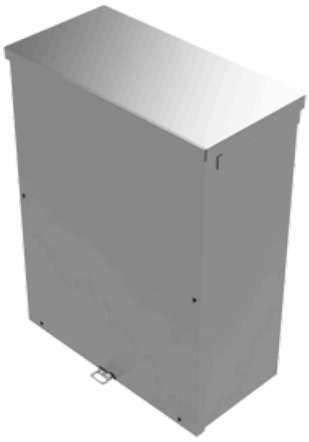
Project		**Catalog #**		**Type**	
Prepared by		**Notes**		**Date**	



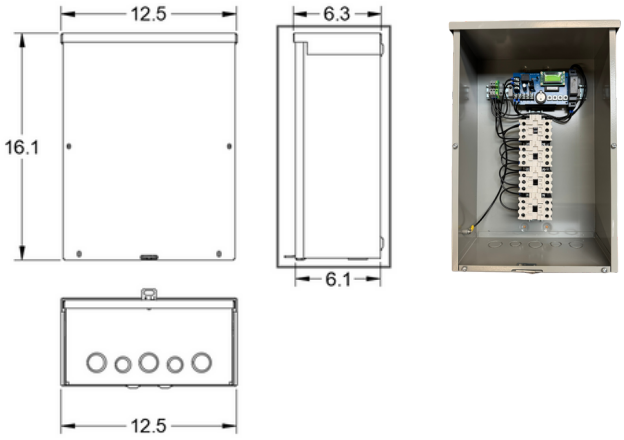
ECO Lighting Contactor Panel

Product Features

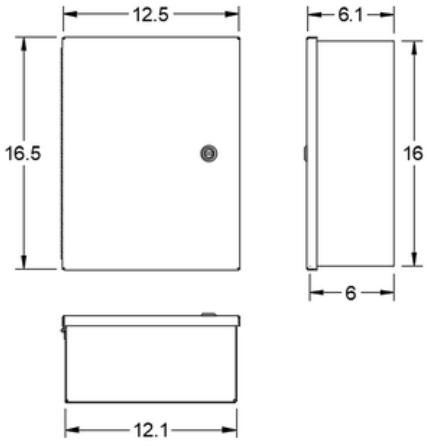
- Plug & play, pre assembled lighting relay panel
- Programmable digital 24 hour 365 day event timer
- Electrically held 120V 30A rated 3-pole contactor blocks, 12 poles maximum
- Steel lockable NEMA 3R or NEMA 1 enclosure
- Ambient operating temperature range -40F to +131F
- Enclosure dimensions 16H x 12W x 6D inches and includes mounting flanges with through holes
- Screw terminal connections accept 14-8 AWG solid or stranded 75C copper wire
- Included exterior photocell accessory can be connected in OR/AND logic arrangement with timeclock
- All components are UL listed
- HOA switches, additional enclosure types, and many more options available. Consult factory for details.

Dimenstional Details

NEMA 3R



NEMA 1



nuvospec **ECO Lighting Contactor Panel**

Order Infrormation

Family	Type	# Poles	Coil Voltage	NEMA	Switch Options	Timeclock	Photocell
CTRL	**ECO**	**03** = 3 POLES **06** = 6 POLES **09** = 9 POLES **12** = 12 POLES	**[BLANK]** = 120VAC **277** = 277VAC **24** = 24VAC	**NEMA1** = INDOOR **NEMA3R** = OUTDOOR	**[BLANK]** = NONE **HOA** = HOA SWITCH **2HR** = 2 HOUR OVERRIDE SWITCH	**[BLANK]** = NONE **TMCLK** = ALTRONIX PT724A TIMECLOCK	**[BLANK]**= NONE **PHCL**= PHOTOCEL INCLUDED
Notes							

Product Specifications

- Enclosure
  - NEMA 3R or NEMA 1
  - UL listed UL-50 Type 3R complies with NEMA Type 3R and IEC 60529 IP24
  - 16 x 12 x 6 inches (HxWxD)
  - Surface or channel mountable
  - Galvanized steel, powder coated finish, ANSI 61 gray
  - Hinged screw cover with padlock hasp and staple
- Contactor
  - Electrically held lighting contactor
  - All lighting load types
  - Rated to 30A at 600VAC for general use
  - Up to 12 power poles
  - Wire size
    - Power poles: 14-8 AWG
    - Coil: 18-14 AWG
  - 120VAC 28VA coil
  - UL listed
- Timeclock
  - Commercial grade multipurpose 365 day time switch (standard)
    - Field programmable
    - Capacitor back-up
    - UL listed
- Photocell
  - Mechanical bimetal switch with Cadmium Sulfide photocell
  - Delay feature prevents unwanted OFF switching
  - High strength, UV resistant plastic housing
  - Swivel with ½"-14 NPSM threaded stem
  - Washer gasket and locking nut included
  - #18 AWG, 6" wire leads
  - UL listed

Altronix Timeclock

Wiring Diagrams

- Wiring diagram illustrates order code CTRL-ECO-12-NEMA1-HOA-TMCLK-PHCL which utilizes the full combination of a photo cell, time switch, HOA override switch, and lighting contactors.
- If HOA switch is not included, connect normally open output (5) of time switch directly to lighting contactor coil (A1).
- If photo cell is not included, connect time switch common input (3) directly to line supply (1).
- If time switch and HOA Switch are not included, connect photo cell output (Red) directly to lighting contactor coil (A1).

Photo Cell, Time Switch, HOA Switch

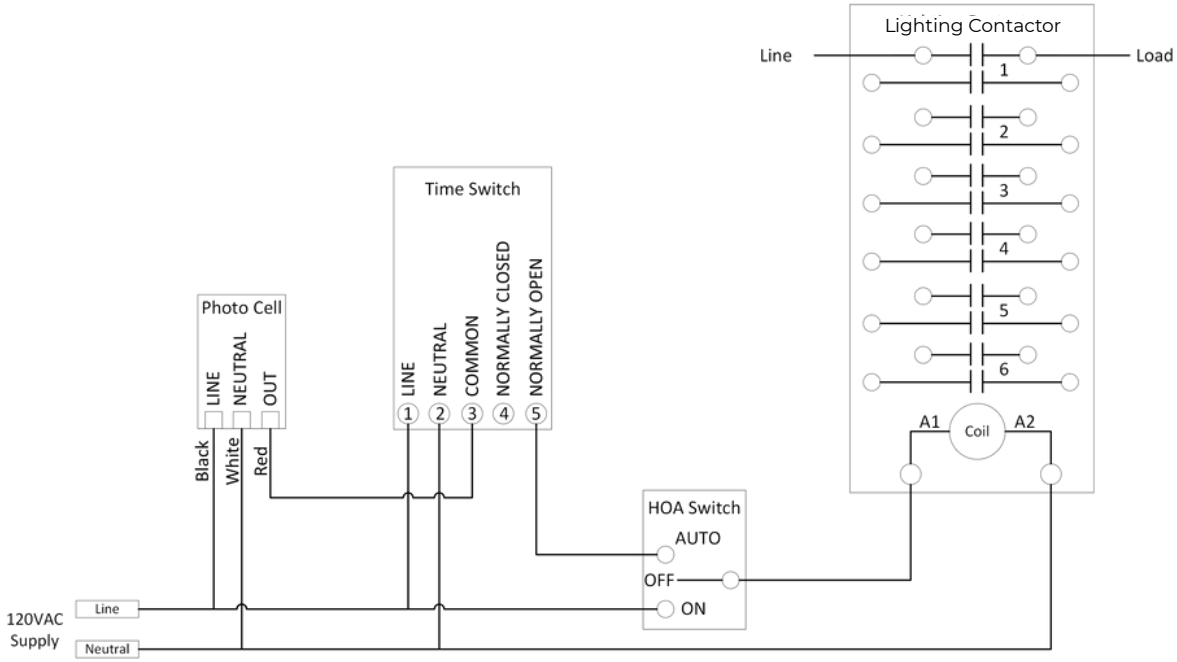
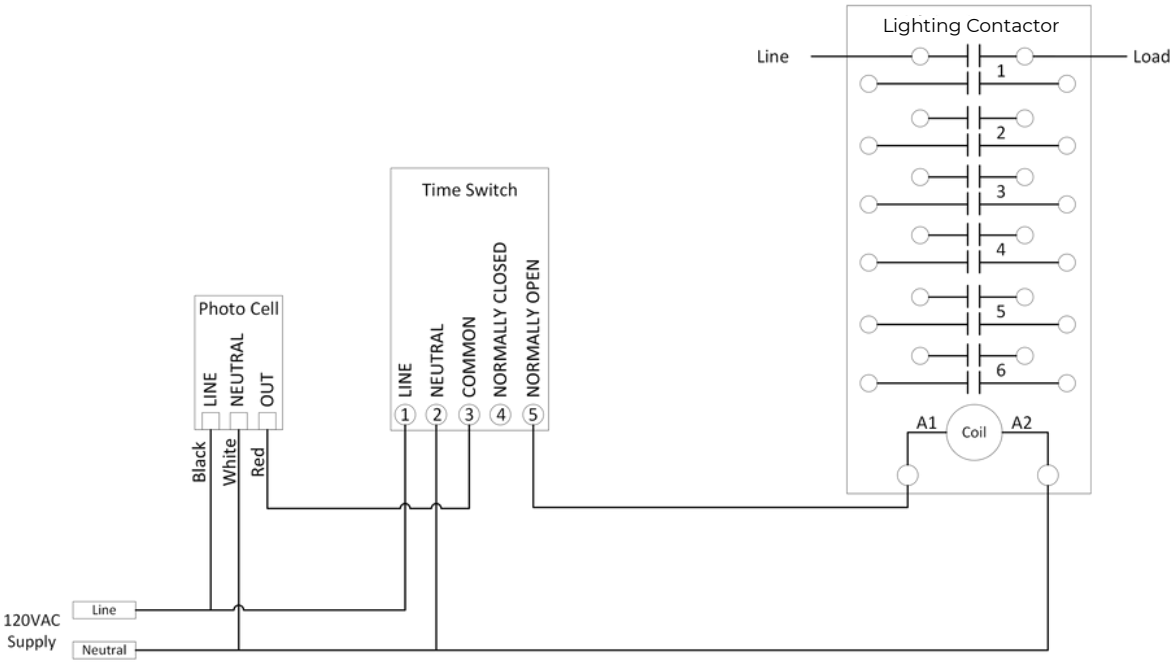


Photo Cell, Time Switch



Wiring Diagrams

Time Switch

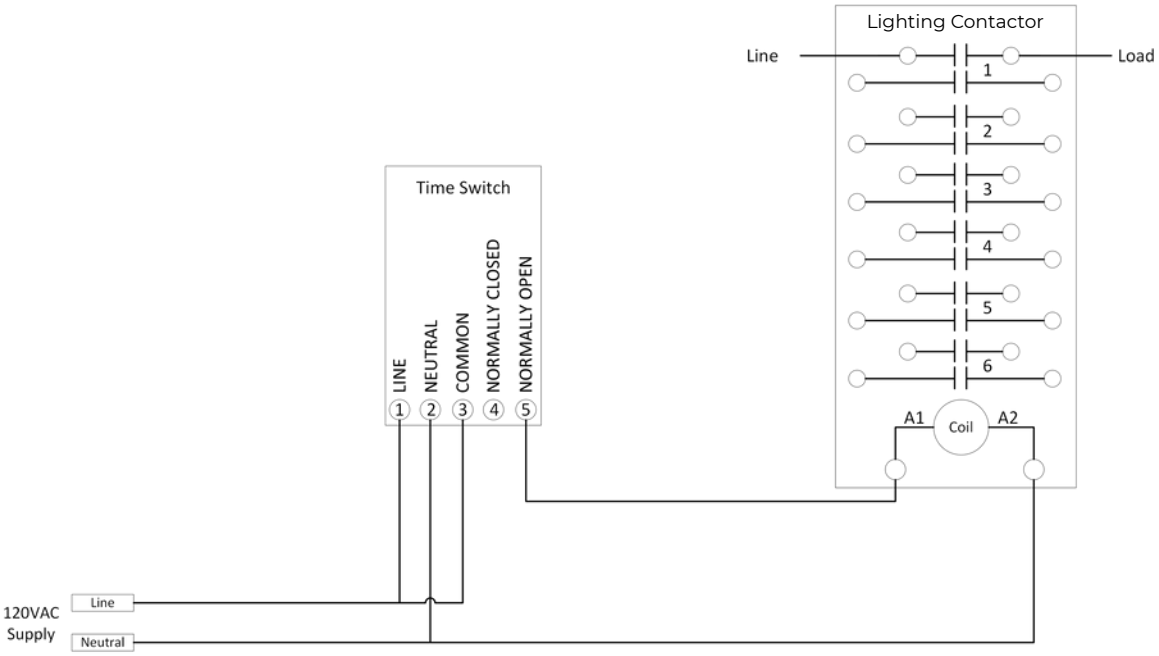
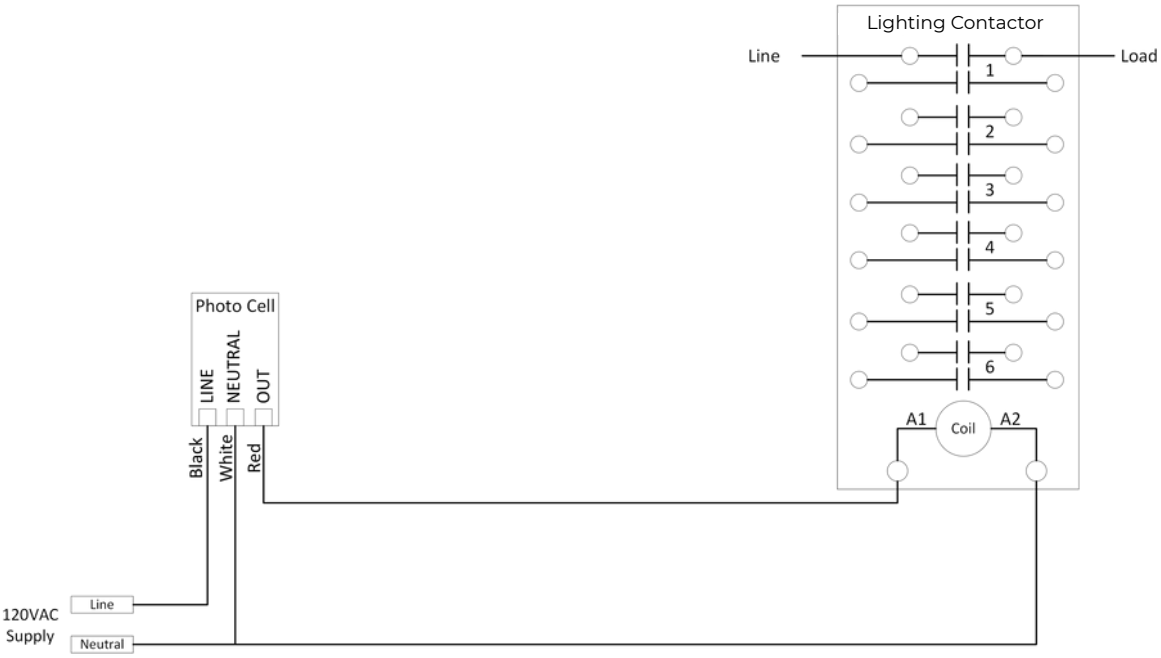


Photo Cell



Programming the Timeclock

Buttons (remember this pattern)

- SET – Step through menus / exit.
- ENTER – Select / confirm.
- UP / DWN – Change values (time, day, mode).

Think: SET → UP/DWN → ENTER.

1. Set Clock & Calendar (do this once)
   1. Power the timer.
   2. Press SET until display prompts to set TIME/CALENDAR.
   3. Press ENTER, then use UP/DWN + ENTER to set:
      - Month / Day / Year
      - Day of week
      - Time (24-hour)
   4. Continue with SET to find DS/ST; choose DS (Daylight Savings) or ST (Standard Time), ENTER.

2. Program a Basic ON / OFF Schedule (e.g., M–F 08:00–17:00)

A. ON event
   1. Press SET until SET EVENT appears, then ENTER.
   2. Event #1 shows. Move cursor to mode, choose ON, ENTER.
   3. Set day/block:
      - Use UP/DWN to pick MO, then adjust to FR for a Mon–Fri block (start → end).
   4. Set time to 08:00, ENTER.

B. OFF event
   1. Press SET to return to SET EVENT, ENTER to go to Event #2.
   2. Mode = OFF, ENTER.
   3. Same MO–FR block, time 17:00, ENTER.

3. Program a Pulse (Momentary) Event
   1. Go to SET EVENT, select next free event.
   2. Mode = PL (Pulse), ENTER.
   3. Set pulse time 1–15 s with UP/DWN, ENTER (default 1 s if you skip).
   4. Set day and time like any event, ENTER.

4. Quick Edits / Wipe

- Edit / Disable single event
  - Go to SET EVENT → ENTER, scroll to event #.
  - Change mode (ON/OFF/PL) or set mode to DIS to disable, ENTER.
- Clear ALL events

1.Press SET until CLEAR MEMORY prompt.
2.ENTER, ENTER, then UP to confirm.

5. “First Man In” (FM) Input – Simple Use

- When FM terminal is tied to negative (–), schedules are effectively held until that input changes state; used where first arrival in the morning overrides the normal time schedule.
- the next programmed event.