



MERCMASTER™ III 400 LUMINAIRE FOR HAZARDOUS AND WET LOCATIONS

FEATURES

- Superior corrosion resistance.
- Choice of light sources: high pressure sodium, and pulse start metal halide.
- Six mounting arrangements to suit any lighting layout: pendant, ceiling, wall bracket, 25° (angle) stanchion, 90° (straight) stanchion and cone.
- Hinge has high lip for added safety during installation and servicing. Hinge and bolt construction assures 360° compression at all points on ballast housing gasket for positive sealing. Swing away design of captive bolt and nut simplifies servicing.
- Choice of optical assemblies: prismatic globe; enclosed reflector with sealed lens; or Type V or Type II closed prismatic glass refractor, with or without guards.
- Wide choice of photometric distributions.
- All fixtures designed to perform in a +40 °C (+104 °F) ambient temperature. Selected fixtures are suitable for ambient temperatures up to +65 °C (+149 °F) .
- Mogul base porcelain lamp holder with nickel-plated contacts has +200 °C (+392 °F) rated welded leads, pre-wired to the ballast. Assures trouble-free operation in installations where high ambient temperatures are encountered.
- For electrical protection, a ground wire is provided on each Mercmaster to bond hood and ballast housing.
- Terminal blocks are provided for Zone 2 fixtures to facilitate wiring.
- Standard dome of 30° angle reflectors made of fiberglass reinforced white polyester. Highly resistant to corrosive atmospheres.
- A wide range of voltages available (120 to 600 Volt) and ballast types (CWA, Super CWA and REG LAG).
- One-piece ballast housing for each component provides even heat dissipation for cooler operation and longer ballast life.
- All Mercmaster mounting hoods have provision for easy field installation of fuses in fixtures (see fuse kit listings).

APPLICATIONS

- Enclosed and gasketed fixtures suitable for use in:
 - Marine and wet locations
 - A wide range of industrial, chemical processing and other areas where flammable gases and vapors or combustible dusts are present under conditions defined by the National Electrical Code as Class I, Division 2; Class II, Division 1 and 2; and Class III
 - In applications involving medium and high mounting heights
 - In applications where energy efficient, high lumen output is required
 - The AEx nA nR Mercmaster III fixture is factory sealed and prevents vapors and gases from entering the globe chamber. There are no seals or putty required.
 - The AEx nR Mercmaster III fixture requires all wiring entries to be sealed.
 - Non-hazardous locations where severe weather conditions, excessive moisture, dirt, dust, corrosive atmosphere or high ambient temperatures are encountered
- Typical applications include:
 - Pulp and paper mills
 - Processing plants
 - Chemical plants
 - Oil refineries
 - Foundries
 - Manufacturing plants
 - Storage areas
 - Waste and sewage treatment
 - Other areas where dust, water, dirt and rough usage are a problem

NEC/CEC RATINGS

Class I, Division 2, Groups A, B, C, D
Class I, Zone 2, AEx nA nR IIC (Z2)
Class I, Zone 2, Ex nR IIC (Z) V
Class I, Zone 2, AEx nR IIC (ZB)
Class II, Division 1 and 2, Groups E, F, G
Class III
Simultaneous Exposure (Class I,
Division 2/Class II, Division 1)
Fixtures Outside Type (Salt Water)
Type 4X
IP66

APPLETON™

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MERCMASTER™ III 400 LUMINAIRE FOR HAZARDOUS AND WET LOCATIONS

STANDARD MATERIALS

- Mounting hoods and ballast bodies: cast copperfree (less than 4/10 of 1% copper) aluminum
- Reflectors: Fiberglass reinforced white polyester
- Guards, hardware and catch assemblies: stainless steel
- Globe: heat- and impact-resistant internally fluted glass
- Refractors: prismatic glass
- Enclosed reflector: etched Alzak aluminum with sealed, tempered heat- and impact resistant lens
- Body and globe gaskets: high-temperature silicone rubber

STANDARD FINISHES

- Mounting hoods and guards: epoxy powder coat, electrostatically applied for complete and uniform protection.

OPTIONS

- AEx nA nR fixtures are available with a Class I, Zone 2 rating. Add suffix **-Z2**.
- AEx nR fixtures are available with a Class I, Zone 2 rating. Add suffix **-ZB**.
- Ex nR fixtures are available with a Class I, Zone 2 rating. Add suffix **-ZV**.
- Quartz Auxiliary comes to full brightness immediately and remains lit until the HID lamp attains 25-50% of full illumination. Quartz Auxiliary supplied with relay switch and socket to accept 120V quartz double contact bayonet base lamp (not included). (Not suitable for hazardous locations.) Add suffix **-E**.

- Factory sealed photocontrol available. See PCD2 Series.
- Smart Starter incorporates a 1-1/2-minute timer and performs as a conventional starter to normally start lamp. Removes itself from circuit if lamp burns out or is removed from socket. Eliminates starter failures caused by prolonged operation with cycling or failing lamps and simplifies finding their location, reducing maintenance and repair costs. Available for all HPS and PSMH fixtures. Add suffix **-S**.

NEC/CEC CERTIFICATIONS AND COMPLIANCES

- cULus Listed: E10444
- UL Standard: ANSI/UL 844, 1598, 60079-0, 60079-15, Marine Type Electric Fixtures Outside Type (Salt Water)
- CSA Certified: 025428
- CSA Standard: CSA C22.2 No. 9, C22.2 No. 137; CAN/CSA E60079-0, E60079-15
- 250 W PSMH not available in MT ballast. See Mercmaster III, 50-250 Luminaires.

CATALOG NUMBERING GUIDE

KP Series: KP - Mercmaster III 400	A Mounting: A - Pendant (rigid mounting) C - Ceiling CH - Pendant Cone Hood F - Pendant (flexible mounting) ST - 90° Stanchion S - 25° Stanchion WB - Wall	L Lamp Type: L - High Pressure Sodium P - Pulse Start Metal Halide	40 Wattage: 25 - 250 W HPS, PSMH ③ 40 - 400 W PSMH & HPS	10 Hub Size: 75 - 3/4" NPT 10 - 1" NPT 125 - 1-1/4" NPT stanchion 150 - 1-1/2" NPT stanchion	J5 Optical Assembly: ① Blank - Glass Globe J2 - NEMA II Glass Refractor ④ J5 - NEMA V Glass Refractor ④ R - Enclosed Refractor with Sealed Lens	G Guard Options: ② G - Globe Guard BG - Refractor Guard Blank - No Guard	MT Voltage: ③ MT - 120/208/240/277, 60 Hz 5MT - 120/208/240/ 277/480, 60 Hz TT - 120/277/347, 60 Hz 48 - 480, 60 Hz AM - 127/220, 60 Hz 125 - 120, 50Hz 226 - 220, 60 Hz 235 - 230, 50Hz 236 - 230, 60 Hz 245 - 240, 50 Hz 246 - 240, 60 Hz 385 - 380/415, 50 Hz	S Options: E - Emergency Quartz F - Fuse Kit (Specify Voltage) S - Smart Starter H1 - Photocontrol 120 V H2 - Photocontrol 208 V H3 - Photocontrol 240 V H4 - Photocontrol 277 V E40 - Export Socket Optional Fusing ⑥ FN - 120 V FP - 208 V FS - 240 V FT - 277 V FF - 480 V	Z2 Suffix: Z2 - Zone 2 suffix (required for AEx nA nR rating) ZB - Zone 2 suffix (required for AEx nR rating)
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Refer to "Mounting Hoods and Ballast" page for available Voltage Configuration.

① NO DESIGNATION is required for fixtures with standard type globe.

② NO DESIGNATION is required for fixtures without guards.

③ Other voltages available. Contact your local sales representative.

④ J2 and J5 refractors are not available with Z2 or ZB suffix.

⑤ Available for 480 V, 50 Hz and 5MT ballast options. For MT and TT voltage suffix, see Mercmaster III 50-250 Luminaires.

⑥ Optional fusing is available for use with MT, 5MT and 48 voltage suffixes ONLY.