

POINT HELIPORT LIGHTING PHC HELIPORT LIGHTING CONTROLLER

Heliport Lighting System Controller – Fixed Brightness
For use with incandescent or LED lighting systems

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. Six (6) load switches on the door allow for manual control of 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.

Point Type	— Voltage	— Options	— Serial Number
PHC-61001	1: 120 volts 2: 230 volts	See list on page 2	xxxxxxx

HELIPORT LIGHTING CONTROLLER
PHC-61001-1



HELIPORT LIGHTING CONTROLLER
PHC-61001-1-TS
With color touchscreen



MARINE HELIDECK LIGHTING CONTROLLER
PHC-61001-1-M-SL
Integral PSL Status Light System Control Unit



PHC HELIPORT LIGHTING CONTROLLER AVAILABLE OPTIONS

ENCLOSURE OPTIONS

	The standard enclosure is NEMA 4X fiberglass and safe area.
EX	Class I, Division 2 (Zone 2) Enclosure
AX	ATEX Zones 1 & 2 Enclosure
SS	Stainless Steel 316L Enclosure
SEQ	Sequence flashing landing direction lights. See file HL137SEQ.
LA	Lightning Arrestor for safe area or stainless steel enclosures

RADIO & REMOTE CONTROL OPTIONS

TS	Touchscreen consisting of color TFT touch panel display that displays current status and automatically lists an alarm condition. It is a 3.5-inch in color, outdoor rated NEMA 4X and has a brightness of 400cd/m2. The touchscreen is controlled by a PLC Programmable Logic Controller.
RC	Radio Control ON-OFF Incorporates into the PHC a passive VHF radio receiver that permits the pilot to remotely activate the lighting system ON-OFF by keying the microphone on the controller's fixed frequency when the PHC master switch is preset to the AUTO mode. All PHC circuits preset to ON will activate. The timer will reset the system to OFF after fifteen (15) minutes. The antenna (included) must be within 50-ft of the PHC and that cable cannot be lengthened. If that is not possible, specify a separate PRC-65001 radio controller.
RC3	Radio Control 3-Circuit Same as option -RC except there are three (3) circuit relays activated in turn based on 3, 5 & 7 keys of the microphone by the pilot.
SA	System Activity Status Adds relay and terminal blocks for NO/NC (normally open/normally closed) contacts. The user can connect their BMS or other remote indication to the contacts which will tell them when the lighting system is ON. That means when the PHC output circuits to the lights are energized. This remote method of indication is in addition to the standard yellow pilot light on the door for "System ON".
RT	Remote Signal Note: The PHC must also have option -RC For remote activation using a radio signal and/or a normally open relay or switch (by others). When the PHC-RC main switch is in the AUTO position, the system may be activated by the usual radio control signal or the remote line voltage contact. The operation by radio keying will time-out as usual; the operation by remote switch signal will remain ON until the switch turned off. The -RT (non-radio) signal must be line voltage.
ROS	Remote Override Station Provides for remote manual operation of the helideck lighting system. When ordered, this station uses line voltage and connects to the PHC controller. When the PHC main switch is set in the AUTO position, the ROS will be active for switching the PHC ON-OFF. It will switch ON whatever circuits are preset in the ON position at the PHC. It simply "remotes" the ON-OFF function at the PHC.

OPTIONS SPECIFIC TO OFFSHORE MARINE HELIDECKS

	Options -SL & -SLA are for the integrated control of an offshore helideck lighting system and a status light system.
M	Marine Helideck Required for electrical safety on all offshore marine helidecks.
PSS	Power Source Selector A DNV requirement to accommodate manually selecting between two external power sources.
SL	Combination Marine Status Light System Control Add this option for a PSL marine status light system control unit to be integral with the PHC. For safe area main lights and Class I, Div 2 main lights. The PHC enclosure is safe area unless option -EX is added to the PHC.
SLA	Combination Marine Status Light System Control Add this option for a PSL marine status light system control unit to be integral with the PHC. For ATEX & IECEx main lights. The PHC enclosure is safe area unless option -AX is added to the PHC.

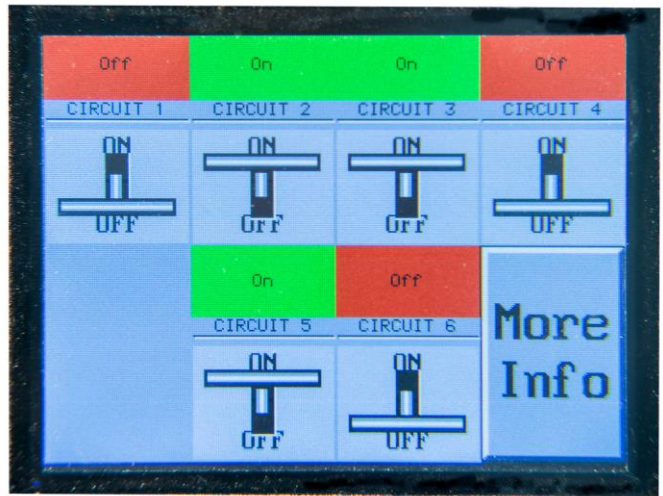


POINT HELIPOINT LIGHTING PHC HELIPOINT LIGHTING CONTROLLER

HELIPOINT LIGHTING CONTROLLER
PHC-61001-1-TS
With color touchscreen



COLOR TOUCHSCREEN
Typical Display
Touch the switch to change circuit state



PHC HELIPORT CONTROLLER
FIXED BRIGHTNESS
FOR INCANDESCENT AND LED SYSTEMS

PHC-61001 SPECIFICATION

The heliport lighting system shall be controlled by means of a POINT LIGHTING CORPORATION system controller type PHC-61001. 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.

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 and amber (yellow) **SYSTEM ON** indicating that the unit is activated and power is available to the loads. There are no alarm functions and the lighting brightness is not adjustable. 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).

The PHC shall include six (6) ON-OFF two-position switches mounted on the door designated for specific lighting loads. These switches shall be available to independently control separate circuits as determined by the installer. 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 –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.

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 super heterodyne receiver is preset to the specified frequency between 118.000 and 136.000 MHz.

* For complete details on the –RC option, see file HL416PRC. PHC with option –RC has the PRC integrated into the PHC system controller enclosure.

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