

# Mercmaster™ III Low Profile Compact Fluorescent Luminaires

## Enclosed and Gasketed. For Hazardous and Wet Locations

Compact Fluorescent listed for simultaneous exposure to combustible dusts and flammable gases or vapors.

### NEC/CEC:

Class I, Division 2, Groups A, B, C, D  
Class I, Zone 2, AEx nA nR IIC (Z2)  
Class II, Division 1 and 2, Groups E, F, G  
Class III

### NEC/CEC:

Simultaneous Exposure (Class I, Division 2/  
Class II, Division 1)  
Fixtures Outside Type (Salt Water)  
Type 4X  
IP66

### CEC:

Class I, Zone 2, Ex nR IIC (Z)

## Applications

- Enclosed and gasketed fixtures suitable for use in marine and wet locations, and in 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. The method of protection for the Zone 2 Mercmaster is AEx nA nR – Restricted Breathing/ Nonsparking.
- For use in areas of low clearance, low ceiling heights or where fixture weights must be minimized.
- Suited for use in non-hazardous locations where severe weather conditions, excessive moisture, dirt, dust or corrosive atmospheres are present.
- Typical applications include oil refineries, pulp and paper mills, chemical plants, food-processing areas, inspection facilities, foundries, power plants, storage areas, waste and sewage treatment, parking garages, and other areas where dust, water, dirt and rough usage are a problem.

## Features

- Energy-efficient, compact fluorescent light sources possess superior lamp efficiency.
- Fluorescent provides long lamp life, thereby reducing relamping costs.
- “Instant on” nature of this electronically ballasted fluorescent eliminates the possibility of an extended blackout due to a momentary power dip.
- High efficacies (up to 75 lumens per Watt) offer a desirable low-glare/instant-on alternative to low wattage HID sources.
- High output under widely varying conditions: Greater than 90% of rated lumens in ambient temperatures from -5 °C to +54 °C (+23 °F to +130 °F).
- Excellent color rendering (82 CRI) makes it the best choice for food processing and inspection facilities.
- A wide variety of lamp wattages: 26 W, 32 W, 42 W, 52 W, 64 W, 84 W.
- Electronic ballast permits low operating costs with power factor greater than 99%. Also allows flicker-free starting.
- Cold weather starting to a minimum temperature of -18 °C (0 °F).
- Fixtures are available for operation from an external 125 Vdc source.
- Compact, light-weight low profile design creates ease of installation and maintenance.
- Modular design, with multiple mounting hoods, optics and reflectors, permits a wide array of fixtures to meet installation and lighting needs.
- Body gaskets and optic gaskets are high temperature silicone O-Rings that provide superior sealing.
- Mounting hoods have a high hinge for added safety during installation and servicing.
- Choice of heat-resistant prismatic glass refractor (NEMA I, III or V), heat-resistant clear globes, color globes or polymeric refractors (NEMA II, III, IV or V). (Polymeric refractors are not listed for Zone 2.)



Pendant Mount Fixture  
with Glass Globe



Ceiling Mount Fixture with  
Prismatic Glass Refractor

## Standard Materials

- Standard dome or 30° angle reflectors: highly reflective fiberglass reinforced white polyester to provide strength, corrosion resistance and excellent photometrics
- Fixture housing, mounting hoods, and guards: die-cast, copperfree (4/10 of 1% max.) aluminum with epoxy finish for corrosion resistance
- 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
- Globes and glass refractors: heat-resistant prismatic glass
- Polymeric refractor: spun aluminum reflector and a lens made of an engineered thermoplastic

## Standard Finishes

- Epoxy powder coat finish electrostatically applied for complete, uniform surface protection

## Options

- Fuse can be field installed. Kits include fuse block, wire connectors and screws for attachment to mounting hood.
  - Fixtures with fuses do not comply with UL 1598A for marine listing
  - Canadian Electrical Code does NOT allow fusing in hazardous locations
- Guards with gray epoxy painted to match fixtures, supplied with stainless steel screws. Add suffix **-G**.
- Reflectors are available as standard dome and 30° angle polyester. Order separately.

## NEC/CEC Certifications and Compliances

- UL Standard: UL 1598, UL 1598A, UL 844, UL 60079-0, UL 60079-15
- UL Listed: E10444
- CSA Standard: C22.2 No. 250, C22.2 No. 137, CAN E60079-0, CAN E60079-15
- CSA Certified: 025428

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## Illustrated Features



### Globe Chamber

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

### Epoxy Finish

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

### Photocell

Installs through knock-out in mounting hoods except cone and ceiling mount. Provides continuous on-off dusk-to-dawn control. Not for use in hazardous (classified) areas. Hazardous location rated photocells also available. See Accessories page.



### Stainless Steel Latch Assembly

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



### 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.

### Prismatic Glass Globes and Refractors

Heat-resistant globes and glass refractors and polymeric refractors thread directly into ballast housing and seal against a high temperature silicone rubber gasket. (Polymeric refractors are not listed for Zone 2 areas.)



### Ballast Assembly

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

### Hood/Ballast Gasket

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.



### Cooler Operating Cone Hood

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



### Fuses

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



### "Safety" High Hinge

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

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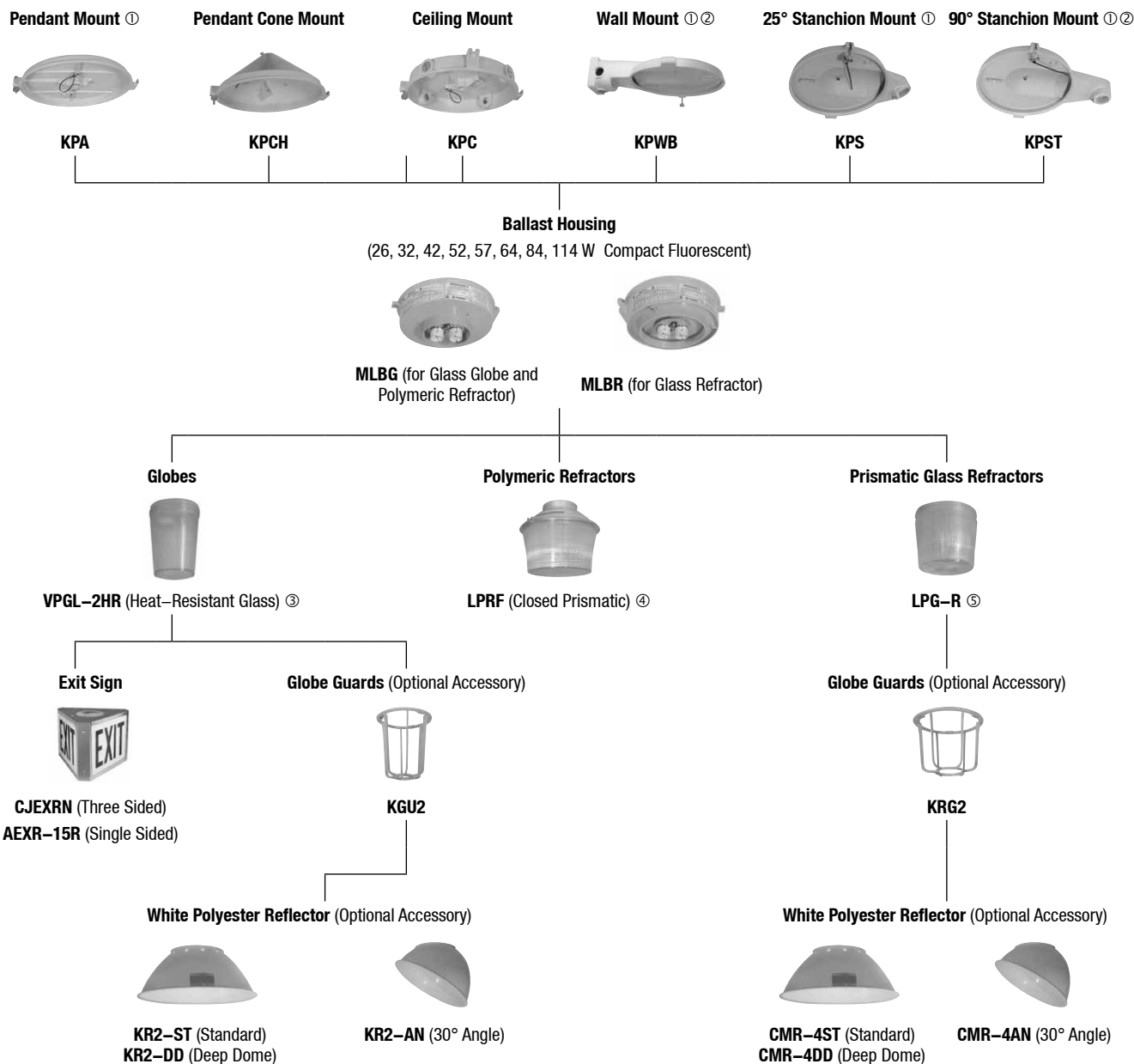
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### Mercmaster III Low Profile Compact Fluorescent Family Tree



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.

④ 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 PSMH Max.).

⑤ Available in NEMA Type I, III and V.

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Item	Description	Catalog Number ③
<b>White Polyester Reflectors</b>		
 Standard Dome	For Globe Fixtures	
	Standard Dome 30° Angle	KR2-ST KR2-AN
 30° Angle Dome	For Glass Refractor Fixtures ①	
	Standard Dome 30° Angle	CMR-4ST ② CMR-4AN ②
<b>Prismatic Glass Globes — Heat-Resistant ③</b>		
	Clear	VPGL-2HR
	Amber ④	VPGL-2AM
	Blue ④	VPGL-2BL
	Green ④	VPGL-2GR
	Red ④	VPGL-2RE
	Clear — 57/114 Watt ⑤	VPGL-4HR
<b>Closed Prismatic Glass Refractors — All Heat-Resistant ③</b>		
	NEMA Type I	LPG-R1
	NEMA Type III	LPG-R3
	NEMA Type V	LPG-R5
<b>Closed Prismatic Polymeric Refractors — Not Listed for Class I, Zone 2 Areas</b>		
	NEMA Type II	LPRF-2CP
	NEMA Type III	LPRF-3CP
	NEMA Type IV	LPRF-4CP
	NEMA Type V	LPRF-5CP
<b>Guards</b>		
 Globe Guard	Globe Guard	KGU2
	Glass Refractor Guard	KRG2
 Glass Refractor Guard		
 Globe Guard for 57 W Only	Globe Guard — 57/114 W ⑤	KPGU400

① Fixtures with refractors are not UL Listed when used with reflectors.

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

③ Silicone or Teflon coated globes are available. Contact your local sales representative.

④ Non hazardous rated globes for special applications.

⑤ Certified to meet the Canadian Electrical Code (CEC) only.