



## 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)

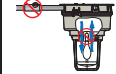
**Certified** - File LR11713

**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                 | <ul style="list-style-type: none"> <li>• Stainless-to-Stainless securement</li> <li>• Takes load off during installation</li> <li>• Uses ordinary tools</li> <li>• Saves time and labor</li> </ul> |
|  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<br>15 17 17P                                     | Easier Maintenance, Saves labor<br>"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

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
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| <p><b>Series Constant</b> — VM</p> <p>Optic Thread Size — 0 0 00 0 0 0 00</p> <p>3 – 5 1/2"</p> <p>4 – 7 3/4"</p> <p>Lamp Type —</p> <p>S – HPS (50, 70, 100, 150)</p> <p>H – MH (70, 100, 175, 250)</p> <p>P – MHP (125Ⓢ, 150, 175, 200)</p> <p>Lamp Wattage —</p> <p>05 – 50W, (HPS)</p> <p>07 – 70W, (HPS, MH)</p> <p>10 – 100W, (HPS, MH)</p> <p>12 – 125W, (MHPⓈ)</p> <p>15 – 150W, (HPS, MHP)</p> <p>17 – 175W, (MH, MHP)</p> <p>20 – 200W, (MHP)</p> <p>25 – 250W, (MH)Ⓢ</p> <p>Voltage @ 60 Hertz Ⓢ —</p> <p>0 – Quadri-Volt (120, 208, 240, 277)</p> <p>5 – 480V</p> <p>6 – Tri - 120, 277, 347 (Canada)</p> <p>7 – 220V</p> <p>8 – 220/240 50 Hz</p> <p>35 – 230V (HPS)</p> <p>Mounting Type —</p> <p>A – Pendant</p> <p>F – Flexible Pendant</p> <p>X – Ceiling</p> <p>B – Wall Bracket</p> <p>C – Cone Top</p> <p>E – EZ Mount Adapterk</p> <p>D – Stanchion 25°</p> <p>S – Stanchion Straight 90°</p> <p>N – None (mount ordered separately)Ⓢ</p> | <p>175-250W<br/>Old Style<br/>MH are<br/>Export only<br/>EISA LAW</p> <p>Entry (Mounts available)</p> <p>2 – 3/4" NPT (A,B,C,X)</p> <p>3 – 1" NPT (A,B,C,X)</p> <p>4 – 1 1/4" NPT (D,S)</p> <p>5 – 1 1/2" NPT (D,S)</p> <p>6 – 3/4" NPT 5-Hub (X)</p> <p>7 – 1" NPT 5-Hub (X)</p> <p>8 – M20 4-Hub (X)</p> <p>9 – M20 5-Hub (X)</p> <p>Z – EZ Mount Adapterk</p> <p>N – None (mount ordered separately)Ⓢ</p> | <p>Optic</p> <p>GL – Globe (VM3, VM4)</p> <p>R1 – Type I Glass Refractor (VM3, VM4)</p> <p>R3 – Type III Glass Refractor (VM4)</p> <p>R5 – Type V Glass Refractor (VM3, VM4)</p> <p>ER – Enclosed Reflector (VM4)</p> <p>EP – Polycarbonate Shielded Enclosed Reflector (VM4)</p> <p>S2 – Type II 12" Spin-Top Refractor (VM3, VM4)Ⓢ</p> <p>S8 – Type V 8" Spin-Top Refractor (VM3)</p> <p>S5 – Type V 12" Spin-Top Refractor (VM3, VM4)</p> <p>P5 – Type V 12" Plastic Spin-Top Refractor (VM3-175W Max.)</p> <p>FG – SiliconemCoated Globe (VM3, VM4)</p> <p>TG – Teflon®ⓈCoated Globe (VM3, VM4)</p> <p>T1 – Teflon®ⓈCoated Globe Type I Glass Refractor (VM3, VM4)</p> <p>T3 – Teflon®ⓈCoated Globe Type III Glass Refractor (VM4)</p> <p>T5 – Teflon®ⓈCoated Globe Type V Glass Refractor (VM3, VM4)</p> <p>T2 – Teflon®ⓈCoated Type II 12" Spin-Top Refractor (VM3, VM4)</p> <p>T8 – Teflon®ⓈCoated Type V 8" Spin-Top Refractor (VM3)</p> <p>TV – Teflon®ⓈCoated Type V 12" Spin-Top Refractor (VM3, VM4)</p> <p>Guard —</p> <p>G – Guard (Globes &amp; Glass refractors)</p> <p>N – No GuardⓈ</p> | <p>Options</p> <p>IR – Instant Restrike - 50-150 HPSⓈ</p> <p>QA – Quartz AuxiliaryⓈ</p> <p>BP – Ballast Protector - 70-150 HPSⓈ</p> <p>F1 – Fusing 120VⓈ</p> <p>F2 – Fusing 208VⓈ</p> <p>F3 – Fusing 240VⓈ</p> <p>F4 – Fusing 277VⓈ</p> <p>F5 – Fusing 480VⓈ</p> <p>F6 – Fusing 347VⓈ</p> <p>F7 – Fusing 220VⓈ</p> <p>F8 – Fusing 240V 50 HzⓈ</p> <p>P1 – Photocell 120VⓈⓈ</p> <p>P2 – Photocell 208-277VⓈⓈ</p> <p>P3 – Photocell 347VⓈⓈ</p> <p>Q1 – QD Wired to 120VⓈ</p> <p>Q2 – QD Wired to 208VⓈ</p> <p>Q3 – QD Wired to 240VⓈ</p> <p>Q4 – QD Wired to 277VⓈ</p> <p>Q5 – QD Wired to 480VⓈ</p> <p>Q6 – QD Wired to 347VⓈ</p> <p>Q7 – QD 220VⓈ</p> <p>Q8 – QD 240V (50Hz)Ⓢ</p> <p>TBx – Terminal Blocks</p> <p>x= Voltage Code</p> <p>AS – Assembled Fixture with Standard Lamp</p> <p>AD – Assembled Fixture with Dual Arc Tube Lamp 70, 100, 150 HPS onlyⓈ</p> <p>AN – Assembled, no lamp</p> <p>CP – Component Pack-No Lamp</p> <p>CS – Component Pack with Standard Lamp</p> <p>LS – Standard Lamp Supplied</p> <p>LD – Dual Arc Tube Lamp Supplied for 70, 100, 150 HPS only</p> <p>Reflector</p> <p>S – VM Fiberglass Dome Reflector</p> <p>A – VM Fiberglass Angle Reflector</p> <p>D – Deep White Reflector</p> <p>Z – Deep Alzak Reflector</p> |
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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. Ⓢ



## CERTILITE® V SERIES

## HIGH PRESSURE SODIUM, 50-150W MOGUL BASE HID



Stanchion 25°  
w/ 5-1/2"  
Globe & Guard



Stanchion Straight  
w/ 5-1/2"  
Refractor & Guard



Stanchion 25°  
w/ 7-3/4"  
Globe & Guard



Stanchion Straight  
w/ 7-3/4"  
Refractor & Guard



Stanchion 25°  
w/ Enclosed Reflector

| VM 50 - 150 WATT HIGH PRESSURE SODIUM STANCHION 25° ANGLE |      |           |              |                            |                                |                                |                            |                                |                                |                    |
|-----------------------------------------------------------|------|-----------|--------------|----------------------------|--------------------------------|--------------------------------|----------------------------|--------------------------------|--------------------------------|--------------------|
| DESCRIPTION                                               |      |           |              | 5-1/2" OPTIC THREAD SIZE ② |                                |                                | 7-3/4" OPTIC THREAD SIZE ② |                                |                                |                    |
| WATTS                                                     | ANSI | HUB SIZE③ | VOLTAGE④     | 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 |
| 50                                                        | S68  | 1-1/2"    | Quad         | VM3S050D5GLG               | VM3S050D5R1G                   | VM3S050D5R5G                   | VM4S050D5GLG               | VM4S050D5R1G                   | VM4S050D5R5G                   | VM4S050D5ERN       |
| 70                                                        | S62  | 1-1/2"    | Quad Tri 480 | VM3S070D5GLG               | VM3S070D5R1G                   | VM3S070D5R5G                   | VM4S070D5GLG               | VM4S070D5R1G                   | VM4S070D5R5G                   | VM4S070D5ERN       |
|                                                           |      |           |              | VM3S076D5GLG               | VM3S076D5R1G                   | VM3S076D5R5G                   | VM4S076D5GLG               | VM4S076D5R1G                   | VM4S076D5R5G                   | VM4S076D5ERN       |
|                                                           |      |           |              | VM3S075D5GLG               | VM3S075D5R1G                   | VM3S075D5R5G                   | VM4S075D5GLG               | VM4S075D5R1G                   | VM4S075D5R5G                   | VM4S075D5ERN       |
| 100                                                       | S54  | 1-1/2"    | Quad Tri 480 | VM3S100D5GLG               | VM3S100D5R1G                   | VM3S100D5R5G                   | VM4S100D5GLG               | VM4S100D5R1G                   | VM4S100D5R5G                   | VM4S100D5ERN       |
|                                                           |      |           |              | VM3S106D5GLG               | VM3S106D5R1G                   | VM3S106D5R5G                   | VM4S106D5GLG               | VM4S106D5R1G                   | VM4S106D5R5G                   | VM4S106D5ERN       |
|                                                           |      |           |              | VM3S105D5GLG               | VM3S105D5R1G                   | VM3S105D5R5G                   | VM4S105D5GLG               | VM4S105D5R1G                   | VM4S105D5R5G                   | VM4S105D5ERN       |
| 150                                                       | S55  | 1-1/2"    | Quad Tri 480 | VM3S150D5GLG               | VM3S150D5R1G                   | VM3S150D5R5G                   | VM4S150D5GLG               | VM4S150D5R1G                   | VM4S150D5R5G                   | VM4S150D5ERN       |
|                                                           |      |           |              | VM3S156D5GLG               | VM3S156D5R1G                   | VM3S156D5R5G                   | VM4S156D5GLG               | VM4S156D5R1G                   | VM4S156D5R5G                   | VM4S156D5ERN       |
|                                                           |      |           |              | VM3S155D5GLG               | VM3S155D5R1G                   | VM3S155D5R5G                   | VM4S155D5GLG               | VM4S155D5R1G                   | VM4S155D5R5G                   | VM4S155D5ERN       |

| VM 50 - 150 WATT HIGH PRESSURE SODIUM STANCHION STRAIGHT |      |           |              |                            |                                |                                |                            |                                |                                |                    |
|----------------------------------------------------------|------|-----------|--------------|----------------------------|--------------------------------|--------------------------------|----------------------------|--------------------------------|--------------------------------|--------------------|
| DESCRIPTION                                              |      |           |              | 5-1/2" OPTIC THREAD SIZE ② |                                |                                | 7-3/4" OPTIC THREAD SIZE ② |                                |                                |                    |
| WATTS                                                    | ANSI | HUB SIZE③ | VOLTAGE④     | 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 |
| 50                                                       | S68  | 1-1/2"    | Quad         | VM3S050S5GLG               | VM3S050S5R1G                   | VM3S050S5R5G                   | VM4S050S5GLG               | VM4S050S5R1G                   | VM4S050S5R5G                   | VM4S050S5ERN       |
| 70                                                       | S62  | 1-1/2"    | Quad Tri 480 | VM3S070S5GLG               | VM3S070S5R1G                   | VM3S070S5R5G                   | VM4S070S5GLG               | VM4S070S5R1G                   | VM4S070S5R5G                   | VM4S070S5ERN       |
|                                                          |      |           |              | VM3S076S5GLG               | VM3S076S5R1G                   | VM3S076S5R5G                   | VM4S076S5GLG               | VM4S076S5R1G                   | VM4S076S5R5G                   | VM4S076S5ERN       |
|                                                          |      |           |              | VM3S075S5GLG               | VM3S075S5R1G                   | VM3S075S5R5G                   | VM4S075S5GLG               | VM4S075S5R1G                   | VM4S075S5R5G                   | VM4S075S5ERN       |
| 100                                                      | S54  | 1-1/2"    | Quad Tri 480 | VM3S100S5GLG               | VM3S100S5R1G                   | VM3S100S5R5G                   | VM4S100S5GLG               | VM4S100S5R1G                   | VM4S100S5R5G                   | VM4S100S5ERN       |
|                                                          |      |           |              | VM3S106S5GLG               | VM3S106S5R1G                   | VM3S106S5R5G                   | VM4S106S5GLG               | VM4S106S5R1G                   | VM4S106S5R5G                   | VM4S106S5ERN       |
|                                                          |      |           |              | VM3S105S5GLG               | VM3S105S5R1G                   | VM3S105S5R5G                   | VM4S105S5GLG               | VM4S105S5R1G                   | VM4S105S5R5G                   | VM4S105S5ERN       |
| 150                                                      | S55  | 1-1/2"    | Quad Tri 480 | VM3S150S5GLG               | VM3S150S5R1G                   | VM3S150S5R5G                   | VM4S150S5GLG               | VM4S150S5R1G                   | VM4S150S5R5G                   | VM4S150S5ERN       |
|                                                          |      |           |              | VM3S156S5GLG               | VM3S156S5R1G                   | VM3S156S5R5G                   | VM4S156S5GLG               | VM4S156S5R1G                   | VM4S156S5R5G                   | VM4S156S5ERN       |
|                                                          |      |           |              | VM3S155S5GLG               | VM3S155S5R1G                   | VM3S155S5R5G                   | VM4S155S5GLG               | VM4S155S5R1G                   | VM4S155S5R5G                   | VM4S155S5ERN       |

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. VM3S050D5GLN

③ Catalog numbers shown are with 1-1/2" conduit openings, change 5 to 4 for 1-1/4"; e.g. VM3S050D4GLG.

④ Consult catalog logic for other available voltages.

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