VML-X Series

for Harsh and Hazardous Environments

HUBBELL CANADA

KILLARK

OPTIC PATTERN ▶

Type I Optic Pattern	Type III Optic pattern	Type V Optic Pattern
5000K – Noon Day Sun Light	Green – for Migratory Birds	Amber – for Marine Life

◀ LED COLOR OPTIONS

INTRODUCTION

CERTILITE®

Class I, Div. 2, Groups A,B,C,D
Class I, Zone 2, Groups IIC, IIB, IIA
Class II, Div. 1 & 2, Groups E,F,G
Class III
Suitable for wet locations
Type 3, 4X
IP66
Marine Rated (US only)

IECEx Rated (Zone 2)
Ex ec IIC T4/T3 Gc
Ex tb IIIC T4/T3 Db

Ambient Suitability -40°C to 65°C (see tables). -20°C to 50°C for Emergency models

IECEx Certificate
QPS 15.0006

ATEX Certificate
QPS22ATEX7000

FEATURES-SPECIFICATIONS

Features

- Traditional Photometric Performance
- Refractor options for Type I, III, and V
- VML-X Housing can be retrofitted to existing VM splice boxes for easy installation
- Retro fit adapters for various manufacturers mounts
- LED Array Life – 100,000+ hours with 70% initial lumens
- Chromaticity outputs:
  - » 5000K 70CRI Cool CCT
  - » 3000K 95CRI Warm CCT
- Wildlife Friendly color options
  - » Amber – Helps protect marine wildlife
  - » PC Amber – Phosphate coated Amber
  - » Green – Helps protect migratory birds
- Surge Protection
- Globe and guard are supplied assembled to the tank
- Self-testing and Self-diagnostics on battery back up fixtures
- Terminal blocks fitted as standard
- Reduced Storage Footprint

Materials

- Housing, Splice box and Guards corrosion resistant copper-free aluminum alloy
- Baked Powder epoxy/polyester finish, electrostatically applied for complete, uniform corrosion protection
- All external hardware - stainless steel
- Reflectors – White Polycarbonate
- Standard Glass Globe
- Optional Clear or Diffuse Polycarbonate globe

Electrical Ratings

- 12-24VDC
- 110 thru 250 VDC
- 120 thru 277 VAC, 50/60Hz
- 347 thru 480 VAC, 50/60Hz
- Surge Protection: 6KV/6KA surge protection as standard.
- Optional supplementary 20KA/10KV (120-277 VAC), 10KA/10KV (347-480 VAC) Surge Protection
- Battery Duration: 90mins 10W, 180 mins 5W
- Terminal Size: 12AWG /4mm (Loop In-Loop Out)

CATALOG LOGIC

The complete luminaire catalog number is as follows:

VML 3 X 28 iE 30 A 2 5W G PC

Series Constant
VML

Tank Size
1 – Small (5000, 7000, 9000lm),
2 – Medium (12000, 15000, 18000lm)
3 – Large (23000, 28000lm)

Fixture Lumen Output in 1000s of Lumens
5 – 5000 lm
7 – 7000 lm
9 – 9000 lm
12 – 12000 lm
15 – 15000 lm
18 – 18000 lm
23 – 23000lm
28 – 28000 lm

Battery Backup (optional)
iE05 – 500 Lumen (180 Min)
iE1 – 1000 Lumen (90 Min)

Voltage – Input supply
30 – 120 thru 277 VAC, 50/60 Hz
33 – 347 thru 480 VAC, 50/60 Hz
34 – 105 thru 250 VDC

Mounting Splice Box
Blank – No splice box provided
A – Pendant (VMA2B, VMA3B)
B – Wall (VMB2B, VMB3B)
X – Ceiling (VMX2B, VMX3B, VMX6B, VMX7B, VMX8B, VMX9B)
C – Cone (VMC2B, VMC3B)
D – Stanchion 25° (VMD4B, VMD5B)
S – Stanchion 90° (Straight) (VMS4B, VMS5B)

Options
PC – Polycarbonate Lens Clear (Glass Globe standard) 18000lm
PD – Polycarbonate Lens Diffuse (Glass Globe Standard) 18000lm
YYZZ – White LED Chromaticity where YY= correlated color temperature (CCT) minimum 3000K; ZZ = Color Rendering Index (CRI) maximum 95 (No value=Standard 5000K CCT 70 CRI minimum)
AMBER – Amber colored LEDs primarily used to help protect marine wildlife
PCAMBER – Amber colored LEDs. Phosphate Coated Amber.
GREEN – Green colored LEDS. Primarily used to help protect migratory birds.
AR – Angled Reflector
DR – Dome Reflector
HA – High Ambient: bigger tank with lower wattage fixture for use in higher Ambient.
Px – Photocell factory installed
1 = 120VAC
2 = 208-277VAC
3 = 347VAC
SP – Add Supplemental Surge Protection
F – Single Fuse
FF – Double Fuse
CISPR – CE Marked driver
xH – Optional Paint (i.e. RH = Red Housing)

Guard
G – With Guard
N – No Guard

Optics
Blank – Type 5-No optics
5W – Type 5 wide (18,000lm)
T1 – Type 1 (9000lm)
T3 – Type III (9000lm)

Entry Size
Blank – no splice box
2 – ¾" NPT
3 – 1" NPT
4 – 1 ¼" NPT
5 – 1 ½" NPT
6 – ¾" NPT (5 hubs)
7 – 1" NPT (5 hubs)
8 – M20 (Metric- 4 hubs)
9 – M20 (Metric 5 hubs)

VML-X TEMPERATURES

CATALOG NUMBER	WEIGHT	WATTAGE	VOLTAGE	AMPS	CLASS I, DIV. 2 GROUPS A,B,C & D; (ZONE 2, GROUPS IIC, IIB, IIA)2			CLASS II, DIV. 1		
					40°C (75°C WIRE)	55°C (90°C WIRE)	65°C (90°C WIRE)	40°C (75°C WIRE)	55°C (90°C WIRE)	65°C (90°C WIRE)
VML1X530	10.8	40	120-277 VAC	0.33-0.14	T4A	T4A	—	EFG	EFG	—
VML1X533			347-480 VAC	0.12-0.08						
VML1X534			120-250 VDC	0.33-0.16						
VML1X730	10.8	55	120-277 VAC	0.46-0.20	T4A	T4A	—	EFG	EFG	—
VML1X733			347-480 VAC	0.16-0.11						
VML1X734			120-250 VDC	0.46-0.22						
VML1X930	10.8	75	120-277 VAC	0.63-0.27	T4A	T4A	—	EFG	EFG	—
VML1X933			347-480 VAC	0.22-0.16						
VML1X934			120-250 VDC	0.36-0.30						
VML2X1230	13.4	100	120-277 VAC	0.83-0.36	T4	T4	—	EFG	EFG	—
VML2X1233			347-480 VAC	0.29-0.21						
VML2X1234			120-250 VDC	0.83-0.40						
VML2X1530	13.4	120	120-277 VAC	1.00-0.43	T4	T4	—	EFG	EFG	—
VML2X1533			347-480 VAC	0.35-0.25						
VML2X1534			120-250 VDC	1.00-0.48						
VML2X1830	13.4	140	120-277 VAC	1.17-0.51	T4	T4	—	EFG	EFG	—
VML2X1833			347-480 VAC	0.40-0.29						
VML2X1834			120-250 VDC	1.17-0.56						
VML3X2330	25.3	200	120-277 VAC	1.67-0.72	T3C	T4A	—	EFG	EFG	—
VML3X2333			347-480 VAC	0.58-0.42						
VML3X2334			120-250 VDC	1.67-0.80						
VML3X2830	25.3	250	120-277 VAC	2.08-0.09	T3C	T4A	—	EFG	EFG	—
VML3X2833			347-480 VAC	0.72-0.52						
VML3X2834			120-250 VDC	2.08-1.00						
VML2X530 HA	13.4	40	120-277 VAC	0.33-0.14	T4A	T4A	T4A	EFG	EFG	EFG
VML2X533 HA			347-480 VAC	0.12-0.08						
VML2X534 HA			120-250 VDC	0.33-0.16						
VML2X730 HA	13.4	55	120-277 VAC	0.46-0.20	T4A	T4A	T4A	EFG	EFG	EFG
VML2X733 HA			347-480 VAC	0.16-0.11						
VML2X734 HA			120-250 VDC	0.46-0.22						
VML2X930 HA	13.4	75	120-277 VAC	0.63-0.27	T4A	T4A	T4A	EFG	EFG	EFG
VML2X933 HA			347-480 VAC	0.22-0.16						
VML2X934 HA			120-250 VDC	.063-0.30						
VML3X1230 HA	25.3	100	120-277 VAC	0.83-0.36	T4A	T4A	T4A	EFG	EFG	EFG
VML3X1233 HA			347-480 VAC	0.29-0.21						
VML3X1234 HA			120-250 VDC	0.83-0.40						
VML3X1530 HA	25.3	120	120-277 VAC	1.00-0.43	T4A	T4A	T4A	EFG	EFG	EFG
VML3X1533 HA			347-480 VAC	0.35-0.25						
VML3X1534 HA			120-250 VDC	1.00-0.48						
VML3X1830 HA	25.3	140	120-277 VAC	1.17-0.51	T4A	T4A	T4A	EFG	EFG	EFG
VML3X1833 HA			347-480 VAC	0.40-0.29						
VML3X1834 HA			120-250 VDC	1.17-0.56						

DELIVERED LUMENS

CATALOG NUMBER	GLASS GLOBE									POLYCARBONATE	
	5000K 70CRI LEDS	TYPE 5 WIDE OPTIC	TYPE 3 OPTIC	TYPE 1 OPTIC	ANGLED REFLECTOR	DOME REFLECTOR	GREEN LED	AMBER LED	3000K 80CRI LEDS	CLEAR GLOBE	DIFFUSE GLOBE
VML1X5(XX)(YY)	5295	5002	4803	4868	4560	4802	3694	1890	4871	5353	4394
VML1X7(XX)(YY)	7101	6708	6441	6528	6116	6440	4030	—	6532	7179	5893
VML1X9(XX)(YY)	9884	9338	8966	9087	8513	8964	4368	—	9093	9992	8203
VML2X12(XX)(YY)	14046	13305	—	—	12049	12645	7005	2859	12922	14200	11658
VML2X15(XX)(YY)	16359	15496	—	—	14033	14727	7642	—	15050	16538	13577
VML2X18(XX)(YY)	18733	17745	—	—	16070	16865	—	—	17234	18939	15548
VML3X23(XX)(YY)	23090	—	—	—	19807	20787	—	—	21242	—	—
VML3X28(XX)(YY)	28275	—	—	—	24424	25446	—	—	26013	—	—

ACCESSORIES

Pendant

Ceiling

Wall

25° Stanchion

Straight Stanchion

EZ Adapter* VMEZA

Cone Top

CERTILITE®V VM MOUNTING SPLICE BOXES								
HUB SIZE	CATALOG NUMBER							
	PENDANT	FLEXIBLE PENDANT	CEILING 4 HUB	CEILING 5 HUB	WALL	CONE TOP	25 DEGREE STANCHION	90 DEGREE STANCHION
3/4”	VMA2B	VMF2B	VMX2B	VMX6B	VMB2B	VMC2B	—	—
1”	VMA3B	VMF3B	VMX3B	VMX7B	VMB3B	VMC3B	—	—
1-1/4”	—	—	—	—	—	—	VMD4B	VMS4B
1-1/2”	—	—	—	—	—	—	VMD5B	VMS5B
M-20	—	—	VMX8B**	VMX9B	—	—	—	—

**VMEZA is used between a ballast tank and an EZ mount-ordered separately.*
***VMX8B furnished with 3 non-metallic Ex plugs.*

“EZ” Mount Adapter
For easy fixture relocation or to repair fixture on ‘bench top’.

VMEZA adapter is used between a driver tank and EZ mount ordered separately.

Competitive Adapters

Designed to ease upgrading of other manufacturer’s fixtures to KILLARK LEDs where removal of existing mounting screws and conduit would be difficult and time consuming.

Pendant

Ceiling

Wall Bracket

25° Stanchion

MOUNTING BOXES				
CATALOG NUMBER				HUB SIZE
PENDANT	CEILING	BRACKET	STANCHION	
EZA2	EZX2	EZB3	—	3/4”
EZA3	EZX3	EZB3	—	1”
—	—	—	EZD4A	1-1/4” / 1/2”*

**1-1/2” furnished with 1-1/2”-1-1/4” reducer and extension.*

ACCESSORIES	
CATALOG NUMBER	DESCRIPTION
VMLXGL	Globe (glass)
VMLXPC	Globe (polycarbonate Clear)
VMLXPD	Globe (polycarbonate Diffuse)
VMLXGRD	Guard
VMLXDR	Dome Reflector
VMLXAR	Angle Reflector
VMFSPC1	120VAC Photocell with FS Style Cover
VMFSPC2	208-277VAC Photocell with FS Style Cover
VMSC10	10ft Stainless Steel Safety Cable with loop grip
HUB2PC120	Field Installed 120VAC Photocell
HUB2PC227	Field Installed 208-277VAC Photocell
HUB2PC347	Field Installed 347VAC Photocell

VMLXGL

VMLXPC

VMLXPD

VMLXGRD

VMLXDR

VMLXAR

VMSC10

VMFSPC1

HIGH WATTAGE SELF-TESTING BATTERY BACKUP

Electronics Includes:

- Self-diagnostics monitors LED status, LED driver circuit, battery capacity and charger function and displays any fault detection by means of a flashing code
- Self-Test feature automatically runs a 1 minute test once a month and an alternating 30-60 minute test once every 6 months. LED indicator provides visible fault detection and charging status
- User initiated 1, or 90-minute system test feature
- 15 minute re-transfer delay
- Automatic unit transfer in brown-out conditions (below 80% of nominal AC input voltage)
- 90 or 180 minute run time options.

TEST SWITCH INDICATOR STATUS	
LED INDICATORS STATUS	**EM DRIVER STATUS/MODE**
Solid Green	System OK/AC OK (Self-diagnostic Enabled or Disabled).
Slow Flashing Red, 4s on/1s off	Battery not detected, check battery switch or connection.
Flashing Red, 1s on/1s off	Battery Failure, replace battery.
Flashing Green, 1s on/1s off	Self Diagnostic test underway.
Fast Flashing Red, 0.1s on/0.1s off	Abnormal driver performance, replace driver.
Very Slow Flashing Red, 4s on/4s off	Over temperature.
None. Both LEDs OFF	Normal working in EM mode.
Green/Red alternative flashing, 1s green/1s red	No load or output over voltage protection triggered.

LED Battery Backup Lighting Design

DIMENSIONS

Pendant Mount

Cone Mount

Stanchion(25°) Mount

Stanchion(0°) Mount

Size 1

Size 2

Size 3

Wall Bracket Mount

Ceiling Mount

FIXTURE ADAPTERS

CERTILITE V LED

VMCHVM-DEEP

VMCHVM

VMGEH2

Class I, Div. 2, Groups A, B, C, D
Class II, Div. 1, Groups E, F, G
Class III
Type 4X

FEATURES-SPECIFICATIONS

Applications

The Killark VM adapters are designed to ease upgrading of other manufacturer's fixtures to KILLARK LEDs where removal of existing mounting screws and conduit would be difficult and time consuming.

Adapters are used with the Killark VML-X fixture and the competitive splice box. The Killark fixtures, when used with the Killark adapters and appropriate competitive splice box, will maintain all hazardous and environmental ratings.

VM SERIES COMPETATIVE ADAPTERS

CATALOG NUMBER	DESCRIPTION	EXAMPLE OF MODEL UTILIZED OR REPLACED
VMCHVM	Tank adapter to Crouse-Hinds® VM Series mounts	VMV S2 C 050 R5
VMCHVM-DEEP	Tank adapter to CH (70's era wall mount with deep box)	VMV S2 TW 050 R5
VMM2LP	Tank adapter to Appleton® MERCMASTER II mounts	LPCL 50 75 J
VMM3KP	Tank adapter to Appleton® MERCMASTER III mounts	KPCL 50 75 J5 MT
VMHLDS	Tank adapter to Hazlux®3 mounts	DS015 H040-TGL-P2 E1 F
VMHPP2	Tank adapter mount to Holophane® Petrolux™	PETL 250HP 27 S25 CD
VMGEH2	Tank adapter H2 mount to GE® H2 Filtr-gard™	H2 4 05L 3C GG

Features

- Fixture and competitive mount are certified together
- Baked powder epoxy/polyester finish, electrostatically applied to match the Killark VM tank
- All external hardware – Stainless Steel

COMPLEMENTARY PRODUCTS

DETAILS			10 FOOT POLE		8 FOOT POLE	
PRODUCT NUMBER	FINISH	WEIGHT	PRODUCT NUMBER W/ POLES	WEIGHT	PRODUCT NUMBER W/ POLES	WEIGHT
SPARTAN HINGE						
H-AL	Aluminum	4lbs (2kg)	H-AL-10	14lbs (7kg)	H-AL-08	12lbs (6kg)
H-HG	Galvanized FE	9lbs (4.5kg)	H-HG-10	36lbs (16.5kg)	H-HG-08	30lbs (14kg)
H-SS	316 Stainless	9lbs (4.5kg)	H-SS-10	36lbs (16.5kg)	H-SS-08	30lbs (14kg)
PRODUCT NUMBER	FINISH	WEIGHT	PRODUCT NUMBER	WEIGHT	PRODUCT NUMBER	WEIGHT
SPARTAN HINGE JB						
HJB-AL	Aluminum	15lbs (7kg)	HJB-AL-10	14lbs (7kg)	HJB-AL-08	13lbs (7kg)
HJB-HG	Galvanized FE	39lbs (4.5kg)	HJB-HG-10	36lbs (17kg)	HJB-HG-08	33lbs (15kg)
HJB-SS	316 Stainless	39lbs (4.5kg)	HJB-SS-10	36lbs (17kg)	HJB-SS-08	33lbs (15kg)
SPARTAN COUPLER						
CJB-AL	Aluminum	2lbs (1kg)	CLB-AL-10	12lbs (6kg)	CJB-AL-08	10lbs (4.5kg)

Trade Size 1-1/2" Shed. 40 (40mm)

Poles are 4ft on bottom

The Spartan Hinge

designed to assist in lowering stanchion poles for retrofitting or servicing lighting fixtures or other pole mounted devices.

The Spartan Hinge JB

equipped with a combination of a device box opening and the Spartan hinge cam system for lowering a stanchion pole.

The Spartan Coupler

equipped with a device opening capable of mounting various operator and switch covers and aids in pulling and splicing wires.

The CGB series offers a REVOLUTIONARY, on the site removeable grommets covering a broader cable range with a single gland!

Choose the optimal seal according to the cable diameter which is going to be tightened.

Once the correct cable OD is determined, remove the appropriate sleeve grommet to create a larger diameter.

PART NUMBER	HUB SIZE	CABLE TYPE	DIMENSIONS			(D) CLAMPING RANGE Ø MIN-MAX	S1+S2+S3	S1+S2	S1
			(A) MAX.	(B) MIN.	ACROSS THE CORNERS				
CGB115	1/2”	Flexible & Tray	1.34” (34)	.63” (16)	.964” (24.5)	.157”-.472” (4-12)	.157”-.236” (4-6)	.236”-.354” (6-9)	.354”-.472” (9-12)
CGB139	1/2”	Flexible & Tray	1.67” (42.5)	.63” (16)	1.28” (32.6)	.394”- .630” (10-16)	.394”-.472” (10-12)	.472”-.571” (12-14,5)	.571”-.630” (14,5-16)
CGB215	3/4”	Flexible & Tray	1.34” (34)	.63” (16)	1.28” (32.6)	1.57”-.472” (4-12)	.157”-.236” (4-6)	.236”-.354” (6-9)	.354”-.472” (9-12)
CGB239	3/4”	Flexible & Tray	1.67” (42.5)	.63” (16)	1.28” (32.6)	.394”-.709” (10-18)	.394”-.472” (10-12)	.472”-.571” (12-14,5)	.571”-.709” (14,5-18)
CGB255	3/4”	Flexible & Tray	1.77” (45)	.79” (20)	1.57” (40)	.551”-.945” (14-20)	.551”-.669” (14-17)	.669”-.945” (17-20)	—
CGB339	1”	Flexible & Tray	1.69” (43)	.79” (20)	1.57” (40)	.394”-.709” (10-18)	.394”-.472” (10-12)	.472”-.571” (12-14,5)	.571”-.709” (14,5-18)
CGB355	1”	Flexible & Tray	1.77” (45)	.79” (20)	1.57” (40)	.551”-.945” (14-24)	.551”-.669” (14-17)	.669”-.945” (17-20)	.787”-.945” (20-24)
CGB386	1”	Flexible & Tray	1.97” (50)	.79” (20)	2” (51)	.866”-1.02” (22-26)	.866”-.945” (22-24)	.945”-1.02” (24-26)	—

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