

# CHLORIDE SYSTEMS

## GENERAL DESCRIPTION

The HZ Series LED Exit combines energy-saving LED technology with a durable enclosure suitable for hazardous locations. The HZ Series is UL listed for use in Class I, Division 2 and Class II, Division 2 Areas.

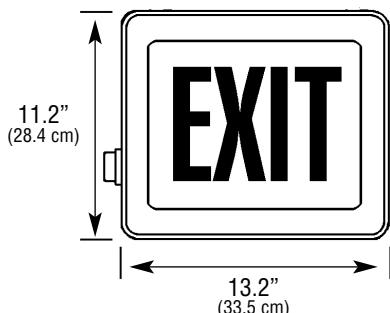
The HZ Series LED Exit offers several levels of protection against the elements, including dust, dirt and water. The exits are designed for use in hostile environments that would otherwise damage ordinary sign components.

## ILLUMINATION

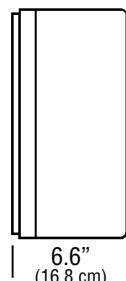
Illumination of the exit stencil face is accomplished with long lasting, high output, direct view LEDs.

## DIMENSIONS

### Front View



### Side View



Dimensions are approximate and subject to change.

TYPE: \_\_\_\_\_

CATALOG NO.: \_\_\_\_\_

# Hz Series

## Class I & II, Division 2 Direct View LED Exits AC Only and Self-Powered LED Illumination



SHOWN: HZN1R-AC

## CODE COMPLIANCE

UL 924, 844, and 1604 listed

UL listed for use in Class I & II, Division 2 hazardous location areas

NFPA 101, NEC, BOCA, OSHA and IBC illumination standards

## ELECTRICAL SPECIFICATIONS

### AC Only

0.08 amps (120 VAC)  
0.03 amps (277 VAC)

### Self-Powered

0.09 amps (120 VAC)  
0.04 amps (277 VAC)

## WARRANTY

Three year full electronics warranty

Five year full plus five year prorated battery warranty

## BATTERY

Maintenance free, sealed nickel cadmium battery

Supplies 90 minutes of emergency power

Estimated service life of 10 years

Operating temperature range of 20°F (-7°C) to 95°F (35°C)

## ORDERING INFORMATION (HZN1RAC)



**SERIES**



**BATTERY**



**STENCIL  
FACES**

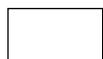
1 = Single



**LETTER  
COLOR**

R = Red LED

G = Green LED



**FACTORY INSTALLED  
OPTIONS<sup>1</sup>**

AC = ACCU-TEST

ACL = ACCU-TEST w/ Alarm

EX = Special Input Transformer (Specify voltage & frequency)

## NOTES:

1) Some option combinations may impact UL listing.

Consult factory for specifics.

# Specification Data for HZ Series LED Exit

## HOUSING

Impact resistant, fiberglass-reinforced polyester is suitable for NEMA 4, 4x, and 12 areas. Housing color is gray with stainless steel hardware.

Housing is suitable for use in NEMA 3, 4x, and 12 areas, and in Class I, Division 2, Groups A, B, C & D, Zone 2, Groups IIA, IIB + H<sub>2</sub> & IIC; and Class II, Division 2, Groups F & G.

Watertight enclosure includes a clear polycarbonate cover.

One-piece formed gasket eliminates potential for seal failure.

Standard internal mounting or external mounting feet for installation flexibility.

## ILLUMINATION

Direct view LEDs are driven to provide maximum face illumination (213 to 215 average footlambert), yet are not driven to exceed the LED manufacturers' recommended current-to-life cycle calculation.

## ELECTRONICS

### AC Only and Emergency Operation

Dual voltage 120/277 VAC input with surge-protection is standard.

### Self-Powered

All components are located within the exit housing.

An indicator light is located on the bottom of the housing to signify that AC utility is present.

AC lockout prevents battery drain prior to the initial energizing of utility power.

The low voltage disconnect (LVD) feature will disconnect the battery prior to an unacceptable deep discharge, but not before the required 90 minute emergency operation.

The brownout protection circuitry will automatically switch the unit into the emergency mode if the utility voltage sags below 20% of nominal.

Battery charging circuitry is entirely solid-state, and of a constant current design. Battery recharge time after a complete discharge is less than the required UL 924 standard.

Solid-state circuitry causes an instantaneous transfer to battery power if either the loss of AC utility, or a brownout condition is detected. When line voltage is present and stabilized, the transfer circuitry switches back to normal operation and begins recharging the battery. The transfer circuitry can be tested via a momentary test switch located on the bottom of the housing.

## SELF-DIAGNOSTICS

The ACCU-TEST Self-Diagnostics option conducts automatic and manual tests, and indicates real time status of the lamp, battery and charger via LED indicator lamps. Automatic tests include: Systems analysis every 10 seconds, with actual load tests performed for a 3 minute duration every 30 days. A manual test is available from 1 to 90 minutes.

## BATTERY

A maintenance free, sealed nickel cadmium battery is standard. Construction is of the sintered plate design and the battery assembly is equipped with a quick connect plug assembly for easy installation.

Standard sustained emergency operation is for 90 minutes with the LED illumination source providing full light output.

The suggested operating temperature range of 20°F (-7°C) to 95°F (35°C) should provide a service life of 10 years.

## ELECTRICAL SPECIFICATIONS

### AC Only

0.08 amps (120 VAC)  
0.03 amps (277 VAC)

### Self-Powered

0.09 amps (120 VAC)  
0.04 amps (277 VAC)

## CODE COMPLIANCE

The HZ Series meets or exceeds all performance standards as required by UL 924, NFPA 101, NEC, BOCA, OSHA and IBC.

## SUGGESTED SPECIFICATION

Furnish and install Chloride's LED exit sign model \_\_\_\_\_. The exit shall be constructed to meet Underwriter's Laboratories, Inc. Standard #924 and the National Electrical Code (NEC).

**INSTALLATION AND OPERATION** - Exit shall be easily field connected to a 120 or 277 VAC, 60 hertz, unswitched power source. Installation must comply with the NEC as well as other applicable codes. (Self-Powered Only) - Upon utility power failure or brownout, the unit shall automatically transfer to battery power and maintain the required illumination level for a minimum period of 90 minutes. Upon restoration of utility power, the charger shall restore the battery to full charge within UL 924 requirements following a rated discharge of not more than 90 minutes.

**CHARGER (Self-Powered Only)** - Product shall utilize a constant current charging system which will maintain the battery at full capacity without the need for periodic exercising or equalization. The following features shall be standard: Low voltage disconnect (LVD), brownout protection and AC lockout. Three year warranty provided.

**BATTERY (Self-Powered Only)** - The battery shall be maintenance free, sealed nickel cadmium utilizing sintered plate construction and polypropylene separators for trouble-free operation in ambient temperatures up to 95°F (35°C). Nickel cadmium batteries shall be supplied with a five year warranty.

**ILLUMINATION** - The HZ Series LED exit signs shall incorporate high intensity direct view LEDs. The LEDs shall be designed so that the unlikely failure of one LED will not affect the integrity of the total sign in the emergency mode. The HZ Series exit equipped with red or green LEDs shall consume 9.5 watts (120 VAC) or 11.0 watts (Self-Powered).

**ENCLOSURE** - The exit housing shall be impact resistant, fiberglass reinforced polyester gray enclosure suitable for NEMA 3, 4x, and 12 areas, and for Class I, Division 2, Groups A, B, C & D, Zone 2, Groups IIA, IIB + H<sub>2</sub> & IIC hazardous location areas. A one-piece formed gasket shall be included to eliminate potential for seal failure.

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.



**CHLORIDE**  
SYSTEMS

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