



## KS Steel Series

### Weather and Corrosion-Resistant Industrial Steel Enclosure Emergency Lighting Unit 6, 12 & 24 Volt

Listed to UL 924 Standard



#### Sealed Maintenance-Free Batteries

- Nickel-Cadmium
- Long Life Lead
- Lead Calcium
- Lead Calcium (Free Electrolyte)



### General Information

The **KS Steel Series** is designed to protect circuitry and connections from harmful dust, liquids and atmospheric contaminants.

### Standard Features

**Reliability:** The KS Series has a 3-year full warranty. Each unit is fully computer tested.

**Enclosure Data:** Constructed of 14 gauge steel with a fully gasketed hinged door and separate battery compartment. It is finished with a gray baked epoxy enamel. Up to three weather resistant thermoplastic heads can be mounted on the enclosure.

**Pulse Charger:** Fully automatic pulse charger offers 120/277 Vac input 60 Hz., 0.3/0.15 Amp. (other inputs available), fused output circuit(s), dual diagnostic LED indicator lights for AC-on and high charge, temperature compensated charging circuit, sealed relay, low voltage battery disconnect, brownout protection and lockout, (automatic battery connect).

### Self-Diagnostic Models (Optional)

#### Advanced Diagnostics (audible and non-audible versions)

Our Advanced Diagnostic circuitry was designed to continuously monitor every critical function of the unit and attached remote lighting heads. Operational status is indicated by colored LED lamps. A high-pitch audible alarm if selected and an LED status indicator alert maintenance personnel of a unit malfunction. This option saves the time spent on testing and trouble shooting by maintenance personnel. The self-testing program will periodically test the unit in accordance with NFPA 101, Life Safety Code. This new generation of Emergi-Lite diagnostics is perfect for any application.

### Technical Information

**Enclosure:** 14 gauge steel construction. **Finish:** ASA 61 gray baked epoxy enamel. **Mounting:** Top and bottom flanges provided. **Misc.:** Accepts 3 heads. **Servicing:** Fully gasketed front provides access to battery and charger. **Lighting Heads:** The unit as standard, is furnished with two, EF 11 weather resistant thermoplastic heads utilizing 9 watt wedge-base lamps. (Other lamps available - see Lamp Data Sheet).

### Electrical

**Power Requirements:** 120/277 Vac, 60 Hz., 0.3/0.15 A (other inputs available). **Output:** 6, 12 or 24 volt fused output circuit(s). **Transfer:** Dust-tight relay automatically and instantly energizes lamp load upon failure of AC supply. **LVD:** Low voltage battery disconnect circuit automatically shuts down lamp load and circuitry when battery reaches 87-1/2% of its nominal voltage, preventing deep discharge and permanent damage to the battery. **Lockout:** Labor saving electronic circuit automatically connects battery when AC circuit is activated. **Brownout:** Close tolerance electronic circuit activates emergency unit when utility power dips below 80-85% of nominal voltage. **Charger:** The pulse plus charger circuit utilizes an integrated chip circuit which samples the battery in relation to its temperature, state of charge and input voltage fluctuations. The charger is current limited, temperature compensated short-circuit protected and reverse polarity protected. Charge regulation +/-1%. The equipment is capable of full recharge in compliance with UL924 specifications. **Transformer:** 120/277 Vac. **Controls:** Sealed push-to-test switch and dual diagnostic indicator lights for AC-on and Hi-charge.

## Optional Features

### Description

### Add Suffix

Temperature Control, 120V Heater.....	-H1
Temperature Control, 277V Heater.....	-H2
Voltmeter .....	-V*
Advanced Diagnostics.....	-AD
Advanced Diagnostics, non-audible.....	-ADNA
Lamp Disconnect Switch .....	-K
Time Delay (Specify 5, 10 or 15 minutes).....	-D1, D2 or D3*
Cord & Plug – Special Voltage (Specify plug type) .....	-C**

\* Not required with the AD option.

Standard 15 minutes AD/ADNA option.

\*\*Standard cord is 3 ft., custom lengths available.

NOTE: Certain option combinations may affect the listing.  
Please contact the factory for specifics.

## Unit Rating Chart

Furnished standard with two 9 watt High Intensity Incandescent lamps.

UNIT EQUIPMENT - NO REMOTE CAPABILITY						
Sealed Maintenance-Free Battery Types	D.C. Voltage	Model Number	*Watts to 87 1/2% of rated battery voltage			
			1 1/2 hrs.	2 hrs.	3 hrs.	4 hrs.
Nickel-Cadmium Δ	6	KSC18-2	18	12	10	7
Long Life Lead Δ	6	KSE18-2	18	11	8	6
UNIT EQUIPMENT - WITH REMOTE CAPABILITY						
Nickel-Cadmium Δ	6	KSC25-2	25	18	9	5
	12	12KSC36-2	36	21	12	6
	12	12KSC50-2	50	36	18	10
	24	24KSC100-2	100	73	37	20
Long Life Lead Δ	6	KSE27-2	27	19	10	5
	6	KSE36-2	36	24	13	7
	6	KSE54-2	54	36	20	11
	6	KSE80-2	80	65	35	19
	6	KSE110-2	110	74	43	21
	6	KSE160-2	160	130	70	38
	12	12KSE36-2	36	24	13	7
	12	12KSE54-2	54	37	21	10
	12	12KSE110-2	110	74	43	21
	12	12KSE160-2	160	130	70	38
	24	24KSE110-2	110	74	43	21
	Lead Calcium (Free Electrolyte) Δ	6	KC87-2	87	70	41
6		KC100-2	100	77	47	24
6		KC175-2	175	140	82	48
12		12KC175-2	110	140	85	48
Lead Calcium Δ	6	KSM27-2	27	18	10	6
	6	KSM54-2	54	37	21	12
	6	KSM81-2	81	54	30	18
	6	KSM110-2	110	72	40	24
	12	12KSM54-2	54	37	21	12
	12	12KSM110-2	110	72	40	24
	24	24KSM110-2	110	72	40	24

\*National Electrical Code Specification Δ = Advanced Diagnostics Available

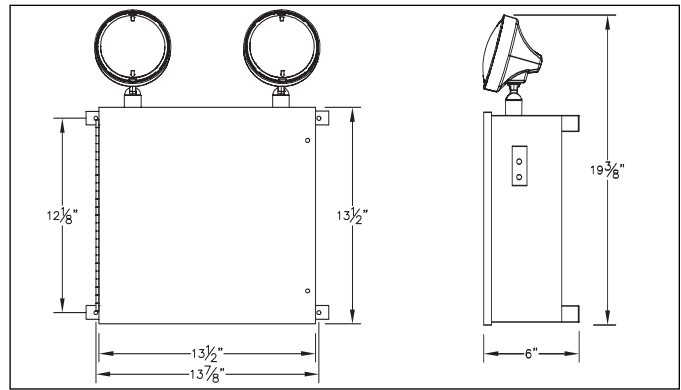
## How To Order (example)

<b>12KS</b>	<b>E</b>	<b>36</b>	<b>-</b>	<b>2</b>	<b>ZH</b>	<b>-</b>	<b>D1</b>
Series	Battery Type	Watts for 90 min.	No. of Head on unit	Lamp Option **12V 18W	Option (5-minute time delay)		

\*\*See lamp data sheet for other wattages, if desired.

## Outline and Dimensions

Dimensions are approximate and subject to change.



## Suggested Specification

A 6, 12 or 24 volt emergency lighting unit shall be installed in accordance with Article 700 of the National Electrical Code and shall be UL Listed. The unit shall have a 120/277Vac, 60Hz input transformer.

Units furnished with sealed maintenance-free 6, 12 or 24 volt battery of one of the following types:

- **KSC** - Nickel-Cadmium Battery
- **KC** - Lead Calcium (free electrolyte) Battery
- **KSE** - Long Life Pure Lead Battery
- **KSM** - Lead Calcium Battery

The unit charger utilizes an integrated circuit which samples the battery in relation to its temperature, state of charge and input voltage fluctuations. The charger shall be current limited, temperature compensated, short-circuit protected and reverse polarity protected. The unit shall be furnished with an electronic lockout circuit which will connect the battery when the AC circuit is activated, and an electronic brownout circuit which will activate the unit when utility power dips below 80-85% of nominal voltage. A low voltage battery disconnect circuit shall be provided and will disconnect the load and circuitry from the fused output circuit when battery reaches 87 1/2% of its nominal voltage. The unit shall be furnished with one or two fused charger output circuits and a sealed, dust-tight relay. The unit shall be capable of full recharge in compliance with UL924 specifications. The unit shall be furnished complete with a test switch and dual diagnostic LED indicator lights (Hi-charge and AC pilot). The cabinet shall be constructed of 14 gauge steel with ASA 61 gray baked epoxy enamel. The unit is furnished with integral mounting flanges top and bottom, and provided with a hinged, fully gasketed cover. Battery compartment shall be separated from charger section by full width dividing shelf. The unit is furnished with two EF 11 weather resistant lighting heads. Heads to be constructed of impact resistant, flame retardant thermoplastic complete with 9 watt high intensity wedge-base lamps. **EMERGI-LITE catalog number** \_\_\_\_\_.

### \*Unit Warranty

Entire unit (excluding lamps and fuses) carries a 3-year Full Warranty.

### \*Battery Warranty

Unit batteries are warranted as follows:

**Sealed Nickel-Cadmium: KSC** – 10-year life expectancy, 5-year Full Warranty, plus 5-year pro rata warranty.

**Sealed Long Life Lead: KSE** – 12-year life expectancy, 5-year Full Warranty, plus 5-year pro rata warranty.

**Sealed Lead Calcium (Free Electrolyte): KC** – 12-year life expectancy, 5-year Full Warranty, plus 5-year pro rata warranty.

**Sealed Lead Calcium: KSM** – 8-year life expectancy, 3-year Full Warranty, plus 3-year pro rata warranty.

\*Subject to proper installation and maintenance.