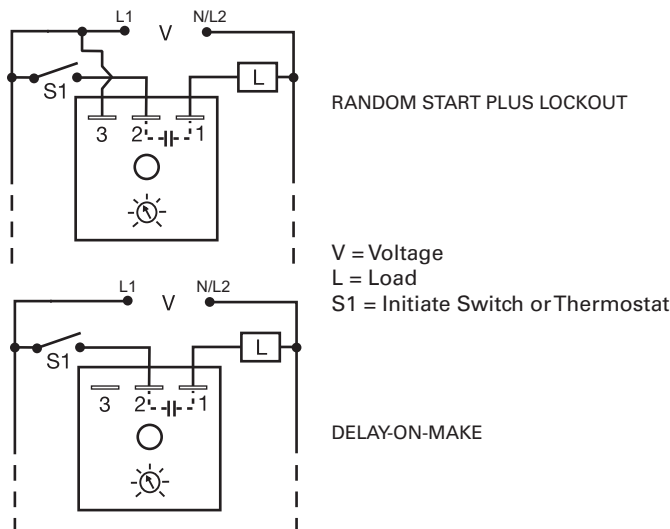


# T2D120A15M

## Lockout



### Wiring Diagram



### Description

The T2D Series provides protection against short cycling of compressors and other motors. At the end of each operation, a lockout delay prevents restarting the compressor or motor until the delay is completed.

#### Operation (Lockout with Random Start)

**Connection #1:** Upon application of input voltage, a random start time delay begins. At the end of this time delay, the output is energized.

**Lockout Delay:** Input voltage must be applied prior to and during timing. When the thermostat or initiate switch opens, the output de-energizes and the lockout time delay begins. At the end of the lockout delay, the output is energized allowing the load to immediately energize when the initiate switch or thermostat closes.

**Connection #2:** Upon application of input voltage and closure of initiate switch, the time delay begins. At the end of the time delay, the output is energized and remains energized until power is removed.

**Reset:** Removing power resets the output and the time delay.

### Features & Benefits

FEATURES	BENEFITS
<b>Lockout delay</b>	Prevents rapid cycling of compressor
<b>Random start delay</b>	Prevents low voltage starting
<b>Analog circuitry</b>	Repeat Accuracy + / - 1%
<b>Compact design</b>	Allows flexibility for OEM applications
<b>1A steady, 10A inrush output</b>	Provides 100 million operations in typical conditions.
<b>Totally solid state and fully encapsulated</b>	No moving parts to arc and wear out over time and encapsulated to protect against shock, vibration and humidity

### 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.

# T2D120A15M

## Specifications

### Input

**Voltage** 120 VAC

**Tolerance** ±20%

**AC Line Frequency** 50/60 Hz

### Output

**Minimum Load Current** 40mA

**Rating** 1A steady state, 10A inrush at 60°C

**Voltage Drop** ≅ 2.5V @ 1A

### Time Delay

**Initiate Time** After timing - 16ms

**Type** Analog circuitry

### Lockout & Random Start Delays

5m fixed

Note: The lockout & random start delays are the same length.

**Tolerance** +/-30%

**Repeat Accuracy** ±1% or 20ms, whichever is greater

**Reset Time** After timing - ≤ 16ms;

During timing - ≤ 200ms

### Protection

**Dielectric Breakdown** ≥ 2000V RMS terminals to mounting surface

**Insulation Resistance** ≥ 100 MΩ

### Mechanical

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

**Dimensions** **H** 50.8 mm (2"); **W** 50.8 mm (2");

**D** 30.7 mm (1.21")

**Termination** 0.25 in. (6.35 mm) male quick connect terminals

### Environmental

#### Operating/Storage

**Temperature** -20° to 60°C / -40° to 85°C

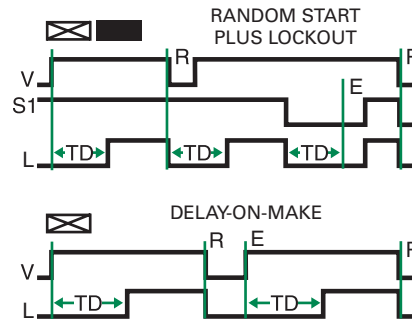
**Humidity** 95% relative, non-condensing

**Weight** ≅ 2.4 oz (68 g)

### Cooling Anticipator (24VAC Units Only)

**Minimum Cooling Anticipator** ≥ 3,000 Ω

## Function Diagram



V = Voltage  
S1 = Initiate Switch  
L = Load (CR)  
E = Ready  
TD = Time Delay  
R = Reset