LED

Project:

Location:

Product Type:

Contact/Phone:

Model #:

ET8415CR

7-Day Electronic Astronomic Time Switch

The ET8415CR 7-Day Astronomic Time Switch features independent 7-Day programming to provide flexibility for applications where load switching differs each day of the week. This time switch provides dependable and uncomplicated performance, plus to-the-minute programming for accurate load control and reduced energy costs. Up to 28 ON/28 OFF (56 events) can be preset to automatically repeat. Each event can be applied to any combination of circuits and days. Each circuit is provided with an independently scheduled Astronomic ON event and Astronomic OFF event. The program can be disabled at any time by placing the time switch in the Manual operating mode. Control buttons provide manual control of each circuit independently regardless of the operating mode. The ET8415CR comes with a 100 hour supercapacitor to provide time keeping and automatic carryover with no maintenance. The time switch is housed in a lockable enclosure to protect from vandalism and unauthorized tampering.

ET8415CR

Features

- Program can be repeated on a weekly basis
- Auto-voltage operation from 120-277 VAC, 50/60 Hz
- To-the-minute programming for accurate load control and reduced energy costs
- Astronomic feature provides sunset ON and sunrise OFF settings to eliminate the need for separate photo control devices
- Astronomic programming can be combined with independent programs to provide a sunset ON and timed OFF program
- Each pair of relays is independently software configurable for: 2 independent outputs, DPST output, or 1 channel ON pulse OFF pulse output
- Up to 28 ON/28 OFF setpoints or events and 8 Astronomic events
- Sunrise/Sunset Astronomic events can be distributed throughout the days of the week
- Automatic Daylight Saving Time (DST) ON/OFF adjustment (factory enabled)
- Non-volatile EEPROM memory protects programming indefinitely
- Temporary override or permanent manual override available via control buttons

Ratings

Enclosure:	Type 3R Gray Painted Steel
Knockouts:	Combination ½" & ¾" Knockouts Bottom: 2, Left: 1, Right: 1, Back: 1
Input Voltage:	120-277 VAC 50/60 Hz
Operating Temperature:	-40°F to 155°F (-40°C to 68°C)

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Contact Ratings:

UL	CSA	Load Type	Voltage	Frequency
30 Amp	30 Amp	Resistive	120/240 VAC	60 Hz
20 Amp	20 Amp	Resistive	28 VDC	–
30 Amp	30 Amp	Inductive	120/240 VAC	60 Hz
20 Amp	20 Amp	Ballast	120-277 VAC	60 Hz
5 Amp	5 Amp	Tungsten	120/240 VAC	60 Hz
1 HP	1 HP	Motor	120 VAC	60 Hz
2 HP	2 HP	Motor	240 VAC	60 Hz
4.5 Amp	–	Electronic Ballast	120-277 VAC	60 Hz

Input Voltage: 120 -277 VAC, 50/60 Hz

Power Consumption: 7 Watts maximum

Contact Configuration: SPST x4

Pulse Feature: 2-second pulse option for contactor and bell ringing applications.

Auto DST: Automatic adjustment for Daylight Saving Time

Supercapacitor Backup: 100 hour supercapacitor maintains date and accurate time. Supercapacitor fully recharges in 30 minutes.

Wiring Terminals: #18 to #10 AWG wire

Minimum ON/OFF Time: 1 minute

Maximum ON/OFF Time: 6 days, 23 hours 59 minutes

Warranty: Limited 1 year

Model Number	Circuits	Switch	Volts AC	Rating	Enclosure	Shipping Weight
ET8415CR*	4	SPST	120-277	30 Amps	Type 3R Steel	3.7 lbs. (1.7 kg)

*Can be wired to DPST

Specification

The 7-Day Astronomic electronic-type time switch shall be capable of permitting up to 28 ON/28 OFF events. In addition, the time switch shall include selectable Astronomic (sunrise/sunset) settings for each day and circuit to allow load switching at sunset and/or sunrise without a photo control device. The time switch shall provide a minimum ON or OFF time of 1 minute. The time switch to be powered by ___ (120)(208)(240)(277) VAC, ___ (50)(60) Hz power supply. The time switch mechanism features a snap-in design to provide easy mechanism removal for mounting the enclosure. The time switch enclosure shall be a Type 3R Steel lockable enclosure that shall be painted with an electrostatic process to eliminate the potential for corrosion. The time switch shall provide clear terminal identification on a see-through non-curling terminal insulator. Terminal connections shall provide secure connections for wire sizes up to #10 AWG. Switch configuration shall be _____ (SPST)(DPST) with a UL or CSA listed switch rating of:

- Resistive: 30 Amps @ 120/240 VAC
- Resistive: 20 Amps @ 28 VDC
- Inductive: 30 Amps @ 120/240 VAC
- Tungsten: 5 Amps @ 120/240 VAC
- Ballast: 20 Amps @ 120-277 VAC
- Motor: 1 HP @ 120 VAC
- Motor: 2 HP @ 240 VAC

The time switch shall be UL or CSA listed under UL category 916 Energy Management Equipment and shall be Intermatic model ET8415CR.

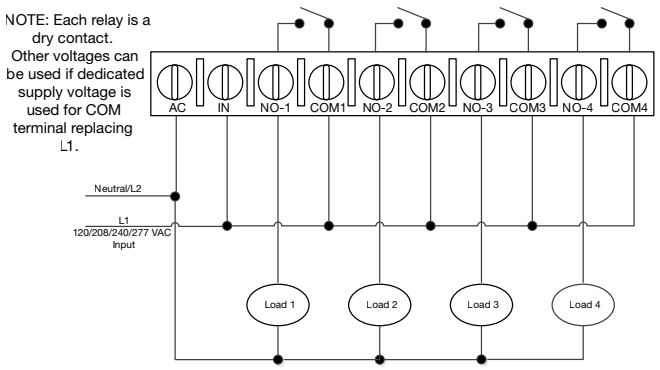
Diagrams

There are many different ways to set the relays on the ET8415CR Time Switch. The four relays can be used individually or in pairs of two. Refer to the table below for a complete list of ways to set the relays and the illustrations for some of the common wiring installations

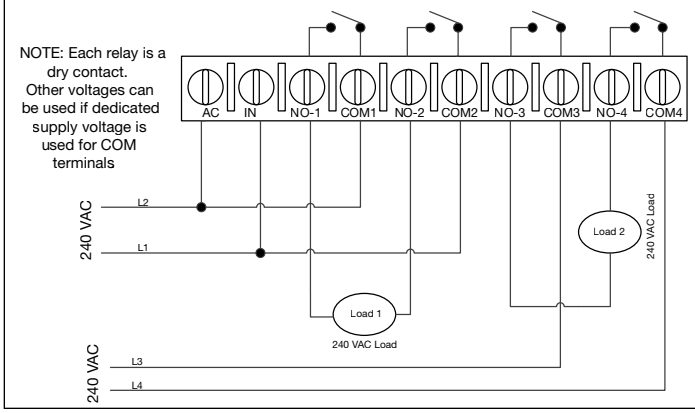
IND/IND	SIM/IND	PUL/IND
IND/SIM	SIM/SIM	PUL/SIM
IND/PUL	SIM/PUL	PUL/PUL

Note:
IND= Independent SIM= Simultaneous PUL= Pulse

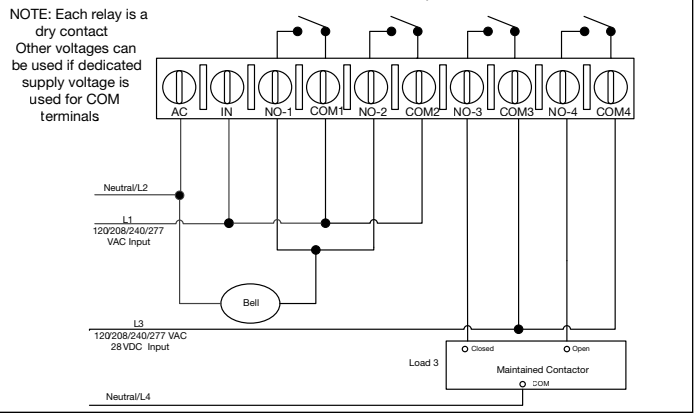
4x SPST
Operation Mode set to "IND", Input and Output voltage are the same



2x DPST
Operation Mode set to "SIM" for both sets of contacts, Input and Output voltage are the same



2 x Pulse
Operation Mode set to "PUL" For both sets of contacts, Each ON and OFF event for Circuit 1 will ring the bell. Each ON event for Circuit 3 will Close Contactor and Each OFF event will Open Contactor



Notes