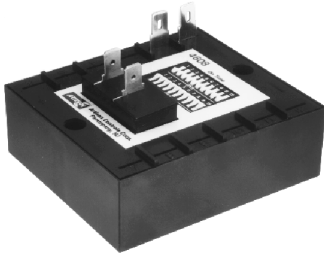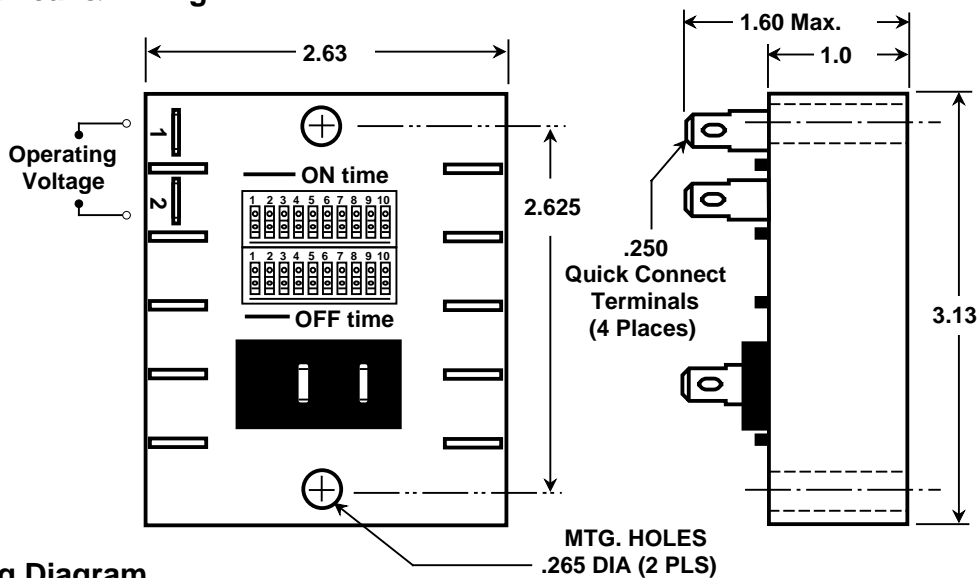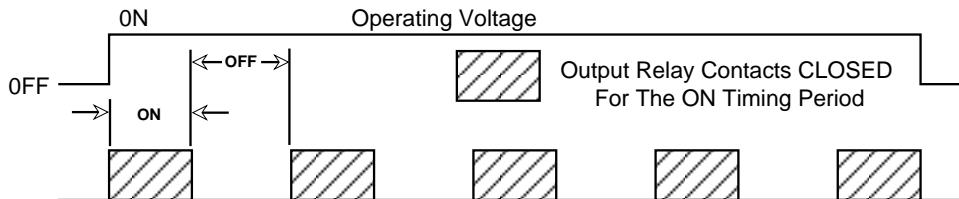# 4608 ON - OFF Repeat Cycle Timer (20A Output Contacts)

The model 4608 is a solid state timing module that operates a set of high power 20 Ampere contacts on a repeat cycle basis. The ON and OFF times of the repeat cycle are set with 10 DIP switches. The ON and the OFF time can be set from 1 second to 1024 seconds in one second increments. Setting the ON portion of the cycle will not effect the OFF portion, and likewise, Setting the OFF portion of the cycle will not effect the ON portion of the cycle. The output contacts are closed for the preset ON portion of the cycle which always starts first on initial application of operating voltage. The model 4608 is available in either a 115V AC or 230 V AC version. Also available with factory fixed times.
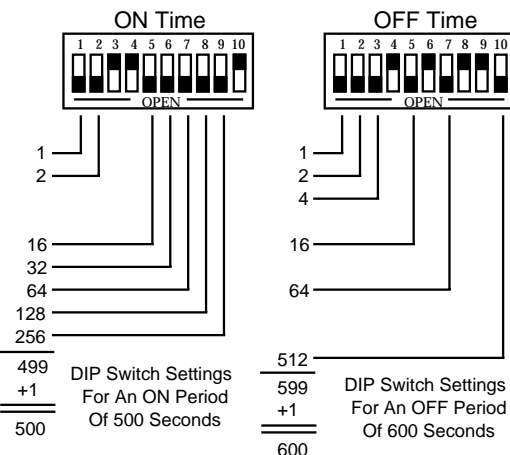
Mechanical & Wiring . . . .

2.63

1.60 Max.
1.0

Operating Voltage

ON time

1 2 3 4 5 6 7 8 9 10

2.625

1 2 3 4 5 6 7 8 9 10

OFF time

.250 Quick Connect Terminals (4 Places)

3.13

MTG. HOLES .265 DIA (2 PLS)

Timing Diagram . . . .

ON

Operating Voltage

OFF

←— OFF —→

ON

Output Relay Contacts CLOSED For The ON Timing Period

Setting The DIP Switches . . . .

To illustrate the setting of the DIP switches, assume that an ON - OFF repeat cycle of 500 seconds ON and 600 seconds OFF is required. To the minimum time of 1 second, 499 seconds must be added by the ON time setting. This is accomplished by opening switches 1, 2, 5, 6, 7, 8, and 9. To the minimum time of 1 second, 599 seconds must be added by the OFF time setting. This is accomplished by opening switches 1, 2, 3, 5, 7, and 10. When the operating voltage is applied, the output relay contacts will be closed for 500 seconds, and opened for 600 seconds. Repeating this cycle for as long as the operating voltage is applied.

ON Time

1 2 3 4 5 6 7 8 9 10
OPEN

1
2
16
32
64
128
256

499
+1
‾‾‾‾
500

DIP Switch Settings For An ON Period Of 500 Seconds

OFF Time

1 2 3 4 5 6 7 8 9 10
OPEN

1
2
4
16
64

512
599
+1
‾‾‾‾
600

DIP Switch Settings For An OFF Period Of 600 Seconds

Solid State Timers and Controllers

Specifications . . . .

Operating Voltage:	115V or 230V AC 50/60Hz. Specify when ordering.
Voltage Tolerance:	±10%.
Timing Mode:	ON - OFF Repeat Cycle.
Timing Range:	ON & OFF times DIP switch settable from 1 - 1024 seconds, or fixed from 1 to 10,000 seconds.
Timing Adjustment:	10 DIP switches providing incremental timing of 1, 2, 4, 8, 16, 32, 64, 128, 256, and 512 seconds. All switches CLOSED provides 1 second period, all switches OPEN provides 1024 seconds. Binary settings provide the 1 to 1024 second range in 1 second increments.
Timing Tolerance:	±10%.
Timing Variation:	±2% at any combination of operating voltage and temperature.
Repeatability Of ON/OFF Periods:	±1% nominal.
Recycle Time:	250 milliseconds to assure starting in ON portion of cycle.
Output:	SPST-NO contacts Close during ON period, Open during OFF period.
Output Rating:	UL/CSA rated for 1 HP, 20A 250V AC, 1.5 HP, 20A 125V AC. 1000Vrms breakdown voltage between open contacts, 1500V rms breakdown voltage between all contacts and operating voltage terminals. Insulation resistance 1000MΩ at 500V DC. Mechanical Life Expectancy: 10^6 operations, Electrical Life Expectancy: resistive load 10^5 operations at 20A 250V AC, 1.5×10^3 operations inductive load (cos ø = 0.7) steady 20A 250V AC inrush 80A.
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, with transient surge currents to 200 amperes for durations up to 1/120 second at 25˚C. Maximum transient voltage protection is 6000 volts as delivered through a source resistance of 30 ohms with a maximum duration of 8.3 milliseconds.
Operating Temperature:	-10˚F to +145˚F
Humidity:	95% condensing
Terminations:	Four (4) .25 Quick Connect type.
Data Sheet Revision Date:	September 25, 1995

Some DIP Switch Settings . . . .

15 =   120 =   390 =   900 =

30 =   300 =   400 =   1000 =
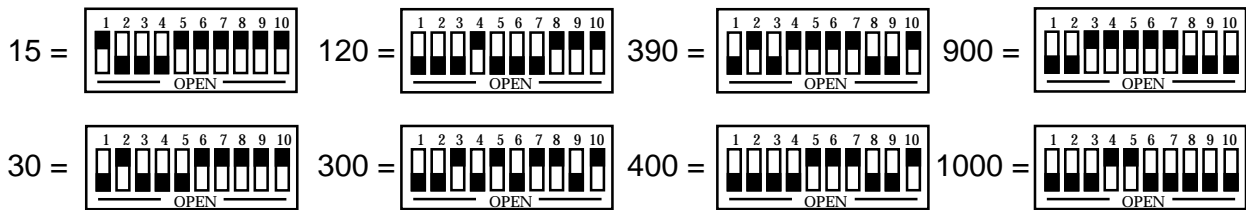
Ordering Information Adjustable Timing Models . . . .

Part Number	ON - OFF Time	Operating Voltage	
4608A - 115	ON and OFF periods DIP switch adjustable from 1 second to 1024 seconds	115V AC	
4608A - 230		230V AC	
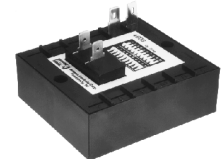
Ordering Information Fixed Timing Models . . . .

Part Number	ON Time	OFF Time	Operating Voltage
4608F - 115	Specify ON Time In Seconds From 1 To 10,000	Specify OFF Time In Seconds From 1 To 10,000	115V AC
4608F - 230			230V AC