First step is to write the mfile and get all the information about transformer, the tests and the resistors on each side including core resistance and reluctance on the high voltage side.

Afterwards, using circuit elements and blocks, we build the circuit, then we use breakers and control breakers to define and set different loads for the motor. After that, with voltage and current measurement blocks, we measure the input and output voltage and current. Using “to workspace” block the data is sent to the workspace of the matlab and with “plot” command the result is depicted. (in Simulink you can use scope block in order to see the result)

Third and final step is to add, subtract or divide alongside active and reactive blocks to measure active and reactive power of input and output. For measuring efficiency you can use division block to divide the input active power to the output and for percentage measuring you can simply define a gain of 100 to do so.