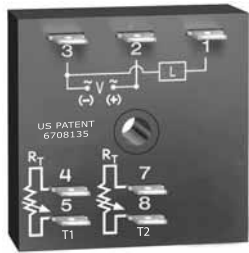


Recycling (Pulse Generator)

KSDR Digi-Timer

Timing Module

5

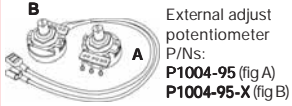


10 YEAR WARRANTY

- Adjustable 0.1 s...1000 m in 6 Ranges
- +/-0.5% Repeat Accuracy
- +/- 5% Factory Calibration
- 24, 120, or 230 V AC
- 1 A Solid State Output
- Encapsulated

Approvals:

Accessories



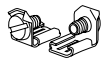
External adjust potentiometer
P/Ns:
P1004-95 (fig A)
P1004-95-X (fig B)



Mounting bracket
P/N: P1023-6



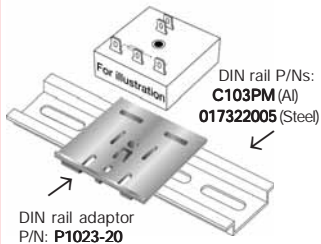
Female quick connect
P/Ns:
P1015-64 (AWG 14/16)
P1015-13 (AWG 10/12)
P1015-14 (AWG 18/22)



Quick connect to screw adaptor
P/N: P1015-18



Versa-knob
P/N: P0700-7



DIN rail adaptor
P/N: P1023-20

See accessory pages for specifications.

Description

The KSDR Series offers independent time adjustment of both delay periods. The KSDR is recommended for air drying, automatic oiling, life testing, chemical metering, and automatic duty cycling. This series is designed for general purpose commercial and industrial applications where a small, cost effective, reliable solid state timer is required. The factory calibration for fixed time delays is within +/- 5% of the target delay. The repeat accuracy, under stable conditions, is 0.5% of the selected time delay. This series is designed for input voltages of 24, 120 or 230 volts AC. Time delays of 0.1 seconds to 1000 minutes are available in 6 ranges. The output is rated 1 A steady and 10 A inrush. The modules are totally solid state and encapsulated to protect the electronic circuitry.

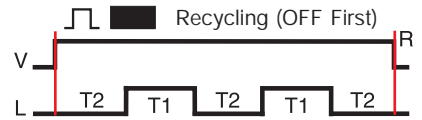
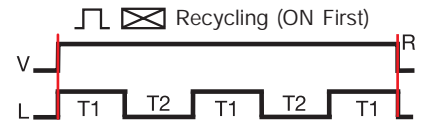
Operation (ON Time First)

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 T1, ON time.

Operation (OFF Time First)

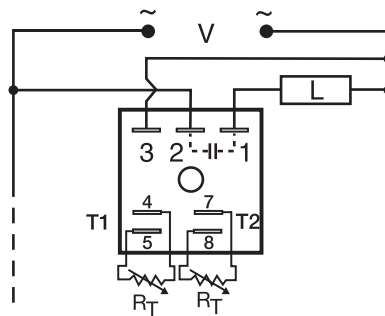
Upon application of input voltage, the T2, OFF time begins. At the end of the OFF time, the T1, ON time begins and the load energizes. At the end of T1, T2 begins and the load de-energizes. This cycle repeats until input voltage is removed. **Reset:** Removing input voltage resets the output and the sequence to T2, OFF time.

Function



V = Voltage R = Reset L = Load
T1 = ON Time T2 = OFF Time

Connection



RT is used when external adjustment is ordered. Dashed lines are internal connections.

Ordering Table

KSDR Series

X
Input
-2 - 24 V AC
-4 - 120 V AC
-6 - 230 V AC

X
T1, ON Time
-0 - 0.1 ... 10 s
-1 - 1 ... 100 s
-2 - 10 ... 1000 s
-3 - 0.1 ... 10 m
-4 - 1 ... 100 m
-5 - 10 ... 1000 m

X
Operating Sequence
-A - ON Time First
-B - OFF Time First

X
T2, OFF Time
-0 - 0.1 ... 10 s
-1 - 1 ... 100 s
-2 - 10 ... 1000 s
-3 - 0.1 ... 10 m
-4 - 1 ... 100 m
-5 - 10 ... 1000 m

Example P/N: **KSDR40A1**

Recycling (Pulse Generator) KSDR Digi-Timer Timing Module

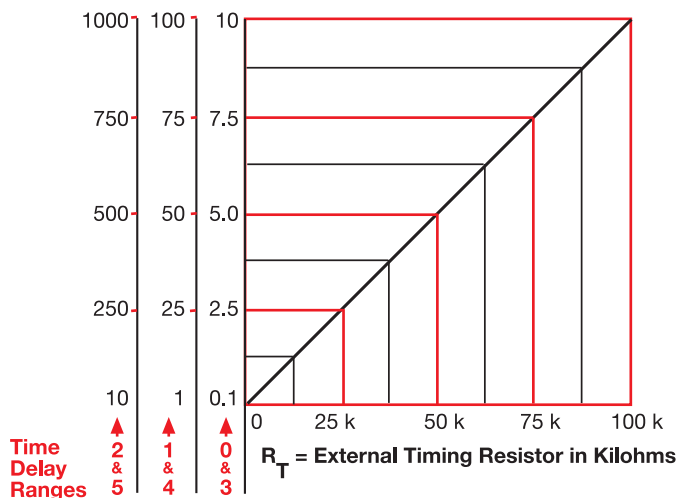
Technical Data

Time Delay	
Range	0.1 s ... 1000 m in 6 ranges
Repeat Accuracy	+/-0.5% or 20 ms, whichever is greater
Tolerance (Factory Calibration)	≤ +/-5%
Reset Time	≤ 150 ms
Time Delay vs. Temperature & Voltage	≤ +/-10%
Input	
Voltage	24, 120, or 230 V AC
Tolerance	+/-20%
Line Frequency	50 ... 60 Hz
Power Consumption	≤ 2 VA
Output	
Type	Solid state
Rating	1 A steady state, 10 A inrush at 60°C
Voltage Drop	≅ 2.5 V at 1 A
OFF State Leakage Current	≅ 5 mA at 230 V AC
Protection	
Circuitry	Encapsulated
Dielectric Breakdown	≥ 2000 V RMS terminals to mounting surface
Insulation Resistance	≥ 100 MΩ
Mechanical	
Mounting	Surface mount with one #10 (M5 x 0.8) screw
Package	2 x 2 x 1.21 in. (50.8 x 50.8 x 30.7 mm)
Termination	0.25 in. (6.35 mm) male quick connect terminals
Environmental	
Operating Temperature	-40°C ... +75°C
Storage Temperature	-40°C ... +85°C
Humidity	95% relative, non-condensing
Weight	≅ 2.4 oz (68 g)

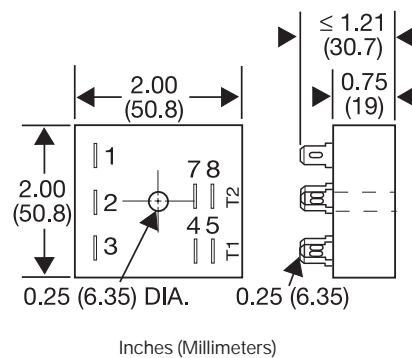
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External Resistance vs Time Delay

In Secs. or Mins.



Mechanical View



This chart applies to externally adjustable part numbers.

The time delay is adjustable over the time delay range selected by varying the resistance across the R_T terminals; as the resistance increases the time delay increases.

When selecting an external R_T , add the tolerances of the timer and the R_T for the full time range adjustment.

Examples: 1 to 50 S adjustable time delay, select time delay range 1 and a 50 K ohm R_T . For 1 to 100 S use a 100 K ohm R_T .