CHLORIDE SYSTEMS
A DIVISION OF GENESIS THOMAS GROUP LLC

TYPE: _____

CATALOG NO.: _____

General Description

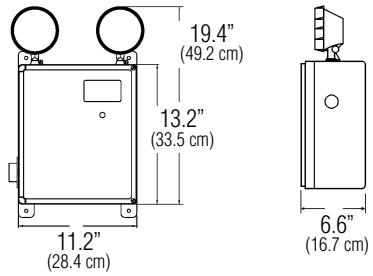
The Max-Lite Series is ideal for locations where oil, water and dust resistant equipment are required. The housing meets NEMA 3, 4x, and 12 classifications.

Illumination

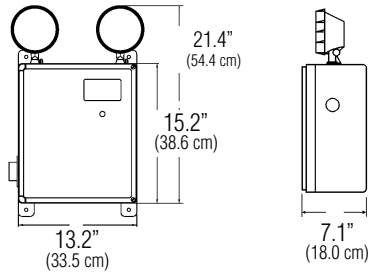
Illumination is accomplished with lamp heads mounted on the top of the unit. The NEMA rated "Z" Series lamp head is available in a variety of wattages, and is gray polycarbonate to match the Max-Lite Series' housing.

Dimensions

25 Watt to 75 Watt Units



100 Watt to 180 Watt Unit



Max-Lite Series

NEMA 3, 4x and 12 Areas

6 and 12 Volt, 25 to 180 Watts

Lead Calcium, Nickel Cadmium or Pure Lead Battery

Housing

Constructed of impact resistant, fiberglass reinforced polyester. Housing color is gray and includes stainless steel hardware.

Housing is approved for NEMA 3, 4x, and 12 areas.

View-through window allows easy monitoring of AC indicator and optional voltmeter and ammeter.

Available with NEMA rated polycarbonate sealed beam Par 36 tungsten or halogen lamp heads. Optional shatter-resistant shield for lamp heads is designed for use in food service areas.

SHOWN: MTC50ZQ2

Electronics

120/277 VAC dual voltage input with surge-protected, solid-state circuitry provides for a reliable charging system. Select models offer an optional high performance, temperature compensated charger that restores the battery to a full charge within UL 924 requirements.

Charging system is complete with low voltage disconnect, AC lockout, brownout protection, AC indicator lamp and test switch.

Optional ACCU-TEST Self Diagnostics includes an automatic 3 minute discharge test every 30 days. A manual test is available from 1 to 90 minutes.

Battery

Maintenance free, sealed lead calcium or pure lead batteries have an estimated service life of 5 years, and an operating temperature range of 65°F (19°C) to 85°F (30°C)

Maintenance free, sealed nickel cadmium battery has an estimated service life of 10 years, and an operating temperature range of 20°F (-7°C) to 95°F (35°C)

Batteries supply 90 minutes of emergency power

Code Compliance

UL 924 listed

NFPA 101

NEC, BOCA and OSHA illumination standard

Performance

Input power requirements

120 VAC - 0.42 amps (max.), 50.4 watts
277 VAC - 0.20 amps, 50.4 watts

Warranty

Three year full electronics warranty

One year full plus four year prorated lead calcium and pure lead battery warranty

Five year full plus five year prorated nickel cadmium battery warranty

Ordering Information

MTC50 | ZQ | 2 — TD1

SERIES/ BATTERY

6 Volt, Lead Calcium
MC28 = 28 Watt Unit
MC50 = 50 Watt Unit
MC75 = 75 Watt Unit
MC100 = 100 Watt Unit

6 Volt, Nickel Cadmium
MN25 = 25 Watt Unit
MN50 = 50 Watt Unit
MN70 = 70 Watt Unit

12 Volt, Lead Calcium
MTC50 = 50 Watt Unit
MTC100 = 100 Watt Unit
MTC125 = 125 Watt Unit
MTC150 = 150 Watt Unit
MTC180 = 180 Watt Unit

12 Volt, Nickel Cadmium
MTN25 = 25 Watt Unit
MTN50 = 50 Watt Unit
MTN100 = 100 Watt Unit
MTN125 = 125 Watt Unit
MTN150 = 150 Watt Unit

12 Volt, Pure Lead
MTL120 = 120 Watt Unit [2]

LAMP HEADS

6 Volt, Tungsten
ZM = 8 Watts
ZN = 18 Watts
ZO = 25 Watts
ZP = 30 Watts

6 Volt, Halogen
ZU = 8 Watts
ZV = 12 Watts

12 Volt, Tungsten
ZQ = 12 Watts
ZR = 18 Watts
ZS = 25 Watts
ZT = 30 Watts

12 Volt, Halogen
ZW = 8 Watts
ZX = 12 Watts

 # OF HEADS

3 = Three
2 = Two
1 = One
blank = No lamp heads

FACTORY INSTALLED OPTIONS [1]

A = Ammeter (Not available on MC28) [2]
ACF1 = 120 VAC Fuse
ACF2 = 277 VAC Fuse
ACP1 = 120 VAC Power Switch
ACP2 = 277 VAC Power Switch
AD = ACCU-TEST Self-Diagnostics
ADAL = ACCU-TEST with Alarm
ADTD = ACCU-TEST with Time Delay [4]
DCP = DC Power Switch
EX = Special Input Transformer (Specify voltage & frequency)
HTR1 = 120 VAC Heater (Not UL listed) [1]
HTR2 = 277 VAC Heater (Not UL listed) [1]
TD1 = 120 VAC Time Delay [4]
TD2 = 277 VAC Time Delay [4]
V = Voltmeter [2]

NOTES:

1) Some option combinations may impact UL listing. Consult factory for specifications.
2) Not available with AD, ADAL, or ADTD options.
3) Temperature compensated chargers are available with selected models. Please consult factory.
4) 15 minute delay.

Specification Data for Max-Lite Series NEMA Rated Emergency Lighting Units

Housing

Impact resistant, fiberglass reinforced polyester is suitable for NEMA 3, 4x, and 12 areas. Housing color is gray.

One-piece formed gasket eliminates potential for seal failure.

Standard internal mounting or external mounting feet for installation flexibility.

View-through window enables easy monitoring of AC indicator and optional metering.

Polycarbonate sealed beam Par 36 lamp heads are NEMA rated and come in a variety of wattages.

Unit Accessories

The following accessories for the Max-Lite Series must be ordered separately:

WG5 = Wire Guard (25 - 75 watt)
WG = Wire Guard (100 - 180 watt)

Electronics

120/277 VAC dual voltage input with surge-protected, solid-state charging circuitry provides for a reliable charging system. The charging system is furnished with low voltage disconnect, AC lockout, brownout protection, AC indicator lamp and test switch.

The low voltage disconnect (LVD) feature will disconnect the battery prior to an unacceptable deep discharge, but not before the required 90 minute emergency operation.

The AC lockout feature prevents battery drain prior to the initial energizing of utility power, and allows the installer to complete all wiring and electrical connections without energizing the emergency circuit.

The brownout protection circuitry will automatically switch the unit into the emergency mode if the utility voltage sags below 20% of nominal.

Battery charging circuitry is entirely solid-state, and utilizes a constant current charger for nickel cadmium battery units. A fully automatic, voltage regulated charger is used for lead calcium battery units. Battery recharge time after full discharge is less than the required UL 924 standard.

Line sensitive electronics cause an instantaneous transfer to battery power if utility power is lost, or a brownout condition is detected. When line voltage is present and stabilized, the transfer circuitry switches back to normal operation and begins recharging the battery. The transfer circuitry can be tested via a momentary test switch located on the housing.

Code Compliance

The Max-Lite Series meets or exceeds all performance standards as required by UL 924, NFPA 70, NFPA 101, NEC and OSHA.

Self-Diagnostics

The ACCU-TEST Self-Diagnostics option conducts automatic and manual tests, and indicates real time status of the lamp, battery and charger via LED indicator lamps. Automatic tests include: Systems analysis every 10 seconds, with actual load tests performed for a 3 minute duration every 30 days. A manual test is available from 1 to 90 minutes.

Battery

Maintenance free, sealed nickel cadmium or lead calcium and pure lead battery selections are available.

Standard sustained emergency operation is for 90 minutes with the illumination source providing full light output.

The suggested operating temperature range for nickel cadmium batteries is 20°F (-7°C) to 95°F (35°C), and the battery has an expected service life of 10 years. The suggested operating temperature range for lead calcium batteries is 65°F (19°C) to 85°F (30°C,) and the battery has an expected service life of 5 years.

Performance

Input power requirements
120 VAC - 0.42 amps (max.), 50.4 watts
277 VAC - 0.20 amps, 50.4 watts

Operation

DC Voltage	Unit	Suggested Lamp Head	Watts to 87½ of Rated Voltage*			
			1½ hrs.	2 hrs.	4 hrs.	8 hrs.
6	MC28	ZM	28	21	13.5	—
	MC50	ZM	50	37.5	24	8.5
	MC75	ZN	75	56.5	28.5	15
	MC100	ZN	100	75	48	17
	MN25	ZM	25	19	12	—
	MN50	ZM	50	37.5	24	8.5
	MN70	ZM	70	52.5	33.6	11.9
12	MTC50	ZQ	50	37.5	24	8.5
	MTC100	ZR	100	75	48	17
	MTC125	ZS	125	94	60	21.5
	MTC150	ZS	150	112.5	72	25.5
	MTC180	ZS	180	135	86.5	31
	MTN25	ZQ	25	19	12	—
	MTN50	ZQ	50	37.5	24	8.5
	MTC100	ZR	100	75	48	17
	MTN125	ZS	125	94	60	21.5
	MTN150	ZS	150	112.5	72	25.5
	MTL120	ZS	120	90	58	20

Suggested Specification

Furnish and install Chloride Systems emergency lighting unit model _____. The unit shall be constructed to meet Underwriter's Laboratories, Inc. Standard #924 and the National Electrical Code (NEC).

INSTALLATION AND OPERATION - Unit shall be easily field connected to a 120 or 277 VAC, 60 hertz, unswitched power source. Installation must comply with the NEC as well as other applicable codes. Upon utility power failure or brownout, the unit shall automatically transfer to battery power and maintain the required illumination level for a minimum period of 90 minutes. Upon restoration of utility power, the charger shall restore the battery to full charge within UL 924 requirements following a rated discharge of not more than 90 minutes.

CHARGER - Product shall utilize either a constant current (nickel cadmium) or fully automatic, voltage regulated (lead calcium) charging system. The charging system shall maintain the battery at full capacity without the need for periodic exercising or equalization. The following features shall be standard: Low voltage disconnect (LVD), brownout protection and AC lockout.

BATTERY - The battery shall be either a maintenance free, sealed nickel cadmium or lead calcium battery. The nickel cadmium battery shall utilize sintered plate construction and polypropylene separators for trouble-free operation in ambient temperatures up to 95°F (35°C). The lead calcium battery shall provide trouble-free operation in temperatures up to 85°F (30°C). Nickel cadmium batteries shall be supplied with a five year full warranty, and sealed lead calcium batteries shall be supplied with a one year full warranty.

HOUSING - The unit housing shall be impact resistant, fiberglass reinforced polyester gray enclosure suitable for NEMA 3, 4x, and 12 areas. A one-piece formed gasket shall be included to eliminate potential for seal failure.