



## Long-Ranger Computing Timer with Memory

- EEPROM Memory
- Magnetic Latching Relay
- Delayed & Instantaneous DPDT Contacts
- Switch Selectable SEC, MIN or HR Ranges
- Nine Ranges 0 to 9.99, 99.9 or 999
- High Accuracy & Noise Immunity
- Easy Plug-In Housing
- High Intensity Blue Fluorescent Display
- Fully Gasketed and O-ring sealed to be dust tight
- Timeup or Timedown Display Operation
- 50 or 60 Hz Operation Self-Adjusting

### OPERATION

#### Arrangement 30 & 50 Models

When power is applied to terminals 1 & 2 and 15 of the timer, the instantaneous relay is energized and its contacts change state. The timer starts timing, indicated by the display. The timing bar "■" blinks slowly and the digital display indicates elapse time (Timeup & Stop) or time remaining (Timedown & Stop).

When the preset value is reached, the display stops, the timing bar blinks rapidly, the triangular timed-out symbol "▼" blinks, and the delayed relay latches and its contacts change state. The timer remains in this timed-out condition until reset by applying power to the Reset terminal 16 for at least 60 msec. At reset, both relays revert back to their shelf state (without power).

Note 1: The delayed relay is a magnetic latch relay and once latched it will not unlatch even if power is removed or the unit is unplugged from the housing. It will only unlatch when power is momentarily applied to the Reset terminal 16.

Packaged in a 72mm<sup>2</sup> DIN housing, the ATC 365 is a true plug-in timer that can be replaced in seconds without disturbing the mounting housing or field wiring. Machine and process downtime is kept to a minimum. The 365M is also fully gasketed and O-ring sealed to be dust tight.

**WIDE RANGE:** Each 365 timer covers the overall span of 0.01 SEC to 999 HR, in nine switch-selectable ranges of 9.99, 99.9, or 999 SEC, Min, or HR.

**EASY-TO-ADJUST PRESET:** ATC's unique three rotary switches for easy setting and adjustment of the preset time is an industry standard. The switches can be adjusted anytime, even during a timing cycle. The timer is constantly scanning the preset setting and instantly re-computes the time cycle if a preset change is detected. This is especially valuable in the Timedown mode allowing you to shorten or abort the current time cycle without the removal of power.

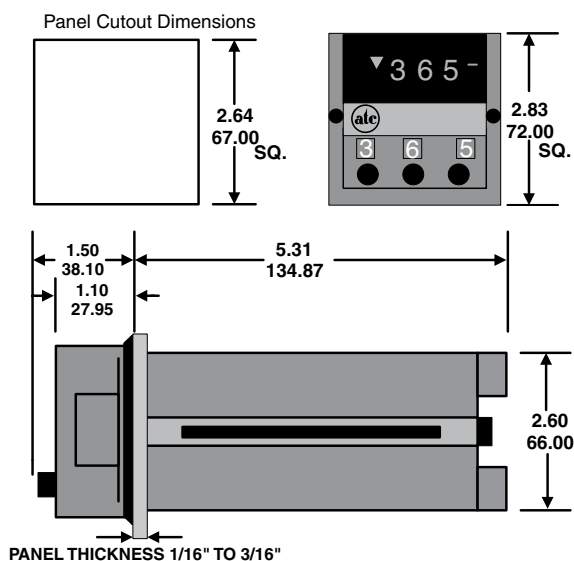
**SELF-CALIBRATING:** The microprocessor automatically calibrates the timer for 50 or 60Hz power operation, there are no switches or jumpers to set.

**PROGRAMMABLE DISPLAY:** An internal DIP switch can be set for Timeup or Timedown and Stop display operation on the Arrangement 30 model. The Arrangement 50 model can be set for Timeup or Timedown and go. There is a horizontal timing bar "■" which appears to the right of the display and blinks once per second during timing and rapidly at time-out. At left, a timed out symbol "▼" blinks after time-out indicating when the magnetic delayed relay is latched.

**MAGNETIC LATCH RELAY:** The 365 utilizes a unique magnetic latch delayed relay which energizes, latches, at time-out. Once latched it will not unlatch even with power removed or the unit is unplugged from the housing. It will only unlatch when power is momentarily applied to the Reset, terminal 16.

**NON-VOLATILE MEMORY:** An EEPROM memory chip to retain the time value during a loss of power and continues timing when power is restored. No battery is required.

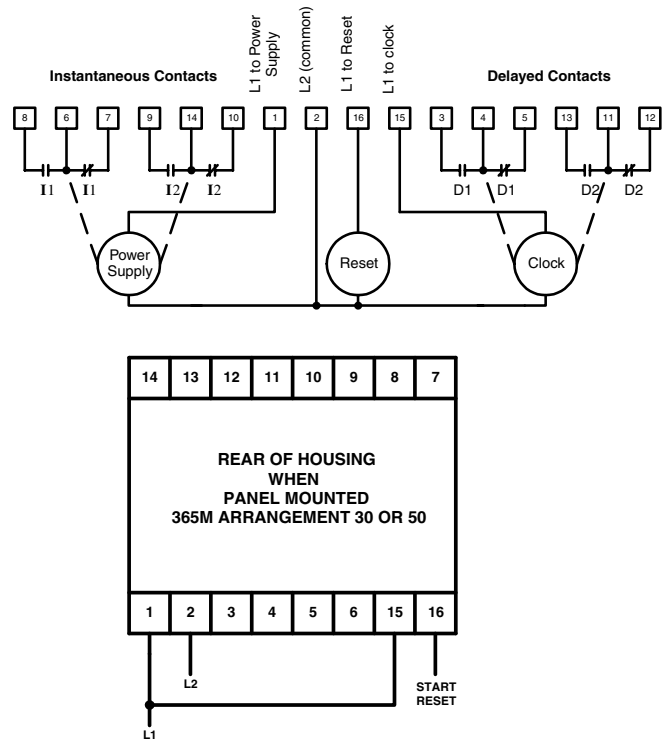
### DIMENSIONS (INCHES/MILLIMETERS)



## SPECIFICATIONS

<b>MODELS</b>	Choice of two standard 120 VAC models	
	Each model available in 240 VAC or 24 VAC	
	365M300Q30PX	Timeup & Stop or Timedown & Stop, with display.
	365M300Q50PX	Timeup & Go or Timedown & Go, with display.
<b>RANGES</b>	Nine (9) Switch-Selectable ranges 0 - 9.99, 0 - 99.9, and 0 - 999 SEC, MIN, or HR	
<b>MEMORY RETENTION</b>	100,000 read/write cycles	
<b>RESET TIME</b>	Guaranteed not to reset <20 mSEC Typical reset = 40 mSEC Guaranteed to always reset >60 mSEC	
<b>DISPLAY</b>	Cycle Progress 3-digit high-intensity blue VF display, 0.3 inch Timing Bar: "■" display; blinks once per second during timing, rapidly after time-out. Timed-Out Symbol: "▼", blinks after time-out, blinks when latch relay is latched	
<b>LOAD RELAYS</b>	Type	DPDT, Form C
	Contact Rating	7 Amps @ 120 VAC, or 1/6HP @ 240 VAC
	Operate Release Time	10 mSEC max.
	Life	10 million operations (no load)
<b>TEMPERATURE RATING</b>	32 to 122°F (0 to 50°C)	
<b>POWER REQUIREMENTS</b>	120 VAC	50 or 60 Hz (10%, -20%) Running <100mA @120VAC
	240 VAC	50 or 60 Hz (10%, -20%) Running <50mA @ 240 VAC
	24 VAC	50 or 60 Hz (10%, -20%) Running <300mA @ 24 VAC
<b>CLOCK INPUT</b> (Terminal 15)	120 VAC	95 - 132 VAC, 10 mA max. current @ 120V
	240 VAC	90 - 264 VAC, 10 mA max. current @ 240V
	24 VAC	19.2 - 26.4 VAC, 20 mA max. current @ 24V
<b>TERMINALS</b>	16 Screw (6-32) terminals with saddle clamps accessible at rear	
<b>HOUSING</b>	72mm <sup>2</sup> DIN size, Plug-in design, fully gasketed dust tight when panel mounted. Panel mounting bracket included.	
<b>WEIGHT</b>	Net: 1 lb. 6 oz Shipping: 2 lbs.	

## WIRING



## MODEL NUMBER

<b>MODEL NUMBER</b>	365M				P	
<b>RANGE</b>	0 to 9.99, or 99.9 or 999 SEC, MIN, or HR	300				
	Special	000				
<b>VOLTAGE &amp; FREQUENCY</b>	120 VAC 50-60 Hz	Q				
	240 VAC, 50-60 Hz	R				
	24 VAC, 50-60 Hz	T				
	Special	K				
<b>ARRANGEMENT</b>	Selectable Timeup & Stop or Timedown & Stop with Display, Standard	30				
	Selectable Timeup & Stop or Timedown & Go with Display, Standard	50				
<b>FEATURES</b>	Basic plug-in unit			P		
	Standard unit				X	
	Special				K	

### Accessories:

Surface Mounting Bracket Kit	353-260-37-00
Retrofit Kit	305-265-61-70