MERCMASTER™ III HID 50-250 WATT LUMINAIRES

- Modular design allows scores of fixture component combinations to meet installation and lighting needs. Many most-used combinations are offered prewired and assembled, complete with lamp, packaged in a single carton and ready to install.
- Mogul lamp types and wattages:
  HPS 50W-150W
  PSMH 70W-250W
- Choice of heat-resistant prismatic glass refractors (NEMA distributions I, III and V), or heat-resistant prismatic glass globes for hazardous area fixtures. Colored and clear polycarbonate globes and Tuff-skin® † coated glass globes are available but are NOT approved for use in classified areas. Fixtures with these globes do NOT comply with code requirements, and should be used in non-classified areas only. Globes and refractors thread directly into ballast housing.
- Mounting hoods include cone-shaped pendant hood, standard pendant, flexible pendant, ceiling and wall pendants (tapped for 3/4" or 1" NPT), 25° angle stanchion, and 90° (straight) stanchion (both tapped for 1-1/4" or 1-1/2" NPT).
- Cone hood fixtures for pendant mounting shed dust, dirt and combustible fibers. Cone hood inhibits build-up that "insulates" fixture and slows heat transfer, and provides increased surface area for more effective heat dissipation.
- Reflector choice includes standard dome and 30° angle types, both made of Fiberglass reinforced white polyester. Highly resistant to unusually corrosive applications. Reflectors are vented for cooler, dirt-free operation and maintained lumen output. They secure to ballast housing with stainless steel screws threading into stainless steel inserts.
- For high corrosion resistance, fixture housing, mounting hoods and guards are copperfree cast aluminum with baked epoxy finish, electrostatically applied for uniformity. All exposed hardware is stainless steel.
- 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.

- Body gaskets and globe gaskets are high-temperature silicone rubber.
- Capacitors are non-PCB type, thermally isolated from ballast.
- Mogul base porcelain socket with nickel-plated contacts has 392 °C/ 200 °C welded leads, prewired to the ballast. Assures trouble-free operation in installations where high ambient temperatures are encountered.
- HPS ballasts are High Power Factor (min. P.F. 90%).
- A wide range of voltages available (120 to 600 Volt) and ballast types (Reactor, CWA, CWI and Super CWA).
- All Mercmaster III mounting hoods have provision for easy field installation of fuses in fixtures (see fuse kit listings in this catalog section).
- For electrical protection, a ground wire is provided on each Mercmaster to bond hood and ballast housing.
- The AEx nA nR / Ex nR (V) factory sealed Mercmaster III prevents vapors and gases from entering the globe chamber. There are no seals or putty required which will reduce installation time and installation errors.
- The AEx nR Mercmaster III fixture requires all wiring entries to be sealed.

SUITABLE LOCATIONS

- 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
— For Zone 2, the method of protection is AEx nA nR – Restricted Breathing/Nonsparking or AEx nR – Restricted Breathing
— Non-hazardous locations where severe weather conditions, excessive moisture, dirt, dust, corrosive atmosphere or high ambient temperatures are encountered.

18% cooler operation allows use in ambient temperatures up to 149°F/65°C depending on fixture component combinations
- Typical applications include:
— Pulp and paper mills
— Processing plants
— Chemical plants
— Oil refineries
— Foundries
— Manufacturing plants
— Storage areas
— Marine applications
- Fixtures have NEMA 4X listing.
- Suitability includes listing for use where there may be simultaneous exposure to combustible dusts and flammable gases and vapors. See listing pages for compliance data on specific fixture component combinations.

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, 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

For product information:
www.appletonelec.com
1.800.621.1506

E M E R S O N .   C O N S I D E R   I T   S O L V E D.™

STANDARD MATERIALS

- Mounting hoods, ballast bodies and guards: copperfree cast aluminum (less than 4/10 of 1%)
- Exposed hardware: stainless steel; latch assemblies have stainless steel bolt and captive nut; reflectors and guards attach with strainless steel screws threading into stainless steel inserts.
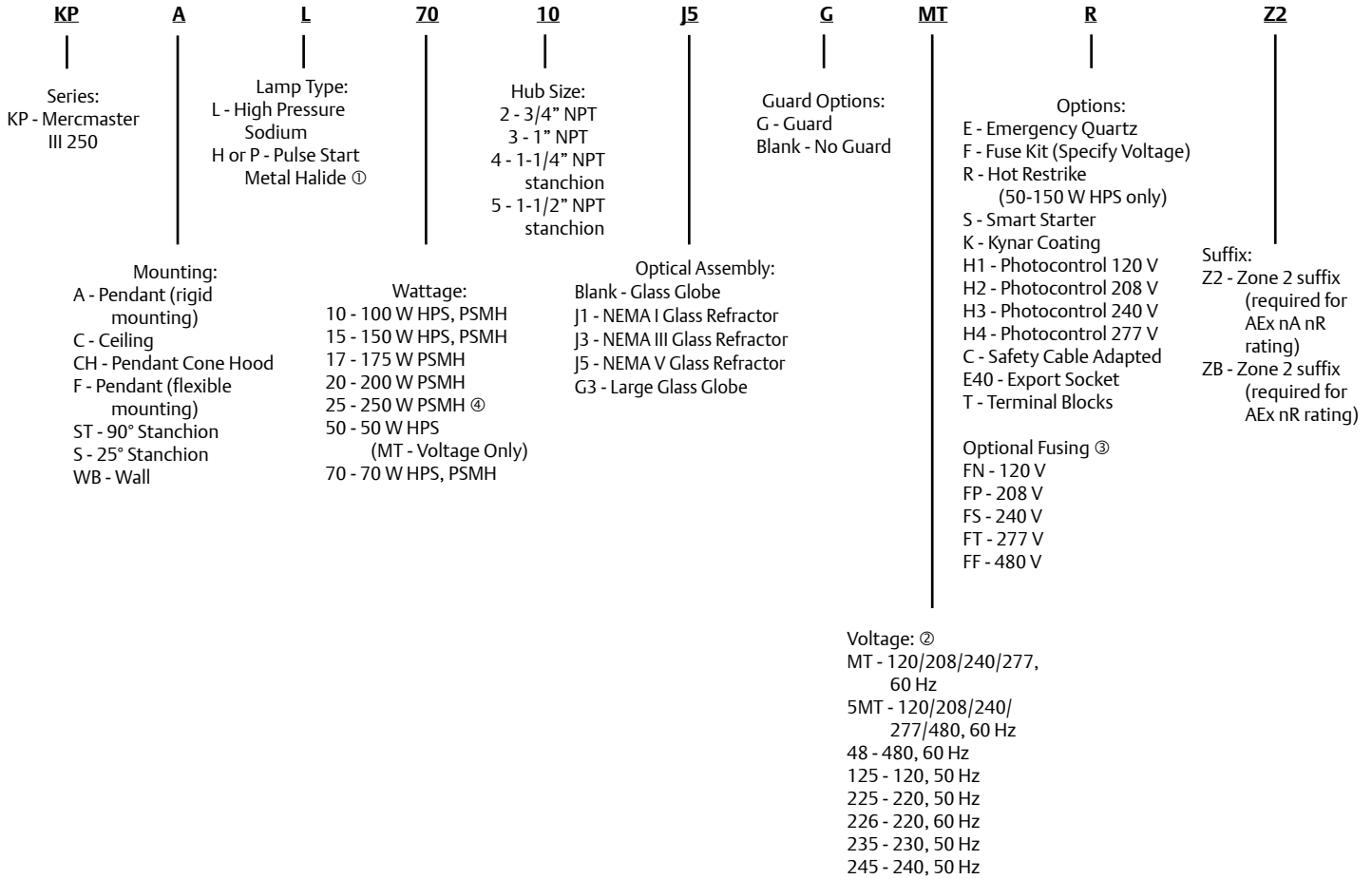
- Reflectors: Fiberglass reinforced white polyester
- Globes: heat-resistant prismatic glass
- Refractors: heat-resistant prismatic glass

STANDARD FINISHES

- Mounting hoods, ballast bodies, guards: epoxy powder coat finish, electrostatically applied for complete, uniform surface protection
- Reflectors: white polyester finish

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
- PSMH 250W MT (120/208/240/277, 60 Hz) Fixtures are not UL Listed

KP	A	L	70	10	J5	G	MT	R	Z2

Series:
KP - Mercmaster III 250

Mounting:
A - Pendant (rigid mounting)
C - Ceiling
CH - Pendant Cone Hood
F - Pendant (flexible mounting)
ST - 90° Stanchion
S - 25° Stanchion
WB - Wall

Lamp Type:
L - High Pressure Sodium
H or P - Pulse Start Metal Halide ①

Wattage:
10 - 100 W HPS, PSMH
15 - 150 W HPS, PSMH
17 - 175 W PSMH
20 - 200 W PSMH
25 - 250 W PSMH ④
50 - 50 W HPS (MT - Voltage Only)
70 - 70 W HPS, PSMH

Hub Size:
2 - 3/4" NPT
3 - 1" NPT
4 - 1-1/4" NPT stanchion
5 - 1-1/2" NPT stanchion

Optical Assembly:
Blank - Glass Globe
J1 - NEMA I Glass Refractor
J3 - NEMA III Glass Refractor
J5 - NEMA V Glass Refractor
G3 - Large Glass Globe

Guard Options:
G - Guard
Blank - No Guard

Options:
E - Emergency Quartz
F - Fuse Kit (Specify Voltage)
R - Hot Restrike (50-150 W HPS only)
S - Smart Starter
K - Kynar Coating
H1 - Photocontrol 120 V
H2 - Photocontrol 208 V
H3 - Photocontrol 240 V
H4 - Photocontrol 277 V
C - Safety Cable Adapted
E40 - Export Socket
T - Terminal Blocks

Optional Fusing ③
FN - 120 V
FP - 208 V
FS - 240 V
FT - 277 V
FF - 480 V

Suffix:
Z2 - Zone 2 suffix (required for AEx nA nR rating)
ZB - Zone 2 suffix (required for AEx nR rating)

Voltage: ②
MT - 120/208/240/277, 60 Hz
5MT - 120/208/240/277/480, 60 Hz
48 - 480, 60 Hz
125 - 120, 50 Hz
225 - 220, 50 Hz
226 - 220, 60 Hz
235 - 230, 50 Hz
245 - 240, 50 Hz

Reflectors are ordered separately – see Accessories page.
① *H - Lamp type is for 70W and 100W fixtures only.*
  P - Lamp type is for 175W, 200W and 250W fixtures only.
② *Voltages shown are limited to specific combinations.*
③ *Optional fusing is available for use with MT, 5MT and 48 voltage suffixes ONLY.*
④ *PSMH 250 W, MT fixtures are not UL Listed.*

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