

GW-LL127 LONG-LIFE MICROPROCESSOR SERIES PHOTOCONTROL

OVERVIEW

Warranted for 20 years and designed for 28, Gateway International 360's Long-Life (GW-LL127) photocontrols were designed for the demands of HID and solid-state lighting (SSL), making them the only choice for LED, conventional and electronic HID and induction luminaires.

APPLICATIONS

- LED luminaires that require dusk-to-dawn control
- Recommended for luminaires that use solid-state ballasts/drivers (e.g. CFL, induction, electronic HID)

FEATURES

- The GW-LL127 is specifically designed to provide long life, enhanced light sensitivity and superior surge protection when used with LED luminaires
- Anti-UV impact resistant polypropylene cover
- Filtered Silicon Light Sensor - sensitive to sunlight but not LED
- Sealed relay
- 2 or 4 MOVs rated for 880J+ or 1760J/5000 amp each. 440 each.
- Base gasket has a continuous use temperature of 105 C. Melt 185 C.
- 2-5 Seconds turn-off delay
- Heavy .105 inch thick wall black cover standard -- other colors optional
- IP-65

SPECIFICATIONS

REGULATORY LISTINGS

- Meets ANSI C136.10 and UL 773
- ROHS compliant
- Manufactured in an ISO certified facility
- Surge-rated to ANSI C136.10 Extreme surge level (20Kv, 10Ka, 10 Pulses)
- Zero-Cross detection

ADDITIONAL FEATURES

ENHANCED LIGHT SENSING

- The silicon photo sensor is designed to sense sunlight, while being "blind" to light emitted from LEDs. This reduces LED sensitivity and greatly decreases false turn-off in high ambient light situations.

INRUSH PROTECTION

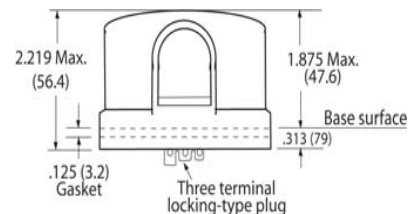
- Tested for use with fixtures that use multiple LED drivers, the GW-LL127 can withstand the high inrush current that these drivers generate.

SURGE PROTECTION

- Employing two or four MOV's provides ANSI Extreme Category (20kV, 10kA) surge protection for the control, and also protects the solid-state driver from differential mode transients.

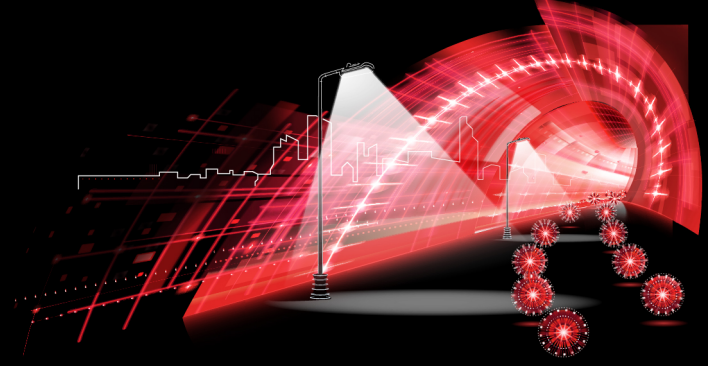
DESIGN LIFE ENHANCEMENTS

- The GW-LL127 is rated for 90,000 hours. The printed circuit board is fiberglass/epoxy FR4 for superior strength and moisture resistance, and is conformally coated on both sides to reduce water absorption.
- The cover is 0.105 inches thick for better impact resistance, compared to 0.06 inches on standard controls. The cover is sealed to the base to provide IP65 ingress protection.



OPERATING CHARACTERISTICS

- Voltage 105 to 305 VAC, 60Hz
- Load rating: 1800VA driver or ballast load
- Up to 200 amp inrush
- Temp. -40 to +70°C ambient
- 1.5 +/- 0.3fc, Turn-ON Light Levels Standard Level
- On/Off Ratio 2-5 second time delay
- Switch: > 81000 On/Off operations at rated load



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LONG LIFE CONTROL	VOLTAGE	TURN ON LEVELS	COVER COLOR	FAILURE MODE	SUFFIX AS NEEDED
GW-LL127	127 = 120-277 VAC 480 = 347-480 VAC	1.5 ANSI Standard 1.0 2.6 IES recommendation	BK = Black BU = Blue GN = Green Y = Yellow M = Metal Armor Cover	None = Fail ON F = Fail OFF	2- MOV 4- MOV

EXAMPLE ONE: GW-LL127-1.5BK is a long-life control with standard 1.5 footcandle turn ON and Fail ON Circuit.

EXAMPLE TWO: GW-LL127-1.5GNF is a long-life control with standard 1.5 footcandle turn ON, green cover and Fail OFF Circuit.

EXAMPLE THREE: GW-LL127-1.0BU123 is a long-life control with standard 1.0 footcandle turn ON, blue cover, Fail ON Circuit and customer special requirements designated by "123" suffix. ("123" is an example only)

Specifications

- 1) Photocontrol shall be a Locking Type (aka, twist lock) and meet or exceed all requirements of ANSI C136.10 except as noted below.
- 2) Line voltage 105-305 VAC @ 50/60 hertz.
- 3) Rate a minimum 2 or 4 MOVs rated for 880J+ or 1760J/5,000 amp each. 440 each. Control must be able to operate incandescent, ballast, LED and lighting contactor type loads. Control must be capable of switching LED drivers that may have up to 200 amps of inrush current.
- 4) Control relay shall be sealed.
- 5) Turn ON shall be 1.5 ± 0.3 ftc. Turn OFF shall be 1.5 times the turn ON level. Photosensor: Sealed silicon sensor. Cadmium sulphide cells are not acceptable. Light sensor shall not be sensitive to LED fixture light.
- 6) Failure mode: Control will fail ON per ANSI definition. Relay must use normally closed contacts.
- 7) Time delay: Control must have instant ON and 2 - 5 seconds "OFF" delay.
- 8) Surge protection: Shall be in the form of one, two or four Metal Oxide Varistor (MOV) wired line to neutral. MOV(s) shall be rated a minimum of 440 joules and 20,000 or 40,000 amp surge. Finished control shall not fail when subjected to 10 surges of 9500 amps applied at 1 minute intervals. Surge wave form as described in ANSI C136.10-2008 section on Extreme.
- 9) Housing: Housing of photoelectric control shall be black, opaque and of an impact and UV resistant material. Impact resistance of housing shall be greater than 1.0 ft-lbs at -20 C. Top and sides of cover shall be 0.10 inch or thicker.
- 10) Drop test: Control must be capable of withstanding a drop of 3 feet to a concrete floor without causing damage to the housing or changing electrical operation.
- 11) Markings: The following must appear on the control: month/year of manufacture, model description, operating voltage range and load rating.
- 12) Power consumption: Control shall consume 0.5 watts or less at 120 VAC.
- 13) Environmental: Control shall be RoHS compliant. It shall not contain lead, cadmium, mercury or hexavalent chromium. Pigments in plastic parts shall not contain bromine compounds or heavy metal pigments.
- 14) Warranty: 20 years. One to One replacement.
- 15) Quality: Control manufacturer and ANSI C136.10 and UL E-listed

WARRANTY All photocontrols are marked with date of manufacture. This product is warranted to operate within its original specifications and shall be free of electrical or mechanical defects. Consult factory for the warranty time period. Manufacturer's warranty shall be limited to providing a replacement control of same type and shall not cover costs of removal, replacement or loss of service nor any consequential damages. This warranty is in lieu of and excludes all other warranties either expressed or implied. Full warranty statement is available by consulting factory.

DISCLAIMER UL and ANSI C136.10-2017 certifications and patents are pending.