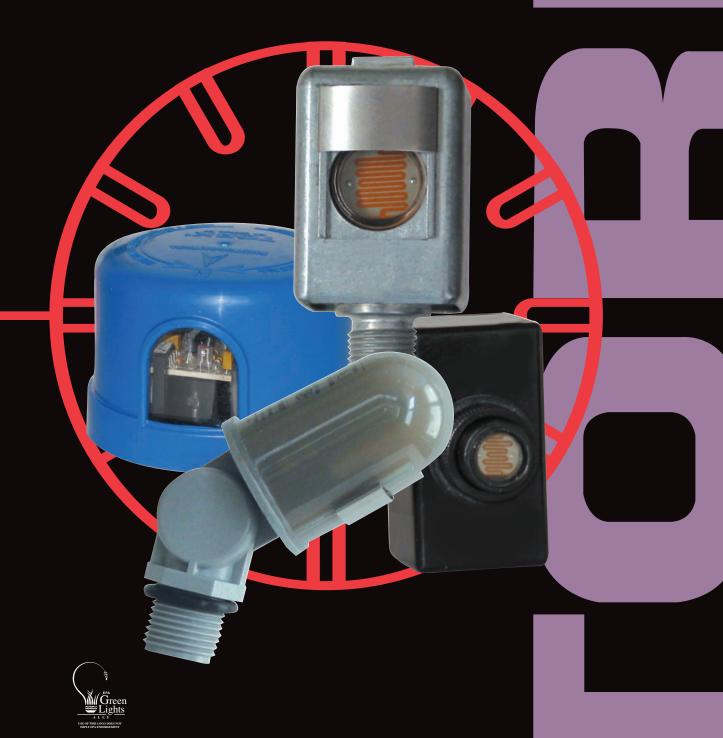
# TORK PHOTOCONTROLS



**JUNE 2007** 

A DIVISION OF NSi INDUSTRIES, LLC

# TORK PHOTOCONTROLS: OVER 80 YEARS OF EXPERIENCE PACKED INTO EVERY SINGLE BOX.

EXCELLENCE THAT THE FIELD HAS COME TO EXPECT FROM TORK, SINCE 1922. ONE SIMPLE GOAL: EXTRAORDINARY PRODUCTS COMBINED WITH EXTRAORDINARY SERVICE, MAKING YOUR LIFE IN THE FIELD EASIER, EVERY DAY.

TORK Photoelectric Controls are designed and manufactured with components which adhere to the highest industry standards. Trained personnel and in-process quality control procedures ensure that every unit meets our strictest quality standards.

# CHOICE OF PHOTOCELLS

Cadmium sulphide, epoxy sealed cells are available in ½" and 1"









All conduit and flush mounted models utilize either die-cast zinc or genuine Lexan® materials. All turn-lock models utilize high impact UV stabilized polypropylene materials.

# CHOICE OF MOUNTING ORIENTATION

Models are available in fixed position or 180° swivel.



# DEPENDABLE AMBIENT LIGHT READINGS

Built-in time delay prevents false switching due to light from vehicles, lightning, etc. Instant response is available in turn-lock models.

#### **TURN-LOCKS MEET ANSI C136.10**

All models meet the current ANSI requirements for locking-type prongs and color coded voltage designations. Locking prongs are solid brass. Color-Coded Dome

Grey 105-130VAC Maroon 208-277VAC Blue 105-285VAC Yellow 480VAC

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# 2100 SERIES (1) (S) SPECIFICATION GRADE 1/2" CONDUIT MOUNTING IN DIE CAST ZINC

#### **APPLICATIONS**

- Parking Lot Lighting Control
- Building Perimeter Lighting Control
- Outdoor Sign Lights

#### **FEATURES**

- Heavy Duty die cast zinc housing and base.
- Gasketed for maximum weather protection
- Delay of up to two minutes prevents false switching due to light from vehicles or lightning, etc.

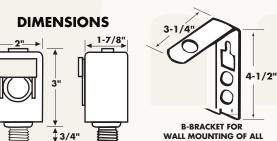
#### **SPECIFICATIONS**

- Turn ON/Turn OFF: Turn ON is 1 to 5fc, Turn OFF is 3 to 15fc, without the slide in position.ON/OFF adjustment is easily made by moving a light level selector. No tools required.
- Cell: Cadmium sulphide, epoxy coated, 1" diameter.
- Contacts: Remain closed between dusk and dawn. (The unit fails in the ON position).
- Lead Wires: Three color coded, minimum 6" wire leads, #16AWG, rated for 105°C.
- Power Consumption: Averages under 1 watt.
- Temperature Range:  $-40^{\circ}$  to  $+140^{\circ}$ F ( $-40^{\circ}$  to  $+60^{\circ}$ C)









1/2" CONDUIT

WALL MOUNTING OF ALL 1/2" CONDUIT MODELS PART #73866

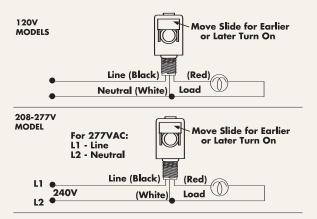
MOUNTING

**BRACKET** 

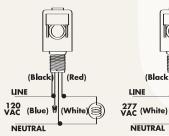
CATALOG	UPC	VOLTAGE		RATI	NG
NO	CODE	50-60HZ	SWITCH	TUNGSTEN	BALLAST
2101	60012	120	SPST	2000W	1800VA
2104	60013	208-277	SPST	2000W	1800VA
2105*	60030	120	SPST	3000W	3000VA
2107	60031	120/277	SPST	2000W	1800VA
73866			MOUNTING BRACKET		

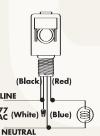
<sup>\*</sup>MODEL 2105 HAS A POLYCARBONATE ENCLOSURE,  $rac{1}{2}$ " CELL, 1 YEAR WARRANTY. NOT UL OR CSA.

#### WIRING DIAGRAMS



120/277V MODEL





#### SPECIFICATION WRITER'S GUIDE

Photocontrol enclosure shall be constructed of die cast zinc, gasketed for weather protection. Cell shall be cadmium sulphide, epoxy coated, one inch diameter. Unit shall have a slide for earlier or later turn ON. Contacts shall be normally closed and fail in the ON position. Photocontrol must withstand temperatures of -40°to +140°F. Unit to be provided with three color coded, minimum six inch wire leads, #16 AWG, rated for 105°C. Photocontrol shall have a fixed base for mounting through 1/26 inch opening or 1/26 inch K.O. Furnish and install TORK Model 2101, 120VAC, (Model 2104 208-277VAC), (Model 2107, 120/277VAC)

#### 2000 SERIES 🖫 🖫 1/2" CONDUIT MOUNTING FIXED POSITION, LEXAN® HOUSING WITH WEATHERPROOF SEALANT

#### **APPLICATIONS**

- Flood Lamp Control
- Patio Lamp Control
- Decorative Lighting Control

#### **FEATURES**

- All Lexan® enclosure is impact and vandal resistant
- Translucent Lexan® Dome prolongs cell life by further screening out ultraviolet rays. Dome and base are ultrasonically welded for maximum strength.
- Delay of up to two minutes prevents false switching due to light from vehicles or lightning, etc.

#### **SPECIFICATIONS**

TURN ON/TURN OFF:

Turn ON is 1 to 5fc

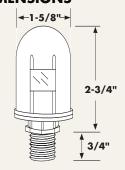
Turn OFF is 3 to 15fc, without the slide in position. ON/OFF adjustment is easily made by moving a light level selector. No tools required.

- CELL: Cadmium sulphide, epoxy coated, ½" diameter.
- CONTACTS: Remain closed between dusk and dawn. (The unit fails in the ON position).
- LEAD WIRES: Three color coded, minimum 6" wire leads, #16AWG, rated for 105°C.
- POWER CONSUMPTION: Averages under 1 watt.
- TEMPERATURE RANGE: -40° to +140°F (-40° to +60°C)

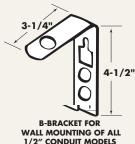
CATALOG	UPC	VOLTAGE		RATIN	G		
NO	CODE	50-60HZ	SWITCH	TUNGSTEN	BALLAST		
2000	60017	120	SPST	2000W	1800VA		
2000C	60317	SAN	NE AS ABOVE, IN CLAMSHELL PAG	CKAGE			
2000-2	60018	208-277	SPST	2000W	1800VA		
2000-7*	62013	120/277	SPST	2000W	1800VA		
73866		MOUNTING BRACKET					

\*MODEL 2000-7 HAS A CADMIUM SULPHIDE, 1" EPOXY CELL

#### **DIMENSIONS**

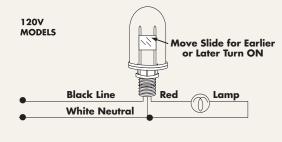


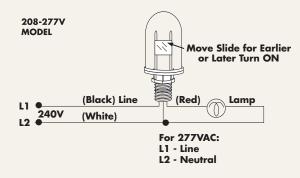
#### **MOUNTING BRACKET**



CONDUIT MODELS PART #73866

#### WIRING DIAGRAMS







#### SPECIFICATION WRITER'S GUIDE

Photocontrol enclosure shall be constructed of Lexan® material. Dome shall be UV stabilized to screen out ultraviolet rays. Dome and base shall be ultrasonically welded. Cell shall be cadmium sulphide, epoxy coated, ½ inch diameter. Unit shall have a slide for earlier or later turn ON. Contacts shall be normally closed and fail in the ON position. Photocontrol must withstand temperatures of -40°to +140°F. Unit to be provided with three color coded, minimum six inch wire leads, #16 AWG, rated for 105°C. Photocontrol shall have a fixed base for mounting through ½ inch opening or ½ inch K.O. Furnish and install TORK Model 2000, 120VAC, (Model 2002, 208-277VAC), (Model 2007, 120/277VAC)





#### **APPLICATIONS**

- Flood Lamp Control
- Patio Lamp Control
- Decorative Lighting Control

#### **FEATURES**

- All Lexan® enclosure is impact and vandal resistant
- Translucent Lexan® Dome prolongs cell life by further screening out ultraviolet rays. Dome and base are ultrasonically welded for maximum strength.

 Delay of up to two minutes prevents false switching due to light from vehicles or lightning, etc.

#### **SPECIFICATIONS**

TURN ON/TURN OFF:

Turn ON is 1 to 5fc

Turn OFF is 3 to 15fc, without the slide in position. ON/OFF adjustment is easily made by moving a light level

selector. No tools required.

CELL: Cadmium sulphide, epoxy coated, ½" diameter.

- CONTACTS: Remain closed between dusk and dawn. (The unit fails in the ON position).
- LEAD WIRES: Three color coded, minimum 6" wire leads, #16AWG, rated for 105°C.

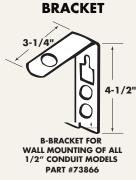
• POWER CONSUMPTION: Averages under 1

 TEMPERATURE RANGE: -40° to +140°F (-40° to +60°C)

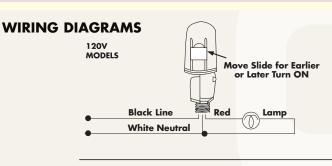


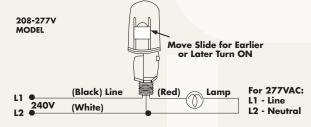
CATALOG	UPC	VOLTAGE		RATIN	G
NO	CODE	50-60HZ	SWITCH	TUNGSTEN	BALLAST
2001	60015	120	SPST	2000W	1800VA
2001C	60315	(	SAME AS ABOVE, IN CLAMSHELL PA	CKAGE	
2002	60016	208-277	SPST	2000W	1800VA
73866			MOUNTING BRACKET		

# **DIMENSIONS ←**1-5/8'**└**→ 3-3/4"



**MOUNTING** 





#### **SPECIFICATION WRITER'S GUIDE**

Photocontrol enclosure shall be constructed of Lexan® material. Dome shall be UV stabilized to screen out ultraviolet rays. Dome and base shall be ultrasonically welded. Cell shall be cadmium sulphide, epoxy coated, ½ inch diameter. Unit shall have a slide for earlier or later turn ON. Contacts shall be normally closed and fail in the ON position. Photocontrol must withstand temperatures of -40°F. Unit to be provided with three color coded, minimum six inch wire leads, #16 AWG, rated for 105°C. Photocontrol shall have a 180° swivel base for mounting through ½ inch opening or ½ inch K.O. Furnish and install TORK Model 2001, 120VAC, (Model 2002, 208-277VAC).

# 2020 SERIES (4) (6)

#### **APPLICATIONS**

- Flood & Patio Lamp Control
- Decorative Lighting Control
- Ideal for applications where it is essential to aim the photocell in an exact direction to sense natural light but avoid artificial light.

#### **FEATURES**

- All Lexan® enclosure is impact and vandal resistant, cover and base are ultrasonically welded for maximum strength.
- Delay of up to two minutes prevents false switching due to light from vehicles or lightning, etc.

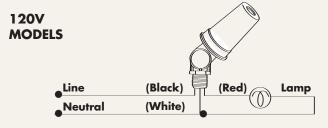
#### **SPECIFICATIONS**

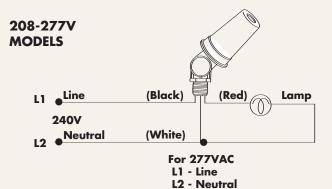
- TURN ON/TURN OFF: Turn ON is 1 to 5fc Turn OFF is 3 to 15fc
- CELL: Cadmium sulphide, epoxy coated, ½" diameter.
- CONTACTS: Normally closed. (The unit fails in the ON position).
- LEAD WIRES: Three color coded, minimum 6" wire leads, #16AWG, rated for 105°C.
- POWER CONSUMPTION: Averages under 1 watt.
- TEMPERATURE RANGE: -40° to +140°F  $(-40^{\circ} \text{ to } +60^{\circ}\text{C})$



CATALOG	UPC	VOLTAGE		RAT	ING	
NO	CODE	50-60HZ	SWITCH	TUNGSTEN	BALLAST	
2021	60024	120	SPST	2000W	1800VA	
2022	60025	208-277	SPST	2000W	1800VA	
73866		MOUNTING BRACKET				

#### WIRING DIAGRAMS





#### **SPECIFICATION WRITER'S GUIDE**

Photocontrol enclosure shall be constructed of Lexan® material. Cover and base shall be ultrasonically welded. Cell shall be cadmium sulphide, epoxy coated, ½ inch diameter. Contacts shall be normally closed and fail in the ON position. Photocontrol must withstand temperatures of 40°to +140°F. Unit to be provided with three color coded, minimum six inch wire leads, #16 AWG, rated for 105°C. Photocontrol shall have a fixed base for mounting through ½ inch opening or ½ inch K.O. Photocontrol shall have a 180° swivel base for mounting through ½ inch opening or ½ inch K.O. Furnish and install TORK Model 2021, 120VAC, (Model 2022, 208-277VAC).

### 3000 SERIES (4) (6) FLUSH MOUNTING, LEXAN® HOUSING



#### **APPLICATIONS**

- Pole Lantern Control
- Lawn Light Control
- Walkway Lighting Control

#### **FEATURES**

- Control housing is weather-resistant molded Lexan® with ultrasonically welded seams.
- Delay of up to two minutes prevents false switching due to momentary flashes of light.

#### **SPECIFICATIONS**

TURN ON/TURN OFF: Turn ON is 1 to 5fc, Turn OFF is 3 to 15fc

- CELL: Cadmium sulphide, epoxy coated, ½" diameter.
  CONTACTS: Normally closed. (The unit fails in the ON position).
- LEAD WIRES: Three color coded, minimum 6" wire leads, #16AWG, rated for 105°C.
- POWER CONSUMPTION: Averages under 1 watt.
- TEMPERATURE RANGE: -40° to +140°F (-40° to +60°C)
   MOUNTING: MODEL 3000: flush mounting through 1/16" hole in post lantern or lighting fixture. 3/8" NPT, Stem 3/4" long. Gasket and nut supplied. MODEL 3010: flush mounting into standard, raintight junction box. Includes plate and gasket to fit FS type outdoor junction box.



CATALOG	UPC	VOLTAGE	RATING	
NO	CODE	50-60HZ	TUNGSTEN	BALLAST
3000	60020	120	1500W	1200VA
3000C	60320		SAME AS ABOVE, IN CLAMSHELL PACKAGE	
3002	60019	208-277	1500W	1200VA
3006 CSA ONLY	60026	347	1500W	1200VA
3010	60021	120	1500W	1200VA
3010C	60321		SAME AS ABOVE, IN CLAMSHELL PACKAGE	

#### SPECIFICATION WRITER'S GUIDE

Photocontrol enclosure shall be constructed of Lexan® material with ultrasonically welded seams. Cell shall be cadmium sulphide, epoxy coated, ½ inch diameter. Contacts shall be normally closed and fail in the ON position. Photocontrol must withstand temperatures of -40°to +140°F. Unit to be provided with three color coded, minimum six inch wire leads, #16 AWG, rated for 105°C.

1. Photocontrol shall be capable of flush mounting. Furnish and install TORK Model 3000, 120VAC, (Model 3002, 208-277VAC).

2. Photocontrol shall be provided with a metal plate and gasket for mounting to a weatherproof junction box. Furnish and install TORK Model 3010 (120VAC).

#### 5000S SERIES 🕪 🐠 **DELAYED RESPONSE** TURN-LOCK MOUNTING STANDARD GAP TYPE SURGE ARRESTOR

### 5000M SERIES W UTILITY GRADE TURN-LOCK MOUNTING MOV SURGE ARRESTOR

#### **APPLICATIONS**

 Street, Highway and other luminaries equipped with locking type receptacles. 5000M where most stringent surge protection is needed.

#### **FEATURES**

- Meets stringent utility standards for street and highway lighting
- Complies with ANSI C136.10 and EEI NEMA standards.
- Delayed response prevents false switching due to light from vehicles or lightning, etc.

#### **SPECIFICATIONS**

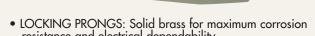
- MOUNTING: Units and locking-type prongs meet requirements of ANSI C136.10.
- PHOTOCELL: Cadmium Sulphide, epoxy coated.

  ENCLOSURE: Polypropylene, UV Stabilized, permanent color with UV resistant clear acrylic window. Provides high impact, flammability resistance and electrically safe operation.

  • COLOR CODED DOMES: Meet ANSI designations as follows:

105-130VAC Grey: 208-277VAC Maroon: Blue: 105-285VAC Yellow: 480VAC

RELAY: Bi-metal provides positive snap action switching, reducing bounce and prolonging contact life.

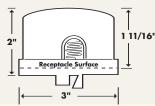


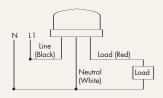
EUCKING FRONGS: Solid brass for maximum corrosion resistance and electrical dependability.
 SURGE ARRESTOR: S SERIES: Open type expulsion design, 2.5KVspark over minimum 5000 follow-through capacity (except Model5007S which has 255 joules MOV.
 SURGE ARRESTOR: M SERIES: 255 joule MOV (metal oxide varistor) exceeds ANSI and NEMA requirements.
 TURN-ON/TURN-OFF: Turn-ON is 1 to 3 fc. Turn-OFF to Turn-ON ratio is 5 max

Turn-ON ratio is 5 max.

TEMPERATURE RANGE: -40° to +140°F (-40° to +60°C).

#### **DIMENSIONS AND WIRING DIAGRAMS**





105 to 285 volt single phase grounded supplies and loads

	CATALOG	UPC	VOLTAGE		RAT	ING	CELL
	NO	CODE	50-60HZ	COLOR	TUNGSTEN	BALLAST	SIZE
	5001\$	61001	105-130	GREY	1200W	1800VA	1"
	5004S	61002	208-277	MAROON	2080-2770W	2080-2770VA	1″
	5007S*	61004	105-130/208-285	BLUE	1200/2850W	1800/2850VA	1/2"
not UL or CSA	5008\$	61040	480	YELLOW	1000W	1800VA	1"
	50215	61007	105-130	GREY	1200W	1800VA	1/2"
	5024\$	61008	208-277	MAROON	2080-2770W	2080-2770VA	1/2"
CSA only	5026S	61044	347	GREEN	1000W	1800VA	1/2"
	5001M	61012	105-130	GREY	1200W	1800VA	1"
	5004M	61013	208-277	MAROON	2080-2770W	2080-2770VA	1"
	5007S*	61004	105-130/208-285	BLUE	1200/2850W	1800/2850VA	1/2"
not UL or CSA	5008M	61017	480	YELLOW	1000W	1800VA	1″
	5021M	61015	105-130	GREY	1200W	1800VA	1/2"
	5024M	61016	208-277	MAROON	2080-2770W	2080-2770VA	1/2"
CSA only	5026M	61045	347	GREEN	1000W	1800VA	1/2"
	5500	61130	SHORTING CAP				
	*E007C has MOV surge	a arrestar					

\*5007S has MOV surge arrestor

**SPECIFICATION WRITER'S GUIDE**5000S SERIES: Furnish and install a time delay photocontrol meets all requirements of ANSI C136.10. Locking type prongs are to be solid brass. Snap action switch to ensure a minimum contact life of 3600 operations. Cell shall be cadmium sulphide, epoxy coated. Surge arrestor shall be open type expulsion, capable of withstanding 2.5KV spark over with 5000A follow through capacity. Enclosure must be ANSI color coded, high impact, UV stabilized polypropylene and contain a UV stabilized and absorbing acrylic window. Base must be high impact polycarbonate material with cross linked polyethylene gasket. Unit must provide a load rating of 1000W tungsten, 1800 VA ballast. Furnish and install Tork Model 5\_\_\_S.

5000M SERIES: Furnish and install a time delay photocontrol meets all requirements of ANSI C136.10. Locking type prongs are to be solid brass. Snap action switch to ensure a minimum contact life of 3600 operations. Cell shall be cadmium sulphide, epoxy coated. Surge protection is to be provided using a 255 joule MOV. Enclosure must be ANSI color coded, high impact, UV stabilized polypropylene and contain a UV stabilized and absorbing acrylic window. Base must be high impact polycarbonate material with cross linked polyethylene gasket. Unit must provide a load rating of 1000W tungsten, 1800 VA ballast. Furnish and install Tork Model 5\_\_\_M.

# 2005A/2007A/2008A SERIES (9) (9)-



#### **QUICK RESPONSE** TURN-LOCK MOUNTING

#### **APPLICATIONS**

 Street, Highway and other luminaries equipped with locking type receptacles where instant response is required.

#### **FEATURES**

- Meets stringent utility standards for street and highway lighting
- Complies with ANSI C136.10 and EEI NEMA standards.



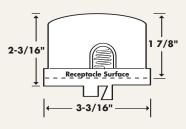
- MOUNTING: Units and locking-type prongs meet requirements of ANSI C136.10.
- PHOTOCELL: Cadmium Sulphide.
- ENCLOSURE: Polypropylene, UV Stabilized, permanent color with UV resistant clear acrylic window. Provides high impact, flammability resistance and electrically safe operation.
- COLOR CODED DÓMES: Meet ANSI designations as follows:

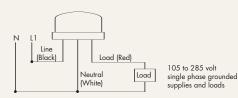
105-130VAC Grey: 105-285VAC Blue: Yellow: 480VAC

- RELAY: Positive snap action switching, reducing bounce and prolonging contact life.
- LOCKING PRONGS: Solid brass for maximum corrosion resistance and electrical dependability.
- 360 joules MOV exceeds NEMA and ANSI requirements.
- TURN-ON/TURN-OFF: Turn-ON is 1 to 3 fc. Turn-OFF to Turn-ON ratio is 3 average.
- TEMPERATURE RANGE: -40° to +158°F (-40° to +70°C).

#### **DIMENSIONS**

#### WIRING DIAGRAMS



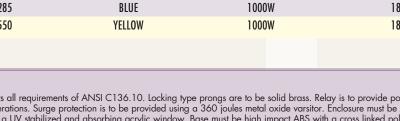


CATALOG NO	UPC CODE	VOLTAGE 50-60HZ	COLOR	RATI TUNGSTEN	NG BALLAST
2005A	62012	105-130	GREY	1000W	1800VA
2007A	62013	105-285	BLUE	1000W	1800VA
2008A	62014	400-550	YELLOW	1000W	1800VA

105 to 285 volt

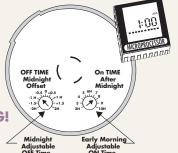
#### SPECIFICATION WRITER'S GUIDE

Furnish and install an install an instant response type photocontrol which meets all requirements of ANSI C136.10. Locking type prongs are to be solid brass. Relay is to provide positive snap action switching to ensure a minimum contact life of 5000 operations. Surge protection is to be provided using a 360 joules metal oxide varsitor. Enclosure must be ANSI color coded, high impact, UV stabilized polypropylene and contain a UV stabilized and absorbing acrylic window. Base must be high impact ABS with a cross linked polyethylene gasket. Unit must provide a load rating of 1000W tungsten, 1800 VA ballast. Unit must fail in the ON position. Furnish and install Tork Model 2005A (2007A, 2008A).



5737TZ TORK PHOTOTIMER PLUS: ON AT DUSK, OFF AT MIDNIGHT, ON EARLY MORNING, OFF AT DAWN

FITS ORDINARY TURN-LOCK
PHOTOCONTROL SOCKET,
OFFERING TOTAL FLEXIBILITY
AND MAXIMUM
ENERGY SAVINGS!
EASY RETROFIT: NO RE-WIRINGS





- Office building wants parking lights ON at dusk, and OFF at 11pm with ON at 5am for reopening and OFF at dawn.
- Restaurant wants signs to turn ON at dusk but OFF at midnight when no one around to see the signs; area becomes active again before dawn.
- Billboard needs to be lit at dusk but OFF at midnight due to lack of traffic which picks up again at 5am.
- Landscape and yard lighting need to be lit at dusk but OFF at midnight when no one is around and ON again for early morning illumination.

# TURNS ON LIKE A PHOTOCONTROL, OFF AND ON LIKE A TIME SWITCH, AND OFF LIKE A PHOTOCONTROL!

#### **FEATURES:**

- Microprocessor tracks the dusk and dawn times as the vary with the seasons and automatically determines midnight. NO PROGRAMMING REQUIRED!
- OFF time during the night is user adjustable for specific needs such as extra energy savings or to customize for various longitudes.
- Early morning ON time is also user adjustable for providing predawn lighting
- Built in Daylight Savings Time correction.
- Automatically "re-learns" and resets after power outage, eliminating costly maintenance.

#### **SPECIFICATION WRITER'S GUIDE**

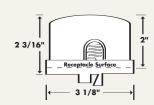
Furnish and install an electronic, instant response type phototimer which meets all requirements of ANSIC136.10. Unit must turn ON at dusk and OFF at midnight, back ON before dawn, and OFF at sunrise. Unit must automatically correct for daylight savings time. Two potentiometers are to be provided. One potentiometer must allow for field adjustment for longitude corrections or for midnight offset of +/- 2 hours. The other potentiometer must allow user to set number of hours after middle of the night that lights turn back on (AM burn). Locking type prongs are to be solid brass. Relay is to provide positive snap action switching to assure a minimum contact life of 5000 operations. Surge protection is to be provided using a metal oxide varistor of 360 joules. Enclosure must be ANSI color coded, high impact, UV stabilized polypropylene and contain a UV resistant clear acrylic window. Base must be ABS with a cross linked polyethylene gasket. Unit must provide a load rating of 1000 watt tungsten, 1800 VA ballast. Unit must fail in the ON position. Furnish and install TORK Model 5737TZ.

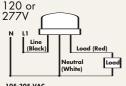


#### **SPECIFICATIONS**

- PLUGS INTO STANDARD TURN-LOCK RECEPTACLE
- ALL UNITS MEET OR EXCEED ANSI C136.10
- TIMER: Microprocessor tracks the dusk and dawn times for 24 hours and automatically sets its internal calendar to turn off at midnight during all seasons. Automatically adjusts for Daylight Savings Time.
- POTENTIOMETER #1: Allows user to adjust OFF time during the night. OFF time can be set for up to two hours before (for extra energy savings) or up to two hours after midnight to customize for various longitudes to acheive exact midnight turn OFF; or to stagger a group of lights to go OFF at different times during the night.
- POTENTIOMETER #2: Allows user to set number of hours after midnight (from 2-10 hours after midnight) that lights should turn back ON. This is used for areas which become active again before dawn.
- LIGHT SENSOR: Silicon photosensor.
- DC RELAY: Provides chatter free operation. Normally closed.
- VOLTAGE RANGE: 105-305VAC
- LOAD RATING: 1000W Tungsten, 1800 VA Ballast.
- SURGE PROTECTION: MOV (metal oxide varistor) 360 joules.
- PRONGS: Solid brass for maximum corrosion resistance and electrical conductivity.
- ENCLOSURE: UV Stabilized, ANSI color coded polypropylene dome.
- WINDOW: UV Stabilized clear acrylic.
- BASE: ABS
- GASKET: Cross-linked polypropylene.
- TURN ON/TURN OFF: Turn ON at dusk is 5.0 foot candle +/- 0.5 OFF/ON ratio is 1.5:1 average.
- Time Delay ON/OFF: Instant ON, 3-5 seconds OFF.
- FAIL ON: For safety reasons.
- TEMPERATURE RANGE: -40° to +158°F (-40° to +70°C).

#### DIMENSIONS AND WIRING 5737TZ, 5737TM AND 5700 SERIES





single phase grounded supplies and load FOR 240V, N=L2, L1=L1

CAT.	UPC		VOLTAGE	RATING		RATING LIGHT
NO	CODE	DESCRIPTION	50-60HZ	TUNGSTEN	BALLAST	SENSOR
5737TZ	62010	PHOTOTIMER PLUS	105-305	1000W	1800VA	SILICON PHOTOSENSOR

# **5737TM** TORK PHOTOTIMER: ON AT DUSK, OFF AT MIDNIGHT





FITS ORDINARY TURN-LOCK PHOTOCONTROL SOCKET, OFFERING FAR GREATER ENERGY SAVINGS! EASY RETROFIT: NO RE-WIRING!

#### **APPLICATIONS/EXAMPLES:**

- Office building wants parking lights ON at dusk, and OFF at 11pm.
- Billboard needs to be lit at dusk but OFF at midnight due to lack of traffic.

#### TURNS ON LIKE A PHOTOCONTROL, AND OFF LIKE A TIME SWITCH!

**FEATURES:** • Microprocessor tracks the dusk and dawn times as they vary with the seasons and automatically determines midnight. NO PROGRAMMING REQUIRED!

- OFF time during the night is user adjustable for specific needs such as extra energy savings or to customize for various longitudes.
- Built in Daylight Savings Time correction.
- Automatically "re-learns" and resets after power outage, eliminating costly maintenance.

CAT. NO	UPC CODE	DESCRIPTION	VOLTAGE 50-60HZ	TUNGSTEN	RATING BALLAST	LIGHT SENSOR
5737TM	62009	PHOTOTIMER: <b>On</b> at dusk, <b>off</b> at midnight	105-130	1000W	1800VA	SILICON PHOTOSENSOR

#### SPECIFICATION WRITER'S GUIDE

Furnish and install an electronic, instant response type phototimer which meets all requirements of ANSIC136.10. Unit must turn ON at dusk and OFF at midnight. Unit must automatically correct for daylight saving time. Potentiometer must be provided for field adjustment for longitude corrections or midnight offset of +/- 2 hours. Locking type prongs are to be solid brass. Relay is to provide positive snap action switching to assure a minimum contact life of 5000 operations. Surge protection is to be provided using a metal oxide varistor of 360 joules. Enclosure must be ANSI color coded, high impact, UV stabilized polypropylene and contain a UV resistant clear acrylic window. Base must be ABS with a cross linked polyethylene gasket. Unit must provide a load rating of 1000 watt tungsten, 1800 VA ballast. Unit must fail in the ON position. Furnish and install TORK Model 5737TM.

SPECIFICATIONS AND WIRING FOR 5737TM AND 5700 SERIES ARE SIMILAR TO 5737TZ

# **5717T SERIES** NIGHT ENERGY SAVER: ON AT DUSK, OFF AFTER FIXED DURATION.



FITS ORDINARY TURN-LOCK PHOTOCONTROL SOCKET, OFFERING FAR GREATER NIGHT ENERGY SAVINGS! EASY RETROFIT: NO RE-WIRING!

#### **APPLICATIONS/EXAMPLES:**

- Office building wants parking lights ON at dusk, but has no need for them all night
- Billboard needs to be lit at dusk but lack of traffic during the night would make lighting a waste of energy.

#### TURNS ON LIKE A PHOTOCONTROL, AND OFF LIKE A TIME SWITCH!

**FEATURES:** • Microprocessor turns light off during the night after a predetermined time. Extra OFF time during the night provides for additional energy savings.

- Factory preset models in 4, 5, 6, 7, or 8 hours.NO PROGRAMMING REQUIRED!
- Turn ON is 1.0 footcandle +/- 0.5. Turn OFF is after selected hours.

CAT.	UPC		VOLTAGE	RAT	ING	LIGHT
NO	CODE	DESCRIPTION	50-60HZ	TUNGSTEN	BALLAST	SENSOR
5717-T4	62004	PHOTOTIMER: ON AT DUSK, OFF AFTER 4 HOURS	105-305	1000W	1800VA	CADMIUM SULFIDE (CDS) PHOTOCELL
5717-T5	62005	PHOTOTIMER: ON AT DUSK, OFF AFTER 5 HOURS	105-305	1000W	1800VA	CADMIUM SULFIDE (CDS) PHOTOCELL
5717-T6	62006	PHOTOTIMER: ON AT DUSK, OFF AFTER 6 HOURS	105-305	1000W	1800VA	CADMIUM SULFIDE (CDS) PHOTOCELL
5717-T7	62007	PHOTOTIMER: ON AT DUSK, OFF AFTER 7 HOURS	105-305	1000W	1800VA	CADMIUM SULFIDE (CDS) PHOTOCELL
5717-T8	62008	PHOTOTIMER: ON AT DUSK, OFF AFTER 8 HOURS	105-305	1000W	1800VA	CADMIUM SULFIDE (CDS) PHOTOCELL

#### **SPECIFICATION WRITER'S GUIDE**

Furnish and install an electronic, instant response type phototimer which meets all requirements of ANSIC136.10. Unit must turn ON at dusk and OFF \_ hours after turnON. Locking type prongs are to be solid brass. Relay is to provide positive snap action switching to assure a minimum contact life of 5000 operations. Surge protection is to be provided using a 255 joules MOV (metal oxide varistor). Enclosure must be ANSI color coded, high impact, UV stabilized polypropylene and contain a UV resistant clear acrylic window. Base must be phenolic with a cross linked polyethylene gasket. Unit must provide a load rating of 1000 watt tungsten, 1800 VA ballast. Unit must fail in the ON position. Furnish and install TORK Model 5717-T\_.

### **5200 SERIES**

#### UTILITY GRADE ELECTRONIC PHOTOCONTROLS WITH FAIL ON MODE

#### **APPLICATIONS**

 For use where the extreme accuracy and reliability of an electronic photocontrol is required and in the event of failure, lights should stay ON for safety reasons.

#### **FEATURES:**

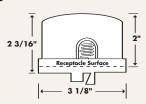
- Meets or exceeds ANSI C136.10 standards.
- DC operated relay provides chatter free operation.
- High joule capacity MOV
- Minimum power dissipation across the light sensor
- Stable turn ON and turn OFF levels regardless in changes in the ambient temperature.
- Lower total life cycle costs.
- Delayed turn OFF of 3-5 seconds reduces false switching from vehicles, lighting or other stray light and is consistent over the operating temperature range.
- Enclosure provides high impact and flammability resistance as well as UV protection.
- Fail ON mode.
- Rugged and reliable.
- Color coded per ANSI



#### **SPECIFICATIONS**

- STANDARD LIGHT SENSORS:
  - 1. Cadmium Sulphide photocell: responds to the light spectrum near to that of a human eye. Resists effects of moisture and airborne contaminants. (A Hermetically sealed cadmium sulphide photocell is available consult our factory!)
  - 2. Silicon Photosensor: assures drift-free operation, turning on and off at the same light level consistently throughout the life of the unit.
- DC RELAY: Positive snap action switching, reducing bounce and prolonging contact life.
- CONTACT LIFE: 5000 operations minimum
- NOMINAL VOLTAGES: 120V, 208/277V, 120/277V, 50-60Hz.
   For other voltages contact factory.
- LOAD RATING: 1000W Tungsten, 1800 VA Ballast.
- PRONGS: Solid brass for maximum corrosion resistance and electrical conductivity.
- SURGE PROTECTION: MOV (metal oxide varistor) 360 joules.
- ENCLOSURE: UV Stabilized, ANSI color coded, high impact polypropylene dome.
- WINDOW: High impact, UV Stabilized acrylic.
- BASE: High impact ABS
- GASKET: Cross-linked polypropylene.
- TURN ON/TURN OFF: Turn ON is 1.5 foot candle +/- 0.2 (other light levels are available). OFF/ON ratio is 1.5:1 average. For other ratios, consult our factory.
- Time Delay ON: Instant (others optional).
- Time Delay OFF: 3-5 seconds, standard (others optional).
- FAIL ON: For safety reasons.
- OPERATING TEMPERATURE: -40° to +158°F (-40° to +70°C).
- POWER CONSUMPTION: 1.0 watt average @ 120V
- WARRANTY: 5 years

#### **DIMENSIONS**



#### WIRING DIAGRAM

S Control (Red)

Neutral (White)

105 to 305 volt single phase grounded supplies and loads.

105 to 285 volt

single phase grounded supplies and loads

CAT.	UPC	TURN	TURN VOLTAGE RATING LIGHT	RATING		LIGHT
NO	CODE	ON*	50-60HZ	TUNGSTEN	BALLAST	SENSOR
	70000					
5211	78882	1.5 fc	105-130V	1000W	1800VA	CADMIUM SULFIDE (CDS) PHOTOCELL
5217	78884	1.5 fc	105-305V	1000W	1800VA	CADMIUM SULFIDE (CDS) PHOTOCELL
5231	78885	1.5 fc	105-130V	1000W	1800VA	SILICON PHOTOSENSOR
5237	78886	1.5 fc	105-305V	1000W	1800VA	SILICON PHOTOSENSOR

# SPECIFICATION WRITER'S GUIDE

\* FOR OTHER OPTIONS, CONSULT FACTORY AT 888-500-4598.

Furnish and install an electronic instant response type photocontrol which meets all requirements of ANSI C136.10. Locking type prongs are to be solid brass. Relay is to provide positive snap action switching to ensure a minimum contact life of 5000 operations. Surge protection is to be provided using a 360 joules metal oxide varsitor. Enclosure must be ANSI color coded, high impact, UV stabilized polypropylene and contain a UV stabilized and absorbing acrylic window. Base must be high impact ABS with a cross linked polyethylene gasket. Unit must provide a load rating of 1000W tungsten, 1800 VA ballast. Unit must fail in the ON position. Furnish and install Tork Model 52 \_ \_.





# 5400 SERIES 6000 WATT CONTACTORS WITH TURN-LOCK **PHOTOCONTROL** FOR STREET LIGHTING

#### **APPLICATIONS**

 For controlling all lighting loads in excess of the capacity of the photoelectric control contacts

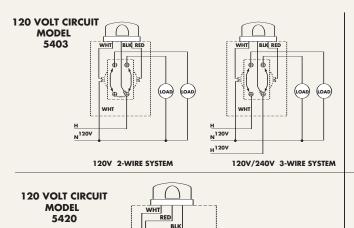
#### **SPECIFICATIONS**

- ENCLOSURE: Outdoor NEMA Type 3R. Beige enamel finish. Two ½"-¾" combination KO in bottom.
- RECEPTACLE: 3-prong turn-lock meets the requirements of EEI NEMA. Adjustable over full 360° for proper photoelectric control orientation.
- PHOTOCONTROL: Appropriate model as indicated in the table below is included.
- POWER CONSUMPTION: Maximum 3 watts during daylight, watts at night.



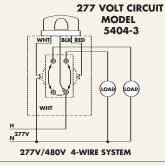
CAT. NO	UPC CODE	INCLUDES PHOTO CONTROL MODEL	VOLTAGE 50-60HZ	CONTACT RATING PER POLE	SWITCH
5403	60009	50215	105-130	3000 WATTS	DPST
5404	60010	5024\$	208-240	3000 WATTS	DPST
5404-3	60011	5024S	277	3000 WATTS	DPST
5420	60014	50215	105-130	1000 WATTS	SPDT
				The state of the s	The same

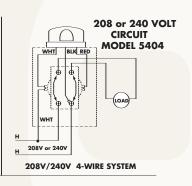
#### **WIRING DIAGRAMS**

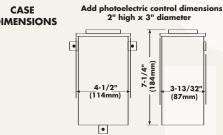


Lim.

H 120V







RED LOAD 1

BLUE LOAD 2

#### TURN-LOCK PHOTOELECTRIC CONTROL ACCESSORIES

### **5500 SHORTING CAP**

#### **FEATURES:**

 Provides a convenient and economical method of closing the primary circuit with a NEMA

locking-type receptacle. Durable materials and gasket provide both long life and materials and gasket provide both long life and weatherproof protection. For use with all voltages.

CAT. NO	UPC CODE	DESCRIPTION
5500	61130	SHORTING CAP



CATALOG NO. 2223 (UL)

Receptacle, 120-480V, color coded #14 leads, neoprene gasket, two mounting



CATALOG NO. 2224 (UL)

Receptacle, 120-480V, color coded #14 leads, mounting bracket and one mounting screw.



CATALOG NO. 2421 (UL)

Receptacle, 120-480V, color coded #12 leads, plastic housing, lock nut (with ½" NPT), and mounting bracket.

CAT. NO	UPC CODE	DESCRIPTION
2223	61025	RECEPTACLE WITH NEOPRENE GASKET
2224	61026	RECEPTACLE WITH MOUNTING BRACKET
2421	61021	RECEPTACLE WITH PLASTIC HOUSING AND MOUNTING BRACKET

TORK PHOTOTIMER PLUS
THE MOST FLEXIBLE PHOTOTIMER FOR MAXIMUM ENERGY
SAVINGS AND ALL ON/OFF NEEDS!

The TORK Phototimer Plus is the most flexible photocontrol ever, operating like a photocontrol AND a time switch! Ideal for retrofit without expensive rewiring. The unit turns the load ON at sunset and can be preset to turn the load OFF up to two hours before or two hours after midnight. It can also be set to turn the load back ON from two to ten hours after midnight and OFF at dawn.

No programming is required, the microprocessor tracks dusk and dawn times and automatically determines midnight, and corrects for Daylight Savings Time. It even re-learns and resets itself after a power outage, so that no maintenance is ever needed. See page 8 for more information on 5737TZ!





#### **ALPHANUMERIC INDEX**

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#### TERMS OF SALE

#### **TORK VENDOR NUMBER: 786261**

- 1. Prices are F.O.B. our plant.
- 2. Prices do not include any sales tax.
- Freight charges will be prepaid on all orders \$250.00 and over shipping within continental USA using standard shipping methods and service.
- 4. Minimum order \$100.00.
- Claims for shortage, erroneous charges or price corrections shall be deemed waived unless made in writing, delivered to NSi within 30 days of invoice.
- 6. Terms of payment 2% 10th prox. net 25th following.
- 7. Warranties NSi guarantees all products to be free of defects in material and workmanship for a period of 1 year from date of sale. Any claims for defective material must be agreed to in writing by NSi. Defective material will be replaced on an F.O.B. our factory basis. NSi disclaims the implied warranty of fitness for a particular application.

#### OTHER PRODUCTS AVAILABLE

NSi can provide many other products for special applications which are not listed in this catalog. If you require an item which you do not find listed, please contact us. We would be pleased to provide a quotation upon receipt of a drawing or a sample.

#### **GUARANTEE**

It is our goal to provide extraordinary products and service on a daily basis. If our products or service do not meet with your satisfaction, please let us know immediately and we promise to make every reasonable effort to remedy the situation.



TORK TECHNICAL INFORMATION: 888.500.4598 REQUEST YOUR COMPLETE SET OF TORK CATALOGS TODAY!