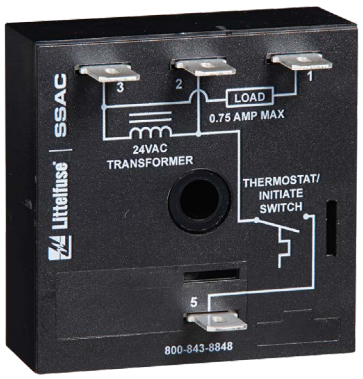
CT SERIES

Delay-on-Make/Delay-on-Break Timer



Description

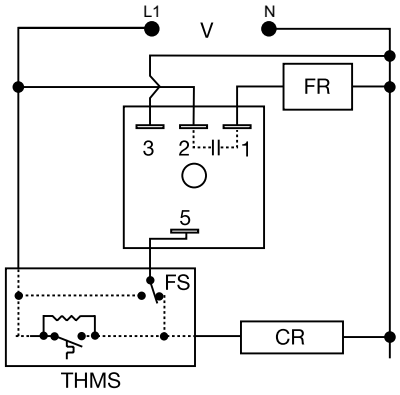
The CT Series combines a delay-on-make and delay-on-break time delay into one unit and may be used to control fan delays in heating and/or cooling equipment. The CT includes bypass circuitry to allow it to operate with cooling anticipators ≥ 3000 ohms. It is designed to operate in 24VAC control circuits. Several CT modules may be combined to provide sequencing of any number of loads and sequencing off of the same loads, such as electric heating elements.

Operation (Delay-on-Make/Delay-on-Break)

Forced Air Heating or Air Conditioning (as shown): When the thermostat closes, the compressor relay is immediately energized. At the end of a fixed delay-on-make delay (T1), the fan relay is energized. When the thermostat opens, the compressor relay is de-energized and the delay-on-break delay is initiated. On completion of the fixed delay-on- break delay (T2) the fan relay is de-energized. If the thermostat is reclosed during the delay-on-break delay, the delay-on-break delay is reset and the fan relay remains energized. If the thermostat is closed when input voltage is applied, the delay-on-make delay (T1) begins as normal.

Reset: Removing input voltage resets the output and time delays.

Wiring Diagram



V = Voltage
FR = Fan Relay
FS = Fan Switch
CR = Compressor Relay
THMS = Wall Thermostat

Features & Benefits

FEATURES	BENEFITS
Delay-on-Make and Delay-on-Break in one unit	Simplifies wiring and installation, and optimizes efficiency of heating and cooling systems
Totally solid state and encapsulated	No moving parts to arc and wear out over time and encapsulated to protect against shock, vibration, and humidity
Interconnectability with other CT modules	Combine modules to provide sequencing on of a number of loads and sequencing off of the same loads

Ordering Information

MODEL	DELAY-ON-MAKE (FIXED SECONDS)	DELAY-ON-BREAK (FIXED SECONDS)
CT1S30	1	30
CT1S45	1	45
CT1S8	1	8
CT1S90	1	90
CT30S1	30	1
CT45S45	45	45
CT5S300	5	300

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

Accessories



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.



P1023-6 Mounting bracket
The 90° orientation of mounting slots makes installation/removal of modules quick and easy.



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.

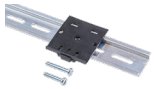
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CT SERIES

Accessories

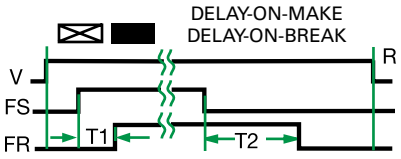


C103PM (AL) DIN Rail
35 mm aluminum DIN rail available in a 36 in. (91.4 cm) length.



P1023-20 DIN Rail Adapter
Allows module to be mounted on a 35 mm DIN type rail with two #10 screws.

Function Diagram



V = Voltage
FS = Fan Switch
FR = Fan Relay
T1 = Delay-on-Make
T2 = Delay-on-Break
R = Reset
= Undefined Time

Specifications

Time Delay

Type	Microcontroller
Range	1 - 600s
Repeat Accuracy	±5%
Tolerance (Factory Calibration)	±20%
Recycle Time	≤ 300ms

Input

Voltage	24VAC
Tolerance	±15%
AC Line Frequency	50/60 Hz

Output

Type	Solid state
Form	NO
Rating	0.75A steady state, 5A inrush at 55°C
Voltage Drop	≅ 1.25V

Protection

Circuitry	Encapsulated
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	Anticipator Resistor: ≥ 3000 Ω

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