

Easily the most *rugged* and *dependable* of industrial percentage timers, the ATC 304 incorporates heavy-duty contacts that are capable of switching loads as large as 4.6 KW directly.

**LARGE CONTACTS:** Self-cleaning silver contacts are 3/8 inch in diameter, larger than in any other make of percentage timer. They easily provide 1,000,000 operations at the full rated load of 25 A (non plug-in models).

**RUGGED AND TROUBLE-FREE:** Every component of the 304 has been refined and improved over the years to provide dependable operation for at least 3,000,000 cycles. Its classic *simplicity* of design makes it virtually trouble-free.

**CONVENIENT ADJUSTMENT:** Graduated in easily read 1% increments, the 304 provides continuous adjustment of on time between 5 and 95%. It also switches the load off continuously when the pointer is set below 3%; and on continuously, when the pointer is set above 98%.



Percentage Timer

## OPERATION

The 304 is available in a choice of 15, 30 and 60-second time cycles (60 Hz). Its synchronous motor drives a cam which repeatedly closes the SPST load switch for a percentage of the time cycle, as set on the timer dial, and opens it for the remainder of the cycle.

When the dial pointer is set below 3%, the load switch stays open for the full cycle; it remains closed when the pointer is set above 98%. An optional Hold switch also disconnects power to the timer motor when the pointer is set below 3%.

Series 304 timers operate continuously and do not reset on power interruption; when power is restored, they resume the interrupted cycle.

**TYPICAL APPLICATIONS:** Ideal for controlling wattage input to electrically heated equipment, the 304 non-plug-in models can pulse loads up to 4.6 KW directly through the SPST load switch; the plug-in models can switch up to 2.3 KW loads directly.

The 304 can be used with other types of electrical equipment to control the ratio of on time and off time in a fixed time cycle. In many types of ratio and cascade control systems, the 304 provides rate-of-rise set point drive control; special dial calibrations are available for this application.

## SPECIFICATIONS

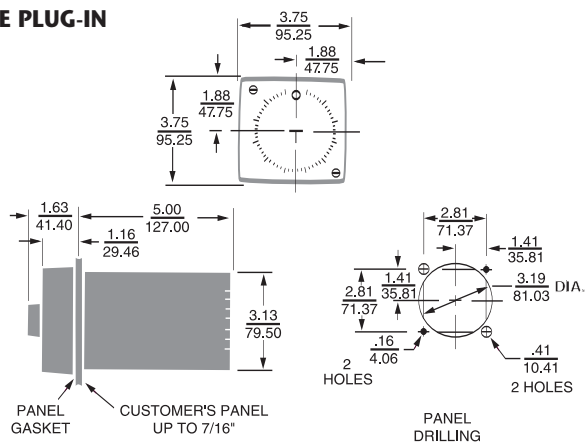
MODELS Choice of three:	304E plug-in	
	304E non-plug-in	
	304C non-plug-in	
RANGES Choice of three standard ranges.	15 SEC @ 60 cycles (18 SEC @ 50 cycles)	
	30 SEC @ 60 cycles (36 SEC @ 50 cycles)	
	60 SEC @ 60 cycles (72 SEC @ 50 cycles)	
REPEAT ACCURACY	± 0.1%	
DIAL CALIBRATION	5 to 95% on time, in 1% graduations.	
	FULL ON, FULL OFF FEATURE. When pointer is set below 3%, load switch contacts are open continuously, above 98%, contacts are closed continuously.	
	HOLD SWITCH (optional). Disconnects power to timer motor when pointer is set below 3%.	
LOAD SWITCH	One SPST (quick make, quick break) switch with self-cleaning heavy-duty silver contacts.	
CONTACT RATINGS (non-inductive)	304C	25A at 120 VAC 20A at 240 VAC
	304E	15A at 120 or 10A at 240V AC—plug-in unit.
	Non-plug-in unit same as 304C	
POWER REQUIREMENTS	120 or 240V, 50/60 Hz; 50 mA running current.	
TERMINALS	4 screw terminals accessible at rear; wiring diagram on housing.	
TEMPERATURE RATING	32° to 120°F (0 to 50°C)	
WEIGHT	NET: 1 lb., 2 oz.	SHIPPING: 1 lb., 7 oz.
MOUNTING ACCESSORIES	OPTIONAL: NEMA 12 case for 304E, both for surface mounting.	

MODEL NUMBER >>>>>>	304E				
<b>Range</b>					
15 SEC @ 60 cycles (18 SEC @ 50 cycles)	004				
30 SEC @ 60 cycles (36 SEC @ 50 cycles)	006				
60 SEC @ 60 cycles (72 SEC @ 50 cycles)	007				
Special	000				
<b>Voltage &amp; Frequency</b>					
120/60	A				
240/60	B				
Special	K				
<b>Dial Calibration</b>					
Standard 0 to 100% Dial	00				
Special	99				
<b>Features</b>					
Standard plug-in timer	p				
Standard non-plug-in timer	X				
	Standard	X			
	With hold switch	H			
	Special	K			

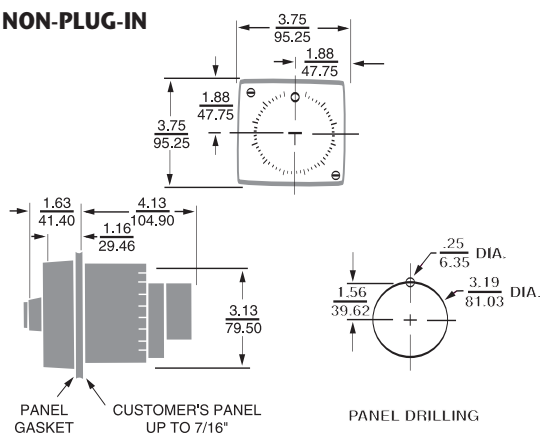
MODEL NUMBER >>>>>>	304C				X
<b>Range</b>					
15 SEC @ 60 cycles (18 SEC @ 50 cycles)	004				
30 SEC @ 60 cycles (36 SEC @ 50 cycles)	006				
60 SEC @ 60 cycles (72 SEC @ 50 cycles)	007				
Special	000				
<b>Voltage &amp; Frequency</b>					
120/60	A				
240/60	B				
Special	K				
<b>Dial Calibration</b>					
Standard 0 to 100% Dial	00				
Special	99				
<b>Features</b>					
Metal Dial	X				
Standard Unit/Non-plug-in	X				
With hold switch	H				
Special	K				

DIMENSIONS (INCHES/MILLIMETERS)

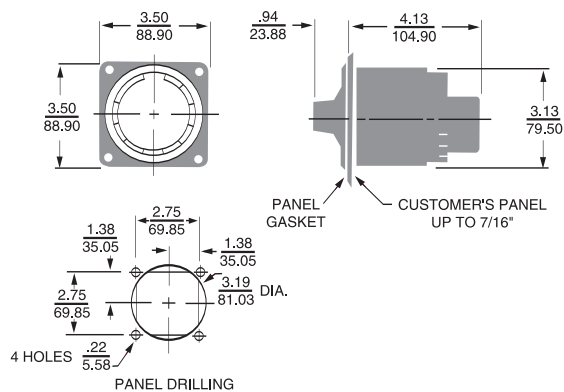
304E PLUG-IN



304E NON-PLUG-IN



304C NON-PLUG-IN



Percentage Timer // 304 Series