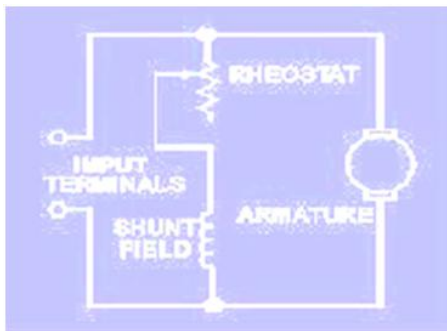


3.2.2 Shunted armature control

The combination of a rheostat transforming the armature and a rheostat in series with the armature is involved in this method of speed control.

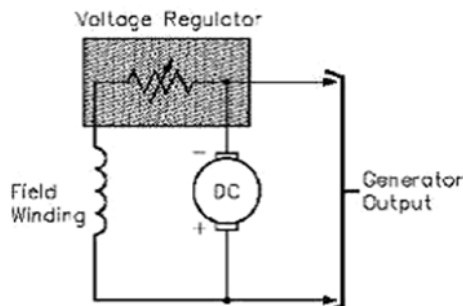
The voltage applied to the armature is varies by varying series rheostat R 1. The exciting current can be varied by varying the armature transforming resistance R2. This method of speed control is not economical due to considerable power losses in speed controlling resistances. Here speed control is obtained over wide range but below normal speed below in figure 6.



- [3] Herman, Stephen. Industrial Motor Control. 6th ed. Delmar, Cengage Learning, 2010.
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3.2.3 Armature Terminal Voltage Control

To fulfill The speed control of dc series motor, it should supply the power to the motor from a separate variable voltage supply. but unfortunately this way coasty so seldom it can be used below in figure 7.



4. Conclusion

In this research I have tried to explain a bit about how to control the speed of a separately excited dc motor with the help of TRIAC and DIAC. also I had passed on the different types of methods and how can we use the speed control of dc motor.

5. Applications

This method (separately excited dc motors) are used in general in some of our daily machines like: paper machines, diesel electric propulsion of ships, In steel rolling mills, etc.

References

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- [2] http://en.wikipedia.org/wiki/DC_motor