

Hazardous area LED lighting
Vaporgard™ LED Luminaires

CROUSE-HINDS
SERIES

Vaporgard™ LED

Low profile LED downlight



EATON

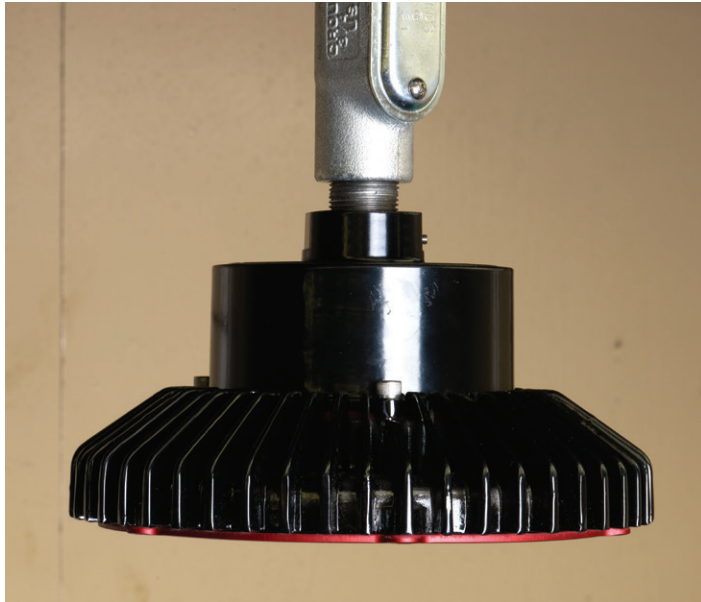
Powering Business Worldwide

Vaporgard LED Lighting

Safe. Reliable. Efficient.

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

We utilize more than 100 years of lighting expertise to maximize the benefits of LED technology to provide **safe and reliable LED luminaires for hazardous areas.**



Why LED?

Useful Life

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

Energy efficiency

- LEDs use 90% less energy than incandescent

Start/restart time

- Instant illumination compared to 10 minute restrike time for HID

Light quality

- Higher color rendering and color temperature

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

Retrofit compatibility

- LED fixtures are compatible with Crouse-Hinds' Vaporgard incandescent installed base

Why Vaporgard LED?



- 20X the life of incandescent lamps



- 50% lower profile than incandescent luminaires

Application

Challenge:

You're faced with high energy and maintenance costs related to your current incandescent lighting fixtures. You need a solution which will not only reduce operating expenses, but also replace your current incandescent fixtures.

Old way:

Replace your current incandescent fixtures with a higher wattage HID luminaire. Light output has increased, however, energy costs have gone up 30%, maintenance costs are still an issue, and future regulations may require another change.

New way:

Install Vaporgard LED luminaires reduce energy consumption and maintenance costs associated with lamp replacement. The Vaporgard LED is designed to easily adapt to existing mounting modules for ease of installation. That, along with a 20 times longer life, makes Vaporgard LED an ideal replacement.

Benefit:

Realize 90% energy savings and eliminate maintenance by installing Vaporgard. Qualify for rebate incentives with local municipalities and federal programs. Take advantage of the robust, low profile design by installing in those hard to reach locations.



Design features



EASY INSTALLATION AND REPLACEMENT

- Contractor-friendly design is ideal for both retrofit and new construction applications
- Installed using the same wall and ceiling mounts as incandescent Vaporgard fixtures

LOW PROFILE DESIGN

- Unique domeless, low profile design for low mounting heights and confined spaces where incandescent and HID based luminaires are too large to fit in the mechanical envelope required

MULTIPLE LENS OPTIONS

- Tempered clear glass lens standard
- Diffused glass lens and teflon coated lens options available

MODULAR DESIGN

- Compact and modular design allows for easy component replacement and future upgrades



RUGGED HEAT SINK

- Heat sink designed to perform in high ambient temperatures up to +55°C and as low as -30°C
- Thick walled castings make for a tough, rugged housing that keeps the internal driver and LED temperature down



Features & benefits

Vaporgard LED

Cool white color temperature – 5000K

Provides uniform crisp, white light and is suitable for lower mounting heights, confined spaces, tunnels or utility rooms. This fixture can deliver similar light levels to 50 watt HID.

Warm white color temperature – 3000K

Provides similar benefits as the cool white version, but with a color rendering more consistent with a warm incandescent or HPS lamp source.

Available with DC power supply

For applications with DC power requirements such as solar, battery or UPS. The DC power supply is suitable for 12VDC through 24VDC.



V2LC



V2LW

Benefits:

Enhance safety and productivity

- Instant illumination and re-strike
- Cold temperature operation; no warm-up time
- Lightweight, low profile and cool surface temperatures
- Driver with internal fusing for branch circuit protection

Reduce operation and maintenance costs

- High efficacy LEDs can save up to 90% in energy costs
- No mercury or hazardous chemicals - eliminates disposal concerns
- Mounts to existing Vaporgard mounting modules

Reliable performance in any environment

- Shock- and vibration-resistant
- Teflon coated lens (suffix S896) option for increased safety in food processing facilities
- Operating ambient:
 - V2L: -30°C to +55°C
 - V3L: -30°C to +40°C

Applications:

- Oil and gas refineries, drilling rigs, petrochemical facilities, food and beverage facilities, platforms, loading docks, tunnels, outdoor wall and stanchion mounted general area lighting, and where flammable vapors, gases, ignitable dusts, fibers or flyings are present
- Locations requiring continuous and consistent light levels in extreme ambient temperatures
- Where extremely corrosive, wet, dusty, hot and/or cold conditions exist
- Type 4X, marine, wet locations and hose-down environments
- Confined space or low ceiling areas, such as tunnels, utility rooms, over doorways, entries, landings, etc.
- Areas requiring frequent on/off of lights
- Areas where maintenance is difficult or challenging
- Areas requiring shatter-protected products, such as food processing facilities
- Outdoor wall or ceiling mounted area illumination
- Low mounting heights
- Classified and hazardous locations

Model number	Nominal lumens	Wattage	Equivalent incandescent luminaire	Typical energy savings/lifetime
V2LM2C/UNV1	1,772	14	50W HID or 150-200W incandescent	90% energy savings and 50,000 hours of 24/7 operation!
V3LM2C/UNV1	3,335	29		



Specifications

Certifications and compliances:

- Class I, Division 2, Groups A, B, C, D
- Class II, Divisions 1 & 2, Groups F, G*
*mounting options limited
- UL844; UL1598; UL1598A
- CSA C22.2 No. 137
- NEMA 4X
- IP66
- EN60079-0:2009, EN60079-15:2010, EN60079-31:2009
- DesignLights Consortium® (pending)

Standard materials:

- Body and mounting modules – copper-free aluminum with Corro-free™ epoxy powder coat
- Lens bezel – aluminum with anodized finish
- Lens – heat- and impact-resistant glass
- Gaskets – silicone
- External hardware – stainless steel

Electrical ratings:

	120-277VAC input		12-24VDC input	
	Power	Current	Power	Current
V2LM2	14W	.12A	14W	1.4A
V3LM2	29W	.24A	31W	3.0A

5 year limited warranty. Refer to the authorized distributor price book for Crouse-Hinds standard Terms and Conditions.

Temperature ratings:

NEC models	Ambient temperature	Class I, Div. 2	Class I, Division 2	Class III, Div. 1
V2LM2	40°C	T4A	T4A	T4A
	55°C	T4A	T4A	T4A
V3LM2	40°C	T3C	T3C	T3C

Weights:

Model number	Lbs.	kg.
Pendant mount	5.7	2.59
Ceiling mount	6.8	3.08
Wall mount	7.9	3.58
Stanchion mount	6.5	2.95



LED driver:

- Constant current regulated power supply
- 120-277VAC, 50/60 Hz
- Power factor: >0.9
- Low harmonic distortion: <20%
- Low in-rush current, <20 amps
- EMC compliant to 47CFR, Part 2, Part 15
- 12-24VDC option available

LED system:

- (4) High brightness LED arrays
- Cool white (5000K), CRI 70
- Warm white (3000K), CRI 82
- Neutral white (4000K), 80 CRI
- L70 >60,000 hours

Ordering information

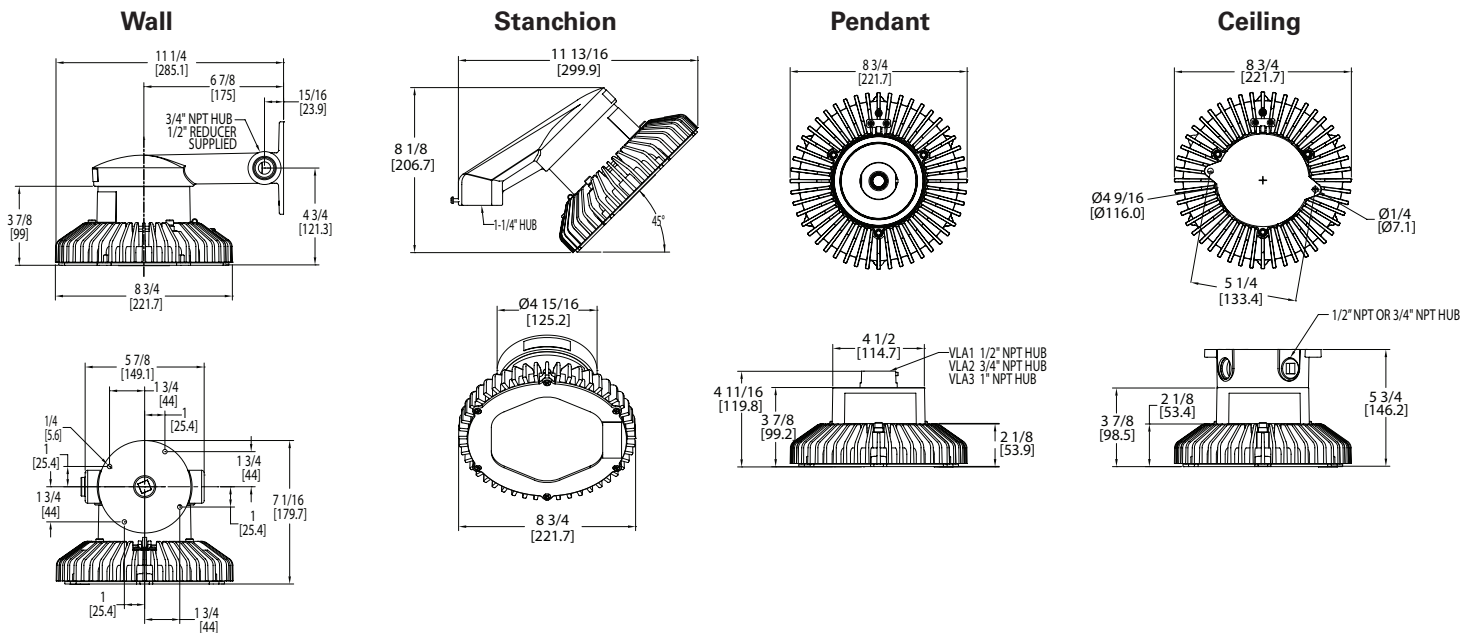
Part number example

V2LM2CHBF1 / UNV1 S891

Vaporgard LED, rated for hazardous areas, 1,500 lumens, Cool white (5000K), 70 CRI, wall mount with junction box, 120-277 VAC, 50/60 Hz. diffused glass window

V	2LM2	C	HBF	1	/	UNV1	S891
Series V Hazardous area rated		Mounting modules Class I, Division 2; Class II, Division 1, Groups F&G A VLA – pendant mount HJ VXJ – stanchion mount HW* VXW – wall mount <small>*Mounts directly to the wall, no VXFT junction box needed.</small>		Hub size BLANK No hub (LED housing, adapter) 1 ½" NPT (pendant, ceiling, wall) 2 ¾" NPT (pendant, ceiling, wall) 3 1" NPT (pendant) 4 1-¼" NPT (stanchion)		Options BLANK Clear glass window S891 Diffused glass window S896 Teflon coated window	
Lumen level (nominal) 2LM2 1,772 lumen LED 3LM2 3,335 lumen LED		OR Class I, Division 2; Class II, Division 2, Groups F&G BLANK LED housing only (warehouse/spare parts) HBF VXT – wall mount with VXFT junction box HF VXF – junction box for ceiling mount HR VLHR – adapter cover (for retrofit) HT VXT – wall mount				Voltage UNV1 120-277 VAC, 50/60 Hz; DC1* 10-30 VDC <small>*Rated to +40°C</small>	
Color temperature C Cool (5000K), 70 CRI min. N Neutral (4000K), 80 CRI min. W Warm (3000K), 80 CRI min.							

Dimensions



**U.S. (global headquarters):
Eaton's Crouse-Hinds Division**

1201 Wolf Street
Syracuse, NY 13208

(866) 764-5454
FAX: (315) 477-5179
FAX Orders Only:
(866) 653-0640

crousecustomerctr@eaton.com

**For more information:
If further assistance
is required, please
contact an authorized
Eaton Distributor, Sales
Office, or Customer
Service Department.**

Canada

Toll Free: 800-265-0502
FAX: (800) 263-9504
FAX Orders only: (866) 653-0645

Mexico/Latin America/Caribbean

52-555-804-4000
FAX: 52-555-804-4020
ventascentromex@eaton.com

Europe (Germany)

49 (0) 6271 806-500
49 (0) 6271 806-476
info-ex@eaton.com

Middle East

971 4 8066100
FAX: 971 4 8894813
chmesales@eaton.com

Singapore

65-6645-9888
FAX: 65-6297-4819
chsi-sales@eaton.com

China

86-21-2899-3600
FAX: 86-21-2899-4055
echsales@eaton.com

Korea

82 2 6380 4032
82-2-6380-4070
ECHKsales@eaton.com

Australia

1300-332-866
FAX: 61-2-9693-5127
crousehindsanz@eaton.com

India

91-124-4683888
FAX: 91-124-4683899
cchindia@eaton.com

Eaton's Crouse-Hinds
1201 Wolf Street
Syracuse, NY 13208
Crouse-Hinds.com

Eaton
1000 Eaton Boulevard
Cleveland, OH 44122
United States
Eaton.com

© 2019 Eaton
All Rights Reserved
Printed in USA
Publication No. 5132-0619
June 2019

Eaton is a registered trademark.
All other trademarks are property
of their respective owners.