

AUTOMATIC SPEED CONTROLLER FOR FAN AND COOLERS

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ABSTRACT

Our project , a speed controller for fan and cooler is a system that control the temperature when it is low or high condition. The operation is in automatic function. The circuit is combination between decade divider / counter and IC timer. When output Q4 is goes low and Q5 goes high relay R2 is switched off and relay RL 4 activated the fan now runs at low speed in the motor used in certain cooler there are separate speeds. Thus , initially the fan and cooler needs to be run at full speeds. As time passes by, one has set up again to adjust the speed of the fan and cooler. Here, no need to adjust it because it will switch off by itself after operate 8 hours.

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INTRODUCTION

A control system may consist of a number of components. Automatic speed controller for fan and coolers is a system that controls the temperature initially from high speed to medium speed and low speed condition later on. The device presented makes the fan run at full speed for a determined time. It takes about 8 hours before it is switched off by itself.

The operation is in an automatic function. So, the operation will make user easier to use it. An automatic controller compares the actual value of the plant output with the reference input (desired value) determines the deviation and produces the control signal that will reduce the deviation to zero or to a small value. The controller detects the actuating error signal, which is usually at a very low power level and amplifies it to a sufficiently high level. In a two-position control system, the actuating element has only 2 fixed positions which are many cases simply 'on' and 'off'.

We can apply it during early morning like at 3,4 am. At that time, the temperature is initially quite high. As time passes, the temperature starts to drop. After a person falls asleep, the metabolic rates of one's body decrease. Thus initially the fan and the cooler need to be run at the full speed. As time passes by, one has to get up again to adjust the speed of the fan and the coolers. Now, nobody needs to get up just to adjust the speed of the fan and coolers because it will do that.