

RTE Series — Analog Timers



Key features of the RTE series include:

- 20 time ranges and 10 timing functions
- Time delays up to 600 hours
- Space-saving package
- High repeat accuracy of $\pm 0.2\%$
- ON and timing OUT LED indicators
- Standard 8- or 11-pin and 11-blade termination
- 2 form C delayed output contacts
- 10A Contact Rating



Cert. No. E9950913332316 (EMC, RTE)
cert. No. BL960813332355 (LVD, RTE)



UL Listed
File No. E66043



Timers

General Specifications	
Operation System	Solid state CMOS Circuit
Operation Type	Multi-Mode
Time Range	0.1sec to 600 hours
Pollution Degree	2 (IE60664-1)
Over voltage category	III (IE60664-1)
Rated Operational Voltage	AF20 100-240V AC(50/60Hz)
	AD24 24V AC(50/60Hz)/24V DC
	D12 12V DC
Voltage Tolerance	AF20 85-264V AC(50/60Hz)
	AD24 20.4-26.4V AC(50/60Hz)/21.6-26.4V DC
	D12 10.8-13.2V DC
Input off Voltage	Rated Voltage x10% minimum
Ambient Operating Temperature	-20 to +65°C (without freezing)
Ambient Storage and Transport Temperature	-30 to +75°C (without freezing)
Relative Humidity	35 to 85%RH (without condensation)
Atmospheric Pressure	80kPa to 110kPa (Operating), 70kPa to 110kPa (Transport)
Reset Time	100msec maximum
Repeat Error	$\pm 0.2\%$, $\pm 20\text{msec}^*$
Voltage Error	$\pm 0.2\%$, $\pm 20\text{msec}^*$
Temperature Error	$\pm 0.5\%$, $\pm 20\text{msec}^*$
Setting Error	$\pm 10\%$ maximum
Insulation Resistance	100M Ω minimum (500V DC)
Dielectric Strength	Between power and output terminals: 2000V AC, 1 minute Between contacts of different poles: 2000V AC, 1 minute Between contacts of the same pole: 1000V AC, 1 minute
Vibration Resistance	10 to 55Hz amplitude 0.5mm ² hours in each of 3 axes
Shock Resistance	Operating extremes: 98m/sec ² (10G) Damage limits: 490m/sec ² (50G) 3 times in each of 3 axes
Degree of Protection	IP40 (enclosure) (IEC60529)
Power Consumption (Approx.)	TYPE RTE-P1, -B1 RTE-P2, -B2
	AF20 120V AC/60Hz 6.5VA 6.6VA
	240V AC/60Hz 11.6VA 11.6VA
	24V AC 60Hz/DC 3.4VA/1.7W 3.5VA/1.7W
D12 1.6W 1.6W	
Mounting Position	Free
Dimensions	RTE-P1, P2 40Hx 36W x 77.9D mm
	RTE-B1, B2 40Hx 36W x 74.9D mm
Weight (Approx.)	RTE-P1 RTE-P2 RTE-B1, -B2
	87g 89g 85g

Contact Ratings	
Contact Configuration	2 Form C, DPDT (Delay output)
Allowable Voltage / Allowable Current	240V AC, 30V DC / 10A
Maximum Permissible Operating Frequency	1800 cycles per hour
Rated Load	Resistive 10A 240V AC, 30V DC
	Inductive 7A 240V AC, 30V DC
	Horse Power Rating 1/6 HP 120V AC, 1/3 HP 240V AC
Life	Electrical 500,000 op. minimum (Resistive)
	Mechanical 50,000,000 op. minimum

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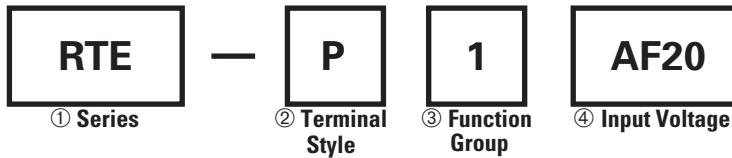
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*For the value of the error against a preset time, whichever the largest.

Part Numbering Guide

RTE series part numbers are composed of 4 part number codes. When ordering a RTE series part, select one code from each category.
Example: RTE-P1AF20



Part Numbers: RTE Series

	Description	Part Number Code	Remarks
① Series	RTE series	RTE	For internal circuits, see next page.
② Terminal Style	Pin	P	Select one only.
	Blade	B	
③ Function Group	ON-delay, interval, cycle OFF, cycle ON	1	Each function group has different timing functions. See page G-4.
	ON-delay, cycle OFF, cycle ON, signal ON/OFF delay, OFF-delay, one-shot	2	
④ Input Voltage	100 to 240V AC(50/60Hz)	AF20	
	24V AC(50/60Hz)/24V DC	AD24	
	12V DC	D12	

Part Number List

Part Numbers

Voltage	Power Triggered		Start Input Triggered	
	8-Pin	Blade	11-Pin	Blade
12V DC	RTE-P1D12	RTE-B1D12	RTE-P2D12	RTE-B2D12
24V AC/DC	RTE-P1AD24	RTE-B1AD24	RTE-P2AD24	RTE-B2AD24
100-240V AC	RTE-P1AF20	RTE-B1AF20	RTE-P2AF20	RTE-B2AF20

Time Range Table

Time Range Determined by Time Range Selector & Dial Selector

	Dial	0 - 1	0 - 3	0 - 10	0 - 30	0 - 60
Range	Second	0.1 sec - 1 sec	0.1 sec - 3 sec	0.2 sec - 10 sec	0.6 sec - 30 sec	1.2 sec - 60 sec
	Minute	1.2 sec - 1 min	3.6 sec - 3 min	12 sec - 10 min	36 sec - 30 min	1.2 min - 60 min
	Hour	1.2 min - 1 hr	3.6 min - 3 hr	12 min - 10 hr	36 min - 30 hr	1.2 hr - 60 hr
	10 Hours	12 min - 10 hr	36 min - 30 hr	2 hr - 100 hr	6 hr - 300 hr	12 hr - 600 hr