



Solid State Timers and Controllers

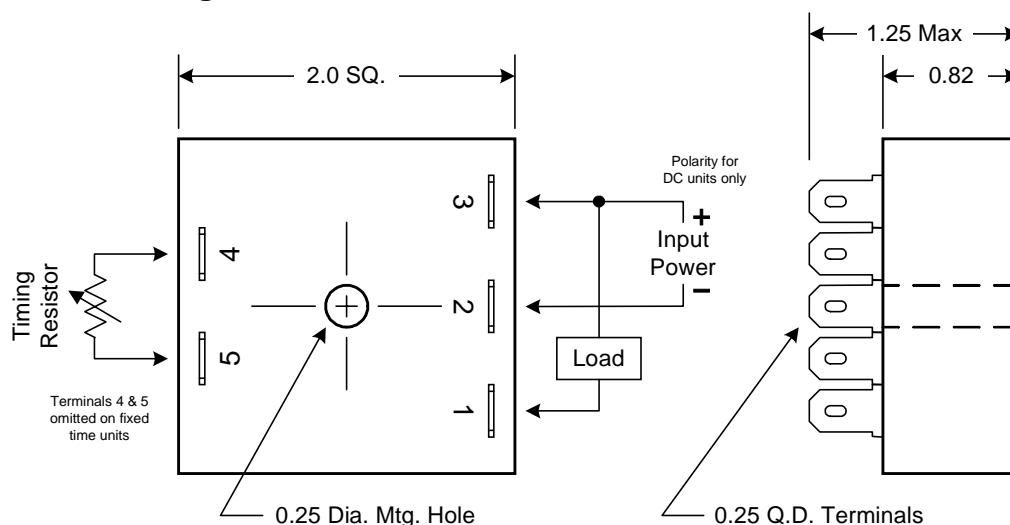
4300

Interval Timing Module

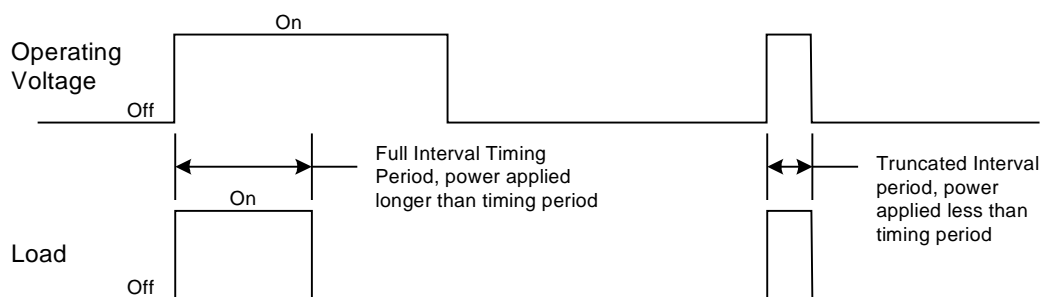


The model 4300 series provides a load circuit with operating voltage for a predetermined amount of time each time the operating voltage is applied. The operating voltage must be present for the duration that exceeds the preset interval timing period. The 4300 series is available in both AC and DC models and controls output load circuits to 1 ampere. Fixed or adjustable timing interval periods are available. Adjustable models have the interval time preset by adding a resistor across terminals 4 & 5.

Mechanical & Wiring



Timing Diagram



External Timing Resistor Chart

The left hand column lists five values of external resistors: 0, 1 meg, 3 meg, 5 meg, and 10 meg, and across the top are listed the five model dash numbers, 1 through 5. To illustrate how the chart works assume that timing range -3 has been selected. Under the -3 column are the times that relate to the five values of external resistors. For an external resistor equal to 0 ohms, the interval would be 2 seconds. With 1 meg ohm, 100 seconds and so forth up to 10 meg ohms where the timing interval is 1000 seconds. If a 3 meg ohm potentiometer were connected across the external timing resistor terminals, you could expect, as a minimum, a range of interval timing from 2 to 300 seconds.

| External Resistor (Ohms) | DASH NO. | | | | |
|--------------------------|----------|-----|-------|-------|-------|
| | -1 | -2 | -3 | -4 | -5 |
| 0 | 0.1 | 1 | 2 | 10 | 30 |
| 1 Meg | 4 | 30 | 100 | 500 | 900 |
| 3 Meg | 12 | 90 | 300 | 1,500 | 2,700 |
| 5 Meg | 20 | 150 | 500 | 2,500 | 4,500 |
| 10 Meg | 30 | 300 | 1,000 | 5,000 | 8,000 |

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Artisan Controls Corporation, 111 Canfield Ave., Bldg B15-18, Randolph, NJ, 07869, USA



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Specifications

| | |
|---|--|
| Operating Voltage: | 12V DC, 24V DC, 48V DC, 12V AC 24V AC, 48V AC, 115V AC, 230V AC. |
| Voltage Tolerance: | ±20%, AC 50/60Hz. |
| Operating Current: | All voltages < 20 mA plus load current requirements. |
| Timing Mode: | Interval. |
| Fixed Timing: | From 0.1 seconds to 10,000 seconds. |
| Fixed Timing Purchase Tolerance | 2%, 5%, 10%, and 20%. |
| Adjustable Timing: | 0.1 seconds to 8,000 seconds covered by 5 models. |
| Timing Range Tolerance: | Minimum time - 15% +0%, maximum time - 0% +15%. |
| Timing Variation: | ±15% of set point over specified temperature and voltage range. |
| Repeatability Of Timing Period: | ±1% nominal. |
| Recycle Time: | Operating voltage must be removed for a minimum of 200 milliseconds to guarantee all timing and output circuits have reset. |
| Output Rating: | Rated for 10mA to 1A inductive with inrush current to 25 A for 8 mS. |
| Output Voltage Drop in "ON" State: | 2V for DC models, 4V maximum for AC models. |
| Leakage Current in "OFF" State: | 1 mA maximum for DC models, 3 mA maximum for AC models. |
| Transient Protection: | Protected by silicon transient suppressors which respond to transients within 1×10^{-12} seconds to a peak pulse power dissipation of 1500 watts. |
| Dielectric: | 1500V rms all terminals to case. |
| Operating Temperature: | -20°C to +85°C. |
| Humidity: | 95% non-condensing. |
| Construction: | Encapsulated module with .25 quick connect wiring terminals. |
| Agency Recognitions: | UL File #E47858 (Component Appliance Controls #ATNZ2), UL File #E47858 (Component Auxiliary Devices #NKCR2), CSA LR31931-3 (Industrial Control Equipment). |
| Data Sheet Revision Date: | February 25, 2003 |

Ordering Information Fixed Timing Models

| Part Number | Operating Voltage | Fixed Timing In Seconds | Fixed Timing Tolerance |
|-------------|-------------------|---|---|
| 4300 F - | -1 (5V DC) | Specify the fixed timing period in seconds from 0.1 to 10,000 | -A 2% |
| | -2 (12V DC) | | -B 5% |
| | -3 (24V DC) | | -C 10 % |
| | -4 (48V DC) | | -D 20 % |
| | -5 (12V AC) | | Specify the dash number that represents the timing tolerance required only on fixed timing units |
| | -6 (24V AC) | | |
| | -7 (48V AC) | | |
| | -8 (115V AC) | | |
| | -9 (230V AC) | | |

Example: 4300F-8-900-C operates from 115V AC with fixed timing of 900 seconds \pm 10%.

Ordering Information Adjustable Timing Models

| Part Number | Operating Voltage | Timing In Seconds |
|-------------|-------------------|--|
| 4300 A - | -1 (5V DC) | -1 (0.1 - 30) |
| | -2 (12V DC) | -2 (1 - 300) |
| | -3 (24V DC) | -3 (2 - 1000) |
| | -4 (48V DC) | -4 (10 - 4500) |
| | -5 (12V AC) | -5 (30 - 8000) |
| | -6 (24V AC) | Timing remotely adjustable by resistor across timing terminals |
| | -7 (48V AC) | |
| | -8 (120V AC) | |
| | -9 (230V AC) | |



Example: 4300A-2-5 operates from 12V DC with adjustable timing from 30 to 8000 seconds.

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