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Multi-function RTE Series Timers



Overview

The new RTE series timers offer the most popular timing functions in 2 models (Power and Signal Triggered) together with high power 10A contacts. In fact, they use our famous RH2 relay, so you can be sure of the reliability. Powered Triggered Models offer standard ON Delay, Interval and Cycle ON & OFF timing functions, while Signal Triggered Models offer 6 distinct timing functions. Both are tubular pin base or .187" quick connect terminals. All models mount into industry standard sockets or standard 45mm square panel cutouts using an optional adaptor.

Key Features

- 10A DPDT contacts
- Timing ranges up to 600 hours (20 time ranges per model)
- Available with either tubular pin or .187" solder/quick connect plug-in terminals
- Mounts in plug-in socket or with optional panel mount adaptor
- Power "ON" and output "OUT" indicating LEDs
- UL listed and CE marked

RTE Series

RTE-P1D12

[Simple and flexible multimode/multirange timers with 10A contacts]



Product Specifications

| Status | Active |
|---|--|
| Timer Type | Power Triggered Start (Maintained Start Signal) |
| Operating Voltage | 12V DC |
| Time Ranges | 1 min, 10 min, 1 hrs, 10 hrs, 10 sec, 1 sec, 60 min, 30 min, 60 sec, 3 sec, 60 hrs, 30 hrs, 300 hrs, 3 hrs, 3 min, 30sec, 600 hrs, 100 hrs |
| Timing Functions | Cycle 1(power start, OFF first), Cycle 2 (power start, ON first), Interval 1 (power start), On Delay 1 (power start) |
| Time Adjustment | Analog Knob Adjustable |
| Pole Configuration | Delayed DPDT |
| Terminal Type | 8 Pin |
| Contact Rating (Resistive @ 120V AC & 30VDC) | 10A |
| Product Type | Multi Function Timers |
| Power Consumption | 1.6W |
| Socket: Din Rail / Surface Mount | SR2P-05, SR2P-06 |
| Socket: Din Rail / Surface Mount Fingersafe Version | n SR2P-05C |
| Socket: Panel Mount (Socket) | SR2P-51 |
| Socket: Panel Mount (Timer Face) | SR6P-M08G (Screw Terminal), SR6P-S08 (Solder Terminal) |
| Panel Mount Adaptor | RTB-G01 |
| Distributor Class/Group | 1 |
| Product Series Name | RTE Series |

Selection Guide

Display Lights

| Series Model | RTE | GT3A | GT3D | GT3F |
|---|---|--|--|--------------------------------|
| Page | 798 | 805 | 813 | 826 |
| Appearance | | | | THE SO |
| Mode of Operation | ON-delay Interval OFF-delay One-shot Cycle (ON first) Cycle (OFF first) Signal OFF delay Signal ON/OFF delay | ay Signal OFF delay Signal OFF delay | | True OFF-delay |
| Time Range 0.1 second to 600 hrs 0.1 second to 18 | | 0.1 second to 180 hrs | 0.01 second to 99.9 hrs | 0.1 to 600 seconds |
| Contact Configuration | Contact Configuration DPDT SPDT, DPDT | | SPDT, DPDT | SPDT, DPDT |
| Repeat Accuracy | ±0.25% maximum | ±0.2% maximum | ±0.3% maximum | ±0.4% maximum |
| Contact Load Rating (resistive) | 10A, 240V AC | SPDT: 3A, 250V AC DPDT: 5A, 240V AC | SPDT: 3A, 250V AC DPDT: 5A, 240V AC | 5A, 250V AC |
| Available Operating Voltage | 100-240V AC 12V DC 24V AC/DC | 100 to 240V AC 12V DC 24V AC/DC | 100 to 240V AC 24V AC/DC | 100 to 240V AC 24V AC/DC |
| Approvals | UL Listed c-uL Listed TUV CE | UL Listed c-uL Listed CE | UL recognized TUV CSA CE | UL Listed c-uL Listed CE |

For Timing Diagrams Overview, see page 794.
For all series specific instructions, accessories, and dimensions, see the individual series section.

Timers

RTE Series – Analog Timers

Switches & Pilot Lights

• 20 time ranges and 10 timing functions • Time delays up to 600 hours

Key features of the RTE series include:

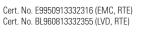
- Space-saving package
- High repeat accuracy of ± 0.2%
- ON and timing OUT LED indicators
- Standard 8- or 11-pin and 11-blade termination
- 2 form C delayed output contacts
- 10A Contact Rating



Relays & Sockets

Timers

PRODUCT SERVICE







| ieneral Specificat | tions | | | | |
|-------------------------------|----------|--------------|--|----------------------|---------------|
| 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 | 1 | | III (IE60664-1) | | |
| 1 | | AF20 | 100-240V AC(50/60 |)Hz) | |
| Rated Operational Vol | tage | AD24 | 24V AC(50/60Hz)/2 | 4V DC | |
| | | D12 | 12V DC | | |
| | | AF20 | 85-264V AC(50/60Hz) | | |
| Voltage Tolerance | | 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% | 6 minimum | |
| Ambient Operating Te | mperatur | e | -20 to +65°C (witho | ut freezing) | |
| Ambient Storage and | Transpor | Temperature | -30 to +75°C (witho | ut freezing) | |
| Relative Humidity | | | 35 to 85%RH (with | out condensation) | |
| Atmospheric Pressure | ; | | 80kPa to 110kPa (Operating), 70kPa to 110kPa (Transport) | | |
| Reset Time | | | 100msec maximum | | |
| Repeat Error | | | ±0.2%, ±20msec* | | |
| Voltage Error | | | ±0.2%, ±20msec* | | |
| Temperature Error | | | ±0.5%, ±20msec* | | |
| Setting Error | | | ±10% maximum | | |
| Insulation Resistance | | | 100MΩ minimum (500V DC) | | |
| | | | Between power and output terminals: 2000V AC, 1 minute | | |
| Dielectric Strength | | | Between contacts of different poles: 2000V AC, 1 minute | | |
| | | | Between contacts of the same pole:1000V AC, 1 minute | | |
| Vibration Resistance | | | 10 to 55Hz amplitu | de 0.5mm² hours in e | ach of 3 axes |
| | | | Operating extremes: 98m/sec ² (10G) | | |
| Shock Resistance | | | Damage limits: 490m/sec ² (50G) | | |
| | | | 3 times in each of 3 axes | | |
| Degree of Protection | | | IP40 (enclosure) (IEC60529) | | |
| | TYPE | | RTE-P1, -B1 | | RTE-P2, -B2 |
| | AF20 | 120V AC/60Hz | 6.5VA | | 6.6VA |
| Power Consumption Approx.) | AFZU | 240V AC/60Hz | 11.6VA 11.6VA | | 11.6VA |
| | 24V AC | 60Hz/DC | 3.4VA/1.7W 3.5VA/1.7W | | 3.5VA/1.7W |
| | D12 | | 1.6W 1.6W | | 1.6W |
| Mounting Position | | | Free | | |
| Dimensions | | RTE-P1, P2 | 40Hx 36W x 77.9D mm | | |
| Dimensions | | RTE-B1, B2 | 40Hx 36W x 74.9D | mm | |
| Woight (Approv.) | | | RTE-P1 | RTE-P2 | RTE-B1, -B2 |
| Weight (Approx.) | | | 87g | 89g | 85g |

Contact Ratings

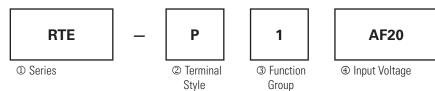
CE

| 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 | | |
| | Resistive | 10A 240V AC, 30V DC | | |
| Rated | Inductive | 7A 240V AC, 30V DC | | |
| Load | 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 | | |

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

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. |
| Terminal Style | Pin | Р | Calest and anly |
| ^② Terminal Style | Blade | В | Select one only. |
| | ON-delay, interval, cycle OFF, cycle ON | 1 | Each function group has different timing functions. |
| ③ Function Group | ON-delay, cycle OFF, cycle ON, signal ON/OFF delay, OFF-delay, one-shot | 2 | See page 794. |
| ⊕ Input Voltage | 100 to 240V AC(50/60Hz) | AF20 | |
| | 24V AC(50/60Hz)/24V DC | AD24 | |
| | 12V DC | D12 | |

Part Numbers

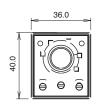
| Voltage | Power T | Power Triggered | | Start Input Triggered | | |
|-------------|------------|-----------------|------------|-----------------------|--|--|
| voltage | 8-Pin | Blade | 11-Pin | Blade | | |
| 12V DC | RTE-P1D12 | RTE-B1D12 | RTE-P2D12 | RTE-B2D12 | | |
| 24V AC/DC | RTE-P1AD24 | RTE-B1AD24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

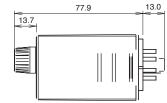
Time Range Determined by Time Range Selector and Dial Selector

| | Dial | 0 - 1 | 0 - 3 | 0 - 10 | 0 - 30 | 0 - 60 |
|-------|----------|-----------------|-----------------|------------------|------------------|------------------|
| | 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 |
| ıge | Minute | 1.2 sec - 1 min | 3.6 sec - 3 min | 12 sec - 10 min | 36 sec - 30 min | 1.2 min - 60 min |
| Range | 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 |

IDEC

Dimensions





RTE-P1 (8 pin) Terminal Style

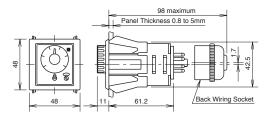


RTE-P2 (11 pin)Terminal Style

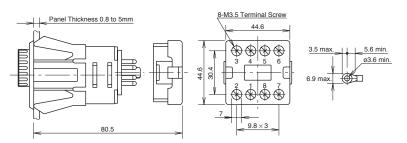


RTE-B1/RTE-B2 (11 blade) Terminal Style

Panel Mount Adapter RTE Timer, 8-Pin and 11-Pin with SR6P-S08 or SR6P-S11



RTE Timer, 8-Pin with SR6P-M08G



RTE Timer, 11-Pin with SR6P-M11G

