POINT HELIPORT LIGHTING
PHC
HELIPORT LIGHTING CONTROLLER

Heliport Lighting System Controller – Adjustable Brightness

For use with an POINT LIGHTING CORPORATION LED lighting system*

The PHC controller provides manual and automatic operation of the heliport lighting system. In the AUTO position, the controller operates automatically from a pilot actuated FAA radio controller or an FAA photoelectric controller that activates per FAA light level requirements. One (1) or two (2) rotary dimming switches on the door allow the brightness of the LED FATO and TLOF lights to be manually adjusted. Four (4) load switches allow for manual control of other individual circuits.

The fiberglass reinforced polyester enclosure is rated NEMA 4X and IP66. There are two industrial grade pilot lights on the door: green POWER ON indicating power presence and amber (yellow) SYSTEM ON. The PHC and lighting circuits are protected from transient voltage spikes by a 50kA interrupting surge suppressor and each load output is protected by a current limiting circuit breaker.

The standard circuit layout may be modified to accommodate the actual heliport lighting system.
* FATO and TLOF LED lighting may be mixed with other incandescent lighting loads separately circuited.

Point Type		Voltage	Options	Serial Number
PHC-61002	Dimming 1-circuit	1: 120 volts	RC: ON-OFF Radio Control	xxxxxxx
PHC-61003	Dimming 2-circuits	2: 230 volts	RC3: 3-Step RC (61002 only)	
PHC-61004	Dimming 3-circuits		SEQ: Sequence Flashing	
PHC-61005	Dimming 4-circuits		BC: Brightness Control (for PSF-53062)	
			For other standard options, see file HL411PHC	

PHC-61003-1

PHC Heliport Controller
Adjustable Brightness

FOR POINT LIGHTING CORPORATION LED SYSTEMS

PHC-61003 Specification

The heliport lighting system shall be controlled by means of a Point Lighting Corporation system controller type PHC-61003. The brightness of the separate LED lighting circuits for the FATO (perimeter) and TLOF (touchdown) shall be adjustable*. The controller shall accommodate other fixed brightness incandescent circuits such as floodlighting. If an LED lighted wind cone is specified, it shall be fixed brightness. The standard circuit layout shall be modified to accommodate the lighting system per the project plans.

The PHC enclosure shall be rated NEMA 4X (IP66) fiberglass reinforced polyester in gray (RAL 7036) with stainless steel piano hinged door and seamless gasket. The door is to be secured by two captive screws. All components shall be panel mounted. The dimensions in inches (mm): 19.3 (490) x 17.3 (440) x 9.6 (243). The enclosure may be punched or drilled for conduit entry. The enclosure shall be manufactured by Vynckier and certified to IEC 529, CSA, KEMA and UL 508A Type 4X & 12, IP66 watertight and dust-tight.

Note: A stainless steel enclosure option is available by description.

All internal wiring and component spacing shall comply with the US National Electric Code. All components shall be prewired to IEC terminal blocks. Power shall be single phase measured line to neutral, 50 or 60 Hz.

The PHC and lighting circuits shall be protected from transient voltage spikes by a DIN-rail mounted surge suppressor with a 50kA maximum surge current to IEC 61643-1.

There shall be two 30mm industrial grade pilot lights on the door: green POWER ON indicating power is present at the input terminals of the contactor as a safety matter and amber (yellow) SYSTEM ON indicating that the unit is activated and power is available to the loads. There are no alarm functions. All door mounted components shall be rated for outdoor installation.

There shall be a three (3) position master switch mounted on the door for ON-OFF-AUTO operation. In the AUTO position, the controller shall operate automatically from a pilot actuated FAA radio controller or an FAA photoelectric controller that operates per FAA light level requirements (order PRC or PPC separately).

There shall be two (2) rotary dimming switches for varying the brightness of the LED FATO and LED TLOF lights. Each four (4) position switch shall be marked “OFF • 1 • 2 • 3” to represent:

Step 1: 35 percent brightness Step 2: 60 percent brightness Step 3: 100 percent brightness

The PHC shall also include four (4) ON-OFF two-position switches mounted on the door designated for specific fixed brightness lighting loads. The power to these circuits shall be controlled by the master switch.

Each load output shall be protected by a DIN-rail mounted current limiting circuit breaker providing thermal magnetic overcurrent protection in accordance with UL, CSA and IEC standards. There shall be one circuit rated for a 4.8 KW floodlight load with a lighting contactor and circuit breaker. The UL and IEC rated short circuit capacity shall be 5,000 amps. The breaker is resettable and the status is color coded.

Terminals shall be provided to power obstruction lights which may be required. Separate FAA photoelectric control must be provided in the obstruction light circuit which will remain energized at all times.

A wiring schematic shall be included with each PHC. Legend plates for all devices shall be included.

Option –SEQ: Sequence Flashing of the Landing Direction Lights

Option –RC: Air-to-Ground Radio Control

The PRC radio controller is a special VHF radio receiver that permits the pilot to remotely activate the heliport lighting system. The PRC is often used for a heliport lighting system that may be unattended for periods of time. The lighting system is remotely activated by the aircraft pilot keying the microphone on the controller's preset frequency. Three "clicks" of the microphone within five seconds activates the controller. The timer will reset the system to OFF after fifteen (15) minutes. At any time during the fifteen minutes, the microphone may be rekeyed in the proper sequence to reinitiate the fifteen minute cycle. Note: The RC does not change the brightness level; it turns the system ON at the current switch settings on the unit.

The remote mounting antenna is included with a 50-ft coaxial cable and connectors. The facility owner must obtain the frequency assignment from local aviation authorities. The double conversion superheterodyne receiver is preset to the specified frequency between 118.000 and 136.000 MHz.

The heliport lighting controller shall be PHC-61003-1 for 120v systems or PHC-61003-2 for 220-240v systems manufactured by Point Lighting Corporation.

Note: PHC-61002 is used for one adjustable circuit which may be the FATO only or the FATO plus TLOF.

Point Lighting Corporation

Mail: P.O. Box 686, Simsbury, CT 06070 Plant: 61-65 W. Dudley Town Rd, Bloomfield, CT
Tel 01 860.243.0600 USA Fax 01 860.243.0665
email: Info@PointLighting.com website: www.PointLighting.com