

Emergency Lighting Control

For Use With Series CBS Central Battery System for Emergency Lighting

Series ELC
Type P3

ELCP3.12.25.19

GENERAL DESCRIPTION

ELC converts any LED luminaire operating from normal AC or 24VDC power, to emergency lighting operation powered from a Sigtex central battery system. Constant power output is factory adjustable to optimize emergency illumination level and fixtures may be on, off, switched or dimmed in normal mode without affecting emergency operation. General lighting fixtures with ELC may be combined with MOONLITE LED™ emergency luminaires and exits in the central battery system, as required.

Typical applications for Type P3 may include down lights, 2 x 2 or 2 x 4 LED flat panel or other lay-in designs, with normal power ranging from 10W to 70 watts or more.

All Sigtex central battery systems Series CBL and CBM include fully automatic self-test, self-diagnostics. Series CBM includes the MARS™ Monitoring and Reporting System which provides cloud-based internet communication and fault reports delivered automatically via email for all components of the emergency system.

CONSTRUCTION & OPERATION

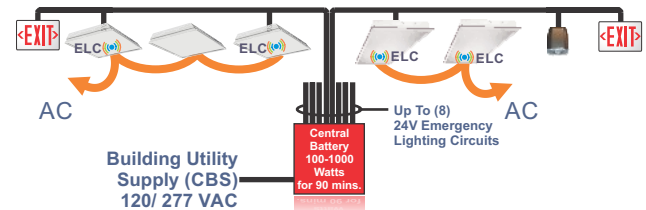
- Factory or field installable in the Fire and Electrical Enclosure of listed fixtures.
- Normal lighting operation is not affected by ELC operation.
- Compatible with all types of dimming and lighting controls.
- Standard flange for screw mount and adhesive base mount.

ELECTRICAL

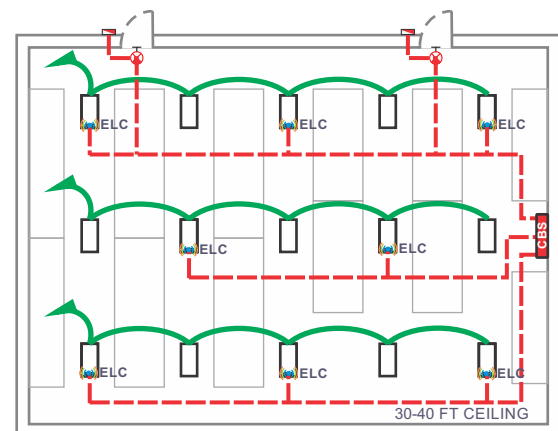
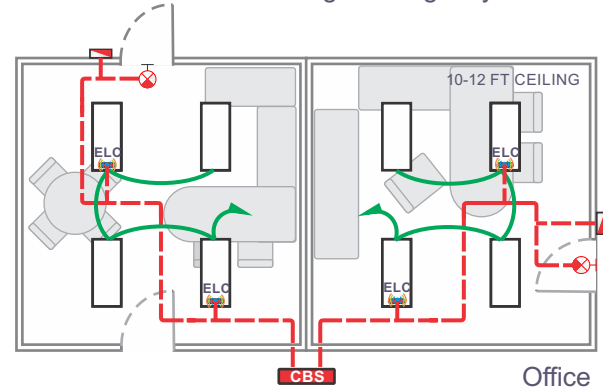
- Input 24 VDC.
- Constant emergency power output is factory adjustable from 5W to 22W.
- Output voltage auto sensing range up to 100V.
- Adjustable emergency lumen output allows optimum settings for any fixture to equal or exceed requirements of NEC and NFPA 101 codes for varying mounting heights and other conditions.
- Available for LED fixtures operating from 10W to 70W or higher in normal mode.
- Optional DC models available for compatible LED fixtures operating from 24VDC normal power.

CODES

- UL Listed in compliance with UL Standard 924 and CAN/CSA C22.2 No. 141-15 for field or factory installation in Fire and Electrical Enclosure. All Sigtex Central Battery Systems and MOONLITE LED emergency fixtures are Listed to UL Standard 924.



Low Voltage Emergency Circuits



Warehouse

— EMERGENCY LIGHTING CIRCUIT: LOW VOLTAGE 24 VDC
— NORMAL LIGHTING BRANCH CIRCUIT 120/ 277 VAC

FIXTURE SCHEDULE

MODEL	CATALOG NO
APPROVAL	JOB INFORMATION



SUGGESTED SPECIFICATIONS:

Supply and install Sigtex Emergency Lighting Control Series ELC which shall be capable of operating a LED general lighting fixture in emergency mode for a minimum of 90 minutes following failure of the normal power supply to the fixture, when connected to a Sigtex DC Central Battery System.

ELECTRICAL SPECIFICATIONS

Driver current is settable at the factory, to produce the output voltage and power ranges given below in Table 1. Emergency power output (EPR) is adjustable through the range given below. Maximum available EPR is a function of the operating voltage of the luminaire's LED array. Power should be specified to ensure illumination on the path of egress complies with NFPA Life Safety Code 101, based on photometric data and efficacy for the fixture in use. To determine compatibility of ELC devices and output power required for specific applications, See ELC SPECIFICATION GUIDE.

FEATURES

- High Efficiency, up to 90% @ 24Vdc input
- Constant current output, step up capability.
- Protections: OVP, SCP, OTP

PRODUCT DATA

INPUT DATA:

Operating Voltage: **19~27V**
Under Voltage Protect Turn OFF: **18V**
Under Voltage Recover: **20V**
Over Voltage Protect Turn OFF: **30V**
Over Voltage Recover: **28V**
DC Current (24V INPUT): **1A**
Inrush current : **2A** (COLD START, VIN=24V, 20W)

OUTPUT DATA:

CONSTANT CURRENT OUTPUT

TABLE 1: OUTPUT VOLTAGE & CURRENT

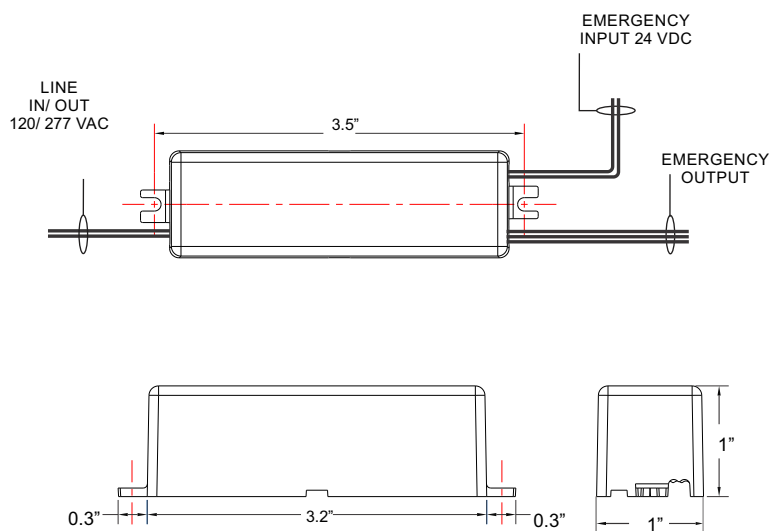
OPTION CODE	OUTPUT VOLTAGE ¹ (VDC)	OUTPUT CURRENT ² (mA)	MAX. EMERGENCY POWER RATING ³ (W)
NONE	30-100	50-200	20
V1	27-54	100-400	20
V2	5-41	50-350	14
V3	5-22	300-1000	22

1. Automatic Output Voltage sensing

2. Output Current is factory adjustable.

3. Maximum EPR is a function of the operating voltage of the Luminaire LED array. See ELC SPECIFICATION GUIDE to estimate value required.

STANDARD MOUNT



NOTE:

- All specifications measured at 25°C.
- If LED arrays include current regulation circuits, contact factory to confirm ELC is compatible.

Operating Temperature: -20° to +65° C

Max Ambient Temperature (Ta) 65° C

Max Case Temperature (Tc) 80° C

UL Conditions of Acceptability:

Wiring must be installed within a Fire and Electrical Enclosure and light output must exceed 1 ft Candle at 7' 3" from sample.

ORDERING INFORMATION: Example: ELC20P3-V1

ELC	20	P3	-V1
MODEL SERIES	EMERGENCY POWER WATTS	PACKAGE TYPE	OPTIONS
ELC	X Watts ¹	P3	V1 = 27- 54V V2 = 5 - 41V V3 = 5 - 22V

¹ Based on lumen output required