

Penentuan Kinerja Motor Induksi Phasa Tunggal Dengan Metode Double Revolving Field Theory, Aplikasi Motor Induksi 1 HP, 220 V, 50 HZ, Klas A Jenis Kapasitor Start

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20406848&lokasi=lokal>

Abstrak

As er know that single phase induction motor is quite a large variety used for household appliances, machine tools, etc. It can be understood because single phase induction motor has a simple cosntruction, cheap and easy to get in market. but this electric machine has diffent in operation than polyphase induction motor . Polyphase induction motor operateson the basis of the existence of a rotating field, but single phase induction motor is based 2 rotating magnetic field also mentioned double revolving field. So the concept of analysis the polyphases induction motor can not be use in single phase induction motor. The performancesof single phase induction motoris usually analyzed in 2 method such as double revolving field theory and cross field theory. the performance may be characterized by factors, input current, power factor, develop power, input power, and efficiency. this research uses double revolving teory appllicated to single phase induction motor capacitor start motor type 1 HP, 220 V, 50 HZ, class A. It has a performance, input current 4,7 Am power factor 0,83 lag, decelopped power 586,45 W, input power 863, 69 W and efficiency 68,1 % in slip $s=5\%$