

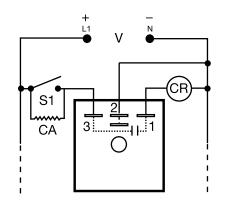
TA SERIES

Lockout





Wiring Diagram



V = Voltage

S1 = Initiate Switch, Contact, or Thermostat

CR = Compressor Relay (Load)

CA = Optional Cooling Anticipator

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 (Lockout)

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. After the time delay is completed, the unit automatically resets.

Features & Benefits

FEATURES	BENEFITS	
Lockout delay	Prevents rapid cycling of compressor and eliminates nuisance service calls due to blown fuse or tripped breaker by locked rotor during short cycling	
Anti-reversing protection for scroll compressors	Extends life of equipment	
Brownout protection	Timer will not allow the compressor to start during low line voltage conditions	
Encapsulated	Protects against shock, vibration, and humidity	
1A solid state output	No moving parts to arc and wear out. Provides up to 100 million operations under typical conditions	

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.

Ordering Information

MODEL	INPUT VOLTAGE	TIME DELAY
TA12D1	12VDC	1m
TA12D2	12VDC	2m
TA24A0.5	24VAC	30s
TA24A3	24VAC	3m
TA24A5	24VAC	5m

If you don't find the part you need, call us for a custom product 800-843-8848



TA SERIES

Specifications

Input

Voltage **AC Line Frequency**

Impedance

Output

Minimum Load Current Maximum Load Current Voltage Drop

Time Delay

Initiate Time

Lockout Time Tolerance

Protection

Circuitry

Low Voltage Protection Dielectric Breakdown

Insulation Resistance

12 or 24VDC; 24VAC

50/60 Hz

450 Ω (anticipator by-pass)

75mA 1A at 60°C ≤ 1.25V

≅ 16ms

Fixed 0.5, 1, 2, 3, or 5m

-15% - 35%

Encapsulated

≈ 20V: 24VAC/DC; ≈ 9V: 12VDC

≥ 2000V RMS terminals to mounting surface

 $\geq 100~M\Omega$

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")

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

Environmental Operating/Storage

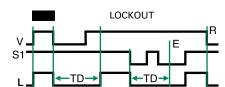
Temperature -40° to 70°C / -40° to 85°C Humidity 95% relative, non-condensing

Weight $\approx 2.4 \text{ oz } (68 \text{ g})$

Thermostat

Cooling Anticipator Resistor $\geq 1800 \Omega$

Function Diagram



V = Voltage

S1 = Initiate Switch L = Load (CR)

E = Ready

TD = Time Delay

R = Reset