

Mercmaster™ Enclosed and Gasketed LED Luminaire

ETL
cETL
Class I, Division 2, Groups A, B, C, D
Class I, Zone 2, AEx nA, Ex nA

Type 4X
Wet Locations
Marine Outside Type (Salt Water)
IP66, IP67

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 are present under conditions defined by the National Electrical Code as Class I, Division 2 and Class 1, Zone 2
 - Areas of low clearance, low ceiling heights or where fixture weights must be minimized
 - Non-hazardous locations where severe weather conditions, excessive moisture, dirt, dust, corrosive atmosphere or high ambient temperatures are encountered
- Typical applications include:
 - Pulp and paper mills
 - Processing plants
 - Chemical plants
 - Oil refineries
 - Foundries
 - Manufacturing plants
 - Storage areas
 - Waste and sewage treatment
 - Parking garages
 - Other areas where dust, water, dirt and rough usage are a problem

Features

- Compact light-weight low profile design is suited for low mounting heights.
- Modular design allows scores of fixture component combinations to meet installation needs. Uses same mounting hoods as Mercmaster III.
- Fixture housing and mounting hoods are copper-free cast aluminum with baked epoxy finish. All exposed hardware is stainless steel.
- Accommodates a wide range of voltages.
- 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.
- All Mercmaster mounting hoods have provision for easy field installation of fuses in fixtures (see Fixture Unit — Electrical Specification section).
- Fixtures are for use in Class I, Zone 2 hazardous locations.

Standard Materials

- Mounting hoods and bodies: copper-free cast aluminum
- All hardware and catch assemblies: stainless steel
- Globes: polycarbonate

Standard Finishes

- Mounting hoods, bodies and guards: baked gray epoxy-clad finish, electrostatically applied for complete uniform protection



Certifications and Compliances

- ETL
- cETL
- Class I, Division 2, Groups A, B, C and D
- Class I, Zone 2, AEx nA and Ex nA
- Ambient: -40 °C to 55 °C
- Electrical: 120-277 Vac, 50/60 Hz; 347 Vac, 50/60 Hz
- Type 4X
- Wet Locations
- Marine Outside Type (Salt Water)
- IP66 and IP67

Related Products

- Photocells for classified use are available within the *Lighting Section*.

* Compliance data varies for specific fixtures. Contact local representative regarding suitability of specific fixtures for a particular application.

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Illustrated Features

Lighting



Heatsink

Reliable heat transfer via the die cast, anodized aluminum body. Provides maximum heat dissipation from the LED assembly to the outside environment.



Driver Assembly

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

Modular Plug between LED and driver.



LED Chamber

Protected by polycarbonate lens, allows for easy maintenance access.



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.

Epoxy Finish

Ballast housing, hoods and guards are copper-free aluminum with epoxy powder coat finish.



Fuses

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

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.

Cooler Operating Cone Hood

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

Electrical Protection

Ground wire provided to bond mounting hood to ballast housing.

Hood/Ballast Gasket

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

Safety

Rounded heatsink edges prevent possible injury during installation.

"Safety" High Hinge

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

Stainless Steel Latch Assembly

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



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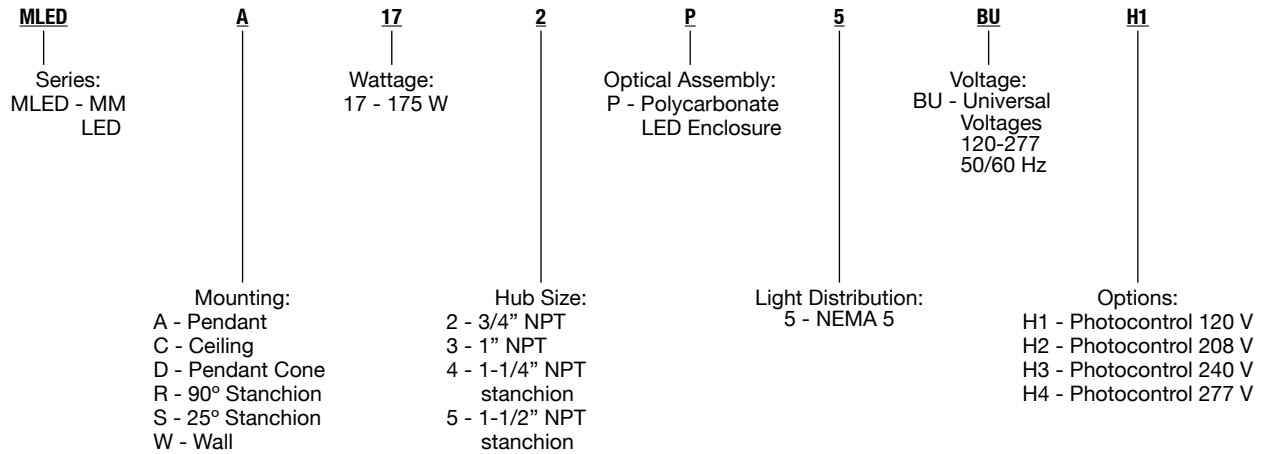
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Ordering Information:

Order using catalog numbering guide below or select catalog number from tables on following pages.

CATALOG NUMBERING GUIDE FOR MERCMaster LED LUMINAIRES



Technical Data

Light Level Equivalent	Lamp Type	Supply Wire Temperature (°C)	Ambient Temperature (°C)	Class I, Division 2
175 Watt PSMH	LED	65	40	T4A
		75	55	T4

"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)	351-450	326-350	301-325	281-300	261-280	231-260	216-230	201-215	181-200	166-180	161-165	136-160	121-135	101-120	86-100	85




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Lighting

LIGHTING: ENCLOSED AND GASKETED LUMINAIRES FOR HAZARDOUS AND ADVERSE LOCATIONS




	Lamp Type	Lamp Watts	Hub Size (Inches)	Catalog Numbers ❶
Pendant One Hub, Rigid Mounting				
	LED	17	3/4	MLEDA172P5BU
			1	MLEDA173P5BU
Pendant Cone One Hub, Rigid Mounting				
	LED	17	3/4	MLEDD172P5BU
			1	MLEDD173P5BU
Ceiling Five Hubs, Four Close-up Plugs				
	LED	17	3/4	MLEDC172P5BU
			1	MLEDC173P5BU

❶ Suffix Voltage AC Frequency
BU 120 - 277 50/60 Hz

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	Lamp Type	Lamp Watts	Hub Size (Inches)	Catalog Numbers ❶
Wall Five Hubs, Four Close-Up Plugs				
	LED	17	3/4	MLEDW172P5BU
			1	MLEDW173P5BU
25° Stanchion One Hub				
	LED	17	1-1/4	MLEDS174P5BU
			1-1/2	MLEDS175P5BU
90° Stanchion One Hub				
	LED	17	1-1/4	MLEDR174P5BU
			1-1/2	MLEDR175P5BU

❶ Suffix Voltage AC Frequency
BU 120 - 277 50/60 Hz

PCD2 Series Hazardous Location Photocontrol

Factory-Sealed. 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

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, Mercmaster LED.
- For remote mounting in FS Boxes.

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.
- Available for 120, 208, 240, or 277 Vac.
- 1000 V.A. Voltage/Ampere
- Minimum time delay: 15 seconds to eliminate nuisance tripping.
- Provided with (3) 18 AWG stranded leads 6" in length.
- Will fit through standard 1/2" knockout.

Materials

- Encapsulated with epoxy sealing compound.
- FS Cover: aluminum

Compliances


- Class I, Division 2, Groups A, B, C, D
- UL Standards: 1604 – Hazardous (Classified) Locations
- NEMA 4X

Lighting

LIGHTING: ENCLOSED AND GASKETED LUMINAIRES FOR HAZARDOUS AND ADVERSE LOCATIONS


Factory-Installed Photocontrol

Add to fixture catalog after voltage; i.e.: MLEDW172P5BUH1.


	Voltage Range	Suffix Designation
 <p>Mercmaster wall mounting hood with photocontrol installed shown</p>	120 Vac, 50/60 Hz	H1
	208 Vac, 50/60 Hz	H2
	240 Vac, 50/60 Hz	H3
	277 Vac, 50/60 Hz	H4

Photocontrol in FS cover for use with FS/FD box

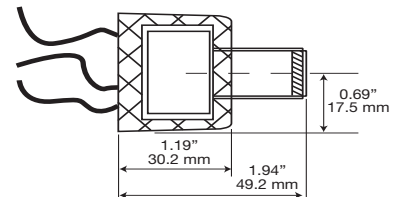
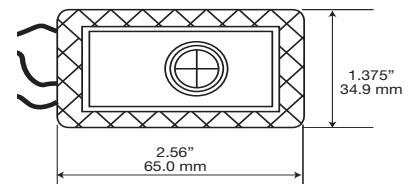
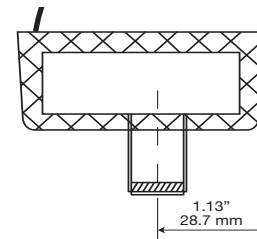
Supplied with two stainless steel screws. For neoprene gasket, order catalog number FS-GKR-1N.

	Voltage Range	Catalog Number
	120 Vac, 50/60 Hz	FSKA-PC120D2
	208-277 Vac, 50/60 Hz	FSKA-PC247D2

Photocontrol for field installation

	Voltage Range	Max. Current	Catalog Number
	120 Vac, 50/60 Hz	8.3 Amp	PC120D2
	208-277 Vac, 50/60 Hz	3.5 Amp	PC247D2

Dimensions











Mercmaster™ Enclosed and Gasketed LED Mounting Hoods and Ballast Bodies

Hoods and Ballast Housings are Copper-Free Cast Aluminum (less than 4/10 of 1%).

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Mounting Hoods				
	Description	Hub Size (Inches)	Catalog Number	
Pendant 	One Hub, Rigid Mounting	3/4	KPA-75	
		1	KPA-100	
Pendant Cone 	One Hub, Rigid Mounting	3/4	KPCH-75	
		1	KPCH-100	
Ceiling 	Five Hubs, Four Close-Up Plugs	3/4	KPC-75	
		1	KPC-100	
Wall 	Five Hubs, Four Close-Up Plugs	3/4	KPWB-75	
		1	KPWB-100	
25° Stanchion 	One Hub	1-1/4	KPS-125	
		1-1/2	KPS-150	
90° Stanchion 	One Hub	1-1/4	KPST-125	
		1-1/2	KPST-150	
Replacement Globe Gaskets – Silicone Rubber				
		Description	Catalog Number	
		Refractor Gasket	KRF-GK	
Fixture Unit – Electrical Specification				
	Current Draw	Fuse Kit	Fixture Unit	120–277 Vac, 50/60 Hz — Voltage Suffix
	120 Vac @ .98 Amps 277 Vac @ .42 Amps	F3	MLED17P5	BU

Lighting

LIGHTING: ENCLOSED AND GASKETED LUMINAIRES FOR HAZARDOUS AND ADVERSE LOCATIONS

Mercmaster™ Enclosed and Gasketed LED Weights and Photometric Data

LIGHTING: ENCLOSED AND GASKETED LUMINAIRES FOR HAZARDOUS AND ADVERSE LOCATIONS

Mercmaster LED Ballast and Accessory Weights

Description	Weight in Lbs.
Fixture Unit	22.00
Pendant	2.25
Pendant Cone	2.50
Ceiling	3.00
Wall	4.00
25° Stanchion	3.25
90° Stanchion	3.75

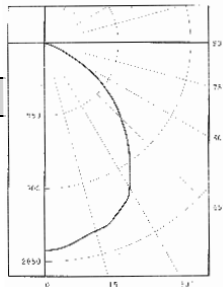
Photometric Data

Degree	Lumens
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0		CIE Type – Direct
5	254	
15	721	
25	1092	
35	1199	
45	1076	
55	764	
65	287	
75	28	
85	8	
90		
95	2	
105	1	
115	1	
125	2	
135	1	
145	1	
155	0	
165	0	
175	0	
180		

Zonal Lumen Summary

Zone	Lumens	% Fixture
0-30	2066	38.0
0-40	3265	60.1
0-60	5105	94.0
0-90	5427	99.9
90-120	4	0.1
90-130	6	0.1
90-150	8	0.1
90-180	9	0.2
0-180	5432	100.0



REPORT NUMBER: **MLED17P**

Lamps: MercMaster LED, Class 1, Div 2, Polycarbonate Optic

Coefficients of Utilization – Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

% Ceiling Rcc	80	70	50	30	10	0	% Walls Rw											
							70	50	30	10	70	50	30	10	50	30	10	0
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	108	104	102	109	106	103	100	101	99	97	98	96	94	94	92	91	89
2	103	97	91	87	101	95	90	86	92	87	84	88	85	82	85	83	80	78
3	96	87	80	75	93	85	79	74	83	77	73	80	75	72	77	74	70	69
4	89	78	71	65	86	77	70	65	75	69	64	72	67	63	70	66	62	60
5	82	71	63	57	80	70	63	57	68	61	56	66	60	56	64	59	55	53
6	76	64	57	51	75	64	56	51	62	55	50	60	54	50	59	54	49	48
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	45	43
8	66	54	46	41	65	53	46	41	52	46	41	51	45	41	50	44	40	39
9	62	50	42	37	61	49	42	37	48	42	37	47	41	37	46	41	93	35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32