Greengate

LK16 & LK32 – LiteKeeper 16 & 32

Catalog#	Prepared by
Project	Date
Comments	Type

Overview

The LiteKeeper stand-alone lighting control panel is an all-inclusive premium grade system for applications that would traditionally use a timeclock in conjunction with contactors. Control up to 32 relays per panel. Several relay options and more standard features than any other stand-alone panel on the market combine to create a state of the art stand-alone lighting control system.

Features

- Capable of mixed load voltages (120/277/347 VAC) as well as mixed sources (i.e. normal and emergency power)
- Manual and programmable control of each relay via a simple keypad and 4 line LCD display
- Normally open, latched, and two pole parallel relays available
- Flush mount kit and voltage separation barrier available
- Capable of controlling receptacle loads
- LED ready

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Specifications

Enclosure	NEMA 1 surface mount, lockable
Size	LK16: 18"H x 15"W x 6.25"D (up to 16 relays)
	LK32: 30"H x 15"W x 6.25"D (up to 32 relays)
Transformer Ratings	Multi-tapped 120/277 VAC internally fused standard
	Optional 347 VAC internally fused
Power Use Ratings	Fully loaded panel 75 watts
Operating Environment	Temperature: 32°F to 122°F (0°C to 50°C)
Master Override	ON/AUTO/OFF
Programming	Onboard keypad and LCD display
	Optional PC Software
Standard Relay Ratings	20A, 120/277VAC per relay
	10A, 120/277VAC electronic Ballast, (LED)
	Normally open
	Max wire size: 10 AWG
	Mechanical operations: 10 million
Latching Relay Ratings	20A, 120/277 electronic ballast (LED)
	15A, 347 VAC
	Maximum wire size: 6 AWG
	Mechanical operations: 10 million
	Provides a system SCCR rating of 10,000A
Two Pole Relay Ratings	20A, 208/240/480 VAC
	Normally open
	Maximum wire size: 6 AWG
	Mechanical operations: 10 million
Standards	UL 916 Listed UL 924 with RIM

System Includes

- UL listed – UL 916 standard
- NEMA 1 enclosure
- 32 low voltage input connections
- Digita Switch interface
- Time schedules with astronomic clock
- Prioritization and masking of switch inputs, time schedules and remotes
- Timed inputs
- Occupant warn-off and overrides
- Keypad and 4 line LCD display
- RS-232 port standard
- UL Listed - UL 924 with RIM
- Control receptacle loads with latching relay card

Accessories

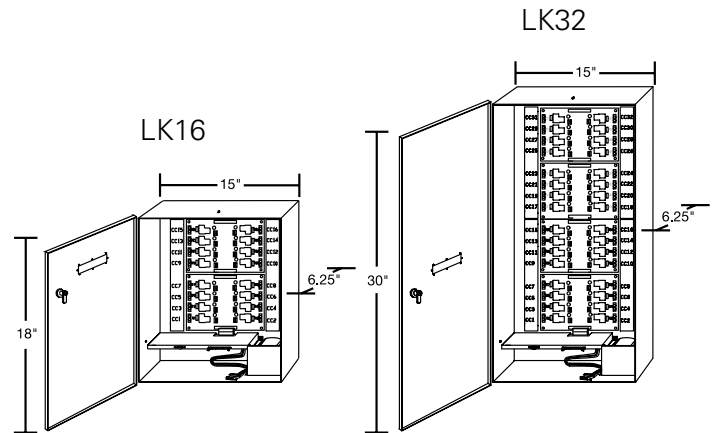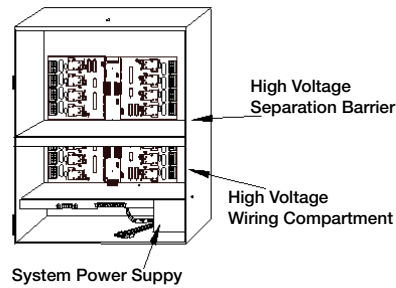- Keeper Enterprise Software
- Ethernet Interface Module
- Greengate Digital Switch (GDS)
- Dry Contact Switches
- Contact Input Photosensor
- Occupancy Sensor
- Voltage Separation Barrier
- Flush Mount Kit
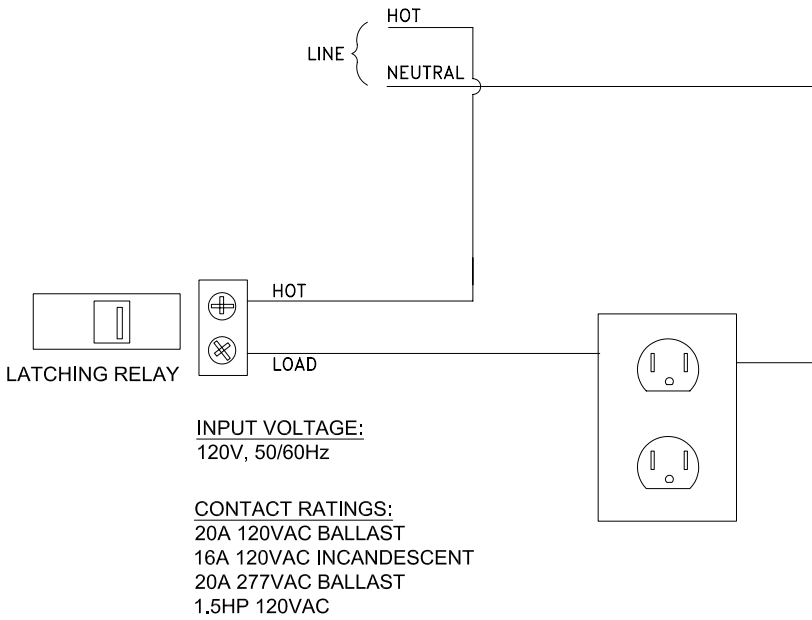- CEPC (UL 924 Accessory)
- RRU

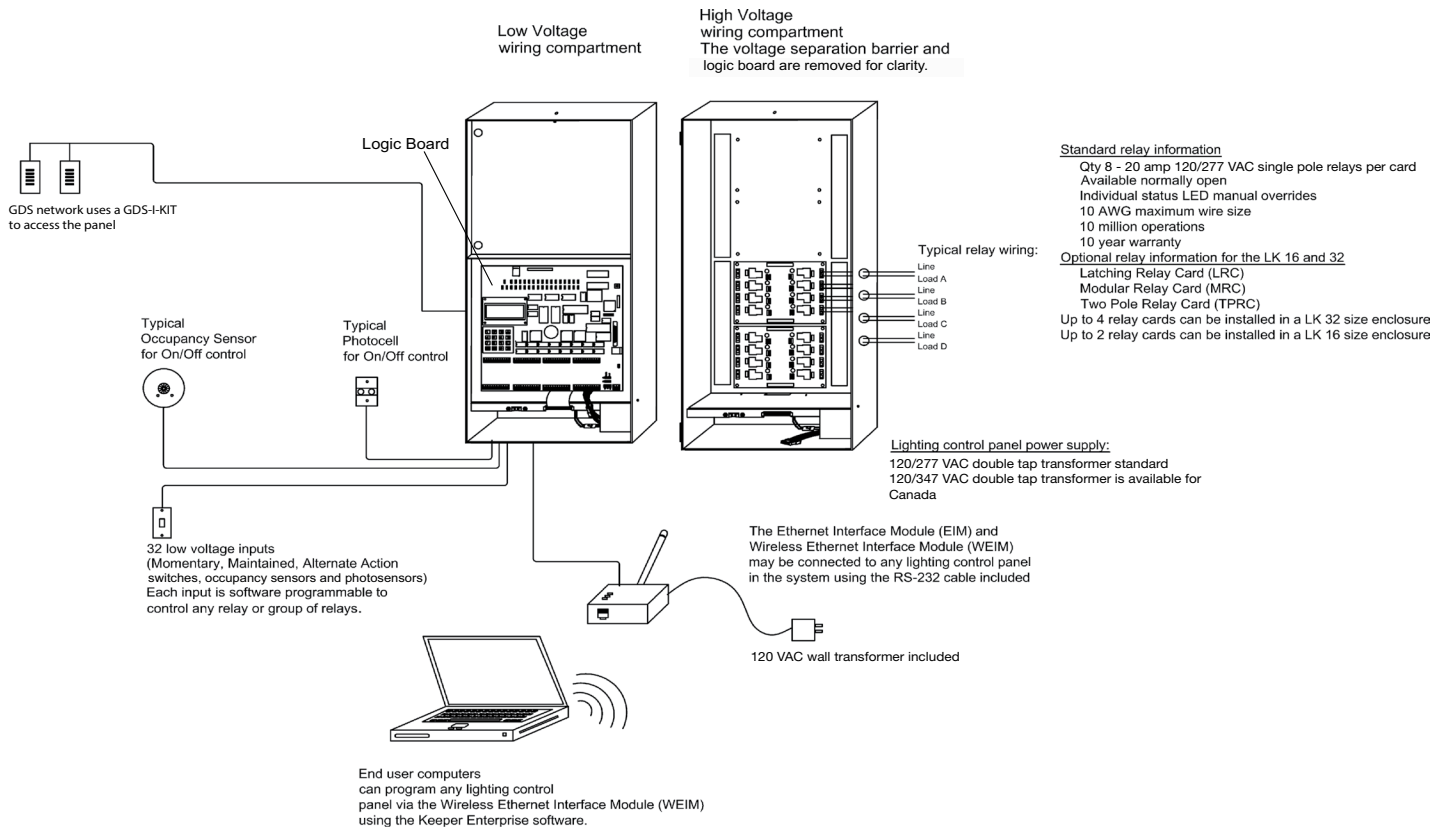## Dimensions

Enclosure

High Voltage Barrier and Dividers

High Voltage Separation Barrier

High Voltage Wiring Compartment

System Power Suppy

LK32

LK16

Wiring Diagram

Latching Relay Receptacle Control

LINE { HOT / NEUTRAL

HOT

LATCHING RELAY

HOT

LOAD

INPUT VOLTAGE:
120V, 50/60Hz

CONTACT RATINGS:
20A 120VAC BALLAST
16A 120VAC INCANDESCENT
20A 277VAC BALLAST
1.5HP 120VAC

Sample One-Line

Low Voltage
wiring compartment

High Voltage
wiring compartment
The voltage separation barrier and
logic board are removed for clarity.

Logic Board

GDS network uses a GDS-I-KIT
to access the panel

Typical
Occupancy Sensor
for On/Off control

Typical
Photocell
for On/Off control

Typical relay wiring:
Line
Load A
Line
Load B
Line
Load C
Line
Load D

Standard relay information
Qty 8 - 20 amp 120/277 VAC single pole relays per card
Available normally open
Individual status LED manual overrides
10 AWG maximum wire size
10 million operations
10 year warranty
Optional relay information for the LK 16 and 32
Latching Relay Card (LRC)
Modular Relay Card (MRC)
Two Pole Relay Card (TPRC)
Up to 4 relay cards can be installed in a LK 32 size enclosure
Up to 2 relay cards can be installed in a LK 16 size enclosure

Lighting control panel power supply:
120/277 VAC double tap transformer standard
120/347 VAC double tap transformer is available for
Canada

32 low voltage inputs
(Momentary, Maintained, Alternate Action
switches, occupancy sensors and photosensors)
Each input is software programmable to
control any relay or group of relays.

The Ethernet Interface Module (EIM) and
Wireless Ethernet Interface Module (WEIM)
may be connected to any lighting control panel
in the system using the RS-232 cable included

120 VAC wall transformer included

End user computers
can program any lighting control
panel via the Wireless Ethernet Interface Module (WEIM)
using the Keeper Enterprise software.
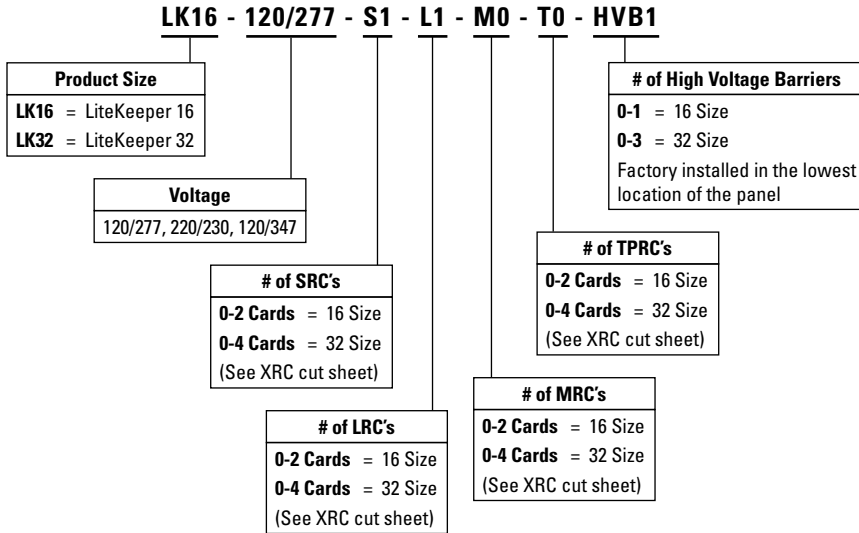
Ordering

All LiteKeeper lighting control panels require a Logic Board (LK-LB). The logic board is shipped separately from the enclosure and is listed as a separate line item. When ordering any of the below models, you must also order the LK-LB.

LK16 - 120/277 - S1 - L1 - M0 - T0 - HVB1

Product Size

LK16	= LiteKeeper 16
LK32	= LiteKeeper 32

Voltage

120/277, 220/230, 120/347

# of SRC's

0-2 Cards	= 16 Size
0-4 Cards	= 32 Size

(See XRC cut sheet)

# of LRC's

0-2 Cards	= 16 Size
0-4 Cards	= 32 Size

(See XRC cut sheet)

# of MRC's

0-2 Cards	= 16 Size
0-4 Cards	= 32 Size

(See XRC cut sheet)

# of TPRC's

0-2 Cards	= 16 Size
0-4 Cards	= 32 Size

(See XRC cut sheet)

# of High Voltage Barriers

0-1	= 16 Size
0-3	= 32 Size

Factory installed in the lowest location of the panel

Additional Options

Catalog #	Description
LK-LB	LiteKeeper Logic Board (required per enclosure)
LK16 FK	LiteKeeper 16 size Flushmount Kit (option)
LK32 FK	LiteKeeper 32 size Flushmount Kit (option)

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