

# BLOCK MINI SERIES H1

LED LIGHTING FOR HARSH AND HAZARDOUS AREAS  
AREA & LOWBAY



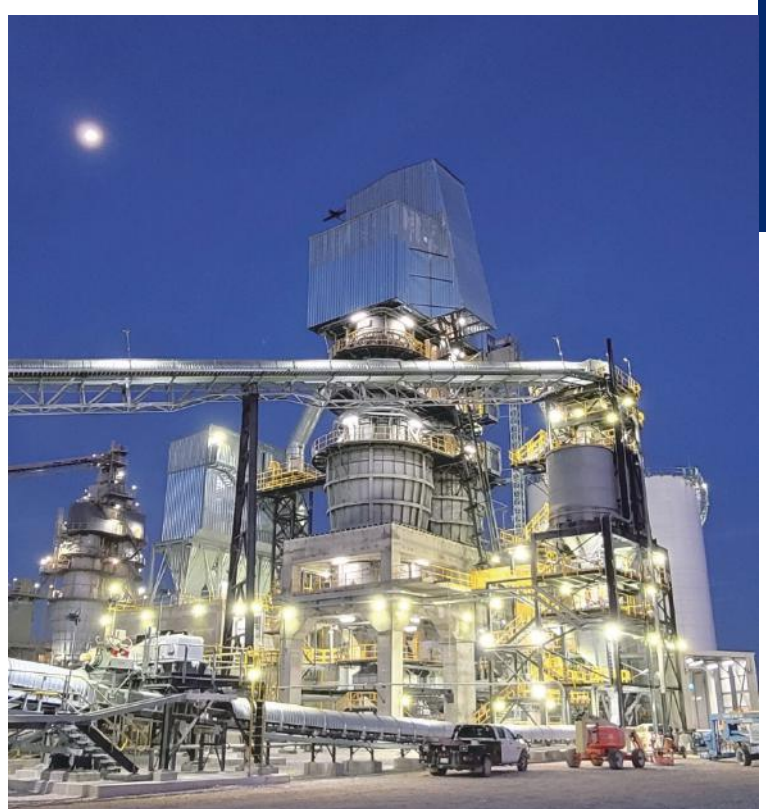
**Reliable. Durable. Efficient.**  
**4,200 to 8,500 lumen models**

**RED SKY**  
SERIOUSLY SAFE LIGHTS™

## ABOUT RED SKY LIGHTING

# PIONEERING INDUSTRIAL ILLUMINATION FOR HARSH & HAZARDOUS CONDITIONS

- A leading manufacturer of premium LED lights for demanding work conditions
- Headquartered in California, products assembled in the USA
- Servicing global clients across 4 continents in metal processing, oil & gas, marine, manufacturing
- Renowned for quality, dependability, client care and uncompromising safety standards



## WHY CHOOSE RED SKY

### SERIOUSLY SAFE LIGHTS

- Rigorously tested in our professional labs
- Surpassing industry certifications and safety protocols
- Crafted with highest grade components for maximum durability

### TOP-NOTCH SERVICES

- Team of experts for seamless support
- Energy audit services, lighting simulation services
- Hassle-free return policy and management

### FAST DELIVERY

- Majority of orders delivered within 14 days
- Same day shipping for products in stock
- Real-time order tracking for full transparency

### SUSTAINABLE SOLUTIONS

- High luminous efficacy LEDs for energy savings
- Conscious product design
- Recyclable materials for products and packaging



# BLOCK MINI SERIES



Introducing the Block Mini Series H1 from Red Sky Lighting - a compact and powerful explosion-proof LED luminaire engineered for the most hazardous locations. This versatile lighting solution meets the stringent Class 1 Division 1 standard, certifying it for use in areas where flammable gases, vapors or liquids are present under normal operating conditions.

The factory-sealed Block Mini H1 eliminates the need for external sealing fittings, simplifying installation and maintenance. Its exceptional thermal management system offers a T6 temperature rating and is engineered to perform reliably in high ambient temperatures up to 149°F, providing an impressive L70 rating of over 219,000 hours.

Compact and lightweight, the Block Mini H1 is easy to handle and install, making it ideal for applications with limited space and low mounting heights. Red Sky Lighting's smart lens choices allow you to customize the light distribution with clear, diffused, and Type 2 & 3 options.

The Block Mini Series H1 comes backed by Red Sky Lighting's 10-year warranty, underscoring the company's confidence in this cutting-edge explosion-proof luminaire engineered to the highest standards.



## BLOCK MINI SERIES

GEORGIA, USA

## FEATURES



### Factory Sealed

No external sealing fittings required in Groups B, C and D.

### Thermal Management

Safe and reliable heat transfer - Offering a T-rating of T6 (CID1)

Heat sink designed to perform in high ambient temperatures up to +149°F.

L70 >219,000 Hours@149°F

### Compact and Light Weight Design

For easy handling, especially when access to limited space with low mounting heights

## RATINGS

Class I, Division 1, Groups B, C and D;  
Class I, Division 2, Groups A, B, C and D;  
Class II, Division 1, Groups E, F and G.  
Class II Division 2, Groups F, G  
Class III  
Class I, Zone 1, Group IIB  
Class I, Zone 2, Group IIC  
Zone 21, Group IIIC  
UL 1598 Wet Locations  
UL 1598A Marine Outside Type (Salt Water)  
5G vibration  
IP66& IP67  
IK10 (PC) /IK08 (Glass)  
Salt Spray 720 hrs (ISO 9227)

## CERTIFICATIONS

UL844  
UL1598  
UL8750  
UL 1598A  
CSA C22.2 No. 137-18  
CSA C22.2 No. 250.0  
CSA C22.2 No. 250.13  
FCC Part 15, Subpart B  
DLC Premium\*

\* Not all product variations listed on this page are DLC qualified. Visit [www.designlights.org/search](http://www.designlights.org/search) to confirm qualification.

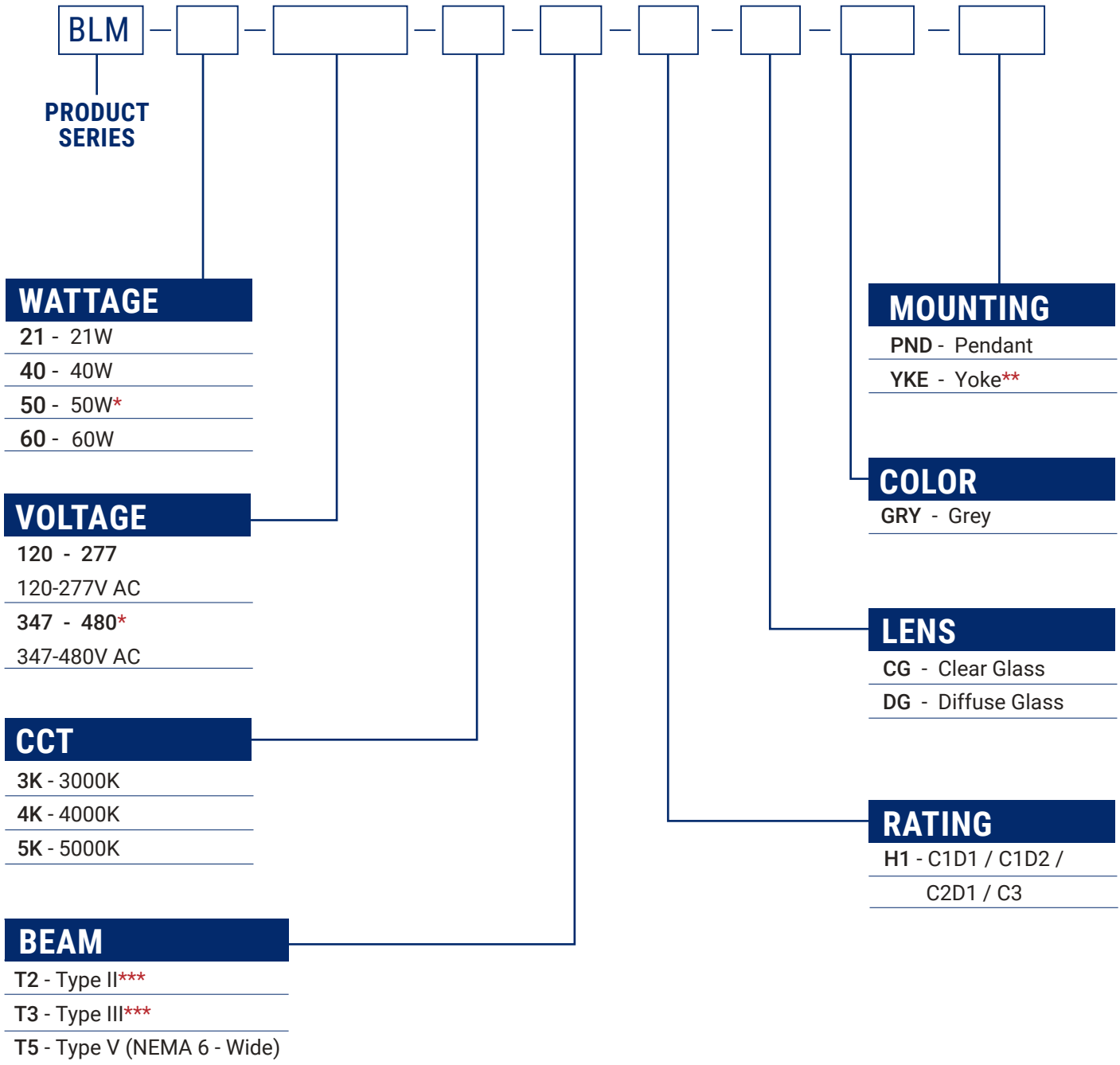
# TECHNICAL PARAMETERS

Specification	BLM-H1-21	BLM-H1-40	BLM-H1-50	BLM-H1-60
Electrical Parameters				
Power	21W	40W	50W	60W
Rated Input Current(120V AC)	0.194A	0.370A	/	0.555A
Rated Input Current(277V AC)	0.084A	0.160A	/	0.240A
Rated Input Current(347V AC)	/	/	0.160A	/
Rated Input Current(480V AC)	/	/	0.115A	/
Voltage/Frequency	120-277V AC	120-277V AC	347-480V AC	120-277V AC
Power Factor	≥0.90			
THD	<20%			
L70	219,000 hrs@149°F			127,000 hrs@147°F
Dimming	0-10V, Range 10-100%			
Surge Protection	2KV		6KV	
Supply Wire	12-18AWG , Rated 90°C			
Warranty	LEDs: 10 years, Driver: 7 years			
Optical Parameters				
Lumen Output*	4,220Lm	6,499Lm	7,179Lm	8,514Lm
Lumen Efficacy*	162Lm/W			
Available Beam Angle	T2/T3/T5			
Correlated Color Temperature (CCT)	3000K/4000K/5000K			
Color Rendering Index (CRI)	Ra>70			
Mechanical Parameters				
Housing Material	Copper-free (< 0.4%) die-cast aluminum			
Hardware	Stainless steel 316			
Lens Material	Tempered Glass			
Mounting Options	Pendant, Yoke			
Product Weight	10.5lbs/4.8kg	10.8lbs/4.9kg	11.7lbs/5.3kg	11.7lbs/5.3kg
Package Weight	12.6lbs/5.8kg	12.9lbs/5.9kg	13.8lbs/6.3kg	13.8lbs/6.3kg
Cable Entry	(1) 3/4" NPT w/3' 18/6 Leads (L/N/G,Dim+/Dim-/12V)			
Product Dimensions(L×W×H)	9.7×8.3×5.1in (245×210×129mm)			
Package Dimensions(L×W×H)	13.4×11×8.3in (340×280×210mm)			
Environmental Parameters				
Ambient Operating Temperature	-40°C~+65°C(-40°F~+149°F)			64°C(147°F)
T-Code Rating	C1D1-T6, CID2-T4A, CIID1-T6		C1D1-T6,CID2-T4,CIID1-T6	C1D1-T5,CID2-T4,CIID1-T5
EPA wind rating (FT2)	0.998 (Yoke)			

\* Value calculated based on 5000K and Clear glass ,varies to different spec.

# ORDERING INFORMATION

**EXAMPLE:** BLM-40-120-277-5K-T5-H1-CG-GRY-PND



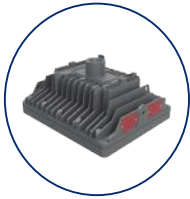
\* 50W only with 347-480V AC, 347-480V AC only with 50W

\*\* BLM-YOKE Pre-installed

\*\*\* Only available with Clear Glass Option



## MOUNTING ACCESSORIES



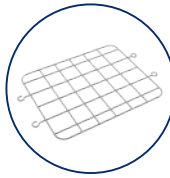
Pendant



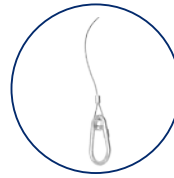
Yoke



BLM-YOKE



BLM-WGG



SFCB02

Mounting Method	PN	Description	MPN Code
Yoke	BLM-YOKE	Yoke Mount, SUS304, Powder-Coated Grey RAL 7037	310010032
	BLM-WGG	Wire Guard for Globe Lens, SUS304	310010034
	SFCB02	Safety Cable Kit, SUS304	309050058
	SP3	Surge Protector, 100-277V	310010029
	SP4	Surge Protector, 347-480V	310010030

## REPLACEMENT PARTS (ORDERED SEPARATELY)

Part Number	Description	MPN Code
BLM-21-120-277-Driver	Replacement Driver Kit for BLM-21-120-277 Fixtures	303010016
BLM-40-120-277-Driver	Replacement Driver Kit for BLM-40-120-277 Fixtures	303010017
BLM-60-120-277-Driver	Replacement Driver Kit for BLM-60-120-277 Fixtures	303010018
BLM-50-347-480-Driver	Replacement Driver Kit for BLM-50-347-480 Fixtures	303010019
CG001-A-01	Replacement Clear Glass Lens for BLM H1/BLM H2	303030001
DG001-A-01	Replacement Diffuse Glass Lens for BLM H1/BLM H2	303030002

Part Number	Power (W)	CCT	Beam	Lens	Lumen Output (Lm)	Efficiency (Lm/W)
<b>Voltage 120-277V AC</b>						
BLM-21-120-277-5K-T2-H1-CG-GRY-PND	21	5000K	T2	Clear Glass	3,364	156
BLM-21-120-277-5K-T3-H1-CG-GRY-PND	21	5000K	T3	Clear Glass	3,210	148
BLM-21-120-277-5K-T5-H1-CG-GRY-PND	21	5000K	T5	Clear Glass	4,220	162
BLM-21-120-277-5K-T5-H1-DG-GRY-PND	21	5000K	T5	Diffuse Glass	2,824	131
BLM-40-120-277-5K-T2-H1-CG-GRY-PND	40	5000K	T2	Clear Glass	6,162	153
BLM-40-120-277-5K-T3-H1-CG-GRY-PND	40	5000K	T3	Clear Glass	5,991	149
BLM-40-120-277-5K-T5-H1-CG-GRY-PND	40	5000K	T5	Clear Glass	6,499	161
BLM-40-120-277-5K-T5-H1-DG-GRY-PND	40	5000K	T5	Diffuse Glass	5,207	130
BLM-60-120-277-5K-T2-H1-CG-GRY-PND	60	5000K	T2	Clear Glass	8,113	147
BLM-60-120-277-5K-T3-H1-CG-GRY-PND	60	5000K	T3	Clear Glass	7,839	143
BLM-60-120-277-5K-T5-H1-CG-GRY-PND	60	5000K	T5	Clear Glass	8,514	154
BLM-60-120-277-5K-T5-H1-DG-GRY-PND	60	5000K	T5	Diffuse Glass	7,132	122
<b>Voltage 347-480V AC</b>						
BLM-50-347-480-5K-T2-H1-CG-GRY-PND	50	5000K	T2	Clear Glass	6,949	146
BLM-50-347-480-5K-T3-H1-CG-GRY-PND	50	5000K	T3	Clear Glass	6,520	137
BLM-50-347-480-5K-T5-H1-CG-GRY-PND	50	5000K	T5	Clear Glass	7,179	151
BLM-50-347-480-5K-T5-H1-DG-GRY-PND	50	5000K	T5	Diffuse Glass	5,881	124

For additional information, please contact your sales representative.



## A DIRECT RETROFIT FROM HID TO LED

The BLM series LED is easy to retrofit in the same configuration as your existing HID luminaires. For example, a 60-watt Block Mini (BLM-60) delivers virtually the same illumination as its equivalent 250 watt HPS luminaire while providing 80% reduction in energy costs and up to 130,000 hours of continuous operation.









MODELS	Lumen Output (Lm)	MH Equivalent (W)	HPS Equivalent (W)
BLM-21	4,220	100	150
BLM-40	6,500	150	200
BLM-50	7,180	175	225
BLM-60	8,515	200	250

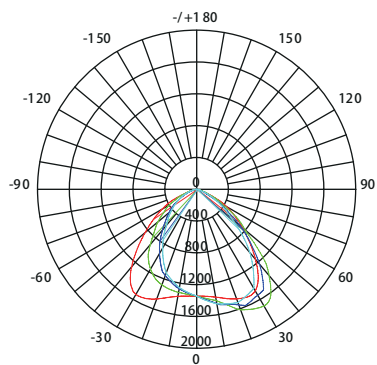
## THE RIGHT BEAM PATTERN FOR YOUR APPLICATION

RSL optic package is engineered to deliver maximum footcandles efficiently where you need them, without wasted light or overspill.

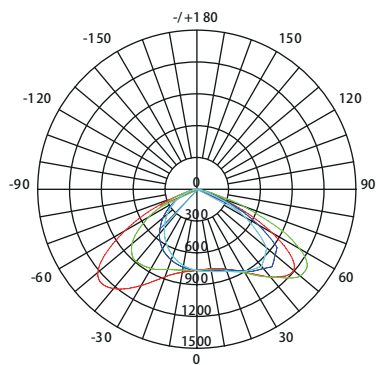
RSL offers complimentary lighting design services for our products using industry-leading AGI32 software, tailored for projects of all sizes in harsh and hazardous locations. We assist you in determining the number of fixtures needed, the types of lights to use, their optimal placement, and how to maximize energy savings—all within budget.

Simply fill out the form ( <https://dev.redskylighting.com/lighting-design> ) with a few key details, request a layout, and we'll bring your ideas to life within 2-5 business days.

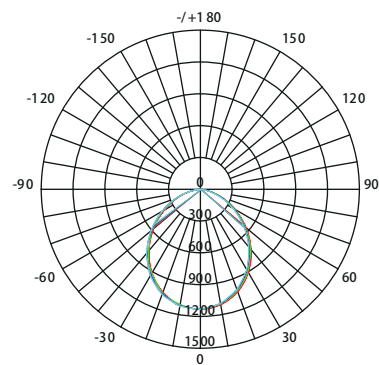
Beam	NEMA/IESNA Type	Beam Description	Beam Projection Distance
30°	NEMA 3	Medium Narrow	
60°	NEMA 4	Medium	
90°	NEMA 5	Medium Wide	
120°	NEMA 6	Wide	
T1	Type I	Asymmetric distributions, well suited for narrow areas, such as Conveyor belts, Aisleways, Catwalks, Loading docks and Tunnels.	
T2	Type II	Asymmetric distributions, well suited for narrow areas, such as roadways, paths and driveways.	
T3	Type III	Asymmetric distributions, well suited for site / area perimeters, wide roadways, and open areas.	
T5	NEMA 7 Type V (Square)	Very Wide: symmetrical pattern with excellent uniformity for large, open areas.	



**Type II**



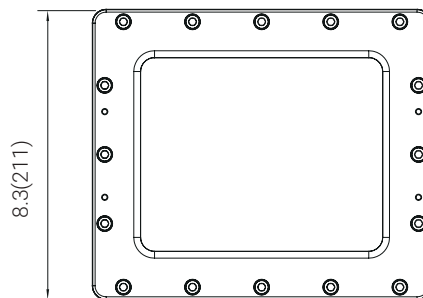
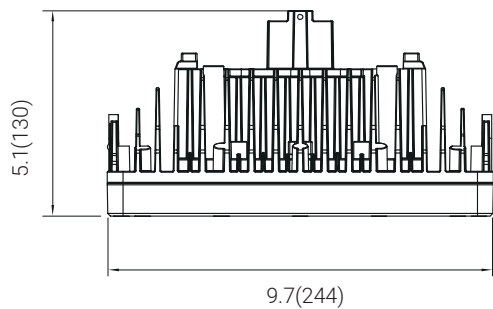
**Type III**



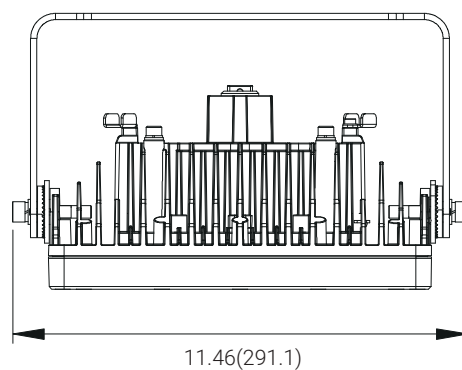
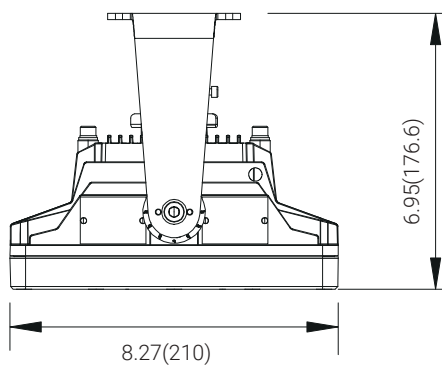
**Type V (NEMA 6 - Wide)**

## **DIMENSIONS**

unit: in(mm)



**Pendant**



**Yoke**

# HAZARDOUS LOCATION LIGHTING BASICS

## Atmosphere Groups

Substance	Hazard Class	Division Groups	Zone Groups	Max. Surface Temperatures	NEC® 500 CEC®	NEC® 500/IEC-Group II
Acetylene	Class I Flammable Gases	Group A	IIC	450°C(842°F)	T1	T1
Hydrogen		Group B	IIC	300°C(572°F)	T2	
Ethylene		Group C	IIB	280°C(536°F)	T2A	T2
Propane		Group D	IIA	260°C(500°F)	T2B	
Methane		Group D	IIA <sup>2</sup>	230°C(446°F)	T2C	
Combustible Metal Dusts	Class II Combustible Dusts	Group E <sup>1</sup>	IIIC <sup>3</sup>	215°C(419°F)	T2D	
Combustible Carbonaceous Dust		Group F	IIIB <sup>3</sup>	200°C(392°F)	T3	T3
Combustible Dusts not in Group E or F (Flour, Grain, Wood, Plastics, Chemicals)		Group G	IIIB <sup>3</sup>	180°C(256°F)	T3A	
				165°C(329°F)	T3B	
				160°C(320°F)	T3C	
Combustible Fibers and Flyings	Class III Fibers and Flyings	Not Applicable	IIIA <sup>3</sup>	135°C(275°F)	T4	T4
Note 1: Group E is applicable to Class II, Division 1 only.				120°C(248°F)	T4A	
Note 2: Methane is a Group IIA Gas for non-mining applications.				100°C(212°F)	T5	T5
Note 3: Group IIIA, IIIB and IIIC have not been adopted by the Canadian Electrical Code.				85°C(185°F)	T6	T6

## Classification of Divisions and Zones

Hazard Level	Division Scheme	Zone Scheme	Definitions
Continuous Hazard	Division 1	Zone 0 / Zone 20	A place in which an explosive atmosphere is continually present
Intermittent Hazard		Zone 1 / Zone 21	A place in which an explosive atmosphere is likely to occur in normal operation
Hazard Under Abnormal Conditions	Division 2	Zone 2 / Zone 22	A place in which an explosive atmosphere is not likely to occur in normal operation, but may occur for short periods

## IP Codes

1st No.	Solid Objects
0	No protection
1	Objects greater than 50mm
2	Objects greater than 12.5mm
3	Objects greater than 2.5mm
4	Objects greater than 1mm
5	Dust protected
6	Dust proof
2nd No.	Liquids
0	No protection
1	Vertically dripping
2	Dripping up to 15°
3	Limited spraying
4	Splashing from all directions
5	Hosing jets from all directions
6	Strong hosing jets from all directions
7	Temporary immersion
8	Continuous immersion
9	Steam-jet cleaning

## IK Ratings

IK Code	Level of Protection Achieved
IK00	Not protected
IK01	Protected against 0.14 joules impact
IK02	Protected against 0.2 joules impact
IK03	Protected against 0.35 joules impact
IK04	Protected against 0.5 joules impact
IK05	Protected against 0.7 joules impact
IK06	Protected against 1 joules impact
IK07	Protected against 2 joules impact
IK08	Protected against 5 joules impact
IK09	Protected against 10 joules impact
IK10	Protected against 20 joules impact



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#### **Disclaimer**

The product information provided is, to the best of Red Sky Lighting's knowledge, accurate as of the date of publication. However, purchasers and end-users of Red Sky Lighting's products should refer to the documentation available on [www.redskylighting.com](http://www.redskylighting.com) for the most up-to-date and controlling product specifications, installation manuals, sales terms and conditions, and warranty terms. To the extent any contract is formed for the sale of Red Sky Lighting's products, whether directly with Red Sky Lighting or through any third party, the versions of such documentation posted on [www.redskylighting.com](http://www.redskylighting.com) as of the date of sale shall govern and prevail over any inconsistent information that may be provided elsewhere. In the event of a conflict between the information contained in this document and that available on [www.redskylighting.com](http://www.redskylighting.com), the website documentation shall control.