

# Mercmaster™ III HID 50-250 Watt Luminaires

High Pressure Sodium and Pulse Start Metal Halide  
Enclosed and Gasketed Fixtures — Hazardous Locations

NEC/CEC: Class I, Division 2, Groups A, B, C, D | Class I, Zone 2, AEx nA nR IIC (Z2) | Class I, Zone 2, AEx/Ex 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

## 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
  - For Zone 2, the method of protection is AEx nA nR – Restricted Breathing/Nonsparking or AEx/Ex 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 +65 °C (+149 °F) depending on fixture component combinations
  - Ambient temperature range:
    - HPS: -40 °C to +65 °C (-40 °F to +149 °F)
    - PSHM: -30 °C to +65 °C (-22 °F to +149 °F)
- 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.

## Features

- 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 175W-250W
- A choice of heat-resistant prismatic glass refractors (NEMA Type II and III), heat-resistant globes, or prismatic polymeric refractors (NEMA Type II, III, IV and V) for hazardous area fixtures. Colored and clear polycarbonate globes and Tuff-skin® ① 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. Photometrics available upon request – contact your local sales representative.
- 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 200 °C (392 °F) 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 and 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 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/Ex nR Mercmaster III fixture requires all wiring entries to be sealed.

① Tuff-skin is a registered trademark of Thomas Manufacturing Corp., Parkton, Maryland.

# Mercmaster™ III HID 50-250 Watt Luminaires

High Pressure Sodium and Pulse Start Metal Halide

Enclosed and Gasketed Fixtures — Hazardous Locations

NEC/CEC: Class I, Division 2, Groups A, B, C, D | Class I, Zone 2, AEx nA nR IIC (Z2) | Class I, Zone 2, AEx/Ex 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

## 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 stainless steel screws threading into stainless steel inserts.
- Reflectors: Fiberglass reinforced white polyester
- Globes and Refractors: heat-resistant prismatic glass
- Polymeric refractor: spun aluminum reflector and a lens made of an engineered thermoplastic

## Standard Finishes

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

## Options

- AEx nA nR fixtures are available with a Class I, Zone 2 rating. Add suffix **-Z2**. Only available for certain ballast types.
- AEx/Ex nR fixtures are available with a Class I, Zone 2 rating. Add suffix **-ZB**.
- Fuses can be field-installed on Mercmaster III fixtures. Kits include fuse block, wire connectors and screws for attaching to mounting hood. Fixtures with fuses do not comply with Marine Type Electric Fixtures Outside Type (Salt Water) requirements for marine listing. *For fuse kits, see Electrical Specifications and Fuse Kits page.*
- Optional photocell for all fixtures except cone and ceiling mount provides automatic “on-off” control.

## NEC/CEC Certifications and Compliances

- cULus Listed: E10444
- UL Standard: ANSI/UL 844, 1598, 60079-0, 60079-15, 1598A
- CSA Standard: CSA C22.2 No. 250.0, C22.2 No. 137; CAN/CSA E60079-0, E60079-15
- PSMH 250W MT (120/208/240/277, 60 Hz) Fixtures are not UL Listed



Pendant Mount Fixture with Prismatic Glass Refractor



Straight Stanchion-Mount Fixture with Prismatic Glass Refractor and Guard



Pendant Cone Fixture with Prismatic Glass Globe and Guard



Ceiling Mount Fixture with Prismatic Glass Globe, Guard and Polyester 30° Angle Reflector



# Mercmaster™ III HID 50-250 Watt Luminaires

High Pressure Sodium and Pulse Start Metal Halide  
Enclosed and Gasketed Fixtures — Hazardous Locations

NEC/CEC: Class I, Division 2, Groups A, B, C, D | Class I, Zone 2, AEx nA nR IIC (Z2) | Class I, Zone 2, AEx/Ex 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

## Illustrated Features



### High Temperature Sockets

Mogul base high-temperature porcelain sockets.

### Aluminum Inner Reflector

Solid aluminum inner reflector (for refractor ballast housings only) improves photometric efficiency.

### Globe Chamber (Zone 2)

Completely sealed from the ballast housing and outside vapors/air (nA nR).



### Vented Reflectors

Reflectors are thick, tough fiberglass-reinforced white polyester, vented for cooler operation. Quickly attach with furnished stainless steel screws.

### Terminal Blocks (Zone 2)

A seven-point terminal block is provided to facilitate wiring. Terminal block accommodates wire size ranging from #8 to #24 AWG.

### Stainless Steel Inserts

Ballast bodies have stainless steel threaded inserts to receive stainless steel screws for reflectors and guard. Prevents "freezing", allowing guards and reflectors to be easily removed and replaced at any time, without damage to the housing.



### Ballast Assembly (Zone 2)

Utilizing non-sparking components avoiding the ignition of gases or vapors that may be present (nA).

### Mounting Hood and Globe Gaskets

Silicone rubber gasket seals out moisture, dirt and dust. Stays flexible, withstands high temperatures. Closure design assures uniform gasket compression.

### Electrical Protection

Ground wire provided to bond mounting hood to ballast housing.



### "Safety" High Hinge

Extra-high hinge provides additional protection against accidental ballast housing disengagement during installation or maintenance.

### Epoxy Finish

Ballast housing, hoods and guards are copperfree aluminum with epoxy powder coat finish.

### Photocell

Available for all fixtures except cone and ceiling mount. Installs through knock-out in mounting hood. Provides continuous ON-OFF dusk-to-dawn control.



### Cooler Operating Cone Hood

Larger sloped surface sheds dusts, dirt and combustible fibers providing better heat dissipation.



### Stainless Steel Latch Assembly

Captive, stainless steel latch assembly bolt and nut closes securely, resists attack of corrosive atmospheres. Swing-away design simplifies servicing.



### Heat-Resistant Globes and Refractors

Prismatic glass globes and refractors are heat-resistant. They thread directly into the ballast housing and seal against a high-temperature silicone rubber gasket.



### Fuses

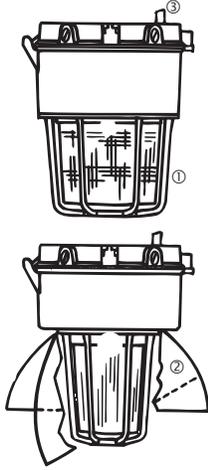
Two screws secure fuse kit to mounting boss in any Mercmaster mounting hood. Fuse included.

# Mercmaster™ III HID 50-250 Watt Luminaires

High Pressure Sodium and Pulse Start Metal Halide  
Enclosed and Gasketed Fixtures — Hazardous Locations

NEC/CEC: Class I, Division 2, Groups A, B, C, D | Class I, Zone 2, AEx nA nR IIC (Z2) | Class I, Zone 2, AEx/Ex 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

## Accessory Options



① **Guards:** Guards are die-cast copperfree aluminum with baked epoxy finish to match fixtures. Fixture supplied with stainless steel mounting screws which thread into stainless steel inserts on fixture housing to attach guard. To order fixture with guard, add suffix -G to catalog number before adding voltage suffix.

② **Reflectors:** Standard dome and 30° angle polyester reflectors are shown elsewhere in this catalog section.

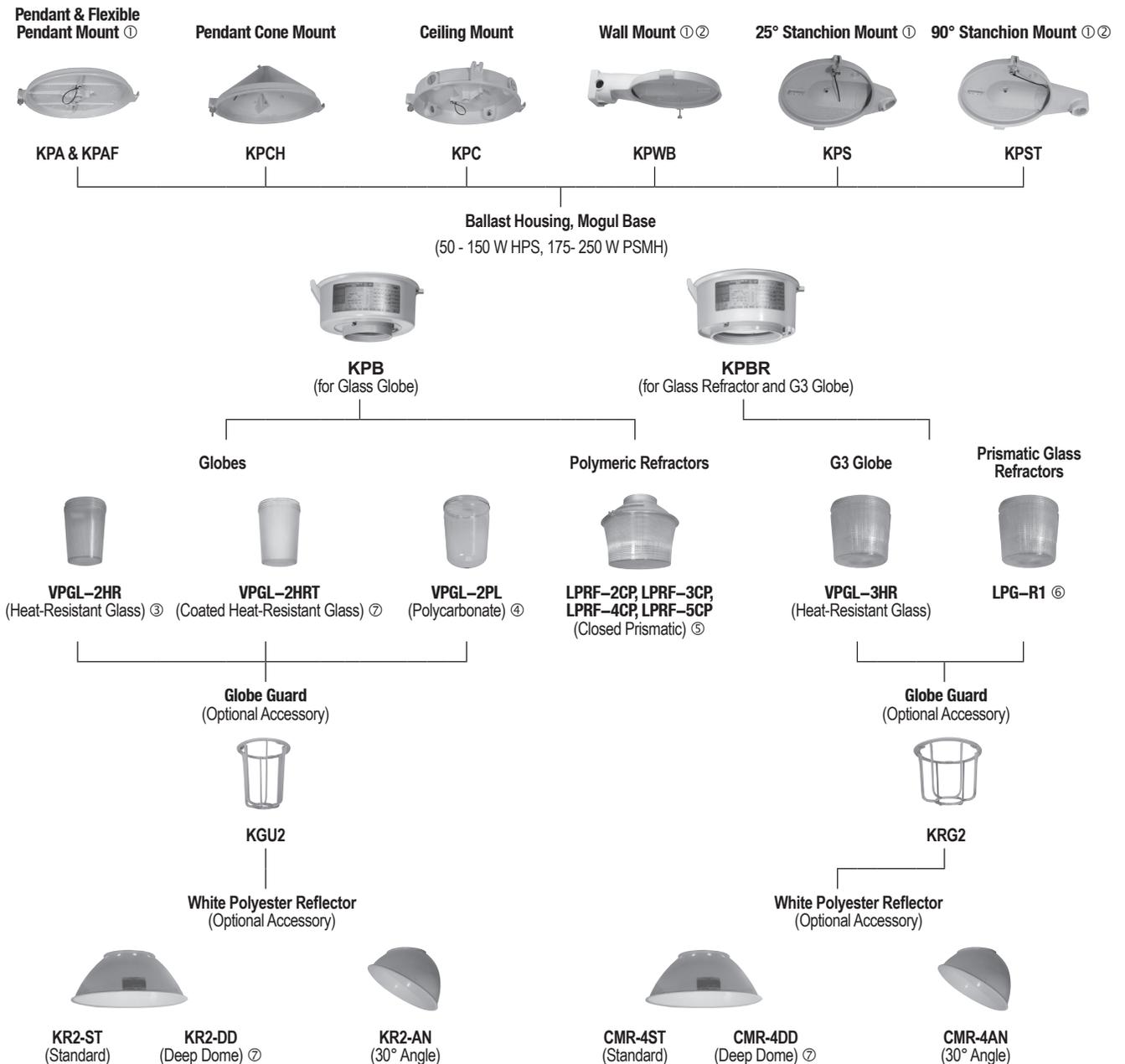
③ **Photocell and Fuses:** Photocontrols are available.

# Mercmaster™ III HID 50-250 Watt Luminaires

High Pressure Sodium and Pulse Start Metal Halide  
Enclosed and Gasketed Fixtures — Hazardous Locations

NEC/CEC: Class I, Division 2, Groups A, B, C, D | Class I, Zone 2, AEx nA nR IIC (Z2) | Class I, Zone 2, AEx/Ex 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

## Family Tree — Mercmaster™ III 50-250 Watt Luminaires



① Mounting hood with a 120 V or 208-277 V factory installed photocell is available.

② Standard and deep dome reflectors may interfere with bottom conduit entry if used with KPST and KPWB mounting hoods.

③ Available in clear, amber, blue, green and red. Colors not UL Listed.

④ Available in clear, amber, green and red. Not UL Listed.

⑤ Available in NEMA Type II, III, IV and V. Polymeric Refractor suitable for Class II, Groups F and G, NEMA 4X and Marine Type Electric Fixtures Outside Type (Salt Water) only (100 W HPS Max.).

⑥ Available in NEMA Type I.

⑦ Not UL Listed.

# Mercmaster™ III HID 50-250 Watt Luminaires

High Pressure Sodium and Pulse Start Metal Halide  
Enclosed and Gasketed Fixtures — Hazardous Locations

NEC/CEC: Class I, Division 2, Groups A, B, C, D | Class I, Zone 2, AEx nA nR IIC (Z2) | Class I, Zone 2, AEx/Ex 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

## Order Using Catalog Numbering Guide — Mercmaster™ III 50-250 Watt Hazardous Location Luminaires

<p><b>KP</b></p> <p>Series: KP - Mercmaster III 50-250 Watt</p>	<p><b>A</b></p> <p>Mounting: A - Pendant (rigid mounting) C - Ceiling CH - Pendant Cone Hood F - Pendant (flexible mounting) ST - 90° Stanchion S - 25° Stanchion WB - Wall</p>	<p><b>L</b></p> <p>Lamp Type: L - High Pressure Sodium P - Pulse Start Metal Halide</p>	<p><b>70</b></p> <p>Wattage: 10 - 100 W HPS 15 - 150 W HPS 17 - 175 W PSMH 25 - 250 W PSMH ③ 50 - 50 W HPS (MT - Voltage Only) 70 - 70 W HPS</p>	<p><b>10</b></p> <p>Hub Size: 75 - 3/4" NPT 10 - 1" NPT 125 - 1-1/4" NPT stanchion 150 - 1-1/2" NPT stanchion</p>	<p><b>J1</b></p> <p>Optical Assembly: Blank - Glass Globe J1 - NEMA I Glass Refractor G3 - Large Glass Globe</p>	<p><b>G</b></p> <p>Guard Options: G - Guard Blank - No Guard</p>	<p><b>MT</b></p> <p>Voltage: ① MT - 120/208/240/277, 60 Hz 48 - 480, 60 Hz 125 - 120, 50 Hz 225 - 220, 50 Hz 226 - 220, 60 Hz 236 - 230, 60 Hz 245 - 240, 50 Hz 246 - 240, 60 Hz GP - 120/220-240, 50 Hz GK - 220/240, 50 Hz</p>	<p><b>C</b></p> <p>Options: F - Fuse Kit (Specify Voltage) 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</p> <p>Optional Fusing ② FN - 120 V FP - 208 V FS - 240 V FT - 277 V FF - 480 V</p>	<p><b>Z2</b></p> <p>Suffix: Z2 - Zone 2 suffix (required for AEx nA nR rating) ④ ZB - Zone 2 suffix (required for AEx/EX nR rating)</p>
---	---	---	--	---	--	--	--	---	---

Lamp Type	Lamp Watts	Voltage Suffixes										
		MT	48	125	225	226	236	245	246	GP	GK	
HPS	50	—	—	—	X	X	—	X	—	—	X	
HPS	70	X	—	X	—	X	X	X	X	X	—	
HPS	100	X	—	—	—	X	X	—	X	—	—	
HPS	150	X	X	X	X	X	X	X	X	X	—	
PSMH	175	X	X	—	—	—	—	—	—	—	—	
PSMH	250	X	—	—	—	—	—	—	—	—	—	
Voltages:												
<b>MT</b> - 120/208/240/277 V 60 Hz		<b>225</b> - 225 V 50 Hz			<b>245</b> - 240 V 50 Hz							
<b>48</b> - 480 V 60 Hz		<b>226</b> - 220 V 60 Hz			<b>246</b> - 240 V 60 Hz							
<b>125</b> - 120 V 50 Hz		<b>236</b> - 230 V 60 Hz			<b>GP</b> - 120/220-240 V 50 Hz			<b>GK</b> - 120/220-240 V 50 Hz				

Reflectors are ordered separately – see Accessories page.  
 ① Voltages shown are limited to specific combinations. Please contact factory for other available voltage options.  
 ② Optional fusing is available for use with MT, 5MT and 48 voltage suffixes ONLY.  
 ③ PSMH 250 W, MT fixtures are not UL Listed.  
 ④ The **-Z2** suffix (AEx nA nR) is available for use with MT, 48 and 246 voltage suffixes ONLY.

# Mercmaster™ III HID 50-250 Watt Luminaires

High Pressure Sodium and Pulse Start Metal Halide

Enclosed and Gasketed Fixtures — Hazardous Locations

NEC/CEC: Class I, Division 2, Groups A, B, C, D | Class I, Zone 2, AEx nA nR IIC (Z2) | Class I, Zone 2, AEx/Ex 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

## Electrical Specifications

Lamp Watts	Lamp Type	Type of Ballast ①	Line Voltage	Starting Amps	Operating Amps	Total Watts
50 Watt	HPS	HX-HPF	120	0.65	0.61	66
		HX-HPF	208	0.37	0.35	66
		HX-HPF	240	0.32	0.31	66
		HX-HPF	277	0.30	0.26	66
70 Watt	HPS	HX-HPF	120	0.90	0.82	94
		HX-HPF	208	0.50	0.48	94
		HX-HPF	240	0.44	0.41	94
		HX-HPF	277	0.35	0.36	94
		HX-HPF	480	0.21	0.21	94
100 Watt	HPS	HX-HPF	120	1.30	1.15	130
		HX-HPF	208	0.76	0.67	130
		HX-HPF	240	0.66	0.60	130
		HX-HPF	277	0.60	0.52	130
		HX-HPF	480	0.33	0.31	135
150 Watt	HPS ②	HX-HPF	120	2.00	1.70	188
		HX-HPF	208	1.15	0.95	188
		HX-HPF	240	1.00	0.85	188
		HX-HPF	277	0.85	0.72	188
		HX-HPF	480	0.50	0.47	189
175 Watt	PSMH	C.W.A.	120	0.80	1.80	198
		C.W.A.	208	0.50	1.00	198
		C.W.A.	240	0.40	0.90	198
		C.W.A.	277	0.40	0.80	198
		C.W.A.	480	0.15	0.45	196
250 Watt	PSMH	C.W.A.	120	2.00	2.30	278
		C.W.A.	208	1.10	1.40	278
		C.W.A.	240	1.00	1.20	278
		C.W.A.	277	0.80	1.00	278

① C.W.A. – Constant Wattage Autotransformer. HX-HPF – High Reactance High Power Factor Autotransformer.

② 150 W HPS units equipped with ballasts to operate 55 volt lamps only.

# Mercmaster™ III HID 50-250 Watt Luminaires

High Pressure Sodium and Pulse Start Metal Halide

Enclosed and Gasketed Fixtures — Hazardous Locations

NEC/CEC: Class I, Division 2, Groups A, B, C, D | Class I, Zone 2, AEx nA nR IIC (Z2) | Class I, Zone 2, AEx/Ex 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

HID Luminaires | Area / Task | Hazardous Location | NEC / CEC

## Temperature Codes | Class I, Division 2; Class II, Division 1; Simultaneous exposure to hazardous conditions in both classifications

Lamp Watts	Lamp Type	Supply Wire Min. Temp. °C (°F)	Ambient Temp. °C (°F)	Class I, Division 2				Class II, Division 1 Groups E, F and G ①				Simultaneous Exposure Class I, Division 2 / Class II, Division 1			
				Globe	Globe & Reflector	G3 Globe	8" Refractor	Globe	Globe & Reflector	G3 Globe	8" Refractor	Globe	Globe & Reflector	G3 Globe	8" Refractor
50	HPS	90 °C (194 °F)	40 °C (104 °F)	T3C	T3B	—	T3C	T4A	T4	—	T6	T3A	T3	—	T3C
		90 °C (194 °F)	55 °C (131 °F)	T3A	T3A	—	T3A	T4	T3B	—	T5	T3	T3	—	T3A
		90 °C (194 °F)	65 °C (149 °F)	T3A	T3	—	T3A	T3C	T3C	—	T4A	T2D	T2D	—	T3
70	HPS	90 °C (194 °F)	40 °C (104 °F)	T3B	T3A	—	T3C	T4	T3C	—	T6	T3	T3	—	T3A
		90 °C (194 °F)	55 °C (131 °F)	T3A	T3A	—	T3B	T3C	T3C	—	T5	T2D	T2D	—	T3
		90 °C (194 °F)	65 °C (149 °F)	T3	T3A	—	T3A	T3C	T3B	—	T4A	T2C	T2C	—	T3
100	HPS	90 °C (194 °F)	40 °C (104 °F)	T2D	T2D	T3	T3	—	T3A(EF)	—	—	T2B(EF)	T2B(EF)	—	—
		90 °C (194 °F)	40 °C (104 °F)	—	—	—	—	T3B	—	T4	T4	T2B	—	T2C	T2C
		90 °C (194 °F)	55 °C (131 °F)	T2D	T2D	T2D	T2D	—	—	T4	T4	—	—	T2B	T2B
		90 °C (194 °F)	65 °C (149 °F)	T2D	T2D	T2D	T2D	—	—	—	—	—	—	—	—
150	HPS	90 °C (194 °F)	40 °C (104 °F)	T2B	T2B	—	T2C	—	—	—	T3C	T2	—	—	T2B
		90 °C (194 °F)	40 °C (104 °F)	—	—	—	—	T3(EF)	—	—	—	—	—	—	—
		90 °C (194 °F)	55 °C (131 °F)	T2B	T2A	—	T2B	—	—	—	—	—	—	—	—
175	PSMH	90 °C (194 °F)	40 °C (104 °F)	T2B	T2B	—	T2B	—	—	—	T3C	—	—	—	T2B
		90 °C (194 °F)	55 °C (131 °F)	T2A	T2A	—	T2B	—	—	—	T3C	—	—	—	T2A
		125 °C (257 °F)	65 °C (149 °F)	T2A	T2	—	T2B	—	—	—	—	—	—	—	—
250	PSMH ②	90 °C (194 °F)	40 °C (104 °F)	T2	T2	—	T2	—	—	—	—	—	—	—	—
		90 °C (194 °F)	55 °C (131 °F)	T2	T2	—	T2	—	—	—	—	—	—	—	—

“T” Numbers Represent the Maximum Lamp Temperature for Class I, Division 2 Locations and Maximum Surface Temperature Under Dust Blanket for Class II, Division 1 Locations.

“T” #	T1	350	325	T2	T2A	T2B	T2C	T2D	T3	T3A	T3B	T3C	T4	T4A	T5	T6
Temp. Range °C (°F)	+351 to +450 (+664 to +842)	+326 to +350 (+619 to +662)	+301 to +325 (+574 to +617)	+281 to +300 (+538 to +572)	+261 to +280 (+502 to +536)	+231 to +260 (+500)	+216 to +230 (+448 to +446)	+201 to +215 (+394 to +419)	+181 to +200 (+358 to +392)	+166 to +180 (+331 to +356)	+161 to +165 (+322 to +329)	+136 to +160 (+277 to +320)	+121 to +135 (+250 to +275)	+101 to +120 (+214 to +248)	+86 to +100 (+187 to +212)	+85 (+185)

① All Class II T Numbers are E, F, G unless otherwise indicated.

② 250 Watt PSHM fixture is not UL/CSA certified, Appleton Grp, LLC self certifies this product.

# Mercmaster™ III HID 50-250 Watt Luminaires

High Pressure Sodium and Pulse Start Metal Halide

Enclosed and Gasketed Fixtures — Hazardous Locations

NEC/CEC: Class I, Division 2, Groups A, B, C, D | Class I, Zone 2, AEx nA nR IIC (Z2) | Class I, Zone 2, AEx/Ex 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

## Temperature Codes | Class I, Zone 2; AEx nA nR IIC (Z2); AEx/Ex nR IIC (ZB); IP66; NEMA 4X

Lamp Watts	Lamp Type	Supply Wire Min. Temp. °C (°F)	Ambient Temp. °C (°F)	Class I, Zone 2 AEx nA nR IIC			Class I, Zone 2 AEx/Ex nR IIC		
				Globe	Globe & Reflector	Refractor Only	Globe	Globe & Reflector	Refractor Only
50	HPS	90 °C (194 °F)	40 °C (104 °F)	T4	T3	T5	T4	T3	T5
		90 °C (194 °F)	55 °C (131 °F)	T3	T3	T4	T3	T3	T4
		90 °C (194 °F)	65 °C (149 °F)	T3	T3	T4	T3	T3	T4
70	HPS	90 °C (194 °F)	40 °C (104 °F)	T4	T4	T4	T5	T5	T5
		90 °C (194 °F)	55 °C (131 °F)	T4	T4	T3	T4	T4	T5
		90 °C (194 °F)	65 °C (149 °F)	T3	T3	T3	T4	T4	T4
100	HPS	90 °C (194 °F)	40 °C (104 °F)	T4	T4	T4	T4	T4	T5
		90 °C (194 °F)	55 °C (131 °F)	T4	T3	T3	T4	T4	T4
		90 °C (194 °F)	65 °C (149 °F)	T3	T3	T3	T4	T3	T4
150	HPS	90 °C (194 °F)	40 °C (104 °F)	T3	T3	T3	T4	T4	T4
		90 °C (194 °F)	55 °C (131 °F)	T3	T3	T3	T4	T3	T4
		105 °C (221 °F)	65 °C (149 °F)	T3	T3	T3	T3	T3	T4
175	PSMH	90 °C (194 °F)	40 °C (104 °F)	T3	T3	T4	T3	T3	T4
		90 °C (194 °F)	55 °C (131 °F)	T3	T3	T3	T3	T3	T4
		105 °C (221 °F)	65 °C (149 °F)	T3	T3	T3	T3	T3	T3
250	PSMH ②	90 °C (194 °F)	40 °C (104 °F)	T3	T3	T3	T3	T3	T3
		90 °C (194 °F)	55 °C (131 °F)	T3	T3	T3	T3	T3	T3

**“T” Numbers represent the maximum surface temperature for luminaires with AEx nA nR and AEx nR rating:**

“T” number is established by separately determining the maximum temperature of the globe surface and ballast compartment. The hotter of the two is taken to determine the “T” number for the overall fixture.

“T” Number	T1	T2	T3	T4	T5	T6
Temp. Range (°C)	301-450	201-300	136-200	101-135	86-100	85
Temp. Range (°F)	547-842	394-572	277-392	214-275	187-212	185

② 250 Watt PSHM fixture is not UL/CSA certified, Appleton Grp, LLC self certifies this product.

# Mercmaster™ III HID 50-250 Watt Luminaires

High Pressure Sodium and Pulse Start Metal Halide

Enclosed and Gasketed Fixtures — Hazardous Locations

NEC/CEC: Class I, Division 2, Groups A, B, C, D | Class I, Zone 2, AEx nA nR IIC (Z2) | Class I, Zone 2, AEx/Ex 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

HID Luminaires | Area / Task | Hazardous Location | NEC / CEC

Fixture Selection Guide Indicates atmosphere for which fixture is suitable.

① Denotes fixture with Globe Only.    ② Denotes fixture with Globe and Reflector.    ③ Denotes fixture with 8" Refractor / G3 Globe

Class I, Division 2 Chemical	Ignition °C (°F) ④	Minimum Fixture "T" Number for Chemical	HPS (Watts)				PSMH (Watts)	
			50	70	100	150	175	250
<b>Group A Atmospheres</b>								
acetylene	305 °C (581 °F)	T2	①②③	①②③	①②③	①②③	①②③	①②
<b>Group B Atmospheres</b>								
acrolein (inhibited)	220 °C (428 °F)	T2D	①②③	①②③	①②③			①②
arsine	NA ⑤							
butadiene	420 °C (788 °F)	350	①②③	①②③	①②③	①②③	①②③	①②
ethylene oxide	429 °C (804 °F)	350	①②③	①②③	①②③	①②③	①②③	①②
hydrogen	500 °C (932 °F)	T1	①②③	①②③	①②③	①②③	①②③	①②
propylene oxide	449 °C (840 °F)	350	①②③	①②③	①②③	①②③	①②③	①②
propyl nitrate	175 °C (347 °F)	T3B	①②③	①②③				
<b>Group C Atmospheres</b>								
acetaldehyde	175 °C (347 °F)	T3B	①②③	①③				
allyl alcohol	378 °C (712 °F)	350	①②③	①②③	①②③	①②③	①②③	①②
n-butylaldehyde	218 °C (424 °F)	T2D	①②③	①②③	①②③			①②
carbon monoxide	609 °C (1128 °F)	T1	①②③	①②③	①②③	①②③	①②③	①②
crotonaldehyde	232 °C (450 °F)	T2C	①②③	①②③	①②③	③		①②
cyclopropane	498 °C (928 °F)	T1	①②③	①②③	①②③	①②③	①②③	①②
diethyl ether (ethyl ether)	160 °C (320 °F)	T3C	①③	③				
diethylamine	312 °C (594 °F)	T2	①②③	①②③	①②③	①②③	①②③	①②
ethylene	450 °C (842 °F)	T1	①②③	①②③	①②③	①②③	①②③	①②
ethylenimine	320 °C (608 °F)	T2	①②③	①②③	①②③	①②③	①②③	①②
ethyl mercaptan	300 °C (572 °F)	T2	①②③	①②③	①②③	①②③	①②③	①②
ethyl sulfide	NA ⑤							
hydrogen cyanide	538 °C (1000 °F)	T1	①②③	①②③	①②③	①②③	①②③	①②
hydrogen sulfide	260 °C (500 °F)	T2B	①②③	①②③	①②③	①②③	①②③	①②
morpholine	310 °C (590 °F)	T2	①②③	①②③	①②③	①②③	①②③	①②
2-nitropropane	428 °C (802 °F)	350	①②③	①②③	①②③	①②③	①②③	①②
tetrahydrofuran	321 °C (610 °F)	T2	①②③	①②③	①②③	①②③	①②③	①②
unsymmetrical dimethyl hydrazine	249 °C (480 °F)	T2C	①②③	①②③	①②③	③		①②
<b>Group D Atmospheres</b>								
acetic acid (glacial)	464 °C (867 °F)	T1	①②③	①②③	①②③	①②③	①②③	①②
acetone	465 °C (869 °F)	T1	①②③	①②③	①②③	①②③	①②③	①②
acrylonitrile	481 °C (898 °F)	T1	①②③	①②③	①②③	①②③	①②③	①②
ammonia	651 °C (1204 °F)	T1	①②③	①②③	①②③	①②③	①②③	①②
benzene	498 °C (928 °F)	T1	①②③	①②③	①②③	①②③	①②③	①②
butane	287 °C (549 °F)	T2A	①②③	①②③	①②③	①②③	①②③	①②
1-butanol (butyl alcohol)	343 °C (649 °F)	325	①②③	①②③	①②③	①②③	①②③	①②

This classified area suitability chart is based on NEC requirements and Appleton and UL testing. However, the ultimate decision on suitability of these fixtures for classified areas depends solely on the judgement of the owner, insurance company, inspector and/or authority having jurisdiction.

④ Ignition temperatures shown should be regarded as approximations only. Per NFPA Bulletin 325M, ignition temperatures may vary according to such factors as vapor/air mixture, size and space where ignition may occur, rate and duration of heating, oxygen concentration and other materials present.

⑤ Not Available.

# Mercmaster™ III HID 50-250 Watt Luminaires

High Pressure Sodium and Pulse Start Metal Halide

Enclosed and Gasketed Fixtures — Hazardous Locations

NEC/CEC: Class I, Division 2, Groups A, B, C, D | Class I, Zone 2, AEx nA nR IIC (Z2) | Class I, Zone 2, AEx/Ex 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

## Fixture Selection Guide Indicates atmosphere for which fixture is suitable.

① Denotes fixture with Globe Only. ② Denotes fixture with Globe and Reflector. ③ Denotes fixture with 8" Refractor / G3 Globe

Class I, Division 2 Chemical	Ignition °C (°F) ④	Minimum Fixture "T" Number for Chemical	HPS (Watts)				PSMH (Watts)	
			50	70	100	150	175	250
<b>Group D Atmospheres</b>								
2-butanol (secondary butyl alcohol)	405 °C (761 °F)	350	①②③	①②③	①②③	①②③	①②③	①②
n-butyl acetate	425 °C (797 °F)	350	①②③	①②③	①②③	①②③	①②③	①②
isobutyl acetate	421 °C (790 °F)	350	①②③	①②③	①②③	①②③	①②③	①②
sec-butyl alcohol	343 °C (649 °F)	325	①②③	①②③	①②③	①②③	①②③	①②
di-isobutylene	391 °C (736 °F)	350	①②③	①②③	①②③	①②③	①②③	①②
ethane	472 °C (882 °F)	T1	①②③	①②③	①②③	①②③	①②③	①②
ethanol (ethyl alcohol)	363 °C (685 °F)	350	①②③	①②③	①②③	①②③	①②③	①②
ethyl acetate	426 °C (799 °F)	350	①②③	①②③	①②③	①②③	①②③	①②
ethylene diamine (anhydrous)	385 °C (725 °F)	350	①②③	①②③	①②③	①②③	①②③	①②
ethylene dichloride	413 °C (775 °F)	350	①②③	①②③	①②③	①②③	①②③	①②
gasoline (56-60 octane)	280 °C (536 °F)	T2A	①②③	①②③	①②③	①②③	①②③	①②
heptanes	204 °C (399 °F)	T3	①②③	①②③	①②③			
hexanes	223 °C (433 °F)	T2D	①②③	①②③	①②③			
isoprene	395 °C (743 °F)	350	①②③	①②③	①②③	①②③	①②③	①②
isopropyl ether	443 °C (829 °F)	350	①②③	①②③	①②③	①②③	①②③	①②
mesityl oxide	344 °C (651 °F)	325	①②③	①②③	①②③	①②③	①②③	①②
methane (natural gas)	537 °C (999 °F)	T1	①②③	①②③	①②③	①②③	①②③	①②
methanol (methyl alcohol)	385 °C (725 °F)	350	①②③	①②③	①②③	①②③	①②③	①②
3-methyl-1-butanol (isoamyl alcohol)	350 °C (662 °F)	350	①②③	①②③	①②③	①②③	①②③	①②
methyl ethyl ketone	404 °C (759 °F)	350	①②③	①②③	①②③	①②③	①②③	①②
methyl isobutyl ketone	448 °C (838 °F)	350	①②③	①②③	①②③	①②③	①②③	①②
2-methyl-1-propanol (isobutyl alcohol)	415 °C (779 °F)	350	①②③	①②③	①②③	①②③	①②③	①②
2-methyl-1-propanol (tertiary butyl alcohol)	478 °C (892 °F)	T1	①②③	①②③	①②③	①②③	①②③	①②
petroleum naphtha ⑥	288 °C (550 °F)	T2A	①②③	①②③	①②③	①②③	①②③	①②
pyridine	482 °C (900 °F)	T1	①②③	①②③	①②③	①②③	①②③	①②
octanes	206 °C (403 °F)	T3	①②③	①②③	①②③			
pentanes	260 °C (500 °F)	T2B	①②③	①②③	①②③	①②③	①②③	①②
1-pentanol (amyl alcohol)	300 °C (572 °F)	T2	①②③	①②③	①②③	①②③	①②③	①②
propane	432 °C (810 °F)	350	①②③	①②③	①②③	①②③	①②③	①②
1-propanol (propyl alcohol)	412 °C (774 °F)	350	①②③	①②③	①②③	①②③	①②③	①②
2-propanol (isopropyl alcohol)	399 °C (750 °F)	350	①②③	①②③	①②③	①②③	①②③	①②
propylene	455 °C (851 °F)	T1	①②③	①②③	①②③	①②③	①②③	①②
styrene	490 °C (914 °F)	T1	①②③	①②③	①②③	①②③	①②③	①②
toluene	480 °C (896 °F)	T1	①②③	①②③	①②③	①②③	①②③	①②
vinyl acetate	402 °C (756 °F)	350	①②③	①②③	①②③	①②③	①②③	①②
vinyl chloride	472 °C (882 °F)	T1	①②③	①②③	①②③	①②③	①②③	①②
xylenes (o-xylene)	463 °C (865 °F)	T1	①②③	①②③	①②③	①②③	①②③	①②

This classified area suitability chart is based on NEC requirements and Appleton and UL testing. However, the ultimate decision on suitability of these fixtures for classified areas depends solely on the judgement of the owner, insurance company, inspector and/or authority having jurisdiction.

④ Ignition temperatures shown should be regarded as approximations only. Per NFPA Bulletin 325M, ignition temperatures may vary according to such factors as vapor/air mixture, size and space where ignition may occur, rate and duration of heating, oxygen concentration and other materials present.

⑥ A saturated hydrocarbon mixture. Also known by synonyms benzene, ligroin, petroleum, ether and naphtha.

# Mercmaster™ III HID 50-250 Watt Luminaires

High Pressure Sodium and Pulse Start Metal Halide

End and Gasketed Fixtures — Hazardous Locations

NEC/CEC: Class I, Division 2, Groups A, B, C, D | Class I, Zone 2, AEx nA nR IIC (Z2) | Class I, Zone 2, AEx/Ex 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

HID Luminaires | Area / Task | Hazardous Location | NEC / CEC

Fixture Selection Guide Indicates atmosphere for which fixture is suitable.

② Denotes fixture with Globe and Reflector. ③ Denotes fixture with 8" Refractor / G3 Globe

Class I, Division 2 Chemical	Ignition °C (°F) ④	Minimum Fixture "T" Number for Chemical	HPS (Watts)				PSMH (Watts)	
			50	70	100	150	175	250
<b>Group IIC</b>								
acetylene	305 °C (581 °F)	T2	②③	②③	②③	②③	②③	②③
acetylene	300 °C (572 °F)	T2	②③	②③	②③	②③	②③	②③
hydrogen	500 °C (932 °F)	T1	②③	②③	②③	②③	②③	②③
<b>Group IIB</b>								
ethylene	490 °C (914 °F)	T1	②③	②③	②③	②③	②③	②③
butadiene 1.3	425 °C (797 °F)	T2	②③	②③	②③	②③	②③	②③
carbon monoxide coke oven gas	560 °C (1040 °F)	T1	②③	②③	②③	②③	②③	②③
diethyl ether (ethyl ether)	160 °C (320 °F)	T4	②③	②③	②③	②③		
ethylene	450 °C (842 °F)	T1	②③	②③	②③	②③	②③	②③
ethylenimine ethylene oxide	425 °C (797 °F)	T2	②③	②③	②③	②③	②③	②③
<b>Group IIA</b>								
acetone	465 °C (869 °F)	T1	②③	②③	②③	②③	②③	②③
amyl acetate	375 °C (707 °F)	T2	②③	②③	②③	②③	②③	②③
ammonia	651 °C (1204 °F)	T1	②③	②③	②③	②③	②③	②③
benzene	498 °C (928 °F)	T1	②③	②③	②③	②③	②③	②③
butane	287 °C (549 °F)	T3	②③	②③	②③	②③	②③	
1-butanol (butyl alcohol)	343 °C (649 °F)	T2	②③	②③	②③	②③	②③	②③
n-butyl acetate cyclohexane	260 °C (500 °F)	T3	②③	②③	②③	②③	②③	
ethyl methyl ketone	515 °C (959 °F)	T1	②③	②③	②③	②③	②③	②③
ethanol (ethyl alcohol)	363 °C (685 °F)	T2	②③	②③	②③	②③	②③	②③
ethyl acetate	426 °C (799 °F)	T1	②③	②③	②③	②③	②③	②③
heptanes	204 °C (399 °F)	T3	②③	②③	②③	②③	②③	
hexanes	223 °C (433 °F)	T3	②③	②③	②③	②③	②③	
isoprene isobutanol	430 °C (806 °F)	T2	②③	②③	②③	②③	②③	②③
mesityl oxide methyl acetate	500 °C (932 °F)	T1	②③	②③	②③	②③	②③	②③
methanol (methyl alcohol)	385 °C (725 °F)	T2	②③	②③	②③	②③	②③	②③
n-propyl acetate	500 °C (932 °F)	T1	②③	②③	②③	②③	②③	②③
n-butyl acetate	420 °C (788 °F)	T2	②③	②③	②③	②③	②③	②③
pentanes	260 °C (500 °F)	T3	②③	②③	②③	②③	②③	
propane	432 °C (810 °F)	T2	②③	②③	②③	②③	②③	②③
xylenes (o-xylene)	463 °C (865 °F)	T1	②③	②③	②③	②③	②③	②③

This classified area suitability chart is based on NEC requirements and Appleton and UL testing. However, the ultimate decision on suitability of these fixtures for classified areas depends solely on the judgement of the owner, insurance company, inspector and/or authority having jurisdiction.

④ Ignition temperatures shown should be regarded as approximations only. Per NFPA Bulletin 325M, ignition temperatures may vary according to such factors as vapor/air mixture, size and space where ignition may occur, rate and duration of heating, oxygen concentration and other materials present.

# Mercmaster™ III HID 50-250 Watt Luminaires

High Pressure Sodium and Pulse Start Metal Halide

Enclosed and Gasketed Fixtures — Hazardous Locations

NEC/CEC: Class I, Division 2, Groups A, B, C, D | Class I, Zone 2, AEx nA nR IIC (Z2) | Class I, Zone 2, AEx/Ex 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

Fuse Kit for Field Installation				
Lamp Watts	Volts	Fuse Quantity Required	Catalog Number HPS	Catalog Number PSMH
50	120	1	F5	—
	208	2	F3	—
	240	2	F3	—
	277	1	F2	—
70	120	1	F5	—
	208	2	F3	—
	240	2	F3	—
	277	1	F2	—
	480	2	F2	—
100	120	1	F8	—
	208	2	F5	—
	240	2	F5	—
	277	1	F3	—
	480	2	F3	—
150	120	1	F10	—
	208	2	F5	—
	240	2	F5	—
	277	1	F5	—
	480	2	F3	—
175	120	1	—	F5
	208	2	—	F3
	240	2	—	F3
	277	1	—	F2
	480	2	—	F3
250	120	1	—	F10
	208	2	—	F6
	240	2	—	F6
	277	1	—	F5

# Mercmaster™ III HID 50-250 Watt Luminaires

High Pressure Sodium and Pulse Start Metal Halide  
Enclosed and Gasketed Fixtures — Hazardous Locations

NEC/CEC: Class I, Division 2, Groups A, B, C, D | Class I, Zone 2, AEx nA nR IIC (Z2) | Class I, Zone 2, AEx/Ex 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

## PRE-PAK Fixtures ①

These pre-packaged fixture component combinations are delivered fully assembled and packed in a single carton. They are available with or without lamp, and with choice of globe or NEMA Type I, III or V refractors – all with or without guards. PRE-PAK units simplify ordering, stocking and shipping, and result in savings on job-site assembly and installation time and costs.

**Catalog numbers do not include mounting hood or reflector, must be ordered separately. Hood and Reflector will be packaged separately.**



Lamp Type and Watts	Ballast Assembly with Globe Only	Ballast Assembly with Globe and Guard	Ballast Assembly with G3 Globe Only	Ballast Assembly with Refractor Only	Ballast Assembly with Refractor and Guard
175 W PSMH	KPBU175P-MT	KPBU175PG-MT	—	KPBU175PJ1-MT	KPBU175PJ1G-MT
70 W HPS	KPBU70L-MT	KPBU70LG-MT	—	KPBU70LJ1-MT	KPBU70LJ1G-MT
100 W HPS	KPBU100L-MT	KPBU100LG-MT	KPBUG3100L-MT	KPBU100LJ1-MT	KPBU100LJ1G-MT
150 W HPS	KPBU150L-MT	KPBU150LG-MT	—	KPBU150LJ1-MT	KPBU150LJ1G-MT

## Catalog Number for Ballast Body and Globe

High Pressure Sodium | High Power Factor (Min. P.F. 90%)  
Pulse Start Metal Halide | Super Constant Wattage Autotransformer (Min. P.F. 90%)



Lamp Type	Lamp Watts	Catalog Number ③		Voltage Suffixes									
		For Globe	For G3 Globe ② / Refractor	MT	48	125	225	226	236	245	246	GP	GK
HPS	50	KPB50L	KPBR50L	—	—	—	X	X	—	X	—	—	X
HPS	70	KPB70L	KPBR70L	X	—	X	—	X	X	X	X	X	—
HPS	100	KPB100L	KPBR100L	X	—	—	—	X	X	—	X	—	—
HPS	150	KPB150L	KPBR150L	X	X	X	X	X	X	X	X	X	—
PSMH	175	KPB175P	KPBR175P	X	X	—	—	—	—	—	—	—	—
PSMH ④	250	KPBG250P	KPBR250P	X	—	—	—	—	—	—	—	—	—

Voltages:  
**MT** - 120/208/240/277 V 60 Hz      **225** - 225 V 50 Hz      **246** - 240 V 60 Hz  
**5MT** - 120/208/240/277/480 V 60 Hz      **226** - 220 V 60 Hz      **GP** - 120/200-240 V 50 Hz  
**48** - 480 V 60 Hz      **236** - 230 V 60 Hz      **GK** - 220/240 V 50 Hz  
**125** - 120 V 50 Hz      **245** - 240 V 50 Hz      **GC** - 230 V 50 Hz

① All catalog numbers are fixtures without lamp. To order fixture complete with appropriate installed lamp, add suffix **L** to catalog number. All PRE-PAK fixtures include multi-tap ballast for operation on 120 V, 208 V, 240 V or 277 V lines. Fixture component combinations listed are furnished completely assembled in a single carton.

② For HPS version fixtures only.

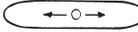
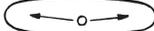
③ Add **-Z2** suffix for factory sealed non-sparking/restricted breathing protection (AEx nA nR). The **-Z2** suffix (AEx nA nR) is available for use with MT, 48 and 246 voltage suffixes ONLY. Add **-ZB** suffix for restricted breathing protection (AEx/Ex nR).

④ MT ballast bodies are not UL Listed for 250W PSMH version fixtures only.

# Mercmaster™ III HID 50-250 Watt Luminaires

High Pressure Sodium and Pulse Start Metal Halide  
Enclosed and Gasketed Fixtures — Hazardous Locations

NEC/CEC: Class I, Division 2, Groups A, B, C, D | Class I, Zone 2, AEx nA nR IIC (Z2) | Class I, Zone 2, AEx/Ex 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

	Notes	Description	Catalog Number
<b>Prismatic Glass Globes — Heat-Resistant</b>			
 Clear Glass Globe	For use in areas where fixture is subject to extreme thermal shock Heat-Resistant	Clear	VPGL-2HR
		Amber	VPGL-2AM
		Blue	VPGL-2BL
		Green	VPGL-2GR
		Red	VPGL-2RE
 Clear Glass Globe		Clear	VPGL3HR
<b>Tuff-Skin® Coated Prismatic Glass Globes — For Non-Classified Areas</b>			
 Clear Glass Globe	For use in areas where fixture is subject to extreme thermal shock Heat-Resistant	Clear	VPGL-2HRT
<b>Polycarbonate Globes — Impact-Resistant ①</b>			
 Clear Polycarbonate Globe	Use 100 watt lamp max. Do not use in ambients exceeding 25 °C (77 °F).	Clear	VPGL-2PL
		Amber	VPGL-2AMPL
		Green	VPGL-2GRPL
		Red	VPGL-2REPL
	<b>Light Distribution</b>	<b>IES/NEMA Distribution Curves</b>	<b>Catalog Number</b>
<b>Closed Prismatic Glass Refractors — Heat-Resistant</b>			
 Clear Glass Refractor	NEMA Type I		LPG-R1
<b>Closed Polymeric Refractors</b>			
For use with PSMH lamps, 100 W max. +40 °C (+104 °F) max. ambient temperature. Suitable for Class II, Division 1 and 2, Groups F, G; NEMA 4X, UL 1598A Marine Type Electric Fixtures Outside Type (Salt Water)			
 Polymeric Refractor	NEMA Type II		LPRF-2CP
	NEMA Type III		LPRF-3CP
	NEMA Type IV		LPRF-4CP
	NEMA Type V		LPRF-5CP

① Polycarbonate globes are shatter-resistant – for use in processing plants, canneries, dairies, bakeries or anywhere broken glass would prove a hazard. Ideally suited for areas where vandalism, high replacement and high maintenance costs are a problem. Do not use in ambients exceeding +25 °C (+77 °F). For burning in vertical base-up positions only.

# Mercmaster™ III HID 50-250 Watt Luminaires

High Pressure Sodium and Pulse Start Metal Halide  
Enclosed and Gasketed Fixtures — Hazardous Locations

NEC/CEC: Class I, Division 2, Groups A, B, C, D | Class I, Zone 2, AEx nA nR IIC (Z2) | Class I, Zone 2, AEx/Ex 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

## Accessories and Replacement Parts

		Description	Catalog Number
<b>White Polyester Reflectors</b>			
 <p>Standard Dome</p>	 <p>30° Angle</p>	For Globe Fixtures	Standard Dome KR2-ST
		For Glass Refractor Fixtures ②	Deep Dome KR2-DD ①④ 30° Angle KR2-AN
		For Glass Refractor Fixtures ②	Standard Dome CMR-4ST Deep Dome CMR-4DD ①④ 30° Angle CMR-4AN
<b>Guards</b>			
 <p>Globe Guard</p>	 <p>Refractor Guard</p>	For Globe Fixtures	Globe Guard KGU2
		For Glass Refractor Fixtures	30° Angle Refractor Guard KRG2 ③
<b>Replacement Globe Gaskets — Silicone Rubber</b>			
		Globe Gasket	VPGL-GK
		Refractor Gasket	KRF-GK
<b>Retrofit Pendant Mounting Adapter</b>			
		Permits use of Mercmaster III pendant hood with 3/4" hub on existing V-51 mounting hood.	LPAD-1

① Dark Skies Compliant.

② Standard and deep dome reflectors may interfere with bottom conduit entry if used with KPST and KPWB mounting hoods.

③ Not for use with CMR-4ST or CMR-400, only CMR-4AN refractor.

④ Fixtures when used with Deep Dome Reflectors are NOT UL Listed.

# Mercmaster™ III HID 50-250 Watt Luminaires

High Pressure Sodium and Pulse Start Metal Halide  
Enclosed and Gasketed Fixtures — Hazardous Locations

NEC/CEC: Class I, Division 2, Groups A, B, C, D | Class I, Zone 2, AEx nA nR IIC (Z2) | Class I, Zone 2, AEx/Ex 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

Mounting Hoods			
	Hub Size	Weight in kg (lbs)	Catalog Number
<b>Pendant — One Hub, Rigid Mounting</b>			
	3/4" NPT	1.0 (2.3)	KPA-75
	1" NPT		KPA-100
<b>Pendant — Flexible — One Hub, Rigid or Flexible Mounting</b>			
	3/4" NPT	1.1 (2.5)	KPAF-75
	1" NPT		KPAF-100
<b>Pendant Cone — One Hub, Rigid Mounting</b>			
	3/4" NPT	1.1 (2.5)	KPCH-75
	1" NPT		KPCH-100
<b>Ceiling — Five Hubs, Four Close-Up Plugs</b>			
	3/4" NPT	1.4 (3.0)	KPC-75
	1" NPT		KPC-100
<b>Wall — Five Hubs, Four Close-Up Plugs</b>			
	3/4" NPT	1.8 (4.0)	KPWB-75
	1" NPT		KPWB-100
<b>25° Stanchion — One Hub</b>			
	1-1/4" NPT	1.5 (3.3)	KPS-125
	1-1/2" NPT		KPS-150
<b>90° Stanchion — One Hub</b>			
	1-1/4" NPT	1.7 (3.8)	KPST-125
	1-1/2" NPT		KPST-150

## Luminaire Specifications ①

Watts	Globe Housing Ballast Weight kg (lb)		Refractor Housing Ballast Weight kg (lb)		Mounting Hoods	Weight kg (lb)	Refractors, Globes, Guards and Reflectors	Weight kg (lb)
	HPS	PSMH	HPS	PSMH				
50	5.7 (12.6)	—	3.5 (7.72)	—	Pendant	1.0 (2.20)	8" Glass Refractor	2.4 (5.29)
70	6.8 (15.0)	—	7.0 (15.4)	—	Pendant Cone	1.1 (2.43)	Glass Globe	1.7 (3.75)
100	7.3 (16.0)	—	7.5 (16.5)	—	Ceiling	1.4 (3.09)	Refractor Guard	0.5 (1.10)
150	—	—	7.9 (17.4)	—	Wall	1.8 (3.97)	Globe Guard	0.5 (1.10)
175	—	7.8 (17.2)	—	8.1 (17.9)	25° Stanchion	1.5 (3.31)	Standard Dome	1.1 (2.43)
250	—	8.4 (18.5)	—	8.4 (18.5)	90° Stanchion	1.7 (3.75)	Deep Dome ②	2.3 (5.07)
							30° Angle	1.1 (2.43)

① Weights are approximate.

② Fixtures when used with Deep Dome Reflectors are NOT UL Listed.

# PCD2 Series Factory Sealed Hazardous Location Photocontrol

For use in Class I, Division 2, Groups A, B, C, D locations

Maintains Class I, Division 2 rating for Mercmaster III – Low Profile, Mercmaster III, and Mercmaster III – 400 Series Luminaires, Mercmaster LED

NEC/CEC: Class I, Division 2, Groups A, B, C, D | NEMA 4X

## Applications

- Encapsulated photocontrol provides automatic dusk-to-dawn lighting control in Class I, Division 2 locations.
- Typical applications include walkways, security areas and any other outdoor lighting application.
- For use with Mercmaster III – Low Profile, Mercmaster III, and Mercmaster III – 400 Series Luminaires.
- For remote mounting in FS Boxes.

- Available for 120, 208, 240, or 277 volts.
- 50-400 W HID, incandescent or fluorescent, 50/60 Hz.
- 1000 V.A. Voltage/Ampere
- Minimum time delay: 15 seconds to eliminate nuisance tripping.
- Provided with (3) 18 AWG stranded leads 152.4 mm (6.00 in) in length.
- Will fit through standard 1/2" knockout.
- Supplied with locknut and gasket.

## Features

- Factory sealed design eliminates the need for an explosionproof enclosure.
- Can be easily installed in the field.
- Solid state design for performance and reliability.

## Materials

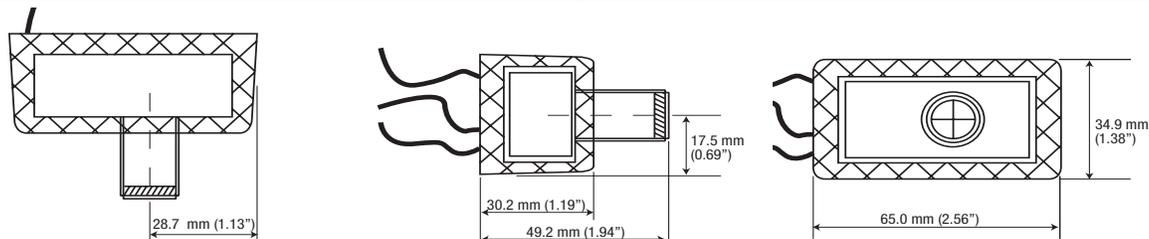
- Encapsulated with epoxy sealing compound
- FS: aluminum

## NEC/CEC Certifications and Compliances

- UL Standard: 1604 – Hazardous (Classified) Locations
- cULus Recognized

	Voltage Range	Max VA	Max Current Amps	Suffix Designation / Catalog Number
<b>Factory-Installed Photocontrol - Not for ceiling or pendant cone.</b> <i>Add to fixture catalog after voltage, i.e.: KPWBL1075MTH1.</i>				
 Mercmaster III wall mounting hood with photocontrol installed shown	120 V, 50/60 Hz	1000	—	H1
	208 V, 50/60 Hz	1000	—	H2
	240 V, 50/60 Hz	1000	—	H3
	277 V, 50/60 Hz	1000	—	H4
<b>Photocontrol for Field Installation</b>				
	120 V, 50/60 Hz	1000	8.3 Amp	PC120D2
	208 V, 50/60 Hz	1000	4.8 Amp	
	240 V, 50/60 Hz	1000	4.2 Amp	PC247D2
	277 V, 50/60 Hz	1000	3.6 Amp	
<b>Photocontrol in FS Cover for Use with FS/FD Box</b> <i>Photocontrol assembly supplied with two stainless steel screws and one neoprene gasket. For additional neoprene gaskets, order catalog numbers FS-GKR-1N.</i>				
	120 V, 50/60 Hz	1000	8.3 Amp	FSKA-PC120D2
	208, 50/60 Hz	1000	4.8 Amp	
	240 V, 50/60 Hz	1000	4.2 Amp	FSKA-PC247D2
	277 V, 50/60 Hz	1000	3.6 Amp	

## Dimensions in Millimeters (Inches)



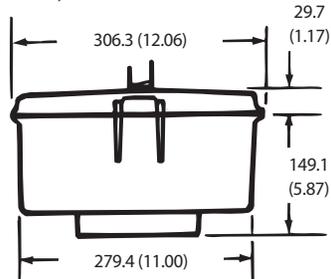
# Mercmaster™ III HID 50-250 Watt Luminaires

High Pressure Sodium and Pulse Start Metal Halide  
Enclosed and Gasketed Fixtures — Hazardous Locations

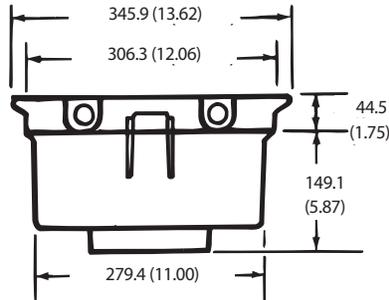
NEC/CEC: Class I, Division 2, Groups A, B, C, D | Class I, Zone 2, AEx nA nR IIC (Z2) | Class I, Zone 2, AEx/Ex nR IIC (ZB) | Class II, Division 1 and 2, Groups E, F, G | Class III | Simultaneous Exposure (Class I, Division 2/Class II, Division 1) | Fixtures Outside Type (Salt Water | Type 4X | IP66

## Dimensions in Millimeters (Inches)

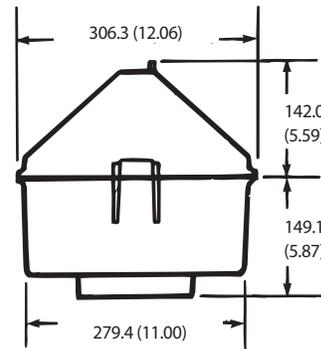
**Pendant (Rigid or Flex)**



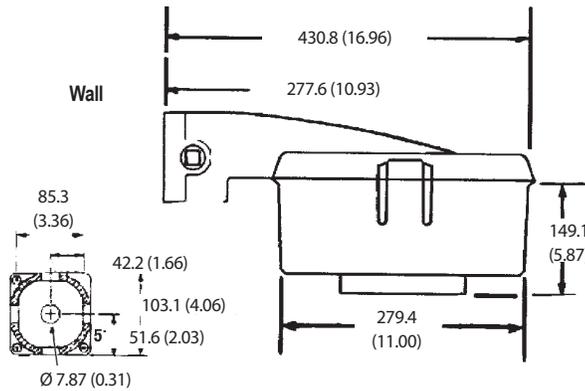
**Ceiling**



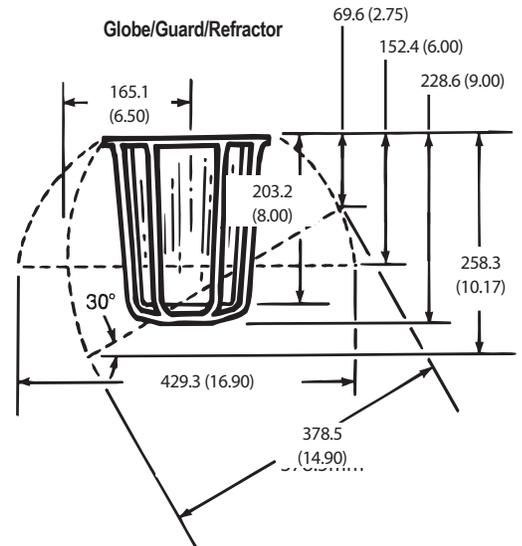
**Cone**



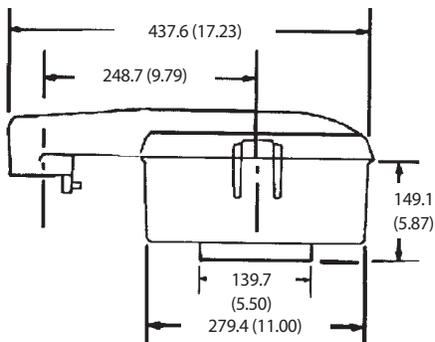
**Wall**



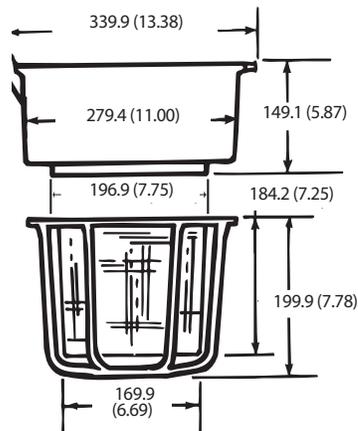
**Globe/Guard/Reflector**



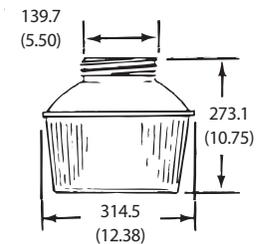
**90° Straight Stanchion**



**8" Globe/Reflector Body/Guard**



**Polymeric Refractor**



**25° Angle Stanchion**

