ABB TA001A01 02.17.03

Lockout Timer TA Series Timing Module





- 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

DescriptionThe 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. New 30 second delay for anti-reversing protection of scroll compressors.



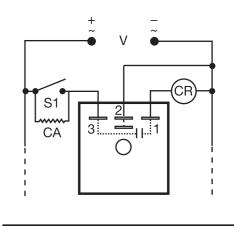
On initial closure of the S1, the compressor relay energizes immediately. When S1 opens or input voltage is interrupted, a lockout condition and a time delay are initiated. During this lockout time delay, the compressor relay cannot be energized. The low voltage (brownout) protection prevents energization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

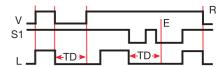
Reset: The lockout time delay cannot be reset.

■ Approvals: (24 V AC only) **¬1** (€









V = Voltage

S1 = Initiate Switch or Thermostat

CR = Compressor Relay

CA = Optional Cooling Anticipator

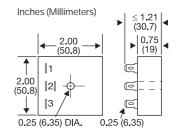
L = Load E = Ready

R = Reset TD = Time Delay

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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echnical Data

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



Accessories

