



RELAYS & CONTACTORS

MULTIFUNCTION ELECTRONIC TIMERS

RTE SERIES

DESCRIPTION

The **RTE Series Multifunction Electronic Timers** are socket-mounted adjustable time delay relays available in two function groups. The timer functions and time ranges are easily selected by setting external switches. The knob on the front of the timer is used to set the precise delay period within the selected time range.

Timer Functions

RTE-B1/RTE-P1 (Power-triggered)

- ON-Delay, Interval, OFF-Cycle, ON-Cycle

RTE-B2/RTE-P2 (Signal-triggered)

- ON-Delay, OFF-Cycle, OFF-Delay, ON-Cycle, Single-Shot

FEATURES

- *Selectable 10 timing functions and 20 time ranges*
- *Time delay settings from 0.1 second to 600 hours*
- *Two Form C delayed output contacts*
- *Space-saving package*
- *High repeat accuracy of $\pm 0.2\%$*
- *On and timing out LED indicators*
- *Standard 8-pin, 11-pin, or 11-blade relay socket*
- *UL listed, CE certified*

SPECIFICATIONS

Time delay settings	0.1 sec to 600 hours
Contact configuration	2 Form C, DPDT (delay outputs)
Contact load rating	10A resist. @ 240 VAC, 30 VDC 7A induct. @ 240 VAC, 30 VDC 1/6 hp @ 120 VAC 1/3 hp @ 240 VAC
Input voltage	100-240 VAC (50/60 Hz) 24 VAC/VDC
Operating temp	-4° to 149°F (-20° to 65°C)
Operating humidity	35% to 85% RH
Repeat accuracy	$\pm 0.2\%$, ± 20 ms
Voltage accuracy	$\pm 0.2\%$, ± 20 ms
Temp error	$\pm 0.5\%$, ± 20 ms
Setting error	$\pm 10\%$ max
Reset time	0.1 sec max
Insulation resistance	100 M Ω min (500 VDC)
Dielectric strength	2000 VAC, 1 min. (except 1000 VAC between contacts of same pole)
Power consumption	
AC	6.6 VA @ 120 VAC, 3.5 VA @ 24 VAC
DC	1.7W
Mechanical life	50 million operations
Electrical life	500,000 operations
Weight	3.2 oz (89 g)
Agency approvals	UL listed, File #E66043, CE
Warranty	1 year

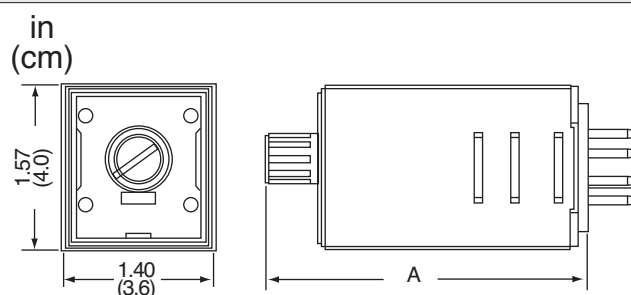


RTE

SR2P-06

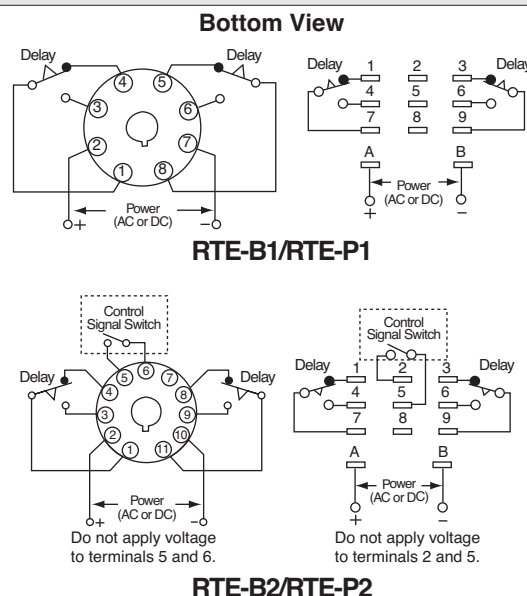


DIMENSIONS



RTE-P 8/11 Pin:	A = 3.06 (7.79)
RTE-B 11 Blade:	A = 2.95 (7.49)

WIRING





OPERATION

RTE-P1, -B1

A: ON-Delay 1 (power start)

Set timer for desired delay, apply power to coil. Contacts transfer after preset time has elapsed, and remain in transferred position until timer is reset. Reset occurs with removal of power.

ITEM	TERMINAL NO.	OPERATION
Power	(1)2-7 (2)A-B	
Delayed Contact	(1)1-4-5-8 (2)1-7-3-9 (NC) (1)1-3-6-8 (2)4-7-6-9 (NO)	
Indicator	PWR OUT	
Set Time		T

B: Interval (power start)

Set timer for desired delay, apply power to coil. Contacts transfer immediately, and return to original position after preset time has elapsed. Reset occurs with removal of power.

ITEM	TERMINAL NO.	OPERATION
Power	(1)2-7 (2)A-B	
Delayed Contact	(1)1-4-5-8 (2)1-7-3-9 (NC) (1)1-3-6-8 (2)4-7-6-9 (NO)	
Indicator	PWR OUT	
Set Time		T

C: Cycle 1 (power start, OFF first)

Set timer for desired delay, apply power to coil. First transfer of contacts occurs after preset delay has elapsed, after the next elapse of preset delay contacts return to original position. The timer now cycles between on and off as long as power is applied (duty ratio 1:1).

ITEM	TERMINAL NO.	OPERATION
Power	(1)2-7 (2)A-B	
Delayed Contact	(1)1-4-5-8 (2)1-7-3-9 (NC) (1)1-3-6-8 (2)4-7-6-9 (NO)	
Indicator	PWR OUT	
Set Time		T

D: Cycle 3 (power start, ON first)

Functions in same manner as Mode C, with the exception that first transfer of contacts occurs as soon as power is applied. The ratio is 1:1. Time On = Time Off

ITEM	TERMINAL NO.	OPERATION
Power	(1)2-7 (2)A-B	
Delayed Contact	(1)1-4-5-8 (2)1-7-3-9 (NC) (1)1-3-6-8 (2)4-7-6-9 (NO)	
Indicator	PWR OUT	
Set Time		T

RTE-P2, -B2

A: ON-Delay 2 (signal start)

When a preset time has elapsed after the start input turned on while power is on, the NO output contact goes on.

ITEM	TERMINAL NO.	OPERATION
Power	(A)2-10 (B)A-B	
Start	(A)5-6 (B)2-5	
Delayed Contact	(A)1-4-8-11 (B)1-7-3-9 (NC) (A)1-3-9-11 (B)4-7-6-9 (NO)	
Indicator	PWR OUT	
Set Time		T

B: Cycle 2 (signal start, OFF first)

When the start input turns on while power is on, the output oscillates at a preset cycle (duty ratio 1:1), starting while the NO contact off.

ITEM	TERMINAL NO.	OPERATION
Power	(A)2-10 (B)A-B	
Start	(A)5-6 (B)2-5	
Delayed Contact	(A)1-4-8-11 (B)1-7-3-9 (NC) (A)1-3-9-11 (B)4-7-6-9 (NO)	
Indicator	PWR OUT	
Set Time		T

C: Cycle 4 (signal start, ON first)

When the start input turns on while power is on, the NO contact goes on. The output oscillates at a preset cycle (duty ratio 1:1).

ITEM	TERMINAL NO.	OPERATION
Power	(A)2-10 (B)A-B	
Start	(A)5-6 (B)2-5	
Delayed Contact	(A)1-4-8-11 (B)1-7-3-9 (NC) (A)1-3-9-11 (B)4-7-6-9 (NO)	
Indicator	PWR OUT	
Set Time		T

D: Signal ON/OFF-Delay

When the start input turns on while power is on, the NO output contact goes on. When a preset time has elapsed while the start input remains on, the output contact goes off. When the start input turns off, the NO contact goes on again. When a preset time has elapsed after the start input turned off, the NO contact goes off.

ITEM	TERMINAL NO.	OPERATION
Power	(A)2-10 (B)A-B	
Start	(A)5-6 (B)2-5	
Delayed Contact	(A)1-4-8-11 (B)1-7-3-9 (NC) (A)1-3-9-11 (B)4-7-6-9 (NO)	
Indicator	PWR OUT	
Set Time		T

E: Signal OFF-Delay

When power is turned on while the start input is on, the NO output contact goes on. When a preset time has elapsed after the start input turned off, the NO output contact goes off.

ITEM	TERMINAL NO.	OPERATION
Power	(A)2-10 (B)A-B	
Start	(A)5-6 (B)2-5	
Delayed Contact	(A)1-4-8-11 (B)1-7-3-9 (NC) (A)1-3-9-11 (B)4-7-6-9 (NO)	
Indicator	PWR OUT	
Set Time		T

F: One-Shot (signal start)

When the start input turns on while power is on, the NO output contact goes on. When a preset time has elapsed, the NO output contact goes off.

ITEM	TERMINAL NO.	OPERATION
Power	(A)2-10 (B)A-B	
Start	(A)5-6 (B)2-5	
Delayed Contact	(A)1-4-8-11 (B)1-7-3-9 (NC) (A)1-3-9-11 (B)4-7-6-9 (NO)	
Indicator	PWR OUT	
Set Time		T

Note: T = Set Time, Ta = Shorter than set time, (1): RTE-P1, (2): RTE-B1, (A): RTE-P2, (B): RTE-B2

ORDERING INFORMATION

MODEL	CONNECTION	VOLTAGE	FUNCTION GROUP	SOCKET
RTE-B1AD24	11 Blade	24 VAC/VDC	On-delay, interval, off-cycle, on-cycle	SR3B-05
RTE-B1AF20	11 Blade	100-240 VAC	On-delay, interval, off-cycle, on-cycle	SR3B-05
RTE-B2AD24	11 Blade	24 VAC/VDC	On-delay, off-cycle, off-delay, on-cycle, single shot	SR3B-05
RTE-B2AF20	11 Blade	100-240 VAC	On-delay, off-cycle, off-delay, on-cycle, single shot	SR3B-05
RTE-P1AD24	8 Pin	24 VAC/VDC	On-delay, interval, off-cycle, on-cycle	SR2P-06
RTE-P1AF20	8 Pin	100-240 VAC	On-delay, interval, off-cycle, on-cycle	SR2P-06
RTE-P2AD24	11 Pin	24 VAC/VDC	On-delay, off-cycle, off-delay, on-cycle, single shot	SR3P-06
RTE-P2AF20	11 Pin	100-240 VAC	On-delay, off-cycle, off-delay, on-cycle, single shot	SR3P-06