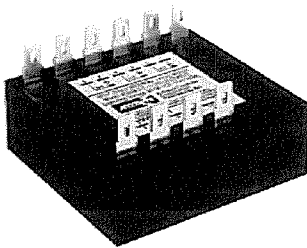




Solid State Timers and Controllers

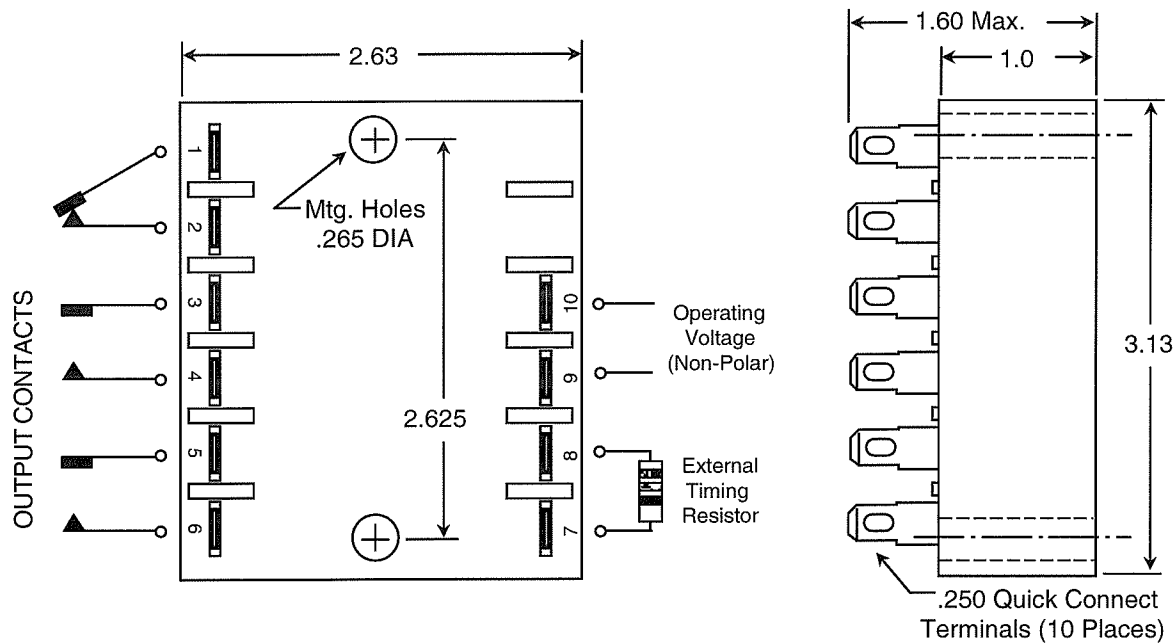
4383

Interval Timer

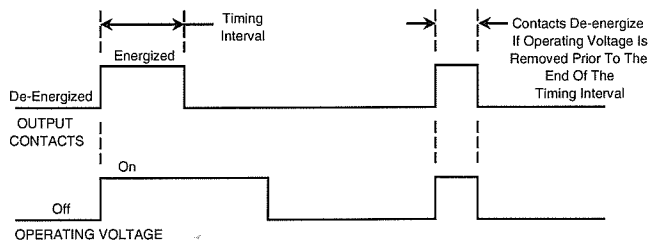


The model 4383 is an interval timing device that has three sets of relay output contacts. Two sets are normally open and one set is normally closed. When operating voltage is applied, the output contacts transfer for the full duration of the preset timing period, or until the operating voltage is removed. The model 4383 is protected against high electrical noise as is found in electric transit cars and locomotive type applications. Both fixed timing and remotely adjustable timing models are available. The polarity of operating voltage does not have to be observed.

Mechanical & Wiring



Timing Diagram



External Timing Resistor Chart

External Resistor (Ohms)	DASH NO.				
	-1	-2	-3	-4	-5
0	0.1	1	2	10	30
1 Meg	4	30	100	500	900
3 Meg	12	90	300	1,500	2,700
5 Meg	20	150	500	2,500	4,500
10 Meg	30	300	1,000	5,000	8,000

How To Read The Timing Resistor Chart

The left hand column lists five values of external resistors: 0, 1 meg, 3 meg, 5 meg, and 10 meg, and across the top are listed the five model dash numbers, 1 through 5. To illustrate how the chart works assume that the model 4383-3 has been selected. Under the -3 column are the times that relate to the five values of external resistors. For an external resistor equal to 0 ohms, the interval would be 2 seconds. With 1 meg ohm, 100 seconds and so forth up to 10 meg ohms where the timing interval is 1000 seconds. If a 3 meg ohm potentiometer were connected across the external timing resistor terminals, you could expect, as a minimum, a range of interval timing from 2 to 300 seconds.





Solid State Timers and Controllers

Specifications

Operating Voltage:	60V to 90V DC - (74V DC nominal).
Operating Current:	75 mA maximum at 74 volts DC.
Timing Mode:	Interval.
Fixed Timing:	From 0.1 seconds to 8,000 seconds.
Purchase Tolerance	
On Fixed Timing Periods:	5%, 10%, and 20%.
Adjustable Timing Ranges:	20 ranges of adjustable Interval timing from 5 models.
Purchase Tolerances	
On Adjustable Timing Ranges:	Adjustable interval timing envelope guaranteed with maximums of -15% on the low time and +15% on the high time.
Timing Resistor Tolerances:	5% maximum and still fall within the overall timing tolerances of the adjustable models when considering the timing envelope overlap on the low and high end of the timing range specified.
Timing Resistor Rating:	Worst case power dissipation never exceeds 15 milliwatts.
Repeatability Of Timing Period:	±2% nominal.
Recycle Time:	A new cycle can be initiated 50 milliseconds after the completion of the interval timing period.
Output:	Relay contacts 3PST - two sets of normally open and one set of normally closed contacts.
Pickup Time:	25 milliseconds maximum.
Contact Transfer Timing:	Normally open contacts close before normally closed contacts opens.
Output Contact Rating:	0.5A resistive load at 74V DC. 750Vrms breakdown voltage between open contacts, 1500Vrms breakdown voltage between all contacts and operating voltage terminals. Insulation resistance 100MΩ at 500V DC.
Electrical Life Expectancy:	100,000 cycles minimum with resistive load of 0.5 Amperes at 74V DC.
Operating Temperature:	-40°F to +140°F.
Transient Protection:	Protected by silicon transient suppressors responding 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 8.3ms.
Data Sheet Revision Date:	June 5, 1995

Ordering Information Fixed Timing

Part Number	Operating Voltage	Timing Period	Timing Tolerance
4383F	74V DC	Specify	-B 5%
		fixed time	-C 10 %
		In Seconds	-D 20 %
		from	
		.1 to 8,000	

Ordering Information Adjustable Timing

Part Number	Operating Voltage	Timing Range
4383A	74V DC	-1 0.1 - 30 Sec
		-2 1 - 300 Sec
		-3 2 - 1000 Sec
		-4 10 - 4500 Sec
		-5 30 - 8000 Sec

