Assignment # 10

Develop equations for

\[ i_d(t), \ i_q(t), \ i_a(t), \ i_{F'}, \]

\[ \lambda_d(t), \ \lambda_q(t), \ \lambda_a(t), \ \text{and} \ \lambda_{F'}(t). \]

following a three phase bolted fault from a loaded condition.

Ignore the damper windings. Assume the machine parameters are know. Assume that the following quantities are know:

\[ I_d^0, \ I_q^0, \ I_a^0, \ \text{and} \ \delta^0. \]