Hazardous area LED lighting Champ[®] FMVA LED floodlights

EBA

Champ[®] FMVA High lumen LED floodlights

CROUSE-HINDS





Champ FMVA LED floodlights

Safe. Reliable. Efficient.

Featuring the industry's broadest range of LED luminaires for harsh, hazardous and industrial environments, Eaton's Crouse-Hinds can deliver a lighting solution that performs reliably in even the worst operating conditions. All the while reducing your energy, maintenance and manpower costs.

Why LED?

Energy efficiency

LED average energy consumption is significantly less than traditional fluorescent and HID fixtures

Start/restart time Instant illumination vs. 10 minute restrike time for HID

Light quality Higher color rendering compared to fluorescent and HID

Environmental benefits Mercury-free LED eliminates disposal costs and lowers

disposal costs and lowers energy consumption for a smaller carbon footprint Why Crouse-Hinds?

Industry-best reliability Built to withstand a wide array of applications

Thermal management Effective heat sinking ensures longer life

Quality of light Custom optics designed to maximize light distribution and intensity

Globally certified Designed to global specifications for IEC and NEC applications

Serviceable drivers Easy access to drivers for service or replacement

Design features



Smaller and lighter

- 25% smaller footprint than previous model
- · 20 lbs. less weight than previous model



Full frame yoke

 Designed to utilize the SFA6 slipfitter and SWB6 wall mount bracket, making it ideal for retrofit or new installation



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

High lumen output:

- Up to 120 lumens per watt
- Up to 78% energy savings over traditional HID fixtures (compared to 400W MH)

Multiple lens options:

- Tempered clear glass lens standard
- Diffused glass lens optional

FMVA40L & 50L

Rugged heat sink

- Heat sink designed to perform and provide maximum light levels in high ambient temperatures up to +55°C and as low as -40°C
- Thick walled castings make for a tough, rugged housing that keeps the internal driver and LED temperature down

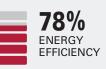




Why choose Champ FMVA floodlights?

Reliable floodlights. FMVA LED luminaires are engineered to deliver high lumen output and maintenance-free long life in the toughest conditions.

FMVA25L vs. 1000 watt HID



77% TOTAL COST OF OWNERSHIP



Assumptions: Calculations based on overall life of the LED system. Energy cost of \$.09 per kilowatt; 24 hour per day operation; labor rate of \$75 each for 2 workers; average time for fixture maintenance of 1 hour.

Features & specifications

39% lighter than the previous design with a small footprint

Champ FMVA high lumen LED floodlights are designed to provide full-spectrum, crisp, white light. Four versions of the FMVA are available, providing ideal solutions for a wide range of applications.

Model	Nominal lumens	Wattage*	Equivalent MH luminaire	Typical energy savings/lifetime
FMVA20L	20,500	175	600W-750W	Up to 78%
FMVA25L	25,500	216	750W-1000W	energy costs and 120,000
FMVA40L	40,500	340	- 1500W +	hours of
FMVA50L	50,500	411	- 10004 +	continuous operation!

*UNV1 at 120 VAC

Applications:

- Locations requiring continuous and consistent light levels in extreme ambient temperatures
- Areas requiring frequent on-and-off of lights
- Where extremely corrosive, wet, dusty, hot and/or cold conditions ٠ exist
- 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

Design features:

- Rugged design engineered to perform in ambient temperatures from -40°C to 55°C
- High efficiency engineered to deliver 117 lumens per watt
- Full frame yoke designed to utilize the SFA6 slipfitter and SWB6 wall mount bracket, making it ideal for retrofit or new installations
- Custom optics standard 7x6 pattern provides maximum light distribution
- 5 year fixture warranty‡

*SFA6 slipfitter and SWB6 wall mount bracket sold separately (20L/25L only). ‡Refer to page 2 of the authorized distributor price book for Crouse-Hinds standard Terms and Conditions.

Fixture life:

 Rated life of 60,000 hours at 55°C operating ambient and 24/7 continuous operation for 365 days

Standard materials:

- Lamp housing and adapter die cast aluminum with Corro-free™ epoxy powder coat
- Lens heat- and impact-resistant glass (standard)
- Gaskets silicone and neoprene
- External hardware stainless steel

Electrical ratings – NEC model:

	120-277 VAC a	at 50/60 Hz	347-480 VAC at 50/60 Hz
Model	Input power	Input amps	Input power Input amps
FMVA20L	160-158W	1.35-0.64A	163-162W 0.48-0.36A
FMVA25L	200-197W	1.67-0.75A	201-200W 0.59-0.44A
FMVA40L	330-323W	2.74-1.26A	326-322W 0.99-0.72A
FMVA50L	403-393W	3.37-1.50A	393-392W 1.15-0.86A

All models (UNV1 only)

Voltage range, VDC 127-300V at 50/60 Hz Power

>0.90

Min.

wire

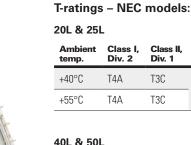
90°C

temp.

supply

All models

factor



40L & 50L	Min. supply		
Ambient temp.	Class I, Div. 2	Class II, Div. 1	wire temp.
+40°C	T4A	T4A	- 90°C
+55°C	T4A	T4A	90.0

Electrical ratings – IEC/ATEX model:

	120-277 VAC a	at 50/60 Hz	347-440 VAC	347-440 VAC at 50/60 Hz		
Model	Input power	Input amps	Input power	Input amps		
nFMVA20L	160-158W	1.35-0.64A	163-162W	0.48-0.36A		
nFMVA25L	200-197W	1.67-0.75A	201-200W	0.59-0.44A		
nFMVA40L	330-323W	2.74-1.26A	326-322W	0.99-0.72A		
nFMVA50L	403-393W	3.37-1.50A	393-392W	1.15-0.86A		

All models (UNV1 only) Voltage range, VDC

127-300V at 50/60 Hz

Power >0.90 factor



T-ratings – IEC/ATEX versio	n	:
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All models

20L & 25I	Min. supply		
Ambient temp.	IEC Zone 2	IEC Zone 22	wire temp.
+40°C	T4	T4	90°C
+55°C	T4	T4	90°C

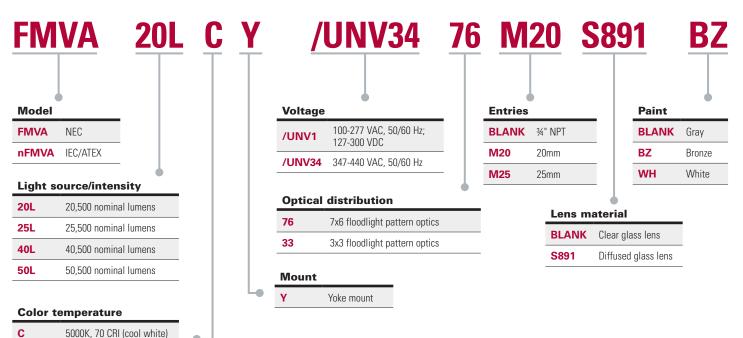
40L & 50L	Min. supply		
Ambient temp.	IEC Zone 2	IEC Zone 22	wire temp.
+40°C	T81°C	T81°C	90°C
+55°C	T94°C	T94°C	90.0

Ordering information

Part number example

FMVA20LCY/UNV34 76 M20 S891 BZ

Champ FMVA floodlight, 20,500 lumens, cool white, yoke mount, 347-440 VAC driver, M20 entry, diffused glass lens, bronze paint



Accessories (ordered separately)

3000K, 80 CRI (warm white)

BLHN2	Bull horn, 2 tenon, gray	BLHN3	Bull horn, 3 tenon, gray	DSV2	Bolt-on visor	SFA6*	Slipfitter
BLHN-BZ2	Bull horn, 2 tenon, bronze	BLHN-BZ3	Bull horn, 3 tenon, bronze	P62	Bolt-on wire guard	SWB6*	Slipfitter wall mount
BLHN-WH2	Bull horn, 2 tenon, white	BLHN-WH3	Bull horn, 3 tenon, white	SC831	Safety cable	*20L and 25	5L models only.

Certifications and compliances – NEC model:

NEC and CEC:

w

- Class I, Division 2, Groups A, B, C, D
- Class I, Zone 2
- Class II, Division 1, Groups E, F, G
- Type 4X, IP66

UL Standards:

• UL844; UL1598; UL1598A; UL1850

CSA Standard:

• CSA C22.2 No. 137

Qualifications and compliances:

 DesignLights Consortium[®] Qualified (pending)*



*Refer to www.designlights.org Qualified Products List under family models for full listing details. Not all models are approved for all application categories.

Certifications and compliances – IEC/ATEX model:

IEC:

• IEC 60079-0:2011+ Corr.1(2012-01) + Corr. 2 (2013-12) + I-SH 01 (2013-11) + I-SH 02 (2014-10) / EN 60079-0:2012 + A11:2013

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- IEC 60079-7:2017/ EN 60079-7:2015
- IEC 60079-31:2013/ EN 60079-31:2014
- IEC 60598-1:2008/EN60598-1:2008
- IEC 60598-2:2008/EN60598-2:2008
- IP66

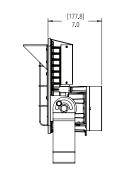
IECEx/ATEX:

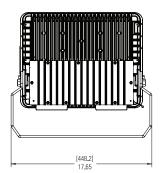
- IECEx UL 15.0029X
- DEMKO 15 ATEX 1377X
- DEMKO 15 ATEX1383
- Ex ec IIC T4 Gc Tamb -40°C to +40°C
- Ex ec IIC T4 Gc Tamb -40°C to +55°C
- Ex tb IIIC T81C Db Tamb -40°C to +40°C
- Ex tb IIIC T65°C Db Tamb -40°C to +40°C
- Ex tb IIIC T65°C Db Tamb -40°C to +55°C
- 🖾 II 3 G Ex ec IIC T4 Gc -40°C to +55°C

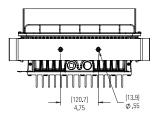
Weights and dimensions

FMVA20 & 25L

	Width	Width		nt	Dept	h	Weight	
	in.	mm.	in.	mm.	in.	mm.	lb.	kg.
FMVA20L & 25L	15.5	393.7	12.0	304.8	7.0	177.8	34.0	15.4

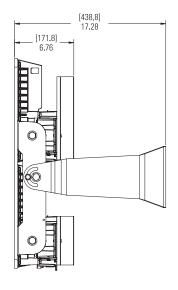






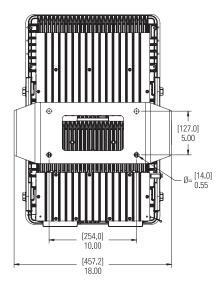
FVMA40L & 50L

	Width		Width Height Depth		Weight			
	In.	mm.	In.	mm.	in.	mm.	lb.	kg.
FIVIVA40L & 50L	18.0	457.2	24.0	609.6	17.28	438.8	77.0	34.9



Effective projected area 40L & 50L

Position (tilt)	ftsq.
at 0°	3.20
at 45° backwards	3.25
at 60° forward	3.62



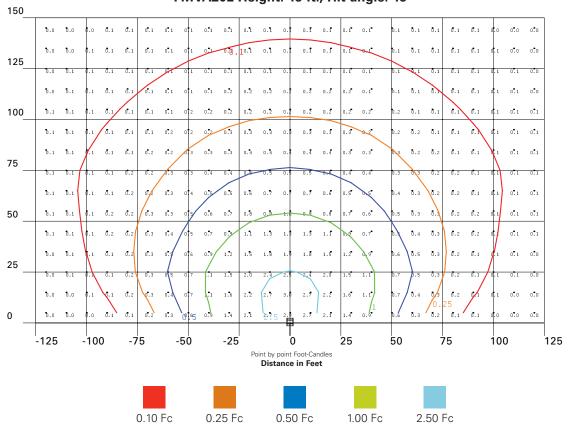
Position (tilt)

at 0°	1.5
at 45° backwards	1.1
at 60° forward	0.8

Effective projected area 20L & 25L

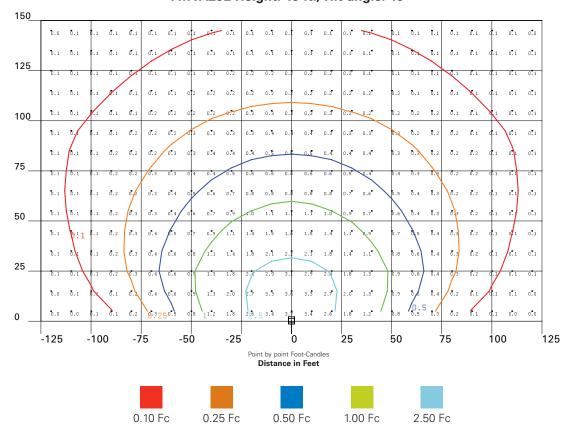
ft.-sq.

Photometric data



7x6 optics FMVA20L Height: 45 ft.; Tilt angle: 45°

7x6 optics FMVA25L Height: 45 ft.; Tilt angle: 45°



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