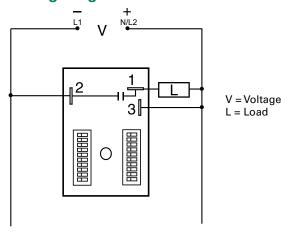
RS SERIES





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

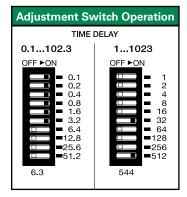
35 mm aluminum DIN rail available in a 36 in. (91.4 cm) length.



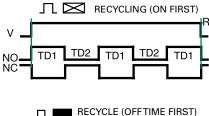
P1023-20 DIN Rail Adapter

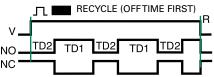
Allows module to be mounted on a 35 mm DIN type rail with two #10 screws.

Adjustment Switch Operation



Function Diagrams





V = Voltage

NO = Normally Open Contact

NC = Normally Closed Contact TD1, TD2 = Time Delay

R = Reset

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 ±0.1% or 20ms, whichever is greater **Setting Accuracy** ≤ ±2% or 20ms, whichever is greater **Reset Time** ≤ 150ms

Time Delay vs Temp.

& Voltage $\leq \pm 2\%$

Input

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

Tolerance ±20%

AC Line Frequency/DC Ripple $50/60 \text{ Hz} / \leq \pm 10\%$ **Power Consumption** $AC \le 2VA$; $DC \le 1W$

Output

Type **Maximum Load Current** 1A steady state, 10A inrush at 60°C $AC \approx 5mA @ 230VAC; DC \approx 1mA$ **OFF State Leakage Current** AC ≈ 2.5V @ 1A; DC ≈ 1V @ 1A

Voltage Drop Protection

Circuitry Encapsulated

Dielectric Breakdown ≥ 2000V RMS terminals to mounting surface

Solid state

Insulation Resistance $\geq 100~M\Omega$

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

-40° to 75°C / -40° to 85°C **Temperature** Humidity 95% relative, non-condensing

Weight $\approx 3.9 \text{ oz } (111 \text{ q})$

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

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Littelfuse:

RS1A11 RS4A13 RS4A11 RS4A33 RS4A22 RS4A12 RS2B44 RS4A24 RS4B12 RS6A13