



INTRODUCTION

FEATURES-SPECIFICATIONS

CERTILITE® V
The Logical Choice

KILLARK® CertiLite® V Series sets a new standard for industrial grade HID luminaires. Designed for installations where moisture, dirt, dust, corrosion and vibration may be present, these fixtures are suitable for NEMA 3 and 4X areas and where wind, water, snow or high ambients can be expected. They also can be used in locations made hazardous by the presence of flammable vapors and gases or combustible dusts, as defined by the NEC®. Typical applications include manufacturing sites, chemical and petrochemical processing facilities, sewage treatment plants, off-shore and dockside installations, garages and warehouses.

Standard Materials:

- Ballast tank and splice box – corrosion resistant copper-free aluminum alloy with baked powder epoxy/polyester finish, electrostatically applied for complete, uniform corrosion protection.
- All external hardware – 316 stainless steel.
- Guards – painted copper-free aluminum alloy or 316SS for 7-3/4" glass optics and Enclosed Reflectors.
- Spin-top Refractor Guards are Plated Steel.
- Reflectors – lightweight, corrosion resistant fiberglass reinforced polyester, or copper-free aluminum.

Additional Features:

- Seven mounting splice box types; Pendant, Flex Pendant, Ceiling, Wall bracket, Cone Top, 25° Angle Stanchion, Straight Stanchion – in a variety of entry sizes, including M20 for the VMX ceiling style.
- Quartz auxiliary, HPS instant restart, Ballast Protectors
- Minimum starting temperature: HPS – 40°C; MV, MH & MHP – 30°C
- Normally shipped as components for fast delivery, or may be ordered factory assembled with or without lamps.
- Options for fuses and quick disconnect



Compliances

- UL1598 Standard for luminaires
- UL1598A Marine type luminaire
- UL-844 Standard for lighting fixtures for hazardous locations
- CSA C22.2 no. 137-M1981 electric luminaires for use in hazardous locations

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
NEMA 3, 4, 4X
IP66

US LISTED - File E10514 (Hazardous & Marine)

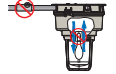
Certified - File LR11713

NR Restricted Breathing Option

Class I, Zone 2 AEx nAnR

Class I, Zone 2 Ex nR

- Enclosed and gasketed
- NEMA 3, 4X IP66
- UL 60079-15 - Electrical apparatus for Explosive Gas Atmospheres with Type of Protection "n" (Restricted Breathing and non-sparking).

FEATURES	BENEFITS
 Swing-Barrel Nut Patented Tank Mounting System	• Stainless-to-Stainless securement • Takes load off during installation • Uses ordinary tools • Saves time and labor
 Range of ballast tanks	Cover a wider range of wattage sizes and socket types (will include five total) for maximum user selection flexibility
 Sealed Optic Zone 2 AEx nAR Restricted Breathing (suffix NR)	NO External Seals. Lower T-codes, Suitable for Class I Div. 2 Classified areas per the NEC®
 All glass refractors	Compact (5-1/2" thread size, types I & V) Standard (7-3/4", thread size, types I, III, V) Enhances user selection flexibility
 "EZ" mount adapter	Easier Maintenance, saves labor, move fixture from the ladder to the workbench
 Photo controls- Class I Div. 2 / N4X areas	Available as Field or Factory Installed to save energy when light not required
 Earthquake Tab -Built-in attachment point for safety cables	Safety: Secures fixture to structure in case of conduit failure. "3rd hand" accessories for lamp change out. See L53 for more info.
 "FULL CUTOFF" & CUTOFF Optics	For "Dark Sky" Requirements. Helps to minimize offending light pollution.
 VMEP40 "Food Optic"	Expanded Offering for Food or Grain Handling Applications to minimize contamination
 NEMA Decals 15 17 17P	Easier Maintenance, Saves labor "Have the right lamp in hand before going up the ladder".
 Expanded lamp types and wattages	Philips® QL Induction type and 600Watt HPS available for long life or high lumen requirements
 CertiLite Software	Used to determine number of fixtures required and their proper layout for various tasks and applications.

Philips® is a registered trademark of Koninklijke Philips Electronics N.V.



VM3/VM4 CATALOG ORDERING LOGIC

CertiLite® Catalog Number Logic; 50-250 Low Wattage (Mogul Base) HID Fixtures

Series Constant — VM Optic Thread Size — 0 0 00 0 0 0 00 3 – 5 1/2" 4 – 7 3/4" Lamp Type — 0 0 (NR) 00 S – HPS (50, 70, 100, 150) H – MH (70, 100, 175, 250) P – MHP (125, 150, 175, 200) Lamp Wattage — 05 – 50W, (HPS) 07 – 70W, (HPS, MH) 10 – 100W, (HPS, MH) 12 – 125W, (MHP) 15 – 150W, (HPS, MHP) 17 – 175W, (MH, MHP) 20 – 200W, (MHP) 25 – 250W, (MH) Voltage @ 60 Hertz — 0 – Quadri-Volt (120, 208, 240, 277) 5 – 480V 6 – Tri - 120, 277, 347 (Canada) 7 – 220V 8 – 220/240 50 Hz 35 – 230V (HPS) Mounting Type — A – Pendant F – Flexible Pendant X – Ceiling B – Wall Bracket C – Cone Top E – EZ Mount Adapter D – Stanchion 25° S – Stanchion Straight 90° N – None (mount ordered separately)	175-250W Old Style MH are Export only EISA LAW Optic GL – Globe (VM3, VM4) R1 – Type I Glass Refractor (VM3, VM4) R3 – Type III Glass Refractor (VM4) R5 – Type V Glass Refractor (VM3, VM4) ER – Enclosed Reflector (VM4) EP – Polycarbonate Shielded Enclosed Reflector (VM4) S2 – Type II 12" Spin-Top Refractor (VM3, VM4) S8 – Type V 8" Spin-Top Refractor (VM3) S5 – Type V 12" Spin-Top Refractor (VM3, VM4) P5 – Type V 12" Plastic Spin-Top Refractor (VM3-175W Max.) FG – Siliconem Coated Globe (VM3, VM4) TG – Teflon® Coated Globe (VM3, VM4) T1 – Teflon® Coated Globe Type I Glass Refractor (VM3, VM4) T3 – Teflon® Coated Globe Type III Glass Refractor (VM4) T5 – Teflon® Coated Globe Type V Glass Refractor (VM3, VM4) T2 – Teflon® Coated Type II 12" Spin-Top Refractor (VM3, VM4) T8 – Teflon® Coated Type V 8" Spin-Top Refractor (VM3) TV – Teflon® Coated Type V 12" Spin-Top Refractor (VM3, VM4) Guard — G – Guard (Globes & Glass refractors) N – No Guard	Options IR – Instant Restrike - 50-150 HPS QA – Quartz Auxiliary BP – Ballast Protector - 70-150 HPS F1 – Fusing 120V F2 – Fusing 208V F3 – Fusing 240V F4 – Fusing 277V F5 – Fusing 480V F6 – Fusing 347V F7 – Fusing 220V F8 – Fusing 240V 50 Hz P1 – Photocell 120V P2 – Photocell 208-277V P3 – Photocell 347V Q1 – QD Wired to 120V Q2 – QD Wired to 208V Q3 – QD Wired to 240V Q4 – QD Wired to 277V Q5 – QD Wired to 480V Q6 – QD Wired to 347V Q7 – QD 220V Q8 – QD 240V (50Hz) TBx – Terminal Blocks x = Voltage Code AS – Assembled Fixture with Standard Lamp AD – Assembled Fixture with Dual Arc Tube Lamp 70, 100, 150 HPS only AN – Assembled, no lamp CP – Component Pack-No Lamp CS – Component Pack with Standard Lamp LS – Standard Lamp Supplied LD – Dual Arc Tube Lamp Supplied for 70, 100, 150 HPS only Reflector S – VM Fiberglass Dome Reflector A – VM Fiberglass Angle Reflector D – Deep White Reflector Z – Deep Alzak Reflector
---	--	---

① Special order lamp type/wattage not shown in grids, minimums apply.

② Completes as "EZ", conduit mounting boxes ordered separately.

④ Silicone coated globe for additional impact protection.

⑤ Teflon® is a registered trademark of DuPont, Inc. Consult factory for available lamp and voltage combinations.

⑥ Restricted Breathing - See L84 for more information.

⑦ Order Guards for Spin-Tops & VMER40 separately.

⑧ QA not suitable for Class I, Div. 2/Zone 2 applications; consult factory for other hazardous applications.

⑨ Fusing not for Marine or Canadian installations.

⑩ Photo cells for Class I, Div. 2 only, or C1Z2 nR not Class II.

⑪ Field connection to proper tap in case of Multitap Ballasts.

⑫ Not for use with wall or straight (90°) Stanchion.

⑬ QD = Quick Disconnect. Allows easy tank removal for maintenance.

⑭ Electrician simply unplugs de-energized ballast from supply circuit. 220V 60Hz or 230V 50Hz used with QA-requires VM5 tank.

⑮ IR and BP cannot be ordered together.

⑯ Not available with IR or QA.



METAL HALIDE, 70-250W MOGUL BASE HID



Ceiling
w/ 5-1/2"
Globe & Guard



Wall
w/ 5-1/2"
Refractor & Guard



Ceiling
w/ 7-3/4"
Globe & Guard



Wall
w/ 7-3/4"
Refractor & Guard



Ceiling
w/ Enclosed Reflector

VM 70 - 250 WATT METAL HALIDE CEILING

DESCRIPTION				5-1/2 OPTIC THREAD SIZE ②			7-3/4 OPTIC THREAD SIZE ②			
WATTS	ANSI	HUB SIZE ③	VOLTAGE ④	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	ENCLOSED REFLECTOR
70	M98	3/4"	Quad Tri 480	VM3H070X2GLG	VM3H070X2R1G	VM3H070X2R5G	VM4H070X2GLG	VM4H070X2R1G	VM4H070X2R5G	VM4H070X2ERN
	VM3H076X2GLG			VM3H076X2R1G	VM3H076X2R5G	VM4H076X2GLG	VM4H076X2R1G	VM4H076X2R5G	VM4H076X2ERN	
	VM3H075X2GLG			VM3H075X2R1G	VM3H075X2R5G	VM4H075X2GLG	VM4H075X2R1G	VM4H075X2R5G	VM4H075X2ERN	
100	M90	3/4"	Quad Tri 480	VM3H100X2GLG	VM3H100X2R1G	VM3H100X2R5G	VM4H100X2GLG	VM4H100X2R1G	VM4H100X2R5G	VM4H100X2ERN
	VM3H106X2GLG			VM3H106X2R1G	VM3H106X2R5G	VM4H106X2GLG	VM4H106X2R1G	VM4H106X2R5G	VM4H106X2ERN	
	VM3H105X2GLG			VM3H105X2R1G	VM3H105X2R5G	VM4H105X2GLG	VM4H105X2R1G	VM4H105X2R5G	VM4H105X2ERN	
175 ⑥	M57	3/4"	Quad Tri 480	VM3H170X2GLG	VM3H170X2R1G	VM3H170X2R5G	VM4H170X2GLG	VM4H170X2R1G	VM4H170X2R5G	VM4H170X2ERN
				VM3H176X2GLG	VM3H176X2R1G	VM3H176X2R5G	VM4H176X2GLG	VM4H176X2R1G	VM4H176X2R5G	VM4H176X2ERN
				VM3H175X2GLG	VM3H175X2R1G	VM3H175X2R5G	VM4H175X2GLG	VM4H175X2R1G	VM4H175X2R5G	VM4H175X2ERN
250 ⑥	M58	3/4"	Quad Tri 480	VM3H250X2GLG	VM3H250X2R1G	VM3H250X2R5G	VM4H250X2GLG	VM4H250X2R1G	VM4H250X2R5G	VM4H250X2ERN
				VM3H256X2GLG	VM3H256X2R1G	VM3H256X2R5G	VM4H256X2GLG	VM4H256X2R1G	VM4H256X2R5G	VM4H256X2ERN
				VM3H255X2GLG	VM3H255X2R1G	VM3H255X2R5G	VM4H255X2GLG	VM4H255X2R1G	VM4H255X2R5G	VM4H255X2ERN

VM 70 - 250 WATT METAL HALIDE WALL

DESCRIPTION				5-1/2 OPTIC THREAD SIZE ②			7-3/4 OPTIC THREAD SIZE ②				
WATTS	ANSI	HUB SIZE ③	VOLTAGE ④	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	GLOBE & GUARD	TYPE I GLASS REFRACTOR & GUARD	TYPE V GLASS REFRACTOR & GUARD	ENCLOSED REFLECTOR	
70	M98	3/4"	Quad Tri 480	VM3H070B2GLG	VM3H070B2R1G	VM3H070B2R5G	VM4H070B2GLG	VM4H070B2R1G	VM4H070B2R5G	VM4H070B2ERN	
	M143			VM3H076B2GLG	VM3H076B2R1G	VM3H076B2R5G	VM4H076B2GLG	VM4H076B2R1G	VM4H076B2R5G	VM4H076B2ERN	
				VM3H075B2GLG	VM3H075B2R1G	VM3H075B2R5G	VM4H075B2GLG	VM4H075B2R1G	VM4H075B2R5G	VM4H075B2ERN	
100	M90	3/4"	Quad Tri 480	VM3H100B2GLG	VM3H100B2R1G	VM3H100B2R5G	VM4H100B2GLG	VM4H100B2R1G	VM4H100B2R5G	VM4H100B2ERN	
	M140			VM3H106B2GLG	VM3H106B2R1G	VM3H106B2R5G	VM4H106B2GLG	VM4H106B2R1G	VM4H106B2R5G	VM4H106B2ERN	
				VM3H105B2GLG	VM3H105B2R1G	VM3H105B2R5G	VM4H105B2GLG	VM4H105B2R1G	VM4H105B2R5G	VM4H105B2ERN	
175 ⑥	M57	3/4"	Quad Tri 480	VM3H170B2GLG	VM3H170B2R1G	VM3H170B2R5G	VM4H170B2GLG	VM4H170B2R1G	VM4H170B2R5G	VM4H170B2ERN	
					VM3H176B2GLG	VM3H176B2R1G	VM3H176B2R5G	VM4H176B2GLG	VM4H176B2R1G	VM4H176B2R5G	VM4H176B2ERN
					VM3H175B2GLG	VM3H175B2R1G	VM3H175B2R5G	VM4H175B2GLG	VM4H175B2R1G	VM4H175B2R5G	VM4H175B2ERN
250 ⑥	M58	3/4"	Quad Tri 480	VM3H250B2GLG	VM3H250B2R1G	VM3H250B2R5G	VM4H250B2GLG	VM4H250B2R1G	VM4H250B2R5G	VM4H250B2ERN	
					VM3H256B2GLG	VM3H256B2R1G	VM3H256B2R5G	VM4H256B2GLG	VM4H256B2R1G	VM4H256B2R5G	VM4H256B2ERN
					VM3H255B2GLG	VM3H255B2R1G	VM3H255B2R5G	VM4H255B2GLG	VM4H255B2R1G	VM4H255B2R5G	VM4H255B2ERN

① See hazardous application data on pages L131 - L140 for limitations.

② Catalog numbers shown are with guard (except enclosed reflector); to omit guard change ending G to N; e.g. VM3H070X2GLN

③ Catalog numbers shown are with 3/4" conduit openings, change 2 to 3 for 1"; e.g. VM3H070X3GLG.

④ Consult catalog logic for other available voltages.

⑤ Add suffix NR for restricted breathing; see page L84 for more information.

⑥ 175W M57 & 250W M58 Fixtures are EXPORT ONLY (EISA LAW).