

# RS SERIES



## Wiring Diagram



## Description

The RS Series is a solid-state, encapsulated, recycling timer designed for tough industrial environments. It is used by many testing labs as a life cycle tester; by others as a cycle controller. The RS Series has separate DIP switch adjustments for the on delay and the off delay. These make accurate adjustment possible the first time, every time. Time delays of 0.1 seconds to 1023 hours are available in 4 ranges.

### Operation (Recycling - ON Time First)

Upon application of input voltage, the output energizes and the T1 ON time begins. At the end of the ON time, the output de-energizes and the T2 OFF time begins. At the end of the OFF time, the output energizes and the cycle repeats as long as input voltage is applied.

**Reset:** Removing input voltage resets the output and time delays, and returns the sequence to the ON time.

### Operation (Recycling - OFF Time First)

Upon application of input voltage, the T2 OFF time begins. At the end of the OFF time, the output energizes and the T1 ON time begins. At the end of the ON time, the output de-energizes and the cycle repeats as long as input voltage is applied.

**Reset:** Removing input voltage resets the output and time delays, and returns the sequence to the OFF time.

## Features & Benefits

FEATURES	BENEFITS
<b>Microcontroller based</b>	Repeat Accuracy +/- 0.1%, Setting accuracy +/- 2%
<b>1A steady, 10A inrush solid-state output</b>	Provides 100 million operations in typical conditions
<b>Totally solid state and encapsulated</b>	No moving parts to arc and wear out over time and encapsulated to protect against shock, vibration, and humidity
<b>ON and OFF time delay settings</b>	Independent adjustment provides greater timing flexibility
<b>DIP switch adjustment</b>	Provides first time setting accuracy

## Ordering Information

MODEL	INPUT VOLTAGE	FIRST DELAY	T1 ON TIME	T2 OFF TIME	MODEL	INPUT VOLTAGE	FIRST DELAY	T1 ON TIME	T2 OFF TIME
RS1A11	12VDC	On time	0.1 - 102.3s in 0.1s increments	0.1 - 102.3s in 0.1s increments	RS4A22	120VAC	On time	0.1 - 102.3m in 0.1m increments	0.1 - 102.3m in 0.1m increments
RS2B44	24VAC	Off time	1 - 1023h in 1h increments	1 - 1023h in 1h increments	RS4A24	120VAC	On time	0.1 - 102.3m in 0.1m increments	1 - 1023h in 1h increments
RS4A11	120VAC	On time	0.1 - 102.3s in 0.1s increments	0.1 - 102.3s in 0.1s increments	RS4A33	120VAC	On time	1 - 1023m in 1m increments	1 - 1023m in 1m increments
RS4A12	120VAC	On time	0.1 - 102.3s in 0.1s increments	0.1 - 102.3m in 0.1m increments	RS4B12	120VAC	Off time	0.1 - 102.3s in 0.1s increments	0.1 - 102.3m in 0.1m increments
RS4A13	120VAC	On time	0.1 - 102.3s in 0.1s increments	1 - 1023m in 1m increments	RS6A13	230VAC	On time	0.1 - 102.3s in 0.1s increments	1 - 1023m in 1m increments

If you don't find the part you need, call us for a custom product 800-843-8848

# RS SERIES

## Accessories



**P1023-6 Mounting bracket**  
The 90° orientation of mounting slots makes installation/removal of modules quick and easy.



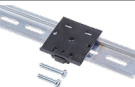
**P1015-64 (AWG 14/16) Female Quick Connect**  
These 0.25 in. (6.35 mm) female terminals are constructed with an insulator barrel to provide strain relief.



**P1015-18 Quick Connect to Screw Adapter**  
Screw adapter terminal designed for use with all modules with 0.25 in. (6.35 mm) male quick connect terminals.

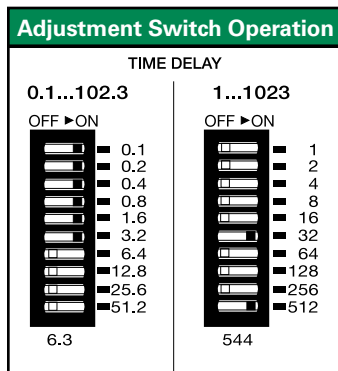


**C103PM (AL) DIN Rail**  
35 mm aluminum DIN rail available in a 36 in. (91.4 cm) length.



**P1023-20 DIN Rail Adapter**  
Allows module to be mounted on a 35 mm DIN type rail with two #10 screws.

## Adjustment Switch Operation



## Specifications

### Time Delay Range\*

0.1 - 102.3s in 0.1s increments  
0.1 - 102.3m in 0.1m increments  
1 - 1023m in 1m increments  
1 - 1023h in 1h increments

### Repeat Accuracy Setting Accuracy Reset Time

±0.1% or 20ms, whichever is greater  
≤ ±2% or 20ms, whichever is greater  
≤ 150ms

### Time Delay vs Temp. & Voltage

≤ ± 2%

### Input

#### Voltage

12, or 24VDC; 24, 120, or 230VAC

#### Tolerance

±20%

#### AC Line Frequency/DC Ripple

50/60 Hz / ≤ ±10%

#### Power Consumption

AC ≤ 2VA; DC ≤ 1W

### Output

#### Type

Solid state

#### Maximum Load Current

1A steady state, 10A inrush at 60°C

#### OFF State Leakage Current

AC ≅ 5mA @ 230VAC; DC ≅ 1mA

#### Voltage Drop

AC ≅ 2.5V @ 1A; DC ≅ 1V @ 1A

### Protection

#### Circuitry

Encapsulated

#### Dielectric Breakdown

≥ 2000V RMS terminals to mounting surface

#### Insulation Resistance

≥ 100 MΩ

#### Polarity

DC units are reverse polarity protected

### Mechanical

#### Mounting

Surface mount with one #10 (M5 x 0.8) screw

#### Dimensions

**H** 76.7 mm (3"); **W** 50.8 mm (2");

**D** 38.1 mm (1.5")

#### Termination

0.25 in. (6.35 mm) male quick connect terminals

### Environmental

#### Operating/Storage

##### Temperature

-40° to 75°C / -40° to 85°C

##### Humidity

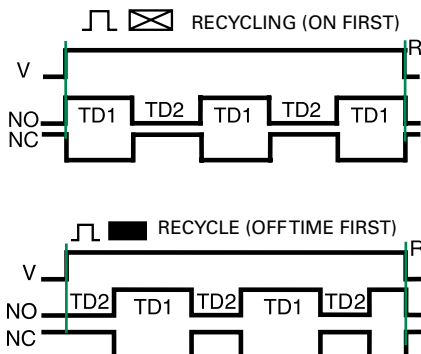
95% relative, non-condensing

##### Weight

≅ 3.9 oz (111 g)

\*For CE approved applications, power must be removed from the unit when a switch position is changed.

## Function Diagrams



V = Voltage  
NO = Normally Open Contact  
NC = Normally Closed Contact  
TD1, TD2 = Time Delay  
R = Reset