



WLC1

WEATHERPROOF LAMP CONTROLLER

WLC1 Weatherproof Lamp Controller Overview

The WLC1 Weatherproof Lamp Controller, developed by Bradshaw Communication Systems, is a warning/signal lamp controller that provides for low voltage controlled on-off flashing of a 115 or 230 VAC incandescent lamp. The flash rate is internally user adjustable and the dual low voltage control inputs allow either Boolean AND or OR logic conditions to control the lamp flashing. The WLC1 is typically used to flash AC incandescent lamps used in earth station antenna systems that signal and/or warn of active transmitters, failure conditions, and other conditions where it is desirable to have a flashing visual indication of an event occurrence.

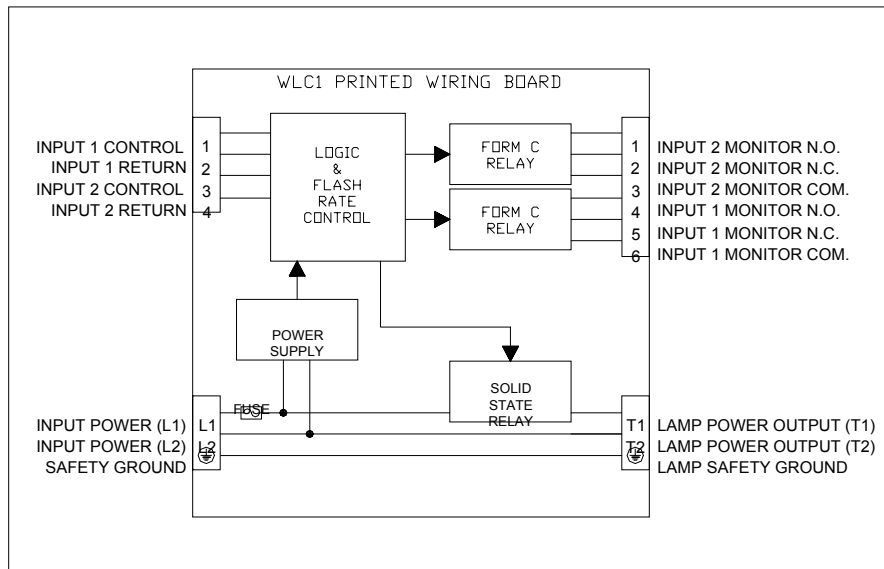
The WLC1 is housed in an IP66/NEMA 4X enclosure, thus supporting the most rugged outdoor applications. The WLC1 is provided with two factory installed watertight cable entry glands for input power and lamp output cables as well as two additional glands that may be user installed at installation for control and monitor cables.

With a internally user adjustable flash rate from 2.4 seconds to continuously on, internal low voltage power source for control, and either contact closure or open collector input control, the WLC1 allows great flexibility for use in many applications. Power is cycled to the lamp when the correct logic is provided at the low voltage control inputs. Two isolated Form C relay outputs are provided that mimic the low voltage control inputs to allow for controller monitoring. Solid state relay lamp control provides reduced cold filament inrush current for longer lamp life

WLC1 electrical terminations are provided via screw type pluggable terminal blocks, providing fast, easy, and accurate termination of interface wiring.

The WLC1 has been designed to provide long life and ease of adjustment while still allowing the system integrator great flexibility in use, configuration, and mounting.

WLC1 Weatherproof Lamp Controller Schematic Diagram



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WLC1 Weatherproof Lamp Controller Specifications

- **Low Voltage Control Input**
 - Two Internally Configurable Inputs
 - Either Boolean AND or OR Logic
 - Either Normally Open or Closed Control
 - Control Voltage - 6 VDC @ 25mA
 - Either Contact Closure or Open Collector Control
- **Flash Rate Adjustment Range**
 - 0.2Hz to 10Hz at 50% on to off duty cycle
- **Lamp Control Method**
 - Zero Crossing Solid State Relay
(Reduces cold filament inrush current)
- **Electrical**
 - Internal Voltage: 115/230VAC (Switch Selectable)
 - Internal Frequency: 50/60Hz
 - Internal Power Consumption: 2.5VA MAX.
 - Lamp Load: 250 Watts @ 115VAC MAX.
 - Lamp Load: 500 Watts @ 230VAC MAX.
 - Monitor Relays: 2A@30VDC/0.5A@125VAC MAX.
- **Electrical Termination**
 - Screw Type Pluggable Terminal Blocks
 - 26-14 AWG Wire Size
- **Mounting**
 - Four 0.190" Diameter Mounting Holes
 - Hole to Hole Dimensions 4.53" Square
- **Cable Entry**
 - Cable O.D. Range: 0.230-0.530 inches
- **Environmental**
 - -40° F to +122° F, 100% humidity, condensing
(-40° C to +50° C, 100% humidity, condensing)
 - Enclosure Rating: IP66 (NEMA 4X)
- **Physical**
 - Enclosure Dimensions
5.12" wide x 5.12" high x 2.95" deep
(130mm wide x 130mm high x 75mm deep)
 - Weight: 1 LB (0.45 Kg)
 - Enclosure Color/Type: Light Gray/Polystyrene
 - Cable Gland Protrusion: 1.25" (31.75mm) Nominal
- **Approvals**
 - The WLC1 has been designed to meet or exceed CE, UL, & CSA safety requirements.

WLC1 Weatherproof Lamp Controller Configurations & Options

- **WLC1 Weatherproof Lamp Controller**
 - P/N 05-01000-1
WLC1 w/ 4 Cable Entry Glands
(2 factory installed – 2 provided loose)

Conclusion

With over 40 years of combined experience in the Satellite Communications Industry, Bradshaw Communication Systems (BCS) has the solution to get your job done right and on time. By providing extremely high quality products and services at economical prices, BCS has become a respected name in the industry and the right choice when it comes to satellite earth station antenna products and services. BCS has provided custom solutions for numerous customers and stands ready to provide components, systems, and services to best fit your specific requirements. Please contact BCS today regarding your requirements.