



Certificate of Compliance

Certificate: 2412032

Master Contract: 151933

Project: 2412032

Date Issued: May 20, 2011

Issued to: Killark Electric Manufacturing Co.

3940 Dr. Martin Luther King Dr.
St. Louis, MO 63113
USA

Attention: Tom Michalski

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only.



D. Somma

Issued by: D. Somma, C.E.T.

PRODUCTS

CLASS 3428 03 - FIXTURES AND FITTINGS - For Hazardous Locations-Certified to U.S. Standards

CLASS 3428 03 - FIXTURES AND FITTINGS - For Hazardous Locations

Class I, Division 2, Groups A, B, C and D, Temperature Coded: T2B, T2D, T3, T3A or T3C; Class II, Groups E, F, G; Class III; Enclosure Types 3 and/or 4 (where applicable):

Class I, Zone 2, AEx nR, T4, T5 or T6; IP66

Ex nR , T4, T5 or T6: IP66:

- Compact Fluorescent Luminaires, Series VQ1F, VQ2F rated 347 VAC, 50/60 Hz, 84 W max.; may be supplied with either Globe, Enclosed Reflector, or Refractor.

Notes:

- (1) Suffixes denote Lamp Type, Cover Type, Conduit Size, Lamp Wattage, Input Voltage and Optics.
- (2) Detail Temperature Codes or Maximum Surface Temperature are covered under descriptive report under Tables 1 – 4 (Class I, Div. 2; Class II and Class III; Class I, Zone 2, Ex nA, nR II/AEx nA ,nR II)

Ballast Tank Assembly



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Series VQ1F or VQ2F followed by 13, 18, 26, 26S, 32, 36, 42, 52, 64 or 84; followed by 30 or 15; may be followed by NR, F, FF, TBx, P1, P2, P3 or QD.

Optics

VMG25, VMG25T, VMG25F, VMR251, VMR251T, VMR253, VMR253T, VMR255, VMR255T, VMER40, VMEP40, VZRG4020, VZRG4050, VZRP175B (VQ2F)

VMG17, VMG17F, VMG17T, VMR171, VMR171T, VMR175, VMR175T, VZRG1550, VZRG2550, VZRG2520, VZRP175 (VQ1F)

External Guards

VMAG25S, VMERG, VMRWG (VQ2F)

VMAG17, VMRWG8 (VQ1F)

External Reflectors

VMPSD40, VMFA40

Mounting Splice Boxes

VMA2B, VMA3B, VMF2B, VM3FB, VMX2B, VMX3B, VMX6B, VMX7B, VMX8B, VMX9B, VMB2B, VMB3B, VMC2B, VMC3B, VMD4B, VMD5B, VMS4B, VMS5B

Options

NR, F, FF, TBx, P1, P2, P3, QD

APPLICABLE REQUIREMENTS

- CAN/CSA-C22.2 No 0-10 - General Requirements – Canadian Electrical Code, Part II
- CAN/CSA-C22.2 No 25-1966 Locations. - Enclosures for use in Class II, Groups E, F and G Hazardous Locations.
- CAN/CSA-C22.2 No 94-M91 - Special Purpose Enclosures
- CAN/CSA-C22.2 No 137M-1987 - Electric Luminaires for Use in Hazardous Locations
- CAN/CSA-C22.2 No 250 - Luminaires
- CAN/CSA-C22.2 No 60079-0-07 Requirements - Electrical equipment for explosive gas atmospheres – General Requirements
- CAN/CSA-C22.2 No 60079-15:02 - Electrical apparatus for explosive gas atmospheres – Part 15: Type of protection “n”



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ANSI/UL Standard 50E (1st Ed) - Enclosures for Electrical Equipment

ANSI/UL Standard 1598 - Luminaires

ANSI/UL Standard 1604 - Electrical Equipment for Use in Class I and II, Div. 2, Class III Hazardous Locations

Standard 844 - Luminaires for Use in Hazardous (Classified) Locations

ANSI/UL

ANSI/UL Standard 60079-15 - UL Standard for Safety Electrical Apparatus for Explosive Gas Atmospheres Part 15: Electrical Apparatus with Type of Protection "n"

ANSI/UL Standard 60079-0 - UL Standard for Electrical Apparatus for Explosive Gas Atmosphere Part 0: General Requirements

ANSI/UL Standard 1598A - Supplemental Requirements for Luminaires for installation on Marine Vessels

MARKINGS

The equipment is marked with the following information on a certified adhesive label or on a metal nameplate having a thickness not less than 0.5mm, secured by drive pins or screws engaging bottomed holes:

- Submitter's name, Trade Mark, File Number or Master Contract Number
- Catalogue number, Hazardous location rating designation, date code, the CSA Monogram and the following:
 - "Open circuit before re-lamping".
 - Complete Electrical Ratings: Voltage, Amperes, Frequency and Wattage
 - Operating temperature or operating temperature code. See Tables 1, 2, 3 & 4.
 - Lamp Type.
- "CAUTION: To Prevent Ignition Of Hazardous Atmospheres, Disconnect The Fixture From The Supply circuit before Opening. Keep tightly closed when in operation.
- "WARNING: To Prevent Fire or Explosion Do Not Install Where The Marked Operating Temperature Exceeds Ignition Temperature of Hazardous Atmospheres"



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- Rated maximum ambient temperature per Tables 1, 2, 3 and 4.
- "For Supply Connection, Use Wires Rated Per Tables 1, 2, 3 and 4.
- For Installation Operating and Maintenance Instructions see form K1361.
- "May be marked Type 3, 4 and/or suitable for wet locations"
- May be marked with IP66 except for Class I, Zone 2, AEx nA nR II/Ex nA nR II.
- CSA.11.2412032X (AEx nA nR/Ex nA nR fixture only)

- OPTIONAL (When fused is installed - Not for CSA and Marine application): To be marked at the location adjacent to the fuse to be replaced. "CAUTION: Risk of Ignition of Hazardous Atmospheres- Replace only with Fuse Having The Same Voltage And Current Rating As The Existing Fuse." and "WARNING – DO NOT REMOVE FUSE WHEN ENERGIZED."
- Fixture marked with Ex nA nR II, AEx nA nR are marked with the following Caution:
Caution for Restricted Breathing application " Globe must be securely hand tightened and periodically inspected." (Special Conditions for Safe Use)