HUBBELL®
Harsh & Hazardous

KILLARK®

NEBS Series

SELF MONITORING EMERGENCY BATTERY SYSTEM

for Harsh and Hazardous Environments

NEBS SERIES

EMERGENCY BATTERY SYSTEM

Class I, Division 2, Groups A, B, C, D
Class I, Zone 2, Groups IIA, IIB, IIB+H2, IIC
Class II, Division 1, Groups E, F, G
Class III
Suitable for wet locations
NEMA 4, 4X
IP66

UL Sanitation Certified with FP Option
Operating Temperature:
C1D2 & C2D1: 50° to 122°F(10° to 50°C)
C1D2 & C2D1: with heater option -22° to 122°F (-30° to 50°C)

FEATURES-SPECIFICATIONS

Applications

The NEBS Series is a highly versatile superior lumen output, industrial application emergency lighting unit, designed to provide a minimum of 90 minutes illumination when primary power is lost. The NEBS Series provides the same level of lumen output with no light degradation for the full 90 minutes of battery discharge. It has a flame-rated, UV stable thermoplastic housing which is fully gasketed and corrosion resistant with a gray finish. LED based lamp-heads are made of high strength die-cast aluminum with a polycarbonate lens. Includes micro-controller based 3-stage charger and Lithium Iron Phosphate(LiFePO4) battery. The NEBS Series accepts 120 through 277VAC input at 50 or 60Hz. Not designed for self-diagnostic operation at 220-240VAC input. Universal mounting plate made of painted stamped steel. The NEBS is specifically designed for demanding environments, high reliability operation in industrial settings such as wet location or hose-down, food processing, food storage, production facilities, chemical plant and wastewater treatment.

Construction

The NEBS Series housing, covers, remote housing, shield and LED Lenses are made of impact resistant polycarbonate. Lamp-heads are made of die-cast aluminum for thermal dissipation.

Installation

The unit includes a universal mounting plate which facilitates mounting to a truss or I-beam, pole, column, or wall.

Illumination

The NEBS series provides bright and uniform illumination and is specifically designed for higher mounting heights above 9'. Coverage provided by 2 sealed aluminum lamp-heads using 3 high power LEDs each. The LEDs are located in a specially designed heat dissipating lamp-head which is fully adjustable and can be locked into position. The NEBS is designed for full lumen output across the entire 90 minutes of operation. This ensures maximum visibility of the egress path over the full 90 minute discharge period.

Electronics

Upon failure of the normal utility power, a LED driver is automatically activated to power the emergency LED lamp-heads. At resumption of normal utility power, the LED driver is turned off. The battery is recharged through a micro-controller based 3-stage charger. The battery is a maintenance-free Lithium Iron Phosphate (LiFePO4) type. The NEBS series accepts dual-voltage input of 120 through 277VAC at 50 or 60 Hz. A low voltage battery disconnect feature protects the battery from severe damage during prolonged power failures. Manual testing is available at any time using the push-to-test button. The NEBS remote can be located up to 100' from the source unit using 75°C minimum rated 12 gage wire.

Spectron Includes:

- Self-diagnostics monitors LED status, LED driver circuit, battery capacity and charger function and displays any fault detection by means of a flashing code
- Self-Test feature automatically runs a 1 minute test once a month and an alternating 30-60 minute test once every 6 months. Multi-color LED indicator provides visible fault detection and charging status
- User initiated 1, or 90-minute system test feature
- 15 minute re-transfer delay
- Automatic unit transfer in brown-out conditions (below 80% of nominal AC input voltage)

LIGHTING

NEBS SERIES

EMERGENCY BATTERY SYSTEM

NEBS	12	I	C1D2	06L
Model	Capacity	Self-Diagnostics	Application	Lamp
	6 – 6 Watt **12** – 12 Watt	**Blank** – None **I** – Spectron® Self-Diagnostics	**FP** – Food Processing Rated **C1D2** – Class 1 Div. 2 **C2D1** – Class 2 Div. 1 **HTR** – Heater for Cold Temp	**Blank** – 3 Watt LED lamps **06L** – 6 Watt LED lamps

OPERATING TEMPERATURE IN °C		
AMBIENT °C	CLASS 1 DIV. 2 A, B, C, D	CLASS 2 DIV. 1 E, F, G
40	T6	T6
50	T5	T6

ADDITIONAL PRODUCT INFORMATION							
CATALOG NUMBER	BATTERY	CAPACITY	LAMP(W)	LUMENS PER LAMP	RUNTIME	REMOTE CAPABLE	REMOTE PART NUMBER
NEBS6I-C1D2	LiFePO4	6 watts	3 watts	331	90 min	No	N/A
NEBS6I-C2D1							
NEBS12I-C1D2		12 watts	3 watts	331	90 min	Yes	NEBSRS-C1D2 NEBSRD-C1D2
NEBS12I-C2D1							NEBSRS-C2D1 NEBSRD-C2D1
NEBS12I-C1D2-06L		12 watts	6 watts	514	90 min	No	N/A
NEBS12I-C2D1-06L							

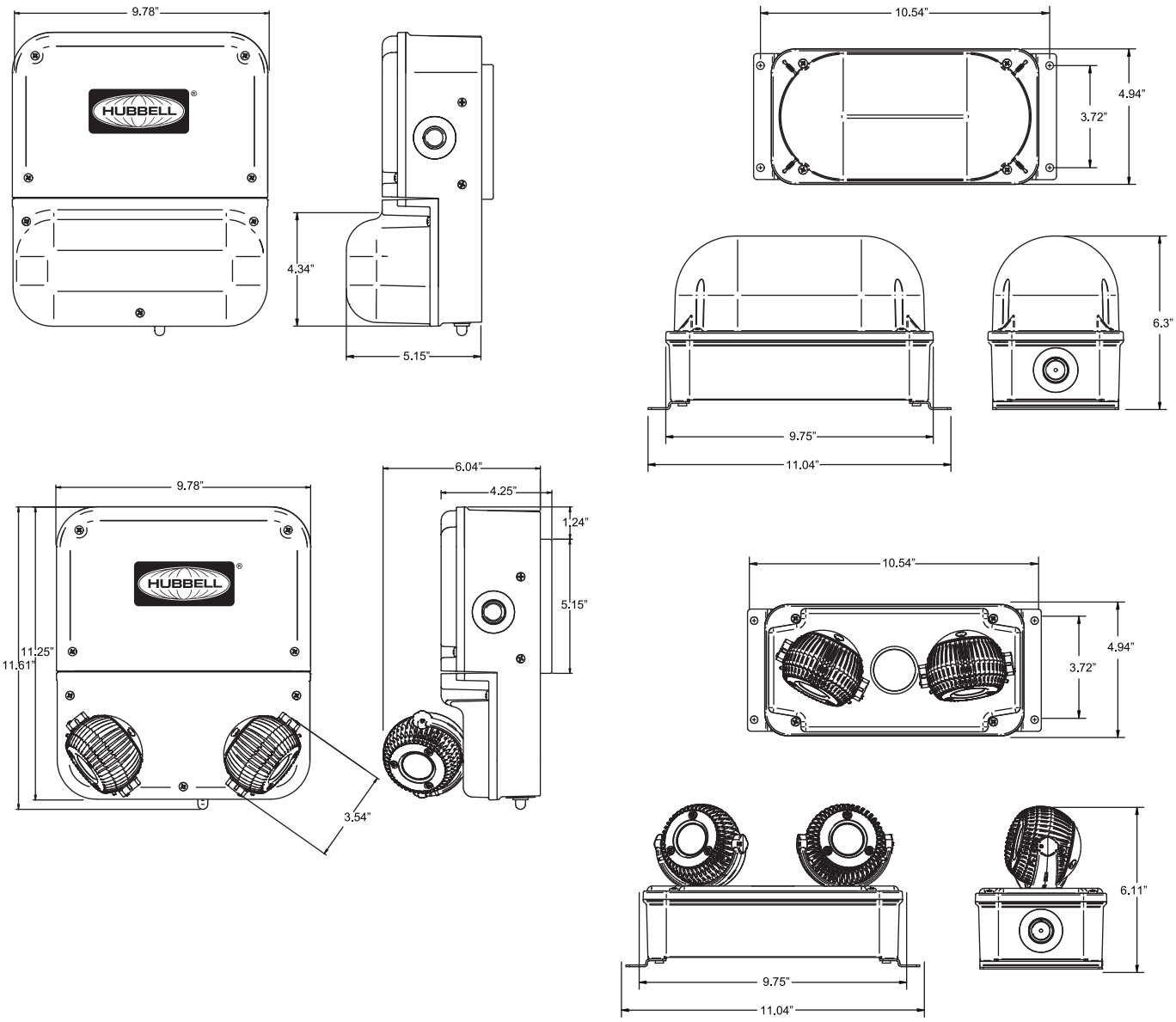
INPUT POWER CONSUMPTION			
	INPUT VOLTAGE	AMPS.	MAX. WATTS
NEBS6	120	0.03	3.40
	277	0.04	3.49
NEBS12	120	0.05	5.98
	277	0.04	6.52

The NEBS Series meets proposed California Energy Commission(CEC) requirements for limits on power consumption in maintenance mode with less than 0.5 watts.

- Maintenance Mode Power Consumption 120VAC- 0.33W
- Maintenance Mode Power Consumption 277VAC- 0.36W

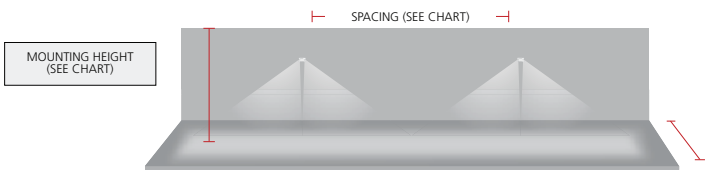
ACCESSORIES	
NEBSRS	NEMA 4X Rated Single Head Remote
NEBSRD	NEMA 4X Rated Double Head Remote
NEBSRS-FP	Food Processing Rated Single Head Remote
NEBSRD-FP	Food Processing Rated Double Head Remote
NEBSWG	Wire Guard (Does not include Food Processing option) 15"H x 14"L x 7"D
NEBSRD-C1D2	Class 1, Div. 2 Remote, 3W heads, 1 conduit hub included
NEBSRD-C2D1	Class 2, Div. 1 Remote, 3W heads with shield, 1 conduit hub included

DIMENSIONS



APPLICATION DATA

Ceiling Mount



** Multiple unit spacing based on 6' path*

INDUSTRIAL PARAMETERS CH=30', R=10/10/10, CEILING MOUNTED (MULTIPLE UNIT SPACING), 6' PATH														
NEBS12I-06L (6 WATT HEAD OPTION)								NEBS6I (3 WATT HEADS)							
MOUNTING HEIGHT	20'	18'	16'	14'	12'	10'	7.5'	MOUNTING HEIGHT	20'	18'	16'	14'	12'	10'	7.5'
MAX SPACING @ 1 FC AVG.	62'	65'	68'	71'	74'	77'	81'	MAX SPACING @ 1 FC AVG.	43'	45'	48'	51'	53'	56'	59'
MAX SPACING @ 1 FC MIN.	35'	34'	34'	33'	32'	31'	29'	MAX SPACING @ 1 FC MIN.	28'	28'	27'	27'	26'	24'	22'

KILLARK®

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