

MERCMASTER™ CONNECT LED LUMINAIRES

PLANTWEB INSIGHT™ CONNECTED LIGHTING APPLICATION — HAZARDOUS LOCATION

FEATURES

- Integrated Hazardous Location Rated WirelessHART® † Sensor Module:
 - Passive infrared Motion Sensing with field replaceable PIR Fresnel lens
 - Embedded illuminance sensor
 - Device health monitoring and alerts
 - Strengthens WirelessHART® † network with a line powered luminaire
- Adjustable LED Driver output:
 - User selectable maximum lumen output
 - Fully dimmable driver from 100% to 0%
- Commission within Emerson Plantweb insight's Connected Lighting Application:
 - Asset Management
 - Map Based Commissioning
 - Programmable central or standalone control modes
- Integrated 0-10V Dimming Controller for group lighting control of up to 10 dimmable luminaires.
 - Dimming connection located inside top hat
- Field provisioning with either Emerson AMS Device Manager or Emerson AMS TREX handheld
- Design is suited for mounting heights ranging from 2 m up to 12 m (7 ft up to 40 ft)
- Choice of optics for optimal light distribution in a variety of applications: Type I, Type III, Type V or Type V Wide
- Choice of color temperature (CCT): 5000K cool white (70 CRI min), 4500K mid-neutral (80 CRI min), 4000K neutral white (80 CRI min), 3500K mid-warm (80 CRI min), or 3000K warm white (80 CRI min)
- Customize to the application requirements with three different globe options: clear and diffused polycarbonate or clear glass even standard mounting hood designs allow for mounting in any location. Uses same mounting hoods as Mercmaster III
- Retrofit adapters for Crouse-Hinds™ ‡, Mercmaster II , and Killark ™ hoods available. See catalog pages for details
- Hinge has high lip for added safety during installation and servicing.

- Rugged housing with superior thermal design translates to long luminaire life
- Luminaire housing has wiring compartment with terminal block separate for easy wiring access
- Spring-loaded screw-type terminal block can accept UL/CSA 14 to 6 mm² (26-10 AWG) wire
- HART® Service Port connection inside top hat
- Heavy duty, high temperature silicone gaskets
- Photometric data and electronic drawings available upon request
- Standard NPT threads with M20 option
- Field replaceable globes, LED driver, and PIR Fresnel Lens

WARRANTY ◊

- 10 year standard warranty

TYPICAL APPLICATIONS

- Power plants
- Processing plants
- Chemical plants
- Oil refineries
- Waste and sewage treatment
- Hydrogen and Biofuels plants
- LNG (Liquid Natural Gas) plants
- Other areas where dust, water, dirt and rough usage are a problem

LUMINAIRE MATERIALS

- Mounting hoods and bodies: cast copperfree (4/10 of 1% max.) aluminum
- Sensor housing: polycarbonate
- PIR Fresnel Lens: HDPE
- Gaskets: silicone
- All hardware and catch assemblies: stainless steel
- Globe: polycarbonate or glass
- Globe guard and safety cable: stainless steel wire
- Mounting hoods and bodies: electrostatically applied gray epoxy powder coat finish

ACCESSORIES (PURCHASE SEPARATELY)

- Globe guard: MGU1
- Safety cable: LEDSC
- Drain: LEDDR3



MGC + Frosted Globe + Pendant Mount

MGC + Clear Globe + Pendant Mount

NEC/CEC/NOM LISTINGS ①

- Class I, Division 2, Groups A, B, C, D | Class II, Division 1, Groups E, F, G | Class III | Class I, Zone 2 IIC | Class II Zone 20 | Type 3R, 4, 4X | IP66 | Simultaneous Exposure | Suitable for Use in Wet Locations | Marine Outside Type (Salt Water)

ATEX/IECEx LISTINGS (L9, H6) ①

- Zones 2 – 21 and 22

NOTABLE LISTINGS ①

- American Bureau of Shipping (ABS) Certified
- DLC listed
- Wireless Spectrum Approvals

RELATED PRODUCTS

- Industrial Mercmaster Connect LED Luminaires
- Appleton Wireless Motion Sensor
- Emerson Plantweb insight Connected Lighting Application
- Emerson 1410S WirelessHART Gateway
- Emerson 1410D WirelessHART Gateway

① Refer to catalog pages for detailed certification information.

✦ Killark is a registered trademark of Hubbell Incorporated.

‡ Crouse-Hinds is a registered trademark of Cooper Industries, inc., a wholly owned subsidiary of the Eaton Corporation plc.

† HART and WirelessHART are registered trademarks of the FieldComm Group

◊ For warranty details go to www.appleton.emerson.com.

PRODUCT SPECIFICATIONS

Series * Lumen Output	MGC*L5	MGC*L9	MGC*H6
Nominal Wattage (W, @120 V)	46	75	145
Equivalencies (W, HID)	100 -150	250-350	400-600
Nominal Lumens ①	Up to 5500	Up to 9500	Up to 17,500
Efficacy (up to, lm/W) ①	130	149	137
Color Temperature (CCT) (K)	5000/4500/3500		
Color Rendering index (CRI)	≥ 70 CRI (5000K) ≥ 80 CRI (4500/3500)		
Voltage	120-277 Vac, 50/60 Hz; 125-300 Vdc		
Surge Protection	6 kA		
L70 Lifetime (hrs, reported)	76,000 hours		
Ambient Temperature ②	-40 °C to +65 °C (-40 °F to +149 °F)		
Temperature Code ②	T3C - T6		
Fixture Weight - kg (lbs)	11.1 (24.4)		13.6 (29.9)
Replaceable Parts	Drivers, Globes, PIR Fresnel Lens		

① Nominal lumens based on Type V optics, 5000K CCT with clear glass lens. Refer to catalog pages for detailed performance.

② Refer to catalog pages for detailed temperature tables/operating temperature based on lumen output/certification. High ambient max temperature may vary from +70 °C to +75 °C (+158 °F to +167 °F).

APPLETON™

For product information:
www.masteringled.com
 1.800.621.1506

EMERSON™

MERCMASTER™ CONNECT LED LUMINAIRES

PLANTWEB INSIGHT™ CONNECTED LIGHTING APPLICATION — HAZARDOUS LOCATION

Project Information	Specifications
Part Number: _____ Date: _____	
Project: _____	
Fixture Type: _____	

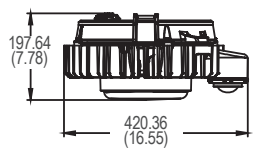
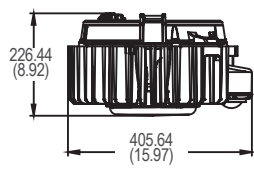
CATALOG NUMBERING GUIDE

Series Prefix	Mounting	Lumen (nominal)	Hub Size	Color Temperature	Globe Material	Light Distribution Pattern	Voltage	Options	PIR Fresnel Lens
MGC							BU		7

SERIES PREFIX: MGC Mercmaster Connect LED MOUNTING: A Pendant B Watertight Pendant ▲ C Ceiling ⊙ D Pendant Cone ⊙ R 90° Stanchion ⊙ S 25° Stanchion ⊙ T Trunnion K Killark™ ✦ Adapter Universal ▲ U Mercmaster II Adapter, Ceiling or Pendant ▲ V Mercmaster II Adapter, Stanchion or Wall ▲ W Wall X Crouse Hinds™ ✦ Adapter, Ceiling or Pendant ▲ Y Crouse Hinds™ ✦ Adapter, Stanchion or Wall ▲ Blank No mounting hood	LUMEN (NOMINAL): * L5 Up to 5,500 L9 Up to 9,500 H6 Up to 17,500 HUB SIZE: 2 3/4" NPT ⊙ 3 1" NPT ⊙ 4 1-1/4" NPT stanchion 5 1-1/2" NPT stanchion 6 Metric M20 Blank If using adapter or no hood COLOR TEMPERATURE (CCT): ‡ C Cool, 5000K N Neutral, 4000K W Warm, 3000K	GLOBE MATERIAL: P Clear Polycarbonate Globe D Diffused Polycarbonate Globe G Clear Glass Globe LIGHT DISTRIBUTION PATTERN: 1 Type I 3 Type III 5 Type V W Type V Wide VOLTAGE: BU 120-277 Vac, 50/60 Hz; 125-300 Vdc OPTIONALS: ⌘ F Fusing Blank No fusing	CONTROL OPTIONS: 7 Motion and Illuminance Sensor, WirelessHart™ ✦ interface PIR FRESNEL LENS: N Between 20 to 40 ft mounting height P Below 20 ft mounting height
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⊙ 3/4" NPT, 1" NPT and Metric M20 hub entries are not offered in this mounting option.
 ⊙ Only allowed for Type V and Type V Wide light distribution.
 ⊙ Fusing only permitted for NEC/CEC rating. Factory installed. Use of fuse voids Marine Outside Type (Salt Water) rating. Fusing is mounted in the driver housing.
 ‡ Other CCT options available upon request. Contact your local sales representative for more information.
 ▲ Adapters and watertight pendant hood only certified for NEC/CEC.
 ✦ Killark is a registered trademark of Hubbell incorporated.
 ✦ Crouse-Hinds is a registered trademark of Cooper industries, inc., a wholly owned subsidiary of the Eaton Corporation plc.
 ✦ HART and WirelessHART are registered trademarks of the FieldComm Group.
 Note: For other lighting combinations, please contact your local Appleton representative for more information.

DIMENSIONAL DRAWINGS | MILLIMETERS (INCHES)

MGCL With Globe 	MGCH With Globe 
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ⓘ Driver housing models with globes shown. Refer to catalog pages or the Product Drawing configurator page for additional dimensional information; available on www.masteringled.com.