

mcPhilben®

emergency lighting

Job Name: _____

Type: _____

Voltage: _____

CODES AND STANDARDS

UL924 listed
Meets NFPA Life Safety Code 101, NEC,
OSHA, Local and State Codes

VOLTAGE INPUT

Universal 120/277VAC input

FINISH

Heavy gauge steel cabinet in neutral cream finish

CONSTRUCTION

Housing: Heavy duty steel cabinet is finished in neutral cream baked-on powder paint providing scratch and corrosion resistance. Optional black (-B) and special color paint (-SP) finishes available, see Options for ordering details.

Lighting Heads: Impact resistant, UV stable, flame rated thermoplastic lamp housing and swivel assemblies in neutral cream color to match unit housing. Lighting heads are fully adjustable and feature lockable swivels.

LAMPS

High output incandescent lamps maximize illumination characteristics through a specially designed reflector and glass lens assembly

that provides glare-free trapezoidal light distribution.

Lamp Type 6 and 12V models: Incandescent - wedge base

Lamp Type 24V models: Incandescent - bayonet base

6 Volt Lamp Rating: 6 volt, 7.2 watt

12 Volt Lamp Rating: 12 volt, 9 watt

24 Volt Lamp Rating: 24 volt, 9 watt

Lamp Life: 100 hours (expected average)

BATTERY

Sealed lead calcium maintenance free battery designed to provide many years of dependable service.

INSTALLATION

Mounting: Units are designed for mounting to walls by means of keyhole slots provided in the back of the unit housing. Units may also be mounted by means of accessory wall bracket or mounting shelf.

Wiring: Surface wiring is provided for by conduit knockouts in the left hand side of the unit housing.



OPERATION

Upon failure of the normal utility power, a solid-state transfer switch automatically connects the unit's battery to the emergency lamp. Emergency illumination will be supplied for a minimum of 90 minutes. During emergency operation, the unit battery is protected from severe discharge damage by an automatic low voltage disconnect circuit that discontinues unit operation when battery voltage reaches 87.5% of nominal. When normal utility power is restored, the battery is automatically disconnected from the load and a recharging cycle begins that will return the battery to full capacity within 24 hours.

ELECTRONICS

Charger Type: Fully automatic, temperature compensating, variable rate float charger
Utility Input: 120/277VAC, 60 Hz.

Power Consumption: 15 watts (maximum)

Temperature Range: 68°F to 86°F (20°C to 30°C)

Recharge Duty Cycle: 24 hours

Load Transfer: All models utilize mechanical relays for load transfer and provide fused DC load connections.

Controls: Momentary test switch, LED AC-On and high charge indicator lights

(Continued on Back)

CATALOG NUMBER (Example: ND6L-4)

FAMILY	WATTAGE	LAMP TYPE ³	OPTIONS ^{1,2}
ND6L - 6V, Lead Calcium ND12L - 12V, Lead Calcium ND24L - 24V, Lead Calcium	6 Volt 2 - 85w 4 - 100w 6 - 152w 8 - 210w 12 Volt 13 - 170w 15 - 210w 17 - 340w 24 Volt 20 - 200w 22 - 350w	6 Volt BLANK - 7.2w Incandescent 04 - 9w Incandescent 12 Volt BLANK - 9w Incandescent 52 - 12.5w Incandescent 24 Volt BLANK - 9w Incandescent 90 - 12w Incandescent 94 - 18w Incandescent	V - Voltmeter A - Ammeter LC - 3-Conductor Line Cord (120V) TD-120 - 15-Minute Re-transfer Time Delay (120V) TD-277 - 15-Minute Re-transfer Time Delay (277V) SX - Self-Diagnostic Circuit (6 and 12V models only) MH - Metal Lighting Heads B - Black Finish - Housing and Lighting Heads SP - Special Paint Finish (Specify Color)
Accessories B-1 Mounting Bracket S-4 Mounting Shelf (ND6-2, 4, 6, ND12-13 and ND24-20 models) S-5 Mounting Shelf (ND6-8, ND12-15, 17 and ND24-22 models) PG-2 Wire Guard (all models) 900-W-03 Matching Remote Head-Single (6 Volt models) (6V, 7.2W)	900-W-51 Matching Remote Head-Single (12 Volt models) (12V, 9W) 900-W-89 Matching Remote Head-Single (24 Volt models) (24V, 9W) 901-W-03 Matching Remote Head-Double (6 Volt models) (6V, 7.2W) 901-W-51 Matching Remote Head-Double (12 Volt models) (12V, 9W) 901-W-89 Matching Remote Head-Double (24 Volt models) (24V, 9W)	¹ Other options available. Consult factory. ² Some options may impact UL listing. ³ Other lamps are available. See back of page or spec sheet ERA6030. Add lamp suffix to end of catalog number but before option codes.	

ND SERIES Industrial Steel Units

ELECTRONICS (CONT'D)

Safety Circuitry:

AC Lockout: Prevents battery discharge prior to initial unit power-up saving installation time.

Low Voltage Battery Disconnect: Protects the battery from being severely damaged by deep discharge during prolonged power failures.

DC Overload and Short Circuit Protection: Provided by fused output connections.

Brownout Protection: Automatically switches the unit to emergency mode when utility voltage is reduced to the point at which most fluorescent light fixtures would extinguish.

SELF-DIAGNOSTICS

The optional SX self-diagnostics circuit automatically cycles the emergency lighting unit every 25-30 days. The SX circuit checks for battery charging and over charging, battery capacity and reports any system malfunction. By design the SX does not activate the lighting heads, thus avoiding substantial lamp life reduction.

WARRANTY

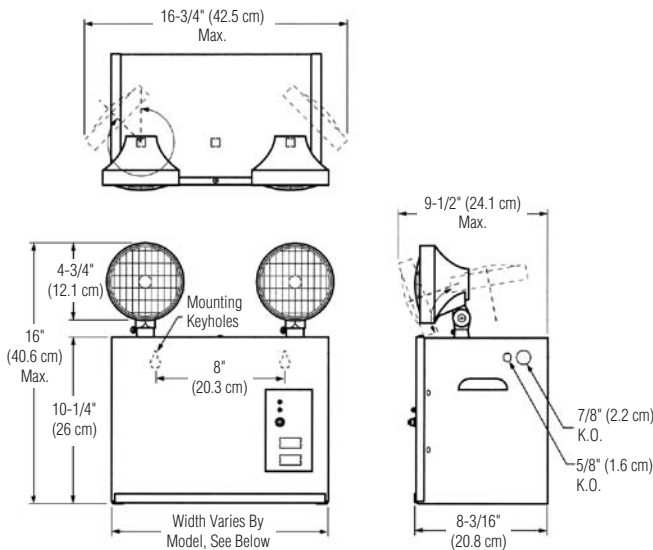
Unit: (excluding lamps) 3-years full coverage against defects in materials and workmanship from date of shipment

Battery: 3 years full warranty plus an additional 7 years of pro-rata coverage

SPECIFICATIONS

Model No.	Volts	Watts For 1-1/2 Hrs.	Watts For 2 Hrs.	Watts For 3 Hrs.	Watts For 4 Hrs.	Standard Lamp	Weight (Lbs.)
ND6L-2	6	85	66	48	36	7.2W incandescent	35
ND6L-4	6	100	78	50	36	7.2W incandescent	40
ND6L-6	6	152	126	76	63	7.2W incandescent	60
ND6L-8	6	210	166	127	101	7.2W incandescent	75
ND12L-13	12	170	137	99	71	9W incandescent	45
ND12L-15	12	210	166	127	101	9W incandescent	65
ND12L-17	12	340	274	198	142	9W incandescent	75
ND24L-20	24	200	150	100	75	9W incandescent	45
ND24L-22	24	350	263	175	131	9W incandescent	75

DIMENSIONS



OPTIONAL LAMPS AVAILABLE

Add suffix to end of catalog number prior to options.

Example: ND6L-8-09 or ND12L-17-127

SUFFIX	VOLTS	WATTAGE	LAMP TYPE
-05	6	6	Bi-pin Halogen
-06	6	8	Bi-pin Halogen
-07	6	10	Bi-pin Halogen
-08	6	12	Bi-pin Halogen
-09	6	20	Bi-pin Halogen
-53	12	8	Bi-pin Halogen
-73	12	10	Bi-pin Halogen
-54	12	12	Bi-pin Halogen
-56	12	20	Bi-pin Halogen
-57	12	30	Bi-pin Halogen
-58	12	40	Bi-pin Halogen
-127	12	50	Bi-pin Halogen
-91	24	24	Double Contact Bayonet
-100	24	20	Bi-pin Halogen

Model No.	Width - Inches (cm)
ND6-2, ND6-4, ND6-6, ND12-13	13-3/8 (34.0)
ND6-8, ND12-15, ND12-17, ND24-20, ND24-22	17.0 (43.2)