

# Lockout Timer

## TA Series

### HVAC/R Timer

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10 YEAR WARRANTY

- Lockout Delay--Prevents Rapid Recycling of a Compressor
- Low Voltage Brownout Protection
- Circuitry to Activate the Cooling Anticipator (24 V AC Models)
- Eliminates Nuisance Service Calls Due to Blown Fuse or Tripped Breakers

Approvals: (24 V AC only)

#### Accessories

Female quick connect  
P/N: **P1015-64** (AWG 14/16)

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

Mounting bracket  
P/N: **P1023-6**

DIN rail adaptor  
P/N: **P1023-20**

DIN rail P/Ns:  
**017322005** (Steel)  
**C103PM** (Al)

See accessory pages for specifications.

#### Description

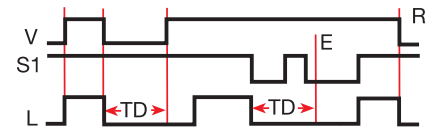
The TA Series prevents rapid recycling of a compressor. A lockout delay is started when the thermostat opens, or input voltage is lost. Eliminates tripped circuit breakers or blown fuses caused by a locked rotor during short cycling. The TA will not allow the compressor to start when the line voltage is low. Chatter of the compressor relay is eliminated. Because of the fast initiate time, bounce of the thermostat will not be transmitted to the compressor relay coil. A 30 second delay provides anti-reversing protection for scroll compressors.

#### Operation

On initial closure of the S1, the compressor relay energizes immediately. When S1 opens or input voltage is interrupted, a lockout time delay is initiated. During this lockout time delay, the compressor relay cannot be energized. The low voltage (*brownout*) protection prevents energization of the compressor when the line voltage is low.

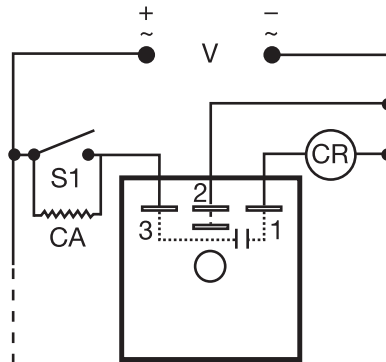
**Reset:** The lockout time delay cannot be reset.

#### Function



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

#### Connection



Dashed lines are internal connections.

S1 = Initiate Switch, Contact, or Thermostat  
CR = Compressor Relay (Load) CA = Optional Cooling Anticipator

#### Ordering Table

Input	Time Delay	Part Number
24 V AC	30 s	TA24A0.5
24 V AC	2 m	TA24A2
24 V AC	3 m	TA24A3
24 V AC	5 m	TA24A5
12 V DC	1 m	TA12D1
24 V DC	30 s	TA24D0.5
24 V DC	2 m	TA24D2
24 V DC	3 m	TA24D3
24 V DC	5 m	TA24D5

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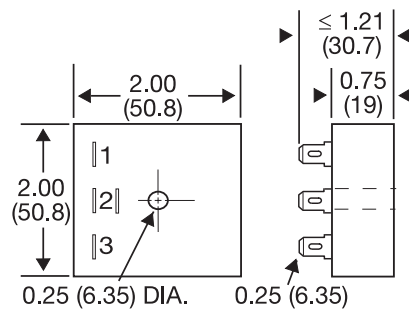
### HVAC/R Timer

#### Technical Data

<b>Input</b> Voltage/Frequency Impedance	12 or 24 V DC; 24 V AC, 50 ... 60 Hz 450 Ω (anticipator by-pass)
<b>Output</b> Minimum Load Current Maximum Load Current Voltage Drop	75 mA 1 A at 60°C ≤ 1.25 V
<b>Time Delay</b> Initiate Time Lockout Time Tolerance	≅ 16 ms Fixed 0.5, 1, 2, 3, or 5 m -15% ... +35%
<b>Protection</b> Circuitry Low Voltage Protection Dielectric Breakdown Insulation Resistance	Encapsulated ≅ 20 V: 24 V AC/DC; ≅ 9 V: 12 V DC ≥ 2000 V RMS terminals to mounting surface ≥ 100 MΩ
<b>Mechanical</b> Mounting Package Termination	Surface mount with one #10 (M5 x 0.8) screw 2 x 2 x 1.21 in. (50.8 x 50.8 x 30.7 mm) 0.25 in. (6.35 mm) male quick connect terminals
<b>Environmental</b> Operating Temperature Storage Temperature Humidity Weight	-40°C ... +70°C -40°C ... +85°C 95% relative, non-condensing ≅ 2.4 oz (68 g)
<b>Thermostat</b> Cooling Anticipator Resistor	≥ 1800 Ω

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#### Mechanical View



Inches (Millimeters)