\* **L120:** Long Life @ 120 min **H120:** Hi Temp @ 120 min **U120:** USA @ 120 min

(required for BAA and BABA compliance) **\$90:** Standard @ 90min

\* **L90:** Long Life @ 90 min **H90:** Hi Temp @ 90 min

**U90:** USA @ 90 min (required for BAA and BABA compliance)

\*Long Life 20 Yr. Pro Rata Battery.

# N08A40

## **AUX BREAKERS (UL1077)**

#### **AUX BREAKERS EXAMPLE**

N 08 A 40

## **OUTPUT**

N: Normally ON F: Normally OFF

\*\*FD: Normally OFF w/ Time Delay

#### **BREAKERS**

\*01 - 20 (Max 20)

# AMP RATING\*\*\*

SFB1(20)

10, 15, 20, 25, 30, 40, 50, 60

STANDARD: 20 AMP

#### **VOLTAGE** A - 120V. 1P

**B** - 208V. 2P

C - 240V. 2P

**D** - 277V. 1P

E - 480V. 2P

F - 208Y/120, 3P

G - 480Y/277, 3P

#### **2 SUBFEED OUTPUT BREAKERS**

**SFB1(#):** Sub Feed Breaker 1 (#): Desired Amps **SFB2(#):** Sub Feed Breaker 2 (#): Desired Amps

## FC + GMS3

## **OPTIONS PICK ANY:**

#### X: Seismic Mounting

LCR20A(#): Load Control Relay, Single Flex Stud Mounting (#): Qty

LCR20(#): Load Control Relay, No Flex (#): Qty

EB: Ex. Maintenance Wraparound Bypass Switch **TVSS:** Input Transient Voltage Surge Suppressor (Class C)

SCCR: 65 KAIC Total System Short Circuit Current Rating

DS: Drip Shield Hood CL: Corbin Lock

#### **BATTERY OPTIONS**

FC: Fast Charge (12 hrs or less)

TR: Thermal Runaway Control (IFC 1206.2)

#### MONITORING OPTIONS

DO: Dry Contacts Open Signal\* \*Normally Closed Standard

A: Local Audible Alarm with Silencer Switch

CP: RS 232 Connecting Port

P: Remote Status Panel (Hard Wired with Extended Cable)

#### SYSTEM TRANSFER

TD(B): User Selectable Time Delay to Battery for Capacitor Discharge During EM (Standard 45 Milliseconds)

TD(U): User Selectable Time Delay Back to Utility During Power Restoration for Facility Inrush

#### **REGEN POWER OPTIONS**

**RGN:** Regen Manager (for regenerative elevators)

# **BATTERY MONITORING SYSTEM (BMS)**

PICK ONE:

SM: Strina Monitorina BM: Battery Monitoring **BM-TS:** Temperature Sensor

#### **GLOBAL MONITORING SYSTEM (GMS)** PICK ONE:

GMS 2: Testing Logs with Remote Accessibility Through Local Network

GMS 3: Testing Logs with Remote Accessibility through Local Network and GPRS for Cellular Text Alerts



<sup>\*</sup> Only up to 20 poles.

<sup>\*\*</sup> Allows you to have individual circuits remain on battery even when utility is restored for a period of time. Must be a normally OFF circuit.

<sup>\*\*\*</sup>Consult factory for custom amp rating.