

HIGHER TECHNICAL INSTITUTE

HIGH FREQUENCY INVERTER FOR ELECTROPHOTOGRAPHY

Project report submitted by

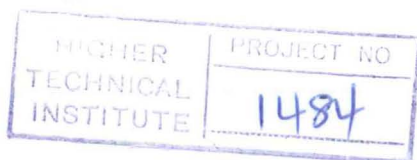
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Report Project

SUMMARY

High frequency inverter for electrophotography

Inverters are simply DC to AC converters in which the output it is not sinusoidal but square or quasi-square waves and for low and medium voltage applications are acceptable for for high power applications filters are used.

There are two types of inverters.

- a) single phase inverters.
- b) three-phase inverters.

Inverters are widely used in industrial applications such as.

- a.c motor drive
- induction heating.
- standby and uninterruptible power supplies.

In electrophotography inverters is of great importance due to the fact that electrophotography pictures are taken by placing a living thing in the field of a high frequency electricity and the picture produce shows the energy aura given from the living thing.

The importance of electrophotography is to explain some physical phenomenon found in our life.

The construction demand to design a rectifier and the high-frequency inverter.

The rectifier it was easy to design since it is a bridge-rectifier and for stabilizer an op-amp 741 is used.

The inverter base on the ideal that the two switching transistors must not operate simultaneously so the control unit design offer this facility.

The oscillator output is a high frequency and the potencometer is for having a variable frequency.

The transformer used is selected from the fact that it can be used for high frequencies applications.

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