

LED lighting solutions

Safe. Reliable. Efficient.  
LED solutions by Eaton's Crouse-Hinds business



**Crouse-Hinds**  
by **EAT•N**

# No matter the area or application Eaton's Crouse-Hinds has an LED to meet your needs



Eaton's Crouse-Hinds business offers the broadest portfolio of LED luminaires for any industrial or hazardous application.

Additionally, we utilize more than 100 years of lighting expertise to optimize the benefits of LED technology to offer the safest and most reliable LED luminaire on the market.

## Why LED?

### Useful Life

- Rated life is up to 60,000 hours of maintenance-free and safe operation

### Energy Efficiency

- LED average energy consumption is 50% less than HID and 85% less than incandescent

### Start/restart Time

- Instant illumination compared to 10 min restrike time for HID

### Light Quality

- Higher color rendering and color temperature compared to HID

### Environmental Benefits

- LED reduces carbon footprint
- Mercury-free

## Why Crouse-Hinds?

### Industry-best Reliability

- Built to withstand extreme temperatures, vibration, water and dust

### Thermal Management

- Effective heat sinking ensures longer life

### Quality of Light

- Custom optics designed to maximize light distribution and intensity

### Retrofit Compatibility













- LED fixtures are compatible with Crouse-Hinds' HID installed base

## Selection Guide – Harsh/Heavy & Light Industrial

Area Classification	Application	Product	Equivalent Light Output	Lumen Level	Input Watts	Input Voltage
Harsh/Heavy Industrial	High/Mid Bay	<b>Champ® Pro PVM</b> <small>CE/NEC CERTIFIED</small> 	9 models - 70W to 1000W HID replacement	3,000 - 25,000 lumens	41W to 232W	100-277 VAC, 347-480 VAC, 108-250 VDC
	Low Bay	<b>Vaporgard™ Pro P2L</b> <small>CE/NEC CERTIFIED</small> 	2 models - 100W to 200W incandescent; 50W HID	1,600 lumens	22W	100-277 VAC, 12-24 VDC
	Flood	<b>Champ® Pro PFM</b> <small>CE/NEC CERTIFIED</small> 	7 models - 70W to 1500W HID replacement	5,000 - 50,000 lumens	64W to 531W	100-277 VAC, 347-480 VAC, 108-250 VDC
	Wall Pack	<b>Endure™</b> <small>NEC CERTIFIED</small> 	2 models - 50W to 70W HPS & 70W HID replacement	2,200 - 4,300 lumens	27W to 51W	100-277 VAC
Light Industrial	High Bay	<b>Industrial High Bay</b> <small>NEC CERTIFIED</small> 	1 model - 400W MH & 4/6 Lamp T5HO	13,940 lumens	138W	100-277 VAC, 347-480 VAC

# Find out which solution is right for you.

## Selection Guide – Hazardous Area

Area Classification	Application	Product	Equivalent Light Output	Lumen Level	Input Watts	Input Voltage
Zone 2 and/or Class I, Division 2	High/Mid Bay	<b>Champ® VMV</b>  <b>CE/NEC CERTIFIED</b>	9 models - 70W to 1000W HID replacement	3,000 - 25,000 lumens	41W to 232W	100-277 VAC, 347-480 VAC, 108-250 VDC
	Flood	<b>Champ® FMV</b>  <b>CE/NEC CERTIFIED</b>	5 models - 70W to 400W HID replacement	5,000 - 13,000 lumens	64W to 179W	100-277 VAC, 347-480 VAC, 108-250 VDC
	Low Bay	<b>Vaporgard™</b>  <b>CE/NEC CERTIFIED</b>	2 models - 100W to 200W incandescent & 50W HID	1,600 lumens	22W	100-277 VAC, 12-24 VDC
	Linear	<b>LL48</b>  <b>CE/NEC CERTIFIED</b>	2x58W T8/T12 fluorescent replacement	3,500 - 4,300 lumens	56W	100-277 VAC
Zone 1, Zone 21 and/or Class I, Division 1	High/Mid Bay	<b>EVLL Hazard•Gard®</b>  <b>NEC CERTIFIED</b>	5 models - 70W to 400W HID/HPS replacement	5,000 - 13,500 lumens	80W to 175W	100-277 VAC, 347-480 VAC, 108-250 VDC
	Exit	<b>Ex-Lite /EXIT</b>  <b>CE/NEC CERTIFIED</b>	4 models - Ex-Lite & Ex-Lite N (with battery); EXIT & EXIT N (with battery)	N/A	N/A	120-277 VAC, 110-250 VDC
	Exit	<b>Ex-Lite Z, ZE</b>  <b>CE/NEC CERTIFIED</b>	2 models - Ex-Lite Z & Ex-Lite ZE (with battery)	N/A	N/A	120-277 VAC, 110-250 VDC
	Low Bay	<b>EV LED</b>  <b>NEC CERTIFIED</b>	2 models - 100W to 200W incandescent & 70W-100W HID replacement	1,500 - 2,000 lumens	26W to 36W	100-277 VAC, 10-30 VDC
	High/Mid Bay	<b>LPL</b>  <b>CE CERTIFIED</b>	5 models - 70W to 250W MH replacement	2,840 - 6,294 lumens	60W to 150W	100-277 VAC
	Linear	<b>eLLK</b>  <b>CE/NEC CERTIFIED</b>	2 models - 2x18W and 2x36W fluorescent replacement	2,100 - 4,100 lumens	2X13W and 2X26W	110-254 VAC, 110-250 VDC
	Bulkhead	<b>AB05</b>  <b>CE CERTIFIED</b>	1 model - 150W incandescent replacement	2,000 lumens	32W	120-240 VAC
	Low Bay	<b>EV35</b>  <b>CE CERTIFIED</b>	1 model - 100W to 150W incandescent & 50W mercury vapor replacement	2,120 lumens	32W	220-240 VAC

## Champ<sup>®</sup> Pro PFM Series LED Floodlights

### Primary applications

Indoor and outdoor area lighting in manufacturing plants, mine sites and processing areas, platforms, loading docks and parking areas.

### Luminaire models

Model Number	Equivalent HID Luminaire	Typical Energy Savings/Lifetime
PFM5L	100W-150W	Up to 65% reduction in energy costs and 60,000 hours of continuous operation!
PFM7L	150W-175W	
PFM9L	175W-250W	
PFM11L	250W-320W	
PFM13L	320W-400W	
PFM25L	600W-750W	
PFM50L	1,500W	

### Certifications & compliances

- UL1598
- UL1598A
- cUL
- CE
- NEMA 4X
- IP66
- UL approved up to 40°C ambient

### Electrical ratings

- Voltages: 100-277 VAC, 347/480 VAC, 108-250 VDC
- Input Power: 64W, 89W, 121W, 149W, 179W, 263W, 531W

### Options & accessories

- Fused
- Bolt-on Visor
- Bolt-on Wire Guard
- Floodlight Slipfitter
- Slipfitter Wall Mount Adapter
- Polycarbonate Lens



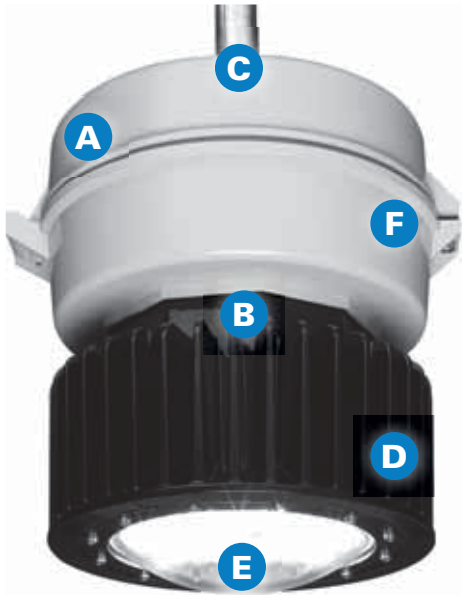
Up to 6 times longer life and 65% reduction in power consumption compared to equivalent HID floodlights

### Design features

- A Versatile design** - Can be used for outdoor or indoor applications, and for a wide range of mounting heights depending on model and light level requirement.
- B Rugged heat sink** - Designed to perform in high ambient temperatures up to +55°C and as low as -40°C. The thick walls of the castings make for a tough, rugged housing that keeps the internal driver and LED temperatures down.
- C High lumen output** - High efficiency drivers and LED arrays provide reliable low cost operation in harsh and hazardous environments.
- D Full-frame yoke** - Designed to utilize the SFA6 slipfitter and SWB6 wall mount bracket, making it ideal for retrofit or new installations.
- E Multiple lens options** - Tempered and clear glass standard, polycarbonate option available.







PVM3L – 11L



PVM13L and 17L



PVM21L and 25L



Custom Type I, III and V optics for better output, zero maintenance and reduced energy consumption

## Design features

- A Modular design** - This contractor-friendly design is ideal for both retrofit and new construction applications.
- B Safe, reliable heat transfer** - Die cast aluminum housing provides safe and effective heat transfer from the LED assembly to the outside environment, ensuring low LED junction temperature, reliability and sustained lumen performance.
- C High efficiency drivers** - Designed to provide reliable operation in even the harshest environments.
- D Type 4X rated** - The LED housing is constructed of durable die cast aluminum, providing an efficient thermal path to the heat sink assembly. The impact-resistant lens is sealed from the outside environment and provides ingress protection against water and dust.
- E Custom optics** - Type I, III and V optics designed to maximize light distribution and intensity.
- F Lever-lock connectors and 3-pole terminal block.**



## Champ<sup>®</sup> Pro PVM Series LED Luminaire

### Primary applications

Locations requiring continuous and consistent light levels in extreme ambient temperatures, such as manufacturing plants, mine sites, heavy industrial or petrochemical facilities, food and beverage facilities, marine environments, platforms, loading docks, tunnels, outdoor wall and stanchion mounted general area lighting.

### Luminaire models

Model Number	Equivalent HID Luminaire	Typical Energy Savings/Lifetime
PVM3L	70W-100W	Up to 77% reduction in energy costs and 60,000 hours of continuous operation!
PVM5L	100W-150W	
PVM7L	150W-175W	
PVM9L	175W-250W	
PVM11L	250W-320W	
PVM13L	320W-400W	
PVM17L	400W-600W	
PVM21L	600W-750W	
PVM25L	750W-1,000W	

### Certifications & compliances

- UL1598
- UL1598A
- cUL
- CE
- NEMA 4X
- IP66
- cUL Listed to CSA Standard CSA C22.2 No. 250
- UL approved up to 55°C ambient

### Electrical ratings

- Voltages: 100-277 VAC, 347/480 VAC, 108-250 VDC
- Input Power: 41W, 67W, 94W, 114W, 130W, 168W, 196W, 232W

### Options & accessories

- Quick Clip
- Diffused Lens
- Teflon Coated Lens
- Polycarbonate Lens
- Wire Guard
- Trunnion Mount
- Cone Top Hat

## Endure™ Pro Series LED Wall Pack

### Primary applications

Ideal for a variety of complex non-hazardous applications such as mining, food processing, marine, wastewater treatment, heavy manufacturing and general wash-down areas.

### Luminaire models

Model Number	Equivalent HID Luminaire	Typical Energy Savings/Lifetime
FM1 B01	50W	59%
FM1 B02	70W	43%

50,000 hours of continuous operation!

### Certifications & compliances

- UL1598
- cUL
- IP66

### Electrical ratings

- Input Power: 27W, 51W



50,000 hours rated life and up to 59% more energy-efficient than equivalent 70 watt HID luminaire

### Design features

- A White light** - Provides superior color rendering and ambient clarity. Optics are precisely designed to shape the distribution, maximizing efficiency and application spacing.
- B Energy efficiency and longer life** - 50,000 hours rated life and up to 59% more energy-efficient than the 70W high pressure sodium equivalent.
- C Reduction in light pollution** - Controlled distribution of light means far less light loss.
- D IP66 ingress protection rating and -30°C to 50°C ambient temperature rating** - Ensures trouble-free operation in a variety of harsh and complex applications.
- E Junction box** - Polycarbonate, IP66 rated, four screws to access cover, double row terminal box to expedite installation.





## Vaporgard™ Pro P2L Series LED Luminaires

### Primary applications

Indoor or outdoor areas with low mounting heights or confined spaces, such as tunnels and catwalks, over doorways or entries, landing areas, utility rooms, etc.

### Luminaire models

Model Number	Equivalent HID Luminaire	Typical Energy Savings/Lifetime
P2LC/UNV1		Up to 85% reduction in energy costs and 60,000 hours of continuous operation!
P2LW/UNV1	50W HID or 100-200W	
P2LC/DC1	incandescent	
P2LW/DC1		



85% more energy-efficient than a 200 watt incandescent and over 20 times the rated life

### Design features

- A Domeless reflector, low profile design** - Designed for low mounting heights and confined spaces where incandescent and HID based luminaires are too large.
- B Installation and replacement made simple** - Installed using the same mounting modules as existing Eaton's Crouse-Hinds Vaporgard™ fixtures.
- C Safe, reliable heat transfer** - Heat sink engineered to safely and effectively remove heat from the LED and driver, ensuring long product life and superior T-ratings.
- D High power multi-die LED arrays** - Provides instant on and full illumination in the harshest conditions, even when exposed to high, repeated vibration.

### Certifications & compliances

- UL1598
- UL1598A
- cUL
- CE
- NEMA 4X
- IP66

### Electrical ratings

- Voltages: 90-264 VAC, 277 VAC, 12-24 VDC
- Input Power: 22W

### Options & accessories

- Frosted Lens
- Teflon Coated Lens
- High Temperature Option (55°C)
- Brazil (CEPEL) Certification
- Warm White (3000K) and Cool White (5600K) Color Temperatures
- 12 VDC/24 VDC Driver



## Industrial High Bay Series LED Luminaires

### Primary applications

IHB Series LED Luminaires are the perfect replacement for 400W HID and 4-6 lamp T5HO fluorescent high bay fixtures. Designed for locations requiring continuous and consistent light levels, requiring frequent on-and-off of lights and that are difficult to relamp or that cause production to be stopped during the lamp maintenance process.

### Luminaire models

Model Number	Equivalent HID Luminaire	Typical Energy Savings/Lifetime
IHB13L2A/ UNV1	400W HID	Up to 69% reduction in energy costs and 60,000 hours of continuous operation!
	4-6 lamp T5HO fluorescent	

### Certifications & compliances

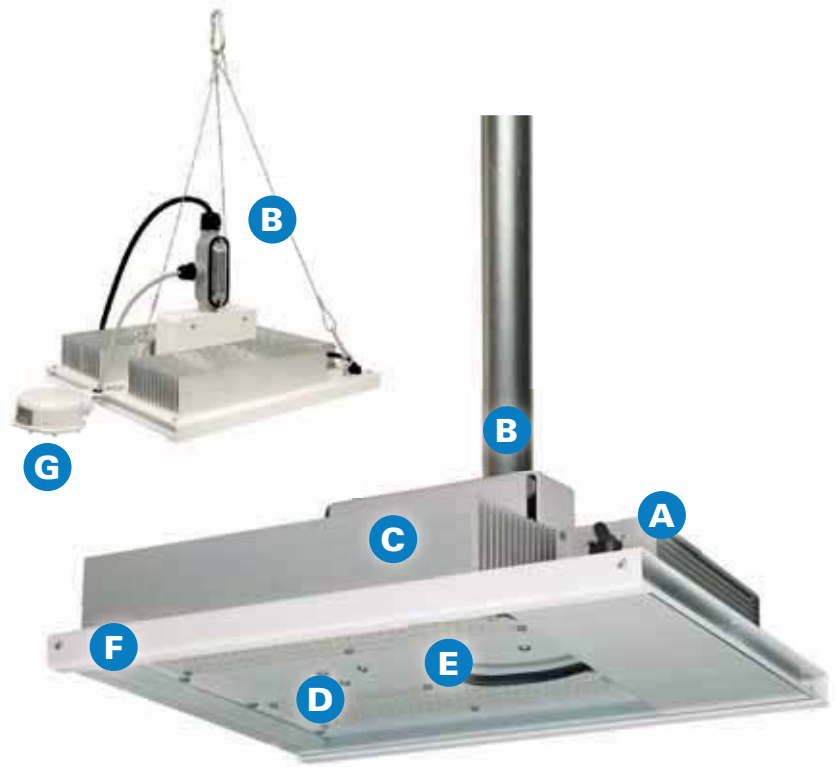
- Meets UL1598 and cUL construction requirements
- UL approved up to 40°C
- Operating Temperature: -30°C to 40°C
- 60,000 hours rated life at 40°C

### Electrical ratings

- Voltages: 100-277 V, 347-480 V; 50/60 Hz
- Input Power: 141W (at 120 VAC); 138W (at 277 VAC)

### Options & accessories

- Occupancy Sensor Kit
- Hook and Cord Kit
- Driver Replacement Kit
- Polycarbonate Lens



Perfect replacement for 400 watt HID or 4-6 lamp T5HO high bay fixtures

### Design features

- A High efficiency serviceable drivers.**
- B Multiple mounting options** - Mounting bracket for 3/4" pendant mount conduit or hook/cord mounting option.
- C Aluminum heat sinks for superior thermal management.**
- D Two discrete LED boards for uniform illumination.**
- E Multiple lens options** - Tempered and clear glass standard, polycarbonate option available.
- F Powder-coated, white painted sheet metal body.**
- G Optional occupancy sensor kit available.**





# Champ® VMV Series LED Luminaires

## Primary applications

Locations requiring continuous and consistent light levels in extreme ambient temperatures, such as manufacturing plants, heavy industrial or petrochemical facilities, food and beverage facilities, platforms, loading docks, tunnels, outdoor wall and stanchion mounted general area lighting.

## Luminaire models

Model Number	Equivalent HID Luminaire	Typical Energy Savings/Lifetime
VMV3L	70W-100W	Up to 77% reduction in energy costs and 60,000 hours of continuous operation!
VMV5L	100W-150W	
VMV7L	150W-175W	
VMV9L	175W-250W	
VMV11L	250W-320W	
VMV13L	320W-400W	
VMV17L	400W-600W	
VMV21L	600W-750W	
VMV25L	750W-1000W	

## Certifications & compliances

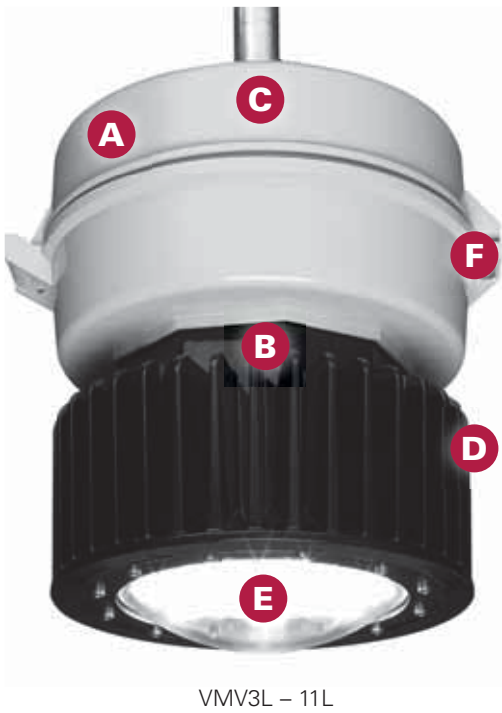
- Class I, Division 2, Groups A, B, C, D
- Class I, Zone 2, Zone 21 tb
- Class II, Groups E, F, G
- Class III
- UL844; UL1598; UL1598A
- CSA C22.2 No. 137
- Type 4X, IP66
- IECEx/ATEX Certified

## Electrical ratings

- Voltages: 100-277 VAC, 347/480 VAC, 108-250 VDC
- Input Power: 41W, 67W, 94W, 114W, 130W, 168W, 196W, 232W

## Options & accessories

- Quick Clip
- Diffused Lens
- Teflon Coated Lens
- Polycarbonate Lens
- Wire Guard
- Trunnion Mount
- Cone Top Hat
- Terminal Block (TB6) 6-pole



VMV3L – 11L



VMV13L and 17L



VMV21L and 25L



Custom Type I, III and V optics for better output, zero maintenance and reduced energy consumption

## Design features

- A Modular design** - This contractor-friendly design is ideal for both retrofit and new construction applications.
- B Safe, reliable heat transfer** - Die cast aluminum housing provides safe and effective heat transfer from the LED assembly to the outside environment, ensuring low LED junction temperature, reliability and sustained lumen performance.
- C High efficiency drivers** - Designed to provide reliable operation in even the harshest environments.
- D Type 4X rated** - The LED housing is constructed of durable die cast aluminum, providing an efficient thermal path to the heat sink assembly. The impact-resistant lens is sealed from the outside environment and provides ingress protection against water and dust.
- E Custom optics** - Type I, III and V optics designed to maximize light distribution and intensity.
- F Lever-lock connectors and 3-pole terminal block.**



## Champ® FMV Series LED Floodlights

### Primary applications

Indoor and outdoor area lighting in manufacturing plants, heavy industrial chemical and petrochemical facilities, platforms, loading docks and parking lots.

### Luminaire models

Model Number	Equivalent HID Luminaire	Typical Energy Savings/Lifetime
FMV5L	100W-150W	Up to 62% reduction in energy costs and 60,000 hours of continuous operation!
FMV7L	150W-175W	
FMV9L	175W-250W	
FMV11L	250W-320W	
FMV13L	320W-400W	

### Certifications & compliances

- Class I, Division 2, Groups A, B, C, D
- Class I, Zone 2
- Class II, Groups E, F, G; Class III
- Type 4X, IP66
- UL844; UL1598; UL1598A
- CSA C22.2 No. 137
- IECEx UL 11.0054X
- Ex nA nR IIC T4 Gc Tamb -30°C to +55°C
- CEPEL Ex-1956/10
- Ex nA nR IIC T5 Gc Tamb -30°C to +40°C
- Ex tc IIIC T68°C Dc IP66 Tamb -30°C to 40°C
- CE DEMKO 12 ATEX 115535X
- Ex II 3 G Ex nA nR IIC T4 Gc Tamb -30°C to +55°C
- Ex II 3 G Ex nA nR IIC T5 Gc Tamb -30°C to +40°C
- Ex II 3 D Ex tc IIIC T68°C Dc IP66 Tamb -30°C to +40°C

### Electrical ratings

- Voltages: 100-277 VAC, 347/480 VAC, 108-250 VDC
- Input Power: 64W, 89W, 121W, 149W, 179W

### Options & accessories

- Fused
- Bolt-on Visor
- Bolt-on Wire Guard
- Floodlight Slipfitter
- Slipfitter Wall Mount Adapter



Up to 6 times longer life and 65% reduction in power consumption compared to equivalent HID floodlights

### Design features

- A Versatile design** - Suitable for hazardous location use in gas or dust areas. Can be used for outdoor or indoor applications, and for a wide range of mounting heights depending on model and light level requirement.
- B Rugged heat sink** - Designed to perform in high ambient temperatures up to +55°C and as low as -40°C. The thick walls of the castings make for a tough, rugged housing that keeps the internal driver and LED temperatures down.
- C High lumen output** - High efficiency drivers and LED arrays provide reliable low cost operation in harsh and hazardous environments.
- D Full-frame yoke** - Designed to utilize the SFA6 slipfitter and SWB6 wall mount bracket, making it ideal for retrofit or new installations.





## LL48 Linear LED Luminaires

### Primary applications

Indoor and outdoor areas with low mounting heights or confined spaces, such as aisles, tunnels and catwalks, over doorways or entries, landing areas, utility rooms, etc.

### Luminaire model

Model Number	Equivalent HID Luminaire	Typical Energy Savings/Lifetime
LL48	2 x 58W fluorescent	Up to 50% reduction in energy costs and 60,000 hours of continuous operation!



Up to 50% more energy efficient than a 2x58W fluorescent light and 8 times the rated life

### Design features

- A Versatile design** - Designed to match the footprint of a traditional linear fluorescent fixture.
- B Energy-efficient** - Same light pattern and lumen output at a fraction of the energy cost.
- C Better visibility** - Diffused lens reduces glare.
- D Shock- and vibration-resistant** - LEDs contain no mercury, eliminating costly lamp disposal programs.
- E Slim and low profile** - Designed for use in confined spaces.

### Certifications & compliances

- Class I, Division 2, Groups A, B, C, D
- UL844; UL1598; UL1598A
- CSA C22.2 No. 137
- Type 4X, IP66
- IECEx/ATEX Certified

### Electrical ratings

- Voltage: 100-277 VAC

### Options & accessories

- Multiple mounting accessories, including: ceiling, wall, pole



## Vaporgard™ V2L Series LED Luminaires

### Primary applications

Indoor or outdoor areas with low mounting heights or confined spaces, such as tunnels and catwalks, over doorways or entries, landing areas, utility rooms, etc.

### Luminaire model

Model Number	Equivalent Luminaire	Typical Energy Savings/Lifetime
V2L	100W-200W incandescent	Up to 85% reduction in energy costs and 60,000 hours of continuous operation!
	50W HID	

### Certifications & compliances

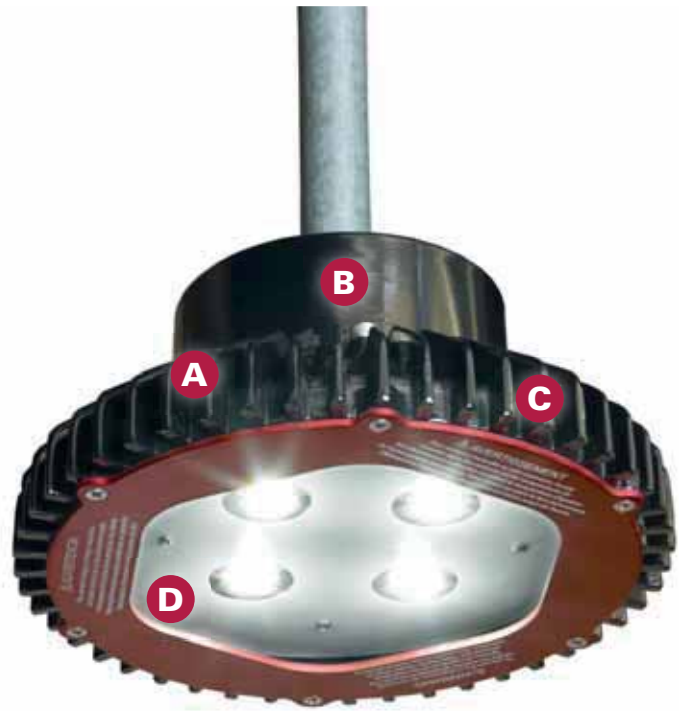
- Class I, Division 2, Groups A, B, C, D
- Class II, Division 1, Groups F, G
- UL844; UL1598; UL1598A
- CSA C22.2 No. 137
- NEMA 4X
- UL1598; UL1598A
- IP66
- RoHS Compliant
- Ⓢ II 3 G Ex nA IIC T4 Gc (T4 at 55°C)
- Ⓢ II 3 D Ex tc IIIB T69°C Dc IP66
- EN60079-0:2009, EN60079-15:2010, EN60079-31:2009

### Electrical ratings

- Voltages: 90-264 VAC, 277 VAC, 12-24 VDC
- Input Power: 22W

### Options & accessories

- Frosted Lens
- Teflon Coated Lens
- High Temperature Option (55°C)
- Brazil (CEPEL) Certification
- Warm White (3000K) and Cool White (5600K) Color Temperatures
- 12 VDC/24 VDC Driver



85% more energy-efficient than a 200 watt incandescent and over 20 times the rated life

### Design features

- A Domeless reflector, low profile design** - Designed for low mounting heights and confined spaces where incandescent and HID based luminaires are too large.
- B Installation and replacement made simple** - Installed using the same mounting modules as existing Eaton's Crouse-Hinds Vaporgard™ fixtures.
- C Safe, reliable heat transfer** - Heat sink engineered to safely and effectively remove heat from the LED and driver, ensuring long product life and superior T-ratings.
- D High power multi-die LED arrays** - Provides instant on and full illumination in the harshest conditions, even when exposed to high, repeated vibration.



ATEX



NEC



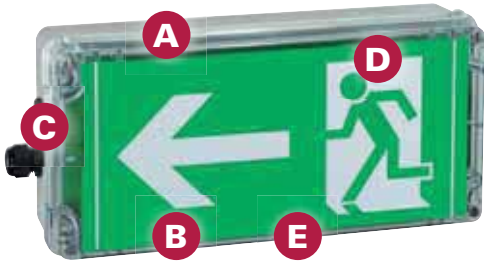
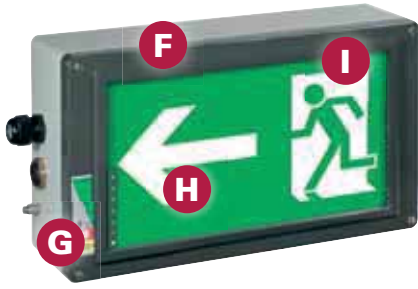
CEC



INMETRO



GOST



LED exit lighting designed for harsh and hazardous locations

### EXIT Lighting design features

- A Polycarbonate housing** - Provides corrosion protection in the most extreme environments and is IP66 rated to protect against dust and moisture ingress
- B Nickel cadmium battery back-up**- High temperature rated nickel cadmium back-up battery (EXIT N model)
- C Reduced maintenance costs** - Self-test, monitoring and diagnostics reduce costly maintenance checks.
- D IEC standard pictograms**
- E Power-saving LED technology**

### Ex-Lite Lighting design features

- F Corrosion- and impact-resistant cast aluminum housing** - Ensures long product life and reliability.
- G Nickel cadmium battery back-up** - High temperature rated nickel cadmium back-up battery (Ex-Lite N and Ex-Lite ZE models)
- H "EXIT" legend with alternative directional arrows** - Left, right or left and right; simple field modification (Ex-Lite Z and Ex-Lite ZE only).
- I IEC standard pictograms** - (Ex-Lite and Ex-Lite N only)



## LED Exit Luminaires

### Primary applications

Used for marking escape routes and exits in potentially explosive atmospheres.

### EXIT and Ex-Lite

#### Luminaire models

Model Number	Rating	Battery
EXIT	Hazardous	No
EXIT N	Hazardous	Yes
Ex-Lite	Hazardous	No
Ex-Lite N	Hazardous	Yes

### Certifications & compliances

- Ex II 2 G Ex e ib mb IIC T4/T5/T6 Gb
- Ex II 2 D Ex tb IIIC T80°C Db IP66
- BVS 09 ATEX E 029/BVS 09 ATEX E 048
- Ex e ib mb IIC T4/T5/T6 Gb/Ex tb IIIC T80°C Db
- IECEx BVS 13.0017/ IECEx BVS 13.0016

### Electrical ratings

- Voltages: 120-277 VAC, 110-250 VDC
- Power Consumption: 6/8VA

### Ex-Lite Z and Ex-Lite ZE

#### Luminaire models

Model Number	Rating	Battery
Ex-Lite Z	Hazardous	No
Ex-Lite ZE	Hazardous	Yes

### Certifications & compliances

- Class I, Division 2, Groups A, B, C, D
- Class I, Zone 1, AEx em ib IIC (NEC)
- Class I, Zone 1, Ex em ib IIC (CEC)
- Class II, Division 2, Groups F, G (NEC)
- Class II, Division 2, Groups E, F, G (CEC)
- IP66
- UL844; UL924/CSA22.2 No. 141-02; UL60079/CSA22.2 E60079; UL1203/CSA22.2 E6124-1-1-02

### Electrical ratings

- Voltages: 120-277 VAC, 110-250 VDC
- Power Consumption: 6/8VA



## Hazard•Gard® EVLL LED Luminaire

### Primary applications

Used for general lighting in areas where flammable or explosive vapors or gases are present, such as petroleum refineries, chemical and petrochemical plants, oil terminals, gas plants, drilling platforms and wastewater treatment plants.

### Luminaire models

Model Number	Equivalent HID Luminaire	Typical Energy Savings/Lifetime
EVLL5L	100W-150W	Up to 62% reduction in energy costs and 60,000 hours of continuous operation!
EVLL7L	150W-175W	
EVLL9L	175W-250W	
EVLL11L	250W-320W	
EVLL13L	320W-400W	

### Certifications & compliances

- Class I, Division 1, Groups B, C, D
- Class I, Zone 1, Groups IIB + H<sub>2</sub>, IIB, IIA
- Class II, Groups E, F, G
- Class III, Simultaneous Presence
- UL844; UL1598; UL1598A
- CSA C22.2 No. 137
- Ex II 2G Ex d IIC (Zone 1, 2) (Pending)
- Ex II 2D Ex tD A21 IP66 (Zone 21, 22) (Pending)
- NEMA 4X, IP66

### Electrical ratings

- Voltages: 100-277 VAC, 347/480 VAC, 108-250 VDC

### Options & accessories

- Trunnion Mount
- Guard
- Color Temperature: Warm White (3000K)\*  
\*available on 5L-11L models only



Energy-efficient and globally certified explosionproof workhorse for general area and high bay lighting applications

### Design features

- A Retrofittable to install base** - Adapter available for connection to existing Hazard•Gard® EVI, EVLP and EVM modules.
- B Quick-connect design** - Install and wire the mounting module, then simply screw in the luminaire.
- C Factory sealed** - No external sealing fittings required in Groups B, C and D.
- D 60,000 hours rated life** - Eliminates the need for frequent lamp replacement.
- E Shock- and vibration-resistant** - Solid-state luminaires have no filaments or glass components that could break, greatly reducing the risk of premature failure.



ATEX



NEC



CEC



## EV LED Luminaire

### Primary applications

Indoors or outdoors in process and storage areas, corridors, bridges and stairs.

### Luminaire models

Model Number	Equivalent Luminaire	Typical Energy Savings/Lifetime
EVLEDC201	100W-200W incandescent	Up to 85% reduction in energy costs and 50,000 hours of continuous operation!
EVLEDC701	70W-100W HID	



Up to 85% reduction in energy costs and 50,000 hours of continuous operation

### Design features

- A** **Retrofittable mounting modules** - Compatible with existing EV Series mounting modules, which reduces retrofit installation time and materials costs, and makes new construction installation easy.
- B** **Dark Sky Compliant light distribution** - Certified by the International Dark Sky Association as Dark Sky Compliant, virtually no light pollution will escape up into the atmosphere.
- C** **20 times longer life than incandescents in tough-to-maintain Division 1 locations.**

### Certifications & compliances

- Class I, Division 1, Groups C, D
- Class I, Zone 1 & 2, Group IIB
- Class II, Groups E, F, G
- Class III; Simultaneous Presence
- UL844; UL1598; UL1598A
- CSA C22.2 No. 137
- Type 4X, IP66

### Electrical ratings

- Voltages: 100-277 VAC, 10-30 VDC
- Input Power: 26W, 30W, 36W

### Options & accessories

- Wildlife Friendly Model Available (Amber)
- Color Temperature: Warm White
- 10-30 VDC



## eLLK 92 Linear LED Luminaire

### Primary applications

Designed for use in outdoor and indoor hazardous and non-hazardous areas where moisture or corrosion may be a problem, such as offshore oil platforms, pharmaceutical plants, oil refineries and industrial locations.

### Luminaire models

Model Number	Equivalent Luminaire	Battery	Typical Energy Savings/Lifetime
eLLK LED 400	2x18W fluorescent	No	Up to 20% reduction in energy costs and 60,000 hours of continuous operation!
eLLK LED 800	2x36W fluorescent	No	
eLLK LED 400 NiB	2x18W fluorescent	Yes	
eLLK LED 800 NiB	2x36W fluorescent	Yes	

### Certifications & compliances

- II 2G Ex de mb IIC T4 Gb
- II 2D Ex tb IIIC T80 °C Db IP66
- BVS 09 ATEX E 034
- Ex de mb IIC T4 Gb/Ex tb IIIC T80 °C
- IECEx BVS 09.0033
- NEC/CEC pending

### Electrical ratings

- Voltages: 110-254 VAC, 110-250 VDC;
- Input Power: 2x13W, 2x26W

### Options & accessories

- LED Module 400 (2x13W) for eLLK/M 92 018/18
- LED Module 800 (2x26W) for eLLK/M 92 036/36
- Through Wiring Single/Double Ended
- Cable Glands
  - Ex-e M25 x 1.5 (plastic) for cables 8-17mm in diameter
  - M20 x 1.5 metal threaded



Saves on energy consumption and easily retrofit existing luminaires in hazardous and corrosive environments

### Design features

- A High output** - Illuminance (lux/Fc) equivalent to related fluorescent tubes at measurement plane.
- B Non-metallic design** - Fiberglass-reinforced polyester construction for extreme durability.
- C Retrofit friendly** - Retrofits to existing eLLK 92 fixtures with existing EVG 09 ballast or as a complete unit.
- D Better visibility** - Glare minimized by indirect emission from luminaire's built-in reflector.
- E Emergency battery pack** - (NiB versions only)





A long-life, energy-efficient luminaire for general area lighting in hazardous IEC applications

### Design features

- A Robust construction** - This corrosion-proof fixture offers high quality, shock- and vibration-resistant LEDs, copper-free aluminum housing and an impact-resistant glass globe.
- B Excellent thermal management** - Provides over 50,000 hours of life.
- C Lead-free and environmentally-friendly.**



## LPL General Area LED Luminaire

### Primary applications

Suitable for Zone 1 and Zone 2 Ex-Gas and Zone 21/22 Ex-Dust hazardous areas, such as heavy industrial, chemical, petrochemical or pharmaceutical facilities, platforms, shipyards, electric power, loading docks, wastewater treatment plants and paper mills.

### Luminaire models

Model Number	Equivalent HID Luminaire	Typical Energy Savings/Lifetime
LPL04-C60-60W	70W-100W	Up to 40% reduction in energy costs and 60,000 hours of continuous operation!
LPL04-C60-85W	150W	
LPL04-C60-100W	175W	
LPL04-C60-125W	175-250W	
LPL04-C60-150W	250W	

### Certifications & compliances

- Class I, Division 2, Groups A, B, C, D
- II 2 G Ex d e IIC T6 Gb
- II 2 D Ex tb IIIC T80°C Db IP66
- EC-type Exam Certification: DNV 11 ATEX 06805X
- IECEx - Certificate of Conformity: IECEx-CM 12.0007X
- IP66
- Zones 1 and 2 (Ex-Gas)
- Zones 21 and 22 (Ex-Dust)

### Electrical ratings

- Voltage: 100-277 VAC
- Input Power: 60W, 85W, 100W, 125W, 150W

### Options & accessories

- Warm White Color Temperature (3300K)
- Pole Mount Accessories

## EV35 LED Luminaire

### Primary applications

Indoors or outdoors in process and storage areas, corridors, bridges and stairs.

### Luminaire models

Model Number	Equivalent Luminaire	Typical Energy Savings/Lifetime
EV35	100W-150W Incandescent	78%
	50W HID	40%

60,000 hours of continuous operation!

### Certifications & compliances

- Group II 2 GD (Zone 1)
- Gas: Ex d IIC T6 Gb
- Dust: Ex t IIIC T85°C Db
- Certificate: LOM 10 ATEX 2075
- IP66

### Electrical ratings

- Voltages: 220-240V
- Input Power: 22W

### Options & accessories

- Internal high polished aluminum reflector for down light applications
- Direct entries or indirect entries via Connection Box



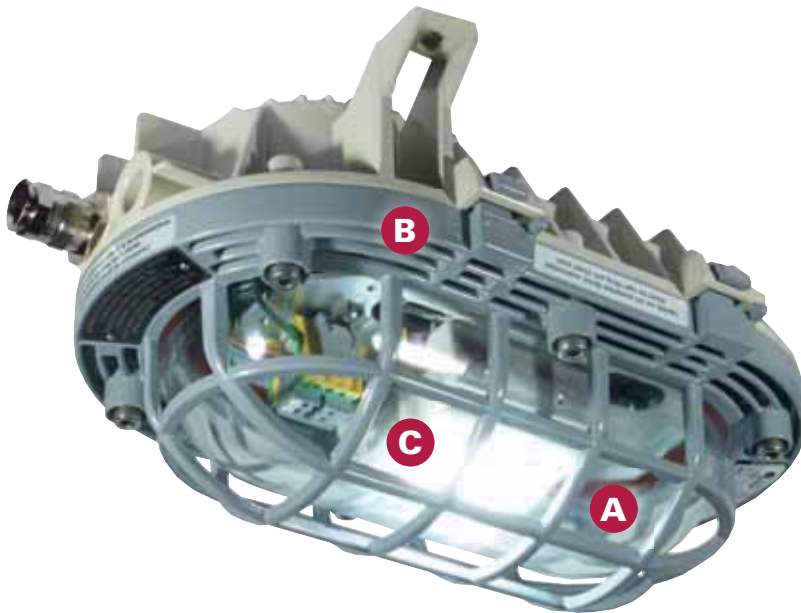
Up to 78% more energy-efficient than a 150 watt incandescent and over 20 times the rated life

### Design features

- A Wide ambient temperature range from -40°C to +55°C** - Allows installation and safe use in nearly every climatic condition.
- B High power LED module** - Provides instant on and full illumination in the harshest conditions, even when exposed to high, repeated vibration.
- C Safe, reliable heat transfer** - Heat sink connected to copper-free aluminum housing to safely and effectively remove heat from the LED module and driver, therefore offering a T-rating of T6.







## AB05 Marine LED Luminaire

### Primary applications

Perfect for confined or restricted spaces, such as stairwells, storage areas and corridors that require consistent light.

### Luminaire models

Model Number	Equivalent Luminaire	Typical Energy Savings/Lifetime
AB05	150W incandescent	Up to 80%
60,000 hours of continuous operation!		

### Certifications & compliances

- Zone 1, 2, 21, 22
- Ex d IIB T6
- II 2 G Ex d IIB T6/T5 Gb
- II 2 D Ex tb IIIC T80°C/T100°C Db
- Certificate BVS 09 ATEX E 014 X
- IP66

### Electrical ratings

- Voltage: 120-240 VAC
- Input Power: 22W



Up to 6 times longer life and 65% reduction in power consumption compared to equivalent HID floodlights

### Design features

- A Shock- and vibration-resistant** - Durable vibration-resistant LEDs decrease maintenance costs.
- B Lightweight enclosure** - Robust light alloy enclosure weighs only 7.0 kg, allowing the user to mount in areas where the available space is restricted, and making installation fast and easy.
- C Instant illumination and restrike** - Decreases facility downtime; no warm-up time required.



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