Test Platform for Electric Motors

Abstract

This invention provides an energy efficient way to test large size electric motor by using a small amount of electricity. This eliminates the need to connect large size electric motors directly to the Mains, which can be complicated and expensive. This invention uses the large electric motor to generate electricity by driving an alternator and feed the electricity back into the electric motor to drive the alternator again. Energy losses are topped-up using a motor-generator to keep the process going.

With this process in place the electric motor can be operated the same as it would have been connected to the Mains. A wide range of tests can be performed on the electric motor and will have minimum impact to the Mains.

One of the important values that can be verified in this setup is the efficiency of the electric motor.

Fig 1.