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.
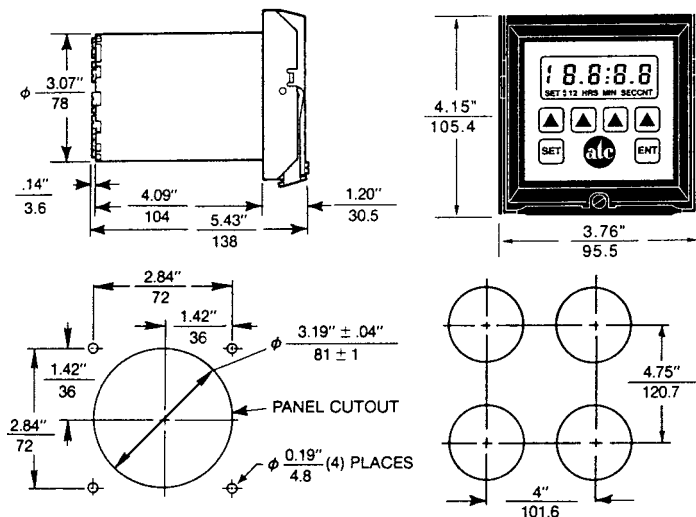
The Model 653 is housed in a standard 15-terminal plug-in round case. Models are available for operation on either 120 VAC or 240 VAC. Counting can be done at either line voltage or at 12-48 VDC/24 VAC jumper selected.
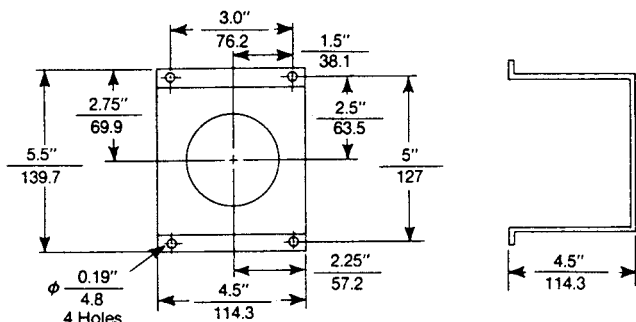
E205980

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)
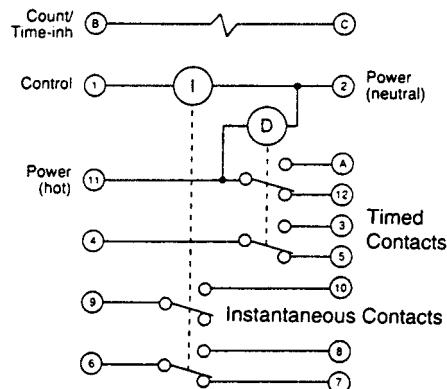- Data Retention Memory with Lithium Battery (included with timer) (653-8-5000, 653-8-5001 Models)

▶ DIMENSIONS (INCHES/MILLIMETERS)

model 600-3-3950 surface mounting bracket

▶ WIRING

▶ SPECIFICATIONS (ALL MODELS)

TIMING RANGES	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
COUNT MODES	500 CPM, AC/DC
	5000 CPM, AC/DC
	7500 CPS, DC Only
MODE OF OPERATION	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
TIME SETTING	Front Panel Keypad
TIME REPEAT ACCURACY	Count: 100% Time: ±0.005 SEC
DISPLAY	LCD - 4 1/2 Digit, 7/16" High
RELAY MECHANICAL LIFE	50,000,000 Operations
INSTANTANEOUS RELAY OUTPUT	7 Amps Resistive, 240 VAC, 2 N.O. 1 N.C. Contact
TIMED RELAY OUTPUT	7 Amps Resistive, 240 VAC, 2 N.O. 2 N.C. Contacts
TEMPERATURE RATING	32° - 140°F (0° - 60°C)
OPERATING POWER	120 or 240 VAC, +10%, -20%, 50/60 Hz
TRANSIENT VOLTAGE PROTECTION	Metal Oxide Varistor
NEMA RATING	NEMA 12
TERMINALS	Screw Terminals
MOUNTING	Plug In Case
WEIGHT	Net: 25 oz. Shipping: 30 oz.

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

RESET TIME	25 mSEC
CONTROL VOLTAGE INITIATE TIME	25 mSEC
MEMORY	EEPROM Circuitry
POWER CONSUMPTION	5.2 VA

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

RESET TIME	8 mSEC
CONTROL VOLTAGE INITIATE TIME	8 mSEC
MEMORY	Lithium Battery (Included with unit)
POWER CONSUMPTION	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 distributers.