Electronic Photo Controls
Thermal vs. Electronic

FAQ'S

What is the difference?

The thermal photo controls use a CdS sensor and a bi-metal mechanical switch to turn lights on and off. The new electronic photo controls have a solid state, silicon light sensor and a DC relay to provide switching. 'Thermal' photo controls can drift from set point due to environmental conditions and life of the CdS sensor. They also have an inherent time delay due to the characteristics of the mechanical switch. The electronic photo controls have a repeatable set point that does not drift during the life of the product. There is also a much faster reaction time which aids in their repeatable operation. Due to their inherent fast reaction, a time delay of 5 seconds is built into the logic of the photocell to avoid false triggers.

What are the advantages of Electronic Photo Controls?

- Repeatable, non-drift operation during their life
- Easier calibration to different targeted on/off levels (at factory)
- Includes MOV surge protection element
- 4 times the lifespan with implementation of zero-cross switching technology
- Compatible with LED and induction light fixtures due to their ability to withstand high inrush current

When should I recommend using Electronic Photo Controls?

Electronic photo controls are ideal for use when installed with light fixtures with extended service lives such as new LED and Induction light fixtures. The long life of the light fixture is now matched with photo controls allowing truly maintenance-free LED installations. In support of this statement, we offer an 8-year warranty with our electronic photo controls vs. a 2-year warranty offered with our thermal photo controls.

Do I need to size up the photo control to the lighting load?

It is always good practice to verify the electrical load that the photo control is expected to see during service. For LED lights in particular, it is important to check the actual size of the LED driver(s) prior to installation to ensure it does not exceed the tested LED/electronic driver load rating for that particular photo control. It is not sufficient to look at the incandescence or tungsten wattage load handling capabilities of the photo control. The new electronic photo controls can handle the load associated with driver(s) up to 6A @ 120VAC or 277VAC which is plenty for most high efficiency LED fixtures found on the market.

What are the equivalent part numbers for Thermal vs. Electronic Photo Controls?

	Electronic Photo Controls		Equivalent Thermal Photo Controls	
Applications	**LED and Induction light fixtures with long service life**	**Warranty**	**Incandescence and HID light fixtures**	**Warranty**
Photo button	EK4036S (120-277V)	8-year	K4021C (120V)	2-year
			K4023C (208-277V)	2-year
Stem Mount	EK4136S (120-277V)	8-year	K4121C (120V)	2-year
			K4123C (208-277V)	2-year
Stem & Swivel (Side Lens)	EK4236S (120-277V)	8-year	K4221C (120V)	2-year
			K4223C (208-277V)	2-year
Stem & Swivel (Top Lens)	EK4736S (120-277V)	8-year	K4251C (120V)	2-year
			K4253C (208-277V)	2-year

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