Greengate

CK4A - Control Keeper 4A

Network lighting control panel

🚀 Interactive Menu

- Order Information page 2
- Additional Resources page 3
- Wiring Diagrams page 4
- Product Warranty

Product Certification

c(UL)us

Product Features

BAA

Top Product Features

- Support for up to four 0-10V dimming ballast outputs
- Electrically held normally open as well as mechanically latched and two pole relays available
- Capable of controlling receptacle loads
- 4 single pole or 2 two pole serial relays
- Open or closed loop control algorithms
- Suitable to control LED dimming loads, see relay card information for loading capacity
- Options to meet Buy American Act requirements

Dimensional Details

14"
[356mm]

10"
[254mm]

3.5"
[89mm]
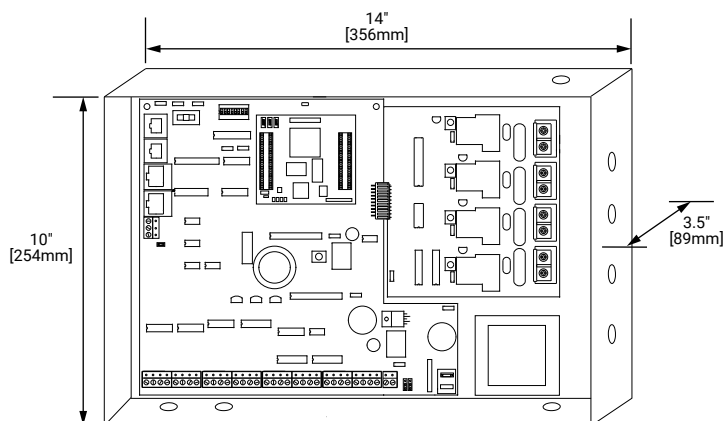
🚀 additional
product diagrams

Order Information

SAMPLE ORDER NUMBER: **CK4A-SLRC-347**

This is a network-ready lighting control system. It can be combined with other ControlKeeper series panels to create a scalable, networked lighting control scheme.
It can be ordered with any suitable system option or accessory.

Catalog Number

Domestic Preferences [1]	Product	Type of Relay Card	Transformer Voltage [2]
[Blank] = Standard **BAA** = Buy American Act	**CK4A** = ControlKeeper 4	**SSRCNO, SLRC,** or **STPRCNO**	**[BLANK]** = 120/277 VAC (60 Hz) **347** = 120/347 VAC (60 Hz) **230** = 220/230 VAC (50/60 Hz) **240** = 220/240 VAC (50/60 Hz)
Notes			

(1) Only product configurations with this designated prefix are built to be compliant with the Buy American Act of 1933 (BAA). Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.
(2) When ordering 230V, 240V, 347V models you must use the SLRC relay option. Example: CK4A-SLRC-347, CK4A-SLRC-230, CK4A-SLRC-240

Product Specifications

Key Features

The ControlKeeper 4A network lighting control panel is a costeffective, specification grade lighting control system. Control up to 4 relays per panel with optional support for up to four 0-10V dimming ballast control outputs. Network up to 254 ControlKeeper panels for a state of the art lighting control system.

Mechanical

Size: 10"H X 14"W X 3.5"D (254 mm x 355.6 mm x 89 mm)
Environment:
  • **Operating temperature:** 32°F to 122°F (0°C to 50°C)
Housing: NEMA 1 surface mount enclosure

Electrical

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

Power Use Ratings:
  • Fully loaded panel 40 watts

Load Types
  • 4-wire fluorescent loads, 0-10 VDC Isolated (40 µA max per circuit leakage to line)
  • The CK4A suppoerts up to 100mA per panel. Each 0-10V output supports 25mA or 12 drivers that draw the standard 2mA each

Master Override:
  • ON/AUTO/OFF

Standard Relay Ratings:
  • 20A, 120/277 VAC per relay
  • 10A, 120/277 VAC electronic ballast (LED)
  • Normally open
  • Maximum wire size: 10 AWG
  • Mechanical operations: 10 million

Latching Relay Ratings:
  • 20A, 120/277 VAC electronic ballast (LED)
  • 15A, 347 VAC (LED)
  • 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

Software Specifications

Programming: Optional PC Software

System Includes:
  • UL listed – UL 916 standard
  • NEMA 1 enclosure
  • 4 relays
  • Support for 4 three-wire or 8 two-wire low voltage inputs
  • 4 analog inputs
  • Time schedules with astronomic clock
  • Prioritization and masking of switch inputs, time schedules and remotes
  • Timed inputs
  • Occupant warn-off and overrides
  • RS-232 port standard
  • RS-485 network standard
  • Open/Closed loop daylighting
  • Control receptacle loads with Latching Relay Card

Accessories:
  • Keeper Enterprise Network Software
  • Ethernet Interface Module
  • BMS Pro
  • CEPC-1-D (UL 924 Accessory)
  • Greengate Digital Switch (GDS)
  • Low Voltage Switches
  • Contact Input or Analog Photocells
  • Occupancy Sensor

Standards/Ratings
  • UL Approval
  • UL 916 Listed
  • Plenum Rated

Warranty

Consult website for warranty information

Wiring Diagrams

Latching Relay Receptacle Controls

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
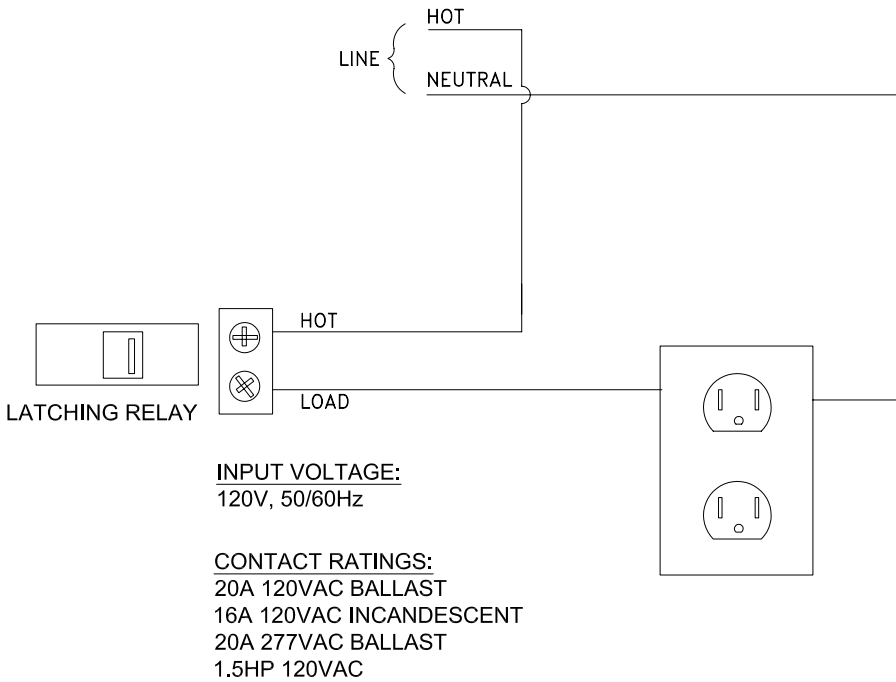
Reflective Ceiling Plan

Recessed
General Lighting
Luminaires

└ Daylight
Zone 1

└ Daylight
Zone 2

└ Daylight
Zone 3

Sample Circuiting

General Lighting
Outboard Lamps OFF
Circuit/Zone 3
Whiteboard Shuts OFF

A/V Mode Lighting
Center Lamp Remains
ON (Full Output)

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Lighting Solutions
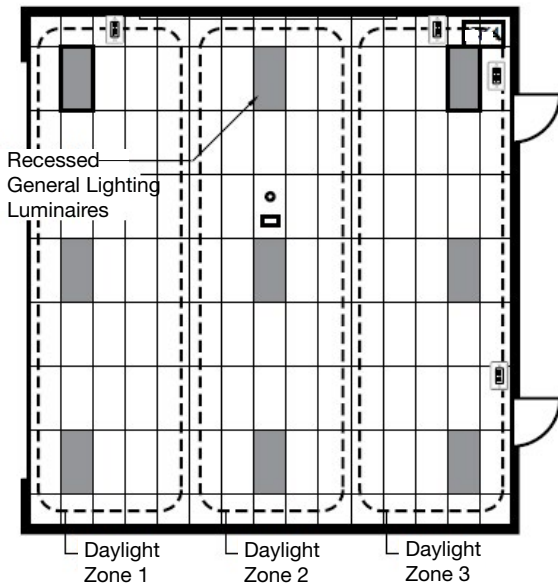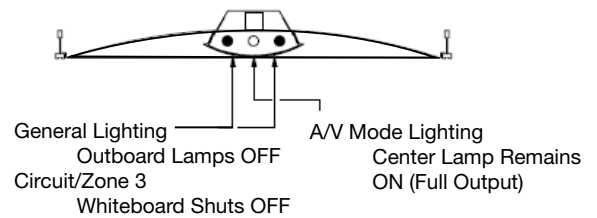
Sample One-Line

RS-485 Network
Connect up to 254 ControlKeeper lighting control panels and accessories
1. Daisy-chain all ControlKeeper lighting control panels using twisted pair (Belden #9841) or category 5 cable.
2. Lighting control network up to 4000 feet total length. If greater length is needed RS-485 repeaters are available.

GDS switch stations can be connected to each panel.

GDS-I

Typical Occupancy Sensor for On/Off control

Work box by installing contractor

Ceiling

Indoor Photocell:
PC-I (indoor photocell)
Up to four photocells connect to ControlKeeper 4A lighting control panel to adjust the lighting level

8 low voltage inputs
(Momentary, Maintained, Alternate Action switches, occupancy sensors and Photocells)
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

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

Standard relay information
Qty 4 - 20 amp 120/277 VAC single pole relays
Available normally open
Individual status LED manual overrides
10 AWG maximum wire size
10 million operations

Dimming Ballast Control
Qty 4: 0-10VDC outputs

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.

Control Systems
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