CKT16, CKT32 & CKT48 ControlKeeper TouchScreen

Catalog#	Prepared by
Project	Date
Comments	Type

Overview

The ControlKeeper TouchScreen network lighting control panel is a cost-effective, specification grade lighting control system that can control up to 48 relays per panel. Network up to 254 ControlKeeper panels for a state of the art lighting control system.

Features

- Capable of mixed load voltages as well as mixed sources (i.e. normal and emergency power)
- Capable of controlling receptacle loads
- Normally open, latched and two pole serial relays available
- 30 Amp relays one used on all 20A relay cards to extend relay life

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Specifications

Enclosure	NEMA 1 surface mount, lockable
Size	•CKT16: 18"H X 15"W X 6.25"D (up to 16 relays)
	•CKT32: 30"H X 15"W X 6.25"D (up to 32 relays)
	•CKT48: 41"H X 15"W X 6.25"D (up to 48 relays)
Transformer Ratings	•Multi-tapped 120/277 VAC internally fused standard
	•Optional 347 VAC internally fused
	•Optional 220/230 VAC 50/60 Hz internally fused
	•Optional 220/240 VAC 50/60 Hz internally fused
Operating Environment	Temperature: 32°F to 122°F (0°C to 50°C)
Master Override	ON/AUTO/OFF
Programming	Onboard TouchScreen Interface
	Optional PC Software
Standard Relay Ratings	20A, 120/277 VAC
	Normally open
	Maximum wire size: 10 AWG
	Mechanical operations: 10 million
Latching Relay Ratings	20A, 120/277 VAC
	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 Approval UL 916 Listed UL 924 with RIM

System Includes

- UL listed – UL 916 standard
- NEMA 1 enclosure
- 32 low voltage input connections
- Digital Switch Interface
- Time schedules with astronomic clock
- Prioritization and masking of switch inputs, time schedules and remotes
- Timed inputs
- Occupant warn-off and overrides
- TouchScreen
- RS-232 port standard
- RS-485 network standard
- 4 analog inputs
- UL Listed - UL 924 with RIM
- Controls receptacle loads with latching relay card

Accessories

- Keeper Enterprise Software
- CEPC (UL 924 Accessory)
- Ethernet Interface Module
- Greengate Digital Switch (GDS)
- Low Voltage Switches
- Flush Mount Kit Available
- High Voltage Barrier
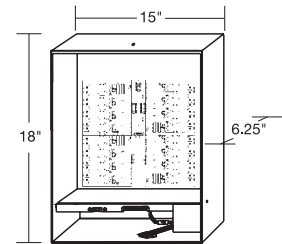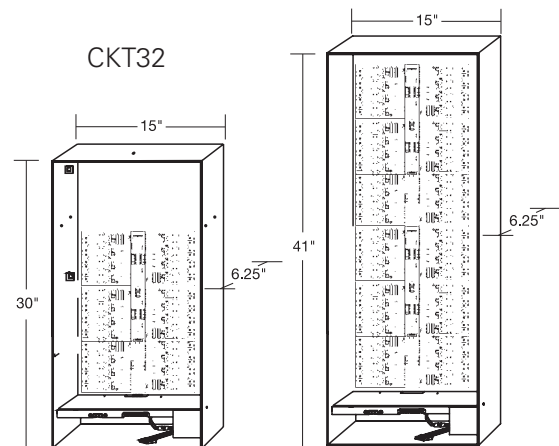- Occupancy Sensors

Dimensions
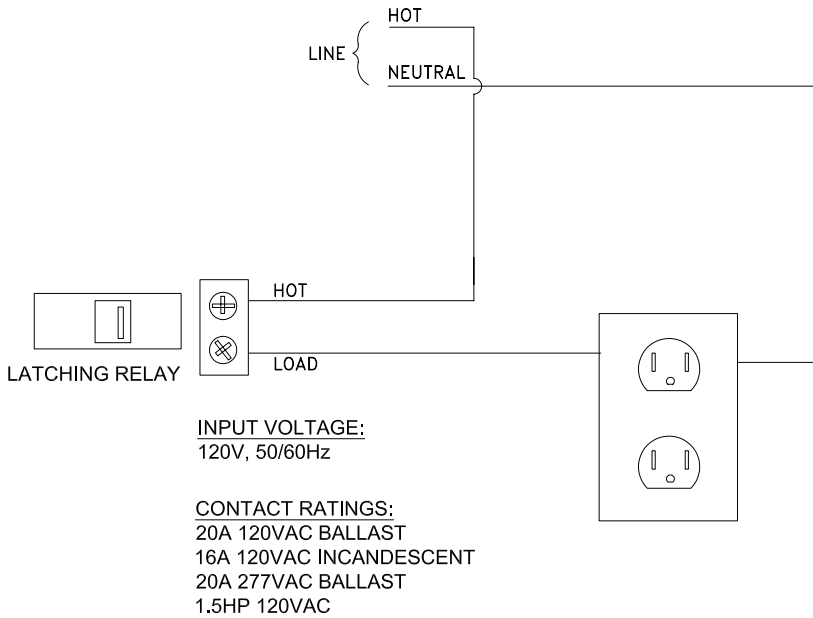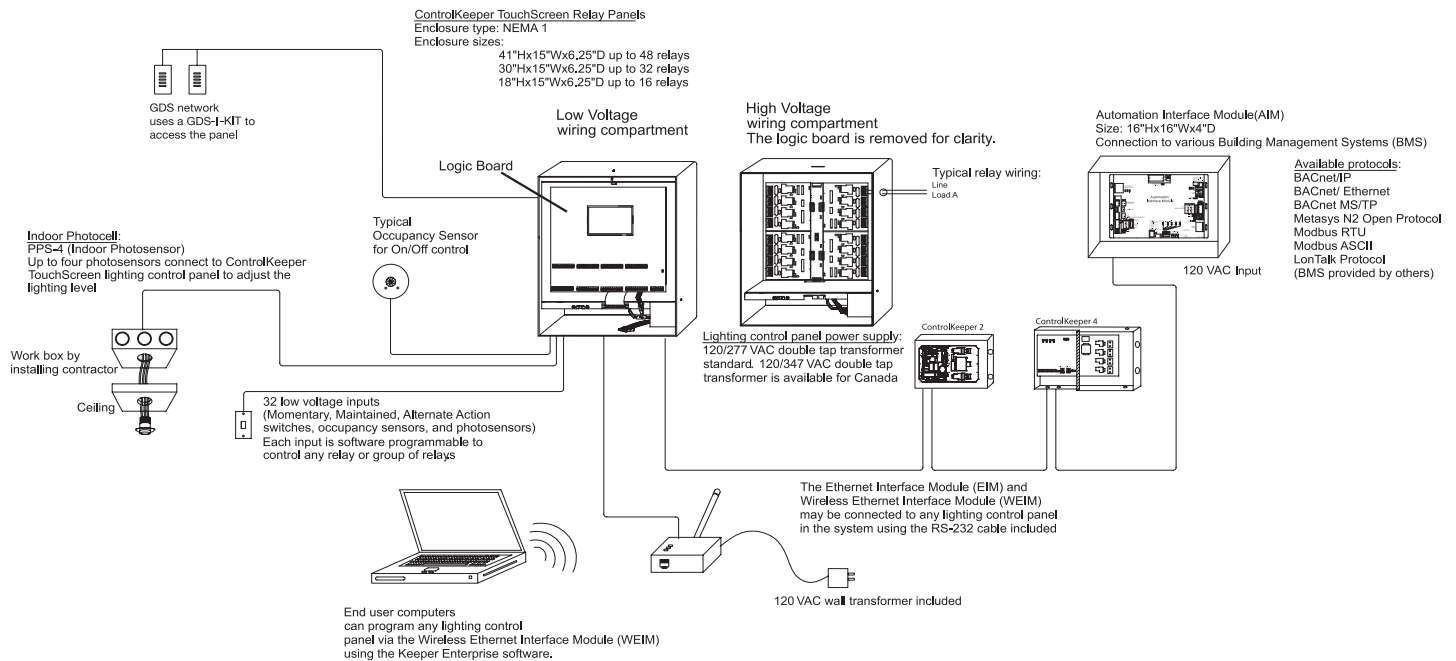
Enclosure

High Voltage Barrier and Dividers

High Voltage Separation Barrier

High Voltage Wiring Compartment

System Power Suppy

CKT16

15"

18"

6.25"

CKT48

15"

41"

6.25"

CKT32

15"

30"

6.25"

Wiring Diagram

Latching Relay Receptacle Control

LINE {
HOT
NEUTRAL
}

HOT
LOAD

LATCHING RELAY

INPUT VOLTAGE:
120V, 50/60Hz

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

Sample One-Line

ControlKeeper TouchScreen Relay Panels
Enclosure type: NEMA 1
Enclosure sizes:
41"Hx15"Wx6.25"D up to 48 relays
30"Hx15"Wx6.25"D up to 32 relays
18"Hx15"Wx6.25"D up to 16 relays

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

Low Voltage
wiring compartment

High Voltage
wiring compartment
The logic board is removed for clarity.

Automation Interface Module(AIM)
Size: 16"Hx16"Wx4"D
Connection to various Building Management Systems (BMS)

Logic Board

Typical relay wiring:
Line
Load A

Available protocols:
BACnet/IP
BACnet/ Ethernet
BACnet MS/TP
Metasys N2 Open Protocol
Modbus RTU
Modbus ASCII
LonTalk Protocol
(BMS provided by others)

Indoor Photocell:
PPS-4 (Indoor Photosensor)
Up to four photosensors connect to ControlKeeper
TouchScreen lighting control panel to adjust the
lighting level

Typical
Occupancy Sensor
for On/Off control

120 VAC Input

Work box by
installing contractor

Ceiling

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

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

ControlKeeper 2

ControlKeeper 4

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

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

120 VAC wall transformer included
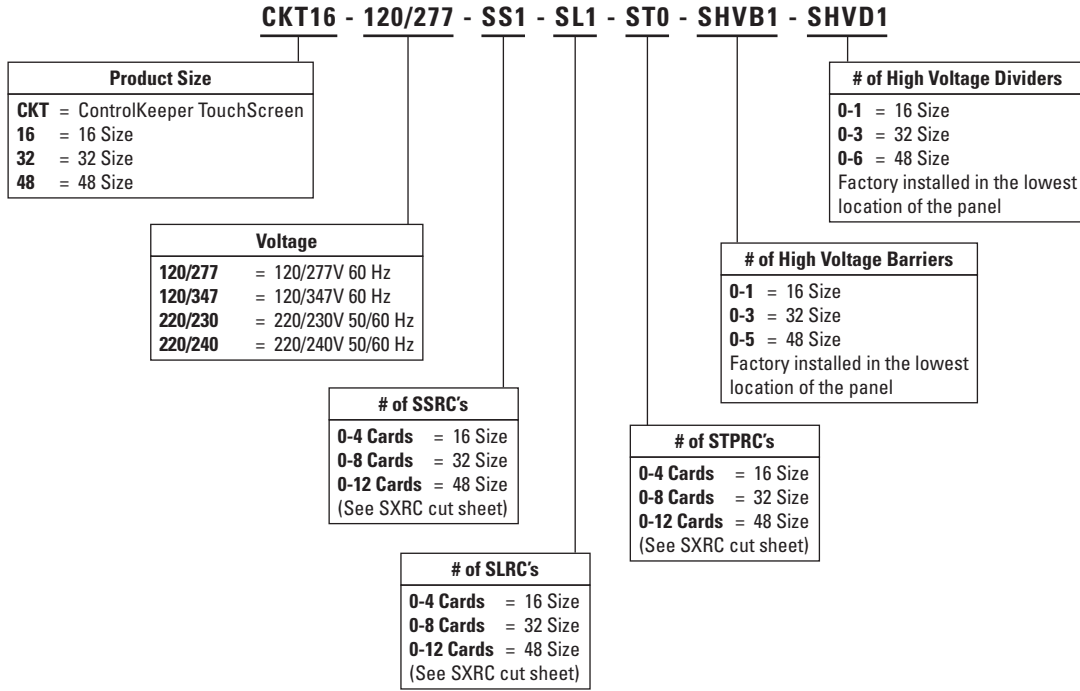
Ordering

All ControlKeeper TouchScreen lighting control panels require a Logic Board (CKT 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 CKT LB.

CKT16 - 120/277 - SS1 - SL1 - ST0 - SHVB1 - SHVD1

Product Size

CKT = ControlKeeper TouchScreen
16 = 16 Size
32 = 32 Size
48 = 48 Size

Voltage

120/277 = 120/277V 60 Hz
120/347 = 120/347V 60 Hz
220/230 = 220/230V 50/60 Hz
220/240 = 220/240V 50/60 Hz

# of SSRC's

0-4 Cards = 16 Size
0-8 Cards = 32 Size
0-12 Cards = 48 Size
(See SXRC cut sheet)

# of SLRC's

0-4 Cards = 16 Size
0-8 Cards = 32 Size
0-12 Cards = 48 Size
(See SXRC cut sheet)

# of STPRC's

0-4 Cards = 16 Size
0-8 Cards = 32 Size
0-12 Cards = 48 Size
(See SXRC cut sheet)

# of High Voltage Barriers

0-1 = 16 Size
0-3 = 32 Size
0-5 = 48 Size
Factory installed in the lowest location of the panel

# of High Voltage Dividers

0-1 = 16 Size
0-3 = 32 Size
0-6 = 48 Size
Factory installed in the lowest location of the panel

Catalog #	Description
CKT LB	ControlKeeper TouchScreen Logic Board (required per enclosure)
CKT16 FK	ControlKeeper TouchScreen 16 size Flushmount Kit (option)
CKT32 FK	ControlKeeper TouchScreen 32 size Flushmount Kit (option
CKT48 FK	ControlKeeper TouchScreen 48 size Flushmount Kit (option)

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