

Mercmaster™ III Low Profile Luminaires

High Pressure Sodium and Pulse Start Metal Halide

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 I, Zone 2, AEx nR IIC (ZB)
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

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

Catalog Numbering Guide

ML	A	L	15	2	G1	G	MT	R	Z2
Series: ML - Mercmaster III Low Profile		Lamp Type: I - Incandescent L - High Pressure Sodium P - Pulse Start Metal Halide		Hub Size: 2 - 3/4" NPT 3 - 1" NPT 4 - 1-1/4" NPT stanchion 5 - 1-1/2" NPT stanchion		Guard Options: G - Cast Guard N - No Guard		Options: E - Emergency Quartz ⑤ F - Fuse Kit (Specify Voltage) R - Hot Restrike ③ S - Smart Starter ④ H1 - Photocontrol 120 V H2 - Photocontrol 208 V H3 - Photocontrol 240 V H4 - Photocontrol 277 V D - E-27 Export Socket <i>Optional Fusing</i> ⑥ FN - 120 V FP - 208 V FS - 240 V FT - 277 V FF - 480 V	
	Mounting: A - Pendant (rigid mounting) C - Ceiling D - Pendant Cone Hood F - Pendant (flexible mounting) R - 90° Stanchion S - 25° Stanchion W - Wall	Wattage: 10 - 100 W HPS, PSMH 15 - 150 W HPS, PSMH and 60-150 W max. Incandescent 17 - 175 W PSMH 50 - 50 W HPS, PSMH 70 - 70 W HPS, PSMH		Optical Assembly: ② G1 - Globe J1 - NEMA I Glass Refractor J3 - NEMA III Glass Refractor J5 - NEMA V Glass Refractor P2 - NEMA II Polymeric Refractor P3 - NEMA III Polymeric Refractor P4 - NEMA IV Polymeric Refractor P5 - NEMA V Polymeric Refractor		Voltage: ① LB - Incandescent, 120, 60 Hz MT - 120/208/240/277, 60 Hz 5MT - 120/208/240/ 277/480, 60 Hz 48 - 480, 60 Hz 125 - 120, 50 Hz 225 - 225, 50 Hz 226 - 220, 60 Hz 236 - 230, 60 Hz 245 - 240, 50 Hz 246 - 240, 60 Hz		Suffix: Z2 - Zone 2 suffix (required for AEx nA nR rating) ZB - Zone 2 suffix (required for AEx nR)	

① Other voltages, frequencies available – contact your local sales representative. Voltages shown are limited to specific combinations; refer to following pages.

② 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.). Reflectors ordered separately.

③ Available for 50-150 W HPS fixtures only.

④ Available for HPS or PSMH fixtures.

⑤ Fixtures equipped with quartz auxiliary lamp do not comply with NEC/CEC requirements and are not suitable for use in classified locations

⑥ Optional fusing is available for use with MT, 5MT and 48 voltage suffixes ONLY.

Mercmaster™ III Low Profile Luminaires

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

Temperature identification numbers of Mercmaster III Low Profile High Pressure Sodium and Pulse Start Metal Halide

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 nR IIC (ZB)
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

Lamp		Supply Wire Min.	Ambient Temp.	Class I, Division 2			Class II, Division 1 Groups E, F and G			Simultaneous Exposure Class I, Division 2 / Class II, Division 1		
Watts	Type	Temp. °C (°F)	°C (°F)	Globe	Reflector	Refractor	Globe	Reflector	Refractor	Globe	Reflector	Refractor
50	HPS	90 °C (194 °F)	40 °C (104 °F)	T3	T3	T3B	T4A	T4A	T5	T3	T3	T3
		90 °C (194 °F)	55 °C (131 °F)	T3	T3	T3A	T4A	T4A	T4A	T2D	T2D	T2D
		90 °C (194 °F)	65 °C (149 °F)	T3	T3	T3A	T4	T4	T4A	T2C	T2C	T2C
70	HPS	90 °C (194 °F)	40 °C (104 °F)	T3	T3	T3	T4	T4	T5	T2B	T2B	T2D
		90 °C (194 °F)	55 °C (131 °F)	T2D	T2D	T3	T3C	T3C	T4A	T2B	T2B	T2C
		90 °C (194 °F)	65 °C (149 °F)	—	—	T3	—	—	T4	—	—	T2B
100	HPS	90 °C (194 °F)	40 °C (104 °F)	T2C	T2C	T2D	T4	T4	T4A	T2B	T2B	T2B
		90 °C (194 °F)	55 °C (131 °F)	T2B	T2B	T2C	T3C	T3C	T4	T2A	T2A	T2A
		90 °C (194 °F)	65 °C (149 °F)	—	—	—	—	—	—	—	—	—
150	HPS	90 °C (194 °F)	40 °C (104 °F)	T2A	T2A	T2B	T3A ①	—	T4	325	—	T2
50	PSMH	90 °C (194 °F)	40 °C (104 °F)	T3	T3	T3A	T4A	T4A	T6	T2D	T2D	T3
		90 °C (194 °F)	55 °C (131 °F)	T3	T3	T3	T4	T4	T5	T2C	T2C	T2D
		90 °C (194 °F)	65 °C (149 °F)	T3	T3	T3	T4	T4	T4A	T2B	T2B	T2D
70	PSMH	90 °C (194 °F)	40 °C (104 °F)	T3	T3	T3	T3C	T3C	T4A	T2B	T2B	T2C
		90 °C (194 °F)	55 °C (131 °F)	T2D	T2D	T3	T3C	T3C	T4A	T2A	T2A	T2B
		110 °C (230 °F)	65 °C (149 °F)	—	—	T3	—	—	T4	—	—	T2B
100	PSMH	90 °C (194 °F)	40 °C (104 °F)	T2A	T2A	T2B	T3B	T3B	T4A	T2	T2	T2A
		90 °C (194 °F)	55 °C (131 °F)	T2A	T2A	T2B	T3A ①	T3A ①	T4	T1	T1	T2
150	PSMH	105 °C (221 °F)	40 °C (104 °F)	350	350	325	—	—	T3B	—	—	T1
175	PSMH	105 °C (221 °F)	40 °C (104 °F)	350	350	325	—	—	T3B	—	—	T1
60	Inc.	90 °C (194 °F)	40 °C (104 °F)	T3B	T3B	T3C	—	—	—	—	—	—
		90 °C (194 °F)	55 °C (131 °F)	T3A	T3A	T3C	—	—	—	—	—	—
		90 °C (194 °F)	65 °C (149 °F)	T3A	T3A	T3C	—	—	—	—	—	—
100	Inc.	90 °C (194 °F)	40 °C (104 °F)	T3	T3	T3	—	—	—	—	—	—
		90 °C (194 °F)	55 °C (131 °F)	T3	T3	T3	—	—	—	—	—	—
		90 °C (194 °F)	65 °C (149 °F)	T2D	T2D	T3	—	—	—	—	—	—
150	Inc.	90 °C (194 °F)	40 °C (104 °F)	T2D	T2D	T3	—	—	—	—	—	—
		90 °C (194 °F)	55 °C (131 °F)	T2B	T2B	T2D	—	—	—	—	—	—
		90 °C (194 °F)	65 °C (149 °F)	T2B	T2B	T2D	—	—	—	—	—	—

“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
Temp. Range (°F)	664-842	619-662	574-617	538-572	502-536	448-500	421-446	394-419	358-392	331-356	322-329	277-320	250-275	214-248	187-212	185

① “T” numbers are for Groups E and F only.

Mercmaster™ III Low Profile Luminaires

Class I, Zone 2, AEx nA nR IIC, AEx nR IIC IP66, NEMA 4X

Temperature identification numbers of Mercmaster III Zone 2 Low Profile High Pressure Sodium and Pulse Start Metal Halide.

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 nR IIC (ZB)
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

Lamp		Class I, Zone 2 AEx nA nR IIC					Class I, Zone 2 AEx nR IIC		
Watts	Type	Supply Wire Temp. °C (°F)	Ambient Temp. °C (°F)	Globe	Globe w/ Reflector	Reflector	Globe	Globe w/ Reflector	Reflector
50	HPS	90 °C (194 °F)	40 °C (104 °F)	T6	T6	T6	T6	T6	T6
		90 °C (194 °F)	55 °C (131 °F)	T5	T5	T5	T5	T5	T5
		90 °C (194 °F)	65 °C (149 °F)	T4	T4	T5	T4	T4	T5
70	HPS	90 °C (194 °F)	40 °C (104 °F)	T5	T5	T5	T5	T5	T5
		90 °C (194 °F)	55 °C (131 °F)	T4	T4	T4	T4	T4	T4
		90 °C (194 °F)	65 °C (149 °F)	—	—	T4	—	—	T4
100	HPS	90 °C (194 °F)	40 °C (104 °F)	T4	T4	T4	T4	T4	T4
		90 °C (194 °F)	55 °C (131 °F)	T4	T4	T4	T4	T4	T4
150	HPS	90 °C (194 °F)	40 °C (104 °F)	T4	T4	T4	T4	T4	T4
50	PSMH	90 °C (194 °F)	40 °C (104 °F)	T5	T5	T6	T5	T5	T6
		90 °C (194 °F)	55 °C (131 °F)	T5	T5	T6	T5	T5	T6
		90 °C (194 °F)	65 °C (149 °F)	T4	T4	T5	T4	T4	T5
70	PSMH	90 °C (194 °F)	40 °C (104 °F)	T5	T5	T6	T5	T5	T6
		90 °C (194 °F)	55 °C (131 °F)	T4	T4	T6	T4	T4	T6
		110 °C (230 °F)	65 °C (149 °F)	—	—	T4	—	—	T4
100	PSMH	90 °C (194 °F)	40 °C (104 °F)	T4	T4	T6	T4	T4	T6
		90 °C (194 °F)	55 °C (131 °F)	T4	T4	T4	T4	T4	T4
150	PSMH	105 °C (221 °F)	40 °C (104 °F)	T3	T3	T4	T3	T3	T4
175	PSMH	105 °C (221 °F)	40 °C (104 °F)	T3	T3	T4	T3	T3	T4

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

The “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

Appleton®

HID/AREA: NEC/CEC ENCLOSED AND GASKETED

Mercmaster™ III Low Profile Luminaires

50 W – 150 W HPS

High Power Factor (min. P.F. 90%). Medium base lamps.

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 nR IIC (ZB)
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

			Hub Size (Inches)	Catalog Numbers ③④⑤		
Lamp Type			Lamp Watts	With Globe	With Type V 8" Refractor ②	
Pendant — One Hub, Rigid Mounting ①						
	HPS	50	3/4 1	MLAL502G1N MLAL503G1N	MLAL502J5N MLAL503J5N	
	HPS	70	3/4 1	MLAL702G1N MLAL703G1N	MLAL702J5N MLAL703J5N	
	HPS	100	3/4 1	MLAL102G1N MLAL103G1N	MLAL102J5N MLAL103J5N	
	Shown with Globe and Optional Guard	HPS	150	3/4 1	MLAL152G1N ⑥ MLAL153G1N ⑥	MLAL152J5N ⑥ MLAL153J5N ⑥
	Pendant Cone — One Hub, Rigid Mounting					
		HPS	50	3/4 1	MLDL502G1N MLDL503G1N	MLDL502J5N MLDL503J5N
		HPS	70	3/4 1	MLDL702G1N MLDL703G1N	MLDL702J5N MLDL703J5N
HPS		100	3/4 1	MLDL102G1N MLDL103G1N	MLDL102J5N MLDL103J5N	
Shown with Refractor		HPS	150	3/4 1	MLDL152G1N ⑥ MLDL153G1N ⑥	MLDL152J5N ⑥ MLDL153J5N ⑥
Ceiling — Five Hubs, Four Close-up Plugs						
		HPS	50	3/4 1	MLCL502G1N MLCL503G1N	MLCL502J5N MLCL503J5N
		HPS	70	3/4 1	MLCL702G1N MLCL703G1N	MLCL702J5N MLCL703J5N
	HPS	100	3/4 1	MLCL102G1N MLCL103G1N	MLCL102J5N MLCL103J5N	
	Shown with Globe	HPS	150	3/4 1	MLCL152G1N ⑥ MLCL153G1N ⑥	MLCL152J5N ⑥ MLCL153J5N ⑥

① For Flexible Pendant Mount, change **A** to **F** in catalog number (except 50 W HPS).

② To order fixture with NEMA Type I or NEMA Type III refractor, change final digit **5** in catalog number to **1** or **3**.

③ For fixtures with guards, substitute a **G** for the **N** before adding voltage suffix. See following pages for accessory ordering information.

④ Add the following voltage and frequency designation before **Z2** suffix:

Lamp Type	Lamp Watts	LB	MT	5MT	48	125	Voltage Suffixes					
							225	226	235	236	245	246
Inc.	150 Max.	X	—	—	—	—	—	—	—	—	—	—
HPS	50	—	X	—	—	—	X	X	—	X	X	X
HPS	70	—	X	—	X	X	X	X	—	X	X	X
HPS	100	—	X	—	X	X	X	X	—	X	X	X
HPS	150	—	X	—	X	X	X	X	—	—	X	—
PSMH	50	—	X	—	X	—	—	—	—	—	—	—
PSMH	70	—	X	—	X	X	X	—	—	—	X	—
PSMH	100	—	X	—	X	X	X	—	—	—	X	—
PSMH	150	—	X	—	X	—	—	—	—	—	X	—
PSMH	175	—	X	X	X	—	—	—	—	—	X	—

Volts:

LB - Incandescent, 120 V 60 Hz

48 - 480 V 60 Hz

226 - 220 V 60 Hz

MT - 120/208/240/277 V 60 Hz

125 - 120 V 50 Hz

235 - 230 V 50 Hz

245 - 240 V 50 Hz

5MT - 120/208/240/277/480 V 60 Hz

225 - 225 V 50 Hz

236 - 230 V 60 Hz

246 - 240 V 60 Hz

⑤ Add **Z2** suffix for factory sealed non-sparking/restricted breathing protection (AEx nA nR). Add **ZB** suffix for restricted breathing protection (AEx nR).

⑥ For 150 W HPS fixtures, use S-55 lamp type only.

Mercmaster™ III Low Profile Compact Fluorescent Luminaires

Enclosed and Gasketed. For Hazardous and Wet Locations

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)

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

Catalog Numbering Guide For Zone 2 Mercmaster III Compact Fluorescent Luminaires

ML	A	F	84	2	G2	G	BU	L	Z2
Series: ML - Mercmaster III Low Profile		Lamp Type: F - Fluorescent		Hub Size: 2 - 3/4" NPT 3 - 1" NPT 4 - 1-1/4" NPT Stanchion 5 - 1-1/2" NPT Stanchion		Guard Options: G - Cast Guard (Glass Refractor and Globe only) N - No Guard		Lamp Options: L - Lamp(s) included Blank - Lamp(s) excluded	
Mounting Hood: A - Pendant (Rigid or Flexible) C - Ceiling D - Pendant Cone R - 90° Stanchion S - 25° Stanchion W - Wall		Wattage: 26 - One 26 Watt PL-T 32 - One 32 Watt PL-T 42 - One 42 Watt PL-T 52 - Two 26 Watt PL-T 57 - One 57 Watt PL-T ④ 64 - Two 32 Watt PL-T 84 - Two 42 Watt PL-T 114 - Two 57 Watt PL-T ④		Optical Assembly: ① G2 - VPGL2HR Globe (not for 57, 114 Watt) G4 - VPGL4HR Globe (57, 114 Watt only) ④ J1 - NEMA I Glass Refractor J3 - NEMA III Glass Refractor J5 - NEMA V Glass Refractor P2 - NEMA II Polymeric Refractor P3 - NEMA III Polymeric Refractor P4 - NEMA IV Polymeric Refractor P5 - NEMA V Polymeric Refractor		Voltage: BU - 120 to 277 V, 50/60 Hz and 125 Vdc A5 - 347 V, 60 Hz ④		Suffix: DP - Safety Cable SC - Safety Chain Z2 - Zone 2 Suffix (Required for AEx nA nR rating) C - Safety Cable ④ F - Fused Mtg. Hood ③④ (Non-Haz. Loc. only) P - Non-Haz. Photocell (Specify Voltage) ④ Q - Division 2 Haz. Photocell (Specify Voltage) ④ T - Terminal Blocks ④ V - Vibration Protection ④ X - Appledapter ② Mounting Hood Adapter ④ Z - Zone 2 suffix (required for Ex nR) ④	

① Polymeric refractors suitable for Class II, Groups F and G; NEMA 4X; and Marine Type Electric Fixture Outside Type (Salt Water) only.

Reflectors ordered separately (for use with globe fixtures only): Standard Dome: KR2-ST 30-degree Angle: KR2-AN

② Appledapter is available for use with the pendant, ceiling and angled stanchion mounting only.

③ Canadian Electrical Code (CEC) does NOT allow fusing in hazardous locations.

④ Certified to meet the Canadian Electrical Code (CEC) only.