

MERCMASTER™ LED GENERATION 3 SERIES LUMINAIRES

STANDARD — HAZARDOUS LOCATION

FEATURES

- Modular design provides thousands of combinations for maximum versatility
- Choice of optics for optimal light distribution in a variety of applications: Type I, Type III, Type V or Type V Wide
- Customize to the application requirements with four different globe options: clear and diffused polycarbonate, clear glass, or prismatic glass refractor
- Seven standard mounting hood designs allow for mounting in any location. Uses same mounting hoods as Mercmaster III, Mercmaster LED and Mercmaster LED Low Profile.
- Retrofit adapters for Crouse-Hinds™ +, Mercmaster II, and Killark™ + hoods available.
- Watertight Pendant Hood with IP68 cord grip available to address water ingress into luminaire via conduit
- Higher ambient options available (up to 75 °C [167 °F]) on select configurations
- Hinge has high lip for added safety during installation and servicing. Hinge and bolt construction assures 360° compression at all points on fixture housing gasket for positive sealing. Swing away design of captive bolt and nut simplifies installation

WARRANTY

- 5 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
- Gaskets: silicone
- All hardware and catch assemblies: stainless steel
- Globe: polycarbonate or glass
- Globe guard, short refractor guard and safety cable: stainless steel

ACCESSORIES (PURCHASE SEPARATELY)

- Globe guard: MGU1
- Refractor guard: KRG2S
- Visor: MMVISOR
- Drain plug: LEDDR3

NEC/CEC LISTINGS

- NEC: Class I, Division 2, Groups A, B, C, D | Class II, Division 1, Groups E, F, G | Class II Division 2 Groups F, G | Class III
- CEC: Class I, Zone 2 AEx ec IIC | Zone 21 AEx tb IIIC | Class I, Zone 2 Ex ec II | Zone 21 Ex tb IIIC
- Marine Outside Type (Salt Water)
- Type 3R, 4, 4X
- IP66/IP67
- Simultaneous Exposure
- Suitable for Use in Wet Locations

IEC / ATEX LISTINGS

- ATEX/IECEx: Zones 2 – 21 and 22

NOTABLE LISTINGS

- ABS Certified
- Dark Sky (IDA) Approved
- DLC listed

RELATED PRODUCTS

- Mercmaster LED Generation 3 Luminaires with Emergency Battery Backup
- Industrial Mercmaster LED Generation 3 Standard and with Emergency Battery Backup Luminaires
- Mercmaster LED Generation 3 Zone 1 Luminaires
- Mercmaster Connect LED Luminaires



MLG*L + Clear Globe + Ceiling Mount



MLG*L + Short Refractor + Ceiling Mount



MLG*H/MLG*X + Clear Globe + Ceiling Mount



MLG*H/MLG*X + Short Refractor + Ceiling Mount

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.

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

PRODUCT SPECIFICATIONS

Series * Lumen Output	MLG*L3	MLG*L5	MLG*L7	MLG*L9	MLG*H9	MLG*H1	MLG*H3	MLG*H6	MLG*X1	MLG*X5
Nominal Wattage (W, @120 V)	30	46	57	75	75	93	115	145	169	210
Equivalencies (W, HID) ①	70 -100	100 -150	175 -250	250-350	250-350	350-400	400	400-600	600-750	1000
Nominal Lumens ①	3700	5400	8300	10400	11200	13600	16400	20100	21937	26070
Efficacy (up to, lm/W)	123	117	146	139	149	146	143	139	130	124
Color Temperature (CCT) (K)	5000 / 4000/3000									
Color Rendering index (CRI)	≥ 70 CRI (5000K) ≥ 80 CRI (4000K / 3000K)									
Voltage	120-277 Vac, 50/60 Hz; 125-300 Vdc 347-480 Vac, 50/60 Hz									
Surge Protection	Standard: 6 kV, 3 kA Optional: 10 kV, 5 kA									
Lifetime (hrs, reported)	L90 > 60000 hrs @ 75 °C					L70 > 76000 hrs @ 25 °C				
Ambient Temperature ②	Standard: -40 °C to +65 °C (-40 °F to +149 °F) High ambient: -40 °C to +75 °C (-40 °F to +167 °F)									
Temperature Code ②	T3 - T6									
Fixture Weight - kg (lbs) ③	9.20 (20.3)				12.00 (26.4)			13.15 (29.0)		
Replaceable Parts	Drivers, Globes									

① Nominal lumens are based on 5000K CCT, clear glass lens and Type III optic (L3 thru L9) or Type V optic (H1 thru X5). Review the 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).

③ Driver housing weight shown. See catalog pages for more details.

APPLETON™

For product information:
www.masteringled.com
 1.800.621.1506

EMERSON™

MERCMASTER™ LED GENERATION 3 SERIES LUMINAIRES

STANDARD — HAZARDOUS LOCATION

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

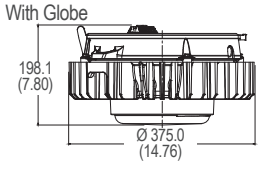
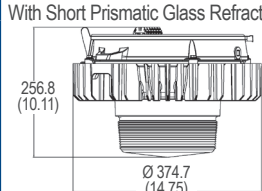
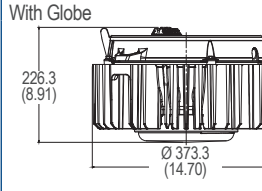
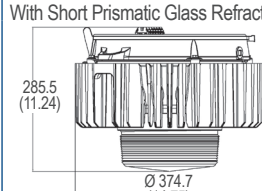
CATALOG NUMBERING GUIDE

Series Prefix	Mounting	Lumen (nominal)	Hub Size	Color Temperature	Light Distribution Pattern	Voltage	Optional Fusing	Options
MLG								

SERIES PREFIX:		LUMEN (NOMINAL): ⁺⁺		COLOR TEMPERATURE (CCT): [‡]		OPTIONAL FUSING: ^{**}	
MLG	Mercmaster LED Generation 3 Series	L3	3,500	C	Cool, 5000K	F	Fusing
MOUNTING:		L5	5,500	N	Neutral, 4000K	Blank	No fusing
A	Pendant	L7	7,500	W	Warm, 3000K	OPTIONS:	
B	Watertight Pendant [▲]	L9	9,500	GLOBE MATERIAL: [Ⓞ]		1	Photocontrol 120V ^④
C	Ceiling ^⑤	H9	9,500 [Ⓢ]	P	Clear Polycarbonate Globe	2	Photocontrol 208V ^④
D	Pendant Cone ^⑤	H1	11,500	D	Diffused Polycarbonate Globe	3	Photocontrol 240V ^④
R	90° Stanchion ^①	H3	13,500	G	Clear Glass Globe	4	Photocontrol 277V ^④
S	25° Stanchion ^①	H6	17,500	J	Short Glass Prismatic Refractor [Ⓞ]	S	Additional surge to 10 kV ^②
T	Trunnion	X1	20,000	LIGHT DISTRIBUTION PATTERN:		A	High Ambient ^{+Ⓢ}
K	Killark™ [◆] Adapter Universal [▲]	X5	24,000	1	Type I ^②	Blank	No Options Chosen
U	Mercmaster II Adapter, Ceiling or Pendant [▲]	HUB SIZE:		3	Type III ^②		
V	Mercmaster II Adapter, Stanchion or Wall [▲]	2	3/4" NPT ^①	5	Type V ^②		
W	Wall	3	1" NPT ^①	W	Type V Wide		
X	Crouse Hinds™ [◆] Adapter, Ceiling or Pendant [▲] [Ⓢ]	4	1-1/4" NPT stanchion	VOLTAGE:			
Y	Crouse Hinds™ [◆] Adapter, Stanchion or Wall [▲]	5	1-1/2" NPT stanchion	BU	120-277 Vac, 50/60 Hz; 125-300 Vdc		
Blank	No mounting hood	6	Metric M20 ^①	BH	347-480 Vac, 50/60 Hz [▲]		
		Blank	If using adapter or no hood				

- ① 3/4" NPT, 1" NPT and Metric M20 hub entries are not offered on 90° or 25° Stanchion mounting options.
- ② 10 year warranty standard when ordered with light distribution pattern Type I, III or V Wide or additional (10 kV) surge protection (not available with high ambient options). 10 kV surge is not rated for ATEX/IECEX.
- ③ Guards for the globes and refractor are ordered separately. Refer to catalog pages for complete accessories information.
- ④ Photocontrol available for 120-277 Vac only. Factory installed in the mounting hood. Photocontrols only certified for cCSAus. Luminaires with photocontrol are not rated IP66/67, Class II, 3R, 4, 4X, or Marine Outside Type (Salt Water).
- ⑤ Ceiling-mount and pendant cone mounting hoods and adapters are not designed to use the in hood photocontrol. Ceiling and pendant cone mounts must use an FS/FD box with photocontrol (ordered separately).
- ⑥ Only allowed for Type V and Type V Wide light distribution.
- ⑦ For 125-170 Vdc, operating temperature range is -40 °C to +55 °C (-40 °F to +131 °F) (for IECEX/ATEX only). NEC/CEC operating temperature remains -40 °C to +65 °C (-40 °F to +149 °F) for full Vdc range.
- ⑧ H9 only available with High Ambient option (-A). Refer to catalog pages for detailed temperature code tables for specific NEC/CEC or ATEX/IECEX applications.
- ⑨ Short glass prismatic refractor (J) is only available in light distribution pattern Type V. Refractor is not rated for ATEX/IECEX.
- + For NEC/CEC, high ambient is available with lumen packages L3 to H3. For ATEX/IECEX, high ambient is only available with lumen packages L7, H9 and H1. See details in Temperature code tables for specific NEC/CEC or ATEX/IECEX applications
- * Refer to catalog pages for detailed lumen output information, see Lumen Output (Efficacy) Table.
- Ⓢ 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, watertight pendant hood and BH Voltage only certified for cCSAus. Not available for use with photocontrol.
- ◆ 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.

DIMENSIONAL DRAWINGS | MILLIMETERS (INCHES)

MLG*L3 to MLG*L9		MLG*H1 to MLG*H9 and MLG*X1 to MLG*X5	
With Globe	With Short Prismatic Glass Refractor	With Globe	With Short Prismatic Glass Refractor
			

① 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.



MERCMASTER™ LED GENERATION 3 SERIES LUMINAIRES WITH EMERGENCY BATTERY BACKUP — HAZARDOUS LOCATION

FEATURES

- Modular design provides thousands of combinations for maximum versatility
- Choice of optics for optimal light distribution in a variety of applications: Type I, Type III, Type V or Type V Wide
- Emergency mode is field changeable from 90 min to 180 min
- Customize to the application requirements with four different globe options: clear and diffused polycarbonate, clear glass, or prismatic glass refractor
- Seven standard mounting hood designs allow for mounting in any location. Uses same mounting hoods as Mercmaster III, Mercmaster LED and Mercmaster LED Low Profile.
- Retrofit adapters for Crouse-Hinds™⁺, Mercmaster II, and Killark™[✦] hoods available.
- Watertight Pendant Hood with IP68 cord grip available to address water ingress into luminaire via conduit
- Hinge has high lip for added safety during installation and servicing. Hinge and bolt construction assures 360° compression at all points on fixture housing gasket for positive sealing. Swing away design of captive bolt and nut simplifies installation

WARRANTY ✪

- 5 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
- Gaskets: silicone
- All hardware and catch assemblies: stainless steel
- Globe: polycarbonate or glass
- Globe guard, short refractor guard and safety cable: stainless steel

ACCESSORIES (PURCHASE SEPARATELY)

- Globe guard: MGU1
- Refractor guard: KRG2S
- Visor: MMVISOR
- Drain plug: LEDDR3

NEC/CEC LISTINGS ①

- NEC: Class I, Division 2, Groups A, B, C, D | Class II Division 1 Groups E, F, G | Class II, Division 2, Groups F, G | Class III
- CEC: Class I, Zone 2 IIC | Zone 20 IIC
- Type 3R, 4, 4X
- IP66/IP67
- Simultaneous Exposure
- Suitable for Use in Wet Locations

NOTABLE LISTINGS ①

- ABS Certified
- Dark Sky (IDA) Approved

RELATED PRODUCTS

- Mercmaster LED Generation 3 Standard Luminaires
- Industrial Mercmaster LED Generation 3 Standard and with Emergency Battery Backup Luminaires
- Mercmaster LED Generation 3 Zone 1 Luminaires
- Mercmaster Connect LED Luminaires



MLG*L + Clear Globe + Ceiling Mount

① Refer to catalog pages for detailed certification information.

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

PRODUCT SPECIFICATIONS

Series * Lumen Output	MLG*L3*H	MLG*L3*E	MLG*L5*H	MLG*L5*E
Nominal Wattage (W, @120 V)	30		46	
Equivalencies (W, HID)	70 - 100		100 - 150	
Nominal Lumens Standard Mode ①	4000		6000	
Nominal Emergency Emergency Mode ①	1450 (90 min) 800 (180 min)			
Efficacy (up to, lm/W) ①	133		130	
Color Temperature (CCT) (K)	5000 / 4000/3000			
Color Rendering index (CRI)	≥ 70 CRI (5000K) ≥ 80 CRI (4000K / 3000K)			
Voltage	120–277 Vac, 50/60 Hz			
Surge Protection	Standard: 6kV, 3kA			
Ambient Temperature ②	-20 °C to +55 °C (-4 °F to +131 °F)			
Temperature Code ②	T3 - T4			
Fixture Weight - kg (lbs) ③	10.5 (23.2)			
Replaceable Parts	Drivers, Globes, Battery pack, Battery Management Module			

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).

③ Driver housing weight shown. See catalog pages for more details

APPLETON™

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EMERSON™

MERCMASTER™ LED GENERATION 3 SERIES LUMINAIRES WITH EMERGENCY BATTERY BACKUP — 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	Emergency
MLG							BU	

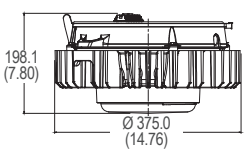
SERIES PREFIX: MLG Mercmaster LED Generation 3 Series with Emergency Battery Backup	MOUNTING: A Pendant B Watertight Pendant C Ceiling D Pendant Cone R 90° Stanchion S 25° Stanchion T Trunnion K Killark™ Adapter Universal U Mercmaster II Adapter, Ceiling or Pendant V Mercmaster II Adapter, Stanchion or Wall W Wall X Crouse Hinds™ + Adapter, Ceiling or Pendant Y Crouse Hinds™ + Adapter, Stanchion or Wall Blank No mounting hood	LUMEN (NOMINAL): * L3 3,500 L5 5,500 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: ② 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 EMERGENCY: H 90 Minutes E 180 Minutes
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- ① 3/4" NPT, 1" NPT and Metric M20 hub entries are not offered on 90° or 25° Stanchion mounting options.
- ② Guards for the globes are ordered separately. Refer to catalog pages for complete accessories information.
- ③ Only allowed for Type V and Type V Wide light distribution.
- ④ Type I and Type III use a multiple hinge housing.
- * Refer to catalog pages for detailed lumen output information, see Lumen Output (Efficacy) Table.
- ▲ Adapters, watertight pendant hood and BH Voltage only certified for NEC/CEC.
- ✦ Killark is a registered trademark of Hubbell Incorporated.
- + Crouse-Hinds is a registered trademarks of Cooper Crouse-Hinds.

DIMENSIONAL DRAWINGS ① | MILLIMETERS (INCHES)

MLG*L3 and MLG*L5

With Globe



① 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.