

ABSTRAK

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Program Studi : Teknik Elektro / Sistem Tenaga
Judul : Perancangan Sistem Starting Motor DC Shunt Untuk Mencegah Arus Starting Berlebih Pada Pompa Emergency Lube Oil Generator

Pompa *lube oil* generator adalah peralatan penting pembangkit yang berfungsi menyuplai kebutuhan minyak pelumas *bearing* generator. Umumnya dipakai dua jenis pompa *lube oil* generator. Pompa utama dengan penggerak motor listrik AC dan pompa cadangan digerakkan motor DC jenis *shunt*. Arus motor DC *shunt* mengalami kenaikan sesaat setelah starting. Perlu di buat sistem starting dengan menyisipkan resistor starting pada rangkaian armatur. Setelah motor *running* dan tegangan armatur sudah terbentuk, resistor starting harus dilepas dari sistem supaya tidak menimbulkan rugi resistansi. Pelepasan resistor starting dapat dilakukan secara otomatis dengan memasang *voltage relay* untuk melepas resistor starting pada saat arus armatur sudah normal.

Kata kunci : Motor DC *shunt*, arus starting, resistor starting

ABSTRACT

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Study Program : Electrical Engineering / Power System
Title : System Starting Design a Shunt DC Motor to Prevent Excessive Starting Currents on Emergency Lube Oil Pump Generator

Lube oil pump is an important power plant equipment to supply lubricating oil to bearing generators. Usually there is two types of lube oil generator pumps. Main pump with an AC electric motor drive and backup pump driven by a shunt type DC motor. The armature DC motor current has increased shortly after starting. A solution is to insert the resistor in the armature circuit. After the motor running and the armature voltage has been formed, the resistor starting must be removed from the system to prevent resistance losses. There can be do automatically by installing a voltage relay to remove the resistor when the armature current is normal.

Key words : DC shunt motor, starting current, starting resistor