

Hazardous area LED lighting

CROUSE-HINDS
SERIES

Champ VMVL

High lumen LED lighting for hazardous areas



Safe. Reliable. Efficient.
17,000 to 25,000 lumens

EATON

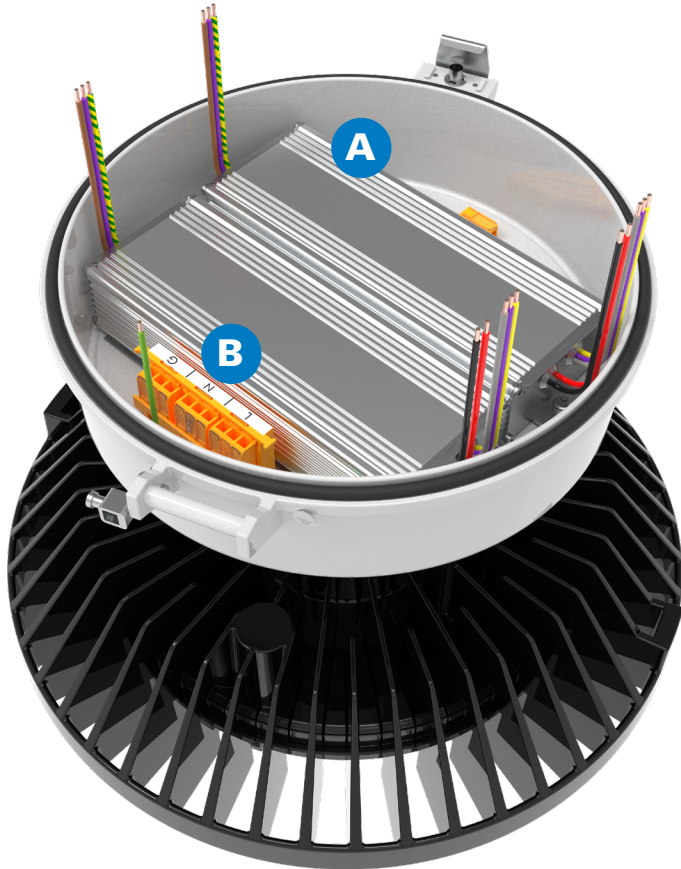
Powering Business Worldwide



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Design features

Our Champ VMVL high lumen LED is a field-proven design that helps ensure safety, reliability and performance in harsh and heavy industrial areas.



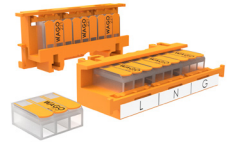
INSTALLATION EASE

A Easy access

- Separate driver compartment enables faster installation, access to wiring and field maintenance

B Lever lock connectors and terminal blocks

- Plug and play wiring simplifies and speeds installations



C Versatile mounting options

- Seven mounting options and four mounting adapters ensure that the fixtures are installed in the correct location to properly light your facility

Mounting modules



Stanchion - straight



Ceiling



Pendant



Stanchion - 25° angled



Wall



Cone pendant

Mounting adapters



Appleton MercMaster III



Appleton MercMaster II



Thomas & Betts HazLux



GE H2 Filtr-Gard

RELIABLE PERFORMANCE

D Thermal management

- Heat fins help ensure proper air flow and facilitate dust-shedding for effective heat dissipation and thermal management of LED engine



E Performance in extreme environments

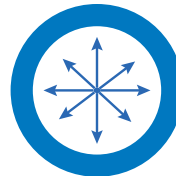
- Operating ambient: -40°C to 55°C
- Type 4X, IP66
- 6kV surge protection
- Corrosion-resistant aluminum housing with Corro-free™ epoxy powder coating
- Vibration tested in accordance with Section 33 of UL844
- Impact tested in accordance with Section 68 of UL844



OPTIMIZED LIGHT & QUALITY

F Custom optics & colors

- Type V optics with wide, medium and narrow beam pattern options engineered for flexibility without requiring clocking
- Directs light where you need it, helping eliminate gaps and dark spots
- Precision optics match to your application to reduce the number of light fixtures required
- 3000K-WARM, 4000K-NEUTRAL, 5000K-COOL and GREEN color options available



Wide

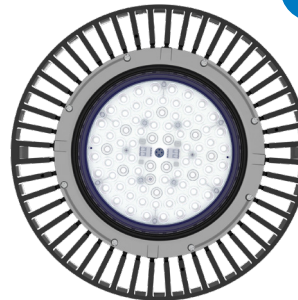


Medium

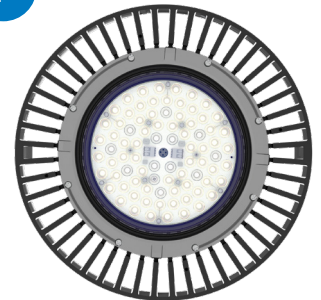


Narrow

F



5000K – COOL
Crisp, bright white with a blue hue.



3000K – WARM
Warm white with a yellow hue.

G Multiple lens options

- Clear glass lens standard
- Diffused glass, Teflon coated glass and clear polycarbonate lenses optional

G



Clear



Diffused

Specifications

Certifications:

NEC and CEC

- Class I, Division 2, Groups A, B, C, D; Class I, Zone 2, nA; Class II, Groups E, F, G; Class III
- Zone 21 tb (UNV1 model only)
- Simultaneous Presence
- Wet Locations, Type 4X, IP66

UL Standards

- UL844; UL1598 Luminaires; UL1598A Marine; UL8750; UL50; UL50E

CSA Standard

- cUL Listed to CSA Standard CSA C22.2 No. 137

IEC**

- IEC 60079-0:2017; IEC 60079-15:2010; IEC 60079-31:2013; IEC 60598-2-1:2008; IEC 60529:2001; IEC 60079-7:2017; IEC 60079-18:2017
- Ex nA IIC T* Gc -40 to +40
- Ex nA IIC T* Gc -40 to +55
- Ex tb IIIC T*°C Db -40 to +40
- Ex tb IIIC T*°C Db -40 to +55
- IECEx UL 14.0031X

ATEX/CE**

- EN 60079-0:2018; EN 60079-15:2010; EN 60079-31:2014; EN 60598-2-1:2008; EN 60929:1991 +A1:2001; EN 60079-18:2015/A1:2017
- ⓧ II 3 G Ex nA IIC T* Gc -40 to +40
- ⓧ II 3 G Ex nA IIC T* Gc -40 to +55
- ⓧ II 2 D Ex tb IIIC T*°C Db IP66 -40 to +40
- ⓧ II 2 D Ex tb IIIC T*°C Db IP66 -40 to +55
- DEMKO 14 ATEX 1324722X; DEMKO 14 ATEX 2274231X

*See temperature code table on the next page.

**IEC/ATEX certifications applicable for voltage ranges: 100-277VAC, 127-250 VDC.

Additional Champ VMVL design features:

- Installation flexibility - seven mounting module styles help ensure that the fixtures are installed in the correct location to properly light your facility
- Energy-efficient technology - up to 77% energy savings over HID fixtures
- Contains no mercury or other hazardous substances
- Shock and vibration-resistant solid-state luminaires have no filaments or glass components that could break - greatly reduces the risk of premature failure
- Dimmable driver, 0-10V
- Operating ambient: -40°C to 55°C
- Up to 60,000 hours lifetime at 55°C
- 5 year fixture warranty*

*Refer to [terms & conditions](#) on Eaton.com for Crouse-Hinds series solutions.

Standard materials:

- Lamp housing and adapter - die cast aluminum with Corro-free™ epoxy powder coat
- Lens - heat and impact-resistant glass in clear or diffused options; also available in clear polycarbonate
- Gaskets - silicone
- External hardware - stainless steel
- Factory-sealed, no external seals required

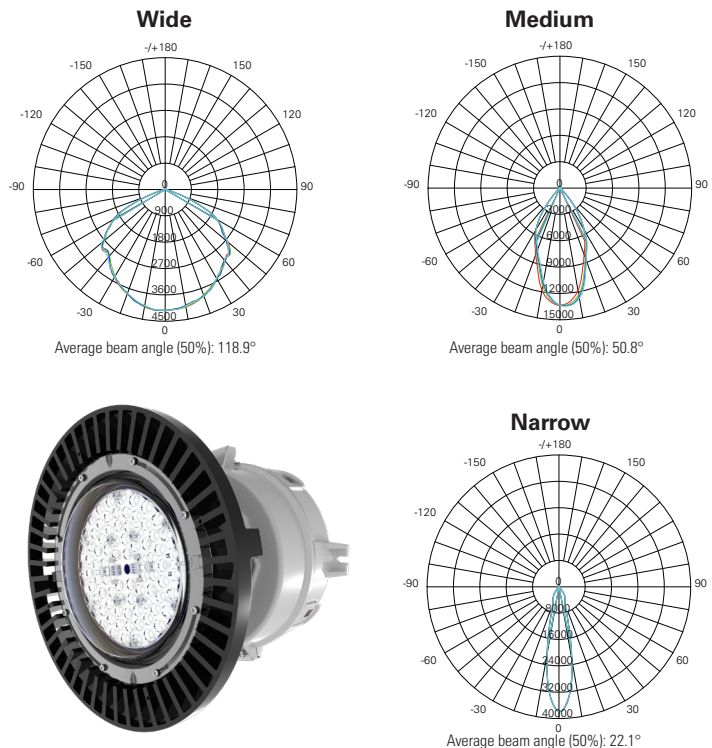


Shown with dust shedding cone pendant mount.

LED system:

- High intensity discrete power emitters
- Standard: cool white (5000K, 70 CRI); optional: warm white, (3000K, 80 CRI) or neutral white (4000K, 70 CRI)
- Custom Type V optics with wide, medium and narrow patterns

Polar curves – Type V beam patterns:



Photometrics:

For IES photometric files, please refer to the resource tab of the [VMVL LED product page](#) on Eaton.com



Electrical ratings:

Model	Weight lbs. (kg.)	Nominal lumens	Efficacy	Wattage	Voltage	Amps	Power factor	THD	Surge protection
VMVL-17-UNV1	22.30 (10.11)	17,800	132 lm/W	134.42	100-277 VAC, 50/60 Hz; 127-250 VDC	0.487-1.351 VAC 0.531-1.048 VDC	0.90	< 20%	6 kV
VMVL-21-UNV1	22.30 (10.11)	21,500	128 lm/W	168.23	100-277 VAC, 50/60 Hz; 127-250 VDC	0.600-1.687 VAC 0.567-1.309 VDC	0.90	< 20%	6 kV
VMVL-25-UNV1	22.30 (10.11)	25,171	122 lm/W	204.40	100-277 VAC, 50/60 Hz; 127-250 VDC	0.719-2.050 VAC 0.789-1.582 VDC	0.90	< 20%	6 kV
VMVL-17-UNV34	22.30 (10.11)	17,800	132 lm/W	133.40	347-480 VAC, 50/60 Hz	0.281-0.384 VAC	0.90	< 20%	6 kV
VMVL-21-UNV34	22.30 (10.11)	21,500	128 lm/W	165.64	347-480 VAC, 50/60 Hz	0.348-0.477 VAC	0.90	< 20%	6 kV
VMVL-25-UNV34	22.30 (10.11)	25,171	122 lm/W	199.43	347-480 VAC, 50/60 Hz	0.417-0.576 VAC	0.90	< 20%	6 kV

Temperature codes:

UNV1	VMVL-17, -21, -25		UNV34	VMVL-17, -21, -25	
Ambient temperature	40°C	55°C	Ambient temperature	40°C	55°C
Class I, Div. 2	T4A	T4A	Class I, Div. 2	T4A	T4A
Class II, Div. I	T5	T4A	Class II, Div. I	T5	T4A
Simultaneous rating Class I, Div. 2, Div. 1	T4A	T4A	Simultaneous rating Class I, Div. 2, Div. 1	T4A	T4A
Class I, Zone 2 AEx nA nR; Ex nA nR	T4	T4			
Class III, Div. 1 Class II, Div. 1, Groups E, F, G Zone 21, AEx tb IIIC	T72	T85			

More Champ solutions available

**Champ VMVL
LED low & mid bay**

**Safe. Reliable. Efficient.
3,000 to 13,000 lumens**

**Champ FMVA
LED floodlights**

**Safe. Reliable. Efficient.
3,000 to 50,000 lumens**

Ordering information

Part number example

VMVL-17-W-2A-R5M-G-UNV1-S831-M2

VMVL - 17 - W - 2A - R5M - G - UNV1 - - S831 - M2

Lamp/function

17	17,800 lumen LED
21	21,500 lumen LED
25	25,171 lumen LED

Color temperature

BLANK	Cool (5000K)
W	Warm (3000K)
N*	Neutral (4000K)

*Consult customer service for lead time information.

Beam pattern

BLANK	Wide
R5M	Medium
R5N	Narrow

Voltage (50/60 Hz)

UNV1	120-277 VAC; 108-250 VDC
UNV34	347-480 VAC

Additional options

S812*	Trunnion mount kit w/ pin
S831**	Safety cable
TB6	Six-pole terminal block

*Order with ceiling mount only.
**Not available for IEC.

Lens type

BLANK	Clear glass lens
S891*	Diffused glass lens
S896*	Teflon coated lens
S903	Polycarbonate lens

*Not available for IEC.

Guard

BLANK	No wire lens guard
G	Wire lens guard

Mounting style

BLANK	No mounting module	25A	25mm pendant	25C	25mm ceiling
J	1-1/2" stanchion, 25° angled	2B	3/4" cone pendant	2HA	3/4" flexible pendant
P	1-1/2" stanchion, straight	3B	1" cone pendant	2TW	3/4" wall
2A	3/4" pendant	2C	3/4" ceiling	3TW	1" wall
3A	1" pendant	3C	1" ceiling	20TW	20mm wall
20A	20mm pendant	20C	20mm ceiling	25TW	25mm wall

Accessories (ordered separately)

Mounting modules

Hub size	Stanchion - straight	Stanchion - angled	Pendant	Offset pendant	Wall	Ceiling	Cone pendant
3/4"	-	-	APM2	HPM2	TWM2	CM2	BPM2
1"	-	-	APM3	-	TWM3	CM3	BPM3
1-1/2"	PM5	JM5	-	-	-	-	-
20mm	-	-	APM20	-	-	-	-
25mm	-	-	APM25	-	TWM25	-	-

Mounting module	lbs.	kg.
Pendant	1.25	0.57
Cone pendant	4.00	1.81
Flexible pendant	1.50	0.68
Ceiling	2.75	1.25
Wall	4.50	2.04
Angled stanchion	3.50	1.59
Straight stanchion	4.50	2.04

Mounting adapters

CHMM1	Mounting adapter for Appleton MercMaster III mounts
CHMM2	Mounting adapter for Appleton MercMaster II mounts
CHMM3	Mounting adapter for Thomas & Betts HazLux mounts
CHMM4	Mounting adapter for GE H2 Filtr-Gard mounts

Mounting kits & hardware

VMVL S812 K1	Trunnion mount kit with pin*
VMVL S812 K1 DBR	PVC coated trunnion mount kit with pin*
VMVL S831 K1	Safety cable
VMVL S890 K1	Quick Clip

*Available with ceiling mounted modules only.

Photocells

D2S20	Photocell, 120V
D2S208 277	Photocell, 208-277V

Lens guard

P3002	Wire guard
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Replacement driver kits - UNV1 (Units made from February 2024 - Current)

VMVL-17L-UNV1-M2 DRIVER KIT	UNV1 replacement driver kit for VMVL-17 M2 fixtures
VMVL-21-UNV1-M2 DRIVER KIT	UNV1 replacement driver kit for VMVL-21 M2 fixtures
VMVL-25-UNV1-M2 DRIVER KIT	UNV1 replacement driver kit for VMVL-25 M2 fixtures

*Replacement UNV1 driver kits are sold as single units.

Replacement driver kits - UNV1 (Units made from September 2021 - January 2024)

VMVL-17L-UNV1-DRIVER-KIT	UNV1 replacement driver kit for VMVL-17 fixtures
VMVL-21-25L-UNV1-DRIVER-KIT	UNV1 replacement driver kit for VMVL-21, -25 fixtures

*Replacement UNV1 driver kits are sold as single units.

Replacement driver kits - UNV34 (Units made from February 2024 - Current)

VMVL-17L-UNV34-M2 DRIVER KIT	UNV34 replacement driver kit for VMVL-17 M2 fixtures
VMVL-21-UNV34-M2 DRIVER KIT	UNV34 replacement driver kit for VMVL-21 M2 fixtures
VMVL-25-UNV34-M2 DRIVER KIT	UNV34 replacement driver kit for VMVL-25 M2 fixtures

*Replacement UNV34 driver kits are sold as single units.

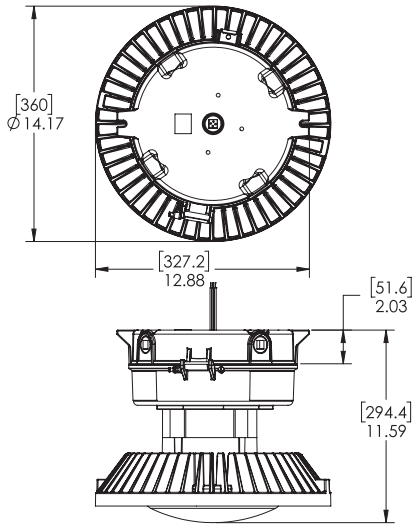
Replacement driver kits - UNV34 (Units made from September 2021 - January 2024)

VMVL-17L-25L-UNV34-DRIVER-KIT	UNV34 replacement driver kit for VMVL-17, -21, -25 fixtures
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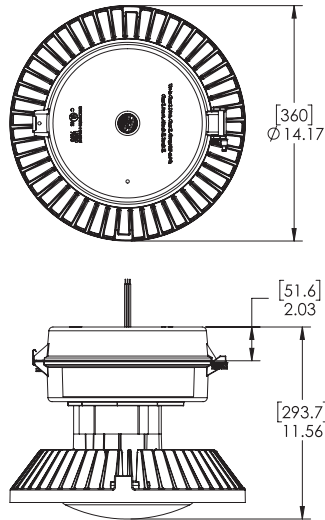
*Replacement UNV34 driver kits are sold as single units.

Dimensions

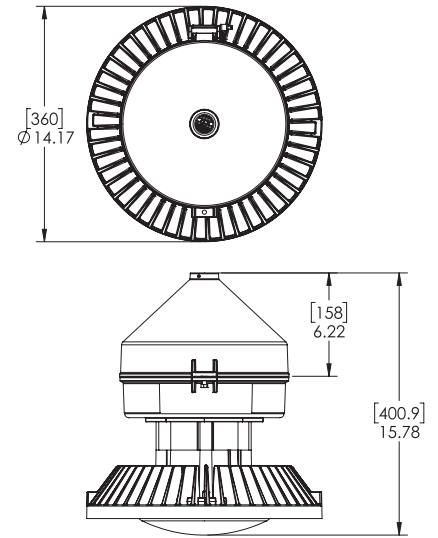
Ceiling



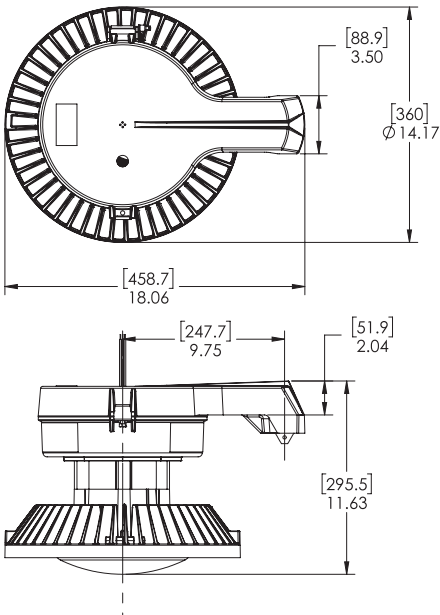
Pendant



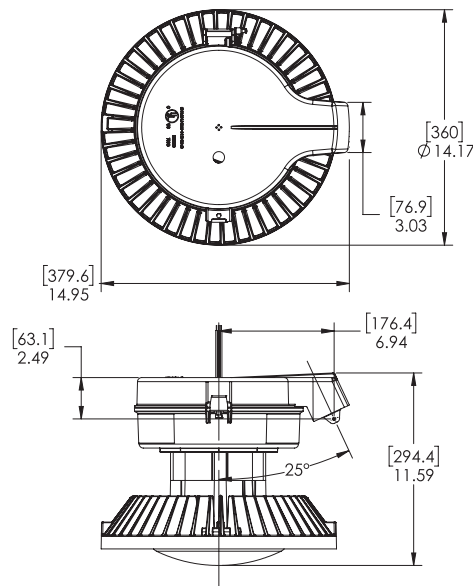
Cone pendant



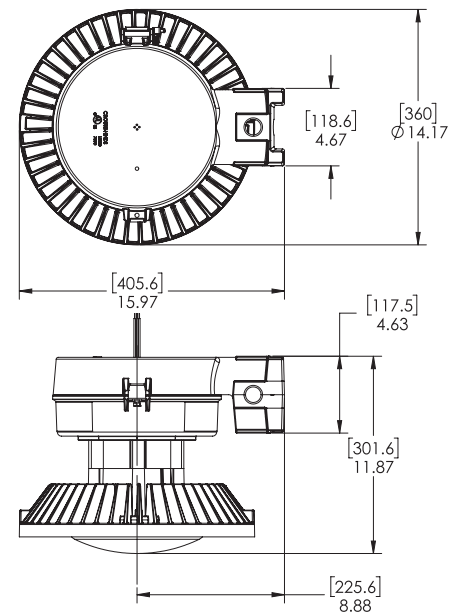
Stanchion - straight



Stanchion - 25° angled



Wall



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