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TA SERIES

Lockout

Description

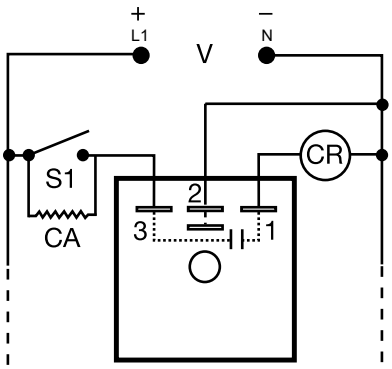
The TA Series prevents rapid recycling of a compressor. A lockout delay is started when the thermostat opens, or input voltage is lost. Eliminates tripped circuit breakers or blown fuses caused by a locked rotor during short cycling. The TA will not allow the compressor to start when the line voltage 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.

Wiring Diagram



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

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

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

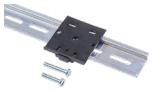
Accessories

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.

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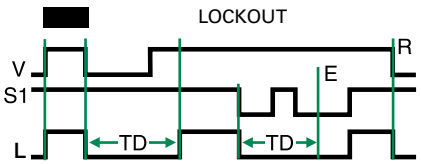
Specifications

Input	
Voltage	12 or 24VDC; 24VAC
AC Line Frequency	50/60 Hz
Impedance	450 Ω (anticipator by-pass)
Output	
Minimum Load Current	75mA
Maximum Load Current	1A at 60°C
Voltage Drop	≤ 1.25V
Time Delay	
Initiate Time	≅ 16ms
Lockout Time	Fixed 0.5, 1, 2, 3, or 5m
Tolerance	-15% - 35%
Protection	
Circuitry	Encapsulated
Low Voltage Protection	≅ 20V: 24VAC/DC; ≅ 9V: 12VDC
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	-40° to 70°C / -40° to 85°C
Humidity	95% relative, non-condensing
Weight	≅ 2.4 oz (68 g)
Thermostat	
Cooling Anticipator Resistor	≥ 1800 Ω

Function Diagram



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

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