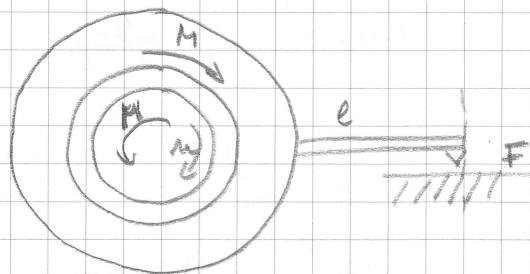


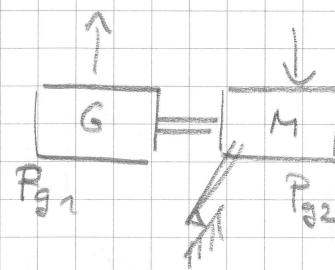
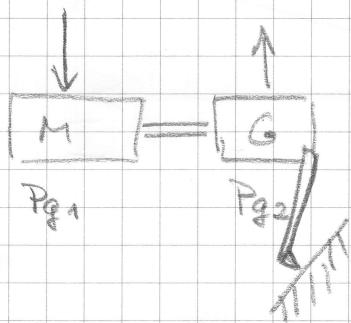
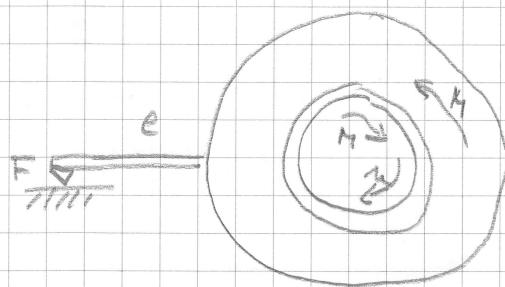
unijapapir.d.a.

DINAMO VAGA

Generator

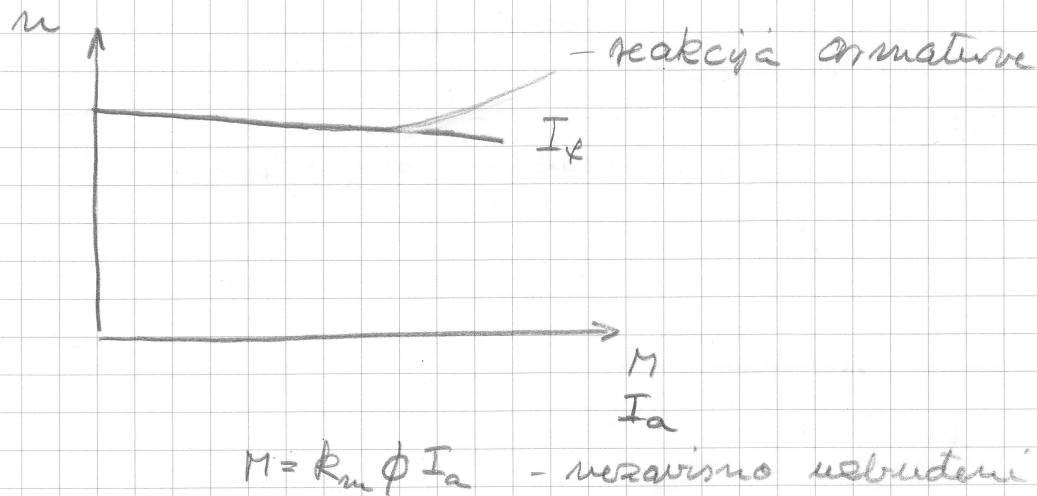


motor



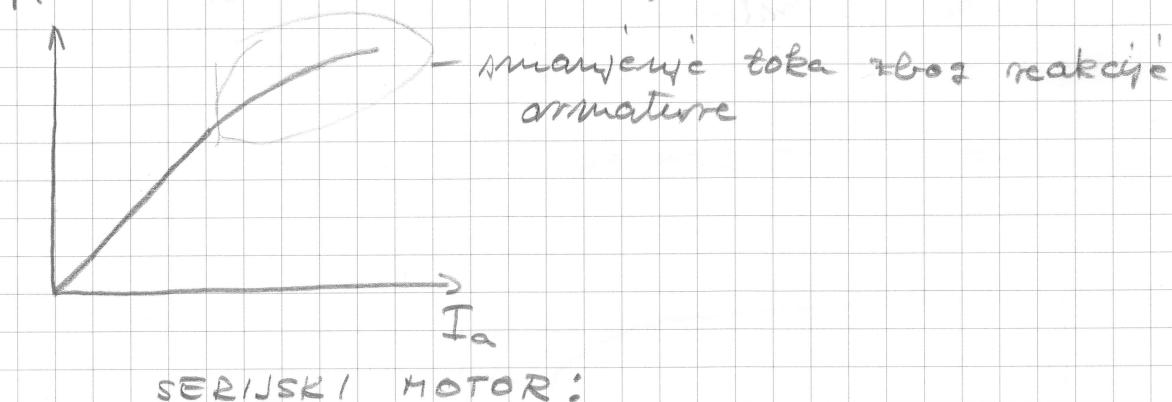
VANJSKA KARAKTERISTIKA I. M.

$$U = \text{konst} \quad I_f = \text{konst.}$$

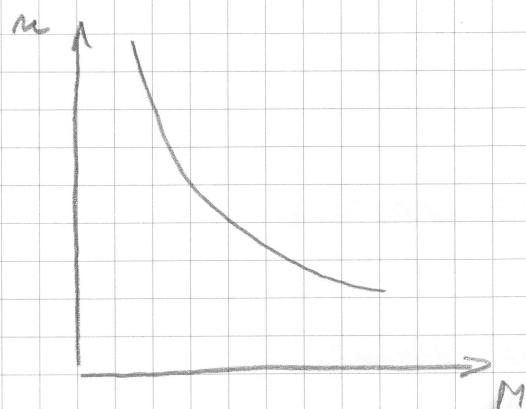


$$M = R_m \phi I_a \quad - \text{nezavisno uzbrdjeni}$$

NEZAVISNO UZBUDENI, ŠIREDNI MOTOR



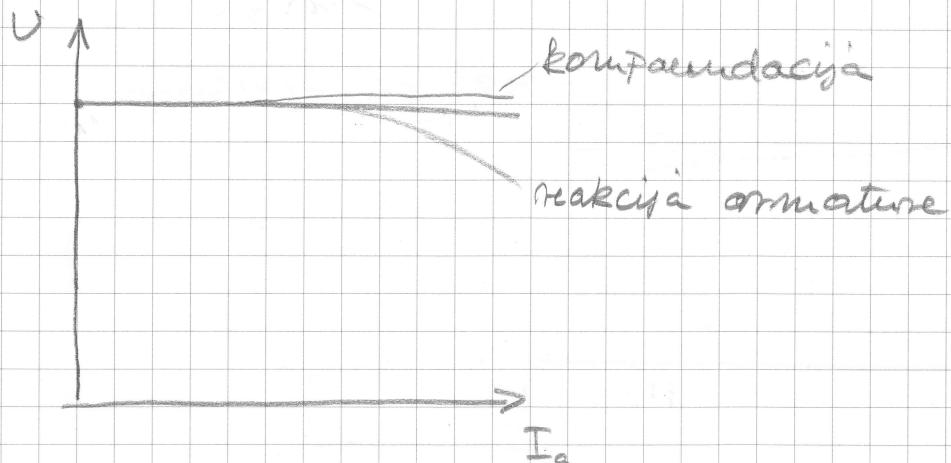
SERIJSKI MOTOR:



unijapapir d.d.

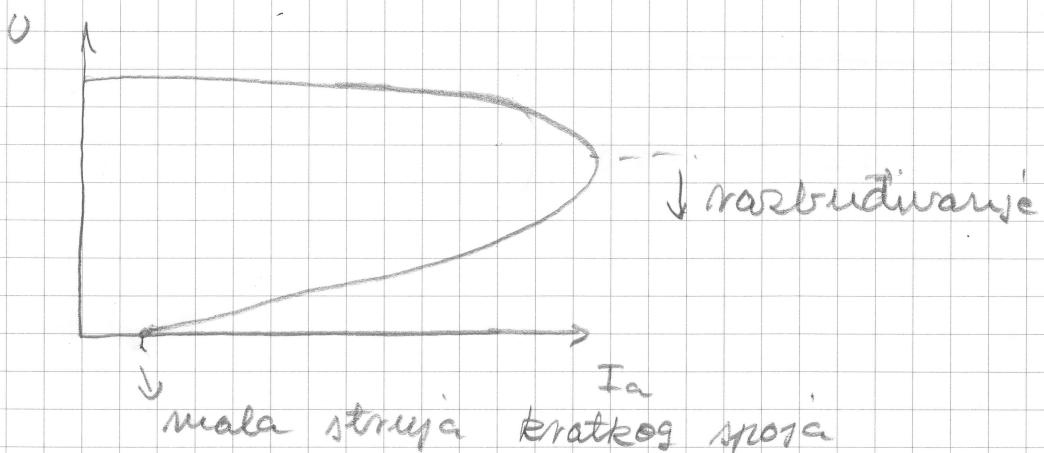
VANJSKA KARAKTERISTIKA J.G.

nezavisno uzbrudom $I_f = \text{konst}$, $n = \text{konst}$.



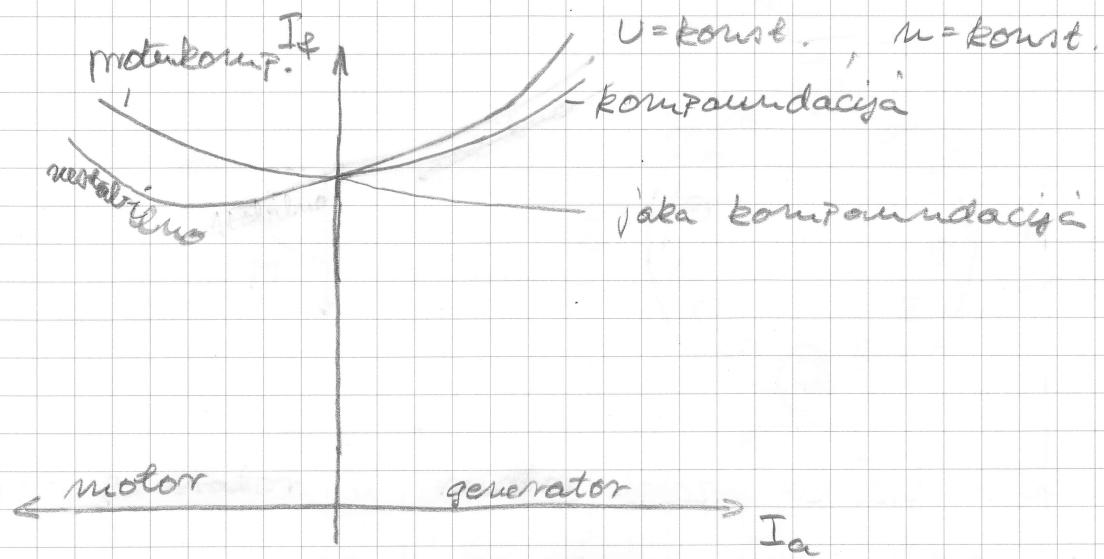
kompozitacija kod motora \Rightarrow protokompozitacije
kod generatora

POREDNI GENERATOR

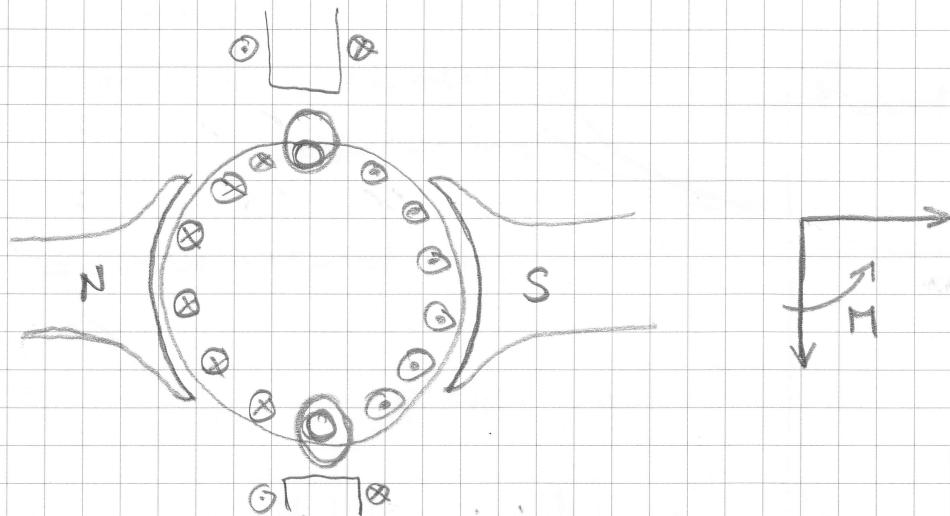


Nerijesti generator se ne koristi

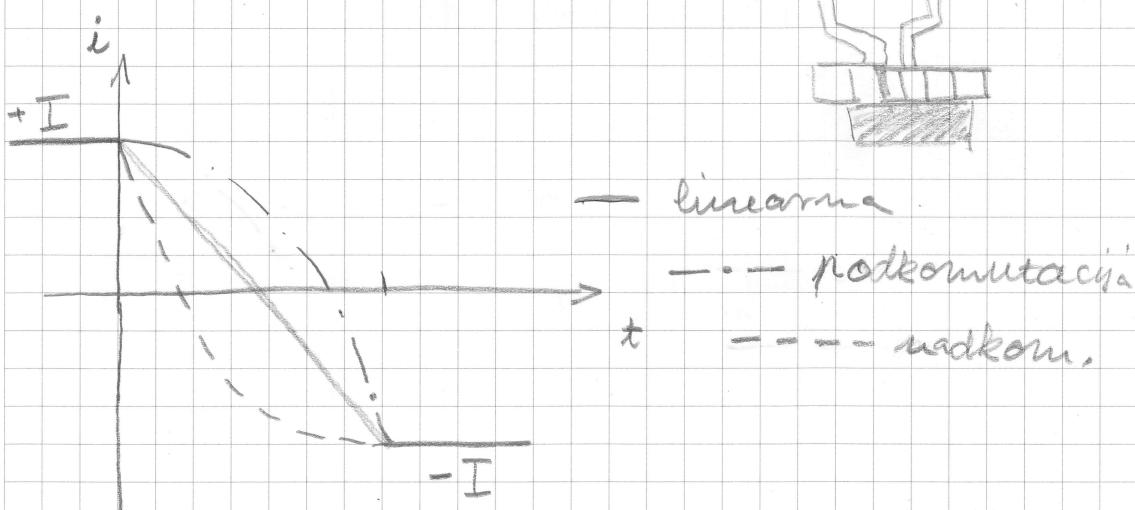
KARAKTERISTIKE REGULACIJE



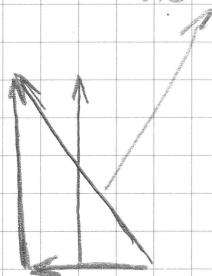
KOMUTACIJA



- četkice kratko spojaju svitke u neutralnoj zoni
- u pravilu \rightarrow više svitaka odjednom



Pomak četkica iz neutralne zone



- može pomoci kompoundaciji
- za male str. bez P.P.

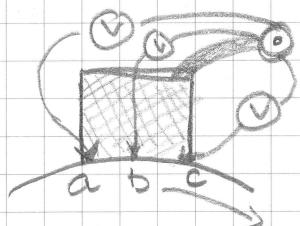
mekanički uzroci

- vibriranje četkica (jajasti, krapavi kolaktor, ...)
- loš pritisak četkica, loš položaj
oblik četkica

kemijski

- električni - djelovanje pomoćnih polova
- kratki spojaci

Mjerenje napona po četkici

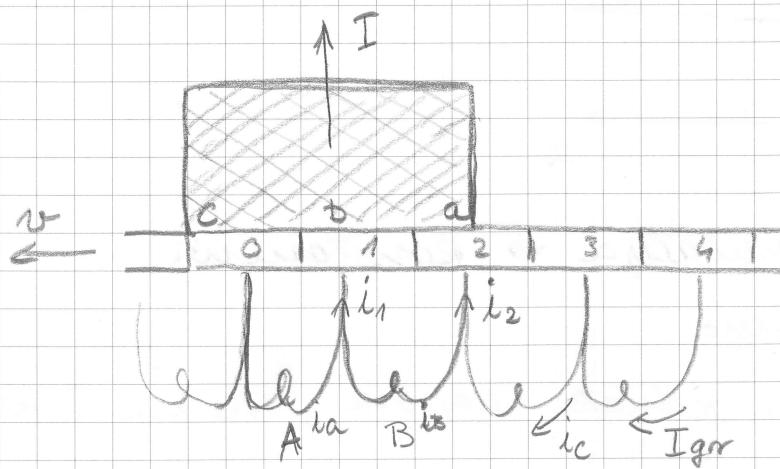


- indirektno mjerenje oblika

Promjene struje u komutaciji

a - ugasni brid

b - redina c - izgasni brid

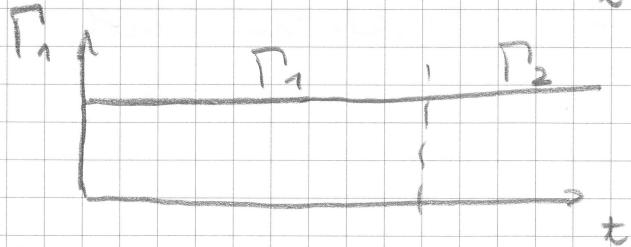
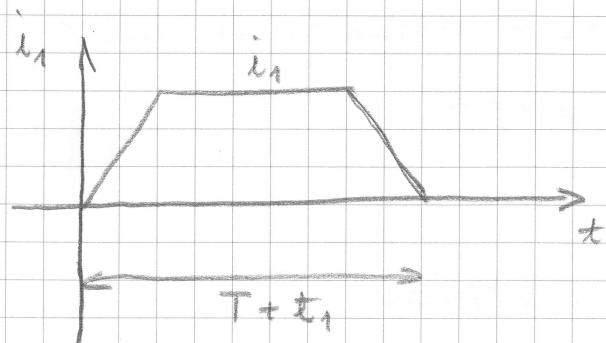
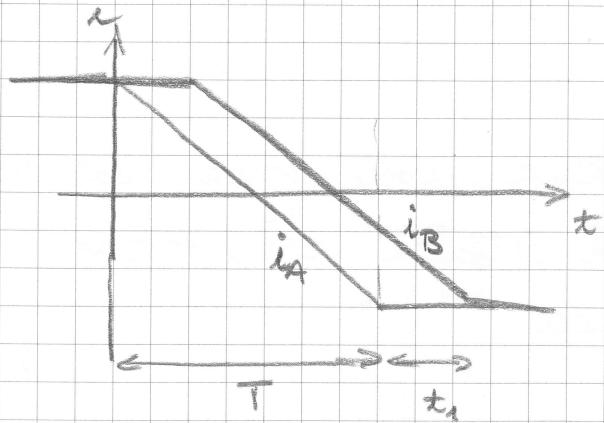


$$\dot{i}_1 = \dot{i}_B - \dot{i}_A$$

$$\dot{i}_2 = \dot{i}_C - \dot{i}_B$$

$$I_1(t) = \frac{i_1(t)}{s_1(t)}$$

LINEARNA KOMUTACIJA

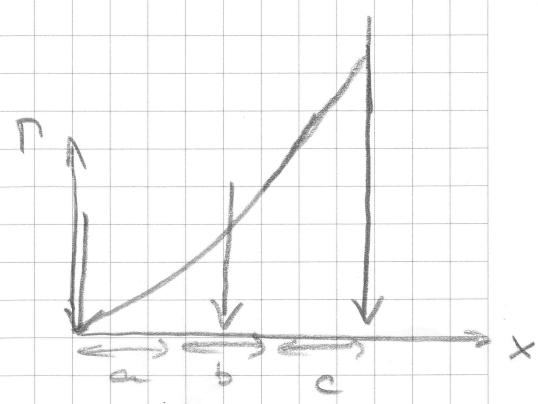
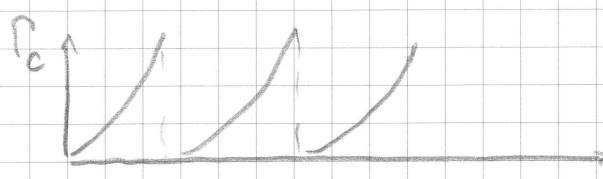
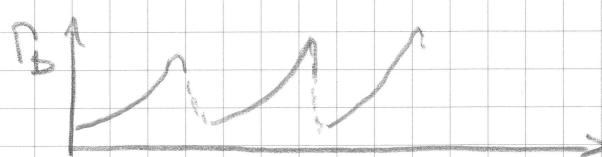
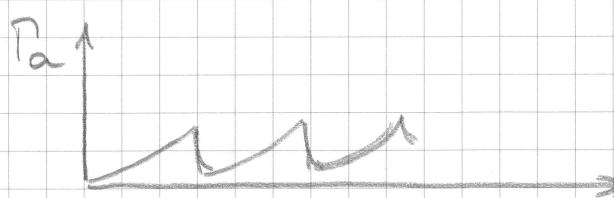
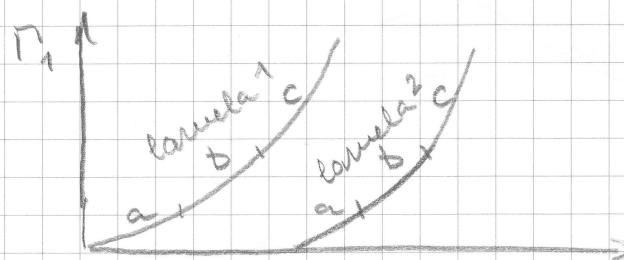
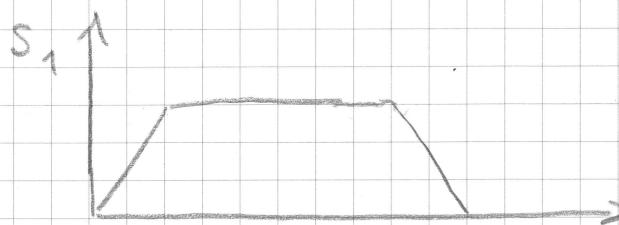
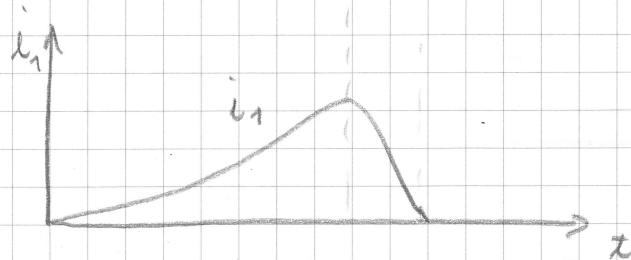
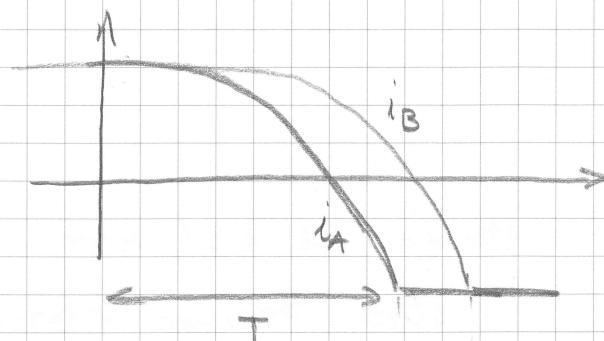


LINEARNA komutacija \Rightarrow konstantna

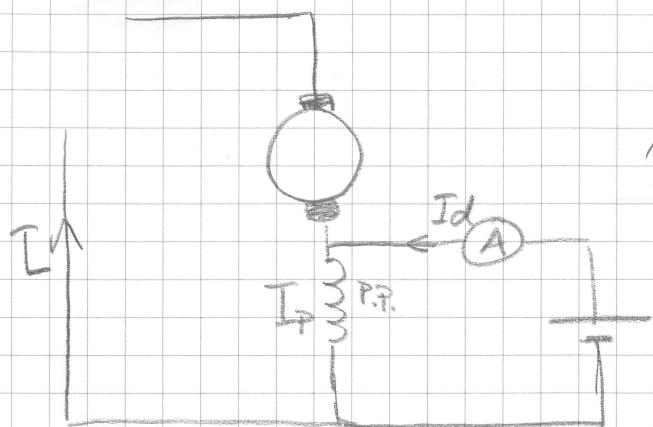
guntoda struje

konstantni, jednake nazovi a, b i c brida

PODKROMUTACIJA



UTVRĐIVANJE CRNOG POJASA KOMUTACIJE



struja Id kod koje
stroj počinje vibrirati

