



GLX Series Pure Sine Wave 1kW to 16kW

Catalog #
Date:
Prepared By:
Type:
Project Name:
Comment:

System Overview:

The GLX Series Inverter is a central emergency lighting system designed to operate all loads of emergency. In the event of a power abnormality event, the GLX will provide emergency power to its connected loads for a run-time of no less than 90 minutes. The GLX is a system designed to provide superior dependability and security to any commercial, institutional or industrial environment in a minimal footprint.

The line voltage output allows the remote fixtures to be located up to 2000 feet from the unit.

Power Factor: .9 leading to .9 lagging

GLX series inverter is designed to occupy a minimum footprint. Capable of supplying power to a nominal load of up to 8000 watts in a 30x30 footprint, the GLX central inverter system can be installed in any electrical room and centralizes all emergency lighting testing to one central location and streamlines any eventual maintenance and required record-keeping.

The GLX series is a compact, modular emergency lighting inverter. Typical applications include all types of LED, HID, fluorescent, incandescent, quartz re-strike and low voltage lighting. The modular design and low MTTR (mean-time-to-repair) ensure easy maintenance. The GLX is well suited for stairwell, hallway, and outdoor emergency egress lighting, large size office buildings, schools and warehouses.

GLX Series inverter employs premium (*VRLA) batteries, designed with an expected service life of 10 years per battery manufacturer guidelines.

*VRLA Batteries are maintenance free. Periodic checks, coupled with standard record keeping and maintenance of the inverter would ensure the longevity of the battery module.

Theory of Operation:

The GLX is designed to power the emergency egress lighting at full brightness for 90 minutes. The system is installed between the lighting distribution panel and the emergency circuit (s) and ahead of any local switches. Upon failure of the normal power source to the connected lights, the GLX will continue to power the emergency fixtures connected to it for a minimum of 90 minutes utilizing standard building lighting components. When the normal power is restored the GLX will automatically switch the lighting fixtures back to the normal source and recharge the batteries so that they are ready for the next power outage. The system may also be configured for normally off or for switched load capability as an option.

Applications:

The GLX Series Inverter will operate incandescent, fluorescent, and LED lamps with power factor greater than .9.

*Self ballasted compact fluorescent and replacement LED screw in lamps may be used, (HID)

*we recommend that only Energy Star recognized compact fluorescent or LED lamps be used with this equipment.

Operating Parameters:

Run Time: minimum 90 minutes

Housing: Heavy duty steel construction finished in white powder coat paint.

Environment:

Operating temperature: 32F (0C) – 104F (40C)

Altitude: 10,000 feet above sea level without derating

Storage temperature: -20 to 70 degrees C. Note – batteries will require frequent recharging if stored above 35 degrees C.

GLX design will provide full rated VA output from .9 leading to .9 lagging power factor. Loads outside of this power factor will reduce the total output of the unit depending on the va at that power factor.

Standard features:

- footprint 30D” by 72H”.
- Free standing cabinet designed for floor mount.
- 12 gauge cold-rolled steel construction finished in powder coat paint.
- 6th generation IGBT technology for high efficiency, low loss power inversion, SCR based rectifier, solid-state transfer switch, PWM, low THD to provide a system with high reliability and high efficiency.
- MTTR of less than 30 minutes for any one component.
- ETL listed to UL 924, meets or exceeds the requirements of OSHA, NEC, NFPA and other codes
- OCPD (over-current protective devices) standard on input, battery and output. Additional output breakers are optional.
- Standard cabinet designed for ease of installation, wiring and maintenance.
- Front mounted meter panel for intuitive system status.
- Basic alarms for overload, overload shutdown, high temperature, near low battery and low battery shutdown.
- 92% efficiency on standby.

Options:

Suffix NOR - Normally off relay 1 required per every 20 amps of load (coil voltage matches input voltage of unit).

Suffix ITP – Input breaker trip alarm

Suffix OTP – Output breaker trip alarm, 1 per output breaker

Suffix BTP – Battery breaker trip alarm

Suffix OCB_ Additional output circuit breakers (note 20 amp output breakers are standard unless otherwise specified).

Suffix R30 - Battery capacity of 30 minutes for when the system is used with a permanently installed emergency generator.

Suffix R120 – Battery capacity of 120 minutes (may require additional enclosures depending on the rating of the unit).

Suffix RS232 -

Suffix 208 or 240 or multiple voltage outputs – may require additional cabinets.

Specifications:

Input:

Voltage: 120, 208, 240, 277 or 480 VAC 2 wires plus ground +/- 15%

Frequency: 60 Hz +/- 3 Hz

Protection: Circuit Breaker

Output:

Voltage: 120, 208, 240, 277, or 480 VAC 2 wire plus ground

Frequency: 60 Hz +/- .5 Hz

THD: > 3% Linear load

Regulation: +/- 3% for 50% load change

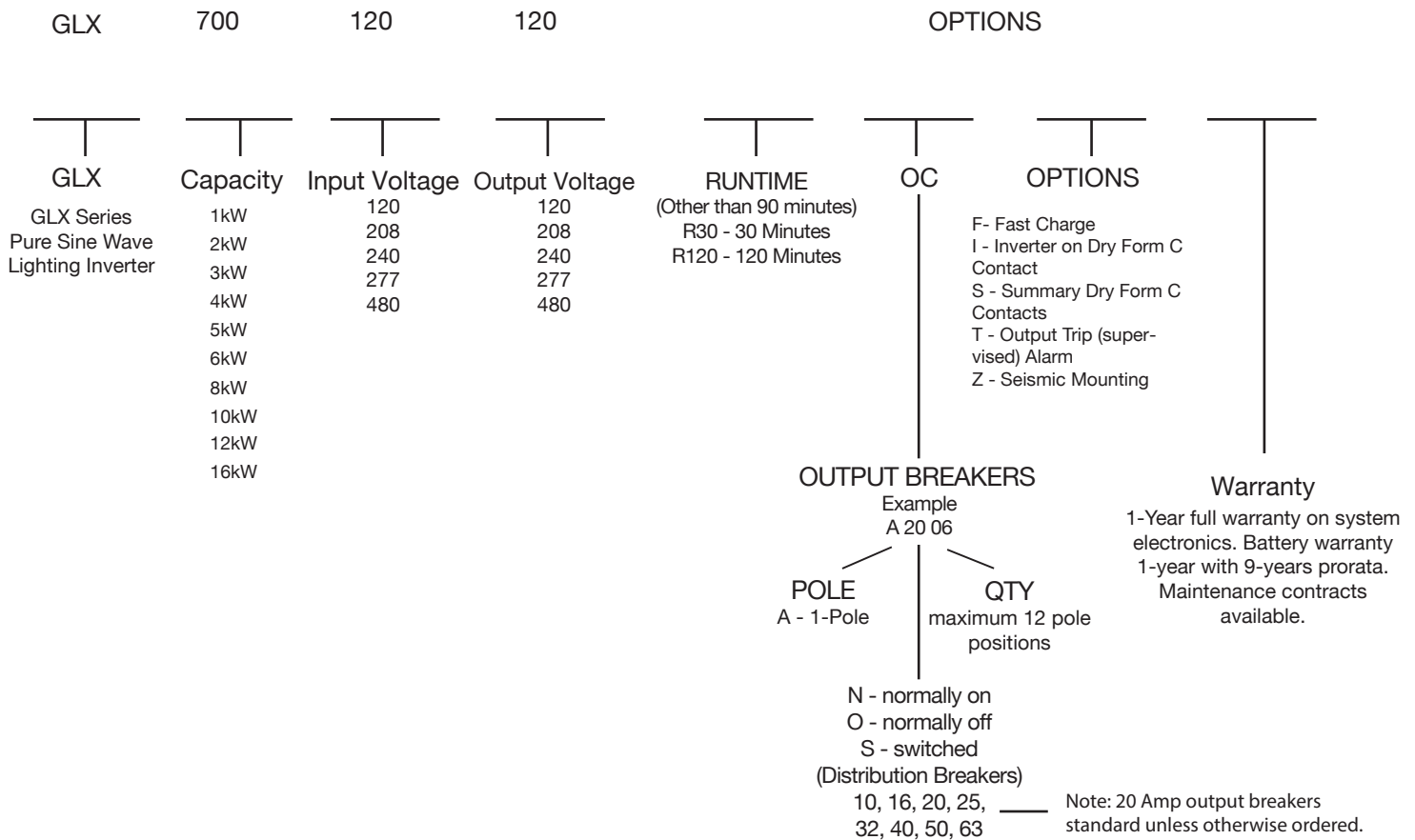
Inverter overload: 110% for 5 minutes

Protection: Output Circuit Breaker

Battery:

Sealed, maintenance-free, lead calcium (AGM) batteries with 10 year prorated warranty. The GLX employs Smart Battery Monitoring System which is temperature compensated and maintains maximum run-time and battery life.

Order Information:



Size	Input Current @120V	Output Currents @120V	Input Current @277V	Output Currents @277V	Output watts	Battery (DC) Voltage	Battery Current
1kW	16	8	7	4	1000	192	6
1.5kW	21	13	9	5	1500	192	9
2kW	27	17	12	7	2000	192	12
3kW	37	25	16	11	3000	192	18
4kW	48	33	21	14	4000	192	24
5kW	64	42	28	18	5000	192	30
6kW	80	50	35	22	6000	192	36
7kW	91	58	39	25	7000	192	41
8kW	107	67	46	29	8000	192	47
10kW	134	83	56	36	10000	192	59
12kW	160	100	69	43	12000	192	71
14kW	182	117	79	51	14000	192	83
15kW	198	125	88	54	15000	192	89
16kW	214	133	95	58	16000	192	95

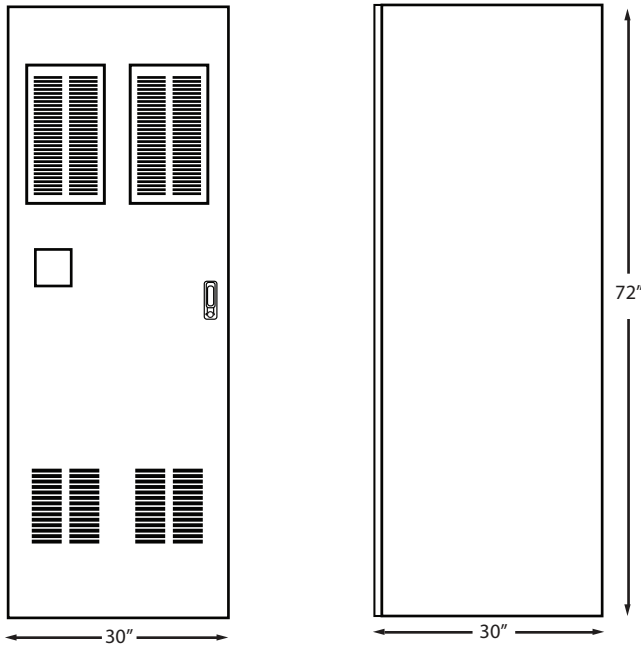
* Consult factory for other options.

** Input currents are shown at high charge with full load rating per UL. Normal and running currents are considerably less.

* Input amps are shown at high charge at full load rating per UL. Running amps are considerably less.

Dimensions for A:

Cabinet Profile A, 6kW and under
30"W x 72"H x 30"D



Typical Instillations:

- Airports
- Apartments/Condominium Complexes
- Assisted Living Centers
- Banks, Financials
- Casinos
- City, County, State, Federal Buildings
- Grocery Stores
- Hospitals
- Hotels
- Industrial
- Medical Offices
- Military Complexes
- Movie Theaters
- Office Buildings
- Parking Garages
- Prisons
- Race Tracks
- Train, Subway, Bus Stations
- Religious Facilities
- Resturants
- Department Stores
- Schools, Colleges
- Shopping malls
- Sport facilities
- Superstores
- Tunnel and Toll Bridges

Dimensions for B:

Cabinet Profile B, over 6kW
60"W x 72"H x 30"D

