CHLORIDE SYSTEMS

TYPE: _____

CATALOG NO.: _____

Synthesis CH2 Series

1500VA Single Phase

Uninterruptible Power Supplies (UPS) for Emergency Lighting Applications

Listed to UL 924

Characteristics

Overall

Operating temperature range 32ºF (0ºC) to 104ºF (40ºC)*

Audible noise less than 50dB at 3 ft on "A" weighted scale

Automatic low battery voltage disconnect

Output

Sine wave output

Voltage regulation ±2%

Frequency regulation- Synchronized to utility
Free running 60Hz, ±0.5%

Output voltage distortion maximum 3%THD with linear load

Load power factor capability 0.7 lead to 0.7 lag

Overload capability 150% for 1 minute with utility power source present

Input

Input power factor correcting to 0.97

Frequency range 60Hz, ±2.5Hz

Input harmonic current distortion < 5%THD

IEEE 587 ANSI C 62.41-1980 surge suppression

*Optimum operating temperature of batteries is 77ºF (25ºC). Temperatures above 85ºF (30ºC) adversely impact battery life

Features

Double conversion- no interruption

Solid state Pulse Width Modulated inverter

Internal inverter bypass switch

Standard, UL 924 compliant, 90 minute battery back up

UL 924 auxiliary equipment 10 and 20 minute back up available

Microprocessor control and diagnostic system

LED array system status panel

Fault annunciating audible alarm

Current limiting start sequence

Single output circuit breaker is standard. Additional circuit breakers (OCB) or circuit breakers with trip alarms (OCBA) can be added.

Optional normally off load (NOL) energizes only during power outage, is user programmable from 0-15 minutes

Free standing NEMA1 enclosure

Lockable control access panel

Seismic anchoring compatible

Applications

The solid state Pulse Width Modulated (PWM) inverter offers enhanced load compatibility

It operates incandescent, magnetic and electronic ballast fluorescent, high power factor compact fluorescent and high intensity discharge (HID) luminaries

Provides conditioned, uninterruptible power for other types of critical loads. Consult factory for non-lighting load applications.

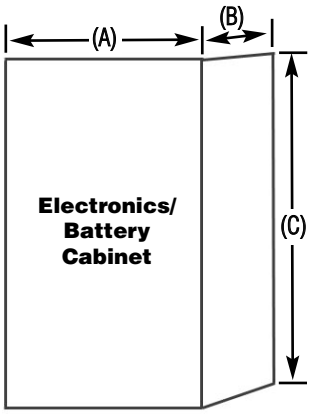
Ordering Information

CH2		1.5					
SERIES	**VOLTAGE CONFIG. INPUT/OUTPUT**	**UNIT SIZE**	**BATTERY TIME**	**NOL**	**QTY CKT BREAKERS**	**QTY NOL CKT BREAKERS**	**FACTORY INSTALLED OPTIONS**
CH2 = Chloride Synthesis CH2 UPS System for Emergency Lighting Applications	AA = 120/120 JJ = 277/277 JA = 277/120	1.5 = 1500VA	S = 90 min X = 10 min Y = 20 min	0 = No 1 = Yes w/ TDT	01X = 1 OCB* 02X = 2 OCB 03X = 3 OCB 04X = 4 OCB . . . 12X = 12 OCB ---------- 01A = 1 OCBA 02A = 2 OCBA 03A = 3 OCBA . . . 06A = 6 OCBA (Maximum 12 pole spaces)	A = 1 B = 2 C = 3 D = 4 E = 5 F = 6 G = 7 H = 8 I = 9 J = 10 K = 11 L = 12 Z = None	FSU = Factory Start Up Service EXT = Extended Warranty[1]

* 1 OCB is standard, substitute corresponding designator for optional configurations.

Note:
1) EXT option only available with FSU

Dimensions/Weights

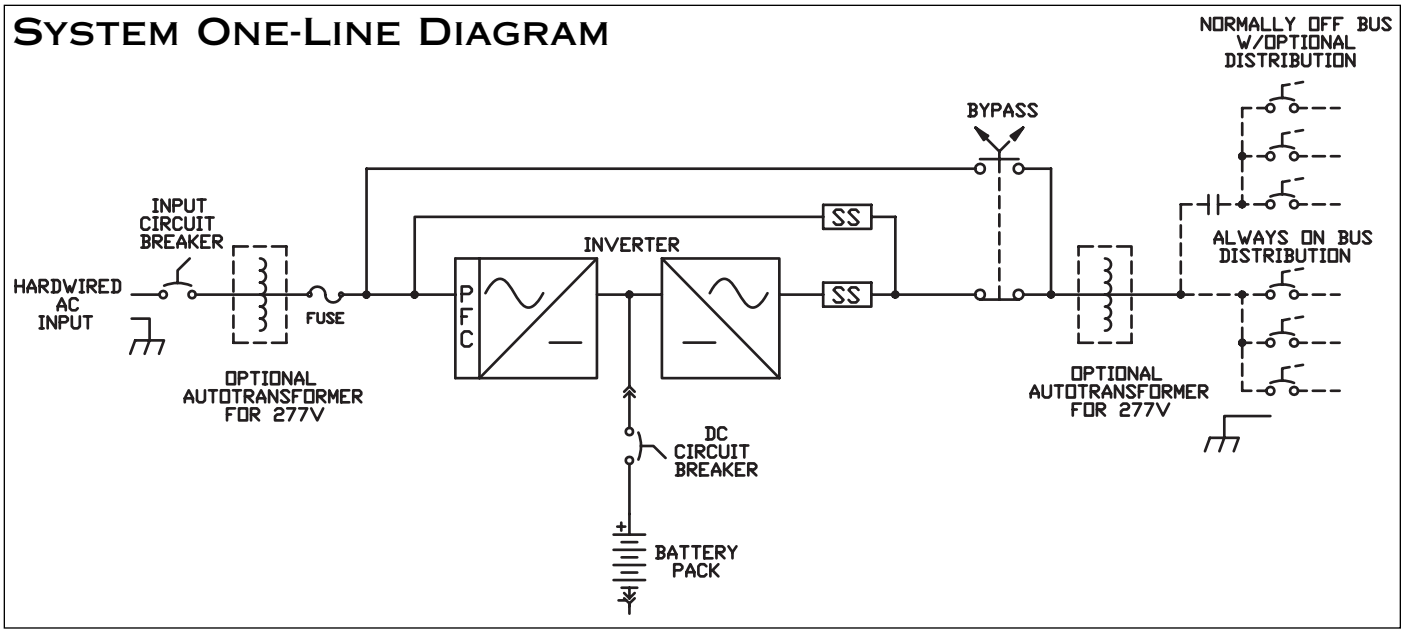


Width **(A)**	22”
Depth **(B)**	11.75”
Height **(C)**	50”

System Input/Output Ratings

System Rating	1500VA
Input Voltage (V) : Input Current (A)	120 : 20.4
	277 : 9.6
Output Voltage : Output Current	120 : 12.5
	277 : 5.4
OCB Pole Spaces Available	
without trip alarm	12
with trip alarm	6
Heat Rejection (Btu/hr)	750
Weights (Lbs)	
120V with 90 min. battery	475
277V with 90 min. battery	535

System One-Line Diagram



Warranty

Standard Warranty

Electronics warranty is 12 months from date of shipment. Battery warranty is 1 year full, 9 years pro-rata from date of shipment.

Extended Warranty Available

Consult factory for extended warranty and service option.

CHLORIDE SYSTEMS
272 West Stag Park Service Road • Burgaw NC 28425
Telephone: (910) 259 1000 • Facsimile: (800) 258 8803
www.chloridesys.com

CHLORIDE SYSTEMS

TYPE: _____

CATALOG NO.: _____

Synthesis CH2 Series for Emergency Lighting Applications, 1500VA

Suggested Specification

Furnish and install Chloride single phase Emergency Lighting System known as Synthesis CH2 Series. The system shall be UL listed to Underwriters' Laboratories standard 924.

Equipment and accessories furnished under the terms of this specification shall be the standard product of a single manufacturer and shall be equal in all respects to those supplied by Chloride. Catalog numbers and model designations which appear herein indicate design, quality and the type of material as well as required operating characteristics. All equipment shall be in compliance with the applicable UL standards.

The connected load shall be continuously powered by the filtered power of the double conversion Synthesis CH2 System and upon failure of the utility input, the load shall automatically continue to be powered via the Synthesis CH2 system's battery and inverter for the specified time. Upon restoration of utility power, the system will automatically resume supplying the load with double conversion, filtered power. The system input power factor shall be corrected to 0.97 or greater.

The Synthesis CH2 Series shall be capable of powering any combination of fluorescent ballasted lamps, incandescent lamps, electronic and high power factor compact fluorescent ballasts, HID lamps or other approved loads up to the total rating of the system. The system shall automatically protect itself against damage from overloads and short circuits while powered from either utility AC or during emergency mode operation. It shall automatically recover from such overloads and clear short circuits by means of overcurrent protection devices.

Under emergency operations, the microprocessor shall regulate the output voltage within ±2% of nominal at full load for the specified discharge period; and the frequency shall be within ±0.5% of nominal.

The system shall use redundant fans in the cooling of the electronic compartment. The AC output to the load shall be isolated from the utility input during emergency mode operation.

Under emergency mode conditions, the Synthesis CH2 shall be powered by maintenance free, sealed lead calcium batteries. The battery shall operate entirely unattended and require no addition of water for a period of 10 years or longer. Periodic inspection of batteries is recommended.

A low voltage disconnect circuit designed to reduce battery discharge during extended power outages, shall monitor the battery voltage and disconnect the inverter when battery voltage drops to approximately 85% of nominal voltage. Restoration of utility power following a low voltage disconnect event shall automatically re-start the Synthesis CH2 System

The Synthesis CH2 solid state battery charger shall be completely automatic with a programmed reference, and capable of restoring the battery to capacity within UL 924 requirements. The charger shall have capability to recharge a battery of up to 4 hour discharge capacity and shall automatically maintain the battery in the fully charged condition whenever the utility power is available.

System display shall indicate normal, caution and alarm conditions. Dry contact for remote failure alarm, and a DB9 computer style connector shall provide volt free contacts for remote alarm indication

Unit Check List

Catalog No. _____ **VA Rating:** **1500**

Battery Type: Sealed Lead Calcium **Operating Time:** 90 / 20 / 10 Min.

Utility Input: _____ VAC; Single Phase

Output Circuit Breakers:

			Normally	Normally	Trip Alarm
Qty: _____	AC Volts: _____	Amps: _____	ON ☐	OFF ☐	YES ☐ NO ☐
Qty: _____	AC Volts: _____	Amps: _____	ON ☐	OFF ☐	YES ☐ NO ☐
Qty: _____	AC Volts: _____	Amps: _____	ON ☐	OFF ☐	YES ☐ NO ☐
Qty: _____	AC Volts: _____	Amps: _____	ON ☐	OFF ☐	YES ☐ NO ☐

REMARKS: _____

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

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