

HSPZA22SL



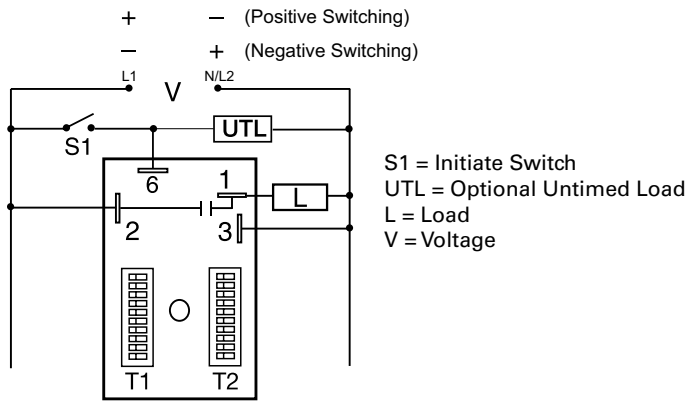
Description

The HSPZA22SL is a factory programmed module available in any 1 of 13 standard functions. The HSPZA22SL offers dual switch adjustable timer or counter functions. Switch adjustment allows accurate selection of the time delay or number of counts the first time and every time. 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 HSPZA22SL is a cost effective approach for OEM applications that require small size, solid state reliability, and accurate switch adjustment.

Operation (Single Shot Lockout)

Upon application of input voltage and momentary or maintained closure of S1, the output relay energizes and TD1 single shot time delay begins. The output relay de-energizes at the end of TD1 and the TD2 lockout time delay begins. During TD2 (and TD1) closing switch S1 has no effect on the operation. After TD2 is complete, closing S1 starts another operation. If S1 is closed when input voltage is applied, the output energizes and the TD1 time delay begins.

Reset: Removing input voltage resets the time delays and the output and returns the cycle to the first delay.



Features & Benefits

FEATURES	BENEFITS
Microcontroller based	Repeat Accuracy + / - 0.1%
User selectable time delay	Timing settings are switch selectable 0.1s - 1023h in a dual switch timer function for added flexibility
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

Accessories

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.

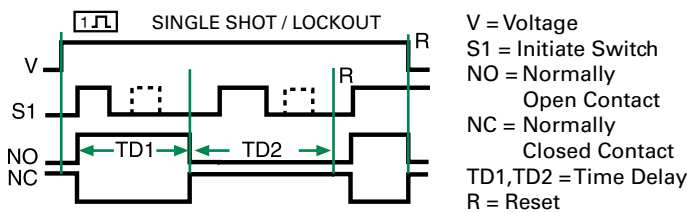
P1023-20 DIN Rail Adapter
Allows module to be mounted on a 35 mm DIN type rail with two #10 screws.

HSPZA22SL

Switch Adjustment

Adjustment Switch Operation			
TIME DELAY		TIME DELAY and COUNTER	
0.1...102.3	1...512	1...1023	1...165
OFF ▶ ON	OFF ▶ ON	OFF ▶ ON	OFF ▶ ON
0.1	1	1	1
0.2	2	2	2
0.4	4	4	3
0.8	8	8	4
1.6	16	16	5
3.2	32	32	10
6.4	64	64	20
12.8	128	128	30
25.6	256	256	40
51.2	M	512	50
6.3	300 s Delay	544	57 counts

Function Diagrams



Specifications

Time Delay

Type

Microcontroller circuitry

Range

1-1023s, m or h in 1s, m or h increments

Repeat Accuracy

±0.1% or 20ms, whichever is greater

Setting Accuracy

≤ ±1% or 20ms, whichever is greater

Reset Time

≤ 150ms

Initiate Time

≤ 20ms

Time Delay vs Temp.

≤ ±2%

& Voltage

1 - 1023 in 2 ranges

Count Range

≤ 25 counts per second

Count Rate

Input

Voltage

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 @ 240VAC; DC ≈ 1mA

Counter Output

Output pulse width: 300ms ±20%

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 76.2 mm (3.0"); **W** 50.8 mm (2.0");

D 38.1 mm (1.5")

0.25 in. (6.35 mm) male quick connects

Termination

Environmental

Operating/Storage

Temperature

-40° to 60°C / -40° to 85°C

Humidity

95% relative, non-condensing

Weight

≈ 3.9 oz (111 g)