



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.

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 1/2" & 3/4" 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) |

Project: _____

Location: _____

Product Type: _____

Contact/Phone: _____

Model #: _____



ET8415CR

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

