

NOT'N: $i \equiv$ current in winding

NOT'N: $v \equiv$ voltage applied to winding

NOT'N: $R \equiv$ resistance of winding

NOT'N: $N \equiv$ number of turns in winding

NOT'N: $\phi \equiv$ magnetic flux passing through surface bounded by one turn of winding

NOT'N: $\psi \equiv$ magnetic flux passing through surface bounded by N turns of winding

NOT'N: $\theta \equiv$ angle of rotor

NOT'N: $\omega \equiv$ angular velocity of rotor

NOT'N: $\omega_L \equiv$ angular velocity of load

NOT'N: $a \equiv$ gear ratio (load angular velocity over rotor angular velocity)

NOT'N: $\tau_e \equiv$ torque on rotor arising from electromagnetics

NOT'N: $\tau_L \equiv$ torque on rotor arising from Load

NOT'N: $\tau_F \equiv$ torque on rotor arising from Friction

NOT'N: $\tau_{LF} \equiv \tau_L + \tau_F \equiv$ torque on rotor arising from Load and Friction

NOT'N: $J \equiv$ inertia of rotor

NOT'N: $J_L \equiv$ inertia of load

NOT'N: $p_m \equiv$ mechanical power

NOT'N: $p_e \equiv$ electromagnetic power

NOT'N: $p_\Omega \equiv$ power dissipated by resistance

NOT'N: $p_H \equiv$ power absorbed by inductance