

The **ATC 653** is a micro-processor-based control that can function as either a timer or a counter. It has a 4-1/2 digit LCD that can provide an indication of either the time or count value remaining or elapsed. There are five timing ranges covering time values from one millisecond to 199 hours 59 minutes. There are also three count speeds to a maximum of 7500 counts per second. The unit has an instantaneous relay output and a programmable relay output which can be programmed for any one of 14 different timing modes.

The timing range, count speed and timing mode are programmed with an internal DIP switch assembly. An external switch determines whether the time inhibit or count input takes place with application or removal of voltage. The time or count value is preset by the operator using the keypad on the front face.

These programmed values are retained in memory and are secured in memory by a keypad lockout command. The keypad can also be used to perform secondary functions such as reset, immediate time/count out, time/count inhibit, changing the direction of the display, displaying the number of cycles run, and clearing the cycle counter.

The Model 653 is housed in a standard 15-terminal plug-in round case. Models are available for operation on either 120 VAC or 240 VAC. Counting can be done at either line voltage or at 12-48 VDC/24 VAC jumper selected.

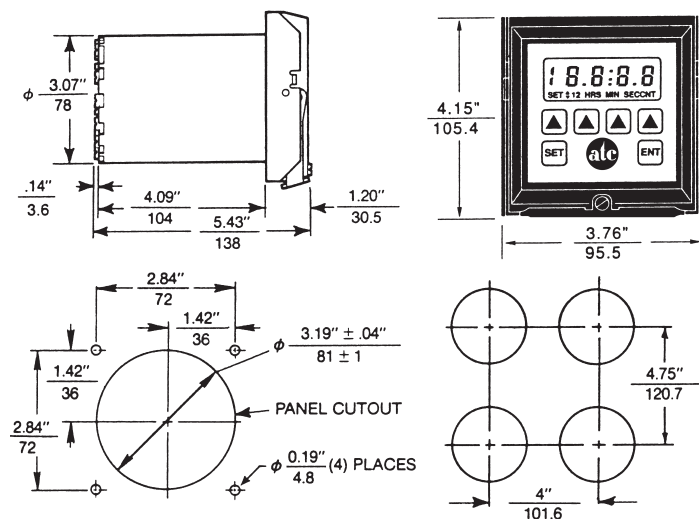
**CAI**<sup>®</sup>  
US  
E205980



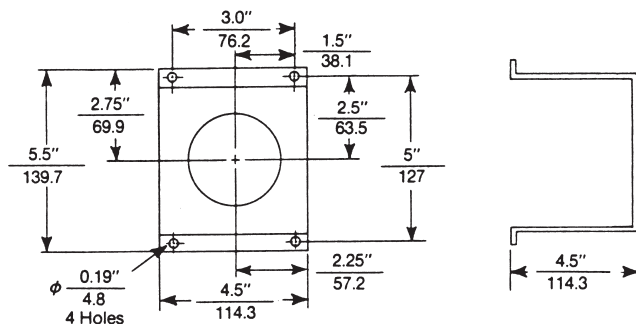
## Multi-Function Multi-Range Solid-State

- Functions As Timer or Counter
- Five Time Ranges
- Six Single-Cycle and Eight Repeat-Cycle Timing Modes
- Sealed Faceplate
- Cycle Counter
- Count Input Scaling
- Data Retention Memory with EEPROM Circuitry. (653-8-4000, 653-8-4001 Models)
- Data Retention Memory with Lithium Battery (included with timer) (653-8-5000, 653-8-5001 Models)

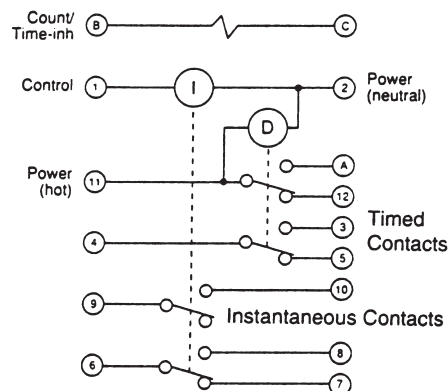
### DIMENSIONS (INCHES/MILLIMETERS)



model 600-3-3950 surface mounting bracket



### WIRING



## SPECIFICATIONS (ALL MODELS)

<b>TIMING RANGES</b>	0.001 SEC to 19.999 SEC 0.01 SEC to 199.99 SEC 0.1 SEC to 1999.9 SEC 1 SEC to 199 MIN 59 SEC 1 MIN to 199 Hr. 59 MIN
<b>COUNT MODES</b>	500 CPM, AC/DC 5000 CPM, AC/DC 7500 CPS, DC Only
<b>MODE OF OPERATION</b>	ON-Delay, Interval, Reverse Start Delay Reverse Start Interval, Momentary Start Accumulator, Repeat Cycle-OFF First Repeat Cycle-ON First, Repeat Cycle Reverse Start-OFF First, Repeat Cycle Reverse Start-ON First, Repeat Pulse Repeat Pulse, First Pulse Immediate Repeat Pulse-Reverse Start, Repeat Pulse First Pulse Immediate Reverse Start
<b>TIME SETTING</b>	Front Panel Keypad
<b>TIME REPEAT ACCURACY</b>	Count: 100% Time: $\pm 0.005$ SEC
<b>DISPLAY</b>	LCD - 4 1/2 Digit, 7/16" High
<b>RELAY MECHANICAL LIFE</b>	50,000,000 Operations
<b>INSTANTANEOUS RELAY OUTPUT</b>	7 Amps Resistive, 240 VAC, 2 N.O. 1 N.C. Contact
<b>TIMED RELAY OUTPUT</b>	7 Amps Resistive, 240 VAC, 2 N.O. 2 N.C. Contacts
<b>TEMPERATURE RATING</b>	32° - 140°F (0° - 60°C)
<b>OPERATING POWER</b>	120 or 240 VAC, +10%, -20%, 50/60 Hz
<b>TRANSIENT VOLTAGE PROTECTION</b>	Metal Oxide Varistor
<b>NEMA RATING</b>	NEMA 12
<b>TERMINALS</b>	Screw Terminals
<b>MOUNTING</b>	Plug In Case
<b>WEIGHT</b>	Net: 25 oz. Shipping: 30 oz.

## SPECIFICATIONS (652-8-4000 & 652-8-4001)

<b>RESET TIME</b>	25 mSEC
<b>CONTROL VOLTAGE INITIATE TIME</b>	25 mSEC
<b>MEMORY</b>	EEPROM Circuitry
<b>POWER CONSUMPTION</b>	5.2 VA

## SPECIFICATIONS (652-8-5000 & 652-8-5001)

<b>RESET TIME</b>	8 mSEC
<b>CONTROL VOLTAGE INITIATE TIME</b>	8 mSEC
<b>MEMORY</b>	Lithium Battery (Included with unit)
<b>POWER CONSUMPTION</b>	3.7 VA

## ORDERING INFORMATION

MODEL NUMBER	DESCRIPTION
653-8-4000	Plug-in, Round Case Timer 120 VAC W/EEPROM Memory
653-8-4001	Plug-in, Round Case Timer 240 VAC W/EEPROM Memory
653-8-5000	Plug-in, Round Case Timer 120 VAC W/Battery Memory
653-8-5001	Plug-in, Round Case Timer 240 VAC W/Battery Memory
651-3-0128	Mounting Gasket, 1/8" Thick (Included With Timer)
651-3-0129	Mounting Gasket, 1/4" Thick (Included With Timer)
600-3-3950	Base Mounting Bracket

Replacement lithium batteries - Old ATC Part #652-3-0130 is not available. Use [TADIRAN#TL-5902/S SAFT, #LS14250](#) or [EAGLE-PICHER #PT-2150](#) from most electrical distributors.