The KSPD Series is a factory programmed module available with 1 of 12 standard dual functions. The time delays can be factory fixed, externally or onboard adjustable, or a combination of fixed and adjustable. The 1A steady, 10A inrush rated solid-state output provides 100 million operations, typical. Its microcontroller timing circuit provides excellent repeat accuracy and stability. Encapsulation protects against shock, vibration, and humidity. The KSPD Series is a cost effective approach for OEM applications that require small size and long life.

See Appendix B, page 165, Figure 1 for dimensional drawing.

Features:

- Choose 1 of 12 standard dual functions
- Special time ranges & functions available
- Factory programmed
- Microcontroller circuitry, ±0.5% repeat accuracy
- 1A steady, solid-state output , 10A inrush
- 12 to 240V in 3 options
- Delays from 0.1s - 1000h in 9 ranges

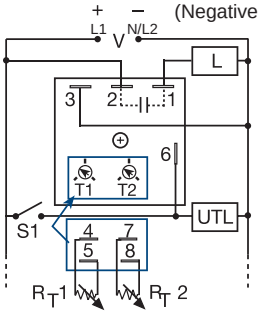
Approvals:

Auxiliary Products:

- **Externalad just potentiometer:**
  P/N: P1004-95
  P/N: P1004-95-X
- **Versa-knob:** P/N: P0700-7
- **Female quick connect:**
  P/N: P1015-64 (AWG 14/16)
- **Quick connect to screw adaptor:**
  P/N: P1015-18
- **DIN rail:** P/N: C103PM (Al)
- **DIN rail adaptor:** P/N: P1023-20

Connection:

– + (Positive Switching)
+ – (Negative Switching)



Terminal Location for External Adjustment.

V = Voltage
L = Load
S1 = Initiate Switch
UTL = Untimed Load
T1 & R_T1 = First Adjustment
T2 & R_T2 = Second Adjustment

Available Models:

KSPD32221RXD	KSPDA2222RXE
KSPD4175S130SMS	KSPDP10.1S31RXE
KSPD42121MB	KSPDP110M18SRXD
KSPDA110ST00127	KSPDP110M18SRXE
KSPDA114ST00173	KSPDP3131MI
KSPDA2121RXE	

If desired part number is not listed, please call us to see if it is technically possible to build.

Order Table:

KSPD **X** **Input**
- **A** - 24 to 240VAC
- **P** - 12 to 120VDC positive switching
- **N** - 12 to 120VDC negative switching
- **1** - 120VDC positive switching
- **3** - 24VDC
- **4** - 120VAC

X **First Adjustment (T1 or R_T1)**
- **1** - Fixed
- **2** - Onboard adjust
- **3** - External adjust

X **First Time Delay***
- **1** - 0.1 - 10s
- **2** - 1 - 100s
- **3** - 10 - 1000s
- **4** - 0.1 - 10m
- **5** - 1 - 100m
- **6** - 10 - 1000m
- **7** - 0.1 - 10h
- **8** - 1 - 100h
- **9** - 10 - 1000h

X **Second Adjustment (T2 or R_T2)**
- **1** - Fixed
- **2** - Onboard adjust
- **3** - External adjust

X **Second Time Delay***
- **1** - 0.1 - 10s
- **2** - 1 - 100s
- **3** - 10 - 1000s
- **4** - 0.1 - 10m
- **5** - 1 - 100m
- **6** - 10 - 1000m
- **7** - 0.1 - 10h
- **8** - 1 - 100h
- **9** - 10 - 1000h

X **Function**
- Specify function

Functions:
MB, MRE, MI, MS, IRE, BRE, SRE, RXE, RXD, IM, AMI, SL

*If fixed delay is selected, insert delay (**0.1-999**) followed by (**S**) secs., or (**M**) mins., or (**H**) hrs.

For a complete list of functions with descriptions and diagrams, see Appendix A - Timer Functions, pages 156-164.

Specifications

Time Delay
Type . . . . . Microcontroller circuitry
Range . . . . . 0.1s - 1000h in 9 adjustable ranges or fixed (to 999)
Repeat Accuracy . . . . . ±0.5% or 20ms, whichever is greater
Tolerance (Factory Calibration) . . . . . ≤ ±2%
Reset Time . . . . . ≤ 150ms
Initiate Time . . . . . ≤ 20ms; ≤ 1500 operations per minute
Time Delay vs Temp. & Voltage . . . . . ≤ ±2%

Input
Voltage . . . . . 12 to 120VDC; 24 to 240VAC
Tolerance . . . . . ≤ ±15%
AC Line Frequency / DC Ripple . . . . . 50/60Hz / ≤ 10%
Power Consumption . . . . . AC ≤ 2VA; DC ≤ 1W

Output
Type . . . . . Solid-state output
Rating . . . . . 1A steady, 10A inrush for 16ms
Voltage Drop . . . . . AC ≅ 2.5V @ 1A; DC ≅ 1V @ 1A
OFF State Leakage Current . . . . . AC ≅ 5mA @ 230VAC; DC ≅ 1mA

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 mt. with one #10 (M5 x 0.8) screw
Dimensions . . . . . 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 connects

Environmental
Operating / Storage Temperature . . . . . -40° to 60°C / -40° to 85°C
Humidity . . . . . 95% relative, non-condensing
Weight . . . . . ≅ 2.4 oz (68 g)